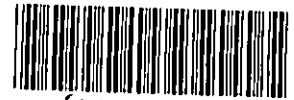


Advancing the Science of Taste Developing Innovative Flavor Ingredients



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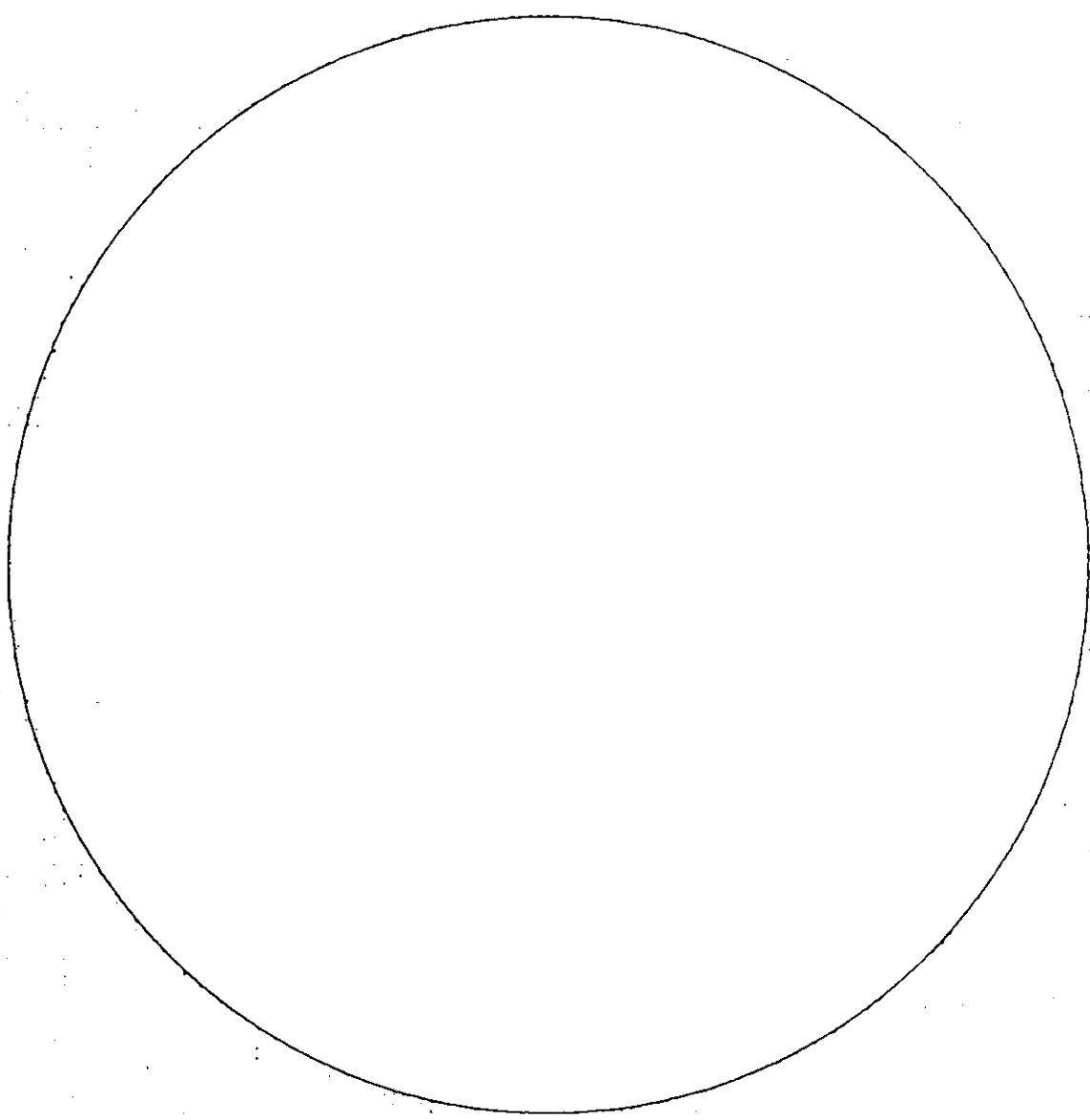
Sensing the Future Through Innovation

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2007 ANNUAL REPORT



Commercialization



Sweetener

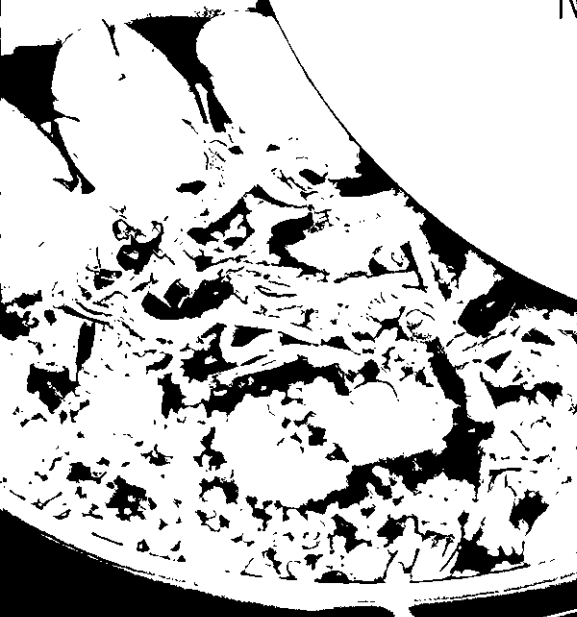
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Exciting Taste Discoveries

World-Class Partners

New Consumer Markets

Cooling Agent



Bitter Blocker



Salt Reduction

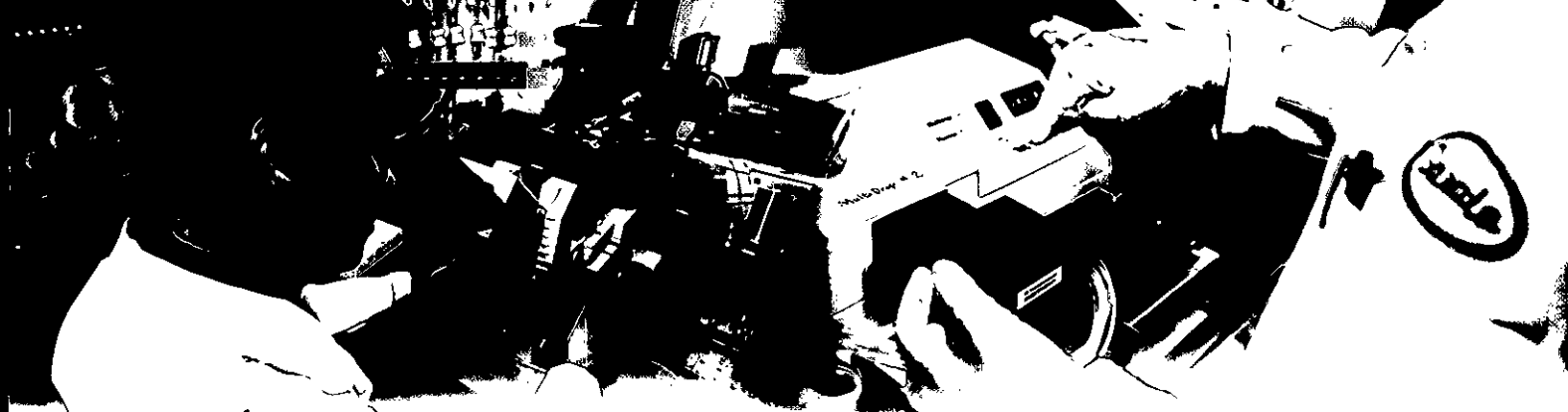
Savory Flavor

2007

Highlights

Senomyx is working to discover and develop new flavor ingredients that could make foods and beverages healthier and/or taste better. We had many accomplishments during the past year.

- **Commercial introduction of foods containing Senomyx savory flavor ingredients by Nestlé**
- **Initiated activities to support regulatory filings for S2383 sucralose enhancer**
- **Identified new sucrose enhancers, S5742 & S0739**
- **Identified SNMX-29, believed to be the primary human salt taste receptor**
- **Identified S5105 and other new bitter blockers**
- **Initiated new Cool Flavor Program**
- **Increased number of issued patents by 41%**
- **Expanded collaboration with Ajinomoto**
- **Entered into new collaboration with Solae**
- **Established new collaboration with Firmenich**



Key Discoveries in the Science of Taste

Senomyx's landmark scientific discoveries have helped clarify the structure and function of human taste receptors. During 2007, we made several key advancements, including determining how different types of sweeteners bind to the sweet taste receptor. This enabled us to identify potential new flavor ingredients that amplify the taste of specific sweeteners. Another significant scientific achievement for the year was the identification of SNMX-29, which we believe is the primary receptor responsible for human salt taste perception.

The human tongue has approximately 3,000 taste buds located within small protrusions scattered on the tongue's surface and the roof of the mouth. Each of these taste buds contains about 50 to 100 taste cells that are specialized to recognize one of the five primary senses of taste: sweet, salty, bitter, sour, and umami or "savory", the taste associated with meaty or brothy foods.

Some taste cells are capped by "receptor" proteins that enable the cell to respond to a certain taste. For example, when we eat a sweet substance it binds to and activates a specialized receptor on sweet cells, which sends a signal to the brain that gives the sensation of sweet taste. Additional taste cells, such as those responsible for sour taste, have receptors that are channels through which ions pass and trigger the sense of that particular taste.

Senomyx has discovered or in-licensed on an exclusive basis many of the key receptors and ion channels that mediate taste in humans. We are aggressive in seeking patent protection for our discoveries and inventions, including coverage for the taste receptor sequences; taste receptor function; expression and assay technologies that may be used to identify new flavors, flavor enhancers, and taste modulators; and novel flavor ingredients and applications.

SENOMYX'S INNOVATIONS ARE VALUABLE ASSETS

Senomyx currently owns or has exclusive licenses to 113 issued patents and 371 pending patent applications in the U.S., Europe, and elsewhere, including several U.S. patents relating to the human sweet, umami (savory), and bitter taste receptors. For example, we have been granted composition claims covering the human sweet taste receptor, as well as claims directed to the amino acids and nucleic acid sequences that encode each of the receptor subunits and subunit variants. Our patents also have broad-based claims that cover novel techniques for using the sweet taste receptor as the basis for assay systems to identify new flavor ingredients that induce or modulate sweet tastes.

We believe our patents provide a significant competitive advantage for Senomyx. Our intellectual property portfolio is therefore an important asset that helps Senomyx establish collaborative agreements with market-leading food, beverage, and ingredient supply companies.



Advancing
the Discovery & Development of New Flavor Ingredients

**SCIENTIFIC EXPERTISE
AND STATE-OF-THE-ART
FACILITIES**



Senomyx currently has approximately 120 full-time employees, including more than 30 with Ph.D. degrees. About 80% of our staff is engaged in research and development activities in our Biology, Discovery, Sensory Science, and Product Development departments. Our new 64,000 sq. ft. corporate facility has been designed for the Company's unique needs, with state-of-the-art chemistry and biology laboratories, a large product development kitchen, and a well-equipped sensory evaluation area.

Senomyx's proprietary technologies are a unique approach to the discovery of new flavor ingredients that amplify preferred tastes or block unwanted tastes. We are using our novel methods to create innovative flavor ingredients and to identify compounds from nature that provide a desired taste effect.

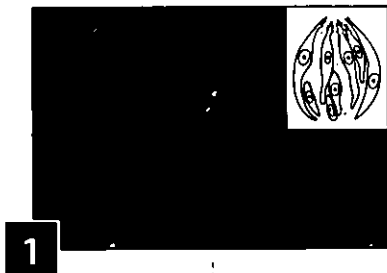
Unlike traditional flavor companies that rely on labor-intensive and time-consuming trial-and-error processes to evaluate combinations of known flavors or flavor derivatives in taste tests, Senomyx has devised robotic systems that enable us to conduct millions of analyses of new potential flavor ingredients annually. This efficiency is impossible to achieve using conventional flavor discovery methods.

Senomyx has amassed a library of approximately 500,000 artificial and natural samples isolated from plants and other sources. The natural samples typically contain mixtures of at least ten components per extract, providing an effective library of more than 1.5 million individual natural components. Samples from the library are evaluated in automated high-throughput screening assays that determine whether they interact with the receptor associated with a particular taste. Our assay systems are much more sensitive than the human tongue, and we have identified patentable potential flavor ingredients that could not be recognized using taste tests alone.

New flavor candidates identified via the screening assays are further evaluated in taste tests using trained panelists. These tests involve both simple product prototypes and complex foods and beverages. The samples can be optimized to increase their potency or to provide the taste and physical attributes requested by our collaborators.

Potential new flavor ingredients that have the appropriate characteristics are selected for final development. Senomyx's development activities are conducted in accordance with standard flavor industry procedures to support U.S. and international regulatory approvals.

SENOMYX PIONEERED THE USE OF TASTE RECEPTORS FOR THE DISCOVERY OF NEW FLAVOR INGREDIENTS.



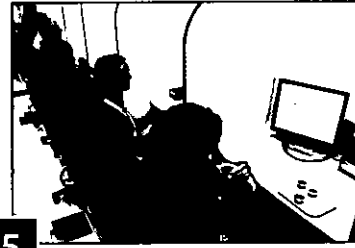
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4



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5



3



6

- 1 TASTE BUD & CELLS**
Cells responsible for different tastes are identified within the taste buds.
- 2 SCREENING PLATES**
Cells containing receptors associated with a particular taste are loaded into screening plates.
- 3 ROBOTIC SCREENING OF SAMPLE LIBRARIES**
A different sample is added into each plate well. Automatic measurements determine if the sample interacts with the taste receptors.
- 4 FLAVOR INGREDIENT CANDIDATES**
Promising flavor ingredient candidates are identified for optimization and further evaluation.
- 5 TASTE TESTING**
Trained taste panels evaluate the flavor candidates in product prototypes.
- 6 COMMERCIALIZATION**
New flavor ingredients are ready for commercialization following development activities and regulatory approval.

Senomyx is using our knowledge of taste receptors to discover new flavor ingredients. We prepare cells associated with a particular taste for use in our proprietary high-throughput screening assays. These assays are robotic systems that have the capability to perform millions of analyses annually to determine which samples in our libraries are potential new flavor ingredients that can enhance or block specific tastes. The most promising flavor ingredient candidates are evaluated in taste tests and optimized to meet our partners' needs. After the completion of industry-standard regulatory and development activities, the ingredients are ready for commercialization.

New

Flavor Ingredients

The goals of Senomyx's Flavor Programs are to discover and develop new flavor ingredients that may enhance the nutritional profile of foods and beverages while maintaining or improving taste.

Savory Enhancers – reduce or replace monosodium glutamate (MSG) and create new savory flavors

Sweet Enhancers – reduce natural and artificial sweeteners to lower calories and improve taste

Bitter Blockers - reduce or block bitter taste and improve the taste characteristics of foods, beverages, ingredients, and other oral products

Salt Enhancers – reduce sodium in foods and beverages yet maintain the salty taste desirable to consumers

High Potency Sweeteners - identify new low- or non-caloric natural high potency sweeteners

Cooling Flavors - identify novel cooling agents that do not have the limitations of currently available agents



Food and beverage companies use both natural and non-nutritive (artificial) sweeteners in their products. Natural sweeteners include sucrose, which is common table sugar, and fructose, the primary sweetener of high-fructose corn syrup. Non-nutritive sweeteners include high intensity sweeteners such as sucralose and aspartame. Senomyx has been able to identify enhancers of both sucrose and sucralose. We intend to seek regulatory acceptance for S2383, our sucralose enhancer, in 2008.

Sucralose is used in a wide variety of beverages and foods, as well as over-the-counter (OTC) healthcare products and dietary supplements. We therefore believe there is significant commercial potential for a sucralose enhancer.



Major Progress in Our Flavor Programs

Savory Enhancer Program: Senomyx's savory program came to fruition this year with the first commercialization of our savory flavor ingredients. These ingredients may be used to reduce or replace monosodium glutamate (MSG), or in combination with other ingredients to create unique new savory flavors. During 2007 Nestlé began marketing food products containing Senomyx's savory flavor ingredients in Pacific Rim and Latin American countries. The marketed products are in the bouillon and culinary aid food categories.

Sweet Enhancer Program: During the year Senomyx discovered S2383, a novel enhancer of the high-intensity sweetener sucralose, which is utilized in beverages, foods, OTC healthcare products, and dietary supplements. Taste tests demonstrated that S2383 enabled up to a 75% reduction of sucralose in certain product prototypes, yet maintained the same sweet intensity without any off-tastes. Development activities are well under way, including successful completion of initial safety studies and product application work.

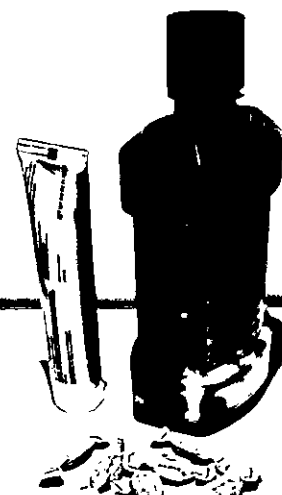
Senomyx also identified S5742 and S0739, which function as enhancers of sucrose (table sugar) and allowed an approximate 40% reduction of sucrose in taste tests with simple product prototypes. Efforts are ongoing to optimize these and related sucrose enhancers and to identify enhancers of fructose and other natural and artificial sweeteners.

Bitter Blocker Program: During 2007 Senomyx discovered S5105 and other bitter blockers that provided statistically significant reduction in the bitterness of several variations of a collaborator's product in proof-of-concept taste tests. We also characterized bitter components of hydrolyzed soy samples and used them to identify the two key receptors associated with the bitter taste.

Salt Enhancer Program: Senomyx achieved a scientific breakthrough in 2007 with the discovery of SNMX-29, the protein we believe is the primary receptor responsible for human salt taste. We identified and evaluated approximately 15,000 proteins found in taste buds and established detailed criteria to determine which of the proteins functions as the taste receptor that responds to sodium chloride (salt). SNMX-29 met all of our criteria and is being incorporated into a screening assay that will be used to examine our sample libraries to find potential enhancers of salt taste.

High Potency Sweetener Program: Senomyx has completed primary screening of more than 250,000 natural samples isolated from plants and other sources. We are seeking to discover novel low- or non-caloric natural high potency sweeteners and to improve upon the taste and physical properties of currently marketed high potency sweeteners.

NEW COOL FLAVOR PROGRAM



Senomyx has initiated a new Discovery & Development program intended to identify novel cooling flavors that do not have the off-tastes, weak cooling characteristics, and other limitations of currently available agents. We developed a proprietary screening assay based on human TRPM8, an ion channel that functions as the receptor associated with cooling and menthol taste sensations, and we have begun screening our libraries for new cooling flavors that would be valuable for our partner.

Validation of Our Scientific Approach and Business Strategy

We view Nestlé's commercial launch of products containing Senomyx's savory flavor ingredients as a validation of our discovery & development expertise and our business model.

- Savory receptor discovered by Senomyx
- Receptor-based screening assay developed by Senomyx
- New savory flavor ingredients identified by Senomyx
- Regulatory acceptances obtained by Senomyx
- ⊛ Commercialization by Senomyx's partner



New Collaborations

Affirm Our Business Model

Food, beverage, and ingredient companies are seeking to satisfy the growing consumer demand for healthier foods such as those with reduced sugar and salt, but they do not want to sacrifice taste or increase costs. Senomyx's proprietary technologies allow us to address this expanding market opportunity by providing our partners with distinctive new flavor ingredients that have significant benefits and competitive advantages.

Senomyx has product discovery and development collaborations with seven of the world's leading food, beverage and ingredient supply companies: Ajinomoto Co., Inc., Cadbury Schweppes, Campbell Soup Company, The Coca-Cola Company, Firmenich SA, Nestlé SA, and Solae. Each collaboration provides the partner with use of new flavor ingredients from one of our flavor programs on an exclusive or co-exclusive basis in specific product fields and geographies. For Senomyx, this arrangement allows us to leverage our assets by establishing multiple collaborations for the same flavor ingredients. For our collaborators, the exclusivity enables them to differentiate their products from their competitors' offerings.

Our collaborations provide Senomyx with research and development funding, milestone payments, and royalties on sales of products incorporating our flavor ingredients. Each collaborator will bear the costs and responsibilities for manufacturing and marketing its products that contain Senomyx flavor ingredients, enabling us to benefit from their brand recognition and established markets.

Senomyx's technologies and business model have been validated by our experience with our savory flavor ingredients. We identified the human umami (savory) receptor, created the screening assay used to discover candidate ingredients, optimized samples, performed taste tests, and conducted development activities needed for regulatory filings. Our savory flavor ingredients can be commercialized in the U.S., China (the world's largest MSG market) and numerous other countries. In mid-2007, Nestlé SA, the world's largest food company, began the commercial introduction of food products that contain Senomyx's savory flavor ingredients.

NEW COLLABORATIONS OPEN NEW MARKETS TO SENOMYX

Senomyx's recent collaborations with global ingredient supply companies have provided a new opportunity to capitalize on our assets and generate royalty revenues by using our products in combination with other ingredients to create improved flavors. Our partnership with Solae (a joint venture of DuPont and Bunge Limited), the leading supplier of soy protein for food-based products, is intended to yield new flavor ingredients that could help expand the rapidly growing market for soy protein. Our agreement with Firmenich, the world's largest privately-owned fragrance and flavor company, may facilitate market acceptance for the use of new Senomyx cooling agents in oral care and OTC healthcare products, as well as confectioneries, foods and beverages.



Dear Stockholders:

Senomyx made great strides in both advancing the science of taste and in the development of innovative flavor ingredients during 2007. We experienced unprecedented progress in all of our Discovery & Development programs, entered into collaborative agreements with two new world-class partners, and opened new market opportunities to the Company. An important highlight of the year was the commercial launch of food products containing Senomyx's savory flavor ingredients by Nestlé. The savory flavor ingredients were discovered and developed in-house using Senomyx's proprietary technologies, and their commercialization represents a validation of Senomyx's scientific approach and business model.

I'm pleased to report that during the year we discovered S2383, a highly effective sucralose enhancer, and began development activities in support of regulatory filings. Based upon continued success with these activities, we expect S2383 will receive regulatory acceptance in late 2008, which will make it eligible for commercialization at that time. Sucralose is a widely used high-intensity sweetener and we believe there is significant commercial potential for a sucralose enhancer.

We also made excellent progress identifying promising enhancers of the natural sugar sucrose during 2007, and we look forward to the near-term initiation of development activities for a sucrose enhancer. Products with reduced sucrose could provide health benefits for consumers, particularly those with diabetes and obesity concerns.

We are especially excited about a recent accomplishment in our Salt Enhancer Program – the discovery of SNMX-29, which we believe is the primary human salt taste receptor. The identification of SNMX-29 was based on an analysis of approximately 15,000 proteins found in human taste buds, and we consider it a significant achievement for both Senomyx and the science of taste. Reduction of sodium consumption is a priority for food companies due to the association of high salt intake with cardiovascular disease. We believe that an effective salt taste enhancer would be a valuable asset for Senomyx, our current partners, and potential new collaborators.

Senomyx achieved a breakthrough in our Bitter Blocker Program during 2007 with the discovery of S5105 and other bitter blockers, which provided a statistically significant reduction in the bitterness of several variations of a collaborator's products and other product prototypes in proof-of-concept taste tests. We are now optimizing these bitter blockers to increase their potency.

Senomyx also made considerable progress with our effort to control the bitterness of certain soy-based products under our

new collaboration with Solae, the leading supplier of soy protein for food-based products. We characterized the bitter components of hydrolyzed soy samples, identified the key receptors associated with the bitter taste, and have initiated screening activities for bitter blockers. Reducing the bitterness of these products could improve the nutritional value of foods by allowing manufacturers to add more protein and use less sugar, salt and fat, and could help expand the rapidly growing market for soy protein.

In parallel with our efforts regarding sweet taste enhancers, we continued to make important headway with our High Potency Sweetener Program. The goals for this program are to identify novel low- or non-caloric natural high potency sweeteners and to improve upon the taste and physical properties of currently marketed sweeteners. We completed primary screening of our library of more than 250,000 natural samples and we are now isolating the active samples for further analysis and taste tests.

Another major scientific and business advancement was the recent initiation of a Cool Flavor Program for the discovery and development of novel cooling agents in conjunction with Firmenich, the world's largest privately-owned fragrance and flavor company. Senomyx has developed a proprietary screening assay that was validated through the identification of samples that provided a cool taste and appeared significantly more potent than several common cooling agents. These agents are used in confectioneries, foods and beverages, as well as oral care and OTC healthcare products. Firmenich is well-established in these markets and we believe they offer key strengths in the areas of product development, manufacturing, and marketing that could allow us to accelerate commercialization of the novel cool flavors we may discover.

In addition to our new collaborations with Solae and Firmenich, we expanded our agreement with Ajinomoto during the year. These partnerships allow us to maximize the long term revenue potential of our flavor ingredients by working with ingredient suppliers as well as food and beverage companies. Senomyx now has collaborations with seven of the world's leading consumer companies: Ajinomoto, Cadbury Schweppes, Campbell Soup Company, Coca-Cola Company, Nestlé, and Solae.

Senomyx is very proud of all the progress made during 2007. We are fortunate to have outstanding employees in both our scientific and business groups, and an experienced management team.

We are also very appreciative of our stockholders and the support we have received from you. We are committed to using our expertise in the science of taste to create innovative flavor ingredients that will enhance the value of our Company.

Sincerely,

Kent Snyder
President and Chief Executive Officer

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 10-K

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended **December 31, 2007**

or

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____
Commission File Number **000-50791**

SENOMYX, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation
or organization)

33-0843840

(I.R.S. Employer Identification No.)

4767 Nexus Centre Drive

San Diego, California

(Address of principal executive offices)

92121

(Zip Code)

(858) 646-8300

Registrant's telephone number, including area code

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class

Name of Exchange on Which Registered

Common Stock, par value \$.001 per share

The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

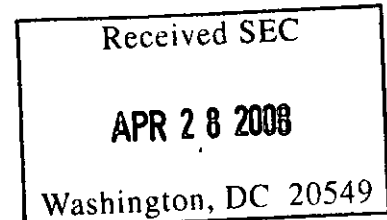
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. Large accelerated filer Accelerated filer Non-accelerated filer

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

As of June 30, 2007, the aggregate market value of the voting stock held by non-affiliates of the registrant,



computed by reference to the last sale price of such stock as of such date on the NASDAQ Stock Market LLC, was approximately \$351,844,000. Excludes an aggregate of 4,320,451 shares of common stock held by officers and directors and by each person known by the registrant to own 5% or more of the outstanding common stock as of June 30, 2007. Exclusion of shares held by any of these persons should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the registrant, or that such person is controlled by or under common control with the registrant.

As of January 31, 2008, there were 30,506,900 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 2008 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Form 10-K, are incorporated by reference in Part III, Items 10-14 of this Form 10-K.

SENOMYX, INC.

**Annual Report on Form 10-K
For the Fiscal Year Ended December 31, 2007**

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This annual report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements included or incorporated by reference in this annual report on Form 10-K other than statements of historical fact, are forward-looking statements. You can identify these and other forward-looking statements by the use of words such as "may," "will," "could," "anticipate," "expect," "intend," "believe," "continue" or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to such statements.

Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth below under the caption "Risk Factors" in Part I Item 1A and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II Item 7 of this annual report on Form 10-K and elsewhere in this annual report on Form 10-K. Readers are cautioned not to place undue reliance on forward-looking statements. The forward-looking statements speak only as of the date on which they are made and we undertake no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they are made except as required by law.

PART I

Item 1. *Business*

Overview

We are a leading company focused on using proprietary taste receptor-based assays and screening technologies to discover and develop novel flavors, flavor enhancers and taste modulators, which we refer to as flavor ingredients, for the packaged food, beverage and ingredient industries. We believe our flavor ingredients will enable packaged food, beverage and ingredient companies to improve the nutritional profile of their products while maintaining or enhancing taste and generating cost of goods savings. We license our flavor ingredients to our collaborators on an exclusive or co-exclusive basis, which we believe will provide these companies with a competitive advantage. We have product discovery and development collaborations with seven of the world's leading packaged food, beverage and ingredient companies: Ajinomoto Co., Inc. ("Ajinomoto"), Cadbury Schweppes ("Cadbury"), Campbell Soup Company ("Campbell"), The Coca-Cola Company ("Coca-Cola"), Firmenich SA ("Firmenich"), Nestlé SA ("Nestlé") and Solae LLC ("Solae"). We currently anticipate that we will derive all of our revenues from existing and future collaborations. Depending upon the collaboration, our collaboration agreements provide for upfront fees, research and development funding, reimbursement of certain regulatory costs, milestone payments based upon our achievement of research or development goals and, in the event of commercialization, commercialization milestones, minimum periodic royalties and royalties on sales of consumer products incorporating our flavor ingredients. Senomyx's current programs focus on the development of savory, sweet and salt flavor enhancers, high potency sweeteners, bitter blockers and cooling agents.

Flavor ingredients are substances that impart or modulate tastes or aromas in foods and beverages. Individuals experience the sensation of taste when flavor ingredients in food and beverage products interact with taste receptors in the mouth. A taste receptor functions either by physically binding to a flavor ingredient in a process analogous to the way a key fits into a lock or by acting as a channel to allow ions to flow directly into a taste cell. As a result of these interactions, signals are sent to the brain where a specific taste sensation is registered. There are currently five recognized primary senses of taste: umami, which is the savory taste of glutamate, sweet, salt, bitter and sour. In addition, there are secondary taste sensations, such as cool, hot and fat.

We are currently pursuing the discovery and development of flavor ingredients through six programs focused on savory, sweet, salt, bitter and cooling taste areas. The goals of our savory program are to enhance the taste of naturally occurring glutamate and enable the reduction or elimination of added monosodium glutamate, or MSG. The goals of our sweet enhancer program are to enhance the taste of

natural and artificial sweeteners and enable a significant reduction in added sweeteners. The goals of our salt program are to enhance the taste of salt and enable a significant reduction in added salt. The goals of our bitter taste modulation program are to reduce or block bitter taste and to improve the overall taste characteristics of packaged foods, beverages, over the counter, or OTC, health care products and pharmaceutical products. The goals of our high potency sweetener program are to allow for the reduction of calories in packaged foods and beverages and to enable our collaborators to use product labeling referencing "natural flavors." The goal of our cool flavor program is to discover novel cooling compounds for a variety of applications.

Our internet address is www.senomyx.com. We post links on our website to the following filings as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission, or SEC: annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendment to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended. All such filings are available through our website free of charge. Our filings may also be read and copied at the SEC's Public Reference Room at 100 F Street, NE Washington, DC 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is www.sec.gov.

