



ALLEGHENY MOUNTAIN SECTION NEWSLETTER

VOLUME XXVI, NUMBER 2

November, 2003

J. Lyn Miller, EDITOR

Please share this newsletter with colleagues, and encourage them to join MAA. If you have received a copy as a department chair, please place it where it will be accessible to your faculty.

Governor's Report

Don Platte, Mercyhurst College

The summer meeting in Boulder, Colorado, was my first as governor so I am still somewhat mystified as to the role of governor. The Board of Governors' meeting is an all-day affair in which the business of the MAA is discussed and approved. There are also many different committees that meet at the summer meetings.

We approved a MAA proposed budget for fiscal year 2004 of \$6,789,537. Most of the revenue comes from dues (\$2,224,000), test and contest sales (\$1,273,000), and advertising (\$1,108,000). The expenses are for membership service, publications, general administration, and American Mathematics Competitions. The MAA endowment is now at approximately \$6 million. This doubled recently when the MAA received a gift of \$3 million from Paul and Virginia Halmos to establish a Mathematical Sciences Conference Center in Washington, DC.

You are probably aware that the MAA web site (www.maa.org/) has been updated and improved. The site gets about 5,000 hits per month. Membership forms are available online, and soon you will be able to renew membership online. They plan to have national elections on-line soon also. MAA publications are available on-line. Of course, you can get information about future meetings such as the Phoenix meeting in

January. Information on professional development, short courses, etc., is also available.

One agenda item that I found interesting and perhaps controversial was the approval of recommendations from the Committee on Undergraduate Programs in Mathematics (CUPM). These are six general recommendations to assist undergraduate mathematics departments in design and teaching of their courses and programs. I am only giving the title of the recommendation. See www.maa.org/cupm for the details.

1. Understand the student population and evaluate courses and programs.
2. Develop mathematical thinking and communication skills.
3. Communicate the breadth and interconnections of the mathematical sciences.
4. Promote interdisciplinary cooperation.
5. Use computers technology to support problem solving and to promote understanding.
6. Provide faculty support for curricular and instructional improvement.

Some interesting MAA statistics:

1. Total MAA membership is 21,619.
2. Excluding bogus submissions the American Mathematical Monthly's acceptance rate for publication is about 10%. Examples of bogus submissions: articles that prove the reals are

countable or short “proofs” of the Four Color Problem.

3. The Mathematics Magazine acceptance rate is approximately 20%.
4. Project NExT is ten years old.
5. There are twenty-nine sections and forty members on the Board of Governors!

I did find time to enjoy the area. Colorado’s Front Range has some incredibly spectacular views. The city of Boulder and the University of Colorado are exceptionally stunning. There are many quaint restaurants, shops, and microbreweries in the area. It is always nice to see old friends and meet new ones at the meetings.

From all the e-mails and the fall officers’ meeting I know that next spring’s sectional meeting at West Virginia Wesleyan College will be outstanding. I urge you to attend. If you are a regular at the meetings, make an effort to get a colleague who has never attended to join you.

Message from the Chair

Tamara Lakins, Allegheny College

It is exciting to begin my two-year term as Chair of the Section, after working with the section for several years as a Vice Chair, Chair-Elect, and a co-coordinator of our Section NExT program. I am grateful to John Zhang (IUP), our past chair, who has been very helpful as I have adjusted to my new position. I’d like to thank John Bukowski (Juniata College), who currently serves as First Vice Chair of the Section, for agreeing also to serve as a co-coordinator of Section NExT. In addition, I’m sure you will all join me in thanking Dave Wells (Penn State, New Kensington) for his great job during the last four years as editor of this newsletter, and in welcoming Lyn Miller (Slippery Rock University) as the new editor. Finally, many thanks to Dick McDermot, who has just completed his term as Section Historian, and welcome to Gary Stoudt, our new Section Historian.

