



# Louisiana/Mississippi Section of the Mathematical Association of America

NEWSLETTER—SPRING 2006  
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## Letter from Jenna Carpenter

Dear LA/MS MAA Section Members,

Thank you for allowing me to serve as your Section Chair this past year. We had a great time hosting the conference February 16 – 18 at Louisiana Tech. Despite the hardships that our states have faced this year, the meeting was a great success. Thanks to everyone who attended and worked to make the meeting a reality!

We had 234 people in attendance at the Section Meeting, representing 38 different institutions, including several attendees from other sections. We were treated to MAA President Carl Cowen's timely opening address on "Connections between Math and Biology". Aparna Higgins inspired both our Section NExT fellows and our undergraduate students with her enthusiasm and great talks. It was easy to see why Richard DeVault won our Outstanding Teacher Award, with his outstanding talk on "What Makes a Teacher Successful?"

Interest in our student activities, such as the Integration Bee, Student Team Competition and Student Career Panel, was strong again this year. We had excellent technology sessions by Ruth Ellen Hanna and Grace Cascio-Houston, as well as interesting panel sessions, hosted by Randy Wills, Michael Pearson and Frank Serio. Our contributed paper sessions were well-attended and many of you took time to check out the variety of booths in the Exhibit Room this year. Everyone had a great time at the Fais-Do-Do eating, visiting and listening to the band.

Serving as Section Chair this year I have learned a great deal about our members and our Section. I have also grown more cognizant of what a strong, vibrant Section we enjoy. The reason for this, of course, is because we have such active and committed faculty and students! Thanks for your support of our Section and its activities. It makes Louisiana and Mississippi a great place to be a math faculty member or student!

Next year our meeting is scheduled to be at Mississippi State. Chair Seth Oppenheimer and his team will do an outstanding job. I hope to see you there!

Jenna Carpenter  
Immediate Past Chair  
LA/MS MAA Section



**MAA President Carl Cowan gave the address at the opening session on February 17--Connections between Math and Biology.**

## Governor's Report

The Section business meeting gave us an opportunity to sing Happy Birthday to Judith Covington. Her age looks a lot better when written in base 13.

I was very happy that our meeting was well-attended. I'm sure that some of our members couldn't make it this year because of financial constraints or more pressing problems. It's been a difficult year, to say the least. In the fall, I sent e-mail messages to all of our department liaisons, asking for information about the effects of the storms on their schools. I got a variety of responses, some very touching. Some didn't respond. A few probably couldn't respond. What a year!

In the past year I have attended two more national meetings, which included two more meetings of the Board of Governors. The meetings were in Albuquerque and San Antonio, two very interesting cities. The national organization continues to be lean and healthy, with a great group of people at the top.

The MAA has implemented continuous strategic planning. For the first round, working groups were formed to address the issues of Professional Development, American Mathematics Competitions, and Revenue. These groups will make recommendations to the Board of Governors within the next year. In San Antonio I had the opportunity to take part in a focus group discussion on professional development. The topics for the next round of

planning will be Students, Governance, and Membership.

At the Albuquerque meeting I volunteered to help with the American Mathematics Competitions (AMC), about which I knew virtually nothing. These are exams given nation-wide to high school students. There are several levels, leading to the selection of the U.S. team for the International Mathematics Olympiad. In the fall I did some work proof-reading the questions for the 2007 AMC-10 and AMC-12 exams. In April I will submit some questions for possible use on these or future exams. The exams consist of 25 multiple-choice questions, to be answered in 75 minutes. The first few questions are fairly routine, and then the going gets significantly tougher. The question topics are mostly algebra, geometry, number theory, and combinatorics. There is no calculus. After seeing the questions I was amazed to learn that every year there are a few perfect scores. Past exams have been administered in the schools, but next year colleges and universities will also be given an opportunity to serve as host sites. I will notify the Section liaisons when I learn more about this, since I think we will all be interested in inviting talented high school students to our campuses.

My term as Section Governor is now 2/3 completed. I am enjoying it thoroughly.

Roger Waggoner  
LA/MS MAA Section Governor

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## Student Team Competition

Student Team Competition Report  
February 17, 2006; Ruston, Louisiana

1. This year 25 student teams containing 94 students took part in the competition. Thirteen colleges and one high school were represented. The median score on the exam was 61, the lowest score was 17 and the highest score was 134.

