PROJECT NExT

NEW EXPERIENCES IN TEACHING

2010-2011 FELLOWS

Workshop held in Pittsburgh, PA August 2 – 4, 2010

A program of

THE MATHEMATICAL ASSOCIATION OF AMERICA

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Project NExT: New Jobs, New Responsibilities, New Ideas Program for the Workshop in Pittsburgh, Pennsylvania August 2 - 4, 2010

Location: Second Floor of the Marriott Pittsburgh City Center

MONDAY, AUGUST 2

11 am - 1:15 pm Arrival and registration – Grand	Foyer
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1:30 - 1:45 pm	Welcome and opening remarks – Salons 2-3 Grand Ballroom Aparna Higgins, University of Dayton and Director of Project NExT	
2:00 - 2:45 pm	Small group discussions – See informa Group A: A City Center Group B: Marquis A Ballroom Group C: Marquis B Ballroom Group D: Marquis C Ballroom	ation for assignments. Group E: Salon 1 Grand Ballroom Group F: Salon 4 Grand Ballroom Group G: Salon 5 Grand Ballroom Group H: Salon 6 Grand Ballroom

- **2:55 3:45 pm** *Transitions* **Salons 2-3 Grand Ballroom** David Bressoud, Macalester College
- 3:50 4:20 pm BREAK Grand Foyer

4:30 - 5:15 pmSmall group discussions [Same room assignments by group above, but your
group assignment may have changed – see information.]4:30 - 5:15 pmSmall group discussions [Same room assignments by group above, but your
group A: A City Center
Group B: Marquis A Ballroom
Group C: Marquis B Ballroom
Group D: Marquis C BallroomGroup above, but your
Group E: Salon 1 Grand Ballroom
Group G: Salon 5 Grand Ballroom
Group H: Salon 6 Grand Ballroom

- 5:30 7:00 pm DINNER Grand Foyer
- 7:30 8:45 pm Joining the Mathematical Community Salons 2-3 Grand Ballroom Douglas Ensley, Shippensburg University Sarah Greenwald, Appalachian State University Chawne Kimber, Lafayette College Jonathan Rubin, University of Pittsburgh
- 9:00 p.m. ? INFORMAL SOCIALIZING

TUESDAY, AUGUST 3

7:00 - 8:15 am BREAKFAST – Grand Foyer

8:30 - 9:45 am Selected topics in teaching undergraduate mathematics I [Five simultaneous sessions – See information for assignments.]

- A. Teaching Undergraduate Geometry Satisfying Course Goals While Increasing Student (and Teacher) Enjoyment – Sarah Greenwald, Appalachian State University, A City Center
- B. Effectively Using Applied Writing Projects in Undergraduate Mathematics Courses – Gavin LaRose, University of Michigan, Marquis A Ballroom
- C. Advising Mathematics Students Academically and Professionally James Sellers, Pennsylvania State University, Marquis B Ballroom
- D. Functioning in Calculus: Combining Algebra, Precalculus, and Calculus for underprepared college students Laura Taalman, James Madison University, Salon 4 Grand Ballroom
- E. What is Inquiry-Based Learning, and Why Should You Use It? Stan Yoshinobu, California Polytechnic State University, San Luis Obispo, Salon 5 Grand Ballroom
- 9:55 10:25 am BREAK Grand Foyer
- 10:25 11:40 a.m. Panel: *Deciding how to teach* Salons 2-3 Grand Ballroom Jim Cottrill, Ohio Dominican University Kay Somers, Moravian College John Travis, Mississippi College
- 11:45 am 1:10 pm LUNCH Grand Foyer
- **1:15 2:30 pm** Repeat of morning breakout sessions See information for assignments.
- **2:40 3:40 pm** What is the definition of definition? and other mathematical cultural conundrums – Salons 2-3 Grand Ballroom Carol Schumacher, Kenyon College
- 3:40 4:10 pm BREAK Grand Foyer
- 4:10 5:25 pm Panel: *The faculty member as teacher and scholar* Salons 2-3 Grand Ballroom Rebecca Goldin, George Mason University John Holcomb, Cleveland State University Stacey Levine, Duquesne University Stephen Maurer, Swarthmore College
- 5:30 7:00 pm DINNER Grand Foyer
- 8:00 10:00 pm Social Event for 2009-10 and 2010-2011 Project NExT Fellows and presenters Marquis C Ballroom
- **10:00 pm ?** INFORMAL SOCIALIZING

WEDNESDAY, AUGUST 4

7:00 - 8:30 am BREAKFAST – Grand Foyer

8:30 - 9:35 am Informal discussions on topics proposed by the 2010-2011 Fellows Marquis A Ballroom, Salon 5 Grand Ballroom, Salon 6 Grand Ballroom, Salons 2-4 Grand Ballroom

9:35 - 10:05 am BREAK - Grand Foyer

10:10 - 11:25 am Selected topics in teaching undergraduate mathematics II [Five simultaneous sessions – See information for assignments.]

