

The 2016 q-bio Summer School

(Albuquerque, San Diego, Fort Collins)

Applications are now being accepted for the Tenth Annual q-bio Summer School. Applications will be due on **Monday, February 15th at 11:59pm (MST)**. Submitted applications may be revised until that time. To apply now, please visit the application website:

<https://www.openconf.org/qbio2016/openconf.php>

Scholarships will be available.

The 2016 q-bio Summer School will be held on different dates at three different campuses

- 1) July 10-23, 2016 at the Colorado State University in Fort Collins, CO
- 2) July 10-23, 2016 at the University of New Mexico in Albuquerque, NM
- 3) July 10-23, 2016 at the University of California in San Diego, CA.

The three campuses will gather together at the **2016 q-bio Student Symposium (July 25 -26)** and the **2016 q-bio Conference (July 27-30)** at Vanderbilt University in Nashville, Tennessee.

School Overview: See http://q-bio.org/wiki/The_Tenth_q-bio_Summer_School

The q-bio Summer School is an annual event intended to advance predictive modeling of cellular regulatory systems by exposing participants to a survey of work in quantitative biology and by providing in-depth instruction in selected techniques, with an emphasis on techniques useful for modeling cellular regulatory networks. Certain data analysis techniques and experimental methods will also be covered.

Lectures will be offered at **three campuses**. At the **San Diego campus**, the focus will be on synthetic biology. At the **Albuquerque and Fort Collins campuses**, the focus will be on different aspects of systems biology (see topics below and the school wiki for more information). Students will each work on a mentored project. Participants will attend daily core lectures, project-specific lectures, journal clubs, and computer and experimental labs. The summer school is designed for graduate students, postdocs, or anyone with a quantitative background who is new to modeling cellular regulatory systems/networks.

At the School students will attend 20-25 hours of core lectures, 20-25 hours of course-specific lectures, 10-15 hours of computational and experimental labs, and 10-15 hours of student presentations. There will also be 20-30 hours of mentored project work, which may include some simple experiments, theoretical developments and/or real data analyses.

The main topics of the 2016 summer school are:

Biomolecular Simulations (Albuquerque, NM), Cell Signaling (Albuquerque, NM), Membrane Biology (Albuquerque, NM), Viral Dynamics (Albuquerque, NM), Cancer Dynamics (Fort Collins, CO), Single-Cell Gene Regulation (Fort Collins, CO), Complex, Nonlinear Biological Dynamics (Fort Collins, CO), Experimental Synthetic Biology (San Diego, CA), and Computational Synthetic Biology (San Diego, CA)

Organizers: R. Braun, *Northwestern*, S. Gnanakaran, *New Mexico Consortium*, Jeff M. Hasty, *UC San Diego*, Nan Hao, *UC, San Diego*, William S. Hlavacek, *New Mexico Consortium*, Marek Kimmel, *Rice University*, Brian Munsky, *CSU, Fort Collins*, Ashok Prasad, *CSU, Fort Collins*, Ruy Ribeiro, *Los Alamos*, Douglas Shepherd, *University of Colorado, Denver*, Patrick Shipman, *CSU, Fort Collins*, Sabrina Spencer, *University of Colorado, Boulder*, Mara P. Steinkamp, *University of New Mexico, Albuquerque*, Lev S. Tsimring, *UC, San Diego*

For inquiries about the scientific content at the summer school, please contact:

Brian Munsky (Fort Collins Campus): munsky@engr.colostate.edu

Bill Hlavacek (Albuquerque Campus): wshlavacek@gmail.com

Lev Tsimring (San Diego Campus): itsimring@ucsd.edu

Point of Contact:

Shannan Yeager, q-bio Program Manager, syeager@newmexicoconsortium.org

For more information, please visit the school wiki at:

http://q-bio.org/wiki/The_Tenth_q-bio_Summer_School