

Via Facsimile and U.S. Mail
Mail Stop 4720

August 7, 2009

Mr. William M. Caldwell, IV
Chief Executive Officer
Advanced Cell Technology, Inc.
381 Plantation Street
Worcester, MA 01605

Re: Advanced Cell Technology, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed July 22, 2009
File Number 000-50295

Dear Mr. Caldwell:

We have completed our review of the above listed filing and have no further comments at this time.

Sincerely,

Jeff Riedler
Assistant Director