- A. Using Visualization Software in Abstract Algebra Brad Emmons, Utica College, Marquis A Ballroom
- B. *Making Bio-Math Connections Across the Curriculum* Laurie Heyer, Davidson College, **Marquis B Ballroom**
- C. Closer to Fair: Social Justice in Mathematics Mathematics for Social Justice – David Kung, St. Mary's College of Maryland, Salon 1 Grand Ballroom
- D. *Writing Across the Mathematics Curriculum* Cynthia Woodburn, Pittsburg State University, **Salon 5 Grand Ballroom**
- E. *Engaging Students with Classroom Voting* Holly Zullo, Carroll College, MT, **Salon 6 Grand Ballroom**

11:30 am - 12:15 pm Small Group Discussions with other Project NExT Fellows

[This session is organized by research area. Please attend the group that best matches your current research interests.]

Group A: Algebra, Group Theory – Marquis C Ballroom

- Group B: Analysis Marquis A Ballroom
- Group C: Applied Mathematics, Mathematical Biology, Operations
- Research Marquis B Ballroom

Group D: Combinatorics, Graph Theory, Discrete Mathematics – Salon 5 Grand Ballroom

- Group E: Differential Equations, Dynamical Systems A City Center
- Group F: Geometry, Algebraic Geometry Salon 6 Grand Ballroom
- Group G: Linear Algebra, Number Theory B City Center

Group H: Mathematics Education, History of Mathematics – Salon 1 Grand Ballroom

Group I: Probability, Statistics – **Pittsburgh Room** (10th floor) Group J: Topology, Set Theory, Logic – **The Three Rivers Conference Center** (1st floor)

12:15 - 1:30 pm LUNCH – Grand Foyer

1:35 - 2:50 pm Repeat of morning breakout sessions – See information for assignments.

(Wednesday continued on next page)

WEDNESDAY, AUGUST 4 (continued)

2:55 - 3:25 pm	Planning session for January Meetings in New Orleans, LA – Salons 2-4 Grand Ballroom
3:25 - 3:55 pm	BREAK – Grand Foyer
3:55 - 5:25 pm	Closing Session – Salons 2-4 Grand Ballroom Recognition of 2009-10 Fellows Presentation: <i>Finding Your Niche in the Profession</i> Joseph Gallian, University of Minnesota Duluth
6:00 – 7:30 pm	Mathfest Opening Reception (cash bar) – William Penn Ballroom/ Sternwheeler/ Riverboat, Omni William Penn Hotel
7:30 - 9:30 pm	Mathfest Opening Banquet – Grand Ballroom, Omni William Penn Hotel
9:30 pm - ?	INFORMAL SOCIALIZING

THURSDAY AND FRIDAY, AUGUST 5 AND 6

Project NExT Courses During the Mathfest: Four-hour courses meeting in the **Omni William Penn Hotel** on Thursday and Friday, August 5 and 6. [See information for assignments. Please attend only the course to which you are assigned.]

- A. Low Tech Visualization Techniques for Undergraduate Mathematics Classes Julia Barnes, Western Carolina University, 1:00 - 3:00 pm, Lawrence Welk Room, Omni Hotel
- B. *Math Courses for Future Elementary and Middle School Teachers* Maria Fung, Worcester State College, 1:00 3:00 pm, **Shadyside Room, Omni Hotel**
- C. Undergraduate Research How to Make It Work Aparna Higgins, University of Dayton, 1:00 3:00 pm, Oakmont Room, Omni Hotel
- D. What? You Want Me To Teach the Intro Stat Course? Robin Lock, St. Lawrence University, 3:15 5:15 pm, Lawrence Welk Room, Omni Hotel
- E1. Applying for Grants from the National Science Foundation/Getting Your Research Off to a Good Start Dean Evasius, National Science Foundation, and Joseph Gallian, University of Minnesota Duluth, 3:15 5:15 pm, Oakmont Room, Omni Hotel Thursday, Dean Evasius (on grants), and Friday, Joe Gallian (on research)
- E2. Applying for Grants from the National Science Foundation/Getting Your Research Off to a Good Start Dean Evasius, National Science Foundation, and Joseph Gallian, University of Minnesota Duluth, 3:15 5:15 pm, **Shadyside Room, Omni Hotel** Thursday, Joe Gallian (on research), and Friday, Dean Evasius (on grants)

Project NExT (New Experiences in Teaching) is a professional development program of the Mathematical Association of America 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.