

PROJECT NExT

NEW EXPERIENCES IN TEACHING

2008-2009 FELLOWS

**Workshop held in Portland, OR
August 4 – 5, 2009**

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 Portland, Oregon
August 2009**

The Project NExT registration area is in the Ballroom Lobby on Lower Level 1 in the Portland Marriott Downtown Waterfront hotel.

TUESDAY, AUGUST 4

8:00 - 10:00 pm Social Event for 2008-09 and 2009-2010 Project NExT Fellows and presenters – **Salon F**

10:00 pm - ? INFORMAL SOCIALIZING

WEDNESDAY, AUGUST 5

8:15 - 9:30 am **TWO** concurrent sessions

A. *Recruiting Math Majors*

Columbia

Panelists: Michael Dorff, Brigham Young University
Dave Kung, St. Mary's College of Maryland
Maura Mast, Association for Women in Mathematics and
University of Massachusetts Boston
George Yates, Youngstown State University

In order to promote mathematics, we need to introduce the subject to as many capable incoming students as possible. Often talented students who could do well studying mathematics may not consider mathematics as a major. What can we do to encourage these bright students that a degree in mathematics is impressive? The panelists come from colleges and universities with a strong track record of recruiting mathematics majors. The goal of this session is to give the Fellows an idea of what works in varying situations, and perhaps what doesn't work. This session will provide advice for everyone looking to bring in mathematics majors both to share the beauty of mathematics and to keep our departments thriving.

Organizers: Spencer Hamblen, McDaniel College
Ryan Mullen, Sacred Heart University
Rommel Regis, Saint Joseph's University
Aaron Wangberg, Winona State University

WEDNESDAY, AUGUST 5

8:15 - 9:30 am

**B. *What Math Faculty Should Know about Mathematics Education*
Salon D**

Panelists: Sean Larsen, Portland State University
Michael Oehrtman, Arizona State University
Chris Rasmussen, San Diego State University

In this session we will discuss how the current research on undergraduate mathematics education informs us about our own teaching practices. The panel, made up of experienced researchers in undergraduate math education, will address ways in which we can improve instruction at the precalculus/calculus level and the transition to higher levels of mathematics. The panel will also suggest ways of improving general classroom discourse and norms.

Organizers: Nicole Engelke, California State University, Fullerton
Pari Ford, University of Nebraska at Kearney
Corey Hoelscher, Rutgers University
Madeleine Jetter, California State University,
San Bernardino

9:35 - 10:05 am

BREAK – Salon F

10:10 - 11:25 am

TWO concurrent sessions

A. *Putting Together Pre-Tenure Review Materials*

Panelists: Donna Beers, Simmons College
Barbara Faires, Westminster College
Tim Garner, Franklin College
David Manderscheid, University of Nebraska-Lincoln

This panel will address how beginning faculty can best prepare materials for pre-tenure (generally 2nd- or 3rd-year) reviews. Specifically, how should faculty document their accomplishments and evolution in teaching, research, and service? How should they select which documents to include in their files? What kind of materials do administrators and evaluation committees most prefer to see? What are common mistakes and omissions? How relevant should these materials be to the eventual tenure review? Is it appropriate to ask colleagues for help in assembling materials?

Organizers: Kayla Dwelle, Ouachita Baptist University
Mike Gagliardo, Jacksonville University
Justin Gash, Franklin College
Rafe Jones, College of the Holy Cross

WEDNESDAY, AUGUST 5

10:10 - 11:25 am

B. *Outreach Programs to Local Schools, Teachers, and Students*

Salon D

Panelists: Melissa Desjarlais, Valparaiso University
Lisa Marano, West Chester University
Amanda Serenevy, Riverbend Community Math Center

As college professors, it is easy for us to forget that the mathematical community extends beyond colleges, universities and industry. In fact, mathematical communities thrive in primary and secondary schools across the country. Working with teachers and students in grades K-12 can be an enriching experience not only for the teachers and students but also for the professors involved. The primary questions we aim to answer in this panel are: "What opportunities are there for outreach to local schools?", "How do I get involved?" and "What are the benefits of being involved in outreach?" As a corollary, we will discuss how outreach to local schools can be incorporated into service learning projects. Our panelists will share information about their personal experiences to provide a foundation for answering these questions. We encourage further questions and the sharing of experiences and discussion on this and related topics.

Organizers: Molly Fenn, North Carolina State University
Jennifer Gorman, Kutztown University
Allison Henrich, Seattle University
Daniel Maxin, Valparaiso University

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

[This session is organized geographically. Please attend the group that includes the MAA Section – states/provinces indicated in parentheses – where your institution for Fall 2009 is located. See page 6 of this program for room assignments.]

12:15 - 1:30 pm LUNCH – **Salon F**

1:35 - 2:50 pm **TWO** concurrent sessions

A. *Reflecting on Our Own Teaching*

Columbia

Panelists: Jeff Johannes, State University of New York at Geneseo
Jennifer Quinn, University of Washington Tacoma
Ami Radunskaya, Pomona College
Michael Starbird, University of Texas at Austin

Today's mathematics faculty are challenged to "teach well" as a matter of practice, whether or not our reviewers are watching. Formal reflections, comparative surveys, and class visits are some methods instructors use to assess and improve their own teaching. It is sometimes difficult to decide when to reveal weaknesses in hopes of receiving constructive advice, and when to "put your best foot forward" for promotional viewing. In this session, a panel of mathematics faculty with diverse teaching backgrounds will share their experiences and ideas on this topic.

