

COUNTABLE BITS

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2022-2023 Back in Person

After the previous year of tentatively returning to a face-to-face office and classroom environment, this year brought a far greater sense of normalcy in our interactions. While we continued to carefully follow protocols, we enjoyed the greater ease of eating together indoors during our not-infrequent lunch meetings. Our paraprofessionals did a superb job of organizing community-building events in the department, and we even threw an in-person retirement party! All around there was a return of spontaneous conversations with colleagues and students, and we resumed thoroughly enjoying occasional social dinners in restaurants, when visiting speakers came into town.

Our blockly ADEI meetings continued this year, and the department co-created a **community agreement** for having difficult conversations. Another success of note was our hiring of computer scientists: alumnus **Dr. Blake Jackson ('16)**, and **Dr. Ben Nye** who will return in a tenure track capacity this fall.

The year saw some restructuring of courses in mathematics, statistics, and computer science. Our three calculus courses have been modified to a four-course sequence, each including fewer topics, and the mathematics major requirements are being modified to allow students more flexibility. Mid-level statistics offerings have expanded. An additional lower-level course in computer science has been added to help first-time computer science students access and succeed in the major. The computer science major will now also require a course from an approved list in equity or ethics.

We appreciated the shared experiences that came with students and faculty being physically present, from the well-attended in-person celebration for seniors, to an in-person retirement event for **Dr. Marlow Anderson**, both held in the elegant Stewart House location. This year saw **Dr. Mike Siddoway** receiving the Burton W. Jones Teaching award, becoming the third such member in our department over several decades.

The year was topped off with a visit from a distinguished and longtime frequent visitor, **Dr. Robin Wilson** who received an honorary doctorate in the May 2023 graduation event.

Joint Mathematics Meetings 2023

The annual Joint Mathematics Meetings were held in Boston in January 2023, and were in-person for the first time since the onset of the covid pandemic. Several thousand mathematicians attended; it was filled with interesting panels, a bustling undergraduate poster session (three current CC students presented), and many great talks, including talks by former CC alums and CC faculty members. On Thursday evening, several CC folks at the meeting gathered for dinner. **Dr. Molly Moran ('09)** was joined by CC alumnus **Dr. Hanson Smith ('14)** and current CC students **Jingyi Liu ('24)**, **Tim Somerset ('23)**, and **Emerson Worrell ('23)**. It was a great evening to catch up and see familiar faces.



From left: **Emerson Worrell**, **Dr. Molly Moran**, **Jingyi Liu**, **Tim Somerset**, and **Dr. Hanson Smith**.

Graduating Majors, Colorado College 2023

Mathematics:

Olivia Bouthot
Edie Brazil
Lilly Brazil
Emma Caligor
Davidson Cheng
Cooper Doe
Galileo Fries
Henry Jones
Casmali Lopez
Na'ama Nevo
Mike Romer
Tim Somerset
Emerson Worrell
Anni Zettl (Dec '22)

Computer Science:

Will Barber
Marcus Behenna
Davidson Cheng
James Dollard (Dec '22)
Griffin Ferguson
Lena Fleischer
Jessica Hannebert
William Holtz
Miranda Hunter
Joshua Kalenga
Ethan Lebowitz
Daniel Lewinsohn
Tony Mastromarino
Quattro Musser
Mishra Pralad
Benjamin Modlin
Ellen Moore
Bryan Moreno
Ella Neurohr
Cormac O'Brien
Moises Padilla
Ronak Patel
Max Perozek
Giang Pham
Liz Seero
Moises Padilla
Moses Solomon
Richard Wang

Mathematical Contest in Modeling

The **Mathematical Contest in Modeling** and **Interdisciplinary Contest in Modeling** (MCM/ICM) is an international contest where teams from around the world compete to solve real-world applications. Participating teams choose one of six open-ended problems and spend five days providing a realistic solution that is ready to deploy in the real world. This year, the contest took place twice: Feb 16 – 20 and March 30 – April 3. A total of five CC teams participated in the contest to improve their modeling, problem-solving, and writing skills.