2. Members of the committee who wrote and graded the questions on the exam were:

**George Cochran**, Louisiana State University-Baton Rouge  
**Richard DeVault**, Northwestern Louisiana State University  
**Robert Doucette**, McNeese State University  
**Kevin Knudson**, Mississippi State University  
**Terry Lawson**, Tulane University  
**Dennis Merino**, Southeastern Louisiana State University

**Vic Schneider**, University of Louisiana-Lafayette  
**Roger Waggoner**, University of Louisiana-Lafayette  
**Randy Wills**, Southeastern Louisiana State University  
**Shaochen Yang**, Mississippi University for Women

3. The top 6 teams were:

Rank	Score	School
1	134	LSU-Baton Rouge Heath LeBlanc, Daniel Whitman, Sean Farley, Ken Alleman
2	129	Univ. of Mississippi Adel Elsohly, Josh Strausser, Sam Watson, Wei Wei
3	113	Mississippi State Andy Eadon, Douglas Lamm, William Cleveland, Brian Schilling
4	111	LSU-Baton Rouge Nick VanMeter, Jude Melancon, Blake Tregre, Jack Tourres
5	101	Tulane University Aliska Gibbins, Michael Bernstein, Donnia Rebello, Henry Weber
6	95	Louisiana Tech Paul Mayeur, Long Nguyen, Jenny Sibille, Meagan Whaley

W. George Cochran, Committee Chair



Team members and sponsors, such as this group from Mississippi University for Women, discussed strategies and logistics as they waited for the student team competition to begin.

## Student Paper Competition

Student Paper Competition Report  
 February 18, 2006; Ruston, Louisiana

The Student Paper Committee was comprised of the following members:

**Randall Wills** (Southeastern Louisiana University)  
**Katie Evans** (Louisiana Tech)  
**Julie Jones** (Xavier University).

The result of the student paper competition is the following:

Undergraduate

1<sup>st</sup> Place. **Alfredo Santana**, University of Louisiana Lafayette, "A computational tool to generate and study semigroup rings"

2<sup>nd</sup> Place. **Sam Karhbet**, University of Louisiana Lafayette, "Finite difference method for a continuous age-structure *Hyla cinerea* population model"

3<sup>rd</sup> Place. **Lindsey Stewart**, Southeastern Louisiana University, "Solving for the zeros of the function  $F(q) = 1/1^q + 1/2^q + 1/3^q + \dots + 1/(p-1)^q$  in the finite field  $Z_p = \{0, 1, 2, \dots, p-1\}$ "

Submitted by Randall Wills



The student paper winners were recognized at the business meeting. They are from left to right Sam Karhbet, Lindsey Stewart, and Alfredo Santana.

## The Integration Bee

The Integration Bee event was designed and conducted by **Tilak DeAlwis** of Southern Louisiana University. It was held on Thursday evening, March 3, 2005. Thirty students participated in the event. The winners and their institutions are as follows:

First Place: **Sam Watson** of University of Mississippi

Second Place: **Wesley Clark** of Louisiana School for Math, Science, and the Arts.

Third Place: **Sean Farley** of Louisiana State University

Submitted by Randall Wills



The Integration Bee was held on Thursday evening, February 16, 2006. The winners were announced at the business meeting. Here, the winners are shown with Tilak DeAlwis, left, and Randall Wills, right.

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### Summary of 2006 LA/MS Section NExT Program

I am pleased to report that the LA/MA Section of the Mathematical Association of America had three new Section NExT fellows this year: **Zach Teitler** from Southeastern Louisiana University and **Katie Evans** and **Brian Camp** from Louisiana Tech University.

The Section NExT Fellows participated in a program of professional development activities Friday morning. The program began with a panel discussion on assessment. The discussion was led by **Randy Wills** from Southeastern Louisiana University; **John Harvey**, now retired from the University of Wisconsin; and **Jenna Carpenter** from Louisiana Tech University. In the second session, **Aparna Higgins** from the University of Dayton shared her experiences and success developing a program of undergraduate research. Finally, **Michael Pearson** from the MAA led an informal discussion for new faculty members on how to get involved in section activities. The fellows then participated in the remainder of the section program that began formally Friday afternoon.

I would like to thank **John Harvey**, **Frank Serio**, **John Travis**, and **Randy Wills** for their help on the Section NExT Committee. I would also like to thank the national Project NExT group and the MAA for the funding to support the LA/MS Section NExT.

