The Project NExT Colloquium
at The Joint Mathematics Meetings
in New Orleans, Louisiana
Thursday, January 4 – Monday, January 8, 2007

Thursday, January 4, 6:00 p.m. – 9:00 p.m.: Dinner with your Project NExT friends,
Waterbury Ballroom, second floor, Sheraton New Orleans

Friday, January 5, 12:15 p.m. – Monday, January 8, 1 p.m.: Project NExT Booth 803, part
of the MAA exhibit area in the Grand Ballroom, third floor, New Orleans Marriott

Friday, January 5 – Monday, January 8: Project NExT Session Room, Grand Ballroom D,
fifth floor, Sheraton New Orleans

Project NExT Program Schedule

UNLESS OTHERWISE NOTED, ALL EVENTS ARE IN GRAND BALLROOM D,
FIFTH FLOOR, SHERATON NEW ORLEANS.

Friday, January 5

8:30 a.m. - 10:00 a.m.: The AP Exams: How are they developed, how are they scored,
and how can you be involved?
Panel: Michael Boardman, Pacific University
Caren Diefenderfer, Hollins College
Roger Nelsen, Lewis & Clark College
Larry Riddle, Agnes Scott College

How do you develop an exam that over 250,000 advanced high school students take?
And, once the exam is developed, how is each student's response assessed? In this
session, the panelists, all of whom are AP Calculus Readers, will walk through the
development of a free-response calculus problem, from the initial idea to the final exam
question. They will also examine the development and application of a scoring rubric.
Similarities and differences in the scoring of AP Calculus and AP Statistics exams will be
discussed. They will also share ways you can take advantage of resources for AP courses
and how you can be involved in the program.
Organizer (Project NExT team):
T. Christine Stevens, Saint Louis University
Friday, January 5 (cont’d)

9:30 a.m. – 10:50 a.m.:  
**Keeping your Research Alive**  
Mardi Gras Ballroom E, 3rd floor, Marriott  
(This session is open to everyone attending the meetings.)

Panel: Jean Bee Chan, Sonoma State University  
Michael J. Dorff, Brigham Young University  
Asamoah Nkwanta, Morgan State University  

Aimed at new Ph.D.s and the young at mathematical heart, this panel will discuss approaches to maintaining an active research agenda in the midst of overwhelming teaching and service demands. Methods for getting undergraduates involved in research and reinvigorating a dormant research agenda will also be discussed.  
Organizers (co-sponsored with Young Mathematicians Network):  
Brian Birgen, Wartburg College  
James E. Hamblin, Shippensburg University  
William M. Higdon, University of Indianapolis

10:00 a.m. – noon:  
**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

2:15 p.m. – 4:15 p.m.:  
**Project NExT – Young Mathematicians Network Poster Session**  
Napoleon Ballroom A1-A3, 3rd floor, Sheraton  
(This session is open to everyone attending the meetings.)  
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):  
Michael Axtell, Wabash College  
Kevin E. Charlwood, Washburn University

3:00 p.m. – 5:00 p.m.:  
**Becoming a Leader in Your Department**  
(This session is open to everyone attending the meetings.)  
Panel: Stuart Boersma, Central Washington University  
Linda Braddy, East Central University  
Duff Campbell, Hendrix College  
Jill E. Guerra, University of Arkansas-Fort Smith  
Thomas C. Ratliff, Wheaton College, MA  
Judy L. Walker, University of Nebraska-Lincoln  

What does it take to become a leader in your department? This session includes panelists from a wide variety of backgrounds who will offer advice on the do's and don'ts of taking on leadership roles in a department. While many are chairs of their departments, other forms of leadership will be addressed as well. This session was organized by the 1994–2002 Project NExT Fellows to address issues of concern to faculty who have four to ten years of teaching experience.  
Organizers (1994-2002 Project NExT Fellows):  
Edwin P. Herman, University of Wisconsin, Stevens Point  
J. Lyn Miller, Slippery Rock University
Friday, January 5 (cont’d)

6:00 p.m. – 8:00 p.m.:  The Legacy of R. L. Moore Project – Educational Advancement Foundation Reception (in conjunction with Project NExT)

New Orleans Marriott Hotel Balconies Room L/M/N

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.

