# PROJECT NExT 

## NEW EXPERIENCES IN TEACHING

## 2011-2012 FELLOWS

Workshop held in Lexington, KY
August 1 - 3, 2011
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 Lexington, Kentucky August 1-3, 2011 

Hyatt Regency Lexington Hotel, with check-in at the Patterson Ballroom Suite

| MONDAY, AUG | T 1 |
| :---: | :---: |
| 11 am-1:15 pm | Arrival and registration - Patterson Ballroom Suite |
| 1:30-1:55 pm | Welcome and opening remarks - Patterson Ballroom C-D <br> Aparna Higgins, University of Dayton and Director of Project NExT |
| 2:00-2:45 pm | Small group discussions - See information for assignments. Group A: Hyatt Suites Woodford Group E: Patterson Ballroom A Group B: Hyatt Suites Scott Group F: Patterson Ballroom E Group C: Hyatt Suites Franklin Group G: Patterson Ballroom F Group D: Hyatt Suites Jessamine Group H: Patterson Ballroom G |
| 2:55-3:45 pm | Prospecting for Patterns - Patterson Ballroom C-D <br> T. Christine Stevens, Saint Louis University |
| 3:50-4:20 pm | BREAK - Regency Ballroom 1 |
| 4:30-5:15 pm | Small group discussions [Same room assignments by group above, but your group assignment may have changed - see information.] <br> Group A: Hyatt Suites Woodford Group E: Patterson Ballroom A <br> Group B: Hyatt Suites Scott <br> Group F: Patterson Ballroom E <br> Group C: Hyatt Suites Franklin Group G: Patterson Ballroom F <br> Group D: Hyatt Suites Jessamine Group H: Patterson Ballroom G |
| 5:30-7:00 pm | DINNER - Regency Ballroom 1 |
| 7:15-8:30 pm | Joining the Mathematical Community - Patterson Ballroom C-D <br> Stephanie Fitchett, Sandia Labs <br> John Harris, Furman University <br> Maeve McCarthy, Murray State University <br> Darren Narayan, Rochester Institute of Technology |
| 8:30 p.m. - ? | INFORMAL SOCIALIZING |

## TUESDAY, AUGUST 2

| 7:00-8:15 am BR | BREAKFAST - Regency Ballroom 1 |
| :---: | :---: |
| 8:30-9:45 am $\begin{array}{cc}\text { Se } \\ & \text { [F } \\ & \text { A. } \\ & \text { B. } \\ & \text { C. } \\ & \text { D. } \\ & \text { E. }\end{array}$ | Selected topics in teaching undergraduate mathematics I <br> [Five simultaneous sessions - See information for assignments.] <br> A. Me, a Mathematician, Teaching a Stat Course? - Doug Andrews, Wittenberg University, Hyatt Suites Woodford <br> B. Tactile Visualization Techniques for Teaching Calculus - Julie Barnes, Western Carolina University, Patterson Ballroom E <br> C. Teaching the Sophomore Differential Equations Course in the TwentyFirst Century - Bob Devaney, Boston University, Patterson Ballroom G <br> D. Advising Undergraduate Mathematics Majors - Wiebke Diestelkamp, University of Dayton, Hyatt Suites Jessamine <br> E. Effectively Using Applied Writing Projects in Undergraduate Mathematics Courses - Gavin LaRose, University of Michigan, Hyatt Suites Scott |
| 9:55-10:25 am BR | BREAK - Regency Ballroom 1 |
| 10:25-11:40 a.m. | Panel: Deciding how to teach - Patterson Ballroom C-D Beth Schaubroeck, United States Air Force Academy Carol Schumacher, Kenyon College Michael Scott, California State University Monterey Bay |
| 11:45 am-1:10 pm | m LUNCH - Regency Ballroom 1 |
| 1:15-2:30 pm | Repeat of morning breakout sessions - See information for assignments |
| 2:40-3:40 pm | Recruiting More Students to Take Mathematics Courses <br> Patterson Ballroom C-D Michael Dorff, Brigham Young University |
| 3:40-4:10 pm | BREAK - Regency Ballroom 1 |
| 4:10-5:25 pm | Panel: The faculty member as teacher and scholar <br> Patterson Ballroom C-D <br> Dora Ahmadi, Morehead State University Alissa Crans, Loyola Marymount University Saad El Zanati, Illinois State University Alex Hahn, University of Notre Dame |
| 5:30-7:00 pm | DINNER - Regency Ballroom 1 |
| 8:00-10:00 pm | Social Event for 2010-2011 and 2011-2012 Project NExT Fellows and presenters - Regency Ballroom 1 |
| 10:00 pm - ? | INFORMAL SOCIALIZING |

## WEDNESDAY, AUGUST 3

7:00-8:30 am BREAKFAST - Regency Ballroom 1
8:30-9:35 am Informal discussions on topics proposed by the 2011-2012 Fellows Hyatt Suites Jessamine, Patterson Ballroom A, Patterson Ballroom E, Patterson Ballroom F, Patterson Ballroom G