The Fall Section Officers’ meeting was held at Slippery Rock University in mid-October, and I look forward to working with the officers throughout the year to plan the

spring section meeting and other events of the section. Indeed, the best part of being chair of the section is the opportunity it gives me to work with the great colleagues you have elected to the Executive Committee! I would like to encourage each of you to contribute to the section in some way, and as you will see from this edition of the newsletter, there are many ways to be involved. Look for a special welcome to new MAA members, or MAA members new to the Allegheny Mountain Section, in this newsletter.

You will find in the pages ahead “Calls for Nominations” from the Nominating Committee for Section Officers, the Distinguished Teaching Award Committee, the Mentor Award Committee, and the Service Award Committee, as well as an announcement that plans are underway to recruit a new class of Allegheny Mountain Section NExT participants. In addition, you can contact any section officer (the current officers are listed later in the newsletter) about suggestions you have regarding the activities and annual meetings of the section. One of the best ways to be involved is to attend our spring section meetings, and I look forward to seeing many of you at this year’s meeting, which will be held at West Virginia Wesleyan College on March 26-27, 2004. Mark your calendars now for this meeting, which promises to be very exciting! The invited speakers for the meeting include Ed Burger (Williams College), Dan Maki (Indiana University), and our own Michael Botsko (Saint Vincent College), winner of the 2003 Allegheny Mountain Section Award for Distinguished Teaching. In addition, the section will host an MAA Workshop on Mathematics for Business Decisions at this meeting.

You can find information about our section awards, Section NExT, and the spring section meeting at the section website at www.math.psu.edu/sellersj/alleghenymtn/. Many thanks to Director of e-communications James Sellers (Penn State University), who maintains this website!

Best regards for a productive and enjoyable end of semester!

2003 Section Award Winners

Congratulations to the winners of the 2003 Allegheny Mountain Section Awards, which were announced at the Spring 2003 section meeting at Penn State, DuBois.

Award for Distinguished College or University Teaching of Mathematics:
Michael Botsko, Saint Vincent College

Mentor Award: **Francisco Alarcon**, Indiana University of PA

Service Award:
Chuck Cable, Allegheny College (emeritus), and **Tom Keagy**, formerly of Duquesne University

Welcome to New Members

The Executive Committee would like to extend a special invitation to all new MAA members, and all members of the MAA new to the Allegheny Mountain Section, to become involved in the section and attend the Spring 2004 section meeting. As our welcome to you, we will waive your registration fee for this meeting! Please refer to the registration form for the meeting (available in the Spring newsletter and in electronic form on the section website at a later date) to see how to take advantage of this offer.

Call for Nominations for Office

It is once again time to nominate a colleague (or yourself) for one of the elected officer positions in our Section. The nominating committee this year consists of:

Bud Boman, ecb5@psu.edu, (Chair)
Tami Lakins, tlakins@allegheny.edu
John Thompson, jwt01+@pitt.edu

The positions on the ballot this year are:

Chair-Elect,
Second Vice-Chair,
A Director of Short Courses, and
Secretary/Treasurer

The Chair-Elect serves one year as Chair-Elect, two years as Chair of the Section, and one year as Past Chair. The Second Vice-Chair serves one year as Second Vice-Chair and the following year as First Vice-Chair. The Director of Short Courses serves for two years and is responsible for coordinating the local arrangements for the summer short course. The Secretary/Treasurer serves for two years and keeps all the books, accounts, and records of the Section. More details can be found in the Section Bylaws at:

<http://www.math.psu.edu/sellersj/alleghenymtn/bylaws99.htm>

The Nominating Committee requests/urges/pleads that you consider nominating interested colleagues for one of these positions. In particular, if you feel that you might be interested in serving the Section but are concerned about the level of commitment involved, please consider nominating yourself for the Second Vice-Chair position. The Second Vice-Chair is an entry level Section officer position. Serving as Second Vice-Chair (and then as First Vice-Chair the following year) will give you a chance to assess whether or not you are interested in participating at a higher level. Please send your nomination to one of the members of the Nominating Committee by **January 15, 2003**. This will give the committee time to discuss and finalize the list of nominations and to have it published in the Spring newsletter. Also, as always, nominations will be taken from the floor at the business meeting next spring.

