

**The Project NExT Colloquium
at The Joint Mathematics Meetings
in San Francisco
Wednesday, January 13 – Saturday, January 16, 2010**

Wednesday, January 13, 12:15 p.m. – Saturday, January 16, noon: Project NExT Booth, # 933, part of the MAA exhibit area in the Exhibit Hall, 1st floor, Moscone West Convention Center.

Wednesday, January 13 – Saturday, January 16: Project NExT Session Room, Room 3024, 3rd floor, Moscone Center West.

Project NExT Program Schedule

**UNLESS OTHERWISE NOTED, ALL EVENTS ARE IN ROOM 3024, 3RD FLOOR,
MOSCONE CENTER WEST.**

Wednesday, January 13

10:00 a.m. – noon: *Mathematics Education Swap Session*

In this session participants will discuss issues related to the mathematics education of future teachers. In particular, we will be discussing content courses for future teachers at all levels – elementary, middle school and high school. Participants are encouraged to come prepared to share ideas that have worked for them and questions that they have for other participants. It is likely that the session participants will break up into small groups to discuss issues of interest.

Organizer (Project NExT team):

Judith Covington, Louisiana State University - Shreveport

2:00 p.m. – 3:15 p.m.: *Getting Discovery Learning Started*

Panel: David Clark, State University of New York, New Paltz

Katherine Socha, St. Mary's College of Maryland

Michael Starbird, University of Texas, Austin

Stan Yoshinobu, California Polytechnic State University, San Luis Obispo

The panelists will discuss ways to teach through discovery learning as well as how to get started on using discovery learning in your classroom.

Organizers (green09 dots – 2009-2010 Project NExT Fellows):

Eric B. Kahn, Bloomsburg University

Brian P. Katz, Augustana College

Amanda H. Matson, Clarke College

Andrew Shallue, Illinois Wesleyan University

Wednesday, January 13 (cont'd)

2:15 p.m. – 4:15 p.m.: ***Project NExT - Young Mathematicians' Network Poster Session***

Room 3001, 3rd Floor, Moscone

(This session is open to everyone attending the meetings.)

This session is intended to highlight the research activities, both mathematical and pedagogical, of recent or future Ph.D.s in mathematics and related fields. The organizers seek to provide an open venue for people who are near completion, or have finished their graduate studies in the last five years to present their work and make connections with other same-stage professionals.

Organizers:

Michael C. Axtell, Wabash College (gold dot, 2000-01)

Kim Roth, Juniata College (forest dot, 2002-03)

4:30 p.m. – 5:45 p.m.: ***Designing and Implementing Your Own Upper Level Course***

Panel: Angela Gallegos, Occidental College

Tim Hsu, San Jose State University

Edward Scheinerman, Johns Hopkins University

Many of us are looking forward to the day when we will get the opportunity to design and teach our own upper level courses. Designing a course takes a lot of work, and without any experience, it can be difficult to figure out where to start. The panelists have all had experience designing their own courses, and they will help us navigate the course design process, from text selection and schedule lay-out to defining prerequisites and managing student expectations. Each panelist will present his/her insight, followed by time for questions and open discussion.

Organizers (green09 dots - 2009-10 Project NExT Fellows):

Camillia Smith Barnes, Sweet Briar College

Hannah Callender, University of Portland

Jessica Mikhaylov, U.S. Military Academy at West Point

Valerie Peterson, University of Portland

6:00 p.m. – 8:00 p.m.: ***The Legacy of R. L. Moore Project – Educational Advancement Foundation Reception***

(in conjunction with Project NExT)

Foothills E Room, San Francisco Marriott Marquis

Meet other Project NExT Fellows and find out more about inquiry-based learning and the Legacy of R. L. Moore Project. Appetizers and refreshments will be served at this private reception.

Thursday, January 14

**8:00 a.m. – 9:15 a.m.: *Teaching Calculus to Students Who Have Had AP Calc:
Challenges and Solutions***

(This session is open to everyone attending the meetings.)

Panel: Michael E. Boardman, Pacific University
David M. Bressoud, Macalester College
Stephen L. Davis, Davidson College
Deborah Hughes-Hallett, University of Arizona
Francis E. Su, Harvey Mudd College

The population of a college calculus class can range from students who have seen calculus through the AP program to students who are seeing the topics for the first time. Some students have seen a subset of the material of the class. Further, students with AP credit can vary widely in the depth of their mathematical training, from familiarity with the mechanics of calculus to an understanding of the theory behind the mechanics. The AP Calculus program can serve as a springboard into college-level mathematical training for strong mathematical students. At the same time, AP training of calculus students can offer a variety of challenges in the calculus classroom. This session will discuss such challenges and innovative ideas and solutions.

Organizers: (1994-2005 Project NExT Fellows)

Timothy P. Chartier, Davidson College
Stephanie Salomone, University of Portland

9:30 a.m. – 10:50 a.m.: *How One Can Become a Referee/Reviewer*

(This session is open to everyone attending the meetings.)

