### EARLY CAREER

The Early Career Section offers information and suggestions for graduate students, job seekers, early career academics of all types, and those who mentor them. Angela Gibney serves as the editor of this section. Next month's theme will be communicating mathematics.



# The Year to Come In the Early Career

#### A. Gibney

In the first year of our series, more than sixty colleagues contributed ideas and advice on topics for early career mathematicians and those who mentor them. Some devoted people have written more than one piece, and others have generously shared their ideas for points to discuss. At the time I'm writing this, almost fifty people have signed on to write articles in year two. You can read the names of all past and (some of the) future contributors below. If you haven't had a chance, I urge you to read what they have had to say: bit.ly/2lEMeHAEarlyCareer.

In the coming year we plan to take on new topics as well as treat different facets of some of the themes from our first year. In February we will focus on aspects of the communication of mathematics. In March we will talk about challenging issues and how to deal with them, especially prior to tenure. In April we will spotlight careers in business, industry, and government. Our themes in May are research, creativity, and productivity. For the June/July issue we will consider different types of academic jobs, and in August, getting ready for the academic job market. Matters surrounding working with students will be the focus of the September issue, and in October we will revisit the important theme of mentoring. Topics for November include strategies for evaluating applications for jobs and graduate school, and we will consider how to prepare for a successful interview. We are opening the floor to our readers so they may tell us about great mathematical activities to highlight in our December issue.

To nominate a program for the December 2020 Good Ideas issue, fill out a short form at www.angelagibney .org/the-early-career. You may also let us know you'd like to contribute to the Early Career section, name a colleague to be invited to contribute, suggest a topic we

Angela Gibney is a professor of mathematics at Rutgers University and an associate editor of Notices. Her email address is angela.gibney@gmail.com. For permission to reprint this article, please contact: reprint-permission @ams.org.

DOI: https://dx.doi.org/10.1090/noti2006

might address, or simply give us feedback. We would love to hear from you.

This month, just in time for the new year's introspection, we feature a piece written by Skip Garibaldi, the director of the Center for Communications Research, La Jolla, a division of the Institute for Defense Analyses. Skip was previously professor of mathematics at Emory University and associate director of the Institute for Pure & Applied Mathematics at UCLA. Skip considers what motivates us to do our work.

Thank you to the contributors for the first year:

Colin Adams Taylor Arnold Arend Bayer Hannah Bennett George Berzsenyi Jennifer Bowen Dawei Chen Linda Chen Izzet Coskun Satyan Devadoss Ellen Eischen Ben Elias Jordan Ellenberg John Etnyre Carol Fan Amanda Folsom **Jim Gatheral** Doris Gluck Herman Gluck Ursula Gritsch Julia Hartmann Brendan Hassett Natalie Hobson Kelly Jabbusch Jesse Johnson Reva Kasman Alex Kercheval Alex Kontorovich Holly Krieger Melinda Lanius **Richard Laugesen** Rob Lazarsfeld

Rachel Levy Robert Lipshitz Marissa Loving Diane Maclagan Claire Merriman Ken Millett Jasmine Ng Ken Ono Iennifer Pearl Nick Proudfoot **Emilie Purvine** Vanessa Ouiñones Rohini Ramadas Iulie Rana Annie Ravmond Ken Ribet Pamela Richardson Fadil Santosa Jessica Sidman Joe Silverman Simone Sisneros-Thiry Dan Stefanica Bernd Sturmfels Francis Su Nicola Tarasca Dan Thompson Chad Topaz Isabel Vogt Chris Woodward Kelly Yancey Xiao Yang Melissa Yeung

And in anticipation of year two, we thank:

Dan Abramovich David Anderson Javier Arsuaga Matt Baker Hannah Bennett Julie Bergner Aaron Bertram Sara Billey Dick Canary Linda Chen Izzet Coskun Lisa Davis Mark De Cataldo Charlie Epstein

Dan Erman Joel Foisy Skip Garibaldi Courtney Gibbons Deanna Haunsperger Natalie Hobson Leslie Hogben Reva Kasman **Jesse Kass** Marianne Korten Greg Kuperberg Brian Lehman Sven Leyffer Sarah Mayes-Tang Anya Michaelsen Ken Ono

**Robin Pemantle** Harriet Pollatsek Pedro Ponte-Castendada Bruce Reznik Margaret Robinson Sarah Rundell Björn Sandstede Greg Smith Karen Smith Andrew Sornborger Becky Swanson Chad Topaz Tony Várilly-Alvarado Judy Walker Chuck Weibel David Zureick-Brown

## Finding Your Reward

#### Skip Garibaldi

What is it about doing math that people find really rewarding? Don't answer too quickly. It's easy to get wrapped up in your current interests and lose sight of other opportunities.

Before we get down to business, let's get our terminology straight. Sometimes people conflate "math" with something like "things done by professors in a department of mathematics," but I mean something more inclusive. When I look at my colleagues in business, industry, and government or faculty in departments of computer science or engineering, for example, I see some people who are not only interested in equations or applications but also care deeply about theorems and proofs. I think they are "doing math." I mean math in that broader sense here.

So what are some of the things that people find rewarding about doing math? For some readers, the answer is simple: proving theorems or explaining exciting theorems to others are both pleasurable activities, and we should count ourselves lucky if someone is willing to pay us to do them. One of my friends does math for this reason; his aim is to prove theorems that he personally finds beautiful, and all other considerations, such as publication, are not just secondary but nearly irrelevant. There is an elemental appeal to this approach to mathematics.

There are also earthly rewards to the math life. For one, math can provide the admiration and respect of your peers, such as the prestige that comes with being a professor or receiving a prize. This is a completely normal motivation. (Recall the quote "Give me enough medals and I'll win

DOI: https://dx.doi.org/10.1090/noti2005

Skip Garibaldi is director of the Center for Communications Research, La Jolla, a division of the Institute for Defense Analyses. His email address is skip@garibaldibros.com.