

**The Project NExT Colloquium  
at The Joint Mathematics Meetings  
in Baltimore, Maryland  
Tuesday, January 14 - Saturday, January 18, 2003**

**Tuesday, January 14, 6:00 p.m. - 9:00 p.m.:** Dinner with your Project NExT friends, Annapolis/Baltimore Rooms, Hyatt Regency Hotel, second floor

**Wednesday, January 15, noon – Saturday, January 18, noon:** Project NExT Booth 412, part of the MAA exhibit in Exhibit Hall A, Baltimore Convention Center

**Wednesday, January 15 – Saturday, January 18:** Project NExT Session Room, Room 343 & 344, Baltimore Convention Center

**Project NExT Program Schedule**

**UNLESS OTHERWISE NOTED, ALL EVENTS ARE IN ROOM 343 & 344  
BALTIMORE CONVENTION CENTER.**

**Wednesday, January 15**

**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

**2:00 p.m. – 3:15 p.m.: *Maximizing Success for Students at Different Levels of Preparation***

Panel: David Ashe, University of Tennessee, Chattanooga  
Herbert E. Kasube, Bradley University  
Vicki Roth, University of Rochester  
Glen Van Brummelen, Bennington College

This panel discussion will focus on different ways of helping under prepared students succeed and on ways of running a successful class in which differences in student preparation exist.

Organizer: (forest dot) Chuck Rocca, Western Connecticut State University

**Wednesday, January 15 (cont'd)**

**3:30 p.m. – 5:00 p.m.: *Expanding Your Research Horizons***

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

Panel: John W. Emert, Ball State University

Rochelle Leibowitz, DIMACS

Neil Portnoy, California State University, Chico

Changing research agendas can be a daunting task. How do you enter into a new field of research? What strategies might be useful for learning about a new field? The panelists will offer their experience and expertise on how one might successfully change research agendas. These speakers include active mathematicians who are working in different research areas as well as a representative from Center for Discrete Mathematics and Theoretical Computer Science (DIMACS). This session was organized by the 1994-98 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 dots): Jennifer Hontz, Meredith College  
Philip K. Hotchkiss, Westfield State College.

**Thursday, January 16**

**8:30 a.m. – 10:00 a.m.: *Writing and Publishing Expository Articles about Mathematics***

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

Panel: Edward G. Dunne, American Mathematical Society

Deanna B. Haunsperger, Carleton College

Martha J. Siegel, Towson University

Francis E. Su, Harvey Mudd College

The panelists will provide advice about writing and publishing expository articles in mathematics. They will discuss how to identify suitable topics, how to organize and write such articles, and how to choose a suitable journal. The panelists include experienced authors of expository articles and current or former editors of publications of the Mathematical Association of America or the American Mathematical Society.

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 16 (cont'd)

**10:45 a.m. –12:05 p.m.: *Keeping the Platters Spinning: Effective Time Management***

(This session is open to all those attending the meetings.)

Room 316, Baltimore Convention Center

Panel: William Fenton, Bellarmine University  
Raymond Johnson, University of Maryland  
Cynthia Woodburn, Pittsburg State University

You've got papers to grade, three classes to prepare, the committee needs your feedback on the proposal, and you wanted to submit your new result to a journal. Meanwhile five students are knocking on your door for help. Sometimes it just seems like there are not enough hours in the day. This panel discussion will focus on ways to negotiate the maze of teaching, service, and research to become successful, competent, and sane. The session is co-sponsored by Project NExT and the Young Mathematicians' Network.

Organizers: Karrolyne Fogel, California Lutheran University  
J. Lyn Miller, Slippery Rock University

**1:00 p.m. – 2:30 p.m.: *How to Assess a Mathematics Program***

(This session is open to all those attending the meetings.)

Panel: Michael Button, The Master's College  
Bernard L. Madison, University of Arkansas  
William A. Marion, Jr., Valparaiso University  
William Martin, North Dakota State University  
Barbara M. Moskal, Colorado School of Mines.

Many universities/colleges and, thus, individual departments are faced with the prospect of implementing assessment plans to assess student learning and really do not know where to start. In the undergraduate mathematics community for the past ten years local, regional, and national efforts have been underway to assist faculty in developing assessment programs to assess student learning and to improve the undergraduate major (outcomes assessment). All the panelists have been involved with assessment at some level and will discuss a number of the ongoing initiatives, provide a few ideas as to what makes for a good assessment program, and describe some of their own experiences. This session was organized by the 1994-98 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 dots):

Mary D. Shepherd, Northwest Missouri State University

Thursday, January 16 (cont'd)

**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.)

Room 307, Baltimore Convention Center

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):

Kenneth A. Ross, University of Oregon

Kevin E. Charlwood, Washburn University

**2:45 p.m. – 4:00 p.m.: *Handling homework: Strategies for success***

Panel: Catherine M. Miller, University of Northern Iowa

John E. Sasser, Midway College

Douglas J. Shaw, University of Northern Iowa

Tamara B. Veenstra, University of Redlands

Much of the learning in mathematics courses occurs outside the classroom.

Faculty face many important decisions regarding the implementation of homework in their courses: What type of homework should be assigned? How much should be assigned? How should it be graded? What will be both effective for the student and manageable for faculty? Members of the panel will discuss their experiences, philosophy, and strategies in dealing with homework in service courses, calculus courses and proof courses. Group discussion will follow so that participants can knowledgeably inform their own decision process.