Industry Background

Packaged Food and Beverage Industry

Packaged food and beverage products include carbonated and non-carbonated beverages, frozen foods, snack foods, ice cream, pasta, canned soup, pet food and numerous other products. According to recent data from Euromonitor International, an independent research organization, worldwide sales of packaged food and beverage products in 2006, excluding pet food, were approximately \$1.4 trillion, of which \$284 billion was generated in the United States. These figures represent growth rates of approximately 5% and 3%, respectively, over 2001 amounts. Based on these estimates, of the worldwide total, sales of packaged foods were approximately \$1.1 trillion and sales of non-alcoholic beverages were approximately \$330 billion. Additionally, according to recent data from Euromonitor, the worldwide sales of pet food products in 2006 were approximately \$30 billion. Based on recent data from Euromonitor, Information Resources, Inc. and reports from our collaborators, we estimate that our collaborators' combined worldwide sales in 2006 of their products that fall within their exclusive or co-exclusive product fields were over \$55 billion. Our collaboration agreements for retail and food service sales provide that we will receive royalties of up to 4% on our collaborators' sales of products containing our flavor ingredients. However, we do not anticipate that our collaborators will incorporate our flavor ingredients into all of their products within their exclusive product fields.

Each of our flavor ingredients addresses large, potentially overlapping markets. The following table sets forth the four primary taste areas on which we are focused and, for each taste area, provides examples of product categories that could incorporate ingredients in those taste areas, estimated worldwide sales and our estimates of the worldwide sales for food and beverage products of our existing collaborators in their exclusive or co-exclusive product fields.

<u>Taste Areas</u>	<u>Example Product Categories</u>	<u>2006 Estimated Worldwide Sales(1)</u>	<u>2006 Estimated Revenues Of Existing Collaborators In Exclusive Product Fields(2)</u>
Savory	Ready meals, sauces, spreads, frozen foods, beverages, meal replacements, soups, pastas, dried foods, snack foods, processed meats, processed cheeses and cracker products	\$ 419 billion	\$ 19.7 billion
Sweet	Confectionaries, cereal, ice cream, beverages, yogurt, dessert, spreads and bakery products	\$ 523 billion	\$ 18.0 billion
Salt	Product categories are the same as those set forth for savory taste area plus canned foods and bakery products	\$ 427 billion	\$ 9.4 billion
Bitter	Products which contain bitter tastants, including confectionary, beverages, ice cream, ready meals, canned foods and soups, and products which utilize certain artificial sweeteners	\$ 506 billion	\$ 7.8 billion

(1) According to recent Euromonitor data for packaged food and beverages, excluding pharmaceutical and OTC health care applications.

(2) Based on recent data from Euromonitor, Information Resources, Inc. and reports from our collaborators.

According to Hill Consulting Group's "Cooling Agents" report, annual sales of current cooling compounds are in the range of \$400 million, and we estimate the opportunity for flavor systems incorporating improved cooling agents may be three to four times that size.

Flavor and Ingredient Supply Industry

Flavors and ingredient supplies are used in a variety of packaged food, beverage and ingredient products throughout the world. Flavors and ingredient supplies can originate from either naturally occurring or chemically synthesized compounds. Flavors include compounds which impart a taste such as strawberry, vanilla or cool while ingredient supplies include food additives such as MSG and hydrolyzed soy protein. Flavor ingredients may be sold as part of a flavor system or in combination with another ingredient to packaged food and beverage companies. A flavor system can be a combination or variety of flavors and ingredients, such as strawberry flavor and sweeteners. Flavor systems can also come in several forms such as powder or liquid, and may be specially processed to increase the functionality of the flavor.

While some packaged food, beverage and ingredient companies have their own internal research and development programs, most have traditionally relied on purchases of flavor ingredients from third parties. Historically, flavor ingredients have been sold on a commodity basis by independent manufacturers who make their products broadly available to packaged food, beverage and ingredient companies on a non-exclusive basis. This has limited the ability of packaged food, beverage and ingredient companies to use flavor ingredients to differentiate their brands from competitors.

Traditionally, flavor and ingredient supply companies have discovered new flavor ingredients primarily using inefficient, non-automated and labor-intensive trial and error processes involving a limited

number of trained taste testers. Using this approach, taste testers must physically taste each potential flavor ingredient to assess the taste characteristics of the compound. Taste testers can assess only a limited number of potential flavor ingredients at one time due to the sensory fatigue that results from repeated tasting. As a result, only a small fraction of the available universe of ingredients can be tested economically.

Flavors and ingredient supplies are regulated under provisions of the Food, Drug and Cosmetic Act (or FD&C Act) administered by the Food and Drug Administration (or FDA). Flavor ingredients sold in countries and regions outside the United States are also subject to regulations imposed by national governments or regional regulatory authorities, as is the case in the European Union. For further discussion of the regulatory regime for flavor and ingredient supplies, please see the "Regulatory" section below.

High Potency Sweetener Industry

High potency sweeteners have many functions in the food and beverage industry and are used in a wide variety of consumer product categories. High potency sweeteners are commonly found in soft drinks, juices, confectionaries, low calorie foods and chewing gum.

As is the case with flavor and ingredient supply companies, high potency sweetener companies have typically discovered new high potency sweeteners primarily using inefficient, non-automated and labor-intensive trial and error processes involving a limited number of trained taste testers. In other instances, as with the discovery of aspartame, high potency sweeteners have been discovered by accident.

High potency sweeteners are sold on a commodity basis by sweetener manufacturers and other third parties. These sweeteners are broadly available to packaged food and beverage companies on a non-exclusive basis. This has limited the ability of packaged food and beverage companies to use high potency sweeteners to differentiate their brands from competitors. Another problem often faced by users of high potency sweeteners are the negative aspects of their taste profiles such as lingering, delayed onset and bitterness. These limitations of current high potency sweeteners require many food and beverage manufacturers to blend high potency sweeteners together in a single product to get the desired taste profile.

While most flavor ingredients are regulated as Generally Recognized as Safe, or GRAS, substances under the provisions of the FD&C Act, in the United States, most high potency sweeteners are currently regulated as food additives which may require FDA approval prior to use in foods. (Please see the "Regulatory" section below for a more complete description of the regulatory process.)

Flavor Ingredients as a Source of Competitive Advantage

The packaged food, beverage and ingredient industries are comprised of a number of large and highly competitive market segments. Small market share gains in specific large market segments can translate into significant additional revenue for packaged food, beverage and ingredient companies. For example, according to recent Euromonitor data, estimated 2006 worldwide sales of soft drinks were approximately \$280 billion. Thus, an increase of a tenth of a percentage point in overall worldwide market share would result in additional revenue of approximately \$280 million.

As a result of these market opportunities, packaged food, beverage and ingredient companies are constantly seeking ways to differentiate their products, demand for which can be greatly affected by very small actual or perceived improvements in flavor or health profiles. Flavor ingredients can potentially provide an important way to differentiate a particular product through enhanced taste, improvements in nutritional profile or labeling, flavor ingredient exclusivity and cost of goods savings.

- *Taste.* Product taste is a critical competitive factor for packaged food, beverage and ingredient companies. These companies seek to use flavor ingredients to improve or maintain taste while improving the nutritional profile of packaged food, beverage and ingredient products or reducing ingredient costs.

- *Health Benefits.* Packaged food, beverage and ingredient companies are exploring ways to improve overall nutritional quality of their products. It is widely accepted that poor diet contributes to adverse health conditions such as cardiovascular disease, diabetes and obesity. To address these concerns, many companies have introduced reduced calorie, reduced sodium and reduced fat content products to the market. Flavor ingredients with specific desired characteristics provide an innovative way to reduce the levels of ingredients that may contribute to these concerns without compromising desirable taste attributes.
- *Flavor Ingredient Exclusivity.* Failure of packaged food, beverage and ingredient companies to differentiate their brands from their competition, including private label products, may result in significant loss of market share, price pressure and erosion of profit margins. Packaged food, beverage and ingredient companies spend millions of dollars creating brands and brand images to compete with other products. Many of these competitive products contain the same or similar flavor ingredients. The limited availability of proprietary flavor ingredients makes it difficult for manufacturers to differentiate their products based on flavor ingredients.
- *Cost of Goods Savings.* The packaged food, beverage and ingredient industries purchase enormous quantities of raw materials to produce their products. According to the Food and Agriculture Division of the United Nations, estimated worldwide sugar production in 2006 was approximately 149.1 million metric tons, and consumption was over 149.9 million metric tons. The market value of processed sugar produced worldwide is therefore in excess of \$65 billion on an annual basis, based on United States spot prices in January 2008. Similarly, according to JapanScan, a Datamonitor Service, worldwide demand for MSG was nearly 1.7 million metric tons in 2006 at a cost of \$2.4 billion. According to LMC International, worldwide demand for high-fructose corn syrup for 2007 was approximately 12.9 million metric tons at a cost of approximately \$6.7 billion. Flavor ingredients can potentially facilitate a reduction in the quantity of these ingredients used in packaged food, beverage and ingredient products, which could result in significant decreases in costs and associated increases in profit margins.

Our Solution

We use our proprietary taste receptor-based assays and screening technologies to discover and develop novel flavor ingredients. We have developed proprietary taste receptor-based assays that incorporate human taste receptors. We use these assays in our high-throughput screening systems to rapidly and efficiently screen our compound libraries and identify large numbers of novel potential flavor ingredients. We believe our approach improves the likelihood that ingredients with the desired characteristics can be discovered and then optimized into novel flavor ingredients.

We believe our approach will result in the discovery and development of flavor ingredients that will provide the following valuable solutions to the following key challenges faced by the packaged food, beverage and ingredient industries:

- *Maintaining and Improving Taste.* We are developing flavor ingredients to enable our current and future collaborators to improve or maintain taste while improving the nutritional profile of packaged food, beverage and ingredient products or reducing ingredient costs.
- *Reducing Sugar, Salt and MSG in Packaged Food, Beverage and Ingredient Products.* We are developing flavor ingredients to enable our current and future collaborators to significantly reduce the levels of sugar, salt and MSG in packaged food, beverage and ingredient products while maintaining or improving taste. We believe reducing the levels of such ingredients will improve the nutritional profile of packaged food, beverage and ingredient products.
- *Blocking Undesirable Tastes.* We are discovering flavor ingredients that we believe will be useful in blocking bitter and other unwanted tastes associated with certain packaged food, beverage, OTC health care products and pharmaceutical products.

- *Overcoming Deficiencies in Certain Flavor Ingredients.* We are discovering flavor ingredients with lower costs and improved properties over existing ingredients including flavor and physical properties.
- *Identifying Natural Ingredients.* We are screening our library of natural samples isolated from plants and other natural sources to discover new natural ingredients.
- *Obtaining Exclusive or Co-Exclusive Use of Proprietary Flavor Ingredients.* We are able to offer our current and future collaborators exclusive or co-exclusive use of our proprietary flavor ingredients in defined packaged food, beverage and ingredient product categories. We believe this approach will assist our collaborators in differentiating their products from those of their competitors.
- *Reducing Cost of Goods.* We believe our proprietary flavor ingredients will enable our current and future collaborators to reduce overall raw material ingredient costs, particularly for those products containing high levels of natural and artificial sweeteners and MSG.

Our Strategy

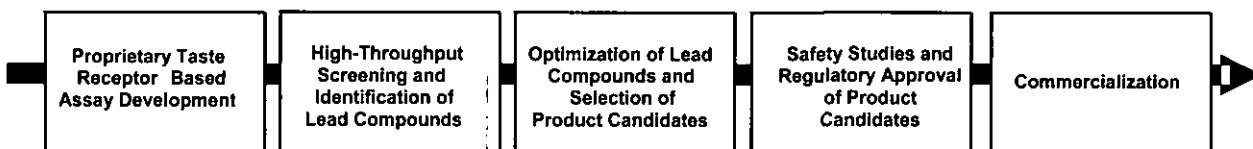
Our goal is to become the leader in discovering, developing and commercializing new and improved flavor ingredients. Key elements of our strategy include:

- *Collaborating With Leading Packaged Food, Beverage and Ingredient Companies.* We are collaborating with leading packaged food, beverage and ingredient companies to develop and commercialize our product candidates. Our collaborators are responsible for marketing, selling and distributing their products incorporating our flavor ingredients. In addition, our collaborators are responsible for all manufacturing costs of our flavor ingredients. As a result, we expect to commercialize our flavor ingredients without incurring significant sales, marketing, manufacturing and distribution costs. We currently have collaborations with Ajinomoto, Cadbury Schweppes, Campbell, Coca-Cola, Firmenich, Nestlé and Solae.
- *Developing Flavor Ingredients that are Eligible for Flavor and Extract Manufacturers Association, or FEMA, GRAS Determination.* Our primary focus is on the development of flavor ingredients that will qualify for a FEMA GRAS determination. Four ingredients developed as part of our savory program have received FEMA GRAS determination. Upon the GRAS determination, our collaborators can begin to test market and commercialize products incorporating our flavor ingredients. In the event that a particular flavor ingredient is not eligible for FEMA GRAS determination, we may dedicate our development efforts to alternative ingredients.
- *Pursuing Additional Collaborations and Market Opportunities.* We seek to establish additional collaborations with leading packaged food, beverage and ingredient companies to use flavor ingredients developed through our existing programs for exclusive or co-exclusive use within new packaged food, beverage and ingredient product fields. We intend to receive from future collaborators up-front fees, research and development funding, milestone payments, minimum periodic royalties and royalties on future sales of products incorporating these flavor ingredients. In addition, we plan to target fields in which our collaborators can incorporate more than one of our flavor ingredients into a particular product.
- *Expanding Our Product Candidate Pipeline.* We will continue to focus on the discovery and development of additional flavor ingredients based on additional taste receptors to address new taste areas. We believe potential new taste receptors include the fat taste and hot taste receptors. We also intend to improve the beneficial characteristics of our current product candidates through the development of next-generation flavor ingredients. We will also continue to consider applications of our current products and technologies outside of the packaged food, beverage and ingredient industries.

- *Maintaining and Expanding Our Technology Position.* We believe our proprietary taste receptor-based technologies, including our receptor discovery, assay development and high-throughput screening technologies and natural and synthetic compound libraries provide us and our collaborators with significant competitive advantages. We intend to continue to develop and acquire proprietary technologies and related intellectual property rights to expand and enhance our ability to discover and develop new proprietary flavor ingredients.

Our Discovery and Development Process

The following diagram summarizes our discovery and development process.



The key elements of our Discovery and Development process are:

- *Proprietary Taste Receptor-Based Assay Development.* The first step in our discovery and development process is to develop proprietary assays based on human taste receptors. Our assays are tests that measure interactions between the taste receptors and potential flavor ingredients. To date we have developed assays to test for compounds that affect savory, sweet, salt, bitter and cooling tastes. We are currently developing a new high-throughput assay to test for compounds that affect salt tastes.
- *High-Throughput Screening and Identification of Lead Compounds.* The next step in our discovery and development process is to use our proprietary taste receptor-based assays to identify compounds that bind to human taste receptors, known as hits. We use automated high-throughput screening to rapidly evaluate our libraries of diverse synthetic and natural compounds. A panel of taste testers then evaluates the taste effect of the most potent hits. Based on this evaluation, we designate hits that exhibit a positive taste effect as proof-of-concept compounds. We then select the most promising of those proof-of-concept compounds, which we call lead compounds, for optimization.
- *Optimization of Lead Compounds and Selection of Product Candidates.* The next step in our discovery and development process is to chemically enhance, or optimize, our lead compounds to allow lower amounts of the compound to be used in the finished product or improve the enhancement effect to meet the taste attribute goals of our collaborators. Optimization may also be required to enhance the safety profile or to improve the physical properties of a compound so that it is stable under manufacturing, storage and food preparation conditions. We refer to optimized compounds that provide desirable taste attributes in packaged food, beverage and ingredient product prototypes as product candidates. When screening natural libraries, optimization involves selecting the appropriate source and developing the most efficient process to obtain the active compound.
- *Safety Studies and Regulatory Approval of Product Candidates.* The next step in our discovery and development process is to select one or more product candidates for commercialization. We then evaluate the selected product candidate for safety. Following this evaluation, we submit the safety data along with the physical and chemical properties of the product candidate and a description of manufacturing and conditions of intended use to the United States Flavor and Extract Manufacturers Association ("FEMA"). The FEMA review is conducted by the Expert Panel. The conclusions of the Expert Panel regarding a flavor or flavor enhancer are provided directly to the FDA and published in the journal Food Technology. Four ingredients developed as part of our savory program have received FEMA GRAS determination. The process from selection for development until receipt of that determination took approximately 12 months. Costs

associated with the FEMA GRAS process, including synthesis of material for regulatory studies, contract safety studies and preparation of the application, were less than \$1 million. We expect that most of the flavor ingredients we develop in the future will require a similar amount of time and cost. However, the length of time may vary depending on the properties of the flavor ingredient. In the United States, most high potency sweeteners are currently regulated as food additives which require FDA approval prior to use in foods. However, no United States regulation precludes high potency sweeteners from being determined to be GRAS. The safety data requirements for food additives and GRAS substances are the same and depend upon the anticipated human exposure to the substance or consumption, and the level of concern for potential toxicity based on the structure of the substance. If a food additive petition is required, there is a range of potential studies which may have an estimated cost of up to \$7 million and may take up to four years to complete. Furthermore, additional studies adding cost and time to approval may be required depending on the results of the initial safety studies. Outside the United States, the food additive approval process is generally similar to the FDA food additive petition process.

- *Commercialization.* Following regulatory approval in a given country, foods and beverages containing our proprietary flavor ingredients can be immediately commercialized. Our collaborators have ultimate responsibility for commercialization of Senomyx flavor ingredients in their end product offerings. Prior to commercialization collaborators complete extensive product formulation work on targeted products. Our collaborators validate final formulations for these products through in-house sensory evaluation as well as external in market taste tests by consumers. Upon confirming consumer acceptance of these products, the collaborators complete activities such as production of the Senomyx flavor ingredients, packaging development and sales samples and materials, enabling the actual market launches of the products.

Our Discovery and Development Programs

We are currently pursuing the discovery and development of flavor ingredients through six programs focused on savory, sweet, salt, bitter and cooling taste areas.

Savory Enhancer Program

The goals of our savory program are to enhance the taste of naturally occurring glutamate and enable the reduction or elimination of added MSG and a related food additive, inosine monophosphate, or IMP. Using SavoryScreenHT, our high-throughput savory receptor-based assay system, we identified two product candidates, S336 and S807, that enhance the savory taste of glutamate. S336 is approximately three times more potent than S807 in taste tests and exhibits greater water solubility compared to S807, which is more fat soluble. Other characteristics, such as heat stability and ease of manufacturing by a simple synthesis process, are similar for the two ingredients. Our collaborator evaluated S336 and S807 for savory taste enhancement in product prototypes, and formally selected both S336 and S807 for development in May 2004.

We completed the safety assessment studies for S336 and S807 and submitted applications for GRAS determination to FEMA in December 2004. In March 2005, the FEMA Expert Panel determined that S336 and S807 were GRAS. In addition, two other flavor enhancers, S263 and S976, which are related to S336, were also determined by FEMA to be GRAS. A more detailed description of the FEMA GRAS process is provided in *Item 1, Business – Regulatory Process*. After we achieved FEMA GRAS status for the four savory ingredients, our collaborator initiated product development efforts to identify initial applications, optimal concentrations and the development of new recipes.

During 2007, the Chinese Ministry of Health granted official regulatory approval in China for our savory flavor ingredients. Also in 2007, our savory flavor ingredients received a positive review by the Joint FAO/WHO Expert Committee on Food Additives, or JECFA. The JECFA determination facilitates the acceptance or approval of flavors for use in food in many countries throughout the world.

Commercialization by Collaborators

Initial market launch by Nestlé of products including our savory enhancers occurred on June 5, 2007. Nestlé's launch strategy is focused on countries where regulatory approval is in place, and targets products that contain high levels of MSG. A total of six new bouillon and culinary aid products, across four countries in the Pacific Rim and Latin America, including Brazil, were launched in 2007. It is expected that additional launches in the dehydrated, culinary and bouillon food categories will continue to occur on a rolling basis over time. While initial launches have focused on new products, it is expected that future launches will also include reformulated established products.

A second collaborator for the savory enhancer program continues preparation for potential future launches of products containing Senomyx's savory ingredients. Currently, we expect the second collaborator's market launch of products containing our savory ingredients to occur in late 2008.

Concurrently, we are working to obtain global regulatory approvals in support of new business development activities and commercialization strategies for subsequent product launches of our savory flavor enhancers in additional countries.

Sweet Enhancer Program

The goals of our sweet enhancer program are to enhance the taste of natural and artificial sweeteners and enable a significant reduction in added sweeteners. Senomyx has identified S2383, a novel enhancer of the high-intensity sweetener sucralose, and S5742, a new sucrose, or plain sugar, enhancer. Taste tests demonstrated that S2383 enabled up to a 75% reduction of sucralose in simple product prototypes, yet maintained the same sweet intensity without any off-tastes. Based on the properties of S2383, we have moved S2383 into the development phase. This includes conducting product development work and safety studies to support regulatory filings. Recent progress includes successful initial safety studies and ongoing product application work. We expect to complete this work and achieve GRAS status in late 2008.

The sucrose enhancer S5742 allowed an approximately 40% reduction of sucrose in taste tests with simple product prototypes. In addition to this significant degree of enhancement, S5742 has key beneficial taste characteristics that allowed the taste of sucrose to be unaffected in these tests. S5742 and related sucrose enhancers are being optimized to lower the compound concentration used to achieve this or a greater degree of enhancement. Additional work is ongoing to identify enhancers of fructose and other natural and artificial sweeteners.

Salt Enhancer Program

The goal of the salt enhancer program is to identify flavor ingredients that allow a significant reduction of sodium in foods and beverages yet maintain the salty taste desirable to consumers. Program activities have been focused on discovery of the primary receptor responsible for human salt taste. Senomyx has identified and evaluated approximately 15,000 proteins found in taste buds and established detailed criteria to determine which of the proteins functions as the receptor that responds to sodium chloride (salt). The Company believes that one of the proteins, SNMX-29, which met all of our criteria, is the primary receptor responsible for salt taste perception. Senomyx has begun development of a high-throughput screening assay based on SNMX-29 that will be used to screen our extensive libraries to provide further verification that SNMX-29 is the human salt taste receptor and, importantly, to identify potential enhancers of salt taste.

Bitter Blocker Program

The goals of our bitter blocker program are to identify compounds that modulate or eliminate the bitter taste and to improve the overall taste characteristics of certain packaged food, beverage and ingredient products, OTC health care products and pharmaceutical products. This involves the identification of taste receptors that respond to bitter ingredients known to be present in a variety of food and beverage ingredients, followed by the use of these receptors to discover bitter taste blockers. In 2007, we continued to make progress identifying taste receptors that respond to bitter ingredients known to be present in a variety of food and beverages, followed by the use of these receptors to discover bitter taste blockers. In particular, we identified S5105, which provided a statistically significant reduction in the bitterness of several variations of a collaborator's product and other product prototypes in proof-of-concept taste tests. S5105 is now being optimized to increase its potency.

In addition, work with another collaborator's products has led to our discovery of taste receptors associated with the bitter taste of hydrolyzed soy protein. Assays using these receptors have been adapted for high throughput screening and we have initiated screening to identify compounds that block the bitterness of soy products.

High Potency Sweetener Program

The goals of our high potency sweetener program are to discover and develop novel no- or low-calorie natural high potency sweeteners and to improve upon the taste and physical properties of currently marketed high potency sweeteners. In 2007, we acquired libraries of natural products containing over 250,000 samples. Since each sample likely contains multiple compounds, we are effectively testing over 1.5 million natural compounds for their ability to activate the sweet taste receptor. Primary screening of these samples has been completed. "Hits" have been identified and are being further analyzed to identify the active compounds. Several compounds have been subjected to taste tests. We are continuing to evaluate these and other samples from our natural libraries for their ability to provide a sweet taste. The high potency sweetener program is progressing in parallel with our active efforts toward the discovery and development of sweet taste enhancers.

Cooling Flavor Program

In the fourth quarter of 2007, we initiated a new scientific program for the discovery and development of cooling agents. The goal of our cool flavor program is to discover novel cooling compounds for a variety of applications. Previously, we developed a proprietary high-throughput screening assay using the receptor associated with cool and menthol taste sensations. This assay has been validated through the identification of several compounds that provided a cooling taste and appeared significantly more potent than menthol, WS-3 and other commonly used cooling agents in a threshold taste test for cooling. Having initiated our new collaboration with Firmenich, we have initiated screening our extensive library of compounds to discover novel cooling flavors that meet the needs of Firmenich's customers.

Product Discovery and Development Collaborations

We pursue collaborations with leaders in the packaged food, beverage and ingredient market. Under each of our current product discovery and development collaboration agreements, we have agreed to conduct research and develop flavor ingredients in one or more specified taste areas, such as savory, sweet, salt, bitter or cool. Each of these collaborations is focused on one or more specific product fields, such as non-alcoholic beverages, wet soups or frozen foods. We have product discovery and development collaborations with Ajinomoto, Cadbury Schweppes, Campbell, Coca-Cola, Firmenich, Nestlé and Solae.

All of our current collaboration agreements provide for research and development funding, milestone payments upon achievement of pre-defined research or development targets, cost reimbursement and royalty payments based upon future product sales in the event the collaborator commercializes a product incorporating our flavor ingredients. Certain of our current collaboration agreements also provide for upfront fees and minimum periodic royalties. The research and development funding under each of these

agreements is paid according to a fixed payment schedule. Each of these collaborations provides us with a portion of the funding we require to pursue the discovery and development of flavor ingredients for the applicable program. Under each of these agreements, we are primarily responsible for the discovery and development phases and any associated expenses, while our collaborator is primarily responsible for selecting the consumer products that may incorporate our flavor ingredients. Our collaborator is also responsible for manufacturing, marketing, selling and distributing any of these consumer products, and any associated expenses. Under most of our agreements, we are primarily responsible for the regulatory approval phase and a portion of the associated expenses. We believe our collaborations will allow us to benefit from our collaborators' well-established brand recognition, global market presence, established sales and distribution channels and other industry-specific expertise. Each of our collaborations is governed by a joint steering committee, consisting of an equal number of representatives of the collaborator and us. The steering committees provide strategic direction and establish performance criteria for the research, development and commercialization of our flavor ingredients. All decisions of the steering committees must be unanimous.

Each of our collaboration agreements provides that we will conduct research and development on flavor ingredients for use within clearly defined packaged food, beverage and ingredient product fields on an exclusive or co-exclusive basis for the collaborator during the collaborative period specified in each of the agreements. Our current product discovery and development collaborators are not prohibited from entering into research and development collaboration agreements with third parties in any product field. Under the terms of each agreement, we will retain rights to flavor ingredients that we discover during the collaboration for use with the collaborator, or for our use or with other collaborators outside of the defined product field. We will also retain rights to any flavor ingredients that we discover after the respective collaborative period. In addition, in the case of certain of our agreements, if the collaborator terminates the agreement or fails after a reasonable time following regulatory approval or GRAS determination to incorporate one or more of our flavor ingredients into a product, it will no longer be entitled to use, and we will have the right to license, the flavor ingredients to other packaged food, beverage and ingredient companies for use in any product field.

Each of our agreements terminates when we are no longer entitled to royalty payments under the agreement. In addition, each agreement may be terminated earlier by mutual agreement or by either party in the event of a breach by the other party of its obligations under the agreement. Our initial agreement with Ajinomoto allows Ajinomoto to terminate the agreement without cause provided that it pay additional specified research funding if it terminates the agreement prior to March 23, 2009. Our most recent agreement with Ajinomoto gives Ajinomoto the right to terminate the agreement without cause provided that it pay additional specified research funding if it terminates the agreement prior to October 5, 2009. Cadbury Schweppes may terminate its agreement without cause upon 90 days written notice. Campbell may only terminate its agreement without cause upon 60 days written notice, provided that it pay a specified termination fee if it terminates the agreement prior to March 28, 2009. Our agreement with Coca-Cola permits Coca-Cola to terminate the agreement upon specified major corporate events. The collaborative period may be terminated by Coca-Cola upon 60 days written notice upon payment of a specified early conclusion fee. In the event of early conclusion, Coca-Cola will no longer be entitled to use, and we will have the right to license, any flavors or flavor enhancers discovered prior to such early conclusion to third parties for use in any product field, provided that Coca-Cola would retain non-exclusive rights in the field of non-alcoholic beverages with the exception of dry powdered beverages. Our agreement with Firmenich permits Firmenich to terminate the agreement without cause upon 90 days written notice on any anniversary of the effective date of the agreement provided that it pay additional specified research funding if it terminates prior to December 14, 2010. Our initial agreement with Nestlé gives Nestlé the right to terminate the agreement without cause, provided that it pay additional specified research funding if it terminates the agreement prior to April 18, 2008. Our most recent agreement with Nestlé gives Nestlé the right to terminate the agreement without cause on or after April 26, 2008 upon 90 days written notice, provided that it pay a specified termination fee if it terminates the agreement after April 26, 2008 but prior to the end of the collaborative period. Our agreement with Solae allows Solae to terminate the agreement without cause on April 23, 2008 upon 60 days' prior notice, or subsequent to April 23, 2008 upon 90 days' prior notice, provided Solae pay additional specified research funding if Solae terminates the agreement prior to April 23, 2010.

Ajinomoto

In March 2006, we entered into a collaborative research, development, commercialization and license agreement with Ajinomoto for the discovery and commercialization of novel flavor ingredients on an exclusive basis in the soup, sauce and culinary aids, and noodle product categories, and on a co-exclusive basis in the bouillon product category within Japan and other Asian markets. Under the terms of the initial collaboration, Ajinomoto agreed to pay us an upfront license fee and research and development funding for up to three years. In addition, we are eligible to receive milestone payments upon achievement of specific product discovery and development goals. In April 2007, we amended the agreement to expand Ajinomoto's rights into North America. Under the terms of the April amendment, Ajinomoto agreed to pay us an upfront license fee and we are eligible to receive an additional milestone payment upon achievement of a specific goal. In August 2007, we further amended the agreement to expand Ajinomoto's rights into additional product categories and geographies that were not previously licensed by us. Under the terms of the August amendment, Ajinomoto has agreed to pay us an upfront license fee. Through December 31, 2007, we have received \$15.6 million in upfront fees and research and development funding and one milestone payment of \$500,000. If all milestones are achieved, and including the \$16.1 million in upfront fees, research and development funding and milestone payments made through December 31, 2007, we may be entitled to up to \$18.1 million in upfront fees, research and development funding and milestone payments. In addition to the upfront fees, research and development funding and milestone payment, we have received a minimum periodic royalty payment. This minimum periodic royalty payment is non-refundable. Under the terms of the contract, Ajinomoto will provide us a sales report and we will record any additional calculated royalties as royalties from product sales. There is no guarantee that we will receive any further milestone payments or royalties under these collaborations.