Two teams **Jingyi Liu ('24)**, **Ziyuan Yin ('24)**, **Fengyan Zhang ('24)**, and **Wanyan Yuan ('24)**, **Haoru Yang**, **Tori Zhu ('26)** investigated if factoring the environment and sustainability into the conventional GDP, called “green” GDP, could be a better measure to represent the true economic health of a nation. **Joshua McFeeters ('25)** participated as a team of one student and predicted Wordle results, which is a popular daily puzzle offered by the New York Times. Another team **Esa Chen ('24)**, **Junhao Qu ('25)**, and **Xinran Wang ('24)** analyzed how the UN should prioritize their 17 sustainable development goals. All of the above-mentioned teams were designated “successful participants.” Lastly, **Zach Zerbe ('25)** participated in the second contest and modeled used yacht prices based on various variables. The result of the second contest will be available in July. The two teams investigating GDP—**Jingyi Liu**, **Ziyuan Yin**, **Fengyan Zhang**, and **Wanyan Yuan**, **Haoru Yang**, and **Tori Zhu** — presented their solutions at the 19th annual **SIAM Front Range Applied Math Student Conference (FRAMSC)** in March. We are very proud of our students participating in the contest while navigating the third weekend of the block on the busy block schedule.



FRAMSC attendees from left: **Ziyuan Yin**, **Fengyan Zhan**, **Jingyi Liu**, team advisors **Dr. Minho Kim** and **Dr. Flavia Sancier-Barbosa**, **Haoru Yang**, **Wanyan Yuan**, and **Tori Zhu**.

Putnam Exam and Rawles Exam

The Putnam Exam is named after William Lowell Putnam, a Harvard University graduate. It was first held in 1938. The problems on the Putnam Exam are known to be very difficult, and many students do not score any points at all. Solving problems correctly on the exam requires mathematical knowledge as well as the ability to come up with creative ideas under time pressure. Three students participated in December: **Annika Piccaro ('24)**, **Davidson Cheng ('23)**, and **Tim Somerset ('23)**. All three students scored above zero, an accomplishment in itself; Annika had a particularly strong performance. The **Rawles Exam** is another exam that runs each year, and is funded by a generous gift from the Rawles family from decades ago when the department was bequeathed shares in the company American Viscose. **Dr. Robin Wilson**, Emeritus Professor at the Open University in the United Kingdom, supplied one of the six questions in the form of the “Icosian Game”. Two of the questions were unsolved Blockly Pizza Puzzles. Our upper division winner was **Tim Somerset**. Our lower division winner was **Haoru Yang ('24)**. Other students taking the exam also did very well, even though no runner up prizes are offered!

Fearless Friday Seminar Series

In Person Fearless Friday seminars continued. We continued our newer tradition of serving pizza outdoors before student-oriented talks and livestreaming to allow for a remote audience. Speakers this year included Department Faculty **Drs. Stefan Erickson**, **Flavia Sancier-Barbosa**, **Molly Moran**, **Joseph Rennie**, and **Cory Scott**. Visiting speakers included alumnae **Drs. Jennifer Marlow ('03)** and **Rebecca Mitchell ('12)**, and Computer Science Chair of Colorado School of Mines **Dr. Iris Bahar**. A longtime welcome visitor, **Dr. Robin Wilson**, gave several talks!

Visit our website:
www.coloradocollege.edu/Dept/MA

Students Attend Conference for Women in Mathematics

Since 1998 the University of Nebraska has hosted the **National Conference for Undergraduate Women in Mathematics** (NCUWM), a venue for female-identifying students to present their research, network with peers and faculty, and learn about graduate programs and job opportunities. Four CC students attended this event that took place in January: **Leo Fries ('24)**, **Na'ama Nevo ('23)**, **Tiia Shea ('24)**, and **Haoru Yang** (who presented a poster on her research from last summer). In addition to the official conference events, the students got a chance to connect with CC alumnus **Austin Eide ('16)**, who is finishing his PhD at the University of Nebraska, and former CC professor **Dr. Amelia Taylor**, who was on a career panel.

Leo says: "It was inspiring to see undergrad math students like myself presenting their research and even having that research published, and to hear the stories of women with careers in mathematics in industry, teaching, and academia." Haoru adds: "NCUWM was a great experience! Being surrounded by excellent female mathematicians and seeing their impressive work inspired me to continue my passion for mathematics and pursue a higher degree in STEM." **Dr. David Brown**, who accompanied the students, agrees that the conference was a wonderful experience and looks forward to making it an annual event.



