



Preview of the 2012 ASCB Annual Meeting in San Francisco

The Same Great Meeting with Some New and Exciting Twists

As the ASCB prepares for its 2012 Annual Meeting in San Francisco, the membership looks forward to meeting old and new friends and learning about interesting science. The



Ron Vale



Tony Hyman

Moscone Center will soon be buzzing again with the excited chatter of young scientists, and the restaurants and bars of San Francisco will be full of reminiscence and conversation.

As Co-Chairs of the 2012 Annual Meeting Program Committee, we would like to give ASCB members a preview of what promises to be a very exciting scientific meeting. The majority of the Minisymposia and poster sessions are devoted to the core interests of the ASCB membership. These events are where scientists in each field of cell biology can gather and learn the latest results and ideas, generally prior to their publication. We have attracted a strong group of Minisymposium co-chairs, covering a breadth of geographic regions (see "Annual Meeting Program" on p. 6–7). Please spread the word!

In addition to offering you a chance to present your own research and keep up-to-date, the ASCB Annual Meeting provides a great opportunity to expand your horizons and learn about new fields, technologies, and ideas. We would like the meeting to serve as a platform for stirring and mixing different research fields that have historically been phase-separated in different institutional departments and in different scientific societies and meetings. New groups of scientists can be introduced to our core strengths (mechanistic dissection of cell activities and functions), and our core membership can use the Annual Meeting as a forum to extend their experimental reach and dig deeper into biology in new and interesting

ways. We also want to welcome scientists from other fields who can contribute to our understanding of cell biology but may not have traditionally attended the ASCB Annual Meeting. Hence, a new idea for the 2012 Annual Meeting—Threads.

The Threads: Capturing Two Frontiers for Cell Biology

The Threads are "meetings within a meeting" and are designed to introduce two frontiers that will influence and be influenced by cell biology: 1) The Intersection of Cell Biology and the Physical Sciences, and 2) Cell Biology and Medicine. Each Thread will have special programmatic events every day and so will be a scientific "thread" running from the start to the conclusion of the meeting. The talks and topics related to the Threads will be announced in the *ASCB Newsletter*, on the ASCB website, in the *Annual Meeting Program*, and in our new Annual Meeting mobile app. Here is more information on the two Threads that will be woven into the ASCB Annual Meetings in both 2012 and 2013.

Thread 1: The Intersection of Cell Biology with the Physical Sciences. No one would dispute that living organisms must operate within the confines of the basic laws of physics and chemistry, and the thinking and methodologies of the physical sciences play an increasingly important role in understanding biological systems. We are entering an era in which more physical scientists are attracted to problems of biology and biologists seek to use tools and thinking from computation, physics, chemistry, and engineering.

However, there are cultural challenges to

The American Society for Cell Biology

8120 Woodmont Avenue, Suite 750
Bethesda, MD 20814-2762, USA
Tel: 301-347-9300
Fax: 301-347-9310
ascbinfo@ascb.org, www.ascb.org

Officers

Ronald Vale	<i>President</i>
Don W. Cleveland	<i>President-Elect</i>
Sandra L. Schmid	<i>Past President</i>
Thoru Pederson	<i>Treasurer</i>
Kathleen J. Green	<i>Secretary</i>

Council

Sue Biggins
David Botstein
A. Malcolm Campbell
Raymond J. Deshaies
Benjamin S. Glick
Akihiro Kusumi
Inke N athke
Mark Peifer
James H. Sabry
David L. Spectro
Jo Ann Trejo
Yixian Zheng

The ASCB Newsletter
is published 11 times per year
by The American Society
for Cell Biology.

W. Mark Leader	<i>Editor</i>
Johnny Chang	<i>Production Coordinator</i>
Kevin Wilson	<i>Public Policy Director</i>
John Fleiselman	<i>Science Writer</i>
Thea Clarke	<i>Director, Communications and Education</i>

Advertising

The deadline for advertising is the first day of the month preceding the cover date. For information contact Advertising Manager Ed Newman, enewman@ascb.org.

