



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

**Fall 2007 Newsletter**

**SIG/RME Executive Board**

**Co-Chairs**

Catherine A. Brown  
Indiana University  
2006-2008

Patricia F. Campbell  
University of Maryland  
2007-2009

**Treasurer**

Beth Herbel-Eisenmann  
Michigan State University  
2006-2008

**Communications**

Jeffrey Choppin  
University of Rochester  
2007-2009

**Electronics**

Gwen Lloyd  
Virginia Tech  
2007-2009

**Awards**

Miriam Gamoran Sherin  
Northwestern University  
2006-2008

**Events**

Sandra Crespo  
Michigan State University  
2007-2009

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## **Request for hard copy**

Members no longer receive a hard copy of the SIG/RME newsletter through U. S. mail unless they specifically request the hard copy. The newsletter will be available through the SIG/RME website. Each time a newsletter is posted, members will receive an email informing them of the newsletter's availability. Members can read the newsletter on-line or download it to have a hard copy.

In addition, members no longer receive a hard copy of the SIG/RME Annual Membership Directory unless a specific request is made for the hard copy. As with the newsletter, members will be notified through email when the Annual Directory is available on the SIG/RME website.

Any member who would like to receive the SIG/RME newsletter and/or Annual Membership Directory in hard copy form rather than electronically should contact Beth Herbel-Eisenmann at [bhe@iastate.edu](mailto:bhe@iastate.edu) before December 15 or [bhe@msu](mailto:bhe@msu) after December 15.

## **Remember to Vote for Officers**

It's time for the SIG/RME officer elections. The biographies of the candidates appear below. You can vote electronically by going to the SIG/RME website ([www.sigme.org](http://www.sigme.org)) or you can vote by using the ballot at the end of this newsletter. Either way, please vote! Ballots are due by January 1, 2008.

## **Officer Candidate Biographies**

### ***Candidates for Co-Chair***

**Rochelle Gutiérrez** is an Associate Professor at the University of Illinois at Urbana-Champaign. Her research focuses on equity in mathematics education, race/class/language issues in teaching and learning mathematics, effective teacher communities, and social justice. She has served as a member of the RAND National Mathematics Study Panel, the National Academy of Sciences' Committee on Increasing Urban High School Students' Engagement and Motivation to Learn, the editorial board of *Journal of Mathematics Teacher Education*, and TODOS/NCTM Research and Publications Committee. Recently, she was awarded a Fulbright fellowship to research collective teacher practice among secondary mathematics teachers in Zacatecas, México, and is currently part of a PME working group on Transnational/Borderland Research in Mathematics Education. Dr. Gutiérrez has received funding multiple times from the Spencer Foundation, as well as AERA/IES. She serves as a member of the design team for the Strategic Educational Research Partnership (an outgrowth of the National Academy of Sciences) that is looking to improve algebra instruction across the United States. Her experience with organizing for conferences extends to her role as

section chair of AERA's Division C (Mathematics Learning and Instruction). Before and throughout graduate school, she taught middle and high school mathematics to adolescents in East San José, California. Her work has been published in such journals as *Mathematical Thinking and Learning*, *Journal of Curriculum Studies*, *American Educational Research Journal*, and the *Urban Review*.

**James A. Middleton** is Professor of Mathematics Education and Director of the Division of Curriculum and Instruction, at Arizona State University. Dr. Middleton's research interests focus in the following areas where he has published extensively: children's mathematical thinking; teacher and student motivation in mathematics; and teacher change in mathematics. He has also written on effective uses of educational technology in mathematics and science education as a natural outgrowth of these interests. To fund his research, Dr. Middleton has garnered over \$20 million in grants to study and improve mathematics education in urban schools. He is currently Principal Investigator for a \$1.8 million research grant to model the longitudinal development of fractions, rational number and proportional reasoning knowledge and skills in middle school students. All of his work has been conducted in collaborative partnerships with diverse, economically challenged, urban schools. This relationship has resulted in a significant (positive) impact on the direction that partner districts have taken, including a significant increase in mathematics achievement in the face of a rising poverty rate.

In the area of service to the mathematics education community, Dr. Middleton served for three years on the National Council of Teachers of Mathematics *Research Committee*, chairing that committee in 2006. In that capacity the Committee published a call, in *JRME*, to mobilize the mathematics education community to actively develop a collective research agenda that has the potential to directly improve teaching and learning in schools. He served as primary author for that call. This call has led to the establishment of a major strategic initiative of the NCTM devoted to Linking Research and Practice. He has served on several task forces for the NCTM, is a regular reviewer for the NSF and the Department of Education, and serves on the Boards of several regional and national-level research centers. He has been a consultant for the Rand Corporation, the National Academies, the American Statistical Association, the Institute for Electrical and Electronics Engineers, and numerous school systems around the country.