From left: **Haoru Yang**, **Na'ama Nevo**, **Leo Fries**, and **Tiia Shea**.

Graduating Majors, Colorado College 2023

Mathematical Economics:

Brandon Burke
Audra Burrall
Jennifer Clemente
Talia Cloud
Michael Cooper
Ella Engel
Anil Jergens
Saigopal Rangaraj
Cullen Schooff
Yubeibei Shi
Annie Tucker
Jules Willick
Alex Wimer
Zihan Zhu

Annual Awards in Computer Science



The **Grace Hopper** award is given to a senior who demonstrates an unusual commitment to the CS community. This year the award is shared by **Lena Fleisher ('23)** (above), and **Joshua Kalenga ('23)** (below).



Rocky Mountain Celebration of Women in Computing

In September, a group of faculty and students attended the **Rocky Mountain Celebration of Women in Computing** (RMCWiC). **Dr. Jane McDougall** and **Dr. Janet Burge** organized the trip, which was funded through the Jones Staaf Computer Science Development Fund. In the words of the organizers, "RMCWiC provides a unique opportunity for technical women from Colorado and neighboring states to come together to share experiences and strategies for success." CC students participated in networking activities, presented original research, and attended a job fair. **Dr. Varsha Koushik** presented some of her research "Empowering People with Cognitive disabilities in Daily Activities," during a lightning talk session. **Dr. Cory Scott** facilitated a panel titled "Recent Graduates Share Their Experiences," which included alumna **Darryl Fillmore ('20)** as a panelist. The experience was validating and enriching for CC students, with one remarking "The conference absolutely helped me see myself as a computer scientist. It gave me so many incredible examples of women like me who have succeeded in the field." Here's hoping this becomes a regular tradition!

CC Students Are Finalists for Computing Research

Two CC students were nominated by the department for the **Computing Research Association's Outstanding Undergraduate Research Award**. This national award recognizes "undergraduate students in North American colleges and universities who show outstanding research potential in an area of computing research." The department invited several students to apply and selected two students—**Liz Seero ('23)** and **Davidson Cheng** to nominate for the national selection process. These students were chosen based on their exemplary track record of research while at CC. Both students were recognized nationally out of thousands of applicants: Liz Seero received an honorable mention and Davidson Cheng was a finalist for the award.



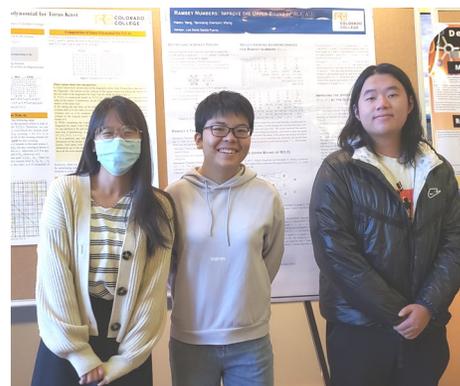
Annual Awards in Computer Science (cont.)

The **Steven Janke Prize** is awarded to a senior who demonstrates unusual talent and achievement. The award is shared this year by **Dan Lewinsohn ('23)** (above), **Max Perozek ('23)**, and **Miranda Hunter ('23)** (both below). Dan will begin graduate school in computational biology at Berkeley this fall.



Summer Research

During the summer months, students frequently engage in summer research, either at a Research Experience for Undergraduates (REU) at another institution, or with faculty here at Colorado College. Students are supported with a stipend from the college or the department, and our department faculty have been fortunate to receive funding from an anonymous donor who believes in the value of faculty-student research. Students present their work at a variety of venues or conferences. Students who conduct research on campus are asked to present at the **Summer Research Symposium**, which was held on October 6th. In the fall, our department holds a **Poster Presentation Day** in lieu of the usual Fearless Friday talk (October 14th this year), that typically includes student research con-



From left: **Jingyi Liu**, **Haoru Yang**, and **Iverson Wang ('25)**



From left: **Ollie Beland**, **Zhiqi Yao**, and **Yousheng Tang**

ducted off campus, for instance at REUs. In the spring, there are several undergraduate conferences within an easy driving distance from Colorado Springs where students can present their research, including the **Pikes Peak Regional Undergraduate Conference (PPRUMC)**, the **Colorado Springs Regional Undergraduate Conference (CSURF)**, and the **FRAMSC**. Pictured above are **Jingyi Liu**, who worked with **Dr. Molly Moran** on knot theory, and **Haoru Yang** and **Iverson Wang** who worked with **Dr. Luis Garcia Puente** on Ramsey Numbers. Pictured left are **Ollie Beland ('25)**, **Zhiqi Yao ('24)** and **Yousheng Tang ('24)** who worked with **Dr. Jane McDougall** on producing Platonic solids and minimal surfaces using 3D printing.