In October 2006, we entered into a second collaborative research, commercialization and license agreement with Ajinomoto for the discovery and commercialization of specified natural flavor ingredients. Under the terms of the agreement, Ajinomoto has agreed to pay us research funding for up to three years based on research progress during the collaborative period. In addition, we are eligible to receive payments upon achievement of specific milestones. Through December 31, 2007 we have received \$563,000 in research and development funding. If all milestones are achieved, and including the \$563,000 in research and development funding paid through December 31, 2007, we may be entitled to up to \$2.3 million in research and development funding and milestone payments. In addition we are entitled to receive minimum periodic royalties and, upon commercialization, royalty payments based on sales of products containing flavor ingredients developed under the agreement. We cannot assure you that we will receive any future milestone payments or royalties under this collaboration.

Cadbury Schweppes

In July 2005, we entered into a collaborative research and license agreement with Cadbury Adams USA, LLC, a Cadbury Schweppes company, for the discovery and commercialization of new flavor ingredients in the gum confectionary area. In July 2007 we extended the collaborative period for an additional twelve months, through July 2008. Under the terms of the collaboration, Cadbury Schweppes has agreed to pay us research funding for up to three years based on research progress during the collaborative period. We are also eligible to receive milestone payments upon our achievement of specific product discovery and development goals. Through December 31, 2007, we have received \$1.9 million in research funding. If all milestones are achieved, and including the \$1.9 million in research funding paid through December 31, 2007, we may be entitled to up to \$3.7 million in research funding and milestone payments. In addition, in the event of commercialization, we are entitled to receive royalties based on sales of products containing new flavor ingredients developed under the agreement. We cannot assure you that we will receive any future milestone payments or royalties under this collaboration.

Campbell Soup Company

In March 2001, we entered into a collaboration agreement with Campbell, a global manufacturer and marketer of consumer food products, to work for a three-year collaborative period to discover specified

flavors and flavor enhancers in the packaged food, beverage and ingredient product fields of soups, including frozen soups. We later amended the agreement to add the product field of specified savory beverages in consideration for additional research and development payments and potential milestone and royalty payments. In February 2006, we extended the collaborative period until the earlier of March 2009 or submission for a GRAS determination, subject to earlier termination under specified circumstances.

Under the terms of the collaboration, Campbell has agreed to pay to us certain research and development funding. We are also eligible to receive a milestone payment upon our achievement of a specific product development goal. Through December 31, 2007, we have received \$10.3 million in research and development funding. If all milestones are achieved, and including the \$10.3 million in research and development funding paid through December 31, 2007, we may be entitled to up to \$12.5 million in research and development funding and milestone payments. In addition, in the event of commercialization, we are entitled to receive royalties on future net sales of products containing a discovered flavor or flavor enhancer from the date of introduction of each product in each country until 17 years thereafter or until the expiration of relevant patents in such country, whichever is earlier. We cannot assure you that we will receive any future milestone payments or royalties under this collaboration.

The Coca-Cola Company

In April 2002, we entered into a collaboration agreement with Coca-Cola, the world's largest beverage company, to work for a three-year collaborative period with Coca-Cola for the discovery and development of specified new flavors and flavor enhancers in the product field of soft drinks and other non-alcoholic beverages. In addition, we will work with Coca-Cola on a co-exclusive basis for the discovery and development of flavor enhancers in a specified food, beverage and ingredient product field. In April 2004, we amended the agreement to extend the collaborative period until April 2008.

Under the agreement, Coca-Cola has agreed to pay certain research and development funding over the collaborative period. We are also eligible to receive milestone payments upon our achievement of specific product discovery and development goals. Through December 31, 2007, we have received \$11.5 million in research and development funding. If all milestones are achieved, and including the \$11.5 million in research and development funding paid through December 31, 2007, we may be entitled to up to \$14.8 million. In addition, in the event of commercialization, we are entitled to receive royalties on future sales of products containing a discovered flavor or flavor enhancer until the expiration of relevant patents. We cannot assure you that we will receive any future milestone payments or royalties under this collaboration.

Firmenich

In December 2007, we entered into a collaboration agreement with Firmenich, a global leader in providing food ingredients and flavor systems to major consumer companies for use in their brands, to work for a three-year collaborative period to discover and develop novel compounds that may be used by Firmenich on an exclusive basis worldwide as ingredients that impart a cool taste in flavor systems.

Under the agreement, Firmenich has agreed to pay research fees and specified payments upon the achievement of milestones. Upon commercialization, we will be entitled to royalties. Through December 31, 2007, we have not received any research fees. If all milestones are achieved, we may be entitled to up to \$3.5 million. In addition, in the event of regulatory approval of a discovered compound, we are entitled to minimum periodic royalties and in the event of commercialization, we are entitled to receive royalties on future sales of products containing a discovered flavor or flavor enhancer until the expiration of relevant patents. We cannot assure you that we will receive any future milestone payments or royalties under this collaboration.

Nestlé SA

In April 2002, we entered into an initial collaboration agreement with Nestlé, the world's largest food company, to work for a three-year collaborative period to discover specified flavors and flavor enhancers in the food and beverage product fields of dehydrated and culinary food, frozen food and wet soup. In April

2005, we amended the agreement to provide for a three-year extension of the collaborative research phase. In March 2006, we further amended the agreement to include commercialization of novel flavors and flavor enhancers in the pet food category on a worldwide, co-exclusive basis. In addition to the expansion, the Nestlé agreement has been amended to allow us to reacquire rights to certain of our flavor ingredients in certain geographic regions. As a result of this amendment, Nestlé now has rights to flavor ingredients in Europe, Asia, Israel, Oceania, Africa, the Middle East and Latin America in specified product categories within the dehydrated and culinary food, frozen food, and/or wet soup product categories, as well as worldwide rights for the pet food category, while we have reacquired certain rights in North America and other geographic regions in specified product categories.

Under the terms of the collaboration agreement, Nestlé has agreed to pay to us certain research and development funding over six years, subject to earlier termination under specified circumstances. We are also eligible to receive milestone payments upon our achievement by certain dates of specific product discovery and development goals. Through December 31, 2007, we have received \$11.2 million in research and development funding, reimbursement of certain regulatory expenses of \$339,000 and four milestone payments of \$375,000 each. If all milestones are achieved, and including all research and development funding paid or payable, we may be entitled to up to \$14.8 million under the initial collaboration. In addition, in the event of commercialization, we are entitled to receive royalties on future net sales of products containing a discovered flavor or flavor enhancer from the date of introduction of each product in each country until the expiration of relevant patents. We cannot assure you that we will receive any further milestone payments or royalties under this collaboration.

In October 2004, we entered into a second product discovery and development collaboration agreement with Nestlé to work for a five-year collaborative period focusing on the discovery and commercialization of specified novel flavor ingredients in the coffee and coffee whiteners field. Under the terms of the agreement, Nestlé has agreed to pay us certain research and development funding over five years, subject to extension or earlier termination under specified circumstances. This collaborative period has been subsequently extended to a five-and-one-half year collaborative period, subject to further extension or earlier termination under specified circumstances. We are also eligible to receive milestone payments upon achievement of specific product discovery and development goals. Through December 31, 2007, we have received \$5.4 million in research and development funding. If all milestones are achieved, and including all research and development funding paid or payable, we may be entitled to up to \$15.8 million under the second collaboration. In addition, in the event of commercialization, we are entitled to receive royalties on future net sales of products containing a discovered flavor ingredient from the date of introduction of each product in each country until the expiration of relevant patents. We cannot assure you that we will receive any milestone payments or royalties under this collaboration.

Solae, LLC

In April 2007, we entered into a collaboration agreement with Solae, the leading supplier of soy protein for food-based products, for the discovery and exclusive worldwide commercialization of novel flavor ingredients for soy proteins. Under the terms of the agreement, Solae has agreed to pay us research fees for up to three years. We are also eligible to receive milestone payments upon achievement of specific product discovery and development goals. Through December 31, 2007, we have received \$621,000 in research and development funding. If all milestones are achieved, and including all research and development funding paid or payable, we may be entitled to up to \$5.2 million under the collaboration agreement. In addition, in the event of commercialization, we are entitled to receive royalty payments based on sales of products containing flavor ingredients developed under the agreement. We cannot assure you that we will receive any milestone payments or royalties under this collaboration.

Our Technology

We have discovered or in-licensed many of the key receptors that mediate taste in mammals. Having isolated human taste receptors, we have created proprietary taste receptor-based assay systems that provide a biochemical or electronic readout when a test compound affects the receptor. To enable faster compound discovery, we integrated our proprietary taste receptor-based screening assays into a robot-controlled

automated system that uses plates containing an array of individual wells, each of which can screen a different compound. Our receptor-based discovery and development process has enabled us to improve our ability to find novel flavor ingredients over the traditional use of simple taste tests.

Receptor Discovery and Assay Development Technology

There are currently five recognized primary senses of taste: umami (which is the savory taste of glutamate), sweet, salt, bitter and sour. In addition, there are secondary taste sensations such as cool, hot and fat. Scientists generally believe that each of these taste sensations is recognized by a distinct taste receptor or family of taste receptors in the mouth or on the tongue. A taste receptor functions either by physically binding to a flavor ingredient in a process analogous to the way a key fits into a lock or by acting as a channel to allow ions to flow directly into a taste cell. The brain recognizes tastes by determining which of the numerous receptors in the mouth have been contacted by a given flavor ingredient. Savory, sweet and bitter taste ingredients bind to taste receptors specific to each taste on the surface of taste bud cells. In contrast, the taste of salt and the sour taste are thought to be recognized by taste channels that allow the passage of particular ions into the taste bud cells. The tastes of cooling and heating are mediated by receptors found in certain nerves.

The current status in the development of proprietary taste receptor-based assay systems for human taste receptors is as follows:

- ***Savory Receptor.*** Glutamate is a natural component of foods, including tomatoes, mushrooms, parmesan cheese, and meats. It is often added to foods in the form of MSG to provide a savory flavor. The human savory receptor is composed of two proteins called hT1R1 and hT1R3. The T1R proteins are members of the G protein-coupled receptor, or GPCR, family and are expressed on the surface of certain taste bud cells. We created SavoryScreenHT, a proprietary high-throughput savory taste receptor-based assay system and demonstrated that it responded to MSG and inosine monophosphate, or IMP. We screened over 200,000 compounds in SavoryScreenHT and identified a number of savory enhancers, including S807, S336, S263 and S976, which were determined to be GRAS in March 2005.
- ***Sweet Receptor.*** The human sweet receptor is composed of two proteins called hT1R2 and hT1R3. The hT1R3 protein is shared in common with the savory receptor. Like the savory receptor, the sweet receptor is also a member of the GPCR family and is expressed on the surface of certain taste bud cells. We created SweetScreenHT, a proprietary high-throughput sweet taste receptor-based assay system, and demonstrated that it responded to many different sweet-tasting compounds including carbohydrate sweeteners and artificial sweeteners. We have screened over 300,000 compounds in SweetScreenHT identified novel compounds that enhance the sweet taste of sucralose and sucrose. Our sucralose enhancer, S2383, is in the development phase. Our sucrose enhancers, including our current top compound S0739, are undergoing optimization to generate a development candidate. We are also using SweetScreenHT to identify natural compounds that could potentially function as high potency sweeteners for no-calorie or low-calorie foods and beverages.
- ***Bitter Receptors.*** There are 25 bitter receptors in humans. These are also members of the GPCR protein family. Work from model systems showed that the 25 bitter receptors are likely present together in the same taste cell. The bitter receptors are believed to have evolved as a defense mechanism to warn of and prevent the ingestion of poisonous substances. It is thought that each bitter receptor recognizes a different set of bitter-tasting compounds. We have characterized bitter ligands for most of the 25 T2R receptors and we are using these receptors in specific BitterScreenHT cell-based assays to discover bitter taste blockers.
- ***Salt Receptor.*** Until now, the primary receptor responsible for salt taste perception had not been identified by Senomyx or in the scientific literature. Over the past year, Senomyx identified and evaluated approximately 15,000 proteins found in taste buds and established detailed criteria to determine which of these functions as the receptor that responds to sodium chloride (salt). The

Company believes that one of the proteins, SNMX-29, met all of our criteria and is the primary receptor responsible for salt taste perception. Senomyx has begun development of a high-throughput screening assay based on SNMX-29 that will be used to screen our extensive libraries to provide further verification that SNMX-29 is the human salt taste receptor and, importantly, to identify potential enhancers of salt taste.

- *Cool Receptor.* The protein TRPM8 is an ion channel that is activated by both cool temperature and cooling agents such as menthol and WS-3. We developed the CoolScreenHT assay, a high-throughput screening assay using the human TRPM8 protein, and we validated the assay using a set of known cooling agents. Furthermore, we screened a library and identified novel compounds that exhibited cooling taste effects.

Screening Technologies and Compound Libraries

We have developed or acquired access to expansive libraries of potential flavor ingredients currently comprised of over 500,000 natural samples and synthetic compounds. We intend to continue to acquire or develop additional compounds and natural samples to add to our libraries. We have designed and selected our libraries to comprise compounds that we believe are likely to lead to safe and economical for use in packaged food and beverage products. We are using our BitterScreenHT, CoolScreenHT and SweetScreenHT assay systems to screen the compounds in our libraries for their effects on specific taste receptors. These systems use many of the same technologies that pharmaceutical companies use to discover medicines. Our assay systems are much more sensitive than the human tongue, and can therefore be used to discover novel flavor ingredients that could not be identified using taste tests. We also use these systems to assist us in optimizing our lead compounds by rapidly and iteratively testing the potency of the flavor ingredients generated in the optimization process as the lead compound progresses to become a product candidate.

Regulatory Process

Flavoring substances, including flavor ingredients intended for use in foods and beverages in the United States, are regulated under provisions of the FD&C Act administered by the FDA. Flavor ingredients sold in countries and regions outside of the United States are also subject to regulations imposed by national governments or regional regulatory authorities, as is the case in the European Union. These regulations are subject to frequent revisions and interpretation.

Regulation of Flavor Ingredients in the United States

In the United States, flavor ingredients are regulated by the FDA as approved food additives, or as GRAS ingredients under the FD&C Act. The Food Additive Amendments of 1958 prompted the flavor industry to establish in 1960 the FEMA Expert Panel. FEMA has administered the GRAS program for flavors on behalf of the industry for over 40 years. Other possible routes to approval of a flavor-modifying compound would be a GRAS self-determination (independent of FEMA) with or without FDA notification, or a food additive petition to the FDA. Our goal is that the flavor ingredients, including flavor ingredients we may discover will be subject to one of the regulatory review processes described below.

GRAS Review Process. Flavor ingredients that qualify for the GRAS review process are generally intended to be consumed in small quantities and have data supporting their safety under conditions of intended use. An expert panel, convened to undertake a GRAS review, determines whether an ingredient is generally recognized as safe under the conditions of its intended use. These experts are qualified by scientific training and experience to evaluate the safety of chemicals used in food and may declare certain ingredients as having been adequately shown through scientific procedures to be generally recognized as safe under the conditions of their intended use. Under the GRAS process, manufacturers are required to obtain safety data from the scientific literature or through the conduct of safety studies, determine the estimated daily intake of the flavor ingredient per person and submit a report to the GRAS review panel describing the physical, chemical, safety, and metabolic properties of the flavor ingredient. The entire GRAS determination process, including the safety and metabolic studies, application preparation and

GRAS panel review, can take up to two years or longer. However, if there are prior safety data on the ingredient or an ingredient with a related structure, then fewer safety studies may be required for the GRAS review and the GRAS review process can be considerably shorter than two years.

The most common types of GRAS review are:

- *FEMA Expert Panel.* The FEMA Expert Panel is an independent panel of experts for which FEMA provides administrative assistance. The FEMA Expert Panel, which may be used by FEMA members and certain other parties, meets up to three times per year. The conclusions of the Expert Panel regarding a flavor or flavor enhancer are provided directly to the FDA and published in the journal Food Technology. To our knowledge, the FDA has not challenged the FEMA Expert Panel's conclusion that the use of a flavoring substance is GRAS. In 2007, the FEMA Expert Panel published its findings on 175 new ingredients determined to be GRAS for specific flavor applications. We joined FEMA as an associate member in 2003. We became a full active member of FEMA in 2006. Four of our savory ingredients were determined to be GRAS by the FEMA Expert Panel in 2005.
- *Specifically Convened Independent Panel.* An independent, qualified panel of experts in pertinent scientific disciplines may be formed by the manufacturer to evaluate the safety of a specific compound for GRAS status. This process is known as a "self determination of GRAS status." The basis for the GRAS self determination is not required to be submitted to the FDA. However, the FDA may request information on ingredients that have been self determined to be GRAS, or the information may be provided voluntarily.

Benefits of the FEMA GRAS Process

There are three key benefits of the FEMA GRAS review process:

- *Rapid Time for Commercialization.* Four ingredients developed as part of our savory program have received FEMA GRAS determination. The process from selection for development until receipt of that determination took approximately 12 months. We expect that future flavor ingredients we develop will take a similar amount of time. However, the length of time may vary depending on the properties of the flavor ingredient. This is much shorter than the typical amount of time to obtain FDA approval under the food additive petition process applicable to other food ingredients. Once the compound is determined to be FEMA GRAS, it can be immediately commercialized in the United States and several other countries that recognize the FEMA GRAS status. As described above, the initial phase of commercialization may include compound manufacturing, incorporation of the flavor ingredient into products, and the commercialization of products in consumer test markets.
- *Low Development Costs.* The total costs for the FEMA GRAS process, including synthesis of material for regulatory studies, contract safety studies and preparation of the FEMA GRAS application is generally under \$1 million per compound.
- *Facilitated Approval in Other Countries.* Approval of flavors for use outside of the United States varies widely by country. According to FEMA, seven countries, including Brazil, New Zealand and Australia, recognize ingredients on the FEMA GRAS list. An additional set of countries recognize ingredients on the FEMA GRAS list "in principle". These include Canada, Philippines and Turkey. Approval in these countries may require specific applications to the food safety authority of the individual countries but usually not additional safety testing.

Food Additive Petition Process. Food ingredients for which the GRAS process is not available may be evaluated as food additives. Food additives require FDA approval prior to use in foods. An ingredient may be ineligible for GRAS determination, and may be considered a food additive, because there is insufficient general knowledge or for a variety of other reasons, including conditions of intended use resulting in high dietary exposure or the ingredient's safety profile. If the ingredient is considered a food additive, a food additive petition must be filed and approved by the FDA. Food additive petitions contain

information on the chemical nature of the ingredient, the manufacturing process, information on use in food, estimates of human exposure from use of the compound in food and all known information related to the safety of the ingredient. The FDA reviews the petition content, requests additional information if necessary, publishes a proposed rule for use in food, reviews comments on the proposed rule and publishes a final rule, if the use is determined to be acceptable. The safety data requirements for food additives are the same as for GRAS substances. We estimate that a food additive petition could cost up to \$7 million and may take up to four years to complete. Furthermore, additional studies adding cost and time to approval may be required depending on the results of the initial safety studies. Examples of ingredients that have gone through a food additive petition process include the artificial sweeteners aspartame, acesulfame K and sucralose. It may be necessary for any high potency sweeteners that we discover or develop to follow this regulatory route.

License Arrangements

We have licensed rights from several companies and academic institutions, including the following:

University of California

In March 2000, we entered into a license agreement with the University of California under which we obtained exclusive rights to certain technologies held by the University of California that are involved in the biology of taste, including specified receptors in two taste receptor families, T1Rs and T2Rs. The license may be converted to a non-exclusive license, or terminated, by the University of California if we fail to meet specified milestones relating to the discovery of specified products and the sale of specified products and services. Our exclusive rights are also subject to rights granted by the University of California to the United States Government and a private medical foundation. In October 2006, we entered into an amended and restated agreement with the University of California to include certain additional related technologies. The agreement, as originally drafted and as amended and restated, required a license issue fee, payable in installments through 2005, and calls for annual maintenance fees commencing in 2006 or royalties or service revenues on sales of any products developed using technologies licensed under the agreement. Royalties will accrue in each country for as long as there exists a valid patent claim covering a product developed under the agreement. The agreement will remain in effect until the expiration of the last to expire patent licensed under the agreement. We may terminate the agreement at any time, without cause, upon notice to the University of California. The University of California may terminate the agreement upon a breach of our obligations under the agreement.

Competition

Our goal is to be the leader in discovering novel flavor ingredients for use in a wide range of packaged food, beverage and ingredient products. Other companies are possibly pursuing similar technologies and the commercialization of products and services relevant to flavor ingredients. Although we are not aware of any other companies that have the scope of proprietary technologies and processes that we have developed in our field, there are a number of competitors who possess capabilities relevant to the flavor ingredient field.

In particular, we face substantial competition from companies pursuing the commercialization of products and services relevant to taste using more traditional methods for the discovery of flavor ingredients, or for the reduction of salt, sugar, MSG or bitter taste. These competitors include leading flavor companies, such as Firmenich, Givaudan SA, International Flavors & Fragrances Inc., Symrise and Takasago. These companies provide flavors and other products, such as oils, extracts and distillates, to consumer products companies for use in a wide variety of products including foods, beverages, confectionaries, dairy products and pharmaceuticals. Competitors currently developing or marketing high potency sweeteners include Ajinomoto, Cargill, Nutrasweet and Tate & Lyle. Competitors currently developing or marketing menthol or cooling agents include Jindal Drugs, Mentha & Allied, Sharp Menthol, Symrise, Takasago and Millenium Specialty Chemicals. We currently compete and will continue to compete in the future with these companies in collaborating with and selling flavor products and technologies to manufacturers of packaged food, beverage and ingredient products. Many of these

companies have substantially greater capital resources, research and development resources and experience, manufacturing capabilities, regulatory expertise, sales and marketing resources, established relationships with consumer products companies and production facilities.

We may in the future face competition from life sciences and other technology companies and other commercial enterprises. These entities engage as we do in biotechnology, biology or chemistry and could apply this technology to the discovery and development of flavor ingredients. We are aware of one other company, Redpoint Bio, that is involved in research on sweetness potentiators, salt substitutes and bitter blockers, specifically AMP. While we do not believe that any of these collaborations is competitive with our product discovery and development efforts, we cannot guarantee that products developed as a result of our competitors' existing or future collaborations will not compete with our flavor ingredients.

Universities and public and private research institutions are also potential competitors. While these organizations primarily have educational objectives, they may develop proprietary technologies related to the sense of taste or secure patent protection that we may need for the development of our technologies and products. We may attempt to license these proprietary technologies, but these licenses may not be available to us on acceptable terms, if at all.

Methods for reducing sodium include the use of potassium chloride in combination with flavors and masking agents. Although savory flavor enhancers, such as IMP, are commercially available, they are not very potent, are not patent protected and are sold as a commodity. The blocking of bitter taste is typically accomplished by attempting to mask the bitter taste with a sweetener or another flavor ingredient. Although AMP has received GRAS determination, we do not believe this compound has been widely adopted into packaged food, beverage and ingredient products. Existing cooling agents, such as menthol and WS3, are currently in use. However, our competitors, either alone or with their collaborative partners, may succeed in developing technologies or discovering flavor ingredients that are similar or preferable in the areas of, among others, effectiveness, safety, cost and ease of commercialization, and our competitors may obtain intellectual property protection or commercialize such products sooner than we do. Developments by others may render our product candidates or our technologies obsolete. In addition, our current product discovery and development collaborators are not prohibited from entering into research and development agreements with third parties in any particular field.

Patents and Proprietary Rights

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary rights are described by valid and enforceable patents or are effectively maintained as trade secrets. Accordingly, we are pursuing and will continue to pursue patent protection for our proprietary technologies. As of December 31, 2007 we are the owner or the exclusive licensee of 63 issued United States patents, 117 pending United States patent applications, 50 issued foreign patents and 254 pending foreign applications covering various aspects of our proprietary technology. Our issued patents have terms that expire in 2014 through 2024.

Our policy is to file patent applications and to protect technologies, inventions and improvements to inventions that are commercially important to the development of our business. For example, we may seek patent protection for receptors and nucleic acid sequences encoding receptors that are involved in taste and the use of such receptors to identify ingredients that modulate taste. We also rely on trademarks to protect our proprietary technology. Generally, United States patents have a term of 17 years from the date of issue or 20 years from the earliest claimed priority date, whichever is later, for patents issued from applications filed with the United States Patent and Trademark Office prior to June 8, 1995 or 20 years from the application filing date or earlier claimed priority date in the case of patents issued from applications filed on or after June 8, 1995. Patents in most other countries have a term of 20 years from the date of filing the patent application. Our success depends significantly upon our ability to develop ingredients and technologies that are protected by our intellectual property and that do not infringe any competitor patents. We intend to continue to file patent applications as we discover and develop new flavor ingredients and technologies.

Seeking and obtaining patents may provide some degree of protection for our intellectual property. However, our patent positions are highly uncertain and may involve complex legal and factual questions. No consistent standard regarding the allowability and enforceability of claims in many of the pending patent applications has emerged to date. As a result, we cannot predict the breadth of claims that will ultimately be allowed in our patent applications, if any, including those we in-licensed or how we may be able to enforce our patent claims against our competitors. In addition, we may not have been the first to file patent applications for or to invent inventions relating to the technologies upon which we rely, which would preclude us from obtaining issued patents on the relevant inventions. We are aware of other companies and academic institutions which have been performing research and have applied for patents in the area of mammalian taste. In particular, other companies and academic institutions and inventor applicants have announced that they have identified taste receptors, published data on taste receptor sequence information or have filed patent applications on receptors and their use, including Ajinomoto, the California Institute of Technology, Dendreon, Duke University, the German Institute of Human Nutrition, Givaudan SA, Monell Chemical Senses, Mount Sinai School of Medicine, Novartis, Pfizer, Redpoint Bio, The Scripps Research Institute, Sloan Kettering, the University of California, Virginia Commonwealth University and Wiessenbach. If any of these companies or academic institutions or inventor applicants are successful in obtaining broad patent claims, such patents could potentially block our ability to use various aspects of our discovery and development process and might prevent us from developing or commercializing newly discovered flavor ingredients or otherwise conducting our business.

We also rely in part on trade secret protection for our confidential and proprietary information and process. Our policy is to execute confidentiality agreements with our employees and consultants upon the commencement of an employment or consulting relationship. These agreements generally require that all confidential information developed by the individual or made known to the individual by us during the course of their employment shall be our exclusive property. However, there can be no assurance that we will be able to effectively enforce these agreements or that the subject proprietary information will not be disclosed.

We are not a party to any litigation, opposition, interference, or other potentially adverse ex parte or inter-party governmental or non-governmental proceeding with regard to our patent and trademark positions. However, if we become involved in litigation, interference proceedings, oppositions or other intellectual property proceedings, for example as a result of an alleged infringement, or a third-party alleging an earlier date of invention, we may have to spend significant amounts of money and time and, in the event of an adverse ruling, we could be subject to liability for damages, invalidation of our intellectual property and injunctive relief that could prevent us from using technologies or developing products, any of which could have a significant adverse effect on our business financial condition and results of operation. In addition, any claims relating to the infringement of third-party proprietary rights, or earlier date of invention, even if not meritorious, could result in costly litigation, lengthy governmental proceedings, divert management's attention and resources and require us to enter royalty or license agreements which are not advantageous if available at all.

Sales and Marketing

While we do not currently intend to establish internal sales and marketing capabilities, we are developing the capability to enable us to work closely with our collaborators and their suppliers in the incorporation of our flavor ingredients into their products. Under our current collaboration agreements, our collaborators are responsible for sales, marketing, and distribution of any packaged food or beverage product incorporating our flavor ingredients. As a result, we expect to commercialize our flavor ingredients without incurring significant sales, marketing and distribution costs. Our seven current collaborators, Ajinomoto, Cadbury Schweppes, Campbell, Coca-Cola, Firmenich, Nestlé and Solae, are recognized leaders in the sales, marketing and distribution of packaged food, beverage and ingredient products.

Manufacturing

We intend to utilize third parties to manufacture our flavor ingredients. Under five of our existing product discovery and development collaborations, our collaborator may, in its sole discretion, manufacture

itself or through a third party manufacturer the flavor ingredients it licenses from us. The remaining four collaborations require the collaborator to identify with us a mutually agreed upon third party to manufacture the flavor ingredients it licenses from us. In some of these agreements, we maintain either the first right of negotiation or an option to manufacture based on provisions within the agreement.

There are a number of reliable third party contract manufacturers available to produce our flavor ingredients. Our current product candidates are relatively simple structures making them easy and inexpensive to produce. We do not anticipate any capacity issues because of our low volume requirements and the number of reliable and available manufacturers.

Employees

As of December 31, 2007, we had 118 full-time employees, including 31 with Ph.D. degrees. Of our full-time workforce, 91 employees are engaged in research and development and 27 are engaged in business development, finance and administration. We also retain outside consultants. None of our employees are covered by collective bargaining arrangements, and our management considers its relationships with our employees to be good.

Executive Officers

The following table sets forth certain information concerning our executive officers and their ages as of December 31, 2007:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Kent Snyder	54	President, Chief Executive Officer and Director
Mark J. Zoller, Ph.D.	54	Executive Vice President of Discovery & Development and Chief Scientific Officer
John Poyhonen	47	Senior Vice President, Chief Financial and Business Officer
Sharon Wicker	52	Senior Vice President of Commercial Development and Chief Strategy Officer
David Berger (1)	38	Vice President, General Counsel and Corporate Secretary

(1) Mr. Berger joined Senomyx January 7, 2008.

Kent Snyder, President and Chief Executive Officer, joined us in June 2003 and has served as a member of our board of directors since that time. Prior to joining us, from October 2001 to June 2003, Mr. Snyder was retired. From July 1991 to October 2001, Mr. Snyder held various marketing and sales management positions with Agouron Pharmaceuticals, Inc., a Pfizer company. Mr. Snyder was President of Global Commercial Operations at Agouron. Prior to holding the position of President of Global Commercial operations, Mr. Snyder served as Senior Vice President of Commercial Affairs and Vice President of Business Development. Mr. Snyder is a director of Santarus, Inc., a publicly-held biopharmaceutical company, and VentiRx Pharmaceuticals, Inc., a privately-held biopharmaceutical company. Mr. Snyder received his B.S. from the University of Kansas and his M.B.A. from Rockhurst College.

