

PROJECT NExT
NEW EXPERIENCES IN TEACHING
2014-2015 FELLOWS

Workshop held in Portland, OR
August 4-6, 2014

A program of

THE MATHEMATICAL ASSOCIATION OF AMERICA

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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.

**Project NExT: New Jobs, New Responsibilities, New Ideas
Program for the Workshop in Portland, Oregon
August 4 - 6, 2014**

The Project NExT registration area will be in the Ballroom Foyer on the Ballroom Level of the Hilton Portland hotel.

All events are in the Hilton Portland hotel.

MONDAY, AUGUST 4

11 am - 1:15 pm Arrival and registration – **Ballroom Foyer**

1:30 - 1:55 pm Welcome and opening remarks – **Grand Ballroom II**
Robert L. Devaney, Boston University and President of the MAA
Aparna Higgins, University of Dayton and Director of Project NExT

2:00 - 2:45 pm Small group discussions
An opportunity to share your thoughts about the coming year with other Fellows.
Group A: **Executive Suite (3rd floor)**
Group B: **Senate Suite (3rd floor)**
Group C: **Galleria I (Ballroom Level)**
Group D: **Galleria II (Ballroom Level)**
Group E: **Galleria III (Ballroom Level)**
Group F: **Parlor A (Ballroom Level)**
Group G: **Parlor B (Ballroom Level)**
Group H: **Parlor C (Ballroom Level)**

2:50 - 3:50 pm *The Next (or NExT) Adventure* – **Grand Ballroom II**
Judy Walker, University of Nebraska – Lincoln

3:55 - 4:25 pm BREAK – **Grand Ballroom I**

4:30 - 5:15 pm Small group discussions [Same room assignments by group above, but your group assignment may have changed – see information.]
An opportunity to talk about teaching techniques with Fellows who work at institutions that are similar to your institution.
Group A: **Executive Suite (3rd floor)**
Group B: **Senate Suite (3rd floor)**
Group C: **Galleria I (Ballroom Level)**
Group D: **Galleria II (Ballroom Level)**
Group E: **Galleria III (Ballroom Level)**
Group F: **Parlor A (Ballroom Level)**
Group G: **Parlor B (Ballroom Level)**
Group H: **Parlor C (Ballroom Level)**

Monday, August 4 (cont'd)

5:30 - 7:00 pm DINNER – **Grand Ballroom I**

7:15 - 8:30 pm Panel: *Joining the Mathematical Community* – **Grand Ballroom II**
Four Project NExT Fellows from previous years will describe how they became involved in various forms of service to the mathematics community.
Jennifer Beineke, Western New England University
Stuart Boersma, Central Washington University
Judith Covington, Louisiana State University in Shreveport
Chuck Dunn, Linfield College

8:30 pm - ? (optional) INFORMAL SOCIALIZING

TUESDAY, AUGUST 5

7:00 - 8:15 am BREAKFAST – **Grand Ballroom I**

8:30 - 9:45 am *Selected Topics in Teaching Undergraduate Mathematics I*
[Five simultaneous breakout sessions – see information for assignments]
A. *Tactile Visualization Techniques for Teaching Calculus* – Julie Barnes, Western Carolina University, **Galleria I, Ballroom Level**
B. *Collaborative Learning in College Mathematics* – Matt DeLong, Taylor University, **Galleria III, Ballroom Level**
C. *Advising Students on What They Can Do with Math besides Teaching* – Michael Dorff, Brigham Young University. **Parlor A, Ballroom Level**
D. *Incorporating Primary Sources into Courses* – Adam Parker, Wittenberg University, **Parlor B, Ballroom Level**
E. *Helping Students Learn to Write Proofs* – T. Christine Stevens, Saint Louis University, **Parlor C, Ballroom Level**

9:50 - 10:20 am BREAK – **Grand Ballroom I**

10:25 - 11:40 am Panel: *Different Approaches to Teaching*, **Grand Ballroom II**
Each panelist will discuss a particular way of teaching or assessing, explaining the technique, its benefits and its limitations. On Wednesday, each of these panelists will present a breakout session exploring the technique in depth.
Applied Writing Projects – Gavin LaRose, University of Michigan
Inquiry-based Learning – Carol Schumacher, Kenyon College
Classroom Voting – Holly Zullo, Westminster College, UT

11:45 am - 1:10 pm LUNCH – **Grand Ballroom I**

1:15 - 2:30 pm Repeat of morning breakout sessions [Five simultaneous sessions – see information, since your assignment will be different from the morning.]

