

**The Project NExT Colloquium
at The Joint Mathematics Meetings
in Phoenix, Arizona
Tuesday, January 6 – Saturday, January 10, 2004**

Tuesday, January 6, 6:00 p.m. – 9:00 p.m.: Dinner with your Project NExT friends, Cowboy Artist Room, second floor, Hyatt Regency

Wednesday, January 7, noon – Saturday, January 10, noon: Project NExT Booth 412, part of the MAA exhibit area in Hall D, Phoenix Civic Plaza

Wednesday, January 7 – Saturday, January 10: Project NExT Session Room, Rooms 1-2, Phoenix Civic Plaza

Project NExT Program Schedule

UNLESS OTHERWISE NOTED, ALL EVENTS ARE IN ROOMS 1-2, PHOENIX CIVIC PLAZA.

Wednesday, January 7

9:30 a.m. - 10:45 a.m.: *Balancing Academic Demands (Teaching-Research-Service) and Balancing Academic with Non-Academic Demands*

Panel: Russell Goodman, Central College
Jean Larson, University of Florida
Heather Lewis, Nazareth College
Rosemary Renaut, Arizona State University

As new faculty in mathematics departments across the country, we are all facing competing demands on our time. Our professional lives involve some combination of teaching, research, and service. It is difficult enough learning how to juggle all three of these, let alone balancing these with life outside our work. Come hear from some mathematics department faculty who have advice to share with us concerning these issues!

Organizers (sky dots): Mary Ann Huntley, University of Delaware
Ellen Mir, Elon University

11:00 a.m. – 1:00 p.m.: *Mathematics Education Swap Session*

In this session participants will discuss issues related to the mathematics education of future teachers. Participants will be 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

Wednesday, January 7 (cont'd)

2:30 p.m. - 4:00 p.m.: *Writing Textbooks in Mathematics*

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

Panel: Lynn Cox, Houghton-Mifflin
J. Douglas Faires, Youngstown State University
William Hoffman, Addison-Wesley
Dan Kalman, American University

At some point or another, many of us have thought about writing a mathematics textbook. What does this involve? The panel, composed of experienced authors and acquisitions editors, will discuss various aspects of the textbook writing process, including reasons for writing a textbook, current market trends in textbooks at various levels, writing proposals for a textbook and the editorial process, what editors look for when evaluating a proposal, textbook writing and promotion and tenure issues, and some "nuts and bolts" details of producing a manuscript. There will be time for questions and answers from the audience. This session was organized by the 1994-99 Project NExT Fellows to address issues of concern to faculty who have four to ten years of teaching experience.

Organizer (red, green, blue, peach, silver, brown dots):
Revathi Narasimhan, Kean University

4:00 p.m. - 5:15 p.m.: *Projects and Activities in Upper Level Courses*

Panel: David Bressoud, Macalester College (Real Analysis)
Annalisa Crannell, Franklin & Marshall College (Abstract Algebra)
Kathleen Fowler, Clarkson University (Numerical Analysis)
Juan Gil, Penn State University, Altoona (Differential Geometry)
David Hartenstine, University of Utah (Writing Assignments)
Dan Kalman, American University (Advanced Calculus)

This session seeks to highlight projects and activities that have been successfully used in teaching a broad variety of upper-level courses in the undergraduate classroom.

Organizer (sky dots): Daniel Birmajer, Nazareth College

Thursday, January 8

9:00 a.m. - 10:30 a.m.: *Mentoring New Faculty*

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

Panel: Emily Ann Hynds, Samford University
Jim Lewis, University of Nebraska, Lincoln
Catherine M. Murphy, Purdue University Calumet
Thomas Q. Sibley, Saint John's University

Panelists will discuss formal and informal mentoring programs and practices for new faculty offered in their departments. What new faculty desire in the way of mentoring will also be addressed.