### ***Candidates for Treasurer***

**Amanda Jansen** is an Assistant Professor of Mathematics Education in the School of Education at the University of Delaware. She conducts research on students' participation in mathematics classroom discourse, particularly how their beliefs and goals mediate their involvement. As a part of her research in the Mid-Atlantic Center for Mathematics Teaching and Learning, she studies how prospective middle school mathematics teachers and early-career middle school mathematics teachers analyze the effectiveness of their own teaching. Her current research focuses on middle school students' self-assessments of their participation in mathematics classroom discourse.

Dr. Jansen was formerly a junior high mathematics teacher. At the University of Delaware, she has taught a range of undergraduate courses in mathematics education, including elementary and middle school methods courses for prospective teachers and mathematics content courses for prospective teachers. At the doctoral level, she has taught courses on mathematics learning and mathematics curriculum.

Dr. Jansen's research has been published (or is forthcoming) in journals such as the *Elementary School Journal*, *Mathematical Thinking and Learning*, the *Journal of Teacher Education*, and the *Journal for Research in Mathematics Education*. She has presented her work recently at AERA, the NCTM research pre-session, and PME-NA. She has served as a reviewer for conferences (e.g., AERA, PME-NA) and journals (e.g., JRME, MTMS).

**Rebecca McGraw** is an Assistant Professor of Mathematics Education at the University of Arizona where she teaches undergraduate secondary mathematics methods courses and graduate research courses in mathematics education, as well as mathematics courses for elementary and secondary pre-service teachers. She also advises Master's and doctoral students and has supervised practicum students and student teachers. In 2006, Dr. McGraw received the Distinguished Early Career Teaching Award from the University of Arizona's College of Science. Dr. McGraw's research focuses on the relationships among mathematics learning, gender, and culture, and the contributions of mathematicians, teacher educators, and practicing teachers to the process of teacher education.

Dr. McGraw is currently a co-PI on two externally funded projects – an NSF-administered Mathematics and Science Partnership (MSP) grant and a state-administered MSP. The NSF MSP supports the creation and implementation of a Master's degree program in mathematics leadership for middle grades teachers. Dr. McGraw develops and teaches graduate courses in this program. She has also created curriculum and supervised professional development for over 150 grades 4-8 teachers as part of the state-administered MSP. In addition, Dr. McGraw serves as a faculty member of the Center for the Mathematics Education of Latinos/as (CEMELA), an NSF-funded Center for Learning and Teaching, and as an Assistant Director of the Institute for Mathematics and Education.

Dr. McGraw's work has been published in the *Journal for Research in Mathematics Education*, *Journal of Mathematics Teacher Education*, *Mathematics Teacher*, *Teaching Children Mathematics*, and the *Online Journal of School Mathematics*. She has also presented her work at AERA, AMTE, NCTM, and PME-NA.

### ***Candidates for Awards Board Member***

**Corey Drake** is an Assistant Professor of Mathematics Education at Iowa State University where she teaches elementary mathematics methods courses as well as graduate courses in curriculum theory. Her research interests include elementary

teachers' uses of *Standards*-based mathematics curriculum materials, parent-teacher engagement in mathematics and science education, and developing methods for examining and documenting the effectiveness of elementary mathematics methods courses. Currently, she is PI on an NSF Early Career project to develop a data-driven conceptual framework for understanding the resources, understandings, and contexts that frame elementary teachers' uses of curriculum materials and to describe the particular strategies teachers implement for using curriculum materials in instruction. The second phase of this project will involve creating and piloting instructional materials to help pre-service teachers learn to use *Standards*-based materials. Dr. Drake is also PI for an NSF-funded conference grant project to bring together teacher educators from across the country to discuss the role of family and community funds of knowledge in elementary mathematics methods courses and then design and evaluate instructional activities for connecting children's mathematical thinking and funds of knowledge within methods courses.

Dr. Drake has presented her work at AERA, the NCTM Research Pre-Session, PME-NA, AMTE, and ICLS. Recent publications have been in the *Journal of Mathematics Teacher Education*, *Teaching Children Mathematics*, *American Educational Research Journal*, and *Curriculum Inquiry*. She has previously served as section chair for Division L, Section 4 (2003-2004) and as a member of the program committee for the AMTE annual conference (2006-2007).

**Vilma Mesa** is an Assistant Professor of Mathematics Education in the Educational Studies program at the University of Michigan. Her principal research interests are undergraduate mathematics education and international comparisons of curriculum. She investigates the role that resources play in developing teaching expertise in undergraduate mathematics settings, with an emphasis in community colleges. Her teaching experience has been with college level mathematics. At the University of Michigan, she teaches graduate courses in curriculum, assessment, research in college teaching, and educational research.

