

INTRODUCTION

The Howard Hughes Medical Institute (HHMI), the Helmsley Charitable Fund, and the Science Literacy Program invite you to attend **SMI-SALSA¹ Summer Institute** on Scientific Teaching **June 26-30, 2017** at University of California, Riverside (UCR). The Summer Institute will expand and sharpen participants teaching skills through workshops facilitated by national science education experts.

Participants will develop original, innovative classroom materials ready for immediate implementation and will be named 2016-2017 National Academies Education Fellows at the end of the institute. Dr. Susan Wessler, Distinguished Professor of Genetics, Dr. Jim Burnette, Academic Coordinator-the *Dynamic Genome*, Dr. Bradley Hyman, Professor Emeritus of Biology, and Dr. Rich Cardullo, Interim Vice Provost of Undergraduate Education, are collaborating to offer a unique professional development opportunity for STEM teachers seeking to combine practical laboratory science with science and mathematics lesson planning.

This intensive workshop will expose credentialed secondary STEM teachers and pre-service STEM teachers to useful laboratory measurement techniques through wet bench experiences already adopted by previous summer institute participants in their classrooms. These analytical techniques will then be converted into mathematics and science classroom lessons using the latest *Scientific Teaching* pedagogies. Participants who complete the training will be provided with the materials necessary to use in their classrooms.

¹Joint funded by the UCR CalTEACH Science Mathematics Initiative (SMI) and a Howard Hughes Medical Institute award "Sustaining Academic Leadership for STEM Achievement (SALSA)".

ANTICIPATED

Participants can expect to:

- become skilled in simple physical measures such as micro volumes and masses used in classrooms and modern research laboratories
- appreciate the importance of reproducibility and calculate inherent experimental error when taking measurements
- develop a discovery-based lesson plan using *Scientific Teaching* principles that include:
 1. Active learning
 2. Assessment
 3. Diversity
 4. Backwards design



TESTIMONIAL

"Attending the Summer Institute (SI) was a transformative experience for me professionally. I am a new instructor and a postdoc, and the intensive training, motivation, and "re-education" on [higher] education provided at the SI gave me with new skills, confidence, and a boost to my CV while applying for jobs. The basic philosophies promoted and explored in the SI are nothing short of revolutionary. The workshops provided me with practical skills for transitioning these ideas into the classroom as well. Participating in this institute has made me feel like I am tuned into the most current and nationally accredited best practices for teaching in the [college] classroom, and has given me tools to excel as an instructor. It is an extremely worthwhile and inspirational experience that has literally inspired and transformed my teaching and my career."

-Ann Petersen, University of Oregon

SMI-SALSA SUMMER INSTITUTE 2017

Dates:

June 26–30, 2017 (Monday-Friday)

Time:

9:00 a.m. to 3:30 p.m.

Location:

UC Riverside
University Laboratory

Fee:

FREE

Eligible Applicants:

- * Completion of EDUC 3
- * Updated SMI program plan
- * Completion of CBEST

Participation Stipend

\$250 upon completion of SMI-SALSA Summer Institute

*Application & deadline:
inside this tri-fold brochure*

APPLICATION DEADLINE:
APRIL 28, 2017
BY 12:00 PM. (NOON)

SMI-SALSA SUMMER INSTITUTE APPLICATION
UCR-SMI STUDENTS

Please see reverse side for eligibility and details about the program.

Provide your responses on a separate sheet of paper.

Applicant's Full Name: _____ **UCR Student ID # (if applicable):** _____

Cumulative GPA: _____ **Expected Graduation Date:** Quarter/Year _____ **Major** _____

1. Briefly describe your interest in the SMI-SALSA Summer Institute and include how your background and career vision relate to the goals of this program.
2. Do you wish to teach science or mathematics? What was the seminal event in charting your direction towards a teaching career?
3. Briefly describe your experience with developing and implementing lesson plans.
4. In your opinion, what makes a lesson effective?

Submit application to:

SMI RESOURCE CENTER

Mail: 1315 Pierce Hall

Riverside, CA 92521

Email: smi@ucr.edu

Fax: 951-827-4971

Questions?

Please contact:

Leslie Bushong

SMI Director

leslie.bushong@ucr.edu