Organizers (Project NExT team): T. Christine Stevens, Saint Louis University
Joseph A. Gallian, University of Minnesota Duluth
Aparna W. Higgins, University of Dayton

Thursday, January 8 (cont'd)

10:45 a.m. – 12:05 p.m.: *Finding Your Next Job*

(This session is open to everyone attending the meetings.)
Room 42, Phoenix Civic Plaza

Panel: Leigh Lunsford, University of Alabama-Huntsville
Lyn Miller, Slippery Rock University
Holly Rosson, St. Mary's College of Maryland

Panelists will present strategies for conducting a search for a second job. Many angles will be covered, including postdoc to tenure-track, academic to industry, liberal arts college to research institution, and just one job to another.

Organizers (co-sponsored by the Young Mathematicians' Network):
Chawne M. Kimber, Lafayette College
David T. Kung, St. Mary's College of Maryland

1:00 p.m.- 2:30 p.m.: *Technology and the Mathematics Major*

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

Panel: Bernard W. Banks, California State Polytechnic University, Pomona
Robert J. Lopez, Rose-Hulman Institute of Technology and Waterloo
Maple

Olympia E. Nicodemi, State University of New York, Geneseo
Kathleen G. Snook, Consortium for Mathematics and its Applications

There has been much discussion in the mathematical community about changing the traditional mathematics major to reflect new technologies and changing emphases. These changes affect both the standard mathematics curriculum and the way that courses are taught. The panelists will offer their expertise and advice on how to wisely incorporate technology into the math major. The panelists are active mathematicians from academe and from organizations involved in mathematics education and research. This session was organized by the 1994-99 Project NExT Fellows to address issues of concern to faculty who have four to ten years of teaching experience.

Organizer (red, green, blue, peach, silver, brown dots):
Ioana Mihaila, California State Polytechnic University at Pomona

2:00 p.m.- 4:00 p.m.: *Project NExT and Young Mathematicians Network Poster Session*

(This session is open to everyone attending the meetings.)
Rooms 21-22, Phoenix Civic Plaza

The session will include exhibits from new or recent Ph.D.s in the mathematical sciences or from those still pursuing graduate study.

Organizers (co-sponsored with Young Mathematicians Network):
Kevin E. Charlwood, Washburn University
Kenneth A. Ross, University of Oregon

Thursday, January 8 (cont'd)

2:30 p.m. - 3:45 p.m.: *Being a Good Consumer of Mathematics Education Research*

Session Chair:

Annie Selden, Tennessee Technological University and New Mexico State University

Panel: April Hoffmeister, University of Memphis
Rapti de Silva, California State University, Chico
Natasha Speer, Michigan State University

Though mathematicians think logically when approaching their research, they tend to think anecdotally when approaching their teaching. The goal of this panel is to provide an antidote to the anecdote. In particular, the panelists will introduce some research-based results from mathematics education that are of practical use in the undergraduate-level mathematics classroom. Further, they will provide some starting points in the literature so that anyone interested can gain deeper knowledge.

Organizers (sky dots): Joshua Sabloff, Haverford College
Jonathan J. White, Coe College
Elizabeth Burroughs, Humboldt State University

4:25 p.m. - 6:30 p.m.: *Joint Prize Session and Reception*

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

Ballroom, Phoenix Civic Plaza

This year's recipient of the Gung Hu Award for Distinguished Service to Mathematics is someone who has been intimately involved with Project NExT since its inception.

Friday, January 9

9:00 a.m. - 10:30 a.m.: *Writing Expository Mathematics*

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

Panel: Lowell W. Beineke, Indiana University-Purdue University Fort Wayne
Ezra Brown, Virginia Tech
Frank A. Farris, Santa Clara University
Underwood Dudley, DePauw University
Keith J. Devlin, Stanford University

Are you interested in writing expository articles in mathematics? This panel, which includes experienced authors of expository articles and current or former editors of MAA or AMS publications, will provide advice about writing and publishing expository articles in mathematics. The panelists will discuss how to identify suitable topics, how to organize and write such articles, and how to choose a suitable journal. This session was organized by the 1994-99 Project NExT Fellows to address issues of concern to faculty who have four to ten years of teaching experience.

