PROJECT NExT

NEW EXPERIENCES IN TEACHING

2004-2005 FELLOWS, PROVIDENCE, RI

A program of

THE MATHEMATICAL ASSOCIATION OF AMERICA

Project NExT: New Jobs, New Responsibilities, New Ideas
Program for the Workshop in Providence, Rhode Island
August 9 - 11, 2004

The Project NExT registration area is in the lobby of Barus & Holley on the Brown University campus. All sessions, unless otherwise noted, are in Barus & Holley (B&H).

MONDAY, AUGUST 9

11 am - 1:15 pm Arrival and registration

1:30 - 1:45 pm Welcome and opening remarks
T. Christine Stevens, Saint Louis University and Director of Project NExT
B&H 166

2:00 - 2:45 pm Small group discussions – See information for assignments
Group A: B&H 157   **Group E: B&H 161**
Group B: B&H 158   **Group F: B&H 163**
Group C: B&H 159   **Group G: B&H 165**
Group D: B&H 160

2:55 - 3:45 pm *The Freedom of Choice*
Janet Andersen, Hope College
B&H 166

3:50 - 4:20 pm BREAK
B&H Lobby

4:30 - 5:15 pm Small group discussions [Same room assignments by group as above, but your group assignment may have changed.]
Group A: B&H 157   **Group E: B&H 161**
Group B: B&H 158   **Group F: B&H 163**
Group C: B&H 159   **Group G: B&H 165**
Group D: B&H 160

5:30 - 7:00 pm DINNER
Verney-Wolley Dining Hall

7:30 - 9:00 pm *Conversation with the Leadership*
Carl Cowen, Indiana University Purdue University, Indianapolis
     President-elect, The Mathematical Association of America
John Ewing, Executive Director, American Mathematical Society
Martha Siegel, Towson University
     Secretary, The Mathematical Association of America
Gilbert Strang, Massachusetts Institute of Technology
     Former President, Society for Industrial and Applied Mathematics
B&H 166

TUESDAY, AUGUST 10

7:15 - 8:15 am BREAKFAST
B&H Lobby

8:30 - 9:45 am *Selected topics in teaching undergraduate mathematics I*
Five simultaneous sessions – See information for assignments.
Getting Your Students to Read Their Calculus Text – Thomas Ratliff,
Wheaton College, MA, **B&H 165**
Adding the Words: Using Writing to Teach Mathematics -- John Meier,
Lafayette College, **B&H 163**
Discrete Math, Arthur Benjamin, Harvey Mudd College, **B&H 161**
*Group Projects in Upper Division Courses such as Abstract Algebra and Real
Analysis* – Cheryl Chute-Miller, State University of New York, Potsdam,
B&H 160
So You're an Advisor -- Now What? – Sandra Paur, North Carolina State
University, Raleigh, **B&H 159**

9:55 - 10:25 am BREAK
B&H Lobby

10:25 - 11:40 am Panel: *Using class time well*
sarah-marie belcastro, Xavier University, Ohio
Thomas Garrity, Williams College
Richard Jardine, Keene State College
B&H 166

11:45 am - 1:00 pm LUNCH
B&H Lobby

1:15 - 2:30 pm Repeat of morning breakout sessions – See information for assignments.

2:40 - 3:40 pm *A Mathematician's Role in the Mathematical Education of Teachers*
W. James Lewis, University of Nebraska, Lincoln
B&H 166

3:40 - 4:10 pm BREAK
B&H Lobby

4:10 - 5:25 pm *Panel: The faculty member as teacher and scholar*
David Carothers, James Madison University
Megan Kerr, Wellesley College
Bozenna Pasik-Duncan, University of Kansas
Brian Winkel, United States Military Academy
B&H 166

5:30 - 7:00 pm DINNER
Verney-Wooley Dining Hall

8:00 - 10:00 pm Social Event for all Project NExT Fellows and invited guests
Vartan Gregorian Quadrangle

