

Allegheny Mountain Section of the Mathematical Association of America

Allegheny Mountain Newsletter

Spring Section Meeting April 5-6, 2013 at Indiana University of Pennsylvania

Do you enjoy mathematics? Do you want to re-connect with friends and colleagues from the Western Pennsylvania and West Virginia area? Then the Spring 2013 Section meeting is the place to be.

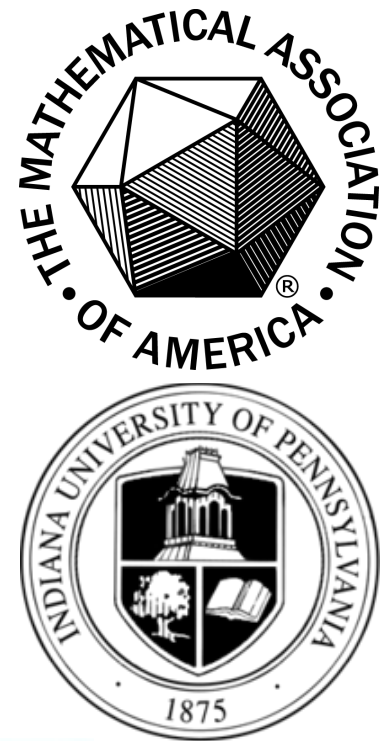
Our three featured speakers will be **Bill Dunham** of Muhlenberg College, **Catherine Socha** of Math for America and **Ravi Vakil** of Stanford University.

At this time, the titles and

abstracts of the talks are not available, but as always we look forward to excellent presentations by well respected speakers.

In addition to our invited speakers, there will be the usual contributed paper sessions for faculty and student speakers, a pizza party on Friday night, and much more. Please plan on being there.

Detailed information will be included in the spring newsletter.



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Tamara Lakins of Allegheny College, Section Governor

From the Governor: Tamara Lakins, Allegheny College

Greetings from an exceptionally warm and beautiful late October day in northwest PA (pre-Sandy)!

First, I must begin this Governor's report with a heartfelt "thank you" to former Allegheny Mountain Section Governor John Bukowski, who attended this summer's Board of Governor's meeting at MathFest in my place. I had to miss the BoG meeting this year due to family reasons, and I'm very grateful to John for providing me with such thorough notes!

John has reported that the Board of Governor's meeting had two main themes: investment in the future, and priorities and planning. Under new Executive Director Michael Pearson's direction, the internal management of the MAA has been restructured. In addition, the MAA website is undergoing a major redesign, with a proposed launch of the new website planned for April 2013. The online MAA Store has already undergone some changes and is now powered by Amazon.com. Electronic access to all MAA journals for all MAA members is an exciting member perk planned for the future!

As I reported last spring, the MAA remains on financially solid ground, although there are some areas that need to be addressed. While the MAA is debt-free and has significant assets, it has experienced eight consecutive years of operating deficits, with the

result that the cumulative reserve fund is projected to be about \$0.7 million at the end of 2012. MAA Treasurer Jim Daniel reported to the BoG that he expects efforts to break this pattern will soon result in operating surpluses. His goal is to build to yearly operating surpluses of 3.5%, which should build the reserve over the next ten years to a level of 40% of the annual MAA operating budget (currently about \$5 million). In addition, the MAA is considering ways of improving current revenues, reducing costs, and developing new sources of revenues. For example, the MAA is working to increase its book revenues by improving its marketing of books, increasing the number of print and electronic books available, and improving delivery of electronic books. The new website should help reduce costs by improving the MAA's efficiency in processing member orders. A potential new source of revenue is to develop support materials, such as online WeBWork homework sets, for MAA textbooks.

Other action items at the Board of Governors meeting included consideration of the AWIS-MAA Joint Task Force "Guidelines for avoiding implicit bias" and the motion for double-masked review for MAA journals (which, as I reported last spring, was tabled at the BoG meeting in January 2012). The "Guidelines for avoiding implicit bias" are distributed

to all MAA selection committees, and in August, the BoG approved them as official MAA policy. The Allegheny Mountain Section Executive Committee reviewed these guidelines at its recent Fall meeting. At the summer BoG meeting, the motion for double-masked review for MAA print journals was revised and passed unanimously. The motion directs editors of MAA print journals to "make a good-faith effort to see that authors' names and affiliations are not explicitly present in manuscripts sent for review." *The Colledge Mathematics Journal* already implements this policy, and the other print journals will implement the policy no later than the beginning of the next editor's term.