Mark J. Zoller, Ph.D., joined us in March 2000 as Vice President of Research and was promoted to Executive Vice President of Discovery and Development and Chief Scientific Officer in January 2006, which position he still holds. From May 1992 to December 1999, Dr. Zoller held a number of scientific management positions at ARIAD Pharmaceuticals, most recently as Senior Vice President, Genomics and Scientific Director of the Hoechst-ARIAD Genomics Center, which in December 1999 was acquired by Aventis Pharmaceuticals. Dr. Zoller received his B.A. in Chemistry from Pomona College and his Ph.D. in Chemistry from the University of California, San Diego.

John Poyhonen, Senior Vice President and Chief Financial and Business Officer, joined us in October 2003 as Vice President and Chief Business Officer and was promoted in April 2004 to Vice President, Chief Financial and Business Officer. In January 2006, he was promoted to Senior Vice President, Chief Financial and Business Officer. From 1996 until October 2003, Mr. Poyhonen served in various sales and marketing positions for Agouron Pharmaceuticals, a Pfizer company, most recently as Vice President of National Sales. Prior to holding this position, Mr. Poyhonen served as Vice President of Marketing and Vice President of National Accounts. Mr. Poyhonen is a director of Ardea Biosciences, Inc., a publicly-held biopharmaceutical company. Mr. Poyhonen received his B.A. in Marketing from Michigan State University and his M.B.A. from the University of Kansas.

Sharon Wicker, Senior Vice President of Commercial Development and Chief Strategy Officer, joined us in April 2006. From 2003 to 2006, Ms. Wicker held various strategic marketing positions, most recently as President, Flavor Business Unit at A.M. Todd Company. From 1999 to 2003, Ms. Wicker served as Vice President of Frozen Meals for Heinz North America. From 1994 to 1999 Ms. Wicker served as Vice President and General Manager of the Meals Strategic Business Unit of ConAgra. From 1984 to 1994 Ms. Wicker held a variety of marketing and general management positions for General Mills, including assignments as Brand Manager for Cheerios and Betty Crocker desserts. Ms. Wicker received her BS in Food Science and Nutrition from Colorado State University and her M.B.A. from Michigan State University.

David Berger, Vice President, General Counsel and Corporate Secretary, joined us in January 2008. From early 2003 through 2007 Mr. Berger was responsible for all commercial aspects of legal affairs at Biosite Incorporated, most recently as Vice President, Legal Affairs. Prior to joining Biosite, he was an attorney at Cooley Godward Kronish LLP. Mr. Berger received his J.D. at Stanford Law School and was granted a B.A. in Economics at the University of California, Berkeley.

Item 1A. Risk Factors

You should consider carefully the following information about the risks described below, together with the other information contained in this annual report on Form 10-K and in our other public filings, in evaluating our business. If any of the following risks actually occurs, our business, financial condition, results of operations and future growth prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock would likely decline.

Risks Related To Our Business

We are dependent on our product discovery and development collaborators for all of our revenue and we are dependent on our current and any future product discovery and development collaborators to develop and commercialize any flavor ingredients we may discover.

A key element of our strategy is to commercialize our flavor ingredients through product discovery and development collaborations. To date, substantially all of our revenue has been derived solely from research and development payments, milestone payments and cost reimbursement payments received under our collaborations. Substantially all of our revenue in the foreseeable future will result from these types of payments from these collaborations until such time, if ever, that we earn material royalties on future sales of consumer products incorporating our flavor ingredients.

Our agreement, as amended, with Campbell provides for research and development funding until March 2009 and gives Campbell the right to terminate the agreement earlier without cause, provided that it pay a specified termination fee if it terminates the agreement prior to March 28, 2009. Our agreement with Coca-Cola provides for research and development funding until April 2008 and gives Coca-Cola the right to conclude the collaborative program earlier for any reason upon payment to us of an early conclusion fee. Our initial agreement with Nestlé (as amended in April 2005) provides for research and development funding through April 2008 and gives Nestlé the right to terminate the agreement earlier without cause, provided that it pay additional specified research funding if it terminates the agreement prior to April 18, 2008. Our most recent agreement with Nestlé regarding the discovery and commercialization of novel flavor ingredients in the coffee and coffee whitener fields provides for research and development funding through April 2011 and gives Nestlé the right to terminate the agreement earlier without cause on or after April 26, 2008, provided that it pay additional specified research funding if it terminates the agreement after April 26, 2008 but prior to April 26, 2011. Our agreement with Cadbury provides for research and development funding through July 2008 and gives Cadbury the right to terminate the agreement earlier without cause upon 90 days' written notice. Our initial agreement with Ajinomoto provides for research and development funding through March 2009 and gives Ajinomoto the right to terminate the agreement without cause provided that it pay additional specified research funding if it terminates the agreement prior to March 23, 2009. Our most recent agreement with Ajinomoto provides for research and development funding through October 2009 and gives Ajinomoto the right to terminate the agreement without cause provided that it pay additional specified research funding if it terminates the agreement prior to October 5, 2009. Our agreement with Solae provides for research and development funding through April 2010, and gives Solae the right to terminate the agreement without cause on April 23, 2008 upon 60 days' prior notice, or subsequent to April 23, 2008 upon 90 days' prior notice provided it pay additional specified research funding if it terminates the agreement prior to April 23, 2010. Our agreement with Firmenich permits Firmenich to terminate the agreement without cause upon 90 days written notice on any anniversary of the effective date of the agreement provided that it pay additional specified research funding if it terminates prior to December 14, 2010. If any or all of our material agreements with our collaborators expire or are terminated, our revenue could significantly decline and if all of our agreements expire or are terminated, our revenue would be substantially eliminated, which would have a material adverse effect on our business, financial condition and results of operations. Our collaborators may not renew their agreements with us or, if they do, they may not be on terms that are as favorable to us as our current agreements. For example, our discovery and development collaboration with Kraft Foods Global, Inc. concluded on December 9, 2007, one year earlier than the scheduled term of the agreement.

Our current collaboration agreements provide that we will receive royalties of up to 4% on our collaborators' sales of retail and food service products, and up to 5% on our collaborators' sales of ingredient supplies containing our flavor ingredients. The actual royalties payable vary by agreement and depend on a number of factors including, for example, the product field, cost of goods savings, degree of flavor enhancement and sales volume of collaborator products incorporating our flavor ingredients. It is possible that our collaborators will not incorporate our flavor ingredients into any or all of their products within their exclusive or co-exclusive product fields.

We are dependent on our current and any other possible future collaborators to commercialize any flavor ingredients that we successfully develop and to provide the sales, marketing and distribution capabilities required for the success of our business. We have limited or no control over the amount and timing of resources that our current or any future collaborators may devote to our programs or potential products. Our collaborators may decide not to devote the necessary resources to the commercialization of our flavor ingredients, or may pursue a competitor's product if our flavor ingredients do not have the characteristics desired by the collaborator. These characteristics include, among other things, enhancement properties, temperature stability, solubility, taste and cost. If these collaborators fail to conduct their commercialization, sales and marketing or distribution activities successfully and in a timely manner, we will earn little or no royalty revenues from our flavor ingredients and we will not be able to achieve our objectives or build a sustainable or profitable business.

Our present and any future product discovery and development collaboration opportunities could be harmed if:

- our existing or any future collaborators terminate their collaboration agreements with us prior to the expiration of the agreements;
- we do not achieve our research and development objectives under our collaboration agreements prior to the termination of the collaboration periods;
- we disagree with our collaborators as to the parties' respective licensing rights to our flavor ingredients, methods or other intellectual property we develop;
- we are unable to manage multiple simultaneous collaborations;
- potential collaborators fail to spend their resources on research and development or commercialization of our flavor ingredients due to general market conditions or for any other reason; or
- consolidation in our target markets limits the number of potential collaborators.

We may not be able to negotiate additional collaboration agreements having terms satisfactory to us or at all.

We may not be able to enter into additional product discovery and development collaborations due to the exclusive nature of our current product discovery and development collaborations. Each of our current collaboration agreements provides that we will conduct research and development on flavor ingredients for use within one or more defined packaged food, beverage and ingredient product fields on an exclusive or co-exclusive basis for the respective collaborator during the collaborative period specified in the agreement. Because each of these agreements is exclusive or co-exclusive, we will not be able to enter into a collaboration agreement with any other food, beverage and ingredient company covering the same product field during the applicable collaborative period. In addition, our collaborators' competitors may not wish to do business with us at all due to our relationship with our collaborators. If we are unable to enter into additional product discovery and development collaborations, our ability to sustain or expand our business will be significantly diminished.

We may not be successful in developing flavor ingredients useful for formulation into products.

In order to develop flavor ingredients, we must have first identified the correct human taste receptor for the taste of interest and develop high-throughput assays to test for compounds that affect the taste of interest. If we are not able to identify the correct human taste receptor for the taste of interest, our assays

may not successfully identify compounds that affect the taste of interest. For example, in the event that SNMX-29 is not the primary human salt-taste receptor, we may not be able to develop an effective salt taste enhancer. Similarly, we may not succeed in identifying the specific receptors needed to reduce or block bitter taste in soy-based products under our collaboration with Solae. In addition, we may not be successful in the development of a high-throughput assay to each human taste receptor of interest to us. Even if we succeed in the identification of a human taste receptor of interest to us and develop an appropriate high-throughput assay, we may not succeed in developing flavor ingredients with the appropriate attributes required for use in successful commercial products. Successful flavor ingredients require, among other things, appropriate biological activity, including the correct taste property for the product application, an acceptable safety profile, including lack of toxicity or allergenicity, and appropriate physical or chemical properties, including relative levels of stability, volatility and resistance to heat. Successful flavor ingredients must also be cost-efficient for our collaborators. We may not be able to develop flavor ingredients that meet these criteria.

If we or our collaborators are unable to obtain and maintain the GRAS determination or other regulatory approval required before certain of our flavor ingredients can be incorporated into products that are sold, we would be unable to commercialize our flavor ingredients and our business would be adversely affected.

In March 2005, we obtained a GRAS determination for four of our savory flavor ingredients. Apart from these flavor ingredients, we do not have GRAS determination or other regulatory approval for any other flavor ingredient at this time. In the United States, the development, sale and incorporation of our flavor ingredients into products are subject to regulation by the FDA and in some instances other government bodies. Obtaining and maintaining a GRAS determination or other regulatory approval can be costly and take many years.

Depending on the amount or intended use of a particular flavor ingredient added to a product and the number of product categories in which the flavor ingredient will be incorporated, specific safety assessment protocols and regulatory processes must be satisfied before we or our collaborators can commercially market and sell products containing any flavor ingredients that we may discover. A key element of our strategy is to develop flavor ingredients that may be subject to review under the FEMA GRAS process. In our experience with the savory program, safety studies, preparation and FEMA GRAS review took approximately 12 months and cost less than \$1 million. This experience may not be representative of the timing and cost for future programs. This approach is less expensive than the alternative of filing a food additive petition with the FDA, approval of which can take up to four years. The FEMA GRAS process may take longer than 12 months and cost more than \$1 million depending on the properties of the flavor ingredient, and if additional safety studies are requested by the FEMA Expert Panel or are necessary to explain unexpected safety study findings. There is a risk that one or more of our product candidates for which we seek FEMA GRAS determination may not qualify for a FEMA GRAS determination. This may occur for a variety of reasons, including the flavor ingredient's intended use, the amount of the flavor ingredient intended to be added to packaged foods and beverages, the number of product categories in which the flavor ingredient will be incorporated, whether the flavor ingredient imparts sweetness, the safety profile of the flavor ingredient and the FEMA Expert Panel's interpretation of the safety data. Even if we obtain a GRAS determination with respect to a flavor ingredient, the FDA has the ability to challenge such determination, which could materially adversely affect our ability to market products on schedule or at all. In the event that a particular flavor ingredient does not qualify for FEMA GRAS determination, we could be required to pursue a lengthy FDA approval process or dedicate our development efforts to alternative ingredients, which would further delay commercialization. In addition, laws, regulations or FDA practice governing the regulatory approval process, the availability of the GRAS determination process or the manufacture or labeling of such products, may change in a manner that could adversely affect our ability to commercialize products on schedule or at all.

Sales of our flavor ingredients outside of the United States will be subject to foreign regulatory requirements, which are subject to change and inherent uncertainty. In most cases, whether or not a GRAS determination has been obtained, approval of a product by the comparable regulatory authorities of foreign countries must still be obtained prior to manufacturing or marketing the product in those countries. A

GRAS determination in the United States or in any other jurisdiction does not ensure approval in other jurisdictions because the requirements from jurisdiction to jurisdiction may vary widely and may change over time. Because of the inherent uncertainty associated with the regulatory approval process outside the United States, predicting the outcome or timing of review of any of our submissions to foreign regulatory authorities, present or in the future, is difficult. Accordingly, our estimates and forecasts for those submissions and potential approvals may not be accurate. The process of obtaining foreign approvals could result in significant delays, difficulties and costs for us and require additional safety studies and additional expenses. If we experience delays or if we fail to comply with these regulatory requirements or to obtain and maintain required approvals, our ability to generate revenue will be diminished.

We and our collaborators may not be successful in overcoming these regulatory hurdles, which could result in product launch delays, unanticipated expenses, termination of collaborations and flavor ingredients not being approved for incorporation into consumer products. These consequences would have a material adverse effect on our business financial condition and results of operations.

If we or our collaborators are unable to obtain and maintain the regulatory approval required before any high potency sweeteners can be incorporated into products that are sold, we would be unable to commercialize our high potency sweeteners and our business would be adversely affected.

In the United States, the development, sale and incorporation of our high potency sweeteners into products are subject to regulation by the FDA and in some instances other government bodies. Obtaining and maintaining regulatory approval can be costly and take many years.

Depending on the amount or intended use of a particular high potency sweetener added to a product and the number of product categories in which the high potency sweetener will be incorporated, specific safety assessment protocols and regulatory processes must be satisfied before we or our collaborators can commercially market and sell products containing any high potency sweeteners that we may discover. An element of our strategy is to develop high potency sweeteners that may be subject to review under the Food Additive Petition process, which encompasses filing a food additive petition with the FDA, approval of which can take up to four years or more and may cost up to \$7 million or more. Government resource constraints may also slow the review and approval process. In addition, laws, regulations or FDA practice governing the regulatory approval process, the availability of the Food Additive Petition process or the manufacture or labeling of such products, may change in a manner that could adversely affect our ability to commercialize products on schedule or at all.

Sales of our high potency sweeteners outside of the United States will be subject to foreign regulatory requirements. In most cases, whether or not FDA approval has been obtained, approval of a product by the comparable regulatory authorities of foreign countries must still be obtained prior to manufacturing or marketing the product in those countries. FDA approval in the United States or regulatory approval in any other jurisdiction does not ensure similar approval in other jurisdictions because the requirements from jurisdiction to jurisdiction may vary widely. Obtaining foreign approvals could result in significant delays, difficulties and costs for us and require additional safety studies and additional expenses. If we fail to comply with these regulatory requirements or to obtain and maintain required approvals, our ability to generate revenue will be diminished.

We and our collaborators may not be successful in overcoming these regulatory hurdles, which could result in product launch delays, unanticipated expenses, termination of collaborations and high potency sweeteners not being approved for incorporation into consumer products. These consequences would have a material adverse effect on our business financial condition and results of operations.

Even if we or our collaborators receive regulatory approval and incorporate our flavor ingredients into products, those products may never be commercially successful.

Even if we discover and develop flavor ingredients that obtain the necessary GRAS determination or other regulatory approval, our success depends to a significant degree upon the commercial success of packaged food, beverage and ingredient products incorporating those flavor ingredients. If these products

fail to achieve or subsequently maintain market acceptance or commercial viability, our business would be significantly harmed because our royalty revenue is dependent upon consumer sales of these products. In addition, we could be unable to maintain our existing collaborations or attract new product discovery and development collaborators. Many factors may affect the market acceptance and commercial success of any potential products incorporating flavor ingredients that we may discover, including:

- health concerns, whether actual or perceived, or unfavorable publicity regarding our flavor ingredients or those of our competitors;
- the timing of market entry as compared to competitive products;
- the rate of adoption of products by our collaborators and other companies in the flavor industry; and
- any product labeling that may be required by the FDA or other United States or foreign regulatory agencies for products incorporating our flavor ingredients.

We have a history of operating losses and we may not achieve or maintain profitability.

We have not been profitable and have generated substantial operating losses since we were incorporated in September 1998. We incurred net losses of approximately \$21.8 million for the year ended December 31, 2007. As of December 31, 2007, we had an accumulated deficit of approximately \$149.1 million. We expect to incur additional losses for at least the next two years. The extent of our future losses will depend, in part, on the rate of increase in our operating expenses and the rate of growth, if any, in our revenue from our existing and any future product discovery and development collaborations as well as from other sources that may become available to us in the future and on the level of our expenses. To date, substantially all of our revenue has come from research and development funding, upfront fees, cost reimbursement and milestone payments under our product discovery and development collaborations. In order for us to generate further royalty revenue and become profitable, we must substantially retain our existing product discovery and development collaborations and our collaborators must further commercialize products incorporating one or more of our flavor ingredients, from which we can derive additional royalty revenues. Our ability to generate royalty revenue is uncertain and will depend upon our ability to meet particular research, development and commercialization objectives.

We expect that our results of operations will fluctuate from period to period, and this fluctuation could cause our stock price to decline.

Our operating results have fluctuated in the past and are likely to vary significantly in the future based upon a number of factors, many of which we have little or no control over. We operate in a highly dynamic industry and future results could be subject to significant fluctuations. These fluctuations could cause us to fail to meet or exceed our published guidance or financial expectations of securities analysts or investors, which could cause our stock price to decline rapidly and significantly. Revenue and expenses in future periods may be greater or less than revenue and expenses in the immediately preceding period or in the comparable period of the prior year. Therefore, period-to-period comparisons of our operating results are not necessarily a good indication of our future performance. Some of the factors that could cause our operating results to fluctuate include:

- termination of any of our product discovery and development collaboration agreements;
- our ability to discover and develop flavor ingredients or the ability of our product discovery and development collaborators to incorporate them into packaged food, beverage and ingredient products;
- our receipt of milestone payments in any particular period;
- the ability and willingness of collaborators to commercialize products incorporating our flavor ingredients on expected timelines, or at all;
- our ability to enter into new product discovery and development collaborations and technology collaborations or to extend the terms of our existing collaboration agreements and our payment obligations, expected revenue and other terms of any other agreements of this type;

- our ability, or our collaborators' ability, to successfully satisfy all pertinent regulatory requirements;
- the demand for our collaborators' products containing our flavor ingredients; and
- general and industry specific economic conditions, which may affect our collaborators' research and development expenditures.

Changes in financial accounting standards related to stock-based compensation expenses have had and are expected to continue to have a significant effect on our reported results.

On January 1, 2006 we adopted Statement of Financial Accounting Standards, or SFAS, No. 123R, *Share-Based Payment*, which requires that we record compensation expense in the statement of operations for stock-based payments, such as employee stock options, using the fair value method. The adoption of the standard is expected to continue to have a significant effect on our reported earnings, although it will not affect our cash flows, and could adversely impact our ability to provide accurate guidance on our projected future financial results due to the variability of the factors used to establish the value of stock options. If factors change and we employ different assumptions or different valuation methods in the application of SFAS No. 123R in future periods, the compensation expense that we record under SFAS No. 123R may differ significantly from what we have recorded in the current period, which could negatively affect our stock price and our stock price volatility.

Compliance with regulation of corporate governance and public disclosure may result in additional expenses.

Laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, SEC regulations and NASDAQ Stock Market rules, are costly to comply with. Our efforts to comply with these laws, regulations and standards have resulted in, and are likely to continue to result in, general and administrative expense and management time related to compliance activities. In particular, our efforts to comply with Section 404 of the Sarbanes-Oxley Act of 2002 and the related regulations regarding our required assessment of our internal controls over financial reporting and our external auditors' audit of that assessment requires the commitment of significant financial and managerial resources. If our efforts to comply with laws, regulations and standards differ from the activities intended by regulatory or governing bodies, our reputation may be harmed and we might be subject to sanctions or investigation by regulatory authorities, such as the SEC. Any such action could adversely affect our financial results and the market price of our common stock.

We may need to obtain additional capital to fund our operations.

If we are unable to successfully commercialize our flavor ingredients, we may need to obtain additional capital or change our strategy to continue our operations. In addition, our business and operations may change in a manner that would consume available resources at a greater rate than anticipated. In such event, we may need to raise substantial additional capital to, among other things:

- fund new research, discovery or development programs;
- advance additional product candidates into and through the regulatory approval process; and
- acquire rights to products or product candidates, technologies or businesses.

If we require additional capital to continue our operations, we cannot assure you that additional financing will be available on terms acceptable to us, or at all. If adequate funds are not available or are not available on acceptable terms, our ability to fund our operations, take advantage of opportunities, identify and develop flavor ingredients, develop technologies or otherwise respond to competitive pressures could be significantly limited. In addition, if financing is not available, we may need to alter our strategy or cease operations. In addition, issuances of debt or additional equity could impact the rights of the holders of our common stock, may dilute our stockholders' ownership and may impose restrictions on our operations. These restrictions could include limitations on additional borrowing, specific restrictions on the use of our

assets as well as prohibitions on our ability to create liens, pay dividends, redeem our stock or make investments.

If we lose our key personnel or are unable to attract and retain qualified personnel, it could adversely affect our business.

Our success depends to a significant degree upon the continued contributions of our executive officers, management and scientific staff. If we lose the services of one or more of these people and, in particular, Kent Snyder, our President and Chief Executive Officer, or Mark Zoller, Ph.D., our Executive Vice President of Discovery & Development and Chief Scientific Officer, the relationships we have with our collaborators would likely be negatively impacted and we may be delayed or unable to develop new product candidates, commercialize our existing product candidates or achieve our other business objectives, any of which could cause our stock price to decline. We have entered into employment letter agreements with the following executive officers: Kent Snyder, Mark Zoller, Ph.D., John Poyhonen, our Senior Vice President, Chief Financial and Business Officer, Sharon Wicker, our Senior Vice President and Chief Strategy Officer and David Berger, our Vice President, General Counsel and Corporate Secretary. All of our employees are at-will employees, which means that either we or the employee may terminate their employment at any time. We currently have no key person insurance.

In addition, our discovery and development programs depend on our ability to attract and retain highly skilled scientists, including molecular biologists, biochemists, chemists and engineers. We may not be able to attract or retain qualified employees in the future due to the intense competition for qualified personnel among technology-based businesses, particularly in the San Diego area. We also face competition from universities and public and private research institutions in recruiting and retaining highly qualified scientific and management personnel. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience constraints that will adversely affect our ability to meet the demands of our current or any future product discovery and development collaborators in a timely fashion or to support our independent discovery and development programs.

We may encounter difficulties managing our growth, which could adversely affect our business.

Our strategy includes entering into and working on simultaneous flavor ingredient discovery and development programs across multiple markets. We increased the number of our full-time employees from seven on December 31, 1999 to 118 on December 31, 2007 and we expect to continue to grow to meet our strategic objectives. If our growth continues, it will continue to place a strain on us, our management and our resources. Our ability to effectively manage our operations, growth and various projects requires us to continue to improve our operational, financial and management controls, reporting systems and procedures and to attract and retain sufficient numbers of talented employees. We may not be able to successfully implement these tasks on a larger scale and, accordingly, we may not achieve our research, development and commercialization goals. If we fail to improve our operational, financial and management information systems, or fail to effectively monitor or manage our new and future employees or our growth, our business would suffer significantly. In addition, no assurance can be made that we will be able to maintain adequate facilities to house our staff, conduct our research or achieve our business objectives.

We will rely on third parties to manufacture our flavor ingredients on a commercial scale.

We do not have experience in manufacturing, nor do we have the resources or facilities to manufacture, flavor ingredients on a commercial scale. Therefore, the commercialization of our flavor ingredients will depend in part on our or our collaborators' ability to contract with third-party manufacturers of our flavor ingredients on a large scale, at a competitive cost, with the specified quality and in accordance with relevant food, beverage and ingredient regulatory requirements. Any such third-party manufacturers may encounter manufacturing difficulties at any time that could result in delays in the commercialization of potential flavor ingredients. Our inability to find capable third-party manufacturers or to enter into agreements on acceptable terms with third-party manufacturers could delay commercialization of any products we may develop and may harm our relationships with our existing and any future product discovery and development collaborators and our customers. Moreover, if we are required to change from

one third-party manufacturer to another for any reason, the commercialization of our products may be delayed further. In addition, if third-party manufacturers fail to comply with the FDA's good manufacturing practice regulations or similar regulations in other countries, then we may be subject to adverse regulatory action including product recalls, warning letters and withdrawal of our products, or our collaborators' or customers' products, from the market.

Further, because our flavor ingredients are regulated as food products under the FD&C Act, we and the third parties with which we collaborate or contract to manufacture, process, pack, import or otherwise handle our products or our product ingredients, may be required to comply with certain registration, prior notice submission, recordkeeping and other regulatory requirements. Failure of any party in the chain of distribution to comply with any applicable requirements under the FD&C Act or the FDA's implementing regulations, or similar regulations in other countries, may adversely affect the manufacture and/or distribution of our products in commerce.

If we acquire products, technologies or other businesses, we will incur a variety of costs, may have integration difficulties and may experience numerous other risks that could adversely affect our business.

If appropriate opportunities become available, we may consider acquiring businesses, technologies or products that we believe are a strategic fit with our business. We currently have no commitments or agreements with respect to, and are not actively seeking, any material acquisitions. We have limited experience in identifying acquisition targets, successfully acquiring them and integrating them into our current infrastructure. We may not be able to successfully integrate any businesses, products, technologies or personnel that we might acquire in the future without a significant expenditure of operating, financial and management resources, if at all. In addition, future acquisitions might be funded by issuances of additional debt or equity, which could impact your rights as a holder of our common stock and may dilute your ownership percentage. Any of the foregoing could have a significant adverse effect on our business, financial condition and results of operations.

Risks Related To Our Industry

Our ability to compete in the flavor ingredient market may decline if we do not adequately protect our proprietary technologies.

Our success depends in part on our ability to obtain and maintain intellectual property that protects our technologies and flavor ingredients. Patent positions may be highly uncertain and may involve complex legal and factual questions, including the ability to establish patentability of sequences relating to taste receptors, proteins, chemical synthesis techniques, compounds and methods for using them to modulate taste for which we seek patent protection. No consistent standard regarding the allowability or enforceability of claims in many of our pending patent applications has emerged to date. As a result, we cannot predict the breadth of claims that will ultimately be allowed in our patent applications, if any, including those we have in-licensed or the extent to which we may enforce these claims against our competitors. The degree of future protection for our proprietary rights is therefore highly uncertain and we cannot assure you that:

- we were the first to file patent applications or to invent the subject matter claimed in patent applications relating to the technologies upon which we rely;
- others will not independently develop similar or alternative technologies or duplicate any of our technologies;
- others did not publicly disclose our claimed technology before we conceived the subject matter included in any of our patent applications;
- any of our patent applications will result in issued patents;
- any of our patent applications will not result in interferences or disputes with third parties regarding priority of invention;

- any patents that have issued or may be issued to us, our collaborators or our licensors will provide a basis for commercially viable products or will provide us with any competitive advantages or will not be challenged by third parties;
- we will develop additional proprietary technologies that are patentable;
- the patents of others will not have an adverse effect on our ability to do business; or
- new proprietary technologies from third parties, including existing licensors, will be available for licensing to us on reasonable commercial terms, if at all.

In addition, patent law outside the United States is uncertain and in many countries intellectual property laws are undergoing review and revision. The laws of some countries do not protect intellectual property rights to the same extent as domestic laws. It may be necessary or useful for us to participate in opposition proceedings to determine the validity of our competitors' patents or to defend the validity of any of our or our licensors' future patents, which could result in substantial costs and would divert our efforts and attention from other aspects of our business.

Technologies licensed to us by others, or in-licensed technologies, are important to our business. In particular, we depend on high-throughput screening technologies that we licensed from Aurora Biosciences, technology related to certain taste receptor sequences that we license from the University of California and others and technology related to compound libraries that we license from third parties. In addition, we may in the future acquire rights to additional technologies by licensing such rights from existing licensors or from third parties. Such in-licenses may be costly. Also, we generally do not control the patent prosecution, maintenance or enforcement of in-licensed technologies. Accordingly, we are unable to exercise the same degree of control over this intellectual property as we do over our internally developed technologies. Moreover, some of our academic institution licensors, collaborators and scientific advisors have rights to publish data and information to which we have rights. If we cannot maintain the confidentiality of our technologies and other confidential information in connection with our collaborations, our ability to protect our proprietary information or obtain patent protection in the future may be impaired, which could have a significant adverse effect on our business, financial condition and results of operations.

Many of the patent applications we and our licensors have filed have not yet been substantively examined and may not result in patents being issued.

Many of the patent applications filed by us and our licensors were filed recently with the United States Patent and Trademark Office and most have not been substantively examined and may not result in patents being issued. Some of these patent applications claim sequences that were identified from different publicly available sequence information sources such as the High-Throughput Genomic Sequences division of GenBank. It is difficult to predict whether any of our or our licensors' applications will ultimately be found to be patentable or, if so, to predict the scope of any allowed claims. In addition, the disclosure in our or our licensors' patent applications, particularly in respect of the utility of our claimed inventions, may not be sufficient to meet the statutory requirements for patentability in all cases. Furthermore, recent changes in rules promulgated by the United States Patent and Trademark Office may adversely affect the patentability of inventions claimed in our and our licensors' patent applications. As a result, it is difficult to predict whether any of our or our licensors' applications will be allowed, or, if so, to predict the scope of any allowed claims or the enforceability of the patents. Even if enforceable, others may be able to design around any patents or develop similar technologies that are not within the scope of such patents. Our and our licensors' patent applications may not issue as patents that will provide us with any protection or competitive advantage.

Disputes concerning the infringement or misappropriation of our proprietary rights or the proprietary rights of others could be time consuming and extremely costly and could delay our research and development efforts.

Our commercial success, if any, will be significantly harmed if we infringe the patent rights of third parties or if we breach any license or other agreements that we have entered into with regard to our technology or business.