Pi Mu Epsilon

Pi Mu Epsilon is a national mathematics honor whose purpose is the promotion and recognition of scholarly activity in the mathematical sciences. This year, the Colorado Epsilon chapter induction ceremony took place in May with **Dr. Robin Wilson**, Emeritus Pro-



essor from the Open University in the United Kingdom giving the invited address. Nine new members were inducted into the Colorado Epsilon chapter based on their interest and accomplishments in the field of mathematics. The new inductees and event organizers are, pictured from left to right, **Edie Brazil ('23)**, **Dr. Molly Moran**, **Yousheng Tang ('24)**, **John Lê ('24)**, **Porter Barnes ('25)**, **Dr. Robin Wilson**, **Jingyi Liu**, **Dani Santillan ('23)**, and **Tony Mastromarino ('23)**. Two inductees not present are **Cooper Doe ('23)** and **Zhiqi Yao**. Congratulations to the new life-long members!

Student Organizations

The Mathematics student organizations continued to be an active part of the department this year. **Math Club**, the **Association for Women in Mathematics (AWM)**, and the **Society for Industrial and Applied Mathematics (SIAM)** organized two main activities open to the entire campus: a spooky math escape room and the pi day pi-k. The escape room challenged teams to solve mathematics and computer science puzzles to escape the haunted math classrooms. The event drew a large crowd and many requests for future escape rooms! The weather was beautiful for the second annual pi day pi-k on March 14th. The fun and pie of pi day attracted students and staff from a variety of offices and majors. Participants ran, walked, skipped, biked, and scooted the 3.14-kilometer path and celebrated with a lot of delicious pie at the finish line!



From left: **Lena Fleischer ('23)**, OBE major **Olivia Dossett ('23)**, and **Lucy Flanagan ('24)**

Phi Beta Kappa

The Phi Beta Kappa Honor Society is a national honor society that recognizes exceptional achievement by undergraduates in the liberal arts. It dates back to 1776 and is recognized by employers and graduate schools - students inducted into the society are eligible for scholarships for graduate study, for instance. The Colorado Chapter was chartered in 1904. Eligibility criteria include facility in a foreign language, and with abstract reasoning. Students must also uphold a high standard of integrity and personal conduct. This year an especially large number of our majors are being inducted: **Tyler Chang ('23)**, **Davidson Cheng**, **Dan Lewinsohn**, **Casmali Lopez ('23)**, **Na'ama Nevo**, **Tim Somerset**, **Iverson Wang**, and **Anni Zettl**. Congratulations to all of you!

Euclid Scholarship Awards

The Euclid scholarship is a one-year award given to first and second year students who show great promise and interest in Mathematics, Statistics, or Computer Science. This year, we received 41 nominations from department faculty, and awarded a total of 17 scholarships, thanks to the generous donations of alumni and friends. Award decisions were based on faculty evaluations and students' essays, which described the role that mathematics, statistics, or computer science plays in their life and how they envision that role evolving over the next few years. Nominated students showed great talent, commitment to learning, and a deep appreciation for at least one these disciplines. We look forward to seeing the awardees pursue their learning of mathematics, statistics, and computer science in the next few years!



From left: **Dakota Hinman ('26)**, **Zahra Cheeseman ('24)**, **Yael Homa ('25)**, and **Nam Ninh ('26)**

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Fearless Award

All mathematics and computer science majors must attend at least four department talks, and produce a detailed summary for each. The 2023 award for best Fearless Friday talk writeups went to **Henry Jones**. Congratulations Henry!