Let me end this note by going back to the message from MAA President Paul Zorn at last spring's section meeting. In his remarks, Paul noted that the three words that best describe the MAA are Participate, Investigate, Educate. There are plenty of opportunities in our own Section to engage in the first of these words, whether by serving for a short time on a committee, or by running to serve as one of the Section officers. Or you can nominate deserving colleagues for the Section Teaching, Mentor, or Service awards. Feel free to contact any member of the Executive Committee if you have questions about how you might contribute. I can be reached at tlakins@allegheny.edu.



Kim Roth of Juniata College,
Section Chair

From the Chair: Kim Roth, Juniata College

Greetings from rainy and windy central Pennsylvania. I hope the rest of you weathered Superstorm Sandy well.

The 2013 Section Meeting will be held at Indiana University of Pennsylvania in Indiana, PA. We have an excellent line up of invited speakers: Bill Dunham (Muhlenberg College), Catherine Socha (Math for America), and Ravi Vakil (Stanford University) There will be talks from students and

faculty along with the student problem contest. Mark your calendar now and plan to attend on April 5 and 6.

We are always looking for more people to serve in positions in the section. The nominating committee is looking for a few good people to serve as second vice chair, treasurer, newsletter editor, and coordinator of student programs. The award and nominating committees need members for next year as well. If you are curious

about what any of these duties entail, ask me or any other officer.

Also nominate people for the mentor, teaching and service awards. I am sure you have a colleague who deserves recognition.

I hope your fall semester finishes well. I hope to see some of you at the Joint Mathematics Meetings in San Diego, CA in January and all of you at the 2013 Section Meeting.



Section NExT

Section NExT News: Jackie Jensen-Vallin

Project NExT (New Experiences in Teaching) is a professional development program for new or recent Ph.D.s in the mathematical sciences. It addresses all aspects of an academic career: improving the teaching and learning of mathematics, engaging in research and scholarship, and participating in professional activities. It also provides the participants with a network of peers and mentors as they assume these responsibilities.

Allegheny Mountain Section NExT welcomes new faculty in the Section to participate in its events. Full-time faculty who have completed fewer than six years of full-time teaching experience at the post-secondary level and have primary teaching responsibilities in a post-secondary mathematical sciences department are eligible to join the Allegheny Mountain Section NExT program. Present and past national NExT Fellows are especially

encouraged to attend Section NExT workshops!

While the focus of the Section NExT workshops is on tenure-track faculty, graduate students and senior members of the Section (in the Section for 6 years or more) are allowed to attend Section NExT workshops on a space-available basis. Furthermore, senior Section members will be charged \$10 to assist with food costs.

Section Teaching Award: Call for Nominations

Nominations for the 2013 Allegheny Mountain Section Award for Distinguished College or University Teaching of Mathematics are now being solicited.

There have been some changes to the teaching award nomination process this year. First, in order to encourage nominations, the nomination process is being simplified. Second, in order to then allow winners of the award to be nominated for the national MAA Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics, which has a longer nomination process, the winner of the section teaching award will be nominated for the Haimo in the year following the section award.

The new criterion for nominations for the teaching award will be on the section website http://sections.maa.org/allegheny/teachingaward_call.htm in a few weeks. It will be a simplified criterion from what is there now.

Each year, the Allegheny Mountain Section of the MAA recognizes one of its own for Distinguished College or University Teaching of Mathematics. The awardee is honored at the spring meeting of the Section and is widely recognized and acknowledged within the Section. Recent recipients of the award include:

- 2012: **Rick Brazier**, Penn State, DuBois
- 2011: **Jerry Kruse**, Juniata

- 2010: **Richard Marchand**, Slippery Rock University
- 2009: **George Bradley**, Duquesne University
- 2008: **Antonella Cupillari**, Penn State Erie—The Behrend College
- 2006: **James Sellers**, Penn State University
- 2005: **James Reynolds**, Clarion University
- 2004: **Michael Mays**, West Virginia University

Anyone is entitled to make a nomination, although self-nomination is not permitted. Even if not selected this year, completed nominations are held for three years with the nominator's permission.

