# President's Report:  Dr. Michele Haney
# May 2023

**Transform the student experience.**

- The RRCC Commencement ceremony marks the culmination of a student's time on campus and celebrates an important milestone. We honored the 53rd graduating class on Saturday, May 13, 2023 on our multi-purpose fields.  One hundred and sixty-three of our students participated in commencement exercises this year.  The Outstanding Graduate was **Mark Irby-Gill**.  The Outstanding Faculty of the Year was **Brandon English;** Full-Time Instructor of the Year was **Jeralyn Price (EMT), Andrew Jensen (MAT);** Part-Time Instructor of the Year was **Jeremy Savage (PSY)** and the Arvada Instructor of the Year was **Lynne Albert (BIO).**  Over 2,151 degrees and certificates were awarded to graduates from summer 2022, fall 2022 and spring 2023. RRCC granted Associate of Science, Associate of Arts, Associate of Applied Science, and Associate of General Studies degrees, plus certificates in dozens of fields at the ceremony.

- The Trefny Honors Program is preparing for our upcoming Research, Art, and Design Expo, which we hope will be pretty RAD (get it? Research, Art, and Design is RAD! ha ha!). May 3rd and 4th, on the Lakewood Campus, students will present posters and creative works. Building on over a decade of expos at Red Rocks, this campus-wide event showcases excellence at all levels of the undergraduate experience, from across the disciplines. I attached two examples of student work. The first example is a classic research poster, and comes from **Dr. Tracy Gray's** BIO 1005 class. The students conducted a small study themselves, under mentorship from their professor, and the project's conceptualization and execution are a lot to be proud of. The second example is from Professor **Paul Weinrauch's** PHO 1021 class. In this example, the student did a research project on sustainable cities using artistic methods of inquiry. While they may look different from one another, these projects ask students to systematically investigate big questions about the world through the means of each discipline—foundations of research inquiry that the Honors Program hopes to foster at RRCC.

- **Brittany Petterson's** Art Show:
  May 1st-May 8th (Art was displayed outside of the library near the Learning Commons 2nd floor)
  Reception (Inside the Library)
  May 8th from 5:30 to 7:30 p.



- **RRCC IDEA Lab Predator vs. Prey Microcontroller Workshop** RRCC EGT 110 student design team awarded finalist in the American Association of Community Colleges (AACC) 2023 Community College Innovation Challenge (CCIC)
- RRCC Mines Academy
- RRCC High School Innovation Challenge Rocky Mtn Industrial Assessment Center RRCC Space Grant

The **RRCC IDEA Lab** is a makerspace on the Lakewood campus where students and faculty explore, innovate, and create. Through real-world projects, students develop skills in innovation, teamwork, communication, collaboration, and creativity. Students from all disciplines are welcome to use the IDEA Lab for class projects, club activities, or personal projects. The lab



has prototyping equipment that includes 3D printers, a CNC mill, a laser cutter, soldering stations, microcontrollers, podcasting, VR, and more. This Spring, students in the IDEA Lab have been working on developing LED Microcontroller Lamps, collaborating with the Theater to create props and supplies for future productions and programs, the English Department by 3D printing items for promotional purposes, and working with the Accessibilities Services Department to develop accessibility hand tools for students in need. Through these high-impact practices, students are able to develop professional, technical, and soft skills.

- **Red Rocks Community College Students Named Semifinalists for JKCF Undergraduate Transfer Scholarship**
Red Rocks Community College (RRCC) students **Shaydie Boyd** and **Mark Irby-Gill**, have been announced as semifinalists for the highly competitive Undergraduate Transfer Scholarship from the Jack Kent Cooke Foundation. Boyd and Irby-Gill are two of this year's 459 semifinalists who were chosen from a pool of more than 1,700 applicants, from 215 community colleges in 38 states. The Scholarship is designed to create a clear path to a four-year degree by offering generous financial support, advising, as well as the opportunity to connect with a community of fellow Cooke Transfer Scholars and Alumni. In addition, the selected Cooke Scholars will have access to internship and study abroad opportunities, and graduate school funding. "By lifting the financial burden of pursuing a four-year degree off their shoulders, our goal is to help students take full advantage of a four-year college experience without taking on student debt, "said Seppy Basili, Executive Director of the Cooke Foundation. "This year's selected semifinalists reflect the deep bench of talent across our community colleges today, and we're looking forward to getting to know them better in our final application review process. "The Undergraduate Transfer Scholarship recipients will be announced in April.