We are aware of other companies and academic institutions that have been performing research in the areas of taste modulation and flavor ingredients. In particular, other companies, academic institutions and inventor applicants have announced that they have conducted taste-receptor or ion channel research and have published data on taste receptor sequence information and taste receptors or filed patent applications or obtained patent protection on taste modulation or taste receptors and their uses, including Ajinomoto, California Institute of Technology, Cargill, Dendreon, Duke University, Firmenich, the German Institute of Human Nutrition, Givaudan SA, International Flavors & Fragrances Inc., Johannes Gutenberg University, Monell Chemical Senses Corp., Mount Sinai School of Medicine, Nestlé, Novartis, NutraSweet, Pfizer, Inc., Redpoint Bio, Sloan Kettering, Symrise, Tate & Lyle, The Scripps Research Institute, Unilever, the University of California, Virginia Commonwealth University and Wissenbach. To the extent any of these companies, academic institutions or inventor applicants currently have, or obtain in the future, broad patent claims, such patents could block our ability to use various aspects of our discovery and development process and might prevent us from developing or commercializing newly discovered flavor ingredients or otherwise conducting our business. The University of California, for example, claims certain patent rights relating to the coexpression of T1R receptors that may not have been licensed to us. While our technology is focused on the use of human T1R receptors, we cannot assure you that it does not infringe such patent rights. In such event, if we are not able to amend our license with the University of California to include such patent rights and our technology is found to interfere with or infringe such patent rights, our business, financial condition and results of operations could suffer a significant adverse effect. In addition, it is possible that some of the flavor ingredients that are discovered using our technology may not be patentable or may be covered by intellectual property of third parties.

We are not currently a party to any litigation, interference, opposition, protest, reexamination, reissue or any other potentially adverse governmental, ex parte or inter-party proceeding with regard to our patent or trademark positions. However, the life sciences and other technology industries are characterized by extensive litigation regarding patents and other intellectual property rights. Many life sciences and other technology companies have employed intellectual property litigation as a way to gain a competitive advantage. If we become involved in litigation, interference proceedings, oppositions, reexamination, protest or other potentially adverse intellectual property proceedings as a result of alleged infringement by us of the rights of others or as a result of priority of invention disputes with third parties, we might have to spend significant amounts of money, time and effort defending our position and we may not be successful. In addition, any claims relating to the infringement of third-party proprietary rights or proprietary determinations, even if not meritorious, could result in costly litigation, lengthy governmental proceedings, divert management's attention and resources, or require us to enter into royalty or license agreements that are not advantageous to us.

Should any person have filed patent applications or obtained patents that claim inventions also claimed by us, we may have to participate in an interference proceeding declared by the relevant patent regulatory agency to determine priority of invention and, thus, the right to a patent for these inventions in the United States. Such a proceeding could result in substantial cost to us even if the outcome is favorable. Even if successful on priority grounds, an interference action may result in loss of claims based on patentability grounds raised in the interference action. Litigation, interference proceedings or other proceedings could divert management's time and efforts. Even unsuccessful claims could result in significant legal fees and other expenses, diversion of management's time and disruption in our business. Uncertainties resulting from initiation and continuation of any patent proceeding or related litigation could harm our ability to compete and could have a significant adverse effect on our business, financial condition and results of operations.

An adverse ruling arising out of any intellectual property dispute, including an adverse decision as to the priority of our inventions, could undercut or invalidate our intellectual property position. An adverse ruling could also subject us to significant liability for damages, including possible treble damages, prevent us from using technologies or developing products, or require us to negotiate licenses to disputed rights from third parties. Although patent and intellectual property disputes in the technology area are often settled through licensing or similar arrangements, costs associated with these arrangements may be substantial and could include license fees and ongoing royalties. Furthermore, necessary licenses may not

be available to us on satisfactory terms, if at all. Failure to obtain a license in such a case could have a significant adverse effect on our business, financial condition and results of operations.

If we are unable to protect our trade secrets and other proprietary information, we could lose any competitive advantage we may have, which could adversely affect our business.

We rely in part on trade secret protection for our confidential and proprietary information, know how and processes. Our policy is to execute proprietary information and invention agreements with our employees and consultants upon the commencement of an employment or consulting relationship. These agreements generally require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not be disclosed to third parties. These agreements also generally provide that inventions conceived by the individual in the course of their employment shall be our exclusive property. There can be no assurance that we will be able to effectively enforce these agreements or that proprietary information is our exclusive property. There can be no assurance that the subject proprietary information will not be disclosed, that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or that we can meaningfully protect our trade secrets. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Many potential competitors, including those who have greater resources and experience than we do, may develop products or technologies that make ours obsolete or noncompetitive.

The life sciences and other technology industries are characterized by rapid technological change, and the area of sensory or taste receptor research is a rapidly evolving field. Our future success will depend on our ability to maintain a competitive position with respect to technological advances. Technological developments by others may result in our flavor ingredients and technologies becoming obsolete.

In particular, we face substantial competition from companies pursuing the commercialization of products and services relevant to taste using more traditional methods for the discovery of flavor ingredients, or for the reduction of salt, sugar, MSG or bitter taste. These competitors include leading flavor companies, such as Firmenich, Givaudan SA, International Flavors & Fragrances Inc., Symrise and Takasago. These companies provide flavors and other products, such as oils, extracts and distillates, to consumer products companies for use in a wide variety of products including foods, beverages, confectionaries, dairy products and pharmaceuticals. Competitors currently developing or marketing high potency sweeteners include Ajinomoto, Cargill, Nutrasweet and Tate & Lyle. Competitors currently developing or marketing menthol or cooling agents include Jindal Drugs, Mentha & Allied, Sharp Menthol, Symrise, Takasago and Millenium Specialty Chemicals. We currently compete and will continue to compete in the future with these companies in collaborating with and selling flavor products and technologies to manufacturers of packaged food, beverage and ingredient products. Many of these companies have substantially greater capital resources, research and development resources and experience, manufacturing capabilities, regulatory expertise, sales and marketing resources, established relationships with consumer products companies and production facilities.

Savory flavor enhancers, particularly IMP, are commercially available, and we will compete with the companies that produce these flavors. IMP is widely available and is a generally accepted food additive by the packaged food, beverage and ingredient industries. As a result, our existing and future collaborators may choose to incorporate IMP or similar savory flavor enhancers into their packaged food, beverage and ingredient products instead of our savory flavor ingredients. We may compete with bitter masking or bitter blocking compounds, such as AMP. We may also compete with known methods for reducing sodium, such as the use of potassium chloride in combination with flavors and masking agents. In addition, we may compete with existing cooling agents, such as menthol and WS3, that are currently in use.

We may in the future face competition from life sciences and other technology companies and other commercial enterprises. These entities engage as we do in biotechnology, biology or chemistry research

and could apply this technology to the discovery and development of flavor ingredients. We are aware of one other company, Redpoint Bio, that is involved in research on sweetness potentiators, salt substitutes and bitter blockers, specifically AMP. We cannot guarantee that products developed as a result of our competitors' existing or future collaborations will not compete with our flavor ingredients.

Universities and public and private research institutions are also potential competitors. While these organizations primarily have educational objectives, they may develop proprietary technologies related to the sense of taste or secure patent protection that we may need for the development of our technologies and products. We may attempt to license these proprietary technologies, but these licenses may not be available to us on acceptable terms, if at all.

Our competitors, either alone or with their collaborative partners, may succeed in developing technologies or discovering flavor ingredients that are more effective, safer, more affordable or more easily commercialized than ours, and our competitors may obtain intellectual property protection or commercialize products sooner than we do. Developments by others may render our product candidates or our technologies obsolete. In addition, our current product discovery and development collaborators are not prohibited from entering into research and development collaboration agreements with third parties in any product field. Our failure to compete effectively would have a significant adverse effect on our business, financial condition and results of operations.

We may be sued for product liability, which could adversely affect our business.

Because our business strategy involves the development and sale by our collaborators of commercial products incorporating our flavor ingredients, we may be sued for product liability. We may be held liable if any product we develop and commercialize, or any product our collaborators commercialize that incorporates any of our flavor ingredients, causes injury or is found otherwise unsuitable during product testing, manufacturing, marketing, sale or consumer use. In addition, the safety studies we must perform and the regulatory approvals we must obtain prior to incorporating our flavor ingredients into a commercial product will not protect us from any such liability.

Our product liability insurance may not fully cover our potential liabilities associated with the sale of commercial products incorporating any of our flavor ingredients. Inability to obtain sufficient insurance coverage to protect against potential product liability claims could prevent or inhibit the commercialization of products developed by us or our product discovery and development collaborators. We may be obligated to indemnify our product discovery and development collaborators for product liability or other losses they incur as a result of our flavor ingredients. Any indemnification we receive from such collaborators for product liability that does not arise from our flavor ingredients may not be sufficient to satisfy our liability to injured parties. If we are sued for any injury caused by our flavor ingredients or products incorporating our flavor ingredients, our liability could exceed our total assets.

We use hazardous materials. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our discovery and development process requires our employees to routinely handle hazardous chemical, radioactive and biological materials. Our operations also produce hazardous waste products. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of these materials. As a result of the increase in size of our operations, we are now classified as a large quantity generator of hazardous waste. This classification may result in increased scrutiny of our operations by the Environmental Protection Agency. Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental regulations may impair our discovery and development efforts.

In addition, we cannot entirely eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. Our insurance policies have limited coverage for damages or cleanup costs related to hazardous waste disposal or contamination. We may be forced to curtail operations or be

sued for any injury or contamination that results from our use or the use by others of these materials, and our liability may exceed our total assets.

Risks Related To Our Common Stock

The price of our common stock is volatile.

The market prices for securities of biotechnology companies historically have been highly volatile, and the market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Since our initial public offering in June 2004, the price of our common stock has ranged from approximately \$5 per share to approximately \$23 per share. The market price of our common stock may fluctuate in response to many factors, including:

- developments concerning our collaborative agreements;
- delays in commercialization of our flavor ingredients;
- results of safety evaluation of our flavor ingredients;
- developments related to the United States and international regulatory approval of our products;
- results of consumer acceptance testing of our flavor ingredients by our collaborators;
- announcements of technological innovations by us or others;
- developments in patent or other proprietary rights;
- changes in our management, key personnel or members of our Board of Directors;
- future sales of our common stock by existing stockholders;
- comments by securities analysts;
- general market conditions;
- fluctuations in our operating results;
- government regulation;
- failure of any of our flavor ingredients, if approved, to achieve commercial success; and
- public concern as to the safety of our flavor ingredients.

Anti-takeover provisions in our charter documents and under Delaware law may make an acquisition of us more complicated and the removal and replacement of our directors and management more difficult.

Provisions of our amended and restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us, even if doing so would benefit our stockholders. These provisions may also make it difficult for stockholders to remove and replace our board of directors and management. These provisions:

- authorize the issuance of “blank check” preferred stock by our board of directors, without stockholder approval, which could increase the number of outstanding shares and prevent or delay a takeover attempt;
- limit who may call a special meeting of stockholders;
- prohibit stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders; and
- establish advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

In addition, the requirements of Section 203 of the Delaware General Corporation Law may discourage, delay or prevent a third party from acquiring us.

Our shareholder rights plan may hinder or prevent change of control transactions.

Our shareholder rights plans may discourage transactions involving an actual or potential change in our ownership. In addition, our board of directors may issue shares of preferred stock without any further action by you. Such issuances may have the effect of delaying or preventing a change in our ownership. If

changes in our ownership are discouraged, delayed or prevented, it would be more difficult for our current board of directors to be removed and replaced, even if you and other stockholders believe such actions are in the best interests of us and our stockholders.

We have never paid cash dividends on our capital stock and we do not anticipate paying dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date, and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. In addition, the terms of any future debt or credit facility may preclude us from paying any dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of potential gain for the foreseeable future.

Item 1B. *Unresolved Staff Comments*

None.

Item 2. *Properties*

We currently lease approximately 65,000 square feet of laboratory and office space at 4767 Nexus Center Drive, San Diego, California, 92121. Our lease for this facility expires on February 28, 2017. Our current monthly lease obligation for rent is approximately \$200,000. We are responsible for expenses associated with the use and maintenance of the building, such as utilities and common area maintenance. These costs will vary each month, and we expect that these costs will be approximately \$110,000 per month.

We believe that our facilities are adequate to meet our business requirements for the near-term and that additional space will be available on commercially reasonable terms, if required.

Item 3. *Legal Proceedings*

We are not a party to any material legal proceedings at this time.

Item 4. *Submission of Matters to a Vote of Security Holders*

No matters were submitted to a vote of our security holders during the quarter ended December 31, 2007.

PART II

Item 5. *Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*

Common Stock Market Price

Our common stock commenced trading on the NASDAQ Stock Market on June 22, 2004 under the symbol "SNMX." The following table sets forth the high and low sales prices per share of our common stock as traded on the NASDAQ Stock Market for the periods indicated.

<u>Fiscal 2007 Quarter ended</u>	<u>March 31, 2007</u>	<u>June 30, 2007</u>	<u>September 30, 2007</u>	<u>December 31, 2007</u>
High.....	\$ 14.85	\$ 16.36	\$ 14.00	\$ 12.40
Low	\$ 11.26	\$ 11.89	\$ 10.21	\$ 6.29

<u>Fiscal 2006 Quarter ended</u>	<u>March 31, 2006</u>	<u>June 30, 2006</u>	<u>September 30, 2006</u>	<u>December 31, 2006</u>
High.....	\$ 17.08	\$ 16.59	\$ 15.75	\$ 19.00
Low	\$ 11.87	\$ 11.36	\$ 12.01	\$ 12.35

The last sale price for our common stock as reported by the NASDAQ Stock Market on January 31, 2008 was \$6.51 per share. As of January 31, 2008, there were approximately 68 shareholders of record of our common stock.

We have never declared or paid any cash dividends to our shareholders. We do not presently plan to pay cash dividends in the foreseeable future and intend to retain any future earnings for reinvestment in our business.

Information about our equity compensation plans is included in Item 12 of Part III of this annual report.

Repurchases of Equity Securities

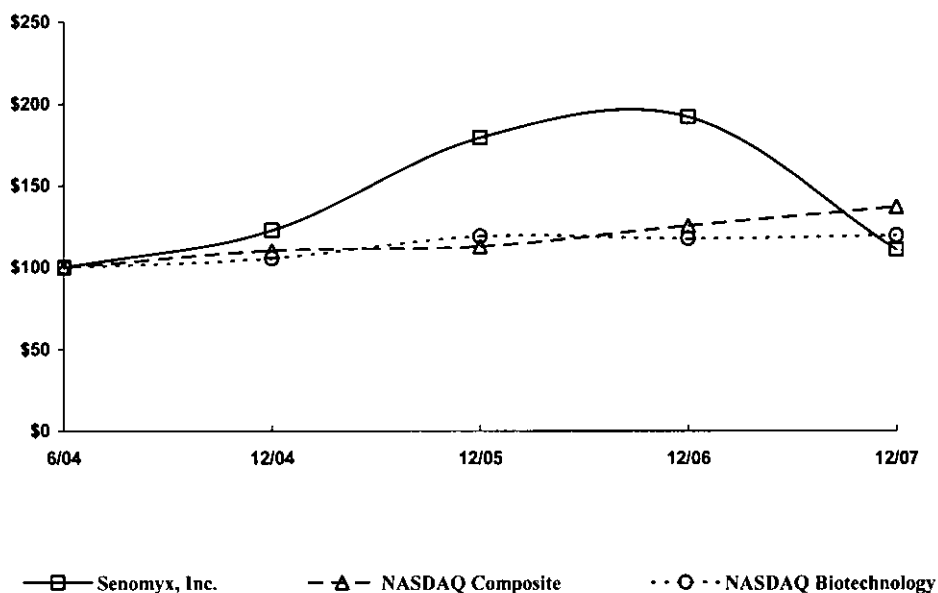
There were no repurchases of equity securities in the fourth quarter of 2007.

Performance Measurement Comparison (1)

The following graph shows a comparison of the 42-month total cumulative returns of an investment of \$100 in cash in (i) our common stock on June 22, 2004, the first trading date following our initial public offering, (ii) the Nasdaq Composite Index, U.S. Companies on May 31, 2004 and (iii) the Nasdaq Biotechnology Index on May 31, 2004. The comparisons in the graph are required by the SEC and are not intended to forecast or be indicative of the possible future performance of our common stock. The graph assumes that all dividends have been reinvested (to date, we have not declared any dividends).

COMPARISON OF 42 MONTH CUMULATIVE TOTAL RETURN*

Among Senomyx, Inc., The NASDAQ Composite Index
And The NASDAQ Biotechnology Index



* \$100 invested on 6/22/04 in stock or 5/31/04 in index-including reinvestment of dividends.
Fiscal year ending December 31.

(1) This section is not "soliciting material," is not deemed "filed" with the SEC, is not subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference in any of our filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

Item 6. Selected Financial Data

The Statement of Operations Data and Balance Sheet Data presented below should be read in conjunction with Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and Item 8, Financial Statements and Supplementary Data included in this annual report on Form 10-K. Amounts are in thousands, except share and per share amounts.

	Years ended December 31,				
	2007	2006	2005	2004	2003
Statements of Operations Data:					
Revenues:					
Development revenue.....	\$ 18,197	\$ 12,230	\$ 9,385	\$ 8,347	\$ 9,537
Commercial revenue.....	23	—	—	—	—
Total revenues	18,220	12,230	9,385	8,347	9,537
Operating expenses:					
Research and development	29,874	25,393	20,330	18,318	18,095
General and administrative.....	13,572	13,735	10,229	10,178	9,093
Total operating expenses	43,446	39,128	30,559	28,496	27,188
Loss from operations	(25,226)	(26,898)	(21,174)	(20,149)	(17,651)
Interest income, net	3,395	3,841	1,344	435	198
Net loss.....	<u>\$ (21,831)</u>	<u>\$ (23,057)</u>	<u>\$ (19,830)</u>	<u>\$ (19,714)</u>	<u>\$ (17,453)</u>
Basic and diluted net loss per share(1):					
Historical	<u>\$ (0.72)</u>	<u>\$ (0.77)</u>	<u>\$ (0.77)</u>	<u>\$ (1.40)</u>	<u>\$ (10.03)</u>
Pro forma.....				<u>\$ (0.89)</u>	<u>\$ (0.97)</u>
Shares used to compute basic and diluted net loss per share(1):					
Historical	<u>30,326,768</u>	<u>29,809,854</u>	<u>25,916,229</u>	<u>14,040,727</u>	<u>1,739,380</u>
Pro forma.....				<u>22,143,380</u>	<u>17,944,686</u>

(1) Please see Note 1 to our financial statements for an explanation of the method used to calculate the historical net loss per share and the number of shares used in the computation of the per share amounts. The pro forma basic and diluted net loss per share gives effect to the conversion of our convertible preferred stock into shares of common stock as if converted at the date of original issuance.

	As of December 31,				
	2007	2006	2005	2004	2003
Balance Sheet Data:					
Cash, cash equivalents and investments available-for-sale	\$ 62,624	\$ 74,104	\$ 83,813	\$ 40,847	\$ 17,058
Working capital	51,977	65,455	80,178	36,841	15,160
Total assets	79,249	90,182	88,531	43,802	20,440
Accumulated deficit.....	(149,114)	(127,283)	(104,226)	(84,396)	(64,682)
Total stockholders' equity	56,627	69,477	82,445	38,373	17,104

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of our financial condition and results of operations should be read in conjunction with our Financial Statements and the related Notes to Financial Statements in Item 8, "Financial Statements and Supplementary Data" in this annual report on Form 10-K.

Certain statements contained in this annual report on Form 10-K, including statements regarding the development, growth and expansion of our business, our intent, belief or current expectations, primarily with respect to our future operating performance, and the products we expect to offer and other statements regarding matters that are not historical facts, are "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, and are subject to the "safe harbor" created by these sections. Future filings with the SEC, future press releases and future oral or written statements made by us or with our approval, which are not statements of historical fact, may also contain forward-looking statements. Because such statements include risks and uncertainties, many of which are beyond our control, actual results may differ materially from those expressed or implied by such forward-looking statements. Some of the factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements can be found under the caption "Risk Factors" and elsewhere in this annual report on Form 10-K. Readers are cautioned not to place undue reliance on forward-looking statements. The forward-looking statements speak only as of the date on which they are made, and we undertake no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they are made.

Overview and Recent Developments

We are a leading company using proprietary taste receptor technologies to discover and develop novel flavor ingredients in the savory, sweet, salt, bitter and cool areas. We believe our flavor ingredients will enable packaged food, beverage and ingredient companies to improve the nutritional profile of their products while maintaining or enhancing taste and may generate cost of goods savings. We license our flavor ingredients to our collaborators on an exclusive or co-exclusive basis, which we believe will provide these companies with the ability to differentiate their products. We have entered into product discovery and development collaborations with seven of the world's leading packaged food, beverage and ingredient companies: Ajinomoto, Cadbury, Campbell, Coca-Cola, Firmenich, Nestlé and Solae. We currently anticipate that we will derive all of our revenues from existing and future collaborations. Depending upon the collaboration, our existing collaboration agreements provide for upfront fees, research and development funding, reimbursement of certain regulatory costs, milestone payments based upon our achievement of research or development goals and, in the event of commercialization, commercial milestones, minimum periodic royalties and royalties on future sales of consumer products incorporating our flavor ingredients. Our current programs focus on the development of savory, sweet and salt flavor enhancers, high potency sweeteners, bitter blockers and cooling agents.

We have incurred significant losses since our inception in 1998 and, as of December 31, 2007 our accumulated deficit was \$149.1 million. We expect to incur additional losses over at least the next two years as we continue to develop flavor ingredients. Our results of operations have fluctuated from period to period and likely will continue to fluctuate substantially in the future based upon:

- termination of any of our product discovery and development collaboration agreements;
- the rate at which we add personnel;
- our ability to discover and develop new flavor ingredients or the ability of our product discovery and development collaborators to incorporate them into their products;
- our ability to enter into new, or extend existing, product discovery and development collaborations and technology collaborations;
- the demand for our collaborators' products containing our flavor ingredients; and
- variability of our stock-based compensation expense in conjunction with fluctuations of our stock price.

In March 2006, we entered into a Collaborative Research, Development, Commercialization and License Agreement with Ajinomoto for the discovery and commercialization of novel flavor ingredients in select product categories within Japan and other Asian markets. In April 2007, we amended the agreement to expand Ajinomoto's rights into North America. The expanded license provided Ajinomoto with exclusive rights on the development and commercialization of certain existing flavor ingredients for the soup and bouillon, sauce and culinary aids, noodles, snack food and frozen foods product categories within the new territory. The license covers retail, food service and ingredient supply applications for the flavor ingredients. In August 2007, we further amended the agreement to expand Ajinomoto's rights into additional product categories and geographies not previously licensed by us. The expanded license will provide Ajinomoto with exclusive rights on the development and commercialization of certain existing flavor ingredients in a wide variety of product categories that were not previously licensed within a respective territory including soups, sauces, instant noodles, snack foods, frozen foods and processed meats. The new territories for these product categories include Africa, the Caribbean, Europe, Latin America, the Middle East and Oceania. Upon commercialization, we will receive royalty payments based on sales of products containing flavor ingredients developed under the agreement. In addition, the royalty obligation for both amendments includes predetermined minimum royalties.

In April 2007, we entered into a Collaborative Research, Development, Commercialization and License Agreement with Solae for the discovery and exclusive worldwide commercialization of novel flavor ingredients for soy proteins. Under the terms of the new collaboration, Solae has agreed to pay us research fees for up to three years. In addition, we are eligible to receive milestone payments upon achievement of specific product discovery and development goals. Upon commercialization, we will receive royalty payments based on sales of products containing flavor ingredients developed under the agreement.

In June 2007, we announced that Nestlé, the world's largest food company, has begun the initial commercial introduction of the first food products that contain our savory flavor ingredients. Under the terms of our agreement with Nestlé, we receive royalty payments based on sales of products containing our flavor ingredients.

In July 2007, we amended our Collaborative Research and License Agreement with Cadbury dated July 15, 2005, to extend the collaborative period for an additional twelve months, through July 15, 2008. During the extension period, we will continue to work with Cadbury on the discovery and commercialization of new flavor ingredients in the gum confectionary area.

In July 2007, we amended our collaboration agreement, dated December 6, 2000, as amended, with Kraft Foods Global, Inc., or Kraft Foods, a global leader in branded foods and beverages, to extend until December 9, 2008 Kraft Foods' ability to evaluate novel flavor modifiers under development by us for potential use by Kraft Foods on an exclusive basis in a specified product field in the dessert product category and on a co-exclusive basis in the powdered beverage product field. On October 31, 2007 we received notification from Kraft Foods terminating our collaboration agreement effective as of December 9, 2007. All rights previously licensed to Kraft Foods returned to us upon such termination.

In January 2008, we announced that we entered into a Collaborative Research, Development, Commercialization and License Agreement with Firmenich for novel flavor ingredients intended to provide

a cooling taste effect. Under the terms of the agreement, Firmenich has agreed to pay us research funding for up to three years based on research progress during the collaborative period. In addition, we are eligible to receive milestone payments upon achievement of specific product discovery and development goals. The combined total of research funding and milestone payments could exceed \$3.5 million if all milestones are met. Upon commercialization, we will receive royalty payments based on sales of products containing new flavor ingredients developed under the agreement.

Revenue

We derive revenue from our product discovery and development collaborations. To date, our revenue has come solely from upfront fees, research and development funding, reimbursement of certain regulatory costs, milestone payments and royalty payments under our product discovery and development collaboration agreements. As of December 31, 2007, we have recognized cumulative revenue under our collaborations of \$67.4 million. If any of these collaborative agreements were to be terminated, this could have a significant effect on future revenues.

From our inception date to the present, research and development payments represented the primary source of our revenue. Based on current collaborations, we anticipate that substantially all of our revenues in the near future will be derived from research and development payments. We may receive additional milestone payments in the future upon the achievement of certain goals set forth in our collaboration agreements.

In addition, as our collaborators launch products incorporating our flavor ingredients, we receive minimum periodic royalties and royalty payments based upon the sales of those products, which in the future could be significantly larger than research and development funding or milestone payments. In order for us to generate material royalty revenue and become profitable, we must retain our existing or establish new product discovery and development collaborations and our collaborators must commercialize products incorporating one or more of our flavor ingredients. Our ability to generate material royalty revenue is uncertain and will depend upon our ability to meet particular research, development and commercialization objectives.

Research and Development

Our research and development expenses consist primarily of costs associated with our discovery and development efforts in connection with our primary programs focused on the development of savory, sweet and salt flavor enhancers, high potency sweeteners, bitter blockers and cooling agents. We track research and development costs by the type of cost incurred rather than by project. Research and development costs are comprised of salaries and other personnel-related expenses, facilities and depreciation, research and development supplies, patent and licensing, outside services and non-cash stock-based compensation expenses. We charge research and development expenses to operations as incurred.

The research and development payments we have received from our collaboration agreements historically have not covered all of our research and development expenses. We expect that our research and development expenses are likely to increase in the future as a result of our existing product discovery and development collaborations, internal product discovery and development activities and technology development and any expansion of these activities.

At this time, due to the risks inherent in the discovery of flavor ingredients, we are unable to estimate with any certainty the costs we will incur in the continued development of our flavor ingredients for commercialization. We anticipate that we will make determinations regarding the research and development projects to pursue and the funding of each project on an ongoing basis in response to the progress of each discovery and development program, as well as an ongoing assessment of its market potential. We cannot be certain when any material net cash inflow from the commercialization of our flavor ingredients will commence.

Our ability to complete the development of our current product candidates is subject to many risks and uncertainties. These risks include the risks, among others, that:

- we are substantially dependent upon our collaborators for research and development funding;
- our collaborators may terminate their respective collaboration programs early;
- we may not be able to discover flavor ingredients with the desired taste attributes;
- we may not be successful in developing flavor ingredients with attributes required for use in commercial products;
- we may be unable to maintain FEMA GRAS determination for our savory product candidates; and
- we may be unable to obtain FEMA GRAS determination or regulatory approval for candidates in our other programs.

If we do not complete the development of our flavor ingredients on a timely basis, our collaborators may terminate or not renew our collaboration agreements, we may begin receiving revenue from the commercialization of products incorporating our flavor ingredients later than anticipated, or not at all, and it may be more difficult to enter into new collaboration agreements. In any of these cases, we may require substantial additional funding in order to continue development of our flavor ingredients.

General and Administrative

General and administrative expenses consist primarily of salaries and other personnel-related expenses related to business development, legal, financial, commercial development and other administrative functions and Sarbanes-Oxley compliance. General and administrative expenses also include non-cash stock-based compensation expenses. We expect that our general and administrative expenses are likely to increase in the future as a result of supporting additional commercial development activities, business development and research and development.

Results of Operations

Years Ended December 31, 2007, 2006 and 2005

Revenue Under Collaboration Agreements

We recorded revenue of \$18.2 million, \$12.2 million and \$9.4 million during the years ended December 31, 2007, 2006 and 2005, respectively. Research and development payments, upfront fees, milestone payments and royalty revenues under collaborations with Ajinomoto, Cadbury Schweppes, Campbell, Coca-Cola, Firmenich, Kraft Foods, Nestlé and Solae accounted for 100% of total revenue for the year ended December 31, 2007. The increase of \$6.0 million from 2006 to 2007 was primarily due to revenue recognized related to amendments of existing collaborations. Research and development payments, upfront fees and milestone payments under collaborations with Ajinomoto, Cadbury Schweppes, Campbell, Coca-Cola, Kraft Foods and Nestlé accounted for approximately 100% of total revenue for the year ended December 31, 2006. Research and development payments, reimbursement of certain regulatory expenses, upfront fees and milestone payments under collaborations with Cadbury Schweppes, Campbell, Coca-Cola, Kraft Foods and Nestlé accounted for approximately 100% of total revenue for the year ended December 31, 2005. The increase of \$2.8 million from 2005 to 2006 was primarily due to revenue recognized for new collaborations.

Research and Development Expenses

Our research and development expenses (including stock-based compensation expenses charged to research and development) were \$29.9 million, \$25.4 million and \$20.3 million for the years ended December 31, 2007, 2006 and 2005, respectively. A comparison of research and development expenses by category is as follows (in thousands):

	Years Ended December 31,		
	2007	2006	2005
Salaries and personnel.....	\$ 11,535	\$ 9,133	\$ 7,685
Facilities and depreciation.....	5,721	5,133	4,568
Research and development supplies.....	5,047	3,328	2,742
Non-cash stock-based compensation.....	2,588	3,048	2,647
Patent and licensing.....	2,503	1,854	1,406
Outside services.....	1,521	2,202	806
Miscellaneous.....	959	695	476
Total research and development expenses.....	<u>\$ 29,874</u>	<u>\$ 25,393</u>	<u>\$ 20,330</u>

Salaries and Personnel. Our expenses for research and development personnel, including consultants, were \$11.5 million, \$9.1 million and \$7.7 million for the years ended December 31, 2007, 2006 and 2005, respectively. The increase in salaries and personnel expenses is primarily due to the addition of staff to support research and development operations. Our research and development staff increased from an average of 79 for the year ended December 31, 2006 to an average of 88 for the year ended December 31, 2007. In addition, the increase in salaries and personnel expenses was due to the impact of annual salary adjustments. Our research and development staff increased from an average of 61 for the year ended December 31, 2005 to an average of 79 for the year ended December 31, 2006. The increase in staff was primarily to support the identification and optimization of product candidates from our discovery and development programs and to support increasing activities in product development and research management.