Euclid Scholars 2023-24

First Year Students:

*Uma Ghimire
Dakota Hinman
Cassidy Recker
Katie Smela
Rebecca Willner*

Second Year Students:

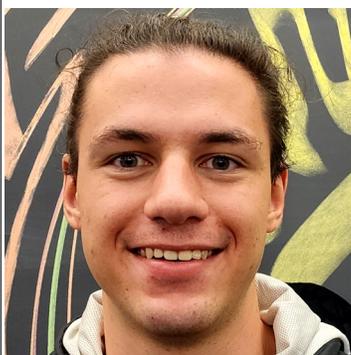
*Zahra Cheeseman
Alana Ermeus
Judy Gonzalez
Zoe Harrington
Yael Homa
Isak Larson
Brendan McCune
Nam Ninh
Iverson Wang
Zach Zerbe*



Annual Awards in Mathematics

The **Florian Cajori Prize** is awarded to a senior who demonstrates unusual talent and achievement in mathematics. The award is shared this year by **Casmali Lopez ('23)** (above), and **Emerson Worrell**, and **Anni Zettl (Dec '22)**, pictured below.

Casmali will attend graduate school at the University of Washington. Emerson will attend Washington State. Anni is already studying at the Technische Universität Dresden.



New Faculty in Computer Science

In 2022-23 **Dr. Ben Nye** joined us as a visitor in computer science, after graduating with his PhD from Northeastern University in Boston. We are pleased to welcome **Dr. Nye** again, for 2023-24 and beyond, in a tenure-track position. When it comes to upper level electives (which are required for a computer science degree), students will be able to study Natural Language Processing, and Data Visualization and Interpretation, with Ben. We are glad



Dr. Blake Jackson

that we will continue to see Ben around the department. The same hiring process that brought us **Dr. Nye**, also brought us **Dr. Blake Jackson ('16)**, who will begin as a new tenure track faculty member. CC alumnus **Dr. Jackson** earned his PhD from the Colorado School of Mines, and upon graduating took a visiting position at Harvey Mudd College. **Dr. Jackson's** research focuses on Human Robot interaction, and he also has research interests in Natural Language Processing. **Dr. Jackson** is very much looking forward to returning to Colorado and to joining us this fall.



Dr. Ben Nye with "Hobbes"

Farewells

Dr. Lauren Nelsen joined the Department of Mathematics and Computer Science in fall 2021. She earned her bachelors degree from the University of Montana, and her masters and doctorate from the University of Denver. Lauren came to us after two years at the University of Indianapolis, in the fall of 2021. She proved to be a popular professor, and many in the community - faculty and students alike—are sorry to have to say goodbye. Dr. Nelsen is an avid runner, and she will be lecturing at the University of Colorado at Colorado Springs starting in the fall. We hope to continue to see Lauren at talks and other events.

Our technical director of more than two decades, **Amy Pacheco**, resigned in January 2023, when she relocated to upstate New York, and started a new job in IT closer to her new home.

We were also sad to learn in January 2023 that **Dr. Matthew Whitehead** will not be returning to the college after his leave of absence. **Dr. Whitehead** joined our faculty as a computer scientist in 2009 and earned tenure in 2017. He plans to run a marathon this year. We wish both Amy and Matthew the very best with their next steps.



Dr. Lauren Nelsen with "Joy"

Homecoming Speaker

Ravi Donepudi ('13) continues to work as a capital market quantitative analyst at Goldman Sachs, but retains a love for teaching. He gave a fascinating and engaging homecoming address on October 7th titled "*To Destroy a Prime Number,*" an exploration of the algebraic consequences of removing the **even prime number "2"**. Pictured are department staff, faculty and friends enjoying a meal together with Ravi.



Upcoming Block Abroad in Computer Science

Thanks to generous contributions from CC alumni and parents, the department will be offering a “block abroad” course hosted at **Lawrence Livermore National Laboratory (LLNL)** in fall of 2023. The class will spend two weeks onsite at LLNL working with a simulation code, learning about computational science from LLNL scientists, and using some of LLNL’s high performance computing resources. **Dr. Barry Rountree**, staff scientist at LLNL, and our own **Dr. Dan Ellsworth**, will be leading the course. Students will be working, in groups, with nanopond. Nanopond is a small simulation code to explore “evolved ecosystems.” The same fundamental performance optimization and data analysis problems exhibited by nanopond are present in large-scale production simulation codes, like those used in climate science. We expect this course will provide students with interesting stories for future interviews and help them recognize computational science as a possible career path.