ASCB Newsletter
ISSN 1060-8982
Volume 35, Number 3
April 2012

  2012 The American Society for Cell Biology. Copyright to the articles is held by the author or, for staff-written articles, by the ASCB. The content of the *ASCB Newsletter* is available to the public under an Attribution-Noncommercial-Share Alike Unported Creative Commons License (<http://creativecommons.org/licenses/by-nc-sa/3.0>).

Postmaster: Send change of address to:
ASCB Newsletter
The American Society for Cell Biology
8120 Woodmont Avenue, Suite 750
Bethesda, MD 20814-2762, USA

The Threads are “meetings within a meeting” and are designed to introduce two frontiers that will influence and be influenced by cell biology: 1) The Intersection of Cell Biology and the Physical Sciences, and 2) Cell Biology and Medicine.

We are entering an era in which more physical scientists are attracted to problems of biology and biologists seek to use tools and thinking from computation, physics, chemistry, and engineering.

pairing biologists and physical scientists. First, our knowledge of biology is more complex than in the days when Erwin Schrödinger wrote *What Is Life?* Physical scientists are often daunted by the thick terminology, complexity, and the messiness of biology. And identifying a truly interesting biological problem in which to invest their time is often challenging for scientists outside of the biology community. From the biologist's side, it can be difficult to make connections with members of the physical sciences community (even on the same campus!) and sometimes to appreciate how work might be advanced by such collaborations.

The Intersection of Cell Biology with the Physical Sciences Thread will attract physical and computational scientists to the meeting, providing them with specially designed sessions to learn about biology and a special Saturday workshop on “Open Problems in Biology Requiring the Physical Sciences.” For the core cell biology community, we are introducing a Frontier Symposium (see below), Minisymposia, and poster sessions that will address topics of how the physical and computational sciences are being applied in biology. These will enable both junior and senior scientists to learn and think of new strategies that might pertain to their work. We will also have informal discussion tables and social activities that will serve to network scientists undertaking cell biology and physical science approaches to understanding the cell.

Thread 2: Cell Biology and Medicine.

Translational medicine is today's buzz word. But what does it mean? How do we generate better drugs or create cells to repair damaged organs? The history of medicine in the past two centuries has shown that breakthroughs in understanding the basic biology of how cells work, as well as the accumulation of smaller insights, have led to new medicines and strategies for improving human health. Given how little we still know about how cells, tissues, and organisms work, it is likely that basic research on cells and tissues will continue to play an important role in improving human health in the coming decades. But how are industry and academic scientists envisioning translating basic sciences into medicine? What are some great current bench-to-bedside stories?

The ASCB Annual Meeting Thread on Cell Biology and Medicine will dig into some of these questions. We will have a Sunday panel discussion called “Is There a New Paradigm

for Drug Discovery?” That is a particularly topical question given recent challenges in the biotechnology industry, and it underscores the increasing need for collaborations between academic researchers and industry. We will have a Frontier Symposium (see below) and Minisymposia that will address topics of cell biology and medicine, with particular spotlights on cancer, infectious disease, and stem cell therapy. There will be ample opportunities to meet with scientists from leading pharmaceutical research and biotechnology companies.

We also hope that ASCB will become increasingly visible to biotech scientists and that the Annual Meeting will be seen as a good place to learn about biological mechanisms. Since the work presented at the ASCB Annual Meeting spans from molecules to organisms, it is a unique venue at which to gain insight into questions pertaining to disease and drug targets.

The Keynote Symposium: Steven Chu and Arthur D. Levinson

The 2012 Annual Meeting Keynote Symposium on Saturday evening, December 15, will feature talks by two spectacular scientists, Steven Chu and Arthur D. Levinson, whose interests and careers epitomize the subject areas of the two Threads.

Chu, who received the Nobel Prize in physics for his work on atom cooling, has taken on the monumental task of orchestrating energy policy as the U.S. Secretary of Energy in the Obama administration. Prior to that, as an academic scientist at Stanford University, Chu brought biology into his research laboratory and employed techniques from the physical sciences (optical traps and single molecule spectroscopy) to understand biological molecules.