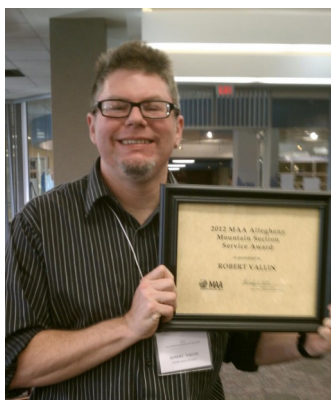
Nominations can be sent by **March 1, 2013** to:
 Kim Roth
 Juniata College
 Brumbaugh Academic Center
 1700 Moore Street
 Huntingdon, PA 16652

Or by email to:
roth@juniata.edu



2012 Teaching Award winner Rick Brazier of Penn State—DuBois

Section Service Award: Call for Nominations



2012 Service Award winner Robert Vallin of Slippery Rock University

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.

The Section announces the winner of this award each year at its annual meeting in the spring. Recent recipients of this award include

- 2012: **Robert Vallin**, Slippery Rock University
- 2010: **John Bukowski**, Juniata College
- 2009: **Tamara Lakins**, Allegheny College
- 2008: **Don Platte**, Mercyhurst College
- 2007: **Ben Freed**, Clarion University

The service award committee consists of John Tolle (Penn State Dubois), Robert Vallin (Slippery Rock), and Pam Wovchko (WV Wesleyan). Please send your nomination, with a description of how the nominee meets the criterion, by **March 15, 2013** to:

Pam Wovchko
 Department of Mathematics
 W. Va. Wesleyan College
 59 College Ave
 Buckhannon, WV 26201
wovchko_p@wvwc.edu

Section Mentoring Award: Call for Nominations



2012 Mentoring Award winner
Stacey Levine of Duquesne
University

Since the year 2000 the Allegheny Mountain Section of the MAA has awarded the Distinguished Faculty Mentor of Undergraduate Mathematics Students Award. We are soliciting nominations for this award from now through **March 1, 2013**. A nominee should have made significant contributions to the development of undergraduate students in mathematics as scholars. This includes, but is not limited to, encouraging student participation in MAA activities and advising students who make presentations at the Section meetings.

Recent recipients of this award include:

2012: **Stacey Levine**, Duquesne University

2010: **Roman Wong**, Washington & Jefferson College

2009: **James Sellers**, Penn State University

2008: **Rich Marchand**, Slippery Rock University

2007: **Mike Berry**, West Virginia Wesleyan College

2006: **Eric Rawdon**, Duquesne University

2005: **Robert Vallin**, Slippery Rock University

Please send your nomination with a description of how the nominee meets the criteria to:

Tim Flowers
flowers@iup.edu
Indiana University of Pennsylvania
233 Stright Hall
210 S. 10th Street
Indiana, PA 15705

We are soliciting nominations for this award from now through **March 1, 2013**.

Section Executive Committee: Call for Nominations

At the 2013 Spring Meeting, the Section must fill the offices of Second Vice Chair, Coordinator of Student Programs, Newsletter Editor, and Treasurer.

Descriptions of these positions can be found in this newsletter. Please consider

nominating yourself or a colleague for one of these positions.

The Nominating Committee this year consists of

Jeff Boerner (chair):
724-946-6023,
boernej@westminster.edu

Ryan Higginbottom:
724-503-1001 ext:3332
rhigginbottom@washjeff.edu

Nathaniel Mays:
304-243-2323,
nmays@wju.edu

Please send your nomination to one of the members of

the Nominating Committee by **January 31, 2013**. As always, nominations will also be taken from the floor at the business meeting next spring. Descriptions of the responsibilities of all officers and committee members can be found on pages 7-10.



If your students have attended a conference or other mathematical event and would like to write an article that can be used in the newsletter, please have them send it to the editor at mbrodie@wju.edu.

News from the Campuses

Allegheny College

submitted by **Cheryl Leech**

Allegheny College welcomes Visiting Professor **Craig Dodge** to the faculty. Craig completed his PhD in 2012 at SUNY Buffalo. His research interest is representations of finite groups.

Juniata College

submitted by **Ben Sunderland**

Henry Escudro has been promoted to Associate Professor and **Cathy Stenson** to Full Professor.