Paraprofessionals

Our paraprofessionals this year were **Lilly Davis ('21)** and **Alex Wagner**. Alex arrived new to the college in 2021 as mathematics paraprofessional. Alex completed advanced java coursework last summer, and returned as computer science paraprofessional! By all accounts his transition was very successful in his second year as a paraprofessional. Just as Alex did, Lilly will be returning for a second year, as paraprofessional for mathematics. Beyond building a sense of fun and community in the department, the paraprofessionals took action to refresh and modernize many of our routines and practices. For example Lilly played a significant role in drafting our department’s community agreement on difficult conversations. Moreover, the noticeboards displaying faculty research are now QR-linked, so as to disseminate faculty research work with updated technology more familiar to students. Interested students and others can now peruse summary pages of faculty research, and then simply scan the code to access more details from the published works.



Building Community with Fun Events

Our paraprofessionals did an amazing job of bringing a sense of fun and community to our department in 2022-23, as we came out of the 2020-21 year of Covid, and the subsequent year of social distancing in 2021-22. Lilly and Alex organized frequent social events for department majors and minors, including Holiday decoration-making for Halloween and winter holidays, as well as face-painting and nail painting. The events proved to be popular, garnering widespread participation from majors, non-majors, faculty and staff alike (staff from other departments including the dean’s office even attended when it came to serving pie during our **π -day celebrations** on 3/14 at 1:59pm). In addition to organized events, the paraprofessionals provided light relief through the “controversial question of the block” (does a hotdog really qualify as a sandwich?), and the blockly doodle-posters received colorful contributions from faculty as well as students.



From left: **Dr. Molly Moran ('25)**, **Zoe Harrington ('25)**, **Sam Johnson ('25)** and **Kenna Grenier ('25)**



Mathematics Awards

(cont.)

The Sophie Germain Award is given to a student of mathematics whose passion for the subject is strong enough to overcome significant challenges. The award is shared by **Olivia Bouthot ('23)** (above) and double math and computer science major **Davidson Cheng ('23)** (pictured below).



Dr. Varsha Koushik and Dr. Ben Nye prepare for nail painting in the department lounge.



Dr. Flavia Sancier-Barbosa



Dr. Minho Kim is the first person in the history of our department to be named **Lloyd E. Worner Teacher of the Year**. Every year students rank their favorite professors on “intelligence, caring, and exceptional qualifications that they bring to teaching”. This year it was Minho who was chosen by students this year – we are very proud of Minho!



Dr. Robin Wilson at the end of year department celebration, preparing to give the talk “Graph Theory in America.”

Tenure for Dr. Flavia Sancier-Barbosa

Earning tenure is a big deal. Based on a faculty member’s accomplishments in the areas of teaching, scholarship, and service, the successful tenure candidate is rewarded with a high degree of professional respect and job security. This year, our own **Dr. Flavia Sancier-Barbosa** was awarded tenure at CC! **Dr. Sancier-Barbosa** is a probabilist and statistician with broad interests. She has carried out research on topics as varied as random fluctuations in stock markets, winning strategies in the board game Risk, identifying gerrymandering in redistricting maps, and satisfaction in polyamorous relationships. Working closely with **Dr. Minho Kim**, she has revamped and expanded our statistics curriculum, which we expect to be a growth area for the department in the future. In **Dr. Sancier-Barbosa’s** tenure review, her students and colleagues expressed their appreciation of her creative teaching, broad expertise, and collegiality.

Faculty Achievements in Research

Dr. Varsha Koushik presented a paper titled *Ability + Motivation: Understanding Factors Influencing People with Cognitive Disabilities in Regularly Practicing Daily Activities* in the ACM 20th International Web for All Conference. This paper was a candidate for the Best Paper Award.

Dr. Mike Siddoway and his coauthor Dr. Pham Ngoc Anh (Vietnamese Institute of Mathematics) just had their paper *Module Types of Rings of Quotients, with Applications to Leavitt Path Algebras* accepted by the Israel Journal of Mathematics.

Dr. Janet Burge’s paper *Exploring a Research Agenda for Design Knowledge Capture in Meetings* was recently published in the Sixteenth International Conference on Cooperative and Human Aspects of Software Engineering. Dr. Burge collaborated on this paper with one of this year’s graduating seniors, **Liz Seero ('23)**!

