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## SIGCSE Board

**Chair** – Adrienne Decker, University at Buffalo, New York, USA

**Vice-Chair** – Dan Garcia, University of California Berkeley, California, USA

**Secretary** – Leo Porter, University of California San Diego, California, USA

**Treasurer** – Andrew Luxton-Reilly, University of Auckland, New Zealand

**At Large** – MaryAnne L. Egan, Siena College, New York, USA

**At Large** – Manuel A. Pérez-Quñones, University of North Carolina at Charlotte, North Carolina, USA

**At Large** – Laurie Murphy, Pacific Lutheran University, Washington, USA

**Immediate Past Chair** – Amber Settle, DePaul University, Illinois, USA

## SIGCSE News in Brief

Welcome to the April issue of the *SIGCSE Bulletin*. We begin with the slate of candidates for the 2022 SIGCSE Board elections, which are currently underway. We encourage members to participate in this important component of our life as a community.

On a related note, the *Bulletin* is seeking a new Co-Editor; we outline the duties of the position and encourage SIGCSE members to consider contributing in this way.

The 2022 SIGCSE Technical Symposium in Providence, Rhode Island saw a return to in-person attendance alongside virtual participation. Conference Chairs Maureen Doyle and Larry Merkle provide a summary of the highly successful event.

We have calls for participation in three upcoming conferences in 2022: ITiCSE in July (Dublin, Ireland, hybrid), ICER in August (Lugano, Switzerland), and Koli Calling in November (Koli, Finland, hybrid).

For those of us administering online surveys in our research, Monica McGill, the CEO and

Founder of CSEdResearch.com, provides a note of caution and some advice regarding the hazards of bots.

Our member spotlight for the April issue is Prof. Adrienne Decker of the University at Buffalo, the current SIGCSE Board Chair, who discusses her wide-ranging work in computer science education research.

### Upcoming Dates and Deadlines

Conference	Location	Dates	Full Paper Submission Deadline
<a href="#">ITiCSE 2022</a>	Dublin, Ireland (hybrid)	July 8-13, 2022	(Passed)
<a href="#">ICER 2022</a>	Lugano, Switzerland	August 7-11, 2022	(Passed)
<a href="#">Koli Calling 2022</a>	Koli, Finland (hybrid)	November 17-20, 2022	July 22, 2022
<a href="#">SIGCSE TS 2022</a>	Toronto, Canada	March 15-18, 2022	TBD

Other conferences operate in cooperation with SIGCSE and are posted on the SIGCSE web site at [sigcse.org/events/incoop.html](http://sigcse.org/events/incoop.html).

### SIGCSE 2022 Board Election

By Amber Settle, SIGCSE Immediate Past Chair

The term of the current SIGCSE Executive Board ends on June 30<sup>th</sup>, which means that it's time to elect a new one! The newly elected Board will take office July 1<sup>st</sup>.

On Monday, April 4<sup>th</sup> all of the SIGCSE members who had an up-to-date membership as of March 15, 2022 were sent an email providing a link to [the SIG election page](#) and giving a unique code to use when voting for the new members of the Board. If your membership was up-to-date as of March 15<sup>th</sup> but you haven't seen the email, please check your spam folder. If you didn't provide ACM with an email address, your voting information will be sent by postal mail.

Please take the time to read the candidate bios and statements and vote. The SIGCSE Executive Board oversees all aspects of the SIG, including its four conferences, grant programs, committees, chapters, and awards. Make sure that you have a say in who serves on the Board. Voting concludes May 20<sup>th</sup>, but voting early is encouraged.

The slate of candidates for the 2022 SIGCSE board is as follows. Note that candidates for each position are listed alphabetically by last name.

#### Chair

- Alison Clear, New Zealand
- Judith Gal-Ezer, Israel

#### Vice Chair

- Brett Becker, Ireland
- Paul Denny, New Zealand

## Treasurer

- Mark Bailey, USA
- Jill Denner, USA

## Secretary

- Mary Anne Egan, USA
- Dan Garcia, USA

## At-Large

- Bedour Alshaigy, UK
- Rodrigo Silva Duran, Brazil
- Catherine Lang, Australia
- Anne-Kathrin Peters, Sweden
- Yolanda Rankin, USA
- Judy Sheard, Australia
- Cheryl Swainer, USA

## SIGCSE Bulletin Seeks a New Co-Editor

By Jeffrey Miller and Charles Wallace, SIGCSE Bulletin Co-Editors

After three years of service, Jeffrey Miller is stepping down as Co-Editor of the SIGCSE Bulletin. We encourage members to apply for this position. Duties include:

- attending SIGCSE board meetings. Travel expenses will be covered for one in-person meeting.
- soliciting articles for the *Bulletin*.
- conducting interviews with SIGCSE members
- coordinating using Google Drive and Microsoft Word.
- managing publication of the *Bulletin* quarterly.

If you are interested or have questions, please contact *Bulletin* Co-Editor Charles Wallace at [wallace@mtu.edu](mailto:wallace@mtu.edu). We will begin considering applicants on May 15.