**Transform our own workforce experience.**



**Predator vs. Prey Microcontroller Workshop:** On Friday, April 21st, several IDEA Lab students organized a Predator vs. Prey microcontroller workshop for middle school and high school students at the Vertical Skills Academy (VSA) in Green Mountain.

VSA students learned about predator vs. prey concepts through an interactive game designed by IDEA Lab student staff. The IDEA Lab students developed microcontrollers for the VSA students to use by printing 3D controller cases and creating a game code with Arduino boards. The workshop challenged the IDEA Lab students by motivating them to think of a creative way to teach younger STEM students in an active learning setting.

**Create education without barriers through transformational partnerships.**

- **RRCC EGT 110 student design team awarded finalist in American Association of Community Colleges (AACC) 2023 Community College Innovation Challenge (CCIC):** Red Rocks Community College is one of 12 finalist teams that will advance to the next phase of the Community College Innovation Challenge (CCIC) with the American Association of Community Colleges and the National Science Foundation! The CCIC is a national competition where community college student teams, working with a faculty or administrator team mentor, use science, technology, engineering, and mathematics (STEM) to innovate solutions to real-world problems. Finalists will attend an Innovation Boot Camp to share their ideas with experts and practitioners in the field and compete for cash prizes. The Red Rocks Community College team consists of the following students and faculty: *Kairi Hoang*, *Cassidy Holman* and *Rorey McGehee*, and Michelle Fisher, RRCC Engineering Faculty. Working together, the team was able to develop an innovative solution. Their project, called the W(aut)ch is designed as a sensory-friendly safety device to prevent drowning and other dangers caused by elopement of children with autism. The device can be worn as a bracelet or magnetized to clothing, remotely monitors location and heart rate, and immediately notifies caregivers when the device is submerged in water, with the option to contact 911. Now, we will move on to the Innovation Boot Camp in June. This Boot Camp will give the team the opportunity to be coached in building communication and entrepreneurial skills relevant to supporting innovation in both the private and public sectors. The sessions will include information applicable to commercializing ideas, using technology for social applications, communicating with stakeholders, refining a pitch, and more.



**RRCC Mines Academy:** The RRCC Mines Academy accepted its first cohort of 50 students in Fall 2022 and supports Associate of Engineering students as they plan and complete prescribed coursework designed for a smooth transition to the Colorado School of Mines to earn their bachelor's degree. Through support services like TRIO Support Services for First Generation students, Accessibility Services, Tutoring Center, RRCC scholarships, or STEM groups such as STEM Scholars or Womxn in STEM, students are able to pursue an economical path to a bachelor's degree at CSM. **RRCC High School Innovation Challenge:** Through the support of the RRCC IDEA Lab, Excel Energy Foundation, and Colorado School of Mines, RRCC hosts a spring competition that recognizes and rewards designs for sustainable change. We

have invited teams of high school students, grades 9-12, to participate in a real-world STEM challenge that will propose sustainable innovations surrounding wildfire prevention, management, and impacts. Student teams can either come up with their problem related to the theme or work on one that the teacher has chosen for the team. High school participating teams will be supported by IDEA Lab students who help teams work through their design problems and solutions. This year's **High School Innovation Challenge will be held on Thursday, May 11, 2023, from 5:00p-7:00p at the Colorado School of Mines, McNeil Hall.**

- **Rocky Mountain Industrial Assessment Center:** The Rocky Mountain Industrial Assessment Center at the Colorado School of Mines, in partnership with Red Rocks Community College, is part of a nationwide program sponsored by the Department of Energy's Office of Manufacturing and Energy Supply Chains. The IAC's mission is to increase energy efficiency, reduce Co2 emissions, increase productivity, and optimize water usage. Students participate in the program by attending one-day energy assessments of small to medium-sized manufacturers utilizing special equipment and data loggers to provide a report of energy-saving recommendations over 60 days. The overarching goal is to educate and train the next generation of energy and industrial audit experts while supporting the community. The RMIAC has completed energy assessments at *Dawn Foods*, *FiberLok*, *Paddington Pre-School* and *Canyon Bakehouse – Flower Foods* during Spring 2023