8:00 p.m. – 11:00 p.m.:  Party at Pat O’Brien’s

Briar's Suite, Pat O'Brien's Restaurant, 624 Bourbon Street

A reminder to those who have previously signed up and paid to attend this social.
Organizer:  Judith Covington, Louisiana State University Shreveport

Saturday, January 6

8:30 a.m. – 9:50 a.m.:  Getting your first book published

Mardi Gras Ballroom E, 3rd Floor, Marriott

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

Panel:  Thomas C. Hull, Merrimack College
Donald J. Albers, Books Editorial Director, Mathematical Association of America
Laura A. Taalman, James Madison University
Craig Bleyer, W. H. Freeman

The panel features authors and acquisitions editors who will discuss topics such as reasons for writing a book, current market trends in math books at various levels, writing proposals for a book, the editorial process, what editors look for when evaluating a proposal and promotion and tenure issues related to publishing a book. There will be ample time for questions from the audience.

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

10:00 a.m. – noon:  Applying for Research and Education Grants

Presenter:  Lloyd Douglas, National Science Foundation

This is a repeat of the Project NExT course offered to Fellows at 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.

Organizers (Project NExT team):
Aparna Higgins, University of Dayton
T. Christine Stevens, Saint Louis University
Saturday, January 6 (cont’d)

12:30 p.m. - 2:00 p.m.:  *Strategies for Making and Sustaining Research Collaborations as a Faculty Member in a Small Department*

Panel:  
Moira McDermott, Gustavus Adolphus College  
Matt Haines, Augsburg College  
Tom Sibley, St. John’s University  
Japheth Wood, Bard College

Maintaining an active program of research can be a difficult task. However, it can be even more daunting in a small department. Faculty members in small departments have less chance of sharing common research interests with their colleagues. In addition, smaller schools often have heavier teaching loads, leaving less time for research. Thus, making and sustaining research collaborations outside your department can be vital to developing and maintaining research projects. This panel discussion will focus on research strategies for faculty in small departments, including how to make and sustain such research collaborations.

Organizers (sepia dots – 2006-07 Project NExT Fellows):
Kristen Meyer, Wisconsin Lutheran College  
Richard Spindler, Bemidji State University

2:00 p.m. - 3:30 p.m.:  *Updating the Undergraduate Mathematics Major*

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

Panel:  
Laurette B. Foster, Prairie View A&M University  
David O. Lomen, University of Arizona  
James E. Ward, Bowdoin College  
Paul Zorn, St. Olaf College

"Changing Core Mathematics" (*MAA Notes* #61, 2002) addresses how the mathematical core should change over the ensuing five to ten years to adapt to the modern uses of mathematics within our society. The article suggests a closer cooperation with other disciplines, the incorporation of technology, the readjustment of goals and curriculum content, and instructional techniques that will be utilized. It is the goal of this panel to consider real-world applications of change within the mathematics major. As such, panelists from institutions that have recently reviewed and revised their mathematics major will briefly discuss their original and revised programs, and explain why they made their changes. This session was organized by the 1994–2002 Project NExT Fellows to address issues of concern to faculty who have four to ten years of teaching experience.

Organizers (1994-2002 Project NExT Fellows):
Timothy R. Ray, Southeast Missouri State University  
John W. Thompson, University of Pittsburgh, Johnstown
Saturday, January 6 (cont’d)

3:30 p.m. - 5:00 p.m.  
**Balancing Teaching, Research and Family**
Panel:  
Deanna Haunsperger, Carleton College  
Steve Kennedy, Carleton College  
Suzanne Lenhart, University of Tennessee  
Bill McCallum, University of Arizona  
Karen O’Hara, High Point University

Finding time to balance teaching, research and service can be challenging in the early years of an academic career. Responsibilities and desires for a satisfying home and family life away from work may seem, at times, nearly impossible! Our panelists are experienced mathematicians who have successfully navigated both professional and personal arenas. The panelists represent a range of institutions, professional experiences and familial obligations and will offer advice on personal and professional aspects of the early academic career. This panel discussion will include brief addresses by the panelists, and time for questions from the audience.