Facilities and Depreciation. Our facilities and depreciation expenses were \$5.7 million, \$5.1 million and \$4.6 million for the years ended December 31, 2007, 2006 and 2005, respectively. The increase of \$588,000 from 2006 to 2007 was primarily attributable to an increase in depreciation expense of \$1.1 million primarily due to tenant improvements in our current facility being placed in service during 2006 and being depreciated for an entire year in 2007, as compared to only part of a year for 2006, partially offset by a decrease in our facilities expenses of \$511,000 due to decreased rent expense for our new facility as compared to our former facility. We relocated to our new facility in November 2006. The increase of \$565,000 from 2005 to 2006 was primarily attributable to increased depreciation expense due to the addition of new scientific equipment and costs associated with the move to the new facility in the fourth quarter of 2006.

Research and Development Supplies. Our expenses for supplies used in research and development were \$5.0 million, \$3.3 million and \$2.7 million for the years ended December 31, 2007, 2006 and 2005, respectively. The increase of \$1.7 million from 2006 to 2007 was primarily attributable to higher research and development screening and other lab supplies expenses and to higher compound acquisition expenses. The increase of \$586,000 from 2005 to 2006 was primarily attributable to increased purchases of scientific supplies and compound acquisition expenses associated with increased screening activity in 2006.

Non-cash Stock-based Compensation. Our non-cash stock-based compensation expenses were \$2.6 million, \$3.0 million and \$2.6 million for the years ended December 31, 2007, 2006 and 2005, respectively. The decrease of \$459,000 was primarily attributable to decreases in compensation expense in 2007 compared to 2006 for stock options granted to both employees prior to 2006 and to non-employees, as the expense for these options is accounted for on an accelerated basis, which results in more expense being recognized for the options earlier in the options' vesting period. This decrease was partially offset by increases in expense related to stock options granted to employees during 2006 and 2007. Options granted to employees after 2005 are accounted for on a straight-line basis. The increase of \$401,000 from 2005 to 2006 was primarily due to an increase in compensation expense in 2006 compared to 2005 for stock options granted to employees, partially offset by a decrease in compensation expense for stock options granted to non-employees. The increase in employee-related stock-based compensation expense was due to our adoption of Financial Accounting Standards Board, or FASB, SFAS No. 123R, *Share Based*

Payment, in the first quarter of 2006.

Patent and Licensing. Our patent and licensing expenses were \$2.5 million, \$1.9 million and \$1.4 million for the years ended December 31, 2007, 2006 and 2005, respectively. The increase of \$649,000 from 2006 to 2007 was primarily attributable to outsourced patent filing related activities associated with our expanding intellectual property portfolio. The increase of \$448,000 from 2005 to 2006 was primarily attributable to certain foreign patent activities commencing in the fourth quarter of 2005 and completed in the second quarter of 2006.

Outside Services. Our outside services expenses were \$1.5 million, \$2.2 million and \$806,000 for the years ended December 31, 2007, 2006 and 2005, respectively. The decrease of \$681,000 from 2006 to 2007 was primarily attributable to a decrease in costs for chemistry outsourcing, as we redeployed these resources to internal activities. The increase of \$1.4 million from 2005 to 2006 was primarily attributable to an increase in costs incurred for chemistry and product development outsourcing.

General and Administrative Expenses

Our general and administrative expenses (including non-cash stock-based compensation expenses charged to general and administrative) were \$13.6 million, \$13.7 million and \$10.2 million for the years ended December 31, 2007, 2006 and 2005, respectively. The \$163,000 decrease in expenses from 2006 to 2007 was primarily attributable to decreases in consulting expenses, non-cash stock-based compensation expenses and recruiting and relocation expenses, partially offset by increases in salaries and personnel costs. The decrease in consulting expenses of approximately \$356,000 from 2006 to 2007 was due to the one-time use of strategic planning consultants in the first quarter of 2006. The decrease in non-cash stock-based compensation expense of approximately \$225,000 was due to stock options granted to both employees prior to 2006 and to non-employees, as the expense for these options is accounted for on an accelerated basis, which results in more expense being recognized for the options earlier in the options' vesting period. This decrease was partially offset by increases in expense related to stock options granted to employees during 2006 and 2007. The decrease in recruiting and relocation expenses of approximately \$167,000 was due to the addition of key general and administrative personnel in the second quarter of 2006. The increase in expenses for salaries and personnel of approximately \$599,000 was primarily due to the impact of salary adjustments.

The \$3.5 million increase in expenses from 2005 to 2006 was primarily attributable to an increase in non-cash stock-based compensation expense of approximately \$1.8 million, an increase in payroll expense of approximately \$1.2 million, and an increase in consulting expenses of approximately \$488,000. The increase in non-cash stock-based compensation expense is due to the adoption of SFAS 123R in the first quarter of 2006, offset by a decrease in amortization of deferred compensation and compensation expense for stock options granted to non-employees. The increases in expenses for payroll and in expenses for recruiting and relocation were due to the impact of annual merit, cost of living and promotion salary increases and to increased headcount. The increase in consulting expenses was due to one-time consulting expenses.

Interest Income

Interest income was \$3.4 million, \$3.8 million and \$1.3 million for the years ended December 31, 2007, 2006 and 2005, respectively. The decrease of \$446,000 was primarily attributable to less cash invested for 2007 compared to 2006 that was partially offset by higher average rates of return on those invested balances for 2007 compared to 2006. The increase of \$2.5 million from 2005 to 2006 was primarily attributable to our higher average cash balances for the year ended December 31, 2006 as a result of our November 2005 public offering of common stock, and to higher rates of return on those balances.

Liquidity and Capital Resources

Since our inception, we have financed our business primarily through private and public placements of stock, research and development payments under our product discovery and development collaborations and interest income. As of December 31, 2007 we had received in excess of \$169.6 million in proceeds from the sales of common and preferred stock. In addition, we had received \$73.2 million in non-refundable license fees, research and development payments, cost reimbursements and milestone payments

from our collaboration agreements, and \$10.9 million in interest income. As of December 31, 2007, over the remaining life of our current collaboration agreements, we expect to receive an additional \$17.7 million in non-refundable research and development payments from our collaborators. We may not receive these payments if the collaborations are terminated. In addition, we may receive payments in the event we achieve research or development milestones and royalty payments in the event our collaborators commercialize products incorporating our flavor ingredients.

At December 31, 2007, we had \$62.6 million in cash, cash equivalents and investments available-for-sale as compared to \$74.1 million at December 31, 2006, a decrease of \$11.5 million. This overall decrease resulted primarily from the use of cash to fund our operations.

Operating Activities

Operating activities used cash of \$12.4 million for the year ended December 31, 2007 compared to \$8.1 million for the year ended December 31, 2006. Operating cash flow in 2007 compared to the prior year reflects a decrease in our net loss of \$1.2 million. Non-cash expenses decreased \$658,000 to \$6.9 million for the year ended December 31, 2007 from \$7.6 million for the year ended December 31, 2006. The decrease in non-cash operating expenses was primarily due to an increase in the amortization of leasehold obligation of \$867,000 (a contra-expense), relative decreases in both non-employee and employee non-cash stock-based compensation expense for \$591,000 and \$93,000, respectively, and an increase in accretion of discount on available-for-sale securities of \$490,000. These reductions in non-cash expenses were partially offset by a relative increase in depreciation expense of \$1.4 million. Net changes in other current assets used cash of \$810,000 for the year ended December 31, 2007, while net decreases in other current assets provided cash of \$1.1 million for the year ended December 31, 2006. Net increases in operating liabilities provided cash of \$3.4 million and \$6.4 million for the years ended December 31, 2007 and 2006, respectively.

Operating activities used cash of \$8.1 million for the year ended December 31, 2006 compared to \$13.9 million for the year ended December 31, 2005. Operating cash flow in 2006 compared to the prior year period reflects an increase in our net loss of \$3.2 million. Non-cash expenses increased \$1.2 million to \$7.6 million for the year ended December 31, 2006 from \$6.3 million for the year ended December 31, 2005. The increase in non-cash operating expenses was primarily due to the implementation of SFAS 123R in the first quarter of 2006. Net decreases in other current assets provided cash of \$1.1 million for the year ended December 31, 2006, while net increases in other current assets used cash of \$978,000 for the year ended December 31, 2005. Net increases in operating liabilities provided cash of \$6.4 million and \$522,000 for the years ended December 31, 2006 and 2005, respectively.

Investing Activities

Investing activities provided cash of \$9.0 million for the year ended December 31, 2007. Cash provided in 2007 reflects the maturities of available-for-sale securities of \$104.8 million. These maturities were partially offset by purchases of available-for-sale securities of \$92.6 million and purchases of property and equipment of \$3.2 million for newly hired employees and for the new facility.

Investing activities used cash of \$47.2 million for the year ended December 31, 2006. Cash used in 2006 reflects the purchases of available-for-sale securities of \$110.2 million and purchases of property and equipment of \$5.7 million for newly hired employees and for the new facility. These purchases were partially offset by the maturities of available-for-sale securities of \$68.7 million.

Investing activities provided cash of \$12.1 million for the year ended December 31, 2005. Cash provided in 2005 reflects the maturities of available-for-sale securities of \$45.8 million, offset by purchases of available-for-sale securities of \$31.8 million with the proceeds from our public offering in November 2005 to obtain higher rates of interest income.

Financing Activities

Financing activities provided cash of \$2.1 million, \$2.6 million and \$58.7 million for the years ended December 31, 2007, 2006 and 2005, respectively. Cash provided by financing activities in 2007 reflects

the net proceeds from the sale of common stock of \$2.1 million, primarily from the exercise of stock options. Cash provided by financing activities in 2006 reflects the net proceeds from the sale of common stock of \$2.6 million, primarily from the exercise of stock options. Cash provided by financing activities in 2005 reflects the net proceeds from the sale of common stock of \$58.7 million, primarily from the sale of common stock during our November 2005 public offering of common stock.

As of December 31, 2007 future minimum payments due under our contractual obligations are as follows (in thousands):

	Payments Due by Period				
	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
Operating leases	\$ 25,478	\$ 2,494	\$ 5,166	\$ 5,439	\$ 12,379
License payments	68	53	15	—	—
Total	<u>\$ 25,546</u>	<u>\$ 2,547</u>	<u>\$ 5,181</u>	<u>\$ 5,439</u>	<u>\$ 12,379</u>

As of December 31, 2007, we had no long-term debt obligations.

As of December 31, 2007, we have net open purchase orders (defined as total open purchase orders at year end less any accruals or invoices charged to or amounts paid against such purchase orders) totaling approximately \$1.4 million. In the next twelve months, we also plan to spend approximately \$3.0 to \$3.5 million on capital expenditures.

Our license agreement with the University of California calls for annual maintenance fees commencing in 2006 or royalties or service revenues on sales of any products developed using technologies licensed under the agreement. Royalties are calculated as a percentage of covered sales. The agreement specifies minimum periodic royalty payments commencing in 2014 and continuing through the expiration of the last to expire patent licensed under the agreement.

Our future capital uses and requirements depend on numerous forward-looking factors. These factors may include, but are not limited to, the following:

- the rate of progress and cost of research and development activities;
- the number and scope of our research activities;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- our ability to establish and maintain product discovery and development collaborations;
- the effect of competing technological and market developments;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish; and
- the extent to which we acquire or in-license new products, technologies or businesses.

We believe our available cash, cash equivalents, investments and existing sources of funding will be sufficient to satisfy our anticipated operating and capital requirements through at least the next 12 months.

Until we can generate significant cash from our operations, we expect to continue to fund our operations with existing cash resources that were primarily generated from the proceeds of offerings of our equity securities and research and development payments and milestone payments under our product discovery and development collaborations. As of December 31, 2007, under our existing collaboration agreements, assuming all milestones are achieved and we receive all research and development funding, we may be entitled to up to \$31.1 million. In 2008, we anticipate receiving \$8.8 million in non-refundable research and development funding. This does not include any additional payments we may receive related to the achievement of additional milestones, or to new collaborations or extensions of existing collaborations. This does not include any additional payments we will receive related to royalties from the sale of products containing our flavor ingredients. We may not receive the payments if the collaborations are terminated or not renewed, or if we do not achieve the milestones set forth in the collaboration

agreements. In addition, the timing of the receipt of milestone payments in particular is uncertain, as we may achieve milestones significantly earlier or later than we currently expect. We cannot predict at this time the level of our collaborators' royalty-generating sales, as these sales to date have been based on launches of new products without established sales histories.

We continue to pursue additional collaborations, which could result in additional revenue. We may not recognize revenues for research and development funding, milestones, minimum periodic royalties or royalties if the collaborations are terminated, or if we do not achieve the milestones set forth in the collaboration agreements. Our expenses will vary based upon (but not limited to) the forward-looking factors listed above.

Off-Balance Sheet Arrangements

As of December 31, 2007 and 2006, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as special purpose or structured finance entities, which would have been established for the purposes of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As such, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these relationships.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with United States generally accepted accounting principles, or GAAP. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate these estimates, including those related to revenue recognition, long-lived assets, accrued liabilities, and income taxes. These estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions. While our significant accounting policies are described in more detail in Note 1 to our financial statements, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements:

Revenue Recognition

Our revenue recognition policies are in compliance with the Staff Accounting Bulletin, or SAB, No. 104, *Revenue Recognition*, and Emerging Issues Task Force, or EITF, Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*. Some of our agreements contain multiple elements, including technological and territorial licenses and research and development services. In accordance with these agreements, we may be eligible for upfront fees, research and development funding, cost reimbursements, development milestones, commercialization milestones, minimum periodic royalty payments and royalty payments.

Development revenues include revenues from license fees, research and development funding, development milestones and cost reimbursement.

Non-refundable license fees, if not associated with future performance, are recognized when received. Non-refundable license fees, if associated with future performance, are attributed to a specific program or collaboration and recognized over the period of service for that specific program or collaboration.

Amounts received for research funding are recognized as revenues as the services are performed. Revenue is deferred for fees received before earned.

Revenue from development milestones is recognized when earned, as evidenced by written acknowledgment from the collaborator or other persuasive evidence that the milestone has been achieved,

provided that (i) the milestone event is substantive and its achievability was not reasonably assured at the inception of the agreement and (ii) our performance obligations after the milestone achievement will continue to be funded by the collaborator at a level comparable to before the milestone achievement. If both of these criteria are not met, the milestone payment is recognized over the remaining minimum period of our performance obligations under the agreement.

Revenue from cost reimbursements is recognized when earned, as evidenced by written acknowledgment from the collaborator or other persuasive evidence.

Commercial revenues include revenues from commercialization milestones, minimum periodic royalty payments and royalties on product sales made by our collaborators incorporating our flavor ingredients.

Revenue from commercialization milestones is recognized over the royalty term.

Non-refundable minimum periodic royalty payments are recognized as revenues over related annual royalty periods. Annual royalty terms vary between collaborations and collaborators and can vary from year to year. These terms vary based on factors such as the characteristics of the flavor ingredient and the product categories and geographies licensed by the collaborator. Periodically, as contractually specified, our collaborators are required to provide a report detailing all sales of products containing our flavor ingredients. To the extent that calculated royalties on sales of such products exceed the minimum periodic royalty payments made to date, the collaborators are required to remit to us the difference between royalties calculated and minimum periodic royalty payments made to date. We recognize this difference as royalties on product sales at the time the report is received. To the extent that minimum periodic royalty payments made to date exceed calculated royalties, we are not required to refund the difference.

Although we do not currently have any collaborations that include refundable minimum periodic royalty payments, in such a case, revenue would be deferred for refundable minimum periodic royalty payments received before earned.

Royalties on product sales made by our collaborators incorporating our flavor ingredients are recognized when received, which is generally expected to be one quarter in arrears.

As applicable, commercial revenues are reported net of royalties payable under our third party licensing agreements. To date, substantially all of our commercial revenues have been related to minimum periodic royalty payments.

Stock-Based Compensation

We grant options to purchase our common stock to our employees and directors under our equity incentive plan. Eligible employees can also purchase shares of our common stock under our employee stock purchase plan at the lower of: (i) 85% of the fair market value on the first day of a two-year offering period; or (ii) 85% of the fair market value on the last date of each six-month purchase period within the two-year offering period. In addition, we grant options to purchase our common stock to non-employees under our equity incentive plan.

For the year ended December 31, 2005, prior to the adoption of SFAS 123R, we recorded deferred compensation for stock options and stock awards granted equal to the difference between the exercise price and the fair value of our common stock on the date of grant as determined for the purpose of recording our initial public offering, or IPO, cheap stock calculation. We recorded options or awards issued to non-employees at their fair value in accordance with the SFAS 123, *Accounting for Stock-Based Compensation*, and periodically remeasure them in accordance with EITF 96-18 and recognize them over the service period. Deferred compensation amounts were recorded as a component of stockholders' equity and amortized, on an accelerated basis, as a non-cash charge to operations over the vesting period of the options. We recorded employee and non-employee stock-based compensation expense of \$5.3 million for the year ended December 31, 2005.

In December 2004, the FASB issued SFAS 123R, which requires companies to expense the estimated fair value of employee stock options and similar awards. This statement is a revision to SFAS 123 and supersedes Accounting Principles Board, or APB, Opinion No. 25, *Accounting for Stock Issued to Employees*, and amends FASB Statement No. 95, *Statement of Cash Flows*. The accounting provisions of SFAS 123R were effective for the first quarter of fiscal 2006. In conjunction with the adoption of SFAS 123R, the unamortized balance of deferred compensation recorded for our IPO cheap stock calculation was reclassified to additional paid-in capital. As of our adoption date of SFAS 123R, the unamortized balance of deferred compensation was \$1.1 million.

Effective January 1, 2006, we use the fair value method to apply the provisions of SFAS 123R with a modified prospective application which provides for certain changes to the method for valuing stock-based compensation. The valuation provisions of SFAS 123R apply to new awards and to awards that are outstanding on the effective date and subsequently modified or cancelled. Under the modified prospective application, prior periods are not revised for comparative purposes. Stock-based compensation expense recognized under SFAS 123R for the years ended December 31, 2007 and 2006 were \$6.2 million and \$6.3 million, respectively. At December 31, 2007, total unrecognized estimated compensation expense related to non-vested stock options granted prior to that date was \$11.8 million, which is expected to be recognized over a weighted average period of 1.9 years. Total stock options granted to employees and non-employee directors during the years ended December 31, 2007, 2006 and 2005 represented 3.6%, 4.1% and 2.5%, respectively, of outstanding shares as of the end of each fiscal year.

Both prior and subsequent to the adoption of SFAS 123R, we estimated the value of stock-based awards on the date of grant using the Black-Scholes option pricing model. Prior to the adoption of SFAS 123R, the value of each stock-based award was estimated on the date of grant using the Black-Scholes model for the pro forma information required to be disclosed under SFAS 123 in the footnotes to our financial statements. The determination of the fair value of stock-based payment awards on the date of grant using an option-pricing model is affected by our stock price as well as assumptions regarding a number of complex and subjective variables. These variables include, but are not limited to, our expected stock price volatility over the term of the awards, risk-free interest rate and the expected term of the awards.

For purposes of estimating the fair value of stock options granted during 2007 using the Black-Scholes model, we have made a subjective estimate regarding our stock price volatility (weighted average of 67.3%). We used an average of the historical volatility of our stock for the period our stock has been publicly traded and the historical volatilities of the common stock of several publicly traded companies management feels are comparable to us, consistent with the guidance in SFAS No. 123R and SAB No. 107. If our stock price volatility assumption were increased to 75%, the weighted average estimated fair value of stock options granted during the year ended December 31, 2007 would increase by \$0.59 per share, or 7%.

The expected term of options granted is derived from the average midpoint between vesting and the contractual term, as described in SAB No. 107. For options granted during the year ended December 31, 2007, we have calculated a weighted average expected term of 6.0 years. If the expected term of the options granted was increased to 8.0 years, the weighted average estimated fair value of stock options granted during the year ended December 31, 2007 would increase by \$0.96 per share, or 11%.

The risk-free interest rate for the expected term of the option is based on the average U.S. Treasury yield curve at the balance sheet date for the expected term (weighted average of 4.6% for the year ended December 31, 2007) which, if increased to 6.0%, would increase the weighted average estimated fair value of stock options granted during the year ended December 31, 2007 by \$0.22 per share, or 3%.

For 2007 and 2006, we have reduced stock-based compensation expense recognized in the Statement of Operations for 2007 and 2006 to reflect for estimated forfeitures. SFAS 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Pre-vesting forfeitures were estimated to be approximately 3.7% and 7.2% for the years ended December 31, 2007 and 2006, respectively, based on historical experience. To date, we have

not required any materials adjustments to our expected forfeitures. In our pro forma information required under SFAS 123 for the periods prior to fiscal 2006, we accounted for forfeitures as they occurred.

Leasehold Incentive Obligation

In conjunction with our lease of our facility, we received a tenant improvement allowance of up to \$155 per square foot, or \$10.1 million. As the tenant improvements were constructed, we recorded both the covered tenant improvements (as property and equipment) and an offsetting leasehold incentive obligation on our balance sheet. As construction on the facility has been completed and we have taken occupancy of the new facility, we are recording depreciation expense to depreciate the covered tenant improvements and recording an offsetting reduction to rent expense to amortize the leasehold incentive obligation over the initial term of the facility lease, in accordance with FASB Technical Bulletin 88-1, *Issues Relating to Accounting for Leases*.

Income Taxes

In July 2006, the FASB issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes – An Interpretation of FASB Statement No. 109*, or FIN 48, which clarifies the accounting for uncertainty in income taxes recognized in an entity's financial statements in accordance with SFAS No. 109, *Accounting for Income Taxes*, and prescribes a recognition threshold and measurement attributes for financial statement disclosure of tax positions taken or expected to be taken on a tax return. Under FIN 48, the impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. Additionally, FIN 48 provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN 48 is effective for fiscal years beginning after December 15, 2006.

We adopted the provisions of FIN 48 on January 1, 2007, and we commenced analyzing filing positions in all of the federal and state jurisdictions where we are required to file income tax returns, as well as all open tax years in these jurisdictions. As a result of adoption, we recorded no additional tax liability. The total amount of unrecognized tax benefits as of January 1, 2007 was \$958,000. As of December 31, 2007 we have not yet completed our analysis of the deferred tax assets for net operating losses of \$33.5 million and research and development credits of \$3.8 million generated in years prior to 2007 and net operating losses of \$3.6 million and research and development credits of \$559,000 generated in 2007. As such, we removed these amounts and the offsetting valuation allowance from our deferred tax assets. We are in the process of completing a Section 382 analysis regarding the limitation of the net operating loss and research and development credits. For additional information regarding the adoption of FIN 48 and for further discussion of our critical accounting estimates related to income taxes, see Note 6, Income Taxes.

New Accounting Pronouncements

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*. SFAS No. 157 establishes a framework for measuring fair value in accordance with GAAP, clarifies the definition of fair value within that framework, and expands disclosures about the use of fair value measurements. It also responds to investors' requests for expanded information about the extent to which companies measure assets and liabilities at fair value, the information used to measure fair value and the effect of fair value measurements on earnings. SFAS No. 157 applies whenever other standards require (or permit) assets or liabilities to be measured at fair value, and does not expand the use of fair value in any new circumstances. SFAS No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007. The FASB has stated that it is considering a potential deferral on the application of Statement No. 157 to the fair value measurement of non-financial assets and liabilities. We do not expect the adoption of SFAS No. 157 to have a material impact on our financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities - Including an amendment to FASB Statement No. 115*. SFAS No. 159 allows certain

financial assets and liabilities to be recognized, at our election, at fair market value, with any gains or losses for the period recorded in the statement of income. SFAS No. 159 includes available-for-sale securities in the assets eligible for this treatment. Currently, we record the gains or losses for the period in comprehensive income and in the equity section of the balance sheet. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007, and interim periods in those fiscal years. We do not expect the adoption of SFAS No. 159 to have a material impact on our financial statements.

In June 2007, the EITF issued EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to be Used in Future Research and Development Activities*. The consensus requires companies to defer and capitalize prepaid, nonrefundable research and development payments to third parties over the period that the research and development activities are performed or the services are provided, subject to an assessment of recoverability. EITF Issue No. 07-3 is effective for new contracts entered into in fiscal years beginning after December 15, 2007, including interim periods within those fiscal years. We do not expect the adoption of EITF Issue No. 07-3 to have a material impact on our financial statements.

In November 2007, the EITF issued EITF Issue No. 07-1, *Accounting for Collaborative Arrangements Related to the Development and Commercialization of Intellectual Property*. Companies may enter into arrangements with other companies to jointly develop, manufacture, distribute, and market a product. Often the activities associated with these arrangements are conducted by the collaborators without the creation of a separate legal entity (that is, the arrangement is operated as a “virtual joint venture”). The arrangements generally provide that the collaborators will share, based on contractually defined calculations, the profits or losses from the associated activities. Periodically, the collaborators share financial information related to product revenues generated (if any) and costs incurred that may trigger a sharing payment for the combined profits or losses. The consensus requires collaborators in such an arrangement to present the result of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. EITF Issue No. 07-1 is effective for collaborative arrangements in place at the beginning of the annual period beginning after December 15, 2008. As our collaborative agreements do not incorporate such revenue- and cost-sharing arrangements, we do not expect the adoption of EITF Issue No. 07-1 to have a material impact on our financial statements.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*

Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of United States interest rates. Due to the nature of our investments, we believe that we are not subject to any material market risk exposure. We do not have any foreign currency or other derivative financial instruments.

Item 8. *Financial Statements and Supplementary Data*

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Senomyx, Inc.

We have audited the accompanying balance sheets of Senomyx, Inc. as of December 31, 2007 and 2006, and the related statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2007. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Senomyx, Inc. at December 31, 2007 and 2006, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2007, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 1 to the financial statements, effective January 1, 2006, Senomyx, Inc. adopted Statement of Financial Accounting Standards No. 123 (revised 2004), "*Accounting for Stock-Based Compensation.*"

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Senomyx Inc.'s internal control over financial reporting as of December 31, 2007, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 11, 2008 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Diego, California
February 11, 2008

Senomyx, Inc.
Balance Sheets
(In thousands, except share and per share data)

	December 31,	
	2007	2006
Assets:		
Current assets:		
Cash and cash equivalents	\$ 19,983	\$ 21,225
Investments available-for-sale	42,641	52,879
Other current assets	2,090	1,239
Total current assets	64,714	75,343
Property and equipment, net	14,535	14,839
Total assets	\$ 79,249	\$ 90,182
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable and accrued expenses	\$ 5,779	\$ 5,410
Other current liabilities	—	39
Leasehold incentive obligation	987	966
Deferred revenue	5,971	3,473
Total current liabilities	12,737	9,888
Deferred rent	1,073	213
Leasehold incentive obligation	8,062	8,854
Deferred revenue	750	1,750
Commitments		
Stockholders' equity:		
Preferred stock, \$.001 par value, 7,500,000 shares authorized; no shares issued or outstanding at December 31, 2007 and 2006	—	—
Common stock, \$.001 par value, 120,000,000 shares authorized; 30,476,072 and 30,166,399 shares issued and outstanding at December 31, 2007 and 2006, respectively	30	30
Additional paid-in-capital	205,697	196,748
Accumulated other comprehensive gain/(loss)	14	(18)
Accumulated deficit	(149,114)	(127,283)
Total stockholders' equity	56,627	69,477
Total liability and stockholders' equity	\$ 79,249	\$ 90,182

See accompanying notes to financial statements.

Senomyx, Inc.
Statements of Operations
(In thousands, except share and per share data)

	Years Ended December 31,		
	2007	2006	2005
Revenues:			
Development revenues	\$ 18,197	\$ 12,230	\$ 9,385
Commercial revenues	23	—	—
Total revenues	18,220	12,230	9,385
Operating expenses:			
Research and development (including \$2,588, \$3,048 and \$2,647 of non-cash stock-based compensation, respectively)	29,874	25,393	20,330
General and administrative (including \$4,233, \$4,457 and \$2,701 of non-cash stock-based compensation, respectively)	13,572	13,735	10,229
Total operating expenses	43,446	39,128	30,559
Loss from operations	(25,226)	(26,898)	(21,174)
Interest income	3,395	3,841	1,344
Net loss	\$ (21,831)	\$ (23,057)	\$ (19,830)
Basic and diluted net loss per share	\$ (0.72)	\$ (0.77)	\$ (0.77)
Shares used to compute basic and diluted net loss per share	30,326,768	29,809,854	25,916,229

See accompanying notes to financial statements.

Senomyx, Inc.
Statements of Stockholders' Equity
(In thousands, except for share data)

	Common Stock		Additional paid-in capital	Deferred compensation	Accumulated other comprehensive gain/(loss)	Accumulated deficit	Total stockholders' equity
	Shares	Amount					
Balance at December 31, 2004	25,309,565	\$ 25	\$ 126,243	\$ (3,492)	\$ (7)	\$ (84,396)	\$ 38,373
Issuance of common stock related to the exercise of options	196,270	1	617	—	—	—	618
Issuance of common stock related to employee stock plan purchases..	123,567	—	640	—	—	—	640
Issuance of common stock in a public offering, net of issuance costs....	4,049,295	4	57,294	—	—	—	57,298
Compensation related to stock options issued to consultants	—	—	2,870	—	—	—	2,870
Compensation related to acceleration of vesting of stock option issued to director	—	—	128	—	—	—	128
Amortization of deferred compensation	—	—	—	2,349	—	—	2,349
Comprehensive loss:							
Unrealized loss on investments.....	—	—	—	—	(1)	—	(1)
Net loss.....	—	—	—	—	—	(19,830)	(19,830)
Comprehensive loss	—	—	—	—	—	—	(19,831)
Balance at December 31, 2005	29,678,697	30	187,792	(1,143)	(8)	(104,226)	82,445
Issuance of common stock related to the exercise of options	337,514	—	1,733	—	—	—	1,733
Issuance of common stock related to employee stock plan purchases..	150,188	—	861	—	—	—	861
Compensation related to stock options granted to consultants	—	—	1,193	—	—	—	1,193
Compensation related to stock options granted to employees and non-employee directors.....	—	—	6,312	—	—	—	6,312
Reduction of deferred compensation due to adoption of SFAS 123(R)	—	—	(1,143)	1,143	—	—	—
Comprehensive loss:							
Unrealized loss on investments..	—	—	—	—	(10)	—	(10)
Net loss.....	—	—	—	—	—	(23,057)	(23,057)
Comprehensive loss.....	—	—	—	—	—	—	(23,067)
Balance at December 31, 2006	30,166,399	30	196,748	—	(18)	(127,283)	69,477

Senomyx, Inc.
Statements of Stockholders' Equity
(In thousands, except for share data)

	Common Stock		Additional paid-in capital	Deferred compensation	Accumulated other comprehensive gain/(loss)	Accumulated deficit	Total stockholders' equity
	Shares	Amount					
Balance at December 31, 2006	30,166,399	\$ 30	\$ 196,748	\$ —	\$ (18)	\$ (127,283)	\$ 69,477
Issuance of common stock related to the exercise of options	230,492	—	1,285	—	—	—	1,285
Issuance of common stock related to employee stock plan purchases..	79,181	—	843	—	—	—	843
Compensation related to stock options granted to consultants	—	—	602	—	—	—	602
Compensation related to stock options granted to employees and non- employee directors	—	—	6,219	—	—	—	6,219
Comprehensive loss:							
Unrealized gain on investments	—	—	—	—	32	—	32
Net loss	—	—	—	—	—	(21,831)	(21,831)
Comprehensive loss	—	—	—	—	—	—	(21,799)
Balance at December 31, 2007	<u>30,476,072</u>	<u>\$ 30</u>	<u>\$ 205,697</u>	<u>\$ —</u>	<u>\$ 14</u>	<u>\$ (149,114)</u>	<u>\$ 56,627</u>

See accompanying notes to financial statements.