Organizers (forest dots): Suzanne M. Riehl, University of Northern Iowa

Dana P. Rowland, Merrimack College

**4:00 p.m. – 5:15 p.m.: *Getting Grounded and Staying Alive!***

Speaker: Francis (Skip) Fennell, McDaniel College, and President,  
Association of Mathematics Teacher Educators

Skip Fennell will discuss issues in surviving promotion decisions, strategies for scholarship development, and thoughts about the role of teaching mathematics and mathematics education courses.

Organizer (Project NExT Team):

Judith Covington, Louisiana State University, Shreveport

Friday, January 17

**9:00 a.m. – 10:15 a.m.: *Bridge Courses or Transition to Proof Courses***

Panel: Connie Campbell, Millsaps College  
Chris Goff, University of the Pacific  
Jeff Johannes, State University of New York-Geneseo  
Randall Maddox, Pepperdine University  
Tom Richmond, Western Kentucky University

One of the most important skills that math majors must learn is how to prove theorems. Yet, many traditional programs have assumed that students would pick up the necessary expertise throughout their coursework. Now, there is a move toward teaching students how to communicate mathematics in a specific “Transition to Proof” course. So, how do we help students make the transition from problem solving to conveying their methods? The panel will discuss successful and unsuccessful techniques that they have encountered.

Organizer (forest dot): Wayne Tarrant, Western Kentucky University

**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.

Organizer (Director of Project NExT):

T. Christine Stevens, Saint Louis University

**1:00 p.m. - 2:30 p.m.: *Undergraduate Seminars in Mathematics***

Panel: William P. Abrams, Longwood College  
Karen D. Bolinger, Clarion University  
Philip K. Hotchkiss, Westfield State College  
Daniel L. King, Sarah Lawrence College

This panel session will focus on issues that faculty face when teaching a mathematics seminar course for the first time and how faculty can use such a course to enhance their teaching skills and further their research. This includes the preparation and expectations that are involved in teaching such a course and the personal rewards and possible drawbacks. There will be a panel discussion during the first half of the session followed by small group discussions led by panelists during the second half. The session was organized by the 1994-98 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 dots):

Jed Herman, University of St. Thomas  
Hieu D. Nguyen, Rowan University

**Friday, January 17 (cont'd)**

**4.15 p.m. - 5.30 p.m.: *The Art of Exam Writing***

Panel: Della Fenster, University of Richmond

Sheldon Gordon, Farmingdale State University of New York

Michael Moody, Franklin W. Olin College of Engineering

How does one learn to write a good exam? There are many issues involved, ranging from learning how to best assess what your students have learned to learning how to minimize agony during grading. This session will involve a panel of experienced test writers, who will talk about their test writing strategies and present good/not so good exam questions. We will have time for an open discussion among the panelists and the audience. Our main focus will be on the design and evaluation of calculus exam problems. After the Joint Meetings, we hope to continue this discussion in a virtual format, alongside the development of an electronic database of exams and exam questions.

Organizers (forest dots): Marc Laforest, Colorado State University

Sarah Spence, Franklin W. Olin College of Engineering

John Vano, University of Wisconsin-Madison

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

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

Constellation Ballroom E/F, Hyatt Regency Baltimore

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 18**

**9:00 a.m. – 11:00 a.m.: *Grant-writing/ Getting Your Research Off to a Good Start***

Presenters: Lloyd Douglas, National Science Foundation

Joseph 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

Saturday, January 18 (cont'd)

**11:05 a.m.-12:20 p.m.: *Recruitment of Mathematics and Statistics Majors***

Panel: David C Carothers, James Madison University  
Mary Gray, American University  
Daniel Joseph, Randolph-Macon College  
James H. Stith, American Institute of Physics

Mathematics and statistics departments often struggle to keep their upper level courses running because of the size of these departments and the lack of interest in these courses. Therefore, recruitment of new majors becomes an important challenge. In facing this challenge, we need to answer questions like, how do we get students to major in mathematics and statistics? What kind of students should we recruit? How do we make more students become interested in these fields? Each speaker will give a presentation addressing these questions. A general discussion between speakers and audience will follow the four presentations.  
Organizer (forest dot) : Hasan Hamdan, James Madison University

**2:00 p.m. - 3.15 p.m.: *Effective strategies for new course development***

Panel: Dorothy Buck, Brown University  
Erica Flapan, Pomona College  
Michael Starbird, The University of Texas at Austin

Many of us have great ideas for a new course but no practical information on how to go about developing the content or successfully pitching it to the department and the students. Our three panelists have, collectively, developed a dozen new courses at small liberal arts colleges and major research universities. They will describe some of their successes (and non-successes!) and their insights into the course development process, followed by a question and answer session.

Organizers (forest dots): Dorothy Buck, Brown University  
Katherine Socha, Michigan State University

We thank forest dots Gregory Boudreaux, University of North Carolina at Asheville, and Pallavi Jayawant, University of Arizona, for coordinating the planning of the forest dot (2002-03 Fellows) sessions, and James Hamblin, Shippensburg University, and Timothy Hendrix, Meredith College, for organizing the staffing of the Project NExT booth. Thanks to George Ashline, St. Michael's College, Jennifer Beineke, Western New England College, and John Lorch, Ball State University, for coordinating the planning of the sessions organized by the 1994-98 Fellows.

Project NExT (New Experiences in Teaching) is a professional development program for new and recent Ph.D.s in the mathematical sciences who are interested in improving the teaching and learning of undergraduate mathematics. It addresses all aspects of an academic career: improving the teaching and learning of mathematics, engaging in research and scholarship, and participating in professional activities. Project NExT is a program of the Mathematical Association of America, with major funding from the ExxonMobil Foundation. Additional funding is provided by The Dolciani-Halloran Foundation, The American Mathematical Society, The Educational Advancement Foundation, the Association of Mathematics Teacher Educators, and the Greater MAA Fund.