Dr. Mesa served as associate editor for the *Journal for Research in Mathematics Education* (2000-2004) and as reviewer to conference proposals and papers (i.e., AERA various divisions and SIGs, PME, and POD) and as a reviewer to various professional and research journals (i.e., JRME, MTL, AERJ, RER, and TIA). She has served in the program committee of the Research in Undergraduate Mathematics Education conference. Her work has been published in *Educational Studies*, *Focus on Learning Problems in Mathematics*, and *Revista EMA*.

### **NCTM Research Pre-Session Information**

The NCTM Research Pre-Session will be held in Salt Lake City, Utah, April 7 - 9, 2008. The opening session's invited speaker on Monday evening will be Steve Williams, outgoing editor of the *Journal for Research in Mathematics Education*. Judit Moschkovich of the University of California Santa Cruz will deliver the Pre-session

plenary address on Wednesday morning. Her talk is titled *Beyond Words: Language(s) and Learning Mathematics*.

There were 233 proposals submitted for the pre-session, including 135 for Individual Sessions, 28 for Research Symposia, 25 for Work Sessions, and 45 for Poster Sessions. The final program for the NCTM Research Pre-session will be available January 2008 through NCTM's website at <http://nctm.org>.

Pre-registration for the Research Pre-Session is also available electronically through NCTM's website at <http://nctm.org> or by calling (888) 241-8406. On-site registration will also be available. For more information on registration costs, please consult the NCTM website.

On Wednesday morning, Judit Moschkovich will give the plenary address titled *Beyond Words: Language(s) and Learning Mathematics*. In the presentation, Dr. Moschkovich will summarize her research on language(s) and learning mathematics. Drawing on reviews of the research literature and analyses of classroom data, she addresses claims and questions about language(s) and learning mathematics that are relevant to both research and practice, in particular for students who are bilingual or English Learners. She considers the following questions:

- What are common language practices in mathematics classrooms among students who are bilingual or learning English?
- What are mathematical discourse practices? How is mathematical discourse more than words?
- What resources do bilingual learners use to communicate mathematically? How can instruction build on these resources?

### **AERA Information**

The Annual Meeting of AERA will be held in New York City March 24 - 28, 2008. The SIG/RME 2008 program will consist of 9 symposia sessions, 6 paper sessions, 2 discussion paper sessions, a poster session and our annual Business Meeting. For program details as well as information regarding registration for the Annual Meeting and lodging, please consult the AERA website at <http://aera.net/>. Pre-registration will be made available electronically at the AERA website in early December or through U.S. mail with the forms provided in an upcoming issue of *Educational Researcher*. On-site registration will also be available.

### **SIG/RME Website**

Please check our website at <http://www.sigme.org> for information related to SIG/RME announcements, positions available, upcoming conferences, and much more.

The Annual Membership Directory can also be accessed through the website. (The user ID is **math**, and the password is **sigrme**.)

If you have any information you think should be posted on the SIG/RME website, please contact Gwen Lloyd at [lloyd@vt.edu](mailto:lloyd@vt.edu).

A new SIG/RME Annual Membership Directory will be available in January 2008. Please check your contact information in the current directory by checking the electronic directory on the SIG/RME website. The user ID is **math** and the password is **sigrme**.

If any changes need to be made to your contact information, please notify Beth Herbel-Eisenmann at [bhe@iastate.edu](mailto:bhe@iastate.edu) by December 15, 2007 or [bhe@msu.edu](mailto:bhe@msu.edu) after December 15. You may also notify Beth by using the address correction form at the end of this newsletter.

### **Call for Early Career Publication Award Nominations**

In 2001, the Special Interest Group for Research in Mathematics Education established the "SIG/RME Early Career Publication Award". The first award was presented in 2002. The most recent award was presented to Dr. Keith Weber.

The purpose of the Early Career Publication Award is 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, announcement in the SIG/RME newsletter and on the SIG/RME website and recognition at the annual NCTM Research Pre-session.

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 single author or the first author (in the case of a jointly authored publication). 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 (e.g., no earlier than September 2001 for this year's nominations).

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.

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). (Self nominations will be accepted.)

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 decisions of that committee will be final. Please send nomination materials **no later than January 15, 2008** to Miriam Sherin. **Electronic submissions to [msherin@northwestern.edu](mailto:msherin@northwestern.edu) are preferred.** Alternatively, you may submit **two copies** of the above items to:

Miriam Gamoran Sherin  
msherin@northwestern.edu  
Northwestern University  
2120 Campus Dr.  
Evanston IL 60208.