- **Mines Academy High School Innovation Challenge:**
Through the support of the RRCC IDEA Lab, RRCC Foundation, RRCC Mines Academy, Excel Energy Foundation, and Colorado School of Mines, the High School Innovation Challenge (HSIC) was held on Thursday, May 11, 2023, from 5:00p-7:00p. The challenge recognized and rewarded teams of High School students who participated in an engineering design challenge. 15 teams of high school students, grades 9-12, from Alameda High School, Evergreen High School, Green Mountain High School, and Golden High School, participated in a real-world STEM challenge that was focused on "Sustainable Innovations for Wildlife Prevention, Management, and Impacts". The students were asked to come up with solutions for real-world problems related to wildlife and the environment. High school participating teams were supported by IDEA Lab and Mines Academy students who mentored teams working through their design problems and solutions. The students were provided with the necessary resources and equipment to create prototypes and test their designs throughout the academic year. During the competition, each team had a chance to present their ideas and prototypes to a panel of judges, which included representatives from RRCC, Excel Energy Foundation, and the Colorado School of Mines. Several teams were awarded RRCC scholarships through the foundation, tuition certificates, and tech prizes for their efforts in the challenge. For more information on the on the HSIC teams designs, please reach out to Libby Fatta at libby.fatta@rrcc.edu or Michelle Fisher at Michelle.Fisher@rrcc.edu.
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**Redefine our value proposition through accessibility, affordability, quality, accountability, resource development, and operational excellence.**

- **RRCC Space Grant:** The RRCC Space Grant DemoSat team successfully launched and recorded data from a high-altitude balloon flight on April 1, 2023. The team then won their presentation session titled *Bringing the Heat to 100,000 feet: The Capacity of HotHands to Facilitate High-Altitude Research* at the Colorado Space Grant Consortium Symposium on Saturday, April 22nd, 23. The team was made up of RRCC students Nick Betz, Misha Lewis, Titus Smith, and Micah Zumtobel.
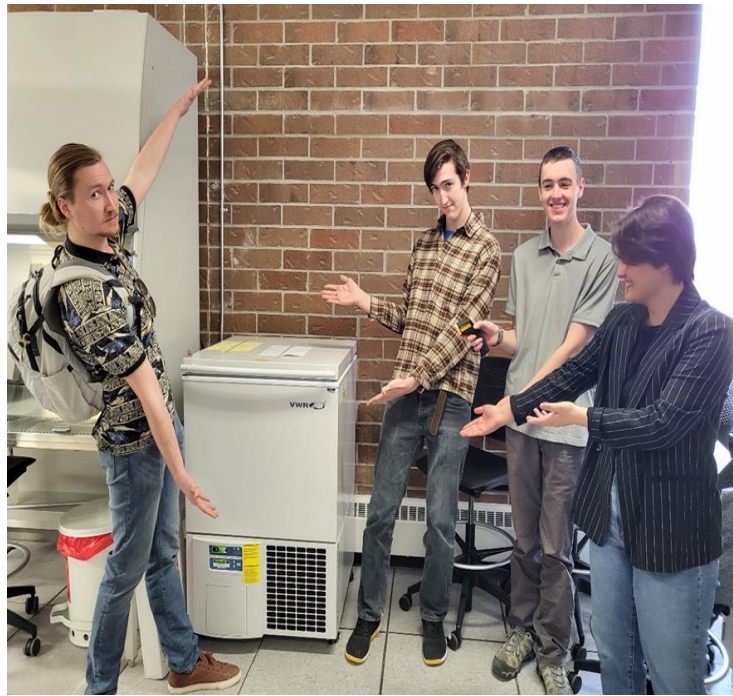


- The **Space Grant program** is part of the Colorado Space Grant Consortium (COSGC), a NASA-funded, state-wide program that provides Colorado students access to space through innovative courses, real-world hands-on satellite programs, and interactive outreach programs. Students participate in undergraduate research projects that involve a high-altitude balloon launch through the DemoSat program, and developing payloads for RockSat, where students are able to attend NASA rocket launches and gain real-world experience working with scientists and aerospace professionals.