9:35-10:05 am BREAK - Regency Ballroom 1
10:10-11:25 am Selected topics in teaching undergraduate mathematics II [Five simultaneous sessions - See information for assignments.]
A. Teaching with Online Interactive Resources - James Hamblin, Shippensburg University, Patterson Ballroom A
B. Writing and the Teaching of Mathematics - John Meier, Lafayette College, Patterson Ballroom F
C. Getting Your Students to Read Their Textbook - Tommy Ratliff, Wheaton College, Patterson Ballroom E
D. Teaching Real Analysis-an Active Approach - Carol Schumacher, Kenyon College, Hyatt Suites Jessamine
E. Using Good Questions in Calculus - Kim Roth, Juniata College, Patterson Ballroom G

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.]

## Group A - Kentucky

Sections: Intermountain, Northern
California/Nevada/Hawaii and Southern
California/Nevada, and Pacific Northwest
(AB, AK, CA, HI, ID, MT (except zips 59715-59717), NV, OR, UT, WA).

## Group B - Kentucky

Sections: Kansas, Nebraska, North
Central, and Rocky Mountain (CO, KS, MB, MN, MT (zips 59715-59717), ND, NE, SD, WY)

## Group C - Patterson Ballroom E

Sections: Louisiana/Mississippi,
Oklahoma/Arkansas, Southwestern, Texas
(AR, AZ, LA, MS, NM, OK, TX)
Group D - Patterson Ballroom F
Sections: Illinois, Iowa, Missouri (IL, IA, MO)

## Group E - Patterson Ballroom G

Sections: Indiana, Michigan, Wisconsin (IN, MI, WI)
Group F - Hyatt Suites Franklin
Sections: Allegheny Mountain, Kentucky, Ohio (KY, OH, PA (zips 15000-16899), WV)
Group G - Hyatt Suites Woodford-Scott
Sections: Florida, Southeastern (AL, FL, GA, NC, PR, SC, TN, VI)
Group H - Hyatt Suites Jessamine
Sections: EPaDel, Maryland/DC/Virginia,
New Jersey (DC, DE, MD, NJ, PA (zips
16900-19699), VA)
Group I - Patterson Ballroom A
Sections: Metro New York, Northeastern,
Seaway (CT, MA, ME, NF, NH, NS, NY,
ON, QC, RI, VT)

## WEDNESDAY, AUGUST 3 (continued)

| 12:15-1:30 pm | LUNCH - Regency Ballroom 1 |
| :---: | :---: |
| 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 Boston, MA Patterson Ballroom C-D |
| 3:25-3:55 pm | BREAK - Regency Ballroom 1 |
| 3:55-5:25 pm | Closing Session - Patterson Ballroom B-C-D <br> Recognition of 2010-11 Fellows <br> Presentation: Finding Your Niche in the Profession Joseph Gallian, University of Minnesota Duluth |
| 6:00-7:30 pm | Mathfest Opening Reception (cash bar) - East, Lexington Center |
| 7:30-9:00 pm | Mathfest Opening Banquet - Grand Kentucky Ballroom, Hilton Hotel |
| 9:00 pm - ? | INFORMAL SOCIALIZING |

## THURSDAY AND FRIDAY, AUGUST 4 AND 5

Project NExT Courses During the Mathfest: Four-hour courses meeting in the Hyatt Regency Lexington Hotel on Thursday and Friday, August 4 and 5.
A. When Life is Linear: Applications of Linear Algebra - Tim Chartier, Davidson College, 1-3 p.m., Patterson Ballroom B
B. Teaching Math Content for Future K-8 Teachers - Judith Covington, Louisiana State University, Shreveport, 1-3 p.m., Patterson Ballroom C
C. Undergraduate Research-How to Make It Work - Aparna Higgins, University of Dayton, 1-3 p.m., Patterson Ballroom D
D. Cooperative Learning for Undergraduate Mathematics - Bill Fenton, Bellarmine University, 3:15-5:15 p.m., Patterson Ballroom C
E. Mathematical Biology in the Mathematics Curriculum - Raina Robeva, Sweet Briar College, 3:15-5:15 p.m., Patterson Ballroom B
F1. Applying for Grants from the National Science Foundation, Dean Evasius, National Science Foundation, Thursday; Getting Your Research Off to a Good Start, Joe Gallian, University of Minnesota, Duluth , Friday; both days 3:15-5:15 p.m., Patterson Ballroom D
F2. Getting Your Research Off to a Good Start, Joe Gallian, University of Minnesota, Duluth , Thursday; Applying for Grants from the National Science Foundation, Dean Evasius, National Science Foundation, Friday; both days 3:15-5:15 p.m., Patterson Ballroom G

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.