Respectfully submitted,  
Jane Wenstrom



**Aparna Higgins** talked about undergraduate research at one of the Section NExT sessions. She also spoke to the students at the luncheon following the competition.

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### Outstanding Teacher Award

**Dr. Randall Wills** is the winner of the Outstanding Teacher Award. He is an Associate Professor of Mathematics at Southeastern Louisiana University where he has worked since 1990. Dr. Wills has taught the entire curriculum of undergraduate mathematics from intermediate algebra to advanced calculus. He has also been a leader in introducing reform methods and technology in the classroom, and his work in this area has led to many presentations at the regional and national level, as well as several publications and grants. The section is proud to have Randy as its Outstanding Teacher.

Richard DeVault, Chair  
LA/MS MAA Outstanding Teacher Award  
Committee



## Mathematical Concerns Committee

The Louisiana/Mississippi Section Mathematical Concerns Committee met on Friday, February 17, 2006. Members present were **Clifton Wingard**, Delta State University, **Anella Kelly**, University of Louisiana Monroe, **Lee Price**, University of Louisiana Lafayette, **Leigh Ann Myers**, Northwestern State University. A summary of the topics discussed follows.

1. The committee expressed concern about the relevance of the mathematical concerns committee and the rest of the committee structure in the section. We believe the concerns committee was created in response to issues of discrimination. As a result of that discussion, we suggest that the executive committee review and consider revising the committee structure for the section.
2. The committee expressed concern about the number of STEM majors regionally and nationally in light of the President's announced initiative on increasing those numbers. Suggestions included increased marketing of the math major, i.e. increasing the visibility of the value of the major in today's market, realizing the importance of the calculus sequence in recruiting majors from other departments and in retaining current majors, and increased involvement of faculty in recruiting high school students. We note that planned events at the recent section meeting, such as the panel discussion on the state of the math major, addressed this issue.
3. The committee followed up on one of the issues discussed last year. We created a survey regarding teaching workloads and service expectation. This survey was distributed at the department heads' luncheon and liaisons' breakfast at the recent meeting and will be mailed to departments in the section who did not respond immediately. Survey results will be presented at our next section meeting.

Submitted by Leigh Ann Myers, Committee Chair

## Location and Nominations Committee

Location and Nominations Committee Report  
February 18, Ruston, LA

The Location and Nominations put forward the following Nominations:

- Section Chair  
**Seth Oppenheimer**, Mississippi State
- LA Vice-Chair  
**Lenny Ornas**, McNeese State
- MS Vice-Chair  
**Connie Campbell**, Millsaps
- Section Treasurer  
**Judith Covington**, Louisiana State University at Shreveport
- Location for 2008 Meeting  
McNeese State University, Lake Charles, LA

Submitted by Frank Serio, Committee Chair

## In Memoriam

Four colleagues were remembered during the business meeting.

**Professor Jim Caveny** passed away in April 2005. Professor Caveny was a past chair of the Mathematics Department at the University of Southern Mississippi in Hattiesburg MS. His career at USM spanned the years 1971-2002. (submitted by Professor Wallace Pye)

We remember **Dr. Jimmy Gilbert**, a former faculty member at Louisiana Tech University. Dr. Gilbert was a faculty member at LA Tech during the era of 1958-mid 80's, who passed away since our last meeting. He and his wife, Linda went to the University of South Carolina at Spartanburg and during their career there authored several College Algebra and Linear Algebra text books. To quote Ruth Ellen Hanna, a former colleague, "He was an excellent teacher!" (also submitted by Wally Pye)

**Dr. Virginia Carlton**, who was on the math faculty at Centenary College, passed away on June 14, 2005. According to her obituary, she once served as Governor of the LA/MS section. (submitted by Michael Pearson)

**Professor Charles Steib** of Southeastern Louisiana University, passed away just before Thanksgiving. He had retired from SLU a number of years ago. Charles had been in poor health for some time. To quote John Hornsby, "He was a great guy!" (submitted by John Hornsby)

Respectfully submitted,  
Grace Cascio-Houston  
Louisiana State University at Eunice  
Necrology Committee, Chair

## Resolutions Committee

### Resolutions Committee 2006

Be it resolved that we express our appreciation to Dr. Daniel Reneau, President of Louisiana Tech University and to Dr. Stan Napper, Dean of the College of Engineering and Science, for their warm welcome and hospitality and to Section Chair Jenna Carpenter for this well-planned and well-executed meeting.