Organizers (sepia dots – 2006-07 Project NExT Fellows):
Cheryl Beaver, Western Oregon University  
Shannon Guerrero, Northern Arizona University  
Carla Martin, James Madison University  
Jon Rogness, University of Minnesota

4:25 p.m. – 5:25 p.m.:  
**Joint Prize Session**
Grand Ballroom A/B/C, 5th floor, Sheraton  
(This session is open to everyone attending the meetings.)

5:00 p.m. – 6:30 p.m.:  
**Mentoring graduate students**
Panel:  
Paul Eloe, University of Dayton  
Bill Goldman, University of Maryland  
Carolyn Gordon, Dartmouth College  
Suzanne Lenhart, University of Tennessee

This panel discussion will focus on advising graduate students, both at the Master’s and the Ph.D. level. Topics may include guiding students from coursework to research, finding good thesis topics, and helping your students find a job. The panelists, who represent a variety of academic institutions, will discuss challenges in graduate education and give advice based on their own experiences. We will then open the floor to questions.

Organizers (sepia dots – 2006-07 Project NExT Fellows):
Julie Bergner, Kansas State University  
Tara Holm, Cornell University & University of Connecticut  
Jeremy Martin, University of Kansas

5:25 p.m. – 6:25 p.m.:  
**Joint Prize Session Reception**
Grand Ballroom Foyer, 5th Floor, Sheraton  
(This session is open to everyone attending the meetings.)
Sunday, January 7
9:00 a.m. - 10:30 a.m.  
*Publishing Undergraduate Research and Expository Articles*

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

Panel: Ezra A. Brown, Virginia Polytechnic Institute and State University
Underwood Dudley, DePauw University
Clifford A. Reiter, Lafayette College
Jody Sorensen, Augsburg College

Panelists in this session will address the issues related to publication of articles that are expository in nature and articles that are the work of undergraduates. We hope to emphasize a discussion of viable journals and the mechanics of successfully writing these articles. This session was organized by the 1994–2002 Project NExT Fellows to address issues of concern to faculty who have four to ten years of teaching experience.

Organizers (1994-2002 Project NExT Fellows):
Chawne M. Kimber, Lafayette College
Joshua Laison, St. Olaf College
Kimberly A. Roth, Juniata College

10:30 a.m. - noon  
*Expanding One’s Research Horizons After Receiving the Ph.D. Degree*

Panel: Barbara Keyfitz, University of Houston and The Fields Institute
Jon McCammond, University of California at Santa Barbara
Robert Underwood, Auburn University at Montgomery
Sarah Witherspoon, Texas A&M University

This panel discussion will focus on developing one's research career after getting the doctoral degree. Panelists will present their personal experiences, share their insights on ways to develop collaborative relationships and find mentors, offer suggestions for moving into a new field of research, and discuss other topics of interest to freshly-minted Ph.D.s in mathematics looking to develop their own research agendas. Time will be available for questions from the audience.

Organizers (sepia dots – 2006-07 Project NExT Fellows):
Stephen Elliott, University of Tennessee at Martin
Gizem Karaali, Pomona College

1:00 p.m. - 2:30 p.m.  
*How can we discover what our students have learned?*

Panel: Brian Birgen, Wartburg College
Barbra Melendez, United States Military Academy
Arnie Pizer, University of Rochester
Tasha Williams, United States Military Academy

What options do we have to evaluate what students have learned besides the usual homework, quizzes, and tests? A wide variety of assessment techniques have been growing in popularity over the last decade or two. We present a panel whose members address the pros and cons of three of these techniques: using software programs like WeBWorK and WebAssign, using peer assessment such as peer grading of homework, and using group homework and activities.