RRCC students **Nick Betz**, **Misha Lewis**, **Titus Smith**, and **Micah Zumtobel** accepting their award for their presentation session titled Bringing the Heat to 100,000 feet: Capacity of HotHands to Facilitate High-Altitude Research at the Colorado Space Grant Consortium Symposium on Saturday, April 22nd, 23.

RRCC students **Nick Betz, Titus Smith**, and **Micah Zumtobel** highlighting their payload where they tested the Capacity of HotHands to Facilitate High-Altitude Research at the Colorado Space Grant Consortium Symposium on Saturday, April 22nd, 23.

- Please join us to honor and learn about the impact Asian immigrants and their families had on the history of America. All are Welcome! Location: Center of Multicultural Excellence, Room 1235, Wednesday, May 17th: Home from the Eastern Sea: The story of Asian immigration to America. Wednesday, May 24th: Please come see the variety of ART work being created in the Visual ARTS here at RRCC. The Student ART Exhibition is view April 28-June 9.

- Following the decision to close 16 schools in the Jeffco Public School District, a community mural project was created to help students from both closing and welcoming schools feel a sense of belonging and unity. This artistic collaboration involved students from Red Rocks Community College's Visual, Audio, and Media Arts Department and the Warren Tech Graphic Design Program, under the guidance of teachers **Scot Odendahl** and **Pete Cunis** from Warren Tech, and Department Chair **Paul D. Weinrauch** from Red Rocks Community College. Together, they completed a 48" x 150" community mural for the Jeffco School District. The project involved 16 closing schools and 16 welcoming schools, with each pairing focusing on the theme of "belonging" to create a unique community mural featuring the word "community." Each school developed a process to solicit and select one piece of art from each grade level, kindergarten through fifth grade. The resulting banners will be printed this summer at Warren Tech and displayed at all welcoming schools receiving the new students. The mural, created from around 200 submissions of student artwork, showcases a diverse range of artistic expression, including paintings, drawings, sculptures, mixed media, and more. A team of 16 students from RRCC and Warren Tech worked together to composite the K-5 student artwork, while VAMA photography student **Jose Venzor** digitized and photographed the submissions.
  Final Mural: *https://drive.google.com/file/d/1Tfj4kS-IRHC0bpbrAWImjbkqwjK75wE9/view?usp=sharing*

- **Three faculty members** were awarded **Dr. Agneta Albinsson** professional development grants: **Matthew Watts**, Assistant Professor of Mathematics, will be presenting his research on identifying at-risk students, at the Community College Math Education Conference hosted by the American Mathematical Association of Two-Year Colleges in Omaha, Nebraska in November 2023. **Dean Barchers,** Professor of Mathematics, will be attending the Joint Mathematics Meeting, the

world's largest mathematics gathering representing over a dozen math-related societies.  This conference will take place in San Francisco, CA in January 2024. **Diane Rhodes**, Computer Science faculty and State Discipline Chair for all computing prefixes, will be attending the Rocky Mountain Information Security conference, an industry conference focusing on the latest trends and technologies in information security (cybersecurity).

- **RRCC hosted Graphic Design Professionals Industry** Interviews In May for RRCC VAMA and Warren Tech graphic design students.139 interviews over 2 days: 28 Interviews with RRCC Students (14 Students), 111 Interviews with Warren Tech Students, 27 Professionals and Companies interviewed
- **RRCC Student Art Exhibition** in the RRCC Gallery from April 28th – June 9th. A reception was held on Saturday, May 13th following the RRC commencement ceremony.  The Exhibition includes works from across the visual arts including painting, drawing, ceramics, sculpture, photography, graphic design, and fine woodworking.
- **Fine Woodworking** hosted its semi-annual end of semester student show on Saturday May 13th showcasing student and instructor projects.  The show hosted over 200 attendees and showcased over 70 Fine Woodworking projects including various furniture pieces, doors, musical instruments, and smaller items such as boxes and art pieces.

