# PROJECT NExT

# NEW EXPERIENCES IN TEACHING

### 2009-2010 FELLOWS

Workshop held in Portland, OR August 3 – 5, 2009

A program of

## THE MATHEMATICAL ASSOCIATION OF AMERICA

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THE DOLCIANI-HALLORAN FOUNDATION THE EDUCATIONAL ADVANCEMENT FOUNDATION THE AMERICAN MATHEMATICAL SOCIETY THE AMERICAN STATISTICAL ASSOCIATION THE NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS THE AMERICAN INSTITUTE OF MATHEMATICS THE ASSOCIATION FOR SYMBOLIC LOGIC THE ASSOCIATION OF MATHEMATICS TEACHER EDUCATORS THE ILLINOIS SECTION OF THE MAA THE MD/DC/VA SECTION OF THE MAA THE METRO NEW YORK SECTION OF THE MAA THE MICHIGAN SECTION OF THE MAA THE SOUTHEASTERN SECTION OF THE MAA **TEXAS INSTRUMENTS** THE W. H. FREEMAN PUBLISHING COMPANY **JOHN WILEY & SONS** 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 3 - 5, 2009

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

#### **MONDAY, AUGUST 3**

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

Salon I

2:00 - 2:45 pm Small group discussions – See information for assignments.

Group A: Eugene
Group E: Salon A
Group B: Medford
Group C: Portland
Group D: Salon G
Group D: Salon G
Group H: Salon H

2:55 - 3:45 pm Nurturing the Mathematical Yawp

Francis Su, Harvey Mudd College

Salon I

3:50 - 4:20 pm BREAK - Salon F

**4:30 - 5:15 pm** Small group discussions [Same room assignments by group above, but your

group assignment may have changed – see information.]

Group A: Eugene
Group E: Salon A
Group B: Medford
Group C: Portland
Group D: Salon G
Group D: Salon G
Group H: Salon H

5:30 - 7:00 pm DINNER - Salon F

7:30 - 8:45 pm *Joining the Mathematical Community* 

Wiebke Diestelkamp, University of Dayton Klay Kruczek, Western Oregon University

Tamara Lakins, Allegheny College

Kyle Riley, South Dakota School of Mines and Technology

Salon I

9:00 p.m. - ? INFORMAL SOCIALIZING

# **TUESDAY, AUGUST 4**

7:00 - 8:15 am	BREAKFAST – Salon F
8:30 - 9:45 am	<ul> <li>Selected topics in teaching undergraduate mathematics I</li> <li>[Five simultaneous sessions – See information for assignments.]</li> <li>A. Effectively Using Applied Writing Projects in Undergraduate Math Courses – P. Gavin LaRose, University of Michigan, Portland</li> <li>B. Occasional Computer Enhancement of Class: Applets and Maple Worksheets – Michael May, S.J., Saint Louis University, Eugene</li> <li>C. Promoting Diversity in Mathematics: Challenges, Opportunities &amp; Ideas for Involvement – Herbert Medina, Loyola Marymount University, Medford</li> <li>D. Teaching Real Analysis – An Active Approach – Carol Schumacher, Kenyon College, Salem</li> <li>E. Classroom Voting in Linear Algebra – Holly Zullo, Carroll College, MT, Salon B</li> </ul>
9:55 - 10:25 am	BREAK – Salon F
10:25 - 11:40 am	Panel: Deciding how to teach Robert Beezer, University of Puget Sound Inga Johnson, Willamette University Barbara Reynolds, SDS, Cardinal Stritch University Salon I
11:45 am - 1:15 pm	LUNCH – Salon F
1:15 - 2:30 pm	Repeat of morning breakout sessions – See information for assignments.
2:40 - 3:40 pm	The Inquiry Oriented Differential Equations Project: Addressing Challenges Facing Undergraduate Mathematics Education Chris Rasmussen, San Diego State University
	Salon I
3:40 - 4:10 pm	Salon I  BREAK – Salon F
3:40 - 4:10 pm 4:10 - 5:25 pm	
•	BREAK – Salon F  Panel: The faculty member as teacher and scholar Timothy Chartier, Davidson College Barbara D'Ambrosia, John Carroll University Maura Mast, University of Massachusetts Boston Kenneth Millett, University of California Santa Barbara
4:10 - 5:25 pm	BREAK – Salon F  Panel: The faculty member as teacher and scholar     Timothy Chartier, Davidson College     Barbara D'Ambrosia, John Carroll University     Maura Mast, University of Massachusetts Boston     Kenneth Millett, University of California Santa Barbara  Salon I

# WEDNESDAY, AUGUST 5

7:00 - 8:30 am	BREAKFAST – Salon F
8:30 - 9:35 am	Informal discussions on topics proposed by the 2009-2010 Fellows
9:35 - 10:05 am	BREAK – Salon F
10:10 - 11:25 am	<ul> <li>Selected topics in teaching undergraduate mathematics II</li> <li>[Five simultaneous sessions – See information for assignments.]</li> <li>A. Using PascGalois Materials to Teach Abstract Algebra – Michael Bardzell, Salisbury University, Portland</li> <li>B. Inquiry-Based Learning in Calculus – Carol Browning, Drury University, Eugene</li> <li>C. Advising Undergraduate Mathematics Students – Wiebke Diestelkamp, University of Dayton, Medford</li> <li>D. Teaching Discrete Mathematics – Susanna Epp, DePaul University, Salem</li> <li>E. Symbol Sense and Symbol Sensibility – William McCallum, University of Arizona, Salon B</li> </ul>
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 is located. See page 5 of this program for room assignments.]
12:15 - 1:30 pm	LUNCH – Salon F
1:35 - 2:50 pm	Repeat of morning breakout sessions – See information for assignments.
2:55 - 3:25 pm	Planning session for January Meetings in San Francisco, CA Salon I
3:25 - 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)