Panel: Matthias Beck, San Francisco State University
Frederick Hoffman, Florida Atlantic University
Carl Pomerance, Dartmouth College
Brigitte Servatius, Worcester Polytechnic Institute

Moderator:

T. Christine Stevens, Saint Louis University

The panelists will provide advice about refereeing papers for research and expository journals, writing reviews for Math Reviews, and reviewing book manuscripts for publishers. Topics to be addressed include how to write referee's reports and how to write reviews for Math Reviews or book publishers. The panelists will also discuss how much time refereeing and reviewing consume, how refereeing/reviewing "counts" in one's department for promotion and tenure, and how one can become a referee/reviewer.

Organizers (Project NExT team):

Joseph A. Gallian, University of Minnesota-Duluth
Aparna W. Higgins, University of Dayton
T. Christine Stevens, Saint Louis University

Thursday, January 14 (cont'd)

11:15 a.m. – 12:15 p.m.: *Session for Consultants for the Green09 Project NExT Fellows*

In this session, we invite consultants for the green09 Project NExT Fellows (2009-10 Fellows) to share ideas about how to be effective consultants.

Organizers (Project NExT team):

Joseph A. Gallian, University of Minnesota-Duluth

Aparna W. Higgins, University of Dayton

1:00 p.m. – 2:15 p.m.: *Maintaining Your Research Agenda*

Panel: Colin Adams, Williams College

Bonita A. Lawrence, Marshall University

Victor H. Moll, Tulane University

Our panelists, who represent a variety of institutions, will present their own personal strategies for success in following their research interests while pleasing their own institutions. In the second half of the session, we will invite questions and discussion from the audience.

Organizers (green09 dots - 2009-10 Project NExT Fellows):

Tricia Muldoon Brown, Armstrong Atlantic State University

Jing Long Hoelscher, University of Arizona

Dante V. Manna, Virginia Wesleyan College

Omayra Ortega, Arizona State University

2:30 p.m. – 3:45 p.m.: *Mathematics and Social Justice*

(This session is open to everyone attending the meetings.)

Panel: Shandy Hauk, University of Northern Colorado

Eric Hsu, San Francisco State University

Lisa Marano, West Chester University

This session will focus on issues at the intersection of mathematics and social justice. In particular, panelists will discuss three ways in which we, as mathematicians, can address issues of social justice: curricula that focus on social justice issues, programs that focus on social justice within the mathematics world (e.g., Treisman's Emerging Scholars Programs for college students and other efforts to level the playing field within mathematics), and culturally responsive pedagogy and ways to make our classrooms more equitable.

Organizers (1994-2005 Project NExT Fellows):

Lily S. Khadjavi, Loyola Marymount University

David T. Kung, St. Mary's College of Maryland

4:25 p.m. – 5:25 p.m.: *Joint Prize Session*

Main Lecture Room, 2nd Floor, Moscone

(This session is open to everyone attending the meetings.)

5:30 p.m. – 6:30 p.m.: *Joint Prize Session Reception*

Room 2006, 2nd Floor, Moscone

(This session is open to everyone attending the meetings.)

Friday, January 15

10:00 a.m. – 11:00 a.m.: ***Open Discussion with the Fellows' Department Chairs and Heads***

The institutions where the Project NExT Fellows work make a substantial commitment to Project NExT by supporting the travel needed for the Fellows' participation in Project NExT. In addition to providing background information about Project NExT, this discussion between the leaders of Project NExT and the chairs and heads of departments of mathematics will address two questions: How can institutions get the most out of their investment in Project NExT, and how can Project NExT best help mathematics departments? Department chairs or heads for Fellows from all years are invited.

Organizers (Project NExT team):

Judith Covington, Louisiana State University - Shreveport
Joe Gallian, University of Minnesota Duluth
Aparna Higgins, University of Dayton
P. Gavin LaRose, University of Michigan

2:30 p.m. – 4:00 p.m.: ***MAA Presentations by Teaching Awards Recipients***
Room 2024, 2nd Floor, Moscone

(This session is open to everyone attending the meetings.)

This session consists of presentations by recipients of this year's Haimo Award for Distinguished College or University Teaching. The recipients this year are all associated with Project NExT. Michael Dorff, Brigham Young University, is a peach dot (1997-98 Project NExT Fellow), and is only the second Project NExT Fellow to receive this award. Allan J. Rossman, California Polytechnic State University - San Luis Obispo, and Curtis D. Bennett, Loyola Marymount University, have been presenters and consultants for various groups of Project NExT Fellows.

3:00 p.m. - 4:15 p.m.: ***Recruiting and Retaining Math Majors through Community Building***

Panel: Doug Faires, Youngstown State University
Rachel Levy, Harvey Mudd College
William Velez, University of Arizona

A primary goal (and challenge) of any mathematics department is to recruit and retain math majors. One effective way to attain this goal is by encouraging a sense of community among math majors through mathematical activities and programs outside of the classroom. The panelists will share their experiences with a variety of programs that have been successful in attracting or retaining majors at their respective institutions, followed by time for questions and open discussion.