John Bukowski, Cathy Stenson, and their two boys spent the spring semester in Leiden, Netherlands. John studied the manuscripts and notebooks of Christiaan Huygens, and he taught History of Mathematics at Universiteit Leiden. He has already given three presentations back in the US about his sabbatical research. Cathy wrote a chapter on polytopes for the forthcoming second edition of *Introduction to Topology and Geometry* by Saul Stahl. While in the Netherlands the family enjoyed riding bicycles and eating lots of cheese!

Jerry Kruse is currently the director of Juniata College's James Lakso Scholarship of Teaching and Learning Center. The center promotes scholarly teaching at Juniata by sponsoring Brown Bag

lunches, Learning Communities, and supporting SoTL research. The themes for 2012-13 are promoting critical thinking and assessment of student learning outcomes. In January, Jerry presented an update on his SoTL research, promoting Quantitative Reasoning skills, at the Joint Math Meetings in Boston. Jerry is also serving on Juniata's Presidential Search Committee, working to find a successor to Dr. Tom Kepple, who has served for 15 years.

In August, the Department moved into a newly created suite of offices on the first floor of Brumbaugh Academic Center. **Kim Roth** is enjoying a sabbatical year by broadening her statistical knowledge and expertise. While Kim is on sabbatical, the department has hired **Brandt Kronholm** to a one-year position.

This past summer Henry and Joie Escudro and their three children enjoyed eight weeks in the Philippines visiting with their families.

In March, the Null Set, Juniata's Math Club, had its biggest Pi Day celebration ever.

Washington & Jefferson College

submitted by **Roman Wong**

Janet Harding has joined the Math faculty of Washington &

Jefferson College for the 2012-2013 academic year.

This past summer, **Dr. Faun Doherty** did research with two math students, **Catherine Monahan** and **Samantha Taylor**, for a project supported by a HHMI grant received by the college. They worked with two biology students and a biology professor, and used network theory to identify genes of *Coprinus cinerea* (a multicellular mushroom) that are of interest to biologists studying meiosis. Dr. Doherty and the two math students will present their work at the JMM in San Diego in January.

Dr. Roman Wong did summer research with two students, **Emily Sasala** and **Hope Snyder**. The research was supported by summer funding from W&J. They attended the summer MathFest at Madison in August. Sasala presented a talk on independent sets of chain paths and cycles at a Pi Mu Epsilon session. Snyder presented a talk on conics in Taxicab and extended Taxicab geometry at a MAA session and received an Outstanding Presentation Award. They will present other results at the JMM at San Diego.

Wheeling Jesuit University

submitted by **Marc Brodie**

Marc Brodie was promoted to

It's Your Section—Get Involved

Do you want to get involved in the section? Ever wonder what the various officers and committees do? Here are descriptions of all of the officer positions and committees of this section. If they sound like something you are interested in doing, talk to any current officer about becoming involved. The sections runs well because of the work of many people.

MAA Allegheny Mountain Section Descriptions of Officer Positions

All Section Officers

All section officers are expected to participate in three Executive Committee Meetings each year. The Spring meeting is held at the Spring Section Meeting, usually in April. The Summer meeting is usually held in June, and the Fall meeting is usually held in October. Section officers are also expected to attend the Business Meeting held at the Spring Section Meeting. Section officers often serve the Section in other ways, such as serving on committees or assisting with the events of the Spring Section Meeting. In addition, all section officers contribute to e-mail discussions about Section business throughout the year. Elected positions, except for the Governor election, which is run by the national MAA, are elected at the Spring Section Meeting Business Meeting. Appointed positions are appointed when the position becomes open.

Second Vice-Chair/First Vice-Chair

The primary duty of the Second Vice-Chair is to organize the faculty contributed talks at the Spring Section Meeting. This includes collecting the faculty talk registrations (typically sent by e-mail), coordinating with the host institution, scheduling times and rooms, and finding moderators for talks. Much of this work is done in the weeks directly preceding the Section Meeting. After one year, the Second Vice-Chair becomes the First Vice-Chair for one year. The First Vice-Chair acts as the contact person

for the three invited speakers for the Spring Section Meeting. Duties include inviting the speakers who have been determined by the executive committee (usually during the summer) and confirming travel, lodging, and registration with the invited speakers. The First Vice-Chair also finds people to meet the speakers when they arrive at the meeting and to introduce the speakers. This work occurs mostly in the summer and in the month before the section meeting. The term of the position is two years total.