Tuesday, August 5 (cont'd)

- 2:40 - 3:40 pm** *Reaching Outside of the Ivory Tower* – **Grand Ballroom II**
Suzanne Weekes, Worcester Polytechnic Institute
- 3:40 - 4:05 pm** BREAK – **Grand Ballroom I**
- 4:10 - 5:25 pm** Panel: *The Faculty Member as Teacher and Scholar* – **Grand Ballroom II**
Panelists will advise the Fellows on how to balance the many demands that are made on them – in teaching, in research, and in service – and to help them to find a mix of activities that is pleasing to them and to their institutions.
Doug Ensley, Shippensburg University
Eric Friedlander, University of Southern California
Nancy Ann Neudauer, Pacific University
Rachel Schwell, Central Connecticut State University
- 5:30 - 7:00 pm** DINNER – **Grand Ballroom I**
- 8:00 - 10:00 pm** Social Event for 2013-2014 and 2014-2015 Project NExT Fellows and Presenters – **Grand Ballroom I**
- 10:00 pm - ?** (optional) INFORMAL SOCIALIZING

WEDNESDAY, AUGUST 6

- 7:00 - 8:15 am** BREAKFAST – **Grand Ballroom I**
- 8:30 - 9:35 am** Informal discussions on topics proposed by the 2014-2015 Fellows –
Galleria I, Galleria III, Parlor A, Parlor B, Parlor C, all on the Ballroom Level
- 9:35 - 10:05 am** BREAK – **Grand Ballroom I**
- 10:10 - 11:25 am** *Selected Topics in Teaching Undergraduate Mathematics II*
[Five simultaneous breakout sessions]
- A. *Making it Work: Teaching and Learning Mathematics Online* – Sloan Despeaux, Western Carolina University, **Galleria I, Ballroom Level**
 - B. *Effectively Using Applied Writing Projects in Undergraduate Mathematics Courses* – Gavin LaRose, University of Michigan, **Galleria III, Ballroom Level**
 - C. *Teaching Abstract Algebra* – Steve Schlicker, Grand Valley State University, **Parlor A, Ballroom Level**
 - D. *Teaching Real Analysis – An Active Approach* – Carol Schumacher, Kenyon College, **Parlor B, Ballroom Level**
 - E. *Engaging Students with Good Questions* – Holly Zullo, Westminster College (UT), **Parlor C, Ballroom Level**

Wednesday August 6 (cont'd)

- 11:30 am - 12:15 pm** Small Group Discussions with other Project NExT Fellows
(This session is organized by area of research. Please attend the group that best fits your research interests.)
Group A: Algebra, group theory, topological groups, linear algebra – **Directors Suite, 3rd floor**
Group B: Commutative rings and algebras, algebraic geometry – **Council Suite, 3rd Floor**
Group C: Geometry, topology, manifolds – **Forum Suite, 3rd floor**
Group D: Mathematics education, probability, statistics – **Studio Suite, 3rd floor**
Group E: Combinatorics – **Galleria I, Ballroom Level**
Group F: Analysis, dynamical systems, ergodic theory, numerical analysis – **Galleria II, Ballroom Level**
Group G: Applied mathematics, operations research – **Galleria III, Ballroom Level**
Group H: Number theory, logic – **Parlor A, Ballroom Level**
Group I: Differential equations – **Parlor B, Ballroom Level**
Group J: Mathematical Biology – **Parlor C, Ballroom Level**
- 12:15 - 1:30 pm** LUNCH– **Grand Ballroom I**
- 1:35 - 2:50 pm** Repeat of morning breakout sessions. [Five simultaneous sessions. See information, since your assignment will be different from the morning.]
- 2:55 - 3:25 pm** Planning session for January Meetings in San Antonio, TX – **Grand Ballroom II**
- 3:25 - 3:50 pm** BREAK– **Grand Ballroom I**
- 3:55 - 5:25 pm** Closing Session – **Grand Ballroom II**
Recognition of 2013-14 Fellows
Presentation: *Finding Your Niche in the Profession*
Joseph Gallian, University of Minnesota Duluth
- 6:00 - 8:00 pm** Mathfest Grand Opening Reception, Portland Hilton, Exhibit Hall
Attendance by both cohorts of Project NExT is expected at this event, which will have complimentary hors d'oeuvres and a cash bar. Please be there before 6:30 pm, when Project NExT Fellows will be recognized.
- 8:00 pm - ?** (optional) INFORMAL SOCIALIZING

Thursday and Friday, Project NExT courses, on next page

THURSDAY AND FRIDAY, AUGUST 7 AND 8

Project NExT Courses During Mathfest: Four-hour courses meeting in the Portland Hilton on Thursday and Friday, August 7 and 8.

- A. *Visualizing Mathematics through GeoGebra and Other Software* – Barbara D’Ambrosia, John Carroll University, 1 - 3 pm, **Skyline 3, 23rd floor**
- B. *Undergraduate Research – How to Make It Work* – Aparna Higgins, University of Dayton, 1 - 3 pm, **Skyline 1, 23rd floor**
- C. *Teaching Mathematics Courses for Future Teachers* – Dale Oliver, Humboldt State University, 1 - 3 pm, **Skyline 4, 23rd floor**
- D. *Teaching Introductory Statistics* – Carolyn Cuff, Westminster College, PA, 3:15 - 5:15 pm, **Skyline 4, 23rd floor**
- E. (THU) *Getting your Research off to a Good Start* – Joe Gallian, University of Minnesota Duluth; (FRI) *Applying for Grants from the National Science Foundation* – Karen Marrongelle, Portland State University, both days 3:15 - 5:15 pm, **Skyline 1, 23rd floor**
- F. *Why, What, & How! Everything you Need to Know about Incorporating Sustainability into Mathematics Courses* – Thomas J. Pfaff, Ithaca College, 3:15 - 5:15 pm, **Skyline 3, 23rd floor**

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