Organizers: Patrick Rault, State University of New York at Geneseo
Amanda Riehl, University of Wisconsin - Eau Claire
Robert Rovetti, Loyola Marymount University
Tiffany Troutman, Bradley University

WEDNESDAY, AUGUST 5

1:35 - 2:50 pm

B. *How to Establish Successful Research Experiences for Undergraduates (REU) in the Summer or Academic Year*
Salon D

Panelists: Michael Dorff, Brigham Young University
Gary Gordon, Lafayette College
Kathryn Leonard, California State University,
Channel Islands
David Strong, Pepperdine University

Active participation by undergraduate students in various areas of research has proven to be extremely beneficial to students. How do faculty members build an environment that provides mathematical stimuli, promotes interdisciplinary collaborations, produces scholarly activities, and prolongs positive lasting effects for participants? In this session, a panel of mathematics faculty will share their personal experiences in the challenges they faced as well as the successes they had when setting up rewarding REU programs.

Organizers: Jen-Mei Chang, California State University,
Long Beach
Jer-Chin (Luke) Chuang, Duke University
Sara Crawford, Valparaiso University
Tim Lucas, Pepperdine University

3:05 - 3:55 pm

BREAK – Salon F

3:55 - 5:25 pm

Closing Session
Recognition of 2008-09 Fellows
Presentation: *Finding Your Niche in the Profession*
Joseph Gallian, University of Minnesota Duluth
Salon I

6:00 – 7:30 pm

Mathfest Opening Reception (cash bar)
Exhibit Hall, Lower Level 2

7:30 - 9:30 pm

Mathfest Opening Banquet
Oregon Ballroom, Ballroom Level

9:30 pm - ?

INFORMAL SOCIALIZING

THURSDAY AND FRIDAY, AUGUST 6 AND 7

Project NExT Courses During the Mathfest: Four-hour courses meeting in the Portland Marriott Downtown Waterfront on Thursday and Friday, August 6 and 7.

[See information for assignments. Please attend only the course to which you are assigned – the rooms are filled to capacity.]

- A. *Teaching a Math Content Course for Future K-8 Teachers* – Judith Covington, Louisiana State University Shreveport 1:00 - 3:00 p.m., **Sunstone**
- B. *Hand-held Technology in the Mathematics Classroom* – Joseph Fiedler, California State University Bakersfield, 1:00 - 3:00 p.m., **Eugene**
- C. *Undergraduate Research – How to Make It Work* – Aparna Higgins, University of Dayton, 1:00 - 3:00 p.m., **Douglas Fir/Meadowlark (combined)**
- D. *Teaching Statistical Concepts with Activities, Data, and Technology* – Allan Rossman and Beth Chance, California Polytechnic State University, San Luis Obispo, 3:15 - 5:15 p.m., **Eugene**
- E1. *Applying for Grants from the National Science Foundation/Getting Your Research Off to a Good Start*, 3:15 - 5:15 p.m., **Sunstone**
Thursday, Dean Evasius (on grants), and Friday, Joseph Gallian (on research)
- E2. *Applying for Grants from the National Science Foundation/Getting Your Research Off to a Good Start*, 3:15 - 5:15 p.m., **Douglas Fir/Meadowlark (combined)**
Thursday, Joseph Gallian (on research), and Friday, Dean Evasius (on grants)

WEDNESDAY, AUGUST 5

11:30 a.m. – 12:15 p.m.

GEOGRAPHICAL BREAKOUT ROOM ASSIGNMENTS

(organized by MAA Sections with corresponding states listed in parentheses)

Group A meets in Columbia

Northern California/Nevada/Hawaii and Southern California/Nevada (CA, HI, NV)
Pacific Northwest (AB, AK, BC, ID zips 83300-83399 and 83600-83899,
MT except zips 59715-59717, OR, WA)

Group B meets in Salem

Intermountain (ID zips 83200-83299 and 83400-83599, UT)
Rocky Mountain (CO, SD zips 57700-57799, MT zips 59715-57717, WY)
Southwestern (AZ, NM)

Group C meets in Medford

Iowa (IA)
Nebraska/Southeast South Dakota (NE, SD zips 57014-57099)
North Central (MB, MN, ND, SD zips 57000-57013 and 57100-57699)

Group D meets in Douglas Fir

Arkansas/Oklahoma (AR, OK)
Kansas (KS)
Louisiana/Mississippi (LA, MS)
Missouri (MO)
Texas (TX)

Group E meets in Salon B

Illinois (IL)
Wisconsin (WI)

Group F meets in Salon D

Indiana (IN)
Kentucky (KY)
Michigan (MI)
Ohio (OH, WV zips 25500-25799)

Group G meets in Eugene

Southeastern (AL, GA, NC, SC, TN)
Florida (FL, PR, VI)

Group H meets in Salon G

Allegheny Mountain (PA zips 15000-16899, WV zips 24700-25499 and 25800-26899)
EPaDel (DE, PA zips 16900-19699)
Seaway (NY zips 12000-12399 and 12800-14999, ON, QC)

Group I meets in Portland

Maryland/DC/Virginia (DC, MD, VA)

Group J meets in Salon A

Metro New York (NY zips 10000-11999 and 12400-12799)
New Jersey (NJ)
Northeastern (CT, MA, ME, NL, NH, NS, RI, VT)