Allegheny Mountain Section of the Mathematical Association of America

# Allegheny Mountain Section Newsletter

## SPRING SECTION MEETING AT GROVE CITY COLLEGE

The annual Spring Meeting of the Allegheny Mountain Section will be held April 3-4, 2020 at Grove City College. We are particularly excited this year as we will be cohosting the meeting with the KME Great Lakes Region! As a result, we are expecting to have significantly more student participation as well as student talks.

Our three invited speakers will be **Tom Edgar,** editor of *Math Horizons,* **Samuel Hansen** who is the Mathematics & Statistics Librarian for the University of Michigan as well as the host of the Relatively Prime Podcast, and **Carol Schumacher** from Kenyon College. Biographies of our speakers can be found on pages 7 and 8 in this newsletter. Detailed information on our Spring Meeting will be provided in the upcoming spring newsletter.

We have an exciting meeting planned and hope to see you there! Don't forget to like us on Facebook (https://www.facebook.com/alleghenymaa/ ) and follow us on Twitter (https://twitter.com/alleghenymaa ).

# REPORT FROM OUR MAA SECTION CONGRESS REPRESENTATIVE:
## Pam Wovchko

**Pam Wovchko of West Virginia Wesleyan College, MAA Congress Representative**

*"There are some new opportunities for membership to include more of the mathematics community..."*

This year was my last MathFest Congress meeting as the Allegheny Mountain Section Representative. It has been my honor to represent such a great section. Thank you for the opportunity to serve. Here are some of the highlights from the Congress meeting that may interest you. The MAA is going to be encouraging members to do some "micro-volunteering" (1-3 hour time commitments). Examples include: reading policy statements for the MAA and giving feedback, refereeing articles, judging posters, inviting other sections to section meetings, inviting colleagues to section meetings, and moderating for section meetings. Many of us have been doing these things, but more hands make lighter work.

There are some new opportunities for membership to include more of the mathematics community: Lifetime Membership ($2500 introductory rate), VITAL faculty memberships ($79/year), and student transitional member-

ships ($59/year for the first two years after a student graduates). Note: VITAL=Visitors, Instructors, TA's, Adjuncts, and Lecturers

As you may have noticed in a recent MAA alert, there is a new edition of "101 Careers" available. Also every department should have received a copy of "Living Proof: Stories of Resilience Along the Mathematical Journey." Please share these inspirational stories with your students and colleagues.

As the MAA transitions away from the Joint Meetings, it is making efforts to increase its support of sections and section meetings. The MAA is changing/expanding the Lecturer program. The exact details of this will be announced when they become official, but we can look forward to additional funding for some speakers at our section meetings.

Have a great end to the Fall semester! Thank you for your involvement in the MAA.

**MAA**
**MATHEMATICAL ASSOCIATION OF AMERICA**

## FROM THE CHAIR:
## Pam Richardson

I routinely teach a few liberal arts math courses designed for students in non-science majors. The vast majority of the students in these classes are nervous about taking a math course and will tell me, "I'm just not a math person" or "I'm really bad at math." When I ask them to explain why they feel this way, the response is usually about how they have been confused by math, how they were discouraged from studying math, or how they never felt confident in math classes in the past. In many cases, these students can point to a single bad experience that soured their opinions of mathematics.

I have always been a firm believer that an individual cannot be classified as a "math person" or "not a math person," but I've always struggled to find the right words to express my reasoning for this. This summer, I was delighted to learn about the new book, *Living Proof: Stories of Resilience Along the Mathematical Journey*. This book, which was co-published by the MAA and the AMS, is available in electronic format for free at https://www.maa.org/press/ebooks/living-proof-stories-of-resilience-along-the-mathematical-journey-2. It is a wonderful collection of essays about successful mathematicians (folks who most would label as "math people") who persisted in their mathematical studies in spite of challenges or bad experiences. The stories are moving and inspirational, and the foreword does a fantastic job of discussing the myth of the "math person." This term, I shared excerpts from the foreword of this book with all of my classes in attempt to encourage them not to give up at the first sign of difficulty. I strongly recommend that you check it out and share it with your students!

I would like to encourage all of our members to get more involved in the Section. Please consider running for office, serving on a committee, or nominating a colleague for one of our Section awards. More information on all of these opportunities can be found in this newsletter and on the Section website.

Finally, the Allegheny Mountain Section spring meeting will be a special one this year, as it will be a joint meeting with Kappa Mu Epsilon (KME). While the structure of the conference program will largely stay the same, we hope to welcome KME participants from throughout the Great Lakes region to our Section. Mark your calendars for this historic event, which will occur on April 3-4, 2020 at Grove City College. I hope to see you there!

