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](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](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
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
Jennifer Pearl
Nick Proudfoot
Emilie Purvine
Vanessa Quiñones
Rohini Ramadas
Julie Rana
Annie Raymond
Ken Ribet
Pamela Richardson
Fadil Santosa
Jessica Sidman
Joe Silverman
Simone Sisneros-Thiry
Dan Stefancic
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-Casteneda
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

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.

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