Megan Patnott

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Education

Ph.D.	University of Notre Dame	Mathematics, May 2013
M.S.	University of Notre Dame	Mathematics, May 2009
B.S.	Hope College	Mathematics and Computer Science, May 2007

Teaching Experience

Fall 2019 - Present	Associate Professor, Regis University
Fall 2013 - Spring 2019	Assistant Professor, Regis University
Fall 2012	Associate Faculty, Indiana University South Bend
Fall 2008 - Spring 2012	Graduate Teaching Assistant, University of Notre Dame

Courses taught since 2013:

- Abstract Algebra
- Applied Combinatorics
- Advanced Linear Algebra
- Business Calculus
- Calculus 1
- Calculus 2
- Calculus 3
- History and Foundations of Mathematics
- Independent Research Project
- Introduction to Discrete Mathematics
- Introduction to Mathematical Modeling
- Introduction to Statistics
- Linear Algebra
- Logic and Proof
- Math Learning Strategies
- Modern Geometry
- Pre-Calculus
- Quantitative Skills and Reasoning
- Statistics for Life Sciences
- Writing Analytically

Most courses were taught face-to-face, but my Fall 2020 courses were HyFlex, my Spring 2021 courses were synchronous online, and a few courses were taught over the summer as asynchronous online courses.

University Service

Fall 2022 - Present	Mathematics Department Chairperson
Fall 2022 - Present	Regis University Assessment Committee
Fall 2022 - Present	Regis College Assessment Committee
Fall 2013 - Present	Regis College Academic Integrity Appeals Panel
Fall 2020 - Spring 2021	Mathematics Department Representative to Faculty Senate
Fall 2017 - Spring 2020	College Curriculum and Core Committee, Math/Science Representative
Fall 2016 - Spring 2019	Faculty Development Committee Member
Fall 2014 - Spring 2018	Math Club Organizer
Fall 2015 - Spring 2017	Mathematics Department Representative to Faculty Senate

Papers

Patnott, Megan. "The h-vectors of arithmetically Gorenstein sets of points on a general sextic surface in $\mathbb{P}^3$." *Journal of Algebra* **403C** (2014), pp. 345 - 362.

Juan Migliore and Megan Patnott. "Minimal free resolutions of general points lying on cubic surfaces in $\mathbb{P}^3$." *Journal of Pure and Applied Algebra* **215** (7), 1737 − 1746, 2011.

Presentations and Supervised Student Presentations

Revising MT 250 Quantitative Skills and Reasoning. Contributed presentation, Regis College 2021 Fall Faculty Conference, October 2021.

Connected Lesson Supplement: Functions. Contributed presentation of work done during the workshop, META Math Writer's Workshop, May 2021.

Visualizing Newton's Method and Other Calculus Topics with Desmos. Contributed presentation, MAA Rocky Mountain Section Meeting 2018, April 14, 2018.

Using Sage to Solve Confused Electrician Games. Contributed presentation by student Erin Mecaller, MAA Rocky Mountain Section Meeting 2018, April 13, 2018 on work from an independent research-study with me in the Spring 2018 semester.

Mathematicians Explore a Puzzle. Presentation for a general audience at Regis University Science Sunday, April 8, 2018.

The h-vectors of arithmetically Gorenstein sets of points on a general sextic surface in $\mathbb{P}^3$. Invited presentation at:

▶ Special Session on Commutative Algebra, American Mathematical Society Sectional Meeting #1087, University of Mississippi, March 3, 2013.

▶ Special Session on Interactions Between Geometry and Commutative Algebra, Canadian Mathematical Society Summer Meeting, University of Regina, Saskatchewan, June 3, 2012.

Symmery, wallpaper patterns, and M.C. Escher. Invited to speak to high school students or undergraduates at:

▶ Black River Public School, Holland, Michigan, September 21, 2011

▶ Hope College Math Colloquium, Hope College, September 20, 2011

▶ Bi-State Math Colloqium, Loras College and the University of Wisconsin–Platteville (at Loras College), March 4, 2011.