Senomyx, Inc.
Statements of Cash Flows
(In thousands)

	Years Ended December 31,		
	2007	2006	2005
Operating Activities			
Net loss	\$ (21,831)	\$ (23,057)	\$ (19,830)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	2,967	1,584	1,215
Accretion of discount on available-for-sale securities	(1,917)	(1,427)	(215)
Amortization of leasehold incentive obligation	(947)	(80)	—
Stock-based compensation for employees and non-employee directors	6,219	6,312	—
Amortization of deferred stock-based compensation	—	—	2,349
Stock-based compensation for non-employees	602	1,193	2,998
Change in operating assets and liabilities:			
Other current assets	(810)	1,061	(978)
Accounts payable and accrued expenses	833	702	711
Deferred revenue	1,498	3,495	(130)
Deferred rent	860	62	(59)
Leasehold incentive obligation	176	2,092	—
Net cash used in operating activities	(12,350)	(8,063)	(13,939)
Investing activities			
Purchases of property and equipment	(3,166)	(5,657)	(1,941)
Proceeds from sale of property and equipment	—	—	84
Purchases of available-for-sale securities	(92,632)	(110,207)	(31,813)
Maturities of available-for-sale securities	104,778	68,650	45,775
Net cash provided by (used in) investing activities	8,980	(47,214)	12,105
Financing activities			
Proceeds from issuance of common stock	2,128	2,594	58,657
Net cash provided by financing activities	2,128	2,594	58,657
Net (decrease) increase in cash and cash equivalents	(1,242)	(52,683)	56,823
Cash and cash equivalents at beginning of year	21,225	73,908	17,085
Cash and cash equivalents at end of year	\$ 19,983	\$ 21,225	\$ 73,908
Supplemental schedule of non-cash investing and financing activities:			
Purchases of property and equipment included in accounts payable, accrued expenses and other current liabilities	\$ 37	\$ 540	\$ 34
Purchases of property and equipment and leasehold incentive obligation directly reimbursed by lessor of new facility	—	\$ 7,808	—
Proceeds from issuance of common stock (net) included in accounts payable, accrued expenses and other current liabilities	—	—	\$ 101

See accompanying notes to financial statements.

Senomyx, Inc.
Notes to Financial Statements

1. Organization and Summary of Significant Accounting Policies

Organization and Business

Senomyx, Inc. (the "Company") was incorporated on September 16, 1998 in Delaware and commenced operations in January 1999. The Company is a leading company focused on using proprietary taste receptor-based assays, screening technologies and optimization techniques to discover and develop novel flavors, flavor enhancers and taste modulators for the packaged food, beverage and ingredient industries. The Company has product discovery and development collaborations with seven of the world's leading packaged food, beverage and ingredient companies: Ajinomoto Co., Inc. ("Ajinomoto"), Cadbury Schweppes ("Cadbury"), Campbell Soup Company ("Campbell"), The Coca-Cola Company ("Coca-Cola"), Firmenich SA ("Firmenich"), Nestlé SA ("Nestlé") and Solae LLC ("Solae"). The Company's collaboration agreements provide for upfront license fees, research and development funding, reimbursement of certain regulatory costs, milestone payments if the Company achieves development or commercialization goals, minimum periodic royalties and royalties on sales of consumer products incorporating the Company's flavor ingredients. The Company's current programs focus on the development of savory, sweet and salt flavor enhancers, high potency sweeteners, bitter blockers and cooling agents.

Use of Estimates

The preparation of financial statements in conformity with United States generally accepted accounting principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments with a remaining maturity of three months or less when purchased to be cash equivalents. Cash equivalents are recorded at cost, which approximates market value.

Investments Available-for-Sale

The Company's surplus cash is invested in commercial paper, corporate notes and United States government agency bonds with maturity dates of one year or less from the settlement date. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity with all amortization and accretion included in interest income. The Company's short-term investments are classified as available-for-sale and carried at estimated fair value, as determined by quoted market prices, with unrealized gains and losses reported in a separate component of accumulated other comprehensive income. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are included in interest income. The cost of securities sold is based on the specific identification method. Interest on securities classified as available-for-sale is included in interest income.

Fair Value of Financial Instruments

The carrying amount of cash and cash equivalents, investments available-for-sale, accounts payable and accrued expenses are considered to be representative of their respective fair value because of the short-term nature of those items.

Concentration of Credit Risk and Major Collaborations

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist of cash, cash equivalents and investments available-for-sale. The Company limits its exposure to credit loss by placing its cash, cash equivalents, and investments with high credit quality financial institutions in instruments with short maturities.

The Company derives significant portions of its revenues from a relatively small number of collaborators. For the year ended December 31, 2007, revenues from its three largest collaborators accounted for 80% of total revenues. For the year ended December 31, 2006, revenues from its four largest collaborators accounted for 87% of total revenues. For the year ended December 31, 2005, revenues from its four largest collaborators accounted for 96% of total revenues.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and are depreciated over the estimated useful lives of the assets (ranging from three to five years) using the straight-line method. Leasehold improvements are amortized over the estimated useful life of the asset or the lease term, whichever is shorter.

Patent Costs

Costs related to filing and pursuing patent applications are expensed as incurred, as recoverability of such expenditures is uncertain. The Company includes all patent costs related to the filing of patents on developments in Research and Development expenses.

Impairment of Long-Lived Assets

In accordance with Financial Accounting Standards Board ("FASB") Statement of Financial Accounting Standards ("SFAS") No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, if indicators of impairment exist, the Company assesses the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash flows. If impairment is indicated, the Company measures the amount of such impairment by comparing the fair value to the carrying value. There have been no indicators of impairment through December 31, 2007.

Leasehold Incentive Obligation

In conjunction with the lease agreement covering the facility occupied by the Company (the "Nexus Lease"), the Company received a tenant improvement allowance of \$155 per square foot leased, or \$10.1 million. As the tenant improvements were constructed, the Company recorded both the covered tenant improvements (as property and equipment) and an offsetting leasehold incentive obligation on the Company's balance sheet. Through the initial term of the Nexus Lease, the Company records depreciation expense to depreciate the tenant improvements and records an offsetting reduction to rent expense (to amortize the leasehold incentive obligation), in accordance with FASB Technical Bulletin 88-1, *Issues Relating to Accounting for Leases*.

Revenue Recognition

The Company's revenue recognition policies are in compliance with the Staff Accounting Bulletin ("SAB") No. 104, *Revenue Recognition*, and Emerging Issues Task Force ("EITF") Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*. Some of the Company's agreements contain multiple elements, including technological and territorial licenses and research and development services. In accordance with these agreements, the Company may be eligible for upfront fees, research and development funding, cost reimbursements, development milestones, commercialization milestones, minimum periodic royalty payments and royalty payments.

Development revenues include revenues from license fees, research and development funding, development milestones and cost reimbursement.

Non-refundable license fees, if not associated with future Company performance, are recognized when received. Non-refundable license fees, if associated with future Company performance, are attributed to a specific program or collaboration and recognized over the period of service for that specific program or collaboration.

Amounts received for research funding are recognized as revenues as the services are performed. Revenue is deferred for fees received before earned.

Revenue from development milestones is recognized when earned, as evidenced by written acknowledgment from the collaborator or other persuasive evidence that the milestone has been achieved, provided that (i) the milestone event is substantive and its achievability was not reasonably assured at the inception of the agreement and (ii) the Company's performance obligations after the milestone achievement will continue to be funded by the collaborator at a level comparable to before the milestone achievement. If both of these criteria are not met, the milestone payment is recognized over the remaining minimum period of the Company's performance obligations under the agreement.

Revenue from cost reimbursements is recognized when earned, as evidenced by written acknowledgment from the collaborator or other persuasive evidence.

Commercial revenues include revenues from commercialization milestones, minimum periodic royalty payments and royalties on product sales made by the Company's collaborators incorporating the Company's flavor ingredients.

Revenue from commercialization milestones is recognized over the royalty term.

Non-refundable minimum periodic royalty payments are recognized as revenues over the related annual royalty periods. Annual royalty terms vary between collaborations and collaborators and can vary from year to year. These terms vary based on factors such as the characteristics of the flavor ingredient and the product categories and geographies licensed by the collaborator. Periodically, as contractually specified, the Company's collaborators are required to provide a report detailing all sales of products containing the Company's flavor ingredients. To the extent that calculated royalties on sales of such products exceed the minimum periodic royalty payments made to date, the collaborators are required to remit to the Company the difference between royalties calculated and minimum periodic royalty payments made to date. The Company recognizes this difference as royalties on product sales at the time the report is received. To the extent that minimum periodic royalty payments made to date exceed calculated royalties, the Company is not required to refund the difference.

Although the Company currently does not have any collaborations that include refundable minimum periodic royalty payments, in such a case, revenue would be deferred for refundable minimum periodic royalty payments received before earned.

Royalties on product sales made by the Company's collaborators incorporating the Company's flavor ingredients are recognized when received which is generally expected to be one quarter in arrears.

As applicable, commercial revenues are reported net of royalties payable under the Company's third party licensing agreements. To date, substantially all of the Company's commercial revenues have been related to minimum periodic royalty payments.

Research and Development

Research and development costs, including those incurred in relation to the Company's collaborative agreements, are expensed in the period incurred. Research and development costs primarily consist of

salaries and related expenses for personnel, facilities and depreciation, research and development supplies, patents and licenses and outside services.

Comprehensive Income (Loss)

SFAS No. 130, *Reporting Comprehensive Income*, requires that all components of comprehensive income, including net income, be reported in the financial statements in the period in which they are recognized. Comprehensive income (loss) is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources. The Company's accumulated other comprehensive loss, as of December 31, 2007 and 2006, consisted of unrealized gains and losses on investments available-for-sale and is reported in stockholders' equity.

Deferred Rent

Rent expense is recorded on a straight-line basis over the initial term of any lease. The difference between rent expense accrued and amounts paid under any lease agreement is recorded as deferred rent in the accompanying balance sheets.

Stock-Based Compensation

For the year ended December 31, 2005, prior to the adoption of SFAS 123R, *Share-Based Payment*, the Company recorded deferred compensation for stock options and stock awards granted to employees and non-employee directors equal to the difference between the exercise price and the fair value of the Company's common stock on the date of grant as determined for the purpose of recording the Company's initial public offering ("IPO") cheap stock calculation. The Company recorded options or awards issued to non-employees at their fair value in accordance with the SFAS 123, *Accounting for Stock-Based Compensation*, and periodically remeasures them in accordance with EITF 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring or in Conjunction with Selling Goods or Services*, and recognized them over the service period. Deferred compensation amounts were recorded as a component of stockholders' equity and amortized, on an accelerated basis, as a non-cash charge to operations over the vesting period of the options. The Company recorded employee and non-employee stock-based compensation expense of \$5.3 million for the year ended December 31, 2005.

In December 2004, the FASB issued SFAS 123R, which requires companies to expense the estimated fair value of employee stock options and similar awards. This statement is a revision to SFAS 123, and supersedes Accounting Principles Board ("APB") Opinion No. 25, *Accounting for Stock Issued to Employees*, and amends FASB Statement No. 95, *Statement of Cash Flows*. The accounting provisions of SFAS 123R were effective for the first quarter of fiscal 2006. In conjunction with the adoption of SFAS 123R, the unamortized balance of deferred stock-based compensation was reclassified against stockholders' equity. As of the adoption date of SFAS 123R, the unamortized balance of deferred stock-based compensation was \$1.1 million.

Effective January 1, 2006, the Company uses the fair value method to apply the provisions of SFAS 123R with a modified prospective application which provides for certain changes to the method for valuing stock-based compensation. The valuation provisions of SFAS 123R apply to new awards and to awards that are outstanding on the effective date and subsequently modified or cancelled. Under the modified prospective application, prior periods are not revised for comparative purposes. Upon adoption of SFAS 123R, the Company has continued to use the Black-Scholes model which was previously used for the Company's pro forma information required under SFAS 123.

The weighted-average estimated fair value of employee stock options granted during the years ended December 31, 2007 and 2006 were \$8.39 and \$9.54 per share, respectively, using the Black-Scholes model with the following weighted average assumptions (annualized percentages):

	Years Ended December 31,	
	2007	2006
Expected volatility	67.33%	60.43%
Risk-free interest rate	4.62%	4.88%
Dividend yield	0.0%	0.0%
Expected term	6 years	6 years

The weighted-average estimated fair value of employee stock purchase rights granted during the years ended December 31, 2007 and 2006 were \$5.63 and \$6.94 per share, respectively, using the Black-Scholes model with the following weighted average assumptions (annualized percentages):

	Years Ended December 31,	
	2007	2006
Expected volatility	64.59%	67.33%
Risk-free interest rate	4.46%	4.90%
Dividend yield	0.0%	0.0%
Expected term	1.25 years	1.25 years

Expected volatility is based on the Company's historical volatility and the historical volatilities of the common stock of comparable publicly traded companies. The risk-free interest rate for the expected term of the option is based on the average United States Treasury yield curve at the balance sheet date for the expected term. The expected term of options granted is derived from the average midpoint between vesting and the contractual term, as described in SAB No. 107, *Share-Based Payment*. The assumptions related to expected volatility and risk-free interest rate used for the valuation of stock options under the Company's stock plan differ from those used for the valuation of stock purchase rights under the Company's employee stock purchase plan primarily due to the difference in their respective expected terms.

As stock-based compensation expense recognized in the Statement of Operations for 2007 and 2006 is based on awards ultimately expected to vest, it should be reduced for estimated forfeitures. SFAS 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Pre-vesting forfeitures were estimated to be approximately 3.7% and 7.2% for the years ended December 31, 2007 and 2006, respectively, based on historical experience. In the Company's pro forma information required under SFAS 123 for the periods prior to fiscal 2006, the Company accounted for forfeitures as they occurred.

Compensation expense related to stock-based compensation for options and awards granted subsequent to the adoption of SFAS 123R is recognized on a straight-line basis. Compensation expense related to stock-based compensation is allocated to research and development or general and administrative based upon the department to which the associated employee or non-employee reports.

Total estimated stock-based compensation expense, related to all of the Company's stock-based awards granted to employees and non-employee directors, recognized for the years ended December 31, 2007 and 2006 was comprised as follows (in thousands):

	Years Ended December 31,	
	2007	2006
Research and development	\$ (1,997)	\$ (1,939)
General and administrative	(4,222)	(4,373)
Employee and non-employee director stock-based compensation expense	<u>\$ (6,219)</u>	<u>\$ (6,312)</u>

At December 31, 2007, total unrecognized estimated compensation expense related to non-vested stock options granted prior to that date was \$11.8 million, which is expected to be recognized over a weighted average period of 1.9 years.

Pro Forma Information under SFAS 123 for Periods Prior to Fiscal 2006

Prior to adopting the provisions of SFAS 123R, the Company recorded estimated compensation expense for employee stock options based upon their intrinsic value on the date of grant pursuant to APB Opinion No. 25, and provided the required pro forma disclosures of SFAS 123. Under APB Opinion No. 25, when the purchase price of restricted stock or the exercise price of the Company's employee stock options equals or exceeds the fair value of the underlying stock on the date of issuance or grant, no compensation expense is recognized. In the event that stock options are granted with an exercise price below the fair value of the Company's common stock per share on the grant date, the difference between the fair value of the Company's common stock and the exercise price of the stock option was recorded as deferred compensation. Deferred compensation was amortized to compensation expense on an accelerated basis in accordance with Financial Accounting Standards Board Interpretation ("FIN") No. 28, *Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans*, over the vesting period of the related options, generally four years.

Options or stock awards issued to non-employees who are not directors of the Company are recorded at their fair value in accordance with SFAS No. 123 and EITF Issue No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring or in Conjunction with Selling Goods or Services*, and are periodically revalued as the options vest and are recognized as expense over the related service period.

For the year ended December 31, 2005, the fair value of options issued to employees was estimated at the date of grant using the Black-Scholes option valuation model with the following weighted average assumptions: (a) risk-free interest rate of 4.1%; (b) expected dividend yield of 0%; (c) volatility factor of 70%; and (d) five-year estimated life of the options. The estimated weighted average fair value of stock options granted during 2005 was \$6.03.

As required under SFAS No. 123, for purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the vesting period of the related options. The Company's pro forma information follows (in thousands, except per share data):

	<u>Year Ended December 31, 2005</u>
Net loss as reported.....	\$ (19,830)
Add: Stock-based employee compensation expense included in net loss	2,477
Deduct: Stock-based employee compensation expense determined under fair value method	<u>(6,538)</u>
Pro forma net loss	<u>\$ (23,891)</u>
Basic and diluted net loss per share as reported.....	<u>\$ (0.77)</u>
Pro forma basic and diluted net loss per share.....	<u>\$ (0.92)</u>

Net Loss Per Share

The Company calculated net loss per share in accordance with SFAS No. 128, *Earnings Per Share*, and SAB No. 98, *Earnings Per Share*. Basic earnings per share ("EPS") is calculated by dividing the net loss by the weighted average number of common shares outstanding for the period, without consideration for common stock equivalents. Diluted EPS is computed by dividing the net income or loss by the weighted average number of common share equivalents outstanding for the period determined using the treasury-stock method. Dilutive common share equivalents include the dilutive effect of in-the-money shares, which is calculated based on the average share price for each period using the treasury stock method. Under the treasury stock method, the exercise price of a share, the amount of compensation cost, if any, for future service that the Company has not yet recognized, and the amount of estimated tax benefits that would be recorded in paid-in capital, if any, when the share is exercised are assumed to be used to repurchase shares in the current period. For purposes of this calculation, common stock subject to repurchase by the Company, convertible preferred stock, options, and warrants are considered to be common stock equivalents and are only included in the calculation of diluted earnings per share when their effect is dilutive.

The following table sets forth the computation of basic and diluted, and unaudited pro forma basic and diluted, net loss per share for the respective periods.

	<u>Years Ended December 31,</u>		
	<u>2007</u>	<u>2006</u>	<u>2005</u>
Historical:			
Net loss (in thousands).....	\$ (21,831)	\$ (23,057)	\$ (19,830)
Weighted average common shares.....	30,350,277	29,910,453	26,090,294
Weighted average unvested common shares subject to repurchase.....	(23,509)	(100,599)	(174,065)
Denominator for basic and diluted earnings per share....	<u>30,326,768</u>	<u>29,809,854</u>	<u>25,916,229</u>
Basic and diluted net loss per share.....	\$ (0.72)	\$ (0.77)	\$ (0.77)

	<u>Years Ended December 31,</u>		
	<u>2007</u>	<u>2006</u>	<u>2005</u>
Historical outstanding antidilutive securities not included in diluted net loss per share calculation:			
Common stock subject to repurchase.....	1,275	59,426	148,779
Options to purchase common stock.....	<u>4,120,085</u>	<u>3,489,874</u>	<u>2,483,417</u>
	<u>4,121,360</u>	<u>3,549,300</u>	<u>2,632,196</u>

Segment Reporting

The Company currently operates in a single operating segment. The Company generates revenues from collaborations that result primarily from its underlying research and development activities. In addition, financial results are prepared and reviewed by management as a single operating segment. The Company periodically evaluates the benefits of operating in distinct segments and will report accordingly when such distinction is made.

Recent Accounting Pronouncements

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurement*. SFAS No. 157 establishes a framework for measuring fair value in accordance with GAAP, clarifies the definition of fair value within that framework, and expands disclosures about the use of fair value measurements. It also responds to investors' requests for expanded information about the extent to which companies measure assets and liabilities at fair value, the information used to measure fair value and the effect of fair value measurements on earnings. SFAS No. 157 applies whenever other standards require (or permit) assets or liabilities to be measured at fair value, and does not expand the use of fair value in any new circumstances. SFAS No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007. The Company does not expect the adoption of SFAS No. 157 to have a material impact on its financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities - Including an amendment to FASB Statement No. 115*. SFAS No. 159 allows certain financial assets and liabilities to be recognized, at the Company's election, at fair market value, with any gains or losses for the period recorded in the statement of income. SFAS No. 159 includes available-for-sales securities in the assets eligible for this treatment. Currently, the Company records the gains or losses for the period in comprehensive income and in the equity section of the balance sheet. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007, and interim periods in those fiscal years. The Company does not expect the adoption of SFAS No. 159 to have a material impact on its financial statements.

In June 2007, the EITF issued EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to be Used in Future Research and Development Activities*. The consensus requires companies to defer and capitalize prepaid, nonrefundable research and development payments to third parties over the period that the research and development activities are performed or the services are provided, subject to an assessment of recoverability. EITF Issue No. 07-3 is effective for new contracts entered into in fiscal years beginning after December 15, 2007, including interim periods within those fiscal years. The Company does not expect the adoption of EITF Issue No. 07-3 to have a material impact on its financial statements.

In November 2007, the EITF issued EITF Issue No. 07-1, *Accounting for Collaborative Arrangements Related to the Development and Commercialization of Intellectual Property*. Companies may enter into arrangements with other companies to jointly develop, manufacture, distribute, and market a product. Often the activities associated with these arrangements are conducted by the collaborators without the creation of a separate legal entity (that is, the arrangement is operated as a "virtual joint venture"). The arrangements generally provide that the collaborators will share, based on contractually defined calculations, the profits or losses from the associated activities. Periodically, the collaborators share financial information related to product revenues generated (if any) and costs incurred that may trigger a sharing payment for the combined profits or losses. The consensus requires collaborators in such an arrangement to present the result of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. EITF Issue No. 07-1 is effective for collaborative arrangements in place at the beginning of the annual period beginning after December 15, 2008. As the Company's collaborative agreements do not incorporate such revenue- and cost-sharing arrangements, the Company does not expect the adoption of EITF Issue No. 07-1 to have a material impact on its financial statements.

2. Balance Sheet Details

Investments Available-for-Sale

The following is a summary of investments available-for-sale securities at December 31, 2007 (in thousands):

	<u>Amortized Cost</u>	<u>Unrealized Gain</u>	<u>Unrealized Loss</u>	<u>Estimated Fair Value</u>
United States Government				
Agency Bonds	\$ 33,166	\$ 16	\$ —	\$ 33,182
Corporate Notes	5,993	5	—	5,998
Commercial Paper	3,468	—	(7)	3,461
	<u>\$ 42,627</u>	<u>\$ 21</u>	<u>\$ (7)</u>	<u>\$ 42,641</u>

The following is a summary of investments available-for-sale securities at December 31, 2006 (in thousands):

	<u>Amortized Cost</u>	<u>Unrealized Gain</u>	<u>Unrealized Loss</u>	<u>Estimated Fair Value</u>
Commercial Paper	\$ 30,171	\$ —	\$ (20)	\$ 30,151
United States Government				
Agency Bonds	22,726	2	—	22,728
	<u>\$ 52,897</u>	<u>\$ 2</u>	<u>\$ (20)</u>	<u>\$ 52,879</u>

Gross realized gains and losses on available-for-sale securities were immaterial during the years ended December 31, 2007 and 2006. All of the available-for-sale securities have a contractual maturity at December 31, 2007 of one year or less.

Property and Equipment

Property and equipment consists of the following (in thousands):

	<u>As of December 31,</u>	
	<u>2007</u>	<u>2006</u>
Scientific equipment	\$ 8,690	\$ 7,285
Computer equipment	2,568	2,376
Furniture and fixtures	1,005	1,004
Leasehold improvements	11,679	12,399
	23,942	23,064
Less accumulated depreciation and amortization	(9,407)	(8,225)
	<u>\$ 14,535</u>	<u>\$ 14,839</u>

Depreciation and amortization expense was \$3.0 million, \$1.5 million and \$1.2 million for the years ended December 31, 2007, 2006 and 2005, respectively.

Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consist of the following (in thousands):

	As of December 31,	
	2007	2006
Accounts payable.....	\$ 739	\$ 1,107
Accrued employee benefits.....	3,766	2,719
Other accrued expenses	1,274	1,584
	<u>\$ 5,779</u>	<u>\$ 5,410</u>

3. Product Discovery and Development Collaborations

Ajinomoto. In March 2006, the Company entered into a collaboration agreement with Ajinomoto for the discovery and commercialization of novel flavor ingredients on an exclusive basis in the soup, sauce and culinary aids, and noodle product categories, and on a co-exclusive basis in the bouillon product category within Japan and other Asian markets. The agreement requires Ajinomoto to pay an upfront license fee and make research and development funding payments for up to three years. The Company is also eligible to receive milestone payments upon the achievement of specific product discovery and development goals and, in the event of commercialization, receive royalties on sales of products containing new flavor ingredients developed under the agreement until the expiration of relevant patents.

In April 2007, the Company and Ajinomoto amended the agreement to expand Ajinomoto's rights into North America. Under the terms of the April amendment, Ajinomoto has agreed to pay the Company a non-refundable upfront license fee and the Company is eligible to receive an additional milestone payment upon achievement of a specific goal. The Company is also eligible to receive minimum periodic royalty payments.

In August 2007, the Company and Ajinomoto further amended the agreement to expand Ajinomoto's rights into additional product categories and geographies that were not previously licensed by the Company. Under the terms of the August amendment, Ajinomoto has agreed to pay the Company a non-refundable upfront license fee. The Company is also eligible to receive minimum periodic royalty payments.

Through December 31, 2007, the Company has received \$15.6 million in upfront fees and research and development funding and one milestone of \$500,000. If all milestones are achieved, and including the \$16.1 million in upfront fees, research and development funding and milestones paid through December 31, 2007, the Company may be entitled to up to \$18.1 million in upfront fees, research and development funding and milestone payments. In addition to the upfront fees, research and development funding and milestone payment, the Company has received a minimum periodic royalty payment. This minimum periodic royalty payment is non-refundable. Under the terms of the contract, Ajinomoto will provide the Company a sales report and the Company will record any additional calculated royalties as royalties from product sales. There is no guarantee that the Company will receive any further milestone payments or royalties under this collaboration.

In October 2006, the Company entered into a second collaboration agreement with Ajinomoto for the discovery and commercialization of specified natural flavor ingredients. The agreement requires Ajinomoto to make research and development funding payments for up to three years. The Company is also eligible to receive milestone payments upon the achievement of specific product discovery and development goals and, in the event of commercialization, receive royalties on sales of products containing new flavor ingredients developed under the agreement.

Under the second collaborative agreement, through December 31, 2007 the Company has received \$563,000 in research and development funding. If all milestones are achieved, and including the \$563,000

in research and development funding paid through December 31, 2007, the Company may be entitled to up to \$2.3 million in research and development funding and milestone payments. In addition, upon commercialization, the Company is entitled to receive minimum periodic royalties and royalty payments based on sales of products containing flavor ingredients developed under the agreement. There is no guarantee that the Company will receive any future milestone payments or royalties under this collaboration.

Cadbury. In July 2005, the Company entered into a collaboration agreement with Cadbury for the discovery and commercialization of new flavor ingredients in the gum confectionary area. The agreement requires Cadbury to make research funding payments for up to two years. The Company is also eligible to receive milestone payments upon the achievement of specific product discovery and development goals and, in the event of commercialization, receive royalties on sales of products containing new flavor ingredients developed under the agreement.

In July 2007, the Company amended its Collaborative Research and License Agreement with Cadbury, dated July 15, 2005, to extend the collaborative period for an additional twelve months, through July 15, 2008. During the extension period, the Company will continue to work with Cadbury on the discovery and commercialization of new flavor ingredients in the gum confectionary area. Under the terms of the extension, Cadbury has agreed to pay the Company incremental research funding of up to \$600,000 based on discovery progress during the extension period. The other payment terms, including milestones and royalties based on sales of products containing new flavor ingredients developed under the agreement, remain unchanged.

Through December 31, 2007, the Company has received \$1.9 million in non-refundable upfront license fees and research funding. If all milestones are achieved, and including all research funding paid or payable, the Company may be entitled to up to \$3.7 million. There is no guarantee that the Company will receive any milestone payments or royalties under this collaboration.

Campbell. In March 2001, the Company entered into a collaboration agreement with Campbell to work for a three-year collaborative period for the discovery and development of specified flavors and flavor enhancers. The agreement requires Campbell to make research funding payments over three years totaling \$3.6 million. The Company is also eligible to receive milestone payments upon the achievement of a specific product development goal and, in the event of commercialization, receive royalties on future net sales of collaborator products containing a discovered ingredient.

The agreement was amended in July 2002 to provide for an option to negotiate the right to expand the field to include additional specified products. The Company received \$1.8 million from Campbell for the option, which was recorded as deferred revenue and recognized as revenue ratably over the remaining term of the agreement (20 months). The agreement was further amended in November 2002 to redefine calculated royalties during the royalty term.

In July 2003, the Company received \$650,000 in additional research support funding and expense reimbursement. The payment was recorded as deferred revenue and was recognized as revenue ratably over the remaining term of the agreement (eight months).

The agreement was further amended in March 2004 to extend the collaborative period until the earlier of March 2006 or when a flavor or flavor enhancer selected by Campbell receives Generally Recognized as Safe ("GRAS") determination, subject to earlier termination under specified circumstances. Under the terms of the extension, the Company will provide additional research and receive additional research funding totaling \$3.0 million for two additional years.

The agreement was further amended in February 2006 to extend the collaborative period until the earlier of March 2009 or when a flavor or flavor enhancer selected by Campbell receives a GRAS determination, subject to earlier termination under specified circumstances. Under the terms of the extension, the Company will provide additional research and receive additional research funding totaling up to \$3.0 million for three additional years.

Through December 31, 2007, the Company has received \$10.3 million in research and development funding. If all milestones are achieved, and including all research and development funding paid or payable, the Company may be entitled to up to \$12.5 million. There is no guarantee that the Company will receive any milestone payments or royalties under this collaboration.

