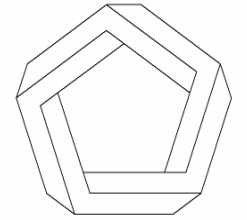

SIG/Research in Mathematics Education
American Educational Research Association
http://www.sigrme.org

Fall 2012 Newsletter

SIG/RME Executive Board

Co-Chairs

Eric Knuth
University of Wisconsin-Madison
2011 - 2013

Maria Blanton
TERC
2012 - 2014

Treasurer
Shuhua An
California State University, Long Beach
2012 - 2014

Communications
Mary Q. Foote
Queens College, CUNY
2011 - 2013

Electronics
Dan Battey
Rutgers, The State University of New Jersey
2011 - 2013

Awards
Denise Spangler
University of Georgia
2012 - 2014

Events
Ann Ryu Edwards
University of Maryland
2011 - 2013

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SIG/RME Election

The time for the SIG/RME officer elections is approaching. The biographies of the candidates appear below. SIG/RME members will receive instructions for the electronic voting procedure in an email from AERA. Information will also be posted on the SIG/RME website (www.sigrme.org).

Officer Candidate Biographies

Co-Chair Position Description

During the first year of service, the co-chair's responsibilities include: liaising with the NCTM Research Committee, reviewing proposals for the NCTM Research Pre-session, determining speakers for the NCTM Pre-session opening and closing addresses. During the second year of service, the co-chair's responsibilities include: general administration of the SIG/RME, planning the SIG/RME sessions for the AERA annual meeting, and liaising between the SIG and AERA. The co-chair will preside over all meetings of the executive board and at the SIG annual business meeting. For a full description of duties, see http://www.sigrme.org/duties.htm.

Candidates for Co-Chair

James E. Tarr
University of Missouri

James E. Tarr is an associate professor of mathematics education at the University of Missouri. He is an active member of the mathematics education research community, currently serving as Chair of the NCTM Research Committee and developing guidelines for the Linking Research and Practice Outstanding Publication Award. He served as Co-Organizer of a Discussion Group at the Eleventh International Congress on Mathematical Education in Monterrey, Mexico. His research interests include the development of probabilistic reasoning and the impact of curriculum on student learning and the classroom-learning environment. He is currently or has been a Principal Investigator or Co-Principal Investigator on several multi-year, federally-funded grants, including *Tomorrow's Teachers with Dual Degrees in Mathematics and Mathematics Education* (NSF, 2010-2015), *Comparing Options in Secondary Mathematics: Investigating Curricula* (NSF, 2005-2011), *The Show-Me Project: Middle School Mathematics Curriculum Center* (NSF, 2002-2005), and *Assessing the Impact of Standards-based Middle School Mathematics Curricula on Student Achievement and the Classroom Learning Environment* (United States Department of Education, 2001-2005). His work has been published in the *Journal for Research in Mathematics Education*, *Statistics Education Research Journal*, *Mathematics Education Research Journal*, *School Science and Mathematics*, *Journal of Mathematical Behavior*, *Mathematics Teaching in the Middle School*, and *Teaching Children Mathematics*, as well as in one book and ten edited books. At MU, he teaches methods courses for preservice middle and secondary mathematics teachers, courses in an alternative certification Master's program, and research

seminars in mathematics education. For more information, see http://education.missouri.edu/faculty/LTC/Tarr_James

Paola Sztajn
North Carolina State University
Paola Sztajn is a professor of mathematics education at North Carolina State University. She currently serves as Interim Head for the Department of Elementary Education and is the Faculty Senator for the College of Education. Her research program focuses on elementary teachers' professional development in mathematics. Related to this topic, she is currently the Principal Investigator for three grants from the National Science Foundation: *All Included in Mathematics* (DRK-12), *Professional Development Models* (DRK-12), and *Learning Trajectory Based Instruction* (REESE). Prior to coming to NC State, Paola served as a program officer at NSF, where she co-led the first round of the DRK-12 program and then became the coordinator for the cluster that organized the DRK-12 and the CAREER programs among others in the Division of Research on Learning. She has also served on the editorial panel for JRME and on the AMTE Research Task Force and subsequent Research Committee. Her work has been published in journals such as *Educational Researcher*, *Journal for Research in Mathematics Education*, *Journal of Mathematics Teacher Education*, and *Teaching and Teacher Education*.