Organizers (green09 dots - 2009-10 Project NExT Fellows):

Audrey Malagon, Mercer University
Weiwei Pan, St. Mary's College of CA
Vicki Sealey, West Virginia University
Thomas Wakefield, Youngstown State University

Friday, January 15 (cont'd)

4:30 p.m. - 5:45 p.m.: *Alternative Methods of Assessment*

Panel: Bonnie Gold, Monmouth University
Azita Manouchehri, The Ohio State University
John Meier, Lafayette College
Lee Stemkoski, Adelphi University

As faculty design courses to be responsive to student learning, what is the role of assessment? How can non-standard assessment strategies be used to enhance learning objectives? The panelists will share their ideas about the role of assessment. They will focus on how non-traditional strategies can be successfully employed to both encourage student learning and to gauge forms of learning that standard strategies fail to assess. There will be time reserved for questions and discussion.

Organizers (green09 dots - 2009-10 Project NExT Fellows):

Julie Beier, Mercer University
Rachelle R. Bouchat, Slippery Rock University
Brian Drake, Grand Valley State University
Jana Gevertz, The College of New Jersey

8:30 p.m. – 10:30 p.m.: *Project NExT Reception*

Atrium, San Francisco Marriott Marquis

(This event is open to everyone attending the meetings.)

Enjoy meeting Project NExT Fellows, Section NExT Fellows, consultants, and other friends of Project NExT. **In addition, Chris Stevens, Director Emerita of Project NExT, will be the guest of honor at this reception. Please come and thank Chris for sixteen years of dedication to Project NExT.** There will be complimentary desserts and a cash bar.

Saturday, January 16

8:00 a.m. – 9:15 a.m.: *Conducting Research with Undergraduates*

Panel: Helen Grundman, Bryn Mawr College
Judy Holdener, Kenyon College
Darren Narayan, Rochester Institute of Technology
Michael Orrison, Harvey Mudd College

Supervising undergraduate research comes with many challenges including: capturing the interest of undergraduates, finding a research project of the right level, keeping track of a student's progress, and providing guidance in the writing and presenting phase of the project. Panelists will discuss their experiences with these aspects of the research process and the resources (organizations, literature and people) they have found helpful along the way.

Organizers (green09 dots - 2009-10 Project NExT Fellows):

Sebastian Marotta, University of the Pacific
David Offner, Westminster College
Adriana Salerno, Bates College
Marie Snipes, Kenyon College

Saturday, January 16 (cont'd)

2:00 p.m. - 3:15 p.m.: *Organizing and Running an Effective Seminar/Capstone Course for Mathematics Majors*

(This session is open to everyone attending the meetings.)

Panel: Mariah Birgen, Wartburg College
Lipika Deka, California State University-Monterey Bay
Nezam Iraniparast, Western Kentucky University
Brian Miceli, Trinity University

Many universities have a capstone/seminar course or experience for their mathematics majors, designed to provide a community of mathematics majors with a meaningful experience beyond textbook mathematics. These experiences vary widely from institution to institution depending on student ability and department culture. Our panelists will describe their departments' courses and support mechanisms, thereby presenting us with a variety of perspectives and ideas on ways to structure a culminating experience.

Organizers (1994-2005 Project NExT Fellows):

Karolyne Fogel, California Lutheran University
Russell Goodman, Central College
Thomas Langley, Rose-Hulman Institute of Technology

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Project NExT (New Experiences in Teaching) is a professional development program for new or recent Ph.D.s in the mathematical sciences who are interested in improving the teaching and learning of undergraduate mathematics. It addresses the full range of faculty responsibilities in teaching, research, and service. Project NExT is a program of the Mathematical Association of America with major funding from the ExxonMobil Foundation and the Dolciani-Halloran Foundation, and additional funding from the Educational Advancement Foundation, the American Mathematical Society, the American Statistical Association, the National Council of Teachers of Mathematics, the American Institute of Mathematics, the Association for Symbolic Logic, the Association of Mathematics Teacher Educators, the Illinois Section of the MAA, the Maryland-DC-Virginia Section of the MAA, the Metro New York Section of the MAA, the Michigan Section of the MAA, the Southeastern Section of the MAA, Texas Instruments, The W. H. Freeman Publishing Company, John Wiley & Sons, and the Mathematical Association of America. More information about Project NExT can be found at <http://archives.math.utk.edu/projnext/>. The 2009-10 Fellows are the 16th group of Project NExT Fellows.

We thank green09 Project NExT Fellows Teena Carroll, St. Norbert College, and Ed Rehkopf, University of Southern Indiana, for coordinating the planning of the green09 (2009-10) Fellows' sessions, and green09 Project NExT Fellows Dante Manna, Virginia Wesleyan College, and Rebecca Schmitz, University of Minnesota, for organizing the staffing of the Project NExT booth. Thanks to gold dot (2000-01) Donna Flint, South Dakota State University, and sky dot (2003-04) Cameron Parker, for coordinating the planning of the sessions organized by the 1994-2005 Fellows.