Secretary

The Secretary keeps minutes of the Business Meeting and the three Executive Committee Meetings each year and submits the Annual Section Report to the MAA after gathering the appropriate data (with the help of the Treasurer and others). The secretary also maintains the contact list for departments for the section and is in charge of distributing it to committees that need it. Most of the Secretary's duties occur immediately before and during the Executive Committee Meetings. The term of the position is two years with possibility of re-election for subsequent terms.

Chair-Elect/Chair/Past Chair

The Chair-Elect serves for one year before beginning a two-year term as Chair. The Chair-Elect has no specific duties other than to serve on the Executive Committee and to prepare to become Chair. The Chair prepares meeting agendas with input from the other officers and presides at the Business Meeting and the three Executive Committee Meetings each year. The Chair is generally responsible for the operations of the Section throughout the year which include setting dates for future section meetings, giving opening and closing remarks at the section meeting, writing a message from the chair for each newsletter and being a contact between the section and the national MAA. After completing the two-year term, the Chair becomes Past Chair for one year to maintain continuity in the Section leadership. During the years of being Chair, most of the work occurs right before

It's Your Section—Get Involved (continued)

and after Executive Committee Meetings with the largest amount being before and during the Spring Section Meeting. The term of the position is four years (one year as chair-elect, two as chair, and one as past chair).

Treasurer

The Treasurer keeps all the financial accounts and records of the Section. The Treasurer receives all money paid into the Section and deposits it in the Section's bank account. The Treasurer also pays all bills of the Section out of the Section's funds and files the Annual Financial Reports and other requested reports with the MAA Director of Finance. The Treasurer has additional responsibilities with regard to the Spring Section Meeting, including organizing the MAA book and merchandise sale, contacting book company representatives for donations, preparing meeting folders and name tags, and collecting registration information to be used for the Annual Section Report. Most of the work occurs right before and after Executive Committee Meetings with the largest amount being before and during the Spring Section Meeting. The term of the position is two years with possibility of re-election for subsequent terms.

Coordinator of Student Programs

The primary responsibility of the Coordinator of Student Programs is to organize student activities at the Spring Section Meeting. This includes scheduling student talks and organizing a student breakout session. The Coordinator collects the student talk registrations (submitted by e-mail), coordinates with the host institution, schedules times and rooms, finds moderators for student talks and also prepares the abstracts of student talks. The breakout session has recently been a student problem-solving competition, but it has previously consisted of panels and talks on REUs, mathematics competitions, and careers in mathematics. Much of this-

work is done in the weeks directly preceding the Spring Section Meeting. The term of the position is two years with possibility of re-election for subsequent terms.

Section NExT Co-Coordinator

The primary responsibility of the Section NExT Co-Coordinator is to organize two workshops, one in the Fall (usually held at the University of Pittsburgh) and one at the Spring Section Meeting. This involves determining the programs, inviting speakers, working with the meeting host to provide lunch at each workshop, and sending e-mail announcements to the listserv about the meetings. After the meetings, the Coordinators work with the Treasurer to arrange appropriate payments and they send thank-you letters to the speakers. The Coordinators also send special invitations after MathFest to the new National NExTers in the Section, as well as a letter to department chairs in the section, inviting new faculty in the section to participate in Section NExT. They write the News from Section NExT for the two Section newsletters, and they maintain the NExT listserv and web page. Much of this work occurs before and during the workshops. This is an appointed position with a two-year term with possibility of serving multiple terms.

Director of E-Communications

The primary responsibility of the Director of E-Communications is to maintain the web presence for the Section. This includes updating the homepage regularly to share important announcements, developing and maintaining the web pages for the Spring Section Meeting (including information on invited speakers, meeting schedule, local information such as hotels and maps, and the online meeting registration form and talk registration form), posting the semi-annual Section Newsletters as a .pdf document, and maintaining all other web pages at the site such as Section award pages and the list of Section officers. E-communications duties occur around when the

It's Your Section—Get Involved (continued)

newsletters are published and around the Spring Section Meeting. This is an appointed position.