WEDNESDAY, AUGUST 11

7:00 - 8:00 am BREAKFAST
B&H Lobby

8:15 - 9:30 am *Selected topics in teaching undergraduate mathematics II*
Five simultaneous sessions – See information for assignments.
Alternative Approaches to Geometry – Colm Mulcahy, Spelman College, **B&H 165**
The Pleasure of Teaching Linear Algebra – Gilbert Strang, Massachusetts Institute of Technology, **B&H 163**
Teaching Students to Write Proofs – Carol Schumacher, Kenyon College, **B&H 160**
Effectively Using Applied Writing Projects in Calculus – P. Gavin LaRose, University of Michigan, **B&H 159**
High- and Low-Tech in the ODE Course – Michael Moody, Olin College, **B&H 157**

9:35 - 10:05 am BREAK
B&H Lobby

10:10 - 11:25 am Panel: *Finding out what your students have learned*
Thomas Banchoff, Brown University
Olympia Nicodemi, State University of New York, Geneseo
Catherine Roberts, College of the Holy Cross
B&H 166

11:25 - 11:40 am Planning session for January Meetings in Atlanta
B&H 166

11:45 - 12:30 pm Small group discussions with other Project NExT Fellows. [Please select the session that best describes your research interests.]
Analysis – **B&H 153**
Combinatorics, graph theory, discrete mathematics – **B&H 155**
Applied mathematics, operations research– **B&H 157**
Geometry, topology, set theory, logic – **B&H 158**
Mathematics education – **B&H 159**
Probability/Statistics – **B&H 160**
Algebra/Number theory – **B&H 161**
Differential equations and dynamical systems – **B&H 163**

12:30 - 1:45 pm LUNCH
B&H Lobby

2:00 - 3:15 pm Repeat of morning breakout sessions – See information for assignments.

3:15 - 3:50 pm BREAK
MacMillan Lobby

WEDNESDAY, AUGUST 11 (cont'd)

3:55 - 5:45 pm   Closing Session
Recognition of 2003-04 Fellows
Presentation: *Finding Your Niche in the Profession*
Joseph Gallian, University of Minnesota, Duluth
MacMillan 117

7:30 – 9:30 pm   Mathfest Opening Banquet
Master of Ceremonies: Annalisa Crannell, Franklin & Marshall College
Presentation: *Captivating Stories for Mathematics Students*
Dan Kalman, American University

THURSDAY, AUGUST 12 and FRIDAY, AUGUST 13

Project NExT Courses During the Mathfest: Four-hour courses meeting on Thursday and Friday, August 12 and 13, in the Rhode Island Convention Center (RICC). (Courses A, B, and C meet at 1:00 – 3:00 p.m. on both days; Courses D and E meet at 3:15 – 5: 15 p.m. on both days.)
A. *Math Modeling in the Curriculum* – Catherine Roberts, College of the Holy Cross, **1:00 - 3:00 p.m., RICC 554A.**
B. *Preparing to Teach Mathematics for Prospective Teachers* – Judith Covington, Louisiana State University, Shreveport, **1:00 - 3:00 p.m., RICC 553A.**
C. *Introductory Statistics* – Jeff Witmer, Oberlin College, **1:00 - 3:00 p.m., RICC 553B.**
D. *Getting Your Research off to a Good Start/ Proposal Preparation for Projects in Undergraduate Mathematical Sciences*-- Joseph Gallian, University of Minnesota, Duluth, and Calvin Williams, National Science Foundation, **3:15 - 5:15 p.m., RICC 553 A, 553B.**
E. *Undergraduate Research -- How to Make It Work* -- Aparna Higgins, University of Dayton, **3:15 - 5:15 p.m., RICC 554A.**

SATURDAY, AUGUST 14, afternoon

Project NExT Fellows are invited to attend two sessions sponsored by Texas Instruments on using hand-held calculators to enhance the teaching of mathematics. One session will deal with teaching mathematics below the level of calculus, and the other will deal with calculus and differential equations. The presenter is Edward Connors of the University of Massachusetts, Amherst. The details about times and location are in a flyer in your Project NExT registration folder.

7/7/04