Dr. Janet Burge and her collaborator Dr. Andre van der Hoek (UC Irvine) were awarded an NSF Collaborative Research Grant for their work studying Distributed Fragmented Software Design Meetings.

Dr. Molly Moran published *Knot Theory in Linear Algebra: An Example With Trip Matrices* co-authored with **Jessica Shenkman ('19)** to appear in the *College Mathematics Journal*.

Dr. Cory Scott ('13) and his collaborators published their paper, *Graph metric learning quantifies morphological differences between two genotypes of shoot apical meristem cells in Arabidopsis*, in the journal *in Silico Plants*.

Significant Award for Dr. Janet Burge

CC Computer Scientist **Dr. Janet Burge**, and her collaborator at University of California Irvine, **Dr. Andre van den Hoeck**, have been awarded a grant from the National Science Foundation (NSF) for \$599,994 (\$132,758 to Colorado College) for their project *Distributed Fragmented Software Design Meetings*. This multi-year project studies design meetings with an emphasis on those that occur regularly. A focus of this work will be the presence of Important Design Bits (IDBs) and will involve developing meeting support tools that can be used to capture, search, and visualize this information across multiple meetings.

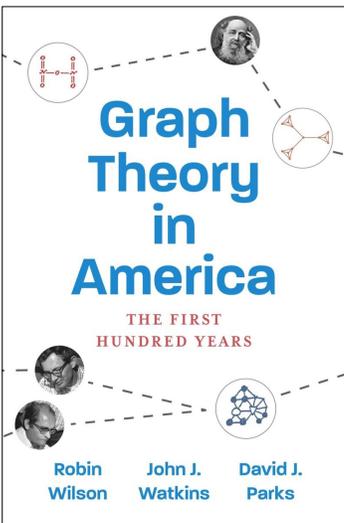
Visit by Dr. Robin Wilson

Dr. Robin Wilson arrived at Colorado College in block 8, after being invited to receive an honorary doctoral degree in mathematics to be awarded at the Colorado College 2023 commencement ceremonies. Robin has made many trips to the college over the last four decades, during which time he has taught almost 40 blocks at CC. Robin is pictured here with paraprofessional **Alex Wagner** (left), and **Drs. Flavia Sancier-Barbosa, Stefan Erickson, Molly Moran** (right.)



Marina’s family has established a named fund to support ORCA through the Everett Community College Foundation—the website is: everettcc.edu/foundation Click “Donate” and specify “ORCA to honor Marina” as the program, or send a similarly earmarked check to **EvCC Foundation, 2000 Tower Street, Everett, WA 98201**

Professor Emeritus John Watkins and frequent CC visitor from the U.K. **Dr. Robin Wilson** published *Graph Theory in America: The First Hundred Years* This is their fourth book together.



In Memorium: Marina McLeod

On December 26, 2022, Marina McLeod (Marina Gresham while at CC) passed away from cancer at the age of 34. She attended Colorado College between 2006-2010 and served as the departmental paraprofessional during the 2010-11 academic year. Marina was known around the department for her friendly personality and warm laugh. She was a passionate jazz trombonist and highly competitive board game player. She graduated *summa cum laude* with distinction in mathematics. After CC, Marina attended the University of Utah where she earned a master's degree. She moved back to Bellingham, Washington, before earning a doctorate to assist in her mother's battle with cancer. Marina started working for the Ocean Research College Academy (ORCA), an early college marine biology program for high school students through Everett Community College. Marina was deeply involved with developing and teaching the mathematics aspect of the program, and taught there until her passing.



Burton Jones Award

In April, **Dr. Mike Siddoway** received the Burton Jones Distinguished Teaching Award from the Rocky Mountain Section of the Mathematical Association of America. This award is presented annually to recognize extraordinarily successful teachers of mathematics at the secondary level who have had an influence through their teaching beyond their own institution. **Dr. Siddoway** began teaching at Colorado College in 1988. He has spent his career generating excitement and enthusiasm for mathematics in his students, mentoring and inspiring colleagues, and advocating for social justice issues.