Coca-Cola. In April 2002, the Company entered into a collaboration agreement with Coca-Cola for the discovery and development of specified flavors and flavor enhancers. The agreement required Coca-Cola to make research funding payments over three years totaling \$6.0 million. The Company is also eligible to receive milestone payments upon the achievement of specific product development goals and, in the event of commercialization, receive minimum periodic royalties and royalties on future sales of collaborator products containing a discovered ingredient. The agreement was amended in April 2004 to extend the collaborative period until April 2008, subject to earlier termination under specified circumstances. Under terms of the extension, the Company will provide additional research and receive additional research funding totaling \$6.0 million for three additional years.

Through December 31, 2007, the Company has received \$11.5 million in research and development funding. If all milestones are achieved, and including all research and development funding paid or payable, the Company may be entitled to up to \$14.8 million. There is no guarantee that the Company will receive any milestone payments or royalties under this collaboration.

Firmenich. In December 2007, the Company entered into a collaboration agreement with Firmenich to work for a three-year collaborative period to discover and develop novel compounds that may be used by Firmenich on an exclusive basis worldwide as ingredients that impart a cool taste in flavor systems. Under the agreement, Firmenich has agreed to pay research fees and specified payments upon the achievement of milestones of up to \$3.5 million. In addition, in the event of regulatory approval of a discovered compound, the Company is entitled to minimum periodic royalties. In the event of commercialization, the Company is entitled to receive royalties on future sales of products containing a discovered flavor or flavor enhancer until the expiration of relevant patents.

Through December 31, 2007, the Company has received \$0 in research fees. If all milestones are achieved, the Company may be entitled to up to \$3.5 million. There is no guarantee that the Company will receive any milestone payments or royalties under this collaboration.

Kraft Foods Global, Inc. In December 2000, the Company entered into a collaboration agreement with Kraft Foods Global Inc. ("Kraft Foods") for the discovery and development of flavor enhancers. Under the terms of the collaboration, Kraft Foods agreed to pay research funding of approximately \$1.4 million per year for three years. In May 2002, the agreement was amended to provide for an additional collaborative program. The level of research support under the original program was reduced from \$1.4 million to \$1.1 million per year for the remainder of the research term. In May 2005 and July 2005, the agreement was further amended to extend the collaborative period until June 2005 and July 2007, respectively, and to provide for an additional specified product field.

Kraft Foods agreed to make research funding payments related to the May 2002 program of \$1.8 million over the period from May 2002 through December 2003, \$1.8 million over the period from January 2004 through May 2005, \$339,000 over the period May 2005 through July 2005, and \$1.7 million from July 2005 through November 2006. The Company earned a milestone payment of \$375,000 in 2002 and a milestone payment of \$250,000 in 2006 from the May 2002 research program.

In December 2005, the Company further amended the agreement to provide for a new three-year discovery and development collaboration. In November 2006, this agreement was further amended to revise the structure of the research and development funding. Under the terms of the new collaboration, Kraft Foods agreed to pay the Company an initial license fee and incremental research and development funding over the three-year period. The Company was eligible to receive milestone payments upon achievement of specific product discovery and development goals, and, in the event of commercialization, receive royalties based on sales of Kraft Foods products containing any flavor modifiers developed under

the agreement.

In July 2007, the Company further amended the collaboration agreement to extend until December 9, 2008 Kraft Foods' ability to evaluate novel flavor modifiers under development by us for potential use by Kraft Foods on an exclusive basis in a specified product field in the dessert product category and on a co-exclusive basis in the powdered beverage product field. On October 31, 2007 the Company received notification from Kraft Foods terminating the collaboration agreement effective as of December 9, 2007. All rights previously licensed to Kraft Foods returned to the Company upon such termination.

Through December 31, 2007, the Company has received \$12.1 million in research and development funding and two milestone payments which totaled \$625,000.

Nestlé. In April 2002, as amended in April 2005, the Company entered into a collaboration agreement with Nestlé for the discovery and development of specified flavors and flavor enhancers. The agreement requires Nestlé to make research funding payments through 2008, subject to earlier termination under specified circumstances. The Company is also eligible to receive milestone payments upon the achievement of specific product development goals and, in the event of commercialization, receive royalties on net sales of collaborator products containing a discovered ingredient. The Company received payments for the achievement of four milestones in 2002, 2003, 2004 and 2005. The Company also received payment for the reimbursement of certain regulatory expenses in 2005. Through December 31, 2007, the Company has received \$11.2 million in research and development funding, four milestone payments of \$375,000 each, and \$339,000 in reimbursement of certain regulatory costs. In addition, the Company has received royalties on net sales of collaborator products containing discovered flavor ingredients. If all milestones are achieved, and including all research and development funding paid or payable, the Company may be entitled to up to \$14.8 million. There is no guarantee that the Company will receive any further milestone payments or royalties under this collaboration.

In October 2004, the Company entered into a second product discovery and development collaboration agreement with Nestlé which provides for a five-year collaborative period focusing on the discovery and commercialization of specified novel flavor ingredients, subject to extension or earlier termination under specified circumstances. This agreement has subsequently been extended for two three-month increments. Under the terms of the agreement, Nestlé has agreed to pay to the Company research and development funding over five and one-half years, subject to earlier termination under specified circumstances. The Company is also eligible to receive milestone payments upon achievement of specific product discovery and development goals, and in the event of commercialization, is entitled to receive royalties on future net sales of products containing a discovered novel flavor ingredient. There is no guarantee that the Company will receive any milestone payments or royalties under this collaboration.

Under this second agreement, through December 31, 2007, the Company has received \$5.4 million in research and development funding. If all milestones are achieved, and including all research and development funding paid or payable, the Company may be entitled to up to \$15.8 million. There is no guarantee that the Company will receive any milestone payments or royalties under this collaboration.

In connection with the above listed collaboration agreements, the Company has recognized revenue of \$18.2 million, \$12.2 million and \$9.4 million for the years ended December 31, 2007, 2006 and 2005, respectively. As of December 31, 2007 and 2006, the Company has deferred revenue of \$6.7 million and \$5.2 million, respectively.

4. Commitments

Leases and Loans

The Company leases its primary office facility under the Nexus Lease that expires on February 28, 2017. The Company moved the majority of its operations to the new facility in November 2006. Rent payments on the facility commenced April 1, 2007. The Nexus Lease provides for an annual minimum 3% rent increase. The Company began recognizing rent expense upon the facility being ready to occupy. Rent

expense for the years ended December 31, 2007, 2006 and 2005 was \$2.1 million, \$3.8 million and \$4.1 million, respectively. Prior to moving to the new facility, the Company sublet part of the facility it occupied, and the sublease rental income for the years ended December 31, 2006 and 2005 was \$619,000 and \$742,000, respectively. Sublease income is recorded as an offset to the Company's facilities expense. The Company has also entered into various operating lease agreements for office equipment.

The estimated annual future minimum rental payments under the Company's operating leases in effect at December 31, 2007, which expire through 2017, for the years ending December 31 are as follows (in thousands):

	<u>Operating Leases</u>
2008	\$ 2,494
2009	2,555
2010	2,611
2011	2,680
2012	2,759
Thereafter.....	<u>12,379</u>
Total minimum lease payments	<u>\$ 25,478</u>

In connection with certain license agreements, the Company's annual future minimum obligation payments are as follows, \$53,000 and \$15,000 for the years ending December 31, 2008 and 2009, respectively.

5. Stockholders' Equity

Public Offering

On November 9, 2005, the Company completed a public offering of 4.0 million shares of common stock for proceeds to the Company of \$57.3 million, net of underwriting discounts, commissions and offering expenses. The offering was made under a shelf registration statement and included the exercise by the underwriters of an over-allotment option of 528,000 shares of common stock.

Convertible Preferred Stock

The Company's certificate of incorporation, as amended and restated, authorizes the Company to issue up to 7,500,000 shares of preferred stock, with a par value of \$0.001, in one or more series. The Board of Directors may authorize the issuance of convertible preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of convertible preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of the Company and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. No shares of convertible preferred stock were outstanding as of December 31, 2007 or 2006.

Equity Incentive Plan

During 1999, the Company adopted the 1999 Equity Incentive Plan, which was amended and restated by the 2004 Equity Incentive Plan in connection with the Company's initial public offering (the "Plan"), which provides for the grant of incentive and non-statutory stock options and restricted stock purchase rights to employees, directors and consultants of the Company. The Plan, as amended, authorizes the Company to issue up to 9,222,731 shares of common stock. At December 31, 2007, the Company has repurchased a total of 131,153 shares and 3,046,526 shares remain available for grant under the Plan. The Company issues new shares upon the exercise of stock options.

The Plan allows the Company to grant restricted stock purchase rights at no less than 85% of the fair value of the Company's common stock as determined by the Board of Directors at the date of the grant. All restricted stock purchase rights vest in accordance with a vesting schedule determined by the Board of Directors, typically over a four-year period. Under the Plan, 457,069 restricted stock purchase rights have been granted at exercise prices ranging from \$0.35 to \$0.94 per share, all of which have been exercised as of December 31, 2007, of which no shares are subject to repurchase.

Options granted under the Plan generally expire no later than 10 years from the date of grant (five years for a 10% stockholder). Options generally vest and become fully exercisable over a period of four years. In certain cases, grants to officers, directors and consultants can be made fully exercisable at the date of grant. The exercise price of incentive stock options must be equal to at least the fair value of the Company's common stock on the date of grant, and the exercise price of non-statutory stock options may be no less than 85% of the fair value of the Company's common stock on the date of grant. The exercise price of any option granted to a 10% stockholder may be no less than 110% of the fair value of the Company's common stock on the date of grant. The Company has an option to repurchase all unvested shares, at the original purchase price, upon the voluntary or involuntary termination of employment with, or consulting services provided to, the Company for any reason. At December 31, 2007, 1,275 shares of common stock were unvested and subject to repurchase.

The following is a further breakdown of the options outstanding as of December 31, 2007:

Range of Exercise Prices	Number of Options	Options Outstanding		Options Vested and Exercisable	
		Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
\$ 0.74-6.00	415,036	5.26	\$ 0.95	414,289	\$ 0.94
\$ 6.02-6.02	713,019	6.52	\$ 6.02	614,190	\$ 6.02
\$ 6.30-12.51	691,913	7.69	\$ 9.33	381,612	\$ 8.66
\$ 12.56-12.91	855,844	8.90	\$ 12.87	137,738	\$ 12.75
\$ 13.10-15.89	633,573	8.79	\$ 13.96	205,605	\$ 13.95
\$ 16.25-18.99	810,700	8.06	\$ 16.34	385,203	\$ 16.35
	<u>4,120,085</u>		\$ 10.74	<u>2,138,637</u>	\$ 8.56

As of December 31, 2007, the total intrinsic value of options outstanding and exercisable was \$3.7 million and \$3.6 million, respectively. At December 31, 2007, the weighted average remaining contractual term for options vested and exercisable was 6.9 years.

The following is a summary of stock option and stock award activity under the Plan through December 31, 2007:

	Number of Shares	Weighted Average Exercise Price
Outstanding at January 1, 2005	1,992,710	\$ 4.46
Granted	753,733	\$ 9.88
Exercised	(196,270)	\$ 3.14
Cancelled	<u>(66,756)</u>	\$ 6.64
Outstanding at December 31, 2005	2,483,417	\$ 6.15
Granted	1,355,290	\$ 15.50
Exercised	(337,514)	\$ 5.16
Cancelled	<u>(11,319)</u>	\$ 10.26
Outstanding at December 31, 2006	3,489,874	\$ 9.86
Granted	1,214,691	\$ 12.86
Exercised	(230,492)	\$ 5.61
Cancelled	<u>(353,988)</u>	\$ 12.70
Outstanding at December 31, 2007	<u>4,120,085</u>	\$ 10.74

The total intrinsic value of stock option exercises during the years ended December 31, 2007, 2006 and 2005 was \$1.5 million, \$3.1 million and \$2.2 million, respectively.

Employee Stock Purchase Plan

During 2004, the Company adopted the 2004 Employee Stock Purchase Plan (the "Purchase Plan"), which allows all eligible employees to purchase shares of the Company's common stock at the lower of: (i) 85% of the fair market value on the first day of a two-year offering period; or (ii) 85% of the fair market value on the last date of each six-month purchase period within the two-year offering period. Employees may authorize the Company to withhold up to 15% of their compensation during any purchase period, subject to certain limitations. The Purchase Plan authorizes up to 953,096 shares to be granted. At December 31, 2007, 352,936 shares of common stock have been issued under the Purchase Plan at an average price of \$7.62 per share.

Shares Reserved for Future Issuance

The following shares of common stock are reserved for future issuance:

	December 31, 2007
Common stock options granted and outstanding.....	4,120,085
Common stock options reserved for future grant	3,046,526
Common stock reserved under Purchase Plan	<u>600,160</u>
Total common stock shares reserved for future issuance.....	<u>7,766,771</u>

Shareholders' Rights Plan

In February 2005, the Company entered into a Share Purchase Rights Plan (the "Rights Plan"). Terms of the Rights Plan provide for a dividend distribution of one preferred share purchase right (a "Right") for each outstanding share of common stock, par value \$0.001 per share (the "Common Shares"), of the Company. The dividend was payable on February 21, 2005 to the stockholders of record on that date. Each Right entitles the registered holder to purchase from the Company one one-hundredth of a share of Series A Junior Participating Preferred Stock, par value \$0.001 per share (the "Preferred Shares"), at a price of \$100.00 per one one-hundredth of a Preferred Share, subject to adjustment. Each one one-hundredth of

a share of Preferred Shares has designations and powers, preferences and rights, and the qualifications, limitations and restrictions which make its value approximately equal to the value of a Common Share. The description and terms of the Rights are set forth in a Rights Agreement, dated as of February 14, 2005 entered into between the Company and Mellon Investor Services LLC, as rights agent.

6. Income Taxes

On July 13, 2006, the FASB issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes – An Interpretation of FASB Statement No. 109* (“FIN 48”), which clarifies the accounting for uncertainty in income taxes recognized in an entity’s financial statements in accordance with SFAS No. 109, *Accounting for Income Taxes*, and prescribes a recognition threshold and measurement attributes for financial statement disclosure of tax positions taken or expected to be taken on a tax return. Under FIN 48, the impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. Additionally, FIN 48 provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN 48 is effective for fiscal years beginning after December 15, 2006.

The Company adopted the provisions of FIN 48 on January 1, 2007, and has commenced analyzing filing positions in all of the federal and state jurisdictions where it is required to file income tax returns, as well as all open tax years in these jurisdictions. As a result of adoption, the Company has recorded no additional tax liability. The total amount of unrecognized tax benefits as of January 1, 2007 was \$958,000. As of December 31, 2007 the Company has not yet completed its analysis of the deferred tax assets for net operating losses of \$33.5 million and research and development credits of \$3.8 million generated in years prior to 2007 and net operating losses of \$3.6 million and research and development credits of \$559,000 generated in 2007. As such, these amounts and the offsetting valuation allowance have been removed from the Company’s deferred tax assets. As noted below, the Company is in the process of completing a Section 382 analysis regarding the limitation of the net operating loss and research and development credits.

A rollforward of changes in the Company’s unrecognized tax benefits is shown below (in thousands).

Balance at January 1, 2007.....	\$	(958)
Additions based on tax positions related to the current year.....	-	-
Additions for tax positions of prior years.....	-	-
Reductions for tax positions of prior years.....	958	-
Settlements.....	-	-
Balance at December 31, 2007.....	\$	<u>-</u>

Due to the existence of the valuation allowance, future changes in our unrecognized tax benefits will not impact the Company’s effective tax rate.

The Company is subject to taxation in the U.S. and state jurisdictions. The Company’s tax years for 2002 and forward are subject to examination by the U.S. and California tax authorities due to the carryforward of unutilized net operating losses and research and development credits. The Company is currently not under examination by any taxing authorities.

The Company’s practice is to recognize interest and/or penalties related to income tax matters in income tax expense. During the twelve months ended December 31, 2007, the Company did not recognize any interest or penalties. Upon adoption of FIN 48 on January 1, 2007, the Company did not record any interest or penalties.

The adoption of FIN 48 did not impact the Company’s financial condition, results of operations or cash flows. At December 31, 2007, the Company had net deferred tax assets of \$12.1 million. These deferred

tax assets are primarily composed of capitalized research and development costs, deferred revenue and stock compensation expense. Due to uncertainties surrounding the Company's ability to generate future taxable income to realize these assets, a full valuation has been established to offset the net deferred tax asset. Additionally, the future utilization of the company's net operating loss and research and development credit carryforwards to offset future taxable income may be subject to an annual limitation as a result of ownership changes that may have occurred previously or that could occur in the future. The Company has not yet determined whether such an ownership change has occurred; however the Company is in the process of completing a Section 382 analysis regarding the limitation of the net operating loss and research and development credits. Until this analysis has been completed the Company has removed the deferred tax assets associated with these carryforwards from its deferred tax asset schedule and has recorded a corresponding decrease to their valuation allowance. When the Section 382 analysis is completed, the Company plans to update its unrecognized tax benefits under FIN 48. The Company expects the Section 382 analysis to be completed within the next twelve months.

Significant components of the Company's net deferred tax assets at December 31, 2007 and 2006 are shown below (in thousands). A valuation allowance of \$12.1 million and \$45.5 million has been established to offset the net deferred tax assets as of December 31, 2007 and 2006, respectively, as realization of such assets is uncertain.

	Years ended December 31,	
	2007	2006
Deferred tax assets:		
Net operating loss carryforwards	\$ —	\$ 33,465
Capitalized research and development	4,777	3,976
Research and development credits	—	3,830
Deferred revenue	2,738	2,128
Stock compensation	2,889	1,176
Other, net	1,695	889
Total deferred tax assets	<u>12,099</u>	<u>45,464</u>
Total deferred tax liabilities	<u>—</u>	<u>—</u>
Net deferred tax assets	12,099	45,464
Valuation allowance for deferred tax assets	<u>(12,099)</u>	<u>(45,464)</u>
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

The provision for income taxes on earnings subject to income taxes differs from the statutory federal rate at December 31, 2007, 2006 and 2005, due to the following (in thousands):

	<u>2007</u>	<u>2006</u>	<u>2005</u>
Federal income taxes at 35%	\$(7,640)	\$(8,070)	\$(6,940)
State income tax, net of federal benefit	(1,254)	(1,324)	(963)
Tax effect on non-deductible expenses and credits	374	890	459
Increase in valuation allowance (1)	<u>8,520</u>	<u>8,504</u>	<u>7,444</u>
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

(1) The removal of the valuation allowance related to the net operating losses and research and development credits is not included in the increase in the valuation allowance. See above for explanation.

As a result of the adoption of SFAS 123R the Company recognizes windfall tax benefits associated with the exercise of stock options directly to stockholders' equity only when realized. Accordingly, deferred tax assets are not recognized for net operating loss carryforwards resulting from windfall tax benefits occurring from January 1, 2006 onward. At December 31, 2007 deferred tax assets do not include excess tax benefits from stock-based compensation of approximately \$1.1 million.

At December 31, 2007, the Company had federal and California tax net operating loss carryforwards of approximately \$106.5 million and \$23.8 million, respectively. The federal and California tax loss carryforwards will begin to expire in 2019 and 2009, respectively, unless previously utilized.

The Company also had federal and California research and development tax credit carryforwards of approximately \$2.9 million and \$2.2 million, respectively. The federal credit carryforward will begin to expire in 2019 unless previously utilized and the California credit will carry forward indefinitely until utilized.

Pursuant to Internal Revenue Code Sections 382 and 383, use of the Company's net operating loss carryforwards and R & D credit carryforwards may be limited if a cumulative change in ownership of more than 50% occurs within a three-year period.

7. Summary of Quarterly Financial Data (unaudited)

The following is a summary of the unaudited quarterly results of operations for the years ended December 31, 2007 and 2006 (in thousands, except per share amounts):

	<u>Year Ended December 31, 2007</u>			
	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
Selected Quarterly Financial Data:				
Revenues	\$ 3,067	\$ 3,737	\$ 5,053	\$ 6,363
Total operating expenses	10,563	10,427	10,667	11,789
Net loss	(6,596)	(5,835)	(4,762)	(4,638)
Basic and diluted net loss per common share	\$ (0.22)	\$ (0.19)	\$ (0.16)	\$ (0.15)

	Year Ended December 31, 2006			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Selected Quarterly Financial Data:				
Revenues	\$ 2,411	\$ 3,215	\$ 3,204	\$ 3,400
Total operating expenses.....	9,913	10,321	9,246	9,648
Net loss.....	(6,628)	(6,159)	(5,015)	(5,255)
Basic and diluted net loss per common share	\$ (0.22)	\$ (0.21)	\$ (0.17)	\$ (0.17)

8. Subsequent Event

On January 3, 2008 the Company announced that the Company entered into a Collaborative Research, Development, Commercialization and License Agreement with Firmenich SA for novel flavor ingredients intended to provide a cooling taste effect. Under the terms of the agreement, Firmenich has agreed to pay the Company research funding for up to three years based on research progress during the collaborative period. In addition, the Company is eligible to receive milestone payments upon achievement of specific product discovery and development goals. The combined total of research funding and milestone payments could exceed \$3.5 million if all milestones are met. Upon commercialization, the Company will receive royalty payments based on sales of products containing new flavor ingredients developed under the agreement.

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

There were no changes in or disagreements with Ernst & Young LLP on accounting and financial disclosure required to be reported under this Item 9.

Item 9A. *Controls and Procedures*

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our President and Chief Executive Officer and our Senior Vice President and Chief Financial and Business Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control — Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2007.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Senomyx, Inc.

We have audited Senomyx Inc.'s internal control over financial reporting as of December 31, 2007, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Senomyx Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we

considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Senomyx Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2007, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the balance sheets as of December 31, 2007 and 2006, and the related statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2007 of Senomyx, Inc. and our report dated February 11, 2008 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Diego, California
February 11, 2008

Item 9B. Other Information

None.

PART III

Certain information required by Part III of this Form 10-K is omitted from this report because registrant will file a definitive Proxy Statement within 120 days after the end of its fiscal year pursuant to Regulation 14A for its 2008 Annual Meeting of Shareholders to be held on May 28, 2008, referred to as the Proxy Statement, and the information included therein is incorporated herein by reference.

Item 10. *Directors, Executive Officers and Corporate Governance*

The information with respect to executive officers required by this item is set forth in Part I of this report.

We have adopted a Code of Business Conduct and Ethics Policy that applies to our directors and employees (including our principal executive officer, principal financial officer, principal accounting officer and controller), and have posted the text of the policy on our website (www.senomyx.com) in connection with "Investor Relations" materials. In addition, we intend to promptly disclose (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals, the name of such person who is granted the waiver and the date of the waiver on our website in the future.

The other information required by this item is incorporated by reference to the Proxy Statement under the sections entitled "Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance."

Item 11. *Executive Compensation*

The information required by this Item is incorporated herein by reference to the information from the Proxy Statement under the sections entitled "Executive Compensation," "Compensation Committee Report" and "Compensation Committee Interlocks and Insider Participation."

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

The information required by this Item is incorporated herein by reference to the information from the Proxy Statement under the sections entitled "Security Ownership of Certain Beneficial Owners and Management" and "Securities Authorized for Issuance under Equity Compensation Plans."

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

The information required by this Item is incorporated herein by reference to the information from the Proxy Statement under the sections entitled "Election of Directors" and "Certain Relationships and Related Transactions."

Item 14. *Principal Accountant Fees and Services*

The information required by this Item is incorporated herein by reference to the information from the Proxy Statement under the section entitled "Principal Accountant Fees and Services."

PART IV

Item 15. *Exhibits and Financial Statement Schedules*

(a) 1. *Financial Statements*

See Index to Financial Statements in Item 8 of this annual report on Form 10-K, which is incorporated herein by reference.

2. *Financial Statement Schedules*

All schedules have been omitted because they are not applicable or required, or the information required to be set forth therein is included in the Financial Statements or notes thereto included in Item 8 of this annual report on Form 10-K.

3. *Exhibits*

Exhibit Footnote	Exhibit Number	Description of Document
(1)	3.1	Amended and Restated Certificate of Incorporation as currently in effect.
(2)	3.2	Amended and Restated Bylaws as currently in effect.
(3)	3.3	Certificate of Designation of Series A Junior Participating Preferred Stock, as filed with the Secretary of State of Delaware on February 14, 2005.
(1)	4.1	Form of Common Stock Certificate.
(1)	4.2	Fourth Amended and Restated Investor Rights Agreement dated November 14, 2001, as amended February 27, 2002, between the Registrant and certain of its stockholders.
(3)	4.3	Form of Rights Certificate.
(3)	4.4	Rights Agreement, dated February 14, 2005 by and between the Registrant and Mellon Investor Services LLP.
(1)	10.1+	Form of Indemnity Agreement.
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(1)	10.10*	Collaborative Research and License Agreement dated March 28, 2001, as amended July 26, 2002, November 5, 2002 and February 19, 2004 between the Registrant and Campbell Soup Company.
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- between the Registrant and Nestec Ltd.
- (4) 10.15* Second Amendment to the Collaborative Research and License Agreement dated April 18, 2002, as amended October 23, 2003, between the Registrant and Nestec, Ltd.
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- (13) 10.37* Collaborative Research, Development, Commercialization and License Agreement between Senomyx, Inc. and Solae, LLC dated April 23, 2007.
- (13) 10.38* Second Amendment dated April 24, 2007 to the Collaborative Research, Development, Commercialization and License Agreement dated March 23, 2006 between Senomyx, Inc. and Ajinomoto Co., Inc.
- (14) 10.39* Third Amendment dated August 1, 2007 to the Collaborative Research,

	Development, Commercialization and License Agreement dated March 23, 2006 between Senomyx, Inc. and Ajinomoto Co., Inc.
10.40+	Consulting Agreement dated October 5, 2007 between the Registrant and Harry J. Leonhardt, Esq.
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney. Reference is made to the signature page.
31.1	Certification of Kent Snyder, Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of John Poyhonen, Chief Financial and Business Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Kent Snyder, President, Chief Executive Officer and Director, and John Poyhonen, Senior Vice President and Chief Financial and Business Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

+ Indicates management contract or compensatory plan.

* Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

- (1) Filed as an exhibit to Registration Statement File No. 333-113998 and incorporated herein by reference.
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(14) Filed as an exhibit to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2007 and incorporated herein by reference.

(b) Exhibits

See Item 15(a) above.

(c) Financial Statement Schedules

See Item 15(a) above.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Senomyx, Inc.

By: /S/ KENT SNYDER

Kent Snyder

President and Chief Executive

Officer

Dated: February 14, 2008

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kent Snyder, Mark Leschly and John Poyhonen, and each of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all amendments to this report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents, or any of them or their or his substitute or substituted, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/S/ KENT SNYDER</u> Kent Snyder	President , Chief Executive Officer and Director	February 14, 2008
<u>/S/ JOHN POYHONEN</u> John Poyhonen	Senior Vice President and Chief Financial and Business Officer	February 14, 2008
<u>/S/ MARK LESCHLY</u> Mark Leschly	Chairman of the Board of Directors	February 14, 2008
<u>/S/ STEPHEN A. BLOCK</u> Stephen A. Block, Esq.	Director	February 14, 2008
<u>/S/ MICHAEL E. HERMAN</u> Michael E. Herman	Director	February 14, 2008
<u>/S/ DENNIS F. O'BRIEN</u> Dennis F. O'Brien	Director	February 14, 2008
<u>/S/ JAY M. SHORT</u> Jay M. Short, Ph.D.	Director	February 14, 2008
<u>/S/ CHRISTOPHER TWOMEY</u> Christopher Twomey	Director	February 14, 2008

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Corporate Information

EXECUTIVES

Kent Snyder

President and Chief Executive Officer

Mark Zoller, Ph.D.

Executive Vice President, Discovery & Development and Chief Scientific Officer

Don Karanewsky, Ph.D.

Senior Vice President, Discovery

John Poyhonen

Senior Vice President, Chief Financial and Business Officer

Sharon Wicker

Senior Vice President, Commercial Development and Chief Strategy Officer

David B. Berger, Esq.

Vice President, General Counsel and Corporate Secretary

Antony Rogers

Vice President, Finance and Treasury

Gwen Rosenberg

Vice President, Investor Relations & Corporate Communications

Albert Zlotnik, Ph.D.

Vice President, Biology

BOARD OF DIRECTORS

Mark Leschly, Chairman *

Roger D. Billingsley, Ph.D.

Stephen A. Block, Esq.

Michael E. Herman

Dennis F. O'Brien

Jay M. Short, Ph.D.

Kent Snyder **

Christopher Twomey

TRANSFER AGENT

BNY Mellon Shareowner Services

*480 Washington Boulevard
Jersey City, NJ 07310-1900*

Tel: (877) 419-8539

Web: www.bnymellon.com/shareowner/isd

CORPORATE COUNSEL

Cooley Godward Kronish LLP

*4401 Eastgate Mall
San Diego, CA 92121-1909*

Tel: (858) 550-6000

Web: www.cooley.com

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Ernst & Young LLP

*4370 La Jolla Village Drive, Suite 500
San Diego, CA 92122*

Tel: (858) 535-7268

Web: www.ey.com

INVESTOR CONTACT

Gwen Rosenberg

Vice President, Investor Relations & Corporate Communications

4767 Nexus Centre Drive

San Diego, CA 92121

Tel: (858) 646-8369

Fax: (858) 404-0750

E-mail: investor.relations@senomyx.com

STOCK SYMBOL

Senomyx common stock is traded on the NASDAQ Stock Market under the symbol SNMX.

ANNUAL MEETING

Wednesday, May 28, 2008

9:00 a.m. P.D.T.

Hyatt Regency La Jolla at Aventine

3777 La Jolla Village Drive

San Diego, CA 92122

CORPORATE HEADQUARTERS

Senomyx, Inc.

4767 Nexus Centre Drive

San Diego, CA 92121

Tel: (858) 646-8300

Fax: (858) 404-0752

Web: www.senomyx.com

Statements in this report that are not strictly historical are forward-looking statements and involve a high degree of risk and uncertainty. Senomyx's actual results may differ materially from those suggested in this report. Factors that could cause such a difference include those described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2007 filed with the Securities and Exchange Commission.

* Not standing for re-election to the Board at the May 28, 2008 annual meeting.

** Nomination to assume the role of Chairman of the Board to be confirmed at the May 28, 2008 annual meeting.

Commercialization



Sweetener



Cooling Agent



senomyx.

Exciting Taste Discoveries

World-Class Partners

New Consumer Markets

Bitter Blocker



Salt Reduction

Savory Flavor

A large, thin-lined circle is centered on the page, containing the company logo and tagline.

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END