Organizers (sepia dots – 2006-07 Project NExT Fellows):
Emily Dryden, Bucknell University
Cindy Farthing, University of Nebraska - Lincoln
Kathy Pinzon, University of Arkansas at Fort Smith
Michael Posner, Villanova University
Sunday, January 7 (cont’d)

2:30 p.m. – 4:00 p.m.:  **Presentations by Teaching Award Recipients**
La Galerie 2, 2nd Floor, Marriott
(This session is open to everyone attending the meetings.)
This session consists of presentations by Jennifer Quinn and Michael Starbird, two of the three recipients of this year's Haimo Award for Distinguished College or University Teaching. The third awardee is Gil Strang, who will not be at the meetings. All three of these Haimo award recipients have been presenters at Project NExT workshops.

8:30 p.m. – 10:30 p.m.:  **Project NExT Reception**
Grand Ballroom D, Sheraton (The Project NExT session room)
(This event is open to everyone attending the meetings.)
Enjoy meeting Project NExT Fellows, Section NExT Fellows, consultants, and other friends of Project NExT. There will be complimentary refreshments and a cash bar.

Monday, January 8

8:30 a.m. - 10:00 a.m.:  **Developing a New Course**
Panel: Carl Cowen, Indiana University - Purdue University Indianapolis
    Glenn Ledder, University of Nebraska – Lincoln
    Carol Schumacher, Kenyon College
    Paul Zorn, St. Olaf College
Developing a new course can be an overwhelming task, especially for new faculty. The panelists will focus on issues such as choosing a textbook, deciding on the extent of material to cover, creating homework or projects for the course, incorporating history to help motivate the material, and determining an appropriate level at which to teach the material. The panelists will also discuss developing interdisciplinary courses and courses for non-majors.
Organizers (sepia dots – 2006-07 Project NExT Fellows):
    Jessie Lenarz, Concordia College, MN
    Taliesin Sutton, University of Arizona

10:00 a.m. - 11:30 a.m.:  **Creating and Sustaining Active Math Clubs**
Panel: Donna Beers, Simmons College and Visiting Mathematician at the MAA
    Stephen DeBacker, University of Michigan
    Jeff Haag, Humboldt State University
    Thomas Hill, Lafayette College
There are many ways in which a club may be successful depending on the needs of the students. The panelists, who are all advisors of math clubs, will speak about what has been successful at their institutions. They will focus on issues such as effective advertising of the club and popular activities that clubs can engage in. They will discuss the amount of planning needed for various activities, and obtaining funds. We also hope to engage the audience in an exchange of ideas. Handouts with lists of resources will be provided.
Organizers (sepia dots – 2006-07 Project NExT Fellows):
    Erich McAlister, Fort Lewis College
    Lee Stemkoski, Adelphi University
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 Institute of Mathematics, the American Statistical Association, the National Council of Teachers of Mathematics, Texas Instruments, the Association of Mathematics Teacher Educators, the Association for Symbolic Logic, Maplesoft, the W. H. Freeman Publishing Company, the Maryland-DC-Virginia Section of the MAA, the Metro New York Section of the MAA and the Greater MAA Fund. More information about Project NExT can be found at http://archives.math.utk.edu/projnext/.

We thank sepia dots Troy Banks, Salisbury University, and Jessie Lenarz, Concordia College, for coordinating the planning of the sepia dot (2006-07 Fellows) sessions, and Ryan Gantner, St. John Fisher College, and Zach Teitler, Southeastern Louisiana University, for organizing the staffing of the Project NExT booth. Thanks to silver dot (1998-99) Carolyn Yackel, Mercer University, and gold dot (2000-01) Christopher Goff, University of the Pacific, for coordinating the planning of the sessions organized by the 1994-2002 Fellows.