Electronics Board Member Position Description
The Electronics Board Member's responsibilities include: maintaining the SIG/RME website (e.g., posting announcements, updating news, posting position announcements), and coordinating aspects of the SIG/RME Officer Election (e.g., soliciting nominations, assembling the election slates). For a full description of duties, see http://www.sigrme.org/duties.htm

Candidates for Electronics Board Member
Lawrence Clark
University of Maryland, College Park
Lawrence M. Clark is an assistant professor of mathematics education at the University of Maryland, College Park. He conducts both quantitative and qualitative research, with a focus on exploring the relationships between mathematics teachers' experiences, knowledge domains, beliefs, and practices, particularly in the contexts of urban schools. Furthermore, a thread of his research explores the work and role of African American mathematics teachers in the U.S. education narrative. His work has been recently published in Teachers' College Record (online version currently available) and past publications include "Examining dilemmas of practice associated with integrating technology into mathematics classrooms serving urban students" (with A. B. Anthony, Urban Education) and "Researching African American mathematics teachers of African American students: Conceptual and methodological considerations" (with W. Johnson & D. Chazan, In D. Martin (Ed.) Mathematics Teaching, Learning, and Liberation in the Lives of Black Children). Dr. Clark is Principal Investigator of the NSF-funded UM Noyce Math Scholars Program, co-PI of

the NSF-funded UM Noyce Science Scholars Program, and co-PI of the DoE-funded Maryland Science and Mathematics Resident Teacher Program (MSMaRT). At the University of Maryland, Dr. Clark teaches secondary mathematics methods classes and doctoral courses focused on the relationship between mathematics instructional practice and student achievement.

Kristen Bieda
Michigan State University
Kristen Bieda is an assistant professor of mathematics education in the Department of Teacher Education at Michigan State University. Prior to her appointment at Michigan State, Dr. Bieda completed a PhD in 2008 at the University of Wisconsin, Madison. Her research interests focus on issues of engaging all students in middle and secondary mathematics classrooms in reasoning-and-proving. Her research has been published in journals such as the *Journal for Research in Mathematics Education, Mathematics Teaching in the Middle School, and ZDM: An International Journal of Mathematics Education*. Most recently, she co-authored a book (with C. Koestler, M. Felton and S. Otten) translating the Common Core Standards for Mathematical Practice to classroom practice, as well as a book (with A. Ellis and E. Knuth) on the Essential Understandings for Proof and Proving in Grades 9-12. Both are to be published by NCTM.

Dr. Bieda serves as co-subject area leader for the secondary mathematics teacher preparation program at MSU, and teaches courses for future secondary mathematics teachers, as well as graduate courses in MSU's Program in Mathematics Education (PrIME). In 2011, she was awarded an MSU Lilly Teaching Fellowship to investigate how collaborative lesson study between mentor and novice teachers supports the development of novice teachers' subject matter and pedagogical knowledge. In Fall 2012, Dr. Bieda is coordinating an effort to support freshman in developmental mathematics courses at MSU to engage in mathematical practices and to learn mathematics with understanding.

Communications Board Member Position Description
The Communications Board Member‘s primary responsibilities are coordinating communication among the board and members of SIG/RME and preparing and distributing the SIG/RME newsletter. For a full description of duties, see http://www.sigrme.org/duties.htm.

Candidates for Communications Board Member
Erin Turner
University of Tucson
Erin Turner is an assistant professor of Mathematics Education in the Teaching, Learning and Sociocultural Studies department at the University of Arizona. Her research focuses on issues of equity and social justice in mathematics education, with a particular focus on effective and transformative mathematics instruction for culturally and linguistically diverse youth. Most recently, her research has explored ways of preparing preservice elementary teachers to teach mathematics in ways that

draw upon children's mathematical thinking and their home and community-based funds of knowledge. Previously, she served as a postdoctoral and faculty researcher with CEMELA - the Center for the Mathematics Education of Latino/as. She is currently a co-PI on an NSF–funded research project, Teachers Empowered to Affect Change in Mathematics Education (TEACH MATH), which focuses on the development and refinement of instructional modules for preK-8 mathematics methods courses and professional development materials for early career teachers that develop teacher competencies related to equitable mathematics instruction in diverse contexts.

Her work has been published in various research and practitioner journals, including the *Journal for Research in Mathematics Education, Journal of Mathematics Teacher Education, Mathematical Thinking and Learning, Educational Studies in Mathematics, Teaching Children Mathematics,* and *Rethinking Schools*. She is a frequent reviewer of manuscripts for numerous mathematics education research journals and conferences. At UA, she teaches elementary mathematics methods courses for preservice teachers in a bilingual/dual language education program, as well as graduate courses on equity and social justice in mathematics education, and mathematics curriculum. Erin is honored by the possibility of serving the SIG/RME community as the communications board member.