This remarkable photo shows four recipients, past and present, of the Burton Jones award. From left: Dr. Mike Siddoway, Emeritus Dr. Seven Janke, Dr. Marlow Anderson, and Dr. Gene Abrams of UCCS.

Retirement for Marlow Anderson

In May 2023, members of the Colorado College community past and present finally had the opportunity to gather **in-person** at the Stewart House to celebrate the retirement of Professor Emeritus Marlow Anderson. Marlow began teaching at Colorado College in 1982 and retired in 2021. Many wonderful stories about Marlow were shared during both the virtual Marlow-Fest event in 2021 and the in-person gathering this year. We see Marlow with **Emeritus Dr. Steven Janke** and **Dr. Cory Scott** in the left image, and at right Marlow is pictured with **Dr. Minho Kim** and **Dr. Joseph Rennie**. Marlow had, and continues to have, a lasting impact on the lives of the students, faculty, and staff at Colorado College. Congratulations on a truly exceptional career, Marlow!



Alumni News

Dr. Courtney Gibbons ('06), Associate Professor of mathematics at Hamilton College, is spending a year as a **Science and Technology Policy Legislative Branch Fellow** serving on Capitol Hill. **Dr. Gibbons** was chosen as one of two fellows sponsored by the American Association for the Advancement of Science, and has been working in the office of Senator Gary Peters from Michigan. **Dr. Gibbons** works with the Senate Homeland Security and Governmental Affairs Committee and spends time researching, meeting with experts, constituents, and others with interests relevant to her work, as well as contributing her mathematical expertise to her host office. "It's definitely surreal to see something I worked on become part of the public record. I've worked on three Senate hearings, drafted bill text, prepared briefing memos, and even got to step into professor mode to explain some of the math behind different types of AI (and why the math itself matters). Seeing the different ways those things have an impact (immediately and over the course of the fellowship) feels really meaningful."



Through the fellowship, **Dr. Gibbons** has had opportunities to work with talented people. "The people I work with are some of the smartest people I've ever met (no offense, academia). They're not just smart about politics — they're smart about everything. They can pick up new ideas and turn them around and work through the implications really quickly."

Dr. Gibbons has expressed appreciation for her CC education and the beneficial role her liberal arts background plays in what she is doing now. "The whole experience makes me wish I had taken some public policy courses, but I would have really enjoyed them if they'd had a strong connection to math. So much of the math that we do is shaped by the way Congress sets its funding priorities — even those of us who think we're doing 'pure' math are being pulled along by the gravity of what the U.S. government thinks is important. I think I'm destined to pore through Congressional funding packages for the rest of my life to see where the compass is pointing. I'm pretty sure a lot of faculty would think that's a waste of time, but I'm equally sure they're wrong. That's why I'm glad I had such a good liberal arts training at CC." Her position will wrap up in August, and she will spend the following year at the NSF, before returning to Hamilton with a better sense of how students can use their skills in government roles. **Dr. Gibbons** also has news to share on the family front with her Baby Ben who "shares a birthday (and hairline) with Bernie Sanders."



Faculty on Sabbatical

Dr. Mike Siddoway will be on a half-year sabbatical. He is staying in Colorado Springs, and will be completing revisions on his paper *Module Types of Rings of Quotients*, and will be immersing himself in the study of Bo Stenström's book "Rings of Quotients." **Dr. Siddoway** will be teaching "Mathematics for Sustainability" this fall and "History of Mathematics" in the Spring, in and around his sabbatical.

Dr. Molly Moran will be on sabbatical in the spring of 2024. She will take several different trips to work with collaborators on new projects related to group boundaries and topological data analysis. She also has plans to develop a block abroad course as well as dive into some of the early history of topology to build classroom activities using original sources.

Gifts

Gifts from generous donors over past years continue to benefit department programs and goals such as supporting Euclid scholars, and faculty-student research in the summer months. To make a gift to the Department, please visit our secure online giving site at

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Our **block visitors** this year were **Dr. Rob Gordon**, **Dr. Nguyen Nguyen**, **Ken Riddle** and **Dr. Rebecca Mitchell ('12)**. **Ken Riddle** has taught courses of shorter duration several times at CC, and taught his first full block at CC in block 8. **Dr. Mitchell** also taught her first full block (linear algebra) at CC in the fall. We appreciate our block visitors!