**Pam Richardson of Westminster College, Section Chair**

*"I would like to encourage all of our members to get more involved in the Section."*

## SECTION NExT REPORT
## Kim Roth, Juniata College and John Tolle, Penn State DuBois

The fall Section NExT Workshop was held at Slippery Rock University on September 28th. The topic of the workshop was innovative classroom design & instructional practice. The morning was a workshop on standards-based grading by Rachel Weir of Allegheny College. The afternoon was a panel on Innovative Nontraditional Classroom Strategies from Kuei-Nuan Lin of Penn State Greater Allegheny, Vicki Sealey of WVU, Rich Marchand of Slippery Rock, Craig Dodge of Allegheny College.

The spring Section NExT meeting will be held on Saturday April 4th at the end of the section meeting beginning with lunch at 1 p.m after the last plenary. The topic and speaker for the workshop are still being planned.

If you are interested on attending a future meeting or you have a new colleague in mathematics you'd like to receive the emails about future meetings, email Kim Roth (roth@juniata.edu) or John Tolle (jut14@psu.edu).

## CALL FOR NOMINATIONS

The Executive Committee is looking for MAA Allegheny Mountain Section members to fill the following three positions; Chair-Elect, Treasurer, and Second Vice-Chair.

All section officers participate in three Executive Committee meetings each year. One meeting is held at the Spring Section Meeting, usually in April. Another meeting is typically held in May or June, and the third meeting is usually held in early October. Section officers are also expected to attend the Business Meeting which is conducted the Saturday morning of the Spring Section Meeting. Section officers often serve in other ways as well, 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.

Please consider nominating one of your Allegheny Mountain Section friends or colleagues for one of these service positions. Self-nominations are welcomed. All nominations should be sent by January 24, 2020 to:

Kim Roth, Juniata College
roth@juniata.edu

# EXECUTIVE COMMITTEE POSITION DESCRIPTIONS

## Chair-Elect

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 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 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 is responsible for handling all section money.  This includes collecting any fees charged by the section, receiving funds provided by the MAA, maintaining proper and accurate books of section money, and paying any debts incurred by the section.  Prior to the annual Spring Meeting, the treasurer (in partnership with the Director of E-Communications) is responsible for creating and maintaining the official records for all meeting attendees who preregister.  The treasurer uses these records to oversee the creation of name tags, folder labels and receipts for meeting attendees who preregistrer.  At the annual section meeting, the treasurer oversees the registration process and collects all registration fees.  Additional duties of the treasurer include filing an annual report with the MAA and collecting section meeting registration information to be used for an annual section report to the MAA Committee on Sections.  The term of the Treasurer is three years.

## Second 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.

# SEEKING NOMINATIONS FOR AWARD RECIPIENTS

## 2020 Allegheny Mountain Section Distinguished Teaching Award

The criterion for the Annual Allegheny Mountain Section Distinguished Teaching Award is a record of extraordinary success in teaching, a record of teaching effectiveness that can be documented, and an ability to foster curiosity and generate excitement about mathematics. It is preferable to have an award recipient whose teaching influence extends beyond their own institution. The nominee should be a member of the MAA, must teach at an institution within the section, and should have at least five years of teaching experience in a mathematical science.

Teaching is to be interpreted in its broadest sense, not necessarily limited to classroom teaching (it may include activities such as preparing students for mathematical competitions at the college level, for example, the Putnam Prize Competition or the Mathematical Contest in Modeling, or attracting students to become majors in a mathematical science or to become Ph.D. candidates).

Please send your nomination, with a description of how the nominee meets the criterion, by March 6 2020 to:

Courtney Nagle, Penn State Behrend
crt12@psu.edu

## 2020 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 Section. Please send your nomination, with a description of how the nominee meets the criterion, by March 6 2020 to:

Pam Wovchko, West Virginia Wesleyan College
wovchko_p@wvwc.edu

## 2020 Allegheny Mountain Section Mentor Award

The Mentor Award has been a part of the Allegheny Mountain Section since the year 2000. 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. Please send your nomination, with a description of how the nominee meets the criterion, by March 6 2020 to:

Jared Burns, Seton Hill University

jburns@setonhill.edu

## MEET OUR INVITED SPEAKERS:  SPRING 2020

**Tom Edgar** is an associate professor of mathematics at Pacific Lutheran University in Tacoma, Washington, where he has lived for the past decade. He received his undergraduate degree from Dickinson College in Pennsylvania, a Masters degree from Colorado State University, and his Ph.D. from the University of Notre Dame in Indiana. He is the recipient of the distinguished teaching award from the Pacific Northwest Section of the Mathematics Association of America, and he will serve as the editor of Math Horizons, the undergraduate magazine of the MAA, during the calendar years 2020-2024. He enjoys exploring integer sequences, combinatorial number theory, representation theory, and visual mathematics, especially with students in the classroom or via undergraduate research.

**Samuel Hansen** is the Mathematics & Statistics Librarian at the University of Michigan. They received their MLIS from the University of Wisconsin, Madison and MS in Mathematics from the University of Nevada, Las Vegas. Samuel is also the producer and host behind the mathematics podcast Relatively Prime: Stories in the Mathematical Domain, and has produced many other mathematics podcasts through the years including Strongly Connected Components and Math/Maths. Samuel has dedicated many years to telling the stories of mathematics in many different form ranging from podcasts to writing on The Aperiodical and Second-Rate Minds to a video series on the mathematical history of Nottingham to their current research which investigates what citation patterns and aging can tell us about the nature of mathematical research.