The Section belongs to all of us and will only be as good as we choose to make it.

Allegheny Mountain Section Service Award

The criterion for the annual Allegheny Mountain Section Service Award is a consistent record of excellence in service to the section over a period of time. In this context "service" is interpreted in a broad

sense to include holding office, coordinating contests, organizing sessions, acting as a panelist, speaking at sessions, acting as the coordinating host for a meeting, or participating in any other activity that contributes to the well-being of the organization.

Kathy Taylor serves as Chair of the Service Award Committee. Any member of the Section is welcome to forward nominations to her by **January 30, 2004**. She may be contacted either by email (taylor@duq.edu) or by surface mail:

Kathy Taylor
Dept. of Mathematics & Computer Science
Duquesne University
Pittsburgh, PA 15282

Distinguished Teaching Award

Nominations for the 2004 Allegheny Mountain Section Award for Distinguished College or University Teaching of Mathematics are now being solicited.

The members of the selection committee know that there are many outstanding teachers in our section who are worthy of consideration for this award. Therefore, we urge you to take the time out of your busy schedules to make a nomination.

It is not necessary to submit a complete application at this time. You may send us the name of your nominee with a brief reason why you think that this person is worthy of nomination. At this time, you may also send us the Nomination Form, which can be found in this newsletter. The complete nomination packet must be received by **January 15, 2004**. Complete information about the award and the full instructions for nomination can be found at http://www.math.psu.edu/sellersj/alleghenymtn/teachingaward_call.htm

If you have questions, or if you wish to make a preliminary nomination, please contact the selection committee chair, John Bukowski, at 814-641-3591 or bukowski@juniata.edu.

Section NExT Program

Barbara Faires, Westminster College

New faculty in the mathematical sciences continue to join MAA and to benefit in our section from the local NExT program. Project NExT (New Experiences in Teaching) is an MAA program for new or recent Ph.D.'s in the mathematical sciences that addresses a broad range of professional issues, focusing on the teaching and learning of undergraduate mathematics. It provides those entering the profession with practical information about, and concrete suggestions for, implementing more effective pedagogical and professional strategies, ranging from new teaching methods to maintaining momentum in research and writing grant proposals. At the section level, we try to maintain the same focus but with a broader net to include all faculty new to teaching in the mathematical sciences. This year our Section has one National NExT fellow: Catalin Zara at Penn State, Altoona.

While our Section NExT activities are widely advertised and open to all new faculty, we organize a "class" every two years and this is the year. Thus, this spring we hope to officially induct a new class of Section NExTers, that is, all faculty new to teaching in the mathematical sciences who joined our Section this fall or last academic year. Faculty who are interested in joining Section NExT this spring should complete the form found at The Allegheny Mountain Section website:

www.math.psu.edu/sellersj/alleghenymtn

Please share this information with colleagues! NExT is lots more fun and worthwhile with faculty from a variety of colleges and universities. Registration for new Section NExTers is covered by the Section, and there may be sufficient funding from our Exxon Grant for other expenses of these faculty.

NExT activities at the Spring Meeting will begin with lunch at 1 pm on Friday, March 26. Our speaker for that afternoon is Ed Berger, from Williams College. There will also be time for discussions and getting to

know the new faculty. NExT programs are wonderful networks!

In addition to NExT programs at the Section's Spring Meeting, there is also an annual fall workshop, which was at the University of Pittsburgh on September 27 this fall. It was a wonderful day devoted to mathematical biology with two outstanding speakers in that area, including our own Jon Rubin. In the morning Bard Ermentrout entertained and educated us along with answering questions with regard to curriculum for those interested in mathematical biology. Bard is the author of XPPAUT, a software platform for the simulation and analysis of nonlinear dynamical systems. One of the discussion topics at the Spring Meeting will be ideas for the fall 2004 workshop.