Section Governor

The Section Governor serves a three-year term to represent the Section on the MAA Board of Governors. The Governor is required to attend the Board meeting at six national meetings during the term. These are full-day meetings held the day before the Joint Meetings and MathFest. The Governor votes on budget and policy issues at these meetings, and the Governor is also involved in infrequent e-mail discussions and votes throughout the year. The Governor gives a report on these meetings at the Joint Math Meetings and MathFest at officers' meeting and writes a report for the newsletter as well. This position has a three-year term.

Newsletter Editor

The primary responsibility of the Newsletter Editor is to publish a newsletter to be disseminated to all members of the Section at least twice each academic year – one in the Fall, typically late October, and one at least a month prior to the Spring Meeting. The term of the position is two years with possibility of re-election for subsequent terms.

Section Historian

The duties of the Section Historian include collecting and preserving significant records that are central to the Section. This is an appointed position.

Puzzle Czar

The duties of the Puzzle Czar are to create or find problems for the section Puzzle Contest and to run the Puzzle contest at the section meeting in coordination with the Coordinator of Student Programs. Much of this work is done in the weeks directly preceding the Spring Section Meeting. This is an appointed position.

MAA Allegheny Mountain Section Descriptions of Committee Duties

All Section Committees

Section committees are selected at the fall Executive Committee Meeting. Almost all business of the section committees occurs by email. The chair of the committee is generally in charge of the few duties that occur at the Spring Section Meeting.

Nominating Committee

The nominating committee solicits nominations for the officer positions on this year's ballot. It is generally a committee of three people, one of whom is chair. Soliciting nominations often involves asking for nominations from colleagues and then contacting the potential persons and asking if they are willing. The chair of the nominating committee writes a blurb for the section newsletter requesting nominations, produces ballots for the Business Meeting, and runs the election at the Business meeting. Most of this committee's work occurs a few months before the section meeting and the chair has some work before and at the section meeting.

Teaching Award Committee

The teaching award committee solicits nominations for the MAA Allegheny Mountain Section Award for Distinguished College or University Teaching of Mathematics and decides who wins the award. It is generally a committee of three people, one of whom is chair. Usually the winner from two years previous also serves on the committee. Committee duties include soliciting nominations and voting on the nominations. Nominations are kept on file for three years and so previous years' nominees are included in the pool. In addition, the chair is in charge of writing the request for nominations that appears in the newsletter, sending the name of the winner to national to get the certificate made, announcing the winner at the dinner at the section meeting, and making sure that

It's Your Section—Get Involved (continued)

next chair with the permission of the nominator. Winners of the Section Teaching Award are eligible for the national Haimo award and the committee should make sure last year's winner's nomination gets updated and submitted for this award in the spring. Most of this committee's work occurs a few months before the section meeting, but soliciting nomination revisions for submission to the national award occurs in the fall. The chair has some additional work before and at the section meeting.

Service Award Committee

The service award committee solicits nominations for Allegheny Mountain Section Service Award and decides who wins the award. It is generally a committee of three people, one of whom is chair. Usually the previous year's winner also serves on the committee. Committee duties include soliciting nominations and voting on the nominations. Nominations are kept on file for three years and so previous years' nominees are included in the pool. In addition the chair is in charge of writing the request for nominations that appears in the newsletter, passing along the name of the winner to whomever is making the certificates, announcing the winner at the dinner at the section meeting, and making sure that past non-winning nominations get passed on to the next chair with the permission of the nominator. Most of this committee's work occurs a few months before the section meeting. The chair has some additional work before and at the section meeting.

Mentor Award Committee

The mentor award committee solicits nominations for the Allegheny Mountain Section Mentor Award and decides who wins the award. It is generally a committee of three people, one of whom is chair. Usually the previous year's winner also serves on the committee. Committee duties include soliciting nominations and voting on the nominations. Nominations are kept on file for three years and so previ-

ous years' nominees are included in the pool. In addition the chair is in charge of writing the request for nominations that appears in the newsletter, passing along the name of the winner to whomever is making the certificates, announcing the winner at the dinner at the section meeting, and making sure that past non-winning nominations get passed on to the next chair with the permission of the nominator. Most of this committee's work occurs a few months before the section meeting. The chair has some additional work before and at the section meeting.

Descriptions of the awards and the nomination procedures can be found on the section website:

<http://sections.maa.org/allegheny/>