**Carol Schumacher** is Professor of Mathematics at Kenyon College and has served three terms as department chair. She received her Ph.D. in mathematics from The University of Texas at Austin. Schumacher is the recipient of Kenyon's Trustee Teaching Award and of the Ohio Section MAA's Distinguished Teaching Award. She is the author of Closer and Closer: Introducing Real Analysis and Chapter Zero: Fundamental Notions of Abstract Mathematics, 2E. She loves teaching pretty much anything, but especially loves Calculus I and Calculus III, the transitions to proof course, the real analysis sequence. And she has recently gotten into teaching applied differential equations and dynamics.

Schumacher is active in the Mathematical Association of America. She was co-chair of the 2015 CUPM Curriculum Guide to Majors in the Mathematical Sciences and is MAA VP. She has addressed Project NExT fellows at their summer workshop and has been involved with workshops that help faculty incorporate inquiry into their classrooms.

## Congratulations to our 2019 Allegheny Mountain Section award recipients!

### Mentor Award:
Jared Burns, Seton Hill University

### Service Award:
Pamela Wovchko, West Virginia Wesleyan College

## UPCOMING MEETINGS

**Joint Mathematics Meetings 2020**
January 15 - 18, Denver, CO

**Allegheny Mountain Section Spring Meeting 2020**
April 3 - 4, Grove City College, Grove City, PA

**MAA MathFest 2020**
July 29 - August 1, Philadelphia, PA

**Allegheny Mountain Section Spring Meeting 2021**
April 9 - 10, Edinboro University, Edinboro, PA

# 2019 PHOTO GALLERY

## Spring Section Meeting at Shepherd University


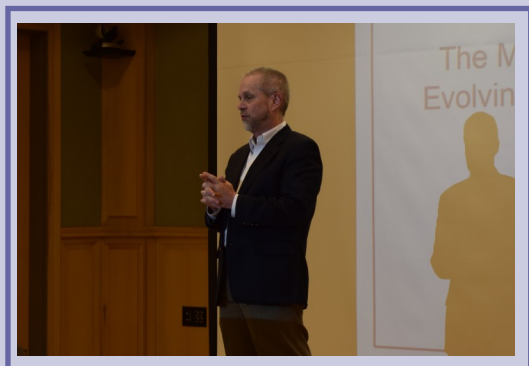W&J students at the Spring Meeting.


Fairmont students and faculty at the Spring Meeting.


Jared Burns, winner of the Mentor Award with presenter Carolyn Cuff.


Pam Wovchko, winner of the Service Award with presenter Tim Flowers.


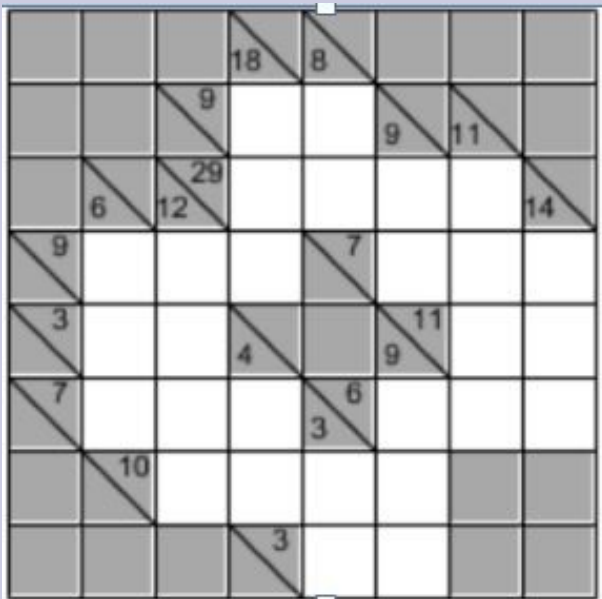Michael Pearson speaking at the conference.

# FOUND MATH



**MAA Found Math Photo:**
Parabolic arcs of the Priory Chapel of Saint Louis Abbey in Creve Coeur, Mo.
Photo by Jane Barnard.

Found Math is a photo gallery of mathematical images on the MAA website.

https://www.maa.org/community/columns/maa-found-math



## FALL PUZZLE
## Kakuro

A Kakuro puzzle is like a crossword puzzle with numbers.  Place a digit from 1 to 9 inclusive, into each white cell so that the numbers in the cells sum horizontally to the number in the upper triangle to the left and sum vertically to the number in the lower triangle above.  No digit can be used more than once in any row or column.

Puzzle from http://innoludic.com

Do you have any exciting news you would like to share? If so, please send it to me!  We would love to hear what you and/or your students are doing within our section.

## Newsletter Editor

Kim Jones

Washington & Jefferson College

kjones@washjeff.edu