Be it resolved that we express appreciation to the Mathematics Program at Louisiana Tech as well as to Janie Anisworth and the other support staff and students for the excellent job they have done hosting this annual meeting. Special thanks are extended to meeting Co-Chair Galen Turner and other Louisiana Tech faculty including Stacy King, Stan McCaa, Dave Meng, Krista Hines, Pat Gaston, and Charles Patterson.

Be it resolved that we express gratitude to Dr. Carl Cowen, President of the MAA, for “hypnotizing” us with the Pulfrich phenomenon and for enlightening us about the connection between proteins and AMTRAK.

Be it resolved that we express appreciation to Aparna Higgins, co-director of Project NexT, for sharing her experiences with Undergraduate Research in the Section NEXt session and for inspiring our students at their luncheon.

Be it resolved that we express appreciation to Richard DeVault of Northwestern State University for his Excellence in Teaching presentation and for reminding us of why we chose our profession.

Be it resolved that we appreciate the undergraduate and graduate students and faculty members who made presentations for our enlightenment, the students who participated in the team competition and Integration Bee, and all those individuals – session chairs, judges, and faculty coaches – who made the presentations and competitions possible, in particular, George Cockran, William Horner, Randy Wills, and Tilak deAlwis.

Be it resolved that we express appreciation to MAA representatives Michael Pearson, Associate Executive Director and Director of Programs & Services, for organizing the New Faculty Session and the panel on K-12 Mathematics and to John Kenelly, MAA Treasurer, for his support of this meeting.

Be it resolved that we express our appreciation to the panel moderators Frank Serio, Randy Wills, and Brian Camp, to the presenters of the technology sessions, Ruth Ellen Hanna and Grace Cascio-Houston, to the publishing companies and their representatives for refreshments and for their exhibits, and to all of the LA-MS committees for their part in ensuring the success of this meeting and last, but not least, to all the members of the LA-MS section of the MAA for their participation in this meeting and their continued support of the section.

Therefore, be it resolved that the 83rd annual meeting of the LA-MS section of the MAA held on February 16-18, 2006 in Ruston, LA and hosted by Louisiana Tech University was a great success.

Respectfully submitted:  
Resolutions Committee  
Kathleen Lopez, Chair  
Michael Neumann



**A Student Career Panel was held at the Section Meeting on Friday, February 17. It was moderated by Dr. Brian Camp of Louisiana Tech. Panelists were (from left) Dr. Elizabeth Wibker (College of Administration and Business at Louisiana Tech), Steve Crow (engineer), Tom Singletary (CenturyTel), and Ron Cathey (Coordinator of Career Development at Louisiana Tech). Students were given a wealth of advise from these panelists as they shared their experiences and perspectives.**

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## LA/MS MAA Section Treasurer's Report March 2005

LA/MS MAA Section Treasurer's Report, February  
2006

Balance March 2, 2005 \$8890.69

Receipts:

MAA Subvention 600.00  
Interest (March 2005-January 2006) 78.08

Total Receipts: \$678.08

Expenses:

Student Awards 700.00  
Newsletter 527.22  
Travel 691.74  
2006 Meeting Start-Up 500.00  
Witte Memorial 100.00  
Total Expenses: \$2518.96

Balance February 13, 2006 \$7049.81

Account Information:

City Bank & Trust Company  
Natchitoches, LA 71457  
Account Number 42-9489-0  
Tax ID Number: 16-0743079

Submitted By:

Judith Covington, Secretary/Treasurer  
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Louisiana State University Shreveport  
Shreveport, LA 71115  
jcovington@lsus.edu

NOTE: There is an un-cashed check for last year's  
second place student paper. Please contact me if you  
should have received that check!

## Proceedings of the Louisiana/Mississippi Section of the Mathematical Association of America

The 2005 Proceedings are almost complete. Papers presented at the 2006 meeting can be submitted by June 30, 2006 in pdf or word format to mmreid@olemiss.edu. Submissions in the areas of Research, Pedagogy, and Student papers are accepted. Please indicate the appropriate category for the paper in your email.

James Reid

Editor-in-Chief

Proceedings of the Louisiana/Mississippi Section of  
the Mathematics Association of America