### **Call for Senior Scholar Award Nominations**

The Special Interest Group for Research in Mathematics Education (SIG/RME) of AERA invites nominations for the Senior Scholar Award, to be presented at AERA 2009. This award recognizes and celebrates the programmatic research of a senior scholar within the field of mathematics education. The SIG/RME will present the award to an individual who is active in mathematics education research at the time the award is granted and who is nominated by members of the community as an exemplar in regard to the following two basic criteria. The nominee has

- designed and carried out programmatic research that has been grounded empirically and has contributed to the theoretical development of the field;
- developed the research capacity of the field, as attested to by the existence of a "school of thought" or intellectual heritage whose constructs and results are used regularly by others.

One or more of the following criteria can strengthen the nomination. The nominee has also made

- major contributions to the broader field of educational research,
- a major impact to the practice of mathematics education at large.

Scholars worldwide can be nominated for this award and membership in AERA or SIG/RME is not required of the nominees. Self nominations are not accepted.



Nominations must include the following.

A letter of nomination e-mailed to the senior steering committee member proposing the name of the nominee and describing the grounds on which the nominee meets the requirements for the award. Three criteria should be addressed in the letter:

1. A brief (no more than 250-word) description of the program of research carried out by the nominee;
2. A list of significant publications representing the contributions described, and;
3. A list of scholars who have been significantly affected by the work of the nominee. The list of scholars may include, but need not be limited to, doctoral students who worked with the nominee. Include current contact information for the list of scholars.

Please email your nomination materials **no later than February 6, 2008** to Miriam Gamoran Sherin at [msherin@northwestern.edu](mailto:msherin@northwestern.edu).

If you are unable to email the materials, please send **2 copies** to Miriam at the following address:

Miriam Gamoran Sherin  
msherin@northwestern.edu  
Northwestern University  
2120 Campus Dr.  
Evanston IL 60208

An awards committee composed of the senior co-chair, one retired scholar in mathematics education, the previous award winner, and two active members of SIG/RME will review the nominations. The awardee will deliver the SIG/RME invited address at AERA 2009.

More information on the award, criteria and nomination procedures can be found at the SIG/RME's website: <http://www.sigrme.org>.

### **Membership Dues & Contact Information**

If you wish to be only a member of SIG/RME and not AERA, download the membership form from the SIG/RME web site, and send it to Beth Herbel-Eisenmann at [bhe@iastate.edu](mailto:bhe@iastate.edu) with your dues. If you are currently a member of SIG/RME but not AERA and are unsure of your membership expiration date, please contact Beth Herbel-Eisenmann.

**It is important to note that slots on the AERA Annual Meeting program are allocated to our SIG based in part on the number of people who are members of both SIG/RME and AERA. Therefore, we strongly encourage you to be a member of both organizations.**

If your mailing address or other contact information is incorrect, please use the form at the end of this newsletter to send corrections to Beth Herbel-Eisenmann, at the contact information provided on page 12.

**SIG/RME OFFICER ELECTION  
PAPER BALLOT**

You may vote by using this paper ballot or vote electronically by going to the SIG/RME website (<http://www.sigrme.org>).

**Please vote by January 1, 2008**

Vote for one person for each office.

**Co-Chair**

\_\_\_\_\_ Rochelle Gutiérrez

\_\_\_\_\_ James A. Middleton

**Treasurer**

\_\_\_\_\_ Amanda Jansen

\_\_\_\_\_ Rebecca McGraw

**Awards Board Member**

\_\_\_\_\_ Corey Drake

\_\_\_\_\_ Vilma Mesa

Please return this ballot by January 1, 2008 to

Gwen Lloyd  
Department of Mathematics  
Virginia Tech  
Blacksburg VA 24061-0123

For questions or problems voting electronically, contact Gwen Lloyd at [lloyd@vt.edu](mailto:lloyd@vt.edu).

**Address Correction Requested!**

If any of your contact information has changed since the last SIG/RME directory (email address, phone number, etc.),, please e-mail Beth Herbel-Eisenmann (bhe@iastate before December 15 or [bhe@msu.edu](mailto:bhe@msu.edu) after December 15) with updated information, or mail the form below to her.

<b>Please update my information!</b>	
Name_____	
Institution_____	
Mailing Address_____	
_____	
Phone Number_____	Fax Number_____
e-mail Address_____	AERA Member Number_____
<p>All SIG/RME members will receive the newsletter electronically. The Annual Membership Directory will be available electronically. <i>Please check the line only if you prefer to receive a paper copy of one or both documents.</i></p> <p><input type="checkbox"/> Please mail me a hard copy of the newsletter.</p> <p><input type="checkbox"/> Please mail me a hard copy of the directory.</p> <p>(This information will assist us with keeping our membership records accurate and up-to-date with AERA.)</p> <p style="text-align: center;">Beth Herbel-Eisenmann 239 Erickson Hall Teacher Education College of Education East Lansing, MI email: <a href="mailto:bhe@msu.edu">bhe@msu.edu</a></p>	