Organizers (red, green, blue, peach, silver, brown dots):

Jed Herman, University of Wisconsin at Stevens Point
Jennifer Hontz, Meredith College
George W. Moss, University of Virginia's College at Wise

Friday, January 9 (cont'd)

10:30 a.m. – noon: *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 providing the travel funds needed for the Fellows' participation in Project NExT. In addition to providing background information about Project NExT, this discussion between the directors 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): T. Christine Stevens, Saint Louis University
Aparna Higgins, University of Dayton

12:30 p.m. – 2:30 p.m.: *Grant-writing/ Getting Your Research Off to a Good Start*

Presenters: Lloyd Douglas, National Science Foundation

Joseph A. Gallian, University of Minnesota, Duluth

This is a shortened version of the Project NExT course offered to Fellows at the Mathfest. The grant-writing presentation will cover topics such as general mathematical proposal writing pitfalls to avoid, incorporation of students in mathematical sciences projects, and various grant opportunities at the National Science Foundation. Project NExT Fellows will also be able to discuss other issues that are of particular concern to them. The presentation on getting your research off to a good start will include advice on how to find research problems, write well, and give good talks. There will also be discussion on where to submit your work, and how to get your work known.

Organizers (Project NExT team): Aparna Higgins, University of Dayton
T. Christine Stevens, Saint Louis University

3:00 p.m. – 4:15 p.m.: *Fun, Fame, and Fortune: Advising Students on Mathematical Competitions*

Panel: Barry Balof, Whitman College

Michael Jones, Montclair State University

Vladimir Chernov, Dartmouth College

This panel discussion will give advice to new professors on how to advise their motivated (and not-so-motivated) undergraduate students on national mathematics competitions such as the Putnam Exam and the Mathematical Competition in Modeling. Panelists will discuss strategies for recruiting students, running practice sessions, keeping students interested in returning for future competitions, and how to ensure that your students get the most out of the competition.

Organizer (sky dots): Barry Balof, Whitman College

Friday, January 9 (cont'd)

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

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

Regency Ballroom C, first floor, Hyatt Regency

Enjoy meeting Project NExT Fellows, Section NExT Fellows, consultants, and other friends of Project NExT. There will be complimentary refreshments and a cash bar.

Saturday, January 10

9:00 a.m. - 10:15 a.m.: *Tips on Writing Textbooks*

Panel: Sheldon Axler, San Francisco State University

Edward Burger, Williams College

Joseph A. Gallian, University of Minnesota Duluth

Laurie Rosatone, John Wiley and Sons, Inc.

This panel discussion will feature three mathematics professors and one publisher who will share their stories about writing and publishing mathematics textbooks. They have experience writing books for both graduate students and undergraduates, for traditional courses and not-so-traditional courses, as well as editing and reviewing potential manuscripts.

Organizer (sky dots): Allison Pacelli, Williams College

10:30 a.m. – 11:45 a.m.: *The Publishing Process*

Panel: Bill Briggs, University of Colorado at Denver

Jeff Scroggs, North Carolina State University

Barbara Reynolds, Cardinal Stritch University

Luise-Charlotte Kappe, State University of New York, Binghamton

The panelists will discuss various aspects of publishing papers, such as: getting started on research, making time for writing papers, the publishing process, and the refereeing process (what happens after you submit the paper). The panelists will answer questions from the audience.

Organizer (sky dots): Kathleen Fowler, Clarkson University

We thank sky dots Reva Kasman, Grand Valley State University, Michael Scott, Kansas State University for coordinating the planning of the sky dot (2003-04 Fellows) sessions, and Darren Glass, Columbia University and Katherine Mawhinney, Appalachian State University for organizing the staffing of the Project NExT booth. Thanks to Michael Prophet, University of Northern Iowa, and Beth Schaubroeck, United States Air Force Academy for coordinating the planning of the sessions organized by the 1994-1999 Fellows.

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 additional funding from the Dolciani-Halloran Foundation, the American Mathematical Society, the Educational Advancement Foundation, the American Statistical Association, the National Council of Teachers of Mathematics, the Association for Symbolic Logic, the Association of Mathematics Teacher Educators, and the Greater MAA Fund.