Faculty who participated in the Fall 2003 Workshop, in addition to speaker Jon Rubin (Pitt), are: Cathy Stenson and Daniell Toth (Juniata); Japheth Wood (Chatham); Natasha Dobrinen (Penn State); John Thomson, Chris Morgan, and Carl Letsche (UPJ); John Lattanzio and Yu-Ju Kuo (IUP); Patrick Headley (Gannon); Joe Santmyer (Bethany); plus the coordinators John Bukowski (Juniata and also a NExTer), Beverly Michael (Pitt), Barbara Faires (Westminster).

News from the Campuses

Duquesne University

George Bradley

Tom Keagy, after chairing the department for sixteen years, left to become Dean of the College of Arts and Sciences at La Salle University in Philadelphia. We wish Tom well in his new position. Frank D'Amico, a member of the department since 1982 and now a full professor, is the new chair.

Chuck Loch is retiring at the end of the semester after more than 42 years of service. We wish Chuck well in his retirement. Jeff Jackson and Abhay Gaur are on sabbatical during the fall semester, and Don Simon in the spring. We also have two new adjunct instructors (1-year appointments): Ron Vergona who comes to

us with an M.S. in Biostatistics and a M.S. in Mathematics and years of applied experience in research, and Matt Goodburn, who also has an MS in Engineering with a strong concentration in mathematics. Mary Lamm, who has been teaching part time but is on a one-year appointment, has her undergraduate business degree and a master's in math education from Duquesne.

Eric Rawdon received a grant from NSF for 3-4 years and Don Simon a grant from NIH for 4-5 years. We are really proud of both of them for obtaining these grants!

Glenville State College

Paul Peck

At Glenville State College, Professor David Kennedy is on sabbatical leave pursuing a doctoral degree in mathematics education at WVU. Dave is currently the President Elect of the West Virginia Council of Teachers of Mathematics. When Professor Paul Peck is not teaching classes, he is compiling the NCATE/NCTM folios for the Math (5-9) and Math (5-adult) programs and serving as President of the Glenville State College Faculty Senate. Mark Ellis, our visiting faculty member, is teaching a special topics course in Logic during the Fall 2003 semester.

Juniata College

John Bukowski

John Bukowski was promoted to Associate Professor and awarded tenure. He wrote an article for the forthcoming MAA publication, "Quantitative Literacy in Practice," and he has agreed to serve as Initial Secretary/Treasurer of the new SIGMAA on Quantitative Literacy.

Jerry Kruse attended the Joint Meetings in Baltimore with John Bukowski, and he later participated in the MAA PREP Workshop on Discrete Mathematics. He is also becoming active in the SIGCSE Committee on Discrete Mathematics.

Cathy Stenson had a paper accepted for publication in Discrete and Computational Geometry. She recently attended a week-

long workshop on Combinatorial and Discrete Geometry at MSRI in Berkeley.

Daniell Toth had a paper accepted for publication in Statistics and Probability Letters. This summer, he presented this paper at the International Conference in Statistics in Hawaii, and he spent two weeks as a visiting researcher at the Institute for Mathematics and Its Applications in Minnesota. At Juniata, he is starting up operations of the interdisciplinary Statistics Center where students can earn credit for analyzing real data provided by Juniata faculty members doing research.

For the first time (ever!), all Juniata mathematicians attended the Spring Section Meeting. These include the four previously mentioned faculty, plus Sue Esch and Ben Sunderland.

Computer Scientist John Wright attended an NSF-sponsored workshop on Human-Computer Interaction education this May, and he will offer a special topics course on this subject in the spring semester.

Daniell Toth, Cathy Stenson, and John Bukowski remain active in Section NExT activities, while John Wright, Loren Rhodes, and Bill Thomas attended SIGCSE this year. The year got off to another good start as James Sellers, our good friend from Penn State, gave the opening Mathematics Colloquium. His talk was entitled, "Beyond Mere Convergence," and was a delightful blend of history and the analysis of convergence of series.