Tesha Sengupta
University of California, Irvine
Tesha Sengupta is an assistant professor in the School of Education and affiliated faculty in Women's Studies at UC Irvine. She earned a PhD in Mathematics Curriculum and Teacher Education with Jo Boaler at Stanford University. She received a Spencer Dissertation Grant for her ethnographic study of a low-track Algebra class serving predominantly ethnic/racial minority and female students in a suburban high school. She completed postdoctoral studies with Noel Enyedy at UCLA, where she served as the Assistant Director of Research for the UCLA Lab School. Her postdoctoral work examined the impact of an elementary math teacher's first time trying inquiry-oriented curricula and grouping without regard to "ability." Tesha serves on the AERA International Relations Committee, which will help her to support SIG/RME in increasing outreach and the exchange of ideas between U.S. and international mathematics education scholars, and between related groups in AERA.

Tesha entered the field of education from engineering, when she realized teaching incarcerated youth and adults was a better fit than designing microprocessors. Now, focusing on the use of cooperative learning in mathematics, her research examines how math learning can be organized to support marginalized youth in resisting the interpersonal, structural, and societal expectations that serve to derail them in public schools. Tesha is currently collaborating with the School of Engineering to develop environmental engineering curricula for secondary mathematics students, which will take her back to the predominantly working class and working poor communities she served as a high school math teacher 15 years ago.

Events Board Member Position Description

The Events Board Member's primary responsibilities are working with the Chair to arrange a meeting of the SIG/RME Board with the NCTM Research Committee at the annual Research Presession meeting and at the annual AERA meeting, and taking notes during those meetings. For a full description of duties, see http://www.sigrme.org/duties.htm.

Candidates for Events Board Member

Vanessa Pitts Bannister
University of South Florida

Vanessa R. Pitts Bannister is an assistant professor of Secondary Mathematics Education at the University of South Florida. She completed her doctoral degree in Mathematics Education at the University of Pittsburgh, master's degree in Mathematics at Bowling Green State University, and undergraduate degree in Mathematics Education at South Carolina State University. She was formerly a faculty member at Virginia Tech where she taught secondary methods courses and a course on diversity and equity issues in mathematics education and was the program leader of the secondary mathematics licensure program. Before her tenure at Virginia Tech, she completed a postdoctoral fellowship with the Diversity in Mathematics Education (DiME) Project at the University of California, Berkeley. Vanessa is currently the PI of a Helios Education Foundation Grant. Recently she completed an NSF-funded study of pre-service secondary mathematics teachers' interactions with reform curriculum materials in mathematics methods courses. This line of work resulted in a co-edited book and other peer-reviewed publications. Her research interests include teacher and student knowledge in areas of algebra and rational numbers, teachers' pedagogical and content knowledge with respect to curriculum materials, and equity and diversity issues in mathematics education.

Shiuli Mukhopadhyay
California State University, Northridge

Shiuli Mukhopadhyay is currently an assistant professor at California State University, Northridge and teaches in the Department of Elementary Education. Dr. Mukhopadhyay holds a B.S. in Bio-Psychology from Bates College, an M.A. and Ph.D in Education from the University of California, Los Angeles. Before coming to CSUN, she was a classroom teacher and a Mathematics Coach with the Los Angeles Unified School District. She joined CSUN in 2008 after finishing her doctoral program at UCLA. Her research is centered around understanding and examining issues of equity and mathematics learning at the classroom level. She is currently working on two different projects in collaboration with community and university STEM partners to study how STEM curricula can be used as a resource to support participation of underrepresented groups of students during classroom math, in elementary schools. Both projects are focused on examining the extent to which after school-clubs offering STEM curricula, Robotics and SCRATCH, with trained professionals can impact students classroom math participation as well as their learning identities.

NCTM Research Pre-Session Information

The Research Presession is sponsored by the NCTM Research Committee and the Special Interest Group on Research in Mathematics Education of the American Educational Research Association. The Research Presession this academic year will be held at the Colorado Convention Center in Denver.

The NCTM Research Presession serves multiple purposes. First, it annually brings researchers together to examine and discuss current issues in mathematics education. Second, it is a chance for researchers to receive feedback on their work and to benefit from exposure to alternative points of view. Third, the Research Presession is an opportunity to capitalize on the collective wisdom available when researchers and practitioners come together to discuss mathematics education and research. Finally, the Research Presession affords beginning scholars opportunities to interact and network with veteran researchers in the field.

There were 310 proposals submitted for the Research Presession (an increase of 4.7% from last year), including 162 for Interactive Paper Sessions, 46 for Research Symposia, 45 for Discussion Sessions, and 57 for Poster Sessions. Of these 203 proposals were accepted, including 73 for Interactive Paper Sessions, 29 for Research Symposia, 22 for Discussion Sessions, and 79 for Poster Sessions (some sessions were reclassified by the program committee). The final program for the NCTM Research Presession will be available in February 2013 through NCTM's website at http://nctm.org.