Levinson is at the helm of two of the most influential companies in the world, Genentech and Apple. Levinson joined Genentech as a research scientist and moved up to become Vice President of Research. He then showed his talents in management by becoming CEO and Chairman of Genentech, leading it to tremendous scientific and financial success in the past decade. Levinson also is the new Chairman of Apple, Inc., replacing Steve Jobs.

Chu and Levinson will reflect upon the personal journeys that brought them into new types of science and leadership positions, and provide their perspectives for the future. We are planning to make the Keynote Symposium open

to the public, because ASCB makes scientific outreach a priority.

Frontier Symposia

Another change to this year's program is the incorporation of three Frontier Symposia. Rather than talking exclusively about their past work, Frontier Symposia speakers will synthesize some of the current exciting progress being made in the field (including their work and work of others) and project their views of where the field will be going in the future. We feel that many people coming to the ASCB Annual Meeting want to gain insight into the future as well as learn about the past. In the Frontier Symposia, the audience can expect a window into what these speakers see as the big questions for the future.

Two of the Frontier Symposia will be targeted to the topics of the Threads, and the third (Synthetic Biology) will encompass many issues in cell biology. The meeting will still include four traditional Symposia (with an emphasis on stem cells and fate determination in three of them). We look forward to getting feedback from attendees on the different styles of the Frontier Symposium and regular Symposium talks.

Opportunities for Mentoring and Informal Discussions

One of the most successful components of recent ASCB Annual Meetings has been the Science Discussion Tables, which enable students and postdocs to interact with senior scientists in small and intimate settings. These events help to make well-known scientists accessible and create a familial feeling within a bustling, vibrant, large meeting.

We will continue this successful strategy, on Sunday through Tuesday mornings during the 2012 Annual Meeting. In keeping with the Threads, we will recruit Bay Area biotech scientists and scientists working at the physical science–cell biology interface. So if you are interested in what science goes on in the biotech industry or in knowing how to set up collaborations with a computational scientist, these small discussions might be very useful for you.

In addition, the popular Women in Cell Biology (WICB) Committee Career Discussion and Mentoring Roundtables will feature a number of biotech scientists with whom you can interact and talk about jobs and career

paths in biotech and pharma. And finally, the International Affairs Committee also runs table discussions on international science and education. All of these venues are great opportunities for young scientists to meet senior scientists, get new insight into scientific practices, and obtain career advice.

At Night in the City

San Francisco is a cool city. Okay, we are biased. One of the Program Co-Chairs (Hyman) completed his postdoc in San Francisco, and the other (Vale) works there. When you are not busy at the meeting (although we will try to keep you busy with a lot of “cannot miss” sessions and posters), there are many places to explore. Great museums, bars, and restaurants are within walking distance. The social aspect of the ASCB Annual Meeting is important; it is where new friendships and collaborations are made and old ones are renewed. And San Francisco provides the perfect setting to mix science with some fun. Also, if you are anything like the Program Co-Chairs, chances are that you will not have completed your holiday shopping. San Francisco provides plenty of opportunity for some last-minute power shopping before you return home.

Join Us and Tell Your Friends

We look forward to seeing you at the 2012 Annual Meeting. As we noted, there are some traditional aspects of the meeting but also some important changes. We feel it has been worthwhile to step back and think about how to keep the meeting current with the changing face of science. One of the issues that a large meeting struggles with is its diversity. As science specializes, some students are tempted to go to specialized meetings in their field. With tightening funding, it may not be possible for students to attend more than one meeting a year. We hope that the Threads will provide a meeting-within-a-meeting structure, allowing participants to follow a topic and learn new fields while enjoying other benefits of a large meeting that gathers the best research in cell biology. The Frontier Symposia will allow the cell biology community to pause and think about the big next questions. We hope that you will join us in what is sure to be an exciting and stimulating meeting! ■

The history of medicine in the past two centuries has shown that breakthroughs in understanding the basic biology of how cells work, as well as the accumulation of smaller insights, have led to new medicines and strategies for improving human health.

One of the most successful components of recent ASCB Annual Meetings has been the Science Discussion Tables, which enable students and postdocs to interact with senior scientists in small and intimate settings.