Penn State, McKeesport

Zhibo Chen

Penn State University McKeesport campus has Dr. James Gillespie as a new tenure track assistant professor of mathematics, since August 2003. Dr. Gillespie's research is in the area of algebraic topology especially in homological algebra. He earned his Ph.D. from Wesleyan University, Connecticut, in May 2003, with his Ph.D. thesis entitled "A Flat Model Structure on Chain Complexes of Modules".

Penn State - New Kensington

Dave Wells

Professor Javier Gomez-Calderon was appointed Head of the Penn State Commonwealth College Mathematics Division in October 2002. In May of 2003 Dr. Gomez-Calderon visited Bonaterra University in Mexico, where he gave lectures for both students and faculty and led a panel discussion on the teaching and learning of mathematics.

Associate Professor Dave Wells has been appointed to a writing team to revise *Crossroads in Mathematics*, AMATYC's set of standards for mathematics education at two-year colleges. Dr. Wells also continues to serve as Chair of the American Mathematics Competitions AMC 12 Contest Committee.

Penn State, University Park

James Sellers

Eight outstanding new faculty joined our department in the fall of 2003. They are Omri Sarig (Warwick, UK, dynamical systems), Ae Ja Yee (Illinois, number theory), Alexei Novikov (Caltech., applied and computational mathematics), Regina Rotman (Toronto, geometry), Alex Nabutovsky (Toronto, geometry/analysis), Anna Mazzucato (Yale, applied mathematics), John Clemens (Caltech, logic), and Kris Wysocki (Melbourne, Australia, dynamical systems). Four new postdocs joined our faculty as well: Eric Mortenson, Katherine Hurley, Greg Bell, and Peng Yu.

Two members of the Department of Mathematics received 2003 C. I. Noll Teaching Awards from the Penn State Eberly College of Science: Pat Schulte and Andrew Belmonte join recent "Math" Noll Award winners Mary McCammon, Nigel Higson, and Simon Tavener.

On Tuesday, April 29, 2003, George Andrews was notified that he had been elected to the National Academy of Sciences. Andrews is the first member of the Mathematics Department to receive this honor.

Slippery Rock University

Robert Vallin

We have one new tenure-track member of the department. Dr. Richard Marchand joins us by way of SUNY Fredonia and West Point. Our two temporary faculty are Tim Straney (joining us for a 3rd year) and Ron Sperber (his first year).

Our faculty has been busy. Jeff Forest is on sabbatical, writing a book. Robert Vallin gave an invited talk entitled “*Preserving quasi-metrics and Cauchy’s functional equation*” at the Canadian Mathematical Society’s Summer Meeting and had his paper “*Gangs of new math*” accepted by Math Horizons. Gary and Elise Grabner have two papers for publication: *Relative Star Normal Type* (submitted to Topology and its Applications) and *Relative Collectionwise Normality* (accepted by Applied General Topology). Lyn Miller went on the MAA’s trip to Greece this past summer, participated in an MAA PREP workshop, organized a YMN/NExT panel at the Joint Meetings, and gave a talk at George Washington University’s Summer Program for Women Undergraduates.

We have had two distinguished visitors this fall: Tom Banchoff, of Brown University, and Chris Ostashewski, of Illinois State University.

Our students have been active too. They attended the National Meetings in Baltimore, the annual Pi Mu Epsilon conference at Youngstown State University, the Section’s meeting at Penn State DuBois, the AMTONP conference, and the SRU Research Symposium. Overall, our students gave seven presentations. Megan McKinney, currently a senior at SRU, went to the summer REU at Worcester Polytechnic University in Boston where she worked on financial models.

Washington & Jefferson College

Dean Morrow

Associate Professor Robert Gouirand has returned from his January and Spring term 2003 sabbatical. During his sabbatical he studied and attended short courses on

Microsoft's Visual Basic .NET programming environment in preparation to teach two new programming courses in VB.NET.

Dr. Jenny Kline received tenure and was promoted to Associate Professor of Mathematics in May 2002. In January 2003, she completed four years of service as Coordinator of the College's Freshman Forum program and was appointed Associate Dean of the Faculty.