### Other News
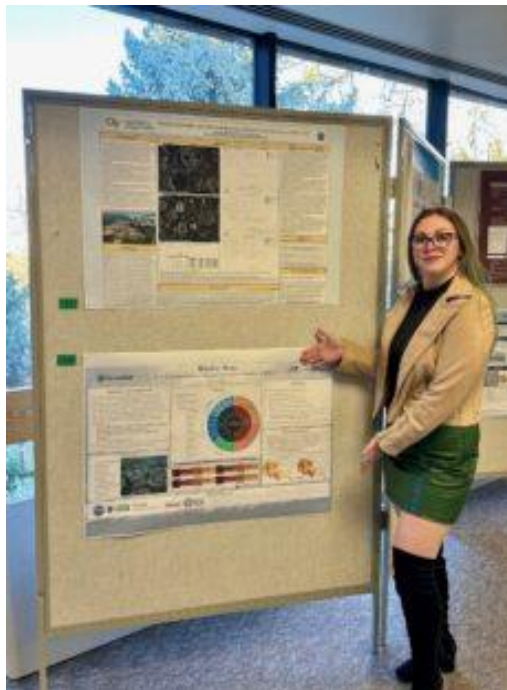


RRCC student **Jamie O'Reilly** was in the two geology classes required for the DwD in Geology, which she plans to finish up next year. This article was widely shared by the Geological Society of America (GSA), one of the premier geological professional organizations in the country. The teacher she mentions in the article linked to the post is Dr. Eleanor Camann, RRCC faculty. GSA allows someone to feel valued and heard, being selected out of a sea of applicants, it's the first step in validating the hard work, sleepless nights and definitely the tears that go into your work.  It feels like someone is standing on the sidelines and just saying, Yeah Jamie, you got this!  We know you are doing great things, breaking those cycles, overcoming those hurdles and you are worthy of being here".

- OTF offered Jamie a chance to experience a very supportive, encouraging community at GSA Connects while also providing exposure to a wide array of geoscience disciplines.

**What was the most impactful aspect of your OTF experience?**
The entire experience was impactful, it was such an eye-opening experience to see how many different areas and topics were being covered; it really opened my eyes that there are so many more areas in the geosciences than I had ever imagined. Overall though, I think the most impactful thing at the conference was how supportive every person I interacted with was. I was incredibly anxious and scared about attending, and then presenting my work. Those who stopped at my poster presentation were incredibly supportive and eager to hear what I had to share. That was a new experience for me; having the life experience I have had, I was worried about judgement, or not knowing all the answers to questions people may ask me. But the responses I had, and questions that challenged me, made me eager to continue my school to explore some various new areas for my career, and it made me want to make sure I worked to find a way to come back next year.

**What do you remember most from GSA 2022?**
I think one of the things I remember the most was getting to sit down at the GSA and talk with my geology teacher. While I was at my internship over the summer, I was with a group of students who knew so much about geology, it was overwhelming and honestly intimidating. They were naming all of these things about rocks and whatever else, while I was standing there confused about how there was more than one type of rock. (That was day 1 too, so imposter syndrome came up quick!) But throughout the summer I heard them talk and share their research too, and although I did not understand a bit of it, something clicked and I rearranged my fall schedule and signed up for my first-ever geology class, and I mean first ever. It turned out that my professor was going to be attending GSA as well and she made a point to offer me guidance, support, and came to my poster presentation. I got to take some time one day and sit with her outside the exhibit hall and share my experiences that had led up to my participation and talk to her about my path. In this conversation too, she shared with me some of the details of the effort she had to put forth to be able to attend the conference and the cost, something I had not thought about. It just made me realize how thankful I was to be a part of OTF and to be able to experience the conference in its entirety. Plus, the opportunity to share conversation with my professor about her passions and knowledge and get to discuss everything we were seeing and hearing; it just was an experience that made me really happy and so thankful for how things had worked out to lead me to that point. (All of this also led me to fall in love with my geology course and now pursue a double associate's degree in engineering and geology.)