A brief tour of algebraic geometry via an example. Invited to speak to VERUM Colloquium Series, Valparaiso University, July 1, 2011.

Minimal free resolutions of general points on cubic surfaces. Invited presentation at Special Session on Hilbert Functions in Commutative Algebra and Algebraic Combinatorics, American Mathematical Society Sectional Meeting #1064, University of Notre Dame, November 7, 2010.

Posters

Using Desmos to Create Interactive Graphs. 2018 Regis University Learning Technology Fair, Regis

University, March 15, 2018.s

Classifying points in $\mathbb{P}^3$. Poster session, Fall Faculty Conference, Regis University, October 3, 2014.

Hilbert functions and graded Betti numbers of arithmetically Gorenstein points on general surfaces in $\mathbb{P}^3$. Accepted to graduate poster session of the Association for Women in Mathematics Workshop at the 2012 Joint Mathematics Meetings, Boston, Massachusetts, January 7, 2012.

Minimal Free Resolutions of General Points on Cubic Surfaces. Poster session of the Midwest Commutative Algebra and Geometry Conference, Purdue University, May 24, 2011.

Conferences, Workshops, and Summer Programs

▶ Building Community Engagement into Active Learning in the Gen Ed Math Classroom. Workshop at MAA Rocky Mountain Section Meeting, 2023.

▶ MAA Rocky Mountain Section Meeting, 2015, 2018, and 2023.

▶ Spring 2022 Change DIAL Conference, University of Nebraska Lincoln, 2022.

▶ Dana Center Lumen OHM Coding Project, Online, 2022.

▶ MAA Equity in Action Discussions, Online, 2021

▶ StatPrep Introduction to RStudio Workshop, Online, 2022.

▶ TODOS 2021 Virtual Conference, TODOS: Mathematics for ALL, Online, 2021

▶ Mastery Grading Conference, Online, 2020 and 2021

▶ Launch Years Designing Mathematics Pathways for Equity, The Charles A. Dana Center at the University of Texas Austin, Online, 2021

▶ META Math Writing Workshop, Online, 2021

▶ PEDESTALS 2: Teaching Mathematics Remotely and Doing it Well, College Bridge, Online, 2020

▶ Joint Mathematics Meetings, 2011-2014, 2020

▶ MAA Mathfest, 2013, 2014, 2017, 2018

▶ An Introduction to WeBWork: An Open Source Alternative for Generating and Delivering Online Homework Problems. Minicourse at MAA Mathfest 2018

▶ Lilly Conference, Bethesda, Maryland, 2018

▶ Teaching Introductory Statistics with Simulation-Based Inference. Minicourse at MAA Mathfest 2017

▶ Preparing Students for Success in Calculus: Aligning Placement, Curriculum and Assessment. Minicourse at MAA Mathfest 2017

- RUME (Research in Undergraduate Mathmatics) with a View, 2016

- Midwest Commutative Algebra and Algebraic Geometry Conference: A Meeting in Honor of Juan Migliore, 2016

- Exploring ePortfolios, Online Learning Consortium, 2016

- Project NExT Workshop, 2013 and 2014

- AMS Sectional Meetings, Midwest Spring and Fall 2010 and Southeast Spring 2013

- Further Connections Between Algebra and Geometry 2013

- Workshop on Connections Between Algebra and Geometry, 2012

- Canadian Mathematical Society Summer Meeting, 2012

- Midwest Commutative Algebra and Algebraic Geometry Conferences, 2009-2012

- Nebraska Conference for Undergraduate Women in Mathematics (as invited graduate student), 2010

- COCOA 2009: International School on Computer Algebra, Barcelona, Spain, 2009

Memberships in Professional Associations
American Mathematical Society
Mathematics Association of America
Association for Women in Mathematics