Pre-registration for the Research Presession is also available electronically through NCTM's website at http://nctm.org. On-site registration will also be available. For more information on registration costs, please consult the NCTM website.

The **opening session** is Monday, April 15th at 7:00 p.m. Ken Zeichner will be the speaker for the opening session. There will be **concurrent sessions** from 8:30 a.m. to 6:00 p.m. on Tuesday, April 16th, and from 8:30 a.m. to 4:30 p.m. on Wednesday, April 17th.

A **plenary session** on Wednesday morning, April 17th, will highlight the theme of Linking Research and Practice. Jo Boaler will be the speaker.

Sessions including interactive papers, research symposia, and work sessions will be scheduled, allowing members of the National Council of Supervisors of Mathematics (NCSM) and other practitioners interested in research to attend. These sessions will focus on the interface between practice and research.

AERA Information

The 2013 AERA Annual Meeting will be held Saturday, April 27, through Wednesday, May 1, 2011, in San Francisco, California. The theme is *Education and Poverty: Theory, Research, Policy, and Praxis*.

This year, we again received a record number of proposals. There were 158 proposals submitted to SIG/RME, 28 symposium proposals and 130 individual paper proposals. We are very grateful to all of the reviewers who helped review the proposals—we received over 450 reviews.

The SIG/RME received an allocation of 15 sessions for symposia or paper sessions, 61 for roundtable or poster sessions, and 1 for the annual business meeting. Of the 28 symposium proposals submitted, 16 were accepted (about 57%) including 10 accepted as symposia and 6 accepted as roundtables. Of the 130 individual paper proposals, 62 were accepted (about 48%) including 25 accepted as paper presentations and 37 accepted as roundtable or poster presentations.

SIG/RME Website

Please check our website at **http://www.SIGRME.org** for information related to SIG/RME announcements, positions available, upcoming conferences, and much more. The Membership Directory can also be accessed through the website. (The user ID is **math**, and the password is **SIGRME**.) Please check your contact information in the current directory by checking the electronic directory on the SIG/RME website.

If you have any information you think should be posted on the SIG/RME website, please contact Dan Battey at <dan.battey@gse.rutgers.edu>.

If any changes need to be made to your contact information, please notify Shuhua An at <shuhua.an@csulb.edu>.

Call for Nominations for the Early Career Publication Award

In 2001, the Special Interest Group for Research in Mathematics Education established the "SIG/RME Early Career Publication Award" to recognize an outstanding mathematics education research publication by an individual within six years of receiving her/his doctoral degree. The award includes a stipend of $500 and a plaque, announcement in the SIG/RME newsletter and on the SIG/RME website as well as at the SIG/RME business meeting at AERA and recognition at the NCTM Research Presession. The first award was presented in 2002, and the most recent award was presented to Anita Wagner of the University of Wisconsin.

Nominations are now open for the 2013 award and should be submitted by **January 15, 2013**. The publication being nominated for the SIG/RME Early Career Publication Award may be based on the dissertation work of the nominee or other recent research the nominee has conducted. The nominee should be either the sole author or the first author (in the case of a jointly authored paper) and the contributor

of the majority of the work done on the paper (which will be confirmed via email contact from the SIG-RME Awards Board Member to each co-author). Note that only a peer-reviewed research publication is eligible for nomination; the award will not be given for a dissertation. The nominee should have received her/his doctoral degree in mathematics education no more than 6 years prior to the nomination deadline (i.e., no earlier than January 15, 2007).

Nominations should include (and are restricted to) the following items.

1. A letter nominating the author of an early career publication. Please include the name of the author, the date he/she received the doctoral degree, and the name of the institution that conferred the degree. The nominator should also include reasons that the paper should be considered as an example of an outstanding mathematics education research publication. Self-nominations will be accepted.

   If the publication is based on the author's dissertation, please include the name of the dissertation director and complete bibliographic information about the dissertation (including the dissertation abstract's number).

2. A copy of the paper, including complete bibliographic information.

3. A copy of the Table of Contents of the journal or other peer-reviewed research publication in which the paper appeared.

Nominations will be considered by a committee consisting of the Events, Awards, and Electronic Board Members of SIG/RME. The publication being nominated will be judged according to the following criteria: significance of research; relevance and timeliness of research question; and quality and rigor of research. The decisions of the committee will be final.