**What was your mentorship experience like? Would you consider returning to serve as a mentor?**
I did not work with a mentor specifically at the GSA; I would absolutely do it next time if I had the opportunity to. The fear of the unknown made me really unsure about exploring that option. But the mentorship that I received in the internship where I did my research was amazing, their support is what made me not completely talk myself out of the conference, and their support while I was there contributed to my eagerness to try again. I also would absolutely love to serve as a mentor in the future; I believe that sharing those

vulnerabilities, like being scared to attend and present, can be just as if not more important than sharing one's knowledge and experience. Sometimes we just need to know that there is someone out there, feeling what we're feeling and that they got through it, so you can too.

**After your OTF experience, how do you see OTF influencing or impacting your future?**

OTF gave me a hands-on experience that I would not have otherwise been able to experience or possibly have been brave enough to try. Since the GSA was in my hometown, it was extremely hard to talk myself out of going, though I tried, and I had done small presentations at community college, but nothing like this. When I was presenting, I felt very proud and accomplished; I remembered how much work I put into my internship that got me there. Also, while I was there, I learned about so many interesting areas of study, like geophysics, and I got to see others' work which resembled my own, which combined geosciences with social sciences and focused a lot on the impact on people and some crossover with areas like climate change, which encompass much of what I want my future to revolve around working in. If I did not have the OTF support, I would not have been able to know the infinite options that are out there for me to explore, and I always like to share that if one lacks the knowledge, how can they access the information.

**Why should donors support programs like OTF?**

I come from a low-income background, I'm a first-generation college student, and first one in my family who got a GED, even after dropping out shortly after completing middle school. The area of STEM is not one I knew a thing about, until I came back to college at 28 years old with two kiddos and a ton of responsibilities. It is not easy trying to work through any one of those hurdles individually, but especially coming from a background where you never have access to anything remotely similar, and where there is no other support system in place for exploration of these type of areas. A program like OTF allows someone like me to feel valued and heard; being selected out of a sea of applicants, it's the first step in validating the hard work, sleepless nights, and definitely the tears that go into your work. It feels like someone is standing on the sidelines and just saying, "Yeah, Jamie, you got this! We know you are doing great things, breaking those cycles, overcoming those hurdles, and you are worthy of being here." There's so much conversation around equality and equity nowadays; sure, programs like OTF can't overcome 28-odd years of inequity I may have experienced, but they sure help to give me hope for the future and feel support that I can still accomplish great things despite any of my circumstances, because there are strangers out there rooting for me just as much as I'm rooting for me. Donating to OTF could do for someone, what it did for me, took that little spark and fanned it into a full-blown fire, where I am so eager to continue studying, going to school, and starting my career, plus it has allowed me to take my own experience and share within my own community. I went back to school and restarted our engineering club with a focus in the area of geosciences, I also created and presented my own REU workshop for our STEM students, sharing many of the resources shared with me at GSA, and it allowed me to provide some one-on-one peer mentoring and support in these areas with

students at my college. I believe investing our most vulnerable communities is invaluable; it can create a generations-long ripple effect, and I plan to one day be on the other side, investing in the future of others.

**RRCC Data Science Team Competes in National Competition**

 Very proud to share that the RRCC **Data Science Team** competed in a national competition recently and won an award for Best Visualization! **Adam Forland** and **Matthew Watts** served as Faculty Advisors to a group of students in Community College **DataFest 2023**. The **DataFest** is a national student competition for data science. The team consisted of: **Alex King-Bailey**, **Jason Ma**, **Mark Irby-Gill**, **Jesse Ayala** (team captain), and **James Lawson** (left to right in picture). The RRCC Data Science Team 1.0 spent the weekend of April 14-16 analyzing and visualizing a large real-world data set. Their slideshow and video were presented to a panel of judges along with the work of ten other teams from across the country. Of the three awards, Best Visualization went to RRCC Data Science Team 1.0. DAT kindly requests that any promotion of this accomplishment consider including an advertisement for the Fall 2023 DAT offerings: Introduction to Data Science (DAT 1001 MWF 8:00-9:00), and Visualizing Data (DAT 2002 TR 2:00-3:15).

- Theatre production *The Trail to Oregon*, a campy musical with a nod to 90s video games, ran for (seven) nights with audience attendance of 237 people!