Westminster College

Barbara Faires

The Department’s news is that we have a tenure-track position in mathematics to begin August 2004. A paper by John Bonomo and Carolyn Cuff that investigates mathematical properties of the stacking ring child’s toy has been accepted for publication in *Mathematics Magazine*. Barbara Faires is on sabbatical leave this fall term; Warren Hickman is chairing the Department. John Bonomo has been selected as judge for the 2004 International Computer Programming Contest in Prague. The Westminster team took first place last spring in the East Central Colleges three-hour mathematics competition.

Wheeling Jesuit University

Kimberly Roth

Wheeling Jesuit University welcomes Erin Niemiec as a one-year leave replacement for Vasilie Lauric. Erin received a master's degree in Applied/Industrial Mathematics from West Virginia University in 2003. She received undergraduate degrees in Mathematics and Computer Science from Wheeling Jesuit University in 2001 and is a native of Moundsville, WV.

WVU Tech

Fred Cavalier

Dr. Scott W. Mansour, Professor of Mathematics, retired in August 2003 from WVU Tech. He had been at Tech in the early 1960’s before leaving to pursue other interests. He returned in 1973 and taught here until August 2003.

Ms. Shane Artrip has been hired for one year in the capacity of Visiting Instructor.

The Department wrote and graded the math exam for the Fayette County (West Virginia) Math Field Day in February 2003. The Department also hosted the Regional Math Field Day for RESA III in March 2003.

The Department will be hosting the 16th Annual Math and Science Bowl on November 20, 2003. This is a qualifying competition for Regional Science Bowl of the U.S. Department of Energy. The Math and Science Bowl is under the direction of Dr. Susan Barton, Associate Professor of Mathematics.

Dr. Ranjith Munasinghe, Professor of Mathematics, has an article titled "Some Differential Equations Forget That They Have Variable Coefficients" that will appear in the January issue of The College Mathematics Journal.

Dr. Andy Blackwood, Associate Professor of Mathematics, became Board of Regents Coordinator in January 2003. He continues to teach (half time) in the Department of Mathematics.

Dr. Joe Urbanski, Professor of Mathematics, attended a Chautauqua short course in May 2003 on Data Analysis and Visualization Using Mathematica.

Dr. Chengmin Yang, Professor of Mathematics, continues to do research and review articles for Mathematical Reviews.

Dr. Bing Yang, Professor of Mathematics, attended the MAA Ohio Section meeting in spring 2003.

Ben Freed, Secretary-Treasurer (2002-2004), 814-393-1930, freed@clarion.edu

Ron Harrell, Short Course Co-Director (2002-2004), 814-332-5344, rharrell@alleggheny.edu

Tamara Lakins, Chair (2003-2005), 814-332-2957, tlakins@alleggheny.edu

Lyn Miller, Newsletter Editor (2003-2005), 724-738-2878, lyn.miller@sru.edu

Don Platte, Governor (2003-2005) and Short Course Co-Director (2003-2005), 814-824-2378, platte@mercyhurst.edu

James Sellers, Director of e-communications (2002-2004), 814-865-7528, sellersj@math.psu.edu

Gary Stoudt, Historian, 724-357-2608, gsstoudt@iup.edu

Bob Vallin, Coordinator of Student Programs (2003-2005), 724-738-2856, robert.vallin@sru.edu

John (Jun-Lue) Zhang, Past Chair (2003-2004), 724-357-4601, zhang@iup.edu

Allegheny Mountain Section Officers 2003-2004

Bud Boman, Second Vice Chair (2003-2004), 814-375-4834, ecb5@psu.edu

John Bukowski, First Vice Chair (2003-2004) and Section NExT Co-Coordinator (2003-2005), 814-641-3591, bukowski@juniata.edu

Barbara Faires, Section NExT Co-Coordinator (2002-2004), 724-946-7293, fares@westminster.edu

Slippery Rock University
Slippery Rock, PA 16057