NSF ASSIST - SHPE

Faculty Development Institute

Target audience: Assistant professors, post-doctoral researchers, senior graduate students interested in academic careers.

Location: Thursday of the SHPE Conference

Overview: The Faculty Development Institute (FDI) aims to help mentor and develop pre-tenured Hispanic science and engineering faculty for the tenured engineering professoriate. Pre-tenured faculty will participate in a one-day faculty development workshop aimed at providing the skill sets and resources needed to obtain and successfully transition to tenured faculty positions. Example workshops include *How to Write Successful Research Grants* and *Managing Teaching, Research, and Service*. Participants will be able to connect with tenured Hispanic faculty role models who can provide mentoring and guidance. The FDI will build a community of Hispanic engineering faculty to promote opportunities for faculty positions, postdoctoral positions, and research collaborations.

Organizing Committee

Chair

David Estrada, Ph.D., Assistant Professor, Department of Material Science and Engineering, Boise State University

Committee Members

Jose Manuel Cerrato Corrales, Ph.D., Assistant Professor, Civil Engineering, University of New Mexico

Cristian Gaedicke, Ph.D., Assistant Professor, School of Engineering, California State University, East Bay

Brian Mazzeo, Ph.D., Associate Professor, Department of Electrical and Computer Engineering, Brigham Young University

Berardi Sensale-Rodriguez, Ph.D., Assistant Professor, Department of Electrical and Computer Engineering, University of Utah

Idalis Villanueva, Ph.D. Assistant Professor, Engineering Education, Utah State University

Agenda

Thursday, November 3rd, 2016	
Session Time	**Faculty Development Institute**
08:00-08:55	Distinguished Lecture Series
09:00 – 9:15	Welcome Remarks
09:15-11:15	Funding Strategies
11:15-12:15	Leveraging Your Chair and Dean Effectively
12:20-14:00	SHPE Graduate Luncheon (Ticket Required) Distinguished Lecture Series
14:00-15:30	Effective Teaching

15:30-15:45	Break
15:45 – 17:15	Research, Teaching, and Service: What's the Right Balance?
17:15 – 17:30	Concluding Remarks
19:30-21:30	Faculty Dinner

Faculty Development Institute Session Abstracts

Funding Strategies

Moderators: Berardi Sensale-Rodriguez, Ph.D., Assistant Professor, Department of Electrical and Computer Engineering, University of Utah

Jose Manuel Cerrato, Ph.D., Assistant Professor, Civil Engineering, University of New Mexico

One of the premier workshops of the Faculty Development Institute, this two-hour workshop will prepare pre-tenured faculty members for the task of writing their first set of grant proposals. Attendees will bring drafts of their proposals that will be reviewed and improved through the mentorship of senior, tenured faculty members. Using group exercises, case studies, and the participant's own proposal outline, the workshop will help participants understand the components of a competitive grant proposal, discover what grant managers consider "red flags," and learn how to cultivate potential institutional donors. By the end of the workshop, the attendees will gain valuable skills to develop and complete a competitive proposal for grants such as the National Science Foundation CAREER award among others.

Leveraging Your Chair and Dean Effectively

Moderator: David Estrada, Ph.D., Assistant Professor, Department of Material Science and Engineering, Boise State University

As a junior faculty member and throughout your career, your Department Chair/Head and Dean can be invaluable assets to advance your career. Beyond their obvious involvement in the tenure process they can serve as an advocate for space, students, and other resources on campus. In this panel we will discuss strategies and best practices for engaging and maintaining a healthy relationship with senior administration at your university. By the end of the workshop, the attendees will have a thorough understanding of the role of the Dean and Department Chair for their level of institution.

Teaching Effectiveness

Moderator: Idalis Villanueva, Ph.D. Assistant Professor, Engineering Education, Utah State University

What makes teaching effective? Research indicates that awareness and knowledge of evidence-based teaching and learning strategies, subject matter knowledge, and understanding of institutional expectations and resources are all leading factors in teacher effectiveness. In this workshop, key findings from the existing research on evidence-based instruction for success in academic outcomes will be explored. Attendees will gain valuable insights and best practices on how to efficiently prepare course lessons, evaluate student feedback, and manage teaching assistants. By the end of the workshop, the attendees will be able to implement valuable teaching and assessment practices into their pedagogy as they develop experience and develop into effective educators as well as researchers.

Research, Teaching, and Service: What's the Right Balance?

Moderators:

Dr. Brian Mazzeo, Associate Professor, Department of Electrical and Computer Engineering, Brigham Young University

Dr. Cristian Gaedicke, Assistant Professor, School of Engineering, California State University, East Bay

The goal of this workshop is for participants to identify specific, institutionally-relevant tasks to facilitate success as beginning-career faculty members. For a pre-tenured faculty member, managing research, teaching, and service is demanding and challenging. Balancing these demands is also dependent on the faculty member's institution. To make this personally relevant, participants are asked to bring rank and status documents from their institutions to facilitate relevant dialogue (we will also bring relevant examples). Based on individual requirements for young faculty members, a guided discussion with invited senior faculty members will help participants to learn best practices to manage time, prioritize commitments, and avoid activities that have little relevance to tenure and promotion. The aim of this discussion is to promote productive self-reflection and identify and encourage specific activities that will promote success for young faculty members.