Please send nomination materials as a single pdf file **no later than January 15, 2013** to Denise Spangler at <dspangle@uga.edu>. **Electronic submissions are preferred.** Alternatively, you may submit **two copies** of the above items to:

Denise Spangler
Department of Mathematics and Science Education
105 Aderhold Hall
Athens, GA 30602-7124

NSF Announcement – Applications for NSF Program Director Position

Program Director (Rotator Position), Division of Research on Learning (DRL), Directorate for Education and Human Resources
The Division of Research on Learning in Formal and Informal Settings (DRL)

announces a nationwide search for temporary Program Directors at the National Science Foundation (NSF). DRL invests in projects to improve the effectiveness of STEM learning for people of all ages. Its mission includes promoting innovative research, development, and evaluation of learning and teaching across all science, technology, engineering, and mathematics (STEM) disciplines by advancing cutting-edge knowledge and practices in both formal and informal learning settings. DRL also promotes the broadening and deepening of capacity and impact in the educational sciences by encouraging the participation of scientists, engineers, and educators from the range of disciplines represented at NSF.

DRL is probably the largest single source of funding for research and development projects to improve curricula, teaching, and learning in mathematics PreK-16. In order for the mathematics education community to optimize its benefit from the DRL funding program opportunities, it is important to have program officers at NSF who understand the needs of the field, can formulate requests for proposals that address those needs, and can guide the merit review process leading to funding of top quality work. This is an exciting time to be part of the NSF and to promote high quality research in mathematics education.

Since the NSF utilizes a staffing policy that engages a substantial number of its program officers on one- or two-year assignments from their permanent positions in universities and other research and development institutions, there is a continuing need to identify and recruit new talent for the work here. Successful candidates will be expected to work with other Program Directors in the division in managing some of the following funding programs: Research and Evaluation on Education in Science and Engineering (REESE) and Discovery Research K-12 (DRK-12), in addition to Faculty Early Career Development (CAREER). There are also opportunities to work on other programs. NSF is an intellectually stimulating place to work, with a variety of opportunities for attending talks and meetings related to cutting-edge research and policy. There are also opportunities to work closely with other Program Directors across clusters, divisions, and directorates on cross-cutting programs of importance to the mission of the Foundation. For more information about DRL, please visit www.nsf.gov/pubs/2010/drl10001/drl10001.jsp.

If you are interested in applying for a position, or learning more about the opportunities and challenges at DRL, please contact Elizabeth VanderPutten <evanderp@nsf.gov>.

Service, Teaching, and Research, (STaR) for Early Career Mathematics Educators Announcement

Applications are being accepted for the 2013 STaR Program. The Program is funded by the National Science Foundation and consists of a summer institute, academic year networking via electronic means, and a regroup session in conjunction with the annual meeting of the Association of Mathematics Teacher Educators (AMTE).

The fourth cohort of STaR Fellows will meet for a Summer Institute in Park City, Utah during the week of July 14-19, 2013 in conjunction with the Park City Mathematics Institute (PCMI). Eligibility is limited to new faculty members with a doctorate in mathematics education in their first or second year of a tenure-track appointment as a mathematics educator at a U.S. institution of higher education. The faculty appointment may be in a department of mathematics or a school/college/department of education.

Information about the STaR program is available at http://matheddb.missouri.edu/star/ To apply, complete the application at: matheddb.missouri.edu/star/application.php. Completed applications are due by December 15, 2012. If you have any questions, contact Robert Reys, Curators' Professor of Mathematics Education, University of Missouri at reysr@missouri.edu

Important Dates

2012

November 1-4	Psychology of Mathematics Education – North America (PME-NA) Annual Meeting in Kamazoo, Michigan.

2013

January 15	Nominations for SIG/RME Early Career Publication Award due to Denise Spangler.
January 24-26	Association of Mathematics Teacher Educators (AMTE) Annual Meeting in Orlando, Florida (http://www.amte.net/conferences/conf2013).
April 15-17	NCTM Research Pre-Session in Denver, Colorado (http://www.nctm.org)
April 17-20	NCTM Annual Meeting and Exposition in Denver, Colorado (http://www.nctm.org)
April 27-May 1	AERA in San Francisco, California (http://www.aera.net)

MEMBERSHIP DUES & CONTACT INFORMATION

A few years ago, a change occurred in our membership policy as dictated by AERA. You may now renew your SIG/RME membership when you renew your AERA

membership. This way, your SIG/RME dues are processed by AERA, and your membership dates are always the same.

AERA has changed its membership procedures. All SIG-RME members must also be active members of AERA. (In other words, it is no longer possible to be a member of SIG-RME and not a member of AERA.)

If your mailing address or other contact information is incorrect, please update your contact information through the AERA website.