## SIGCSE TS 2022 Report

By Larry Merkle and Maureen Doyle, SIGCSE TS 2022 Symposium Co-Chairs

The SIGCSE Technical Symposium is SIGCSE's flagship conference and this past

March we held SIGCSE's 53rd technical symposium. SIGCSE TS 2022 was held March 3-5, 2022, in Providence, Rhode Island and online. Virtual attendees participated through the Pathable platform. SIGCSE TS 2022 was our first hybrid conference, and it opened with some trepidation about stepping into the unknown. However, our community showed patience and support through this adventure, and we thank you.

SIGCSE TS 2022 had 1422 participants, with 788 in Providence and 634 joining us online. We had representatives from 34 countries, and 79% of our global attendees participated virtually. The conference supported online or in-person sessions for papers, Birds of a Feather, and Workshops. Keynotes, panels, special sessions, SIGCSE Board meetings, and Nifty Assignments were live-streamed, which supported hybrid participation. New this year was a virtual Authors' Corner, a hybrid SIGCSE Coffee Break brewed by Google. Authors' Corner was held twice daily and provided participants opportunities to discuss papers with authors presenting virtually. One Authors' Corner was held at noon and the other at nine pm in consideration of our global attendees.



Photo Credit: Cole Rodger, coleimage.com

All in-person attendees did their part to contribute to conference safety by wearing masks and providing verification of vaccination. Socially distant seating was provided in all rooms. In addition, many wore comfort button to indicate handshake, elbow bump or

wavies. Our community seemed to respect others distancing needs.



SIGCSE Vice-Chair Dan Garcia presents Dr. Barbara Ericson with the award for Outstanding Contribution to Computer Science Education.

Photo Credit: Cole Rodger, coleimage.com

Attendees enjoyed an opening keynote by Dr. Barbara Liskov, an Institute Professor at MIT, on “Reflections on Programming Methodology” on Thursday. Friday morning opened with a plenary from the winner of the 2022 award for Outstanding Contribution to Computer Science Education, Dr. Barbara Ericson, an Assistant Professor in the School of Information at the University of Michigan on “Improving Diversity in Computing through Increased Access and Success.”



Plenary speaker Dr. Saundra B. Daily.

Photo Credit: Cole Rodger, coleimage.com

Our closing plenary was held Saturday morning. Dr. Shaundra B. Daily, a professor of the practice of electrical and computer engineering & computer science at Duke University, presented on “Diversifying Computing: Real Change Must Come from Within.” All three plenary talks were engaging and prompted further discussions at the conference.

The submissions to SIGCSE TS were outstanding. The 2022 Technical Symposium Best Paper awards were by track:

### **Best Papers in Computing Education Research**

- Jayne Everson, F. Megumi Kivuva, and Amy J. Ko. 2022. “A Key to Reducing Inequities in Like, AI, is by Reducing Inequities Everywhere First”: Emerging Critical Consciousness in a Co-Constructed Secondary CS Classroom.
- Sophia Krause-Levy, Sander Valstar, Leo Porter, and William G. Griswold. 2022. A Demographic Analysis on Prerequisite Preparation in an Advanced Data Structures Course.
- Juho Leinonen, Francisco Enrique Vicente Castro, and Arto Hellas. 2022. Time-on-Task Metrics for Predicting Performance.

### **Best Papers for Experience Reports and Tools**

- Wengran Wang, Audrey Le Meur, Mahesh Bobbadi, Bita Akram, Tiffany Barnes, Chris Martens, and Thomas Price. 2022. Exploring Design Choices to Support Novices’ Example Use During Creative Open-Ended Programming.
- Jan Vykopal, Valdemar Švábenský, Pavel Seda, and Pavel Čeleda. 2022. Preventing Cheating in Hands-on Lab Assignments.
- Jiameng Du, Yifan Song, Mingxiao An, Marshall An, Christopher Bogart, and Majd



Sakr. 2022. Cheating Detection in Online Assessments via Timeline Analysis.

### Best Papers for Positions and curriculum Initiatives

- Kathryn Cunningham, Yike Qiao, Alex Feng, and Eleanor O'Rourke. 2022. Bringing "High-level" Down to Earth: Gaining Clarity in Conversational Programmer Learning Goals.
- Veronica Cateté, Amy Isvik, and Marnie Hill. 2022. A Framework for Socially-Relevant Service-Learning Internship Experiences for High School Students.

Providence, Rhode Island welcomed us with banners in the city. The city has excellent restaurants and lovely canal walks. The weather was a clear, but a bit cold for many attendees. Fortunately, there was a mall accessible by indoor walkways for dining and errands.

The symposium had strong support from the SIGCSE board and the newly created SIGCSE TS Steering Committee. The SIGCSE Board Meeting shared with the audience the significant increase in costs incurred by offering a hybrid conference. This is an important question for our members and we hope that you try to participate in the hybrid conference and provide your opinions and thoughts for future offerings. The symposium is made possible with large troupe of volunteers and with dedicated conference organizers, dlPlan, and production experts, The Dynamic Communicator. In addition, conference registration is reduced due to our Platinum Supporters: GitHub Education, Google, Inc., Microsoft and the National Science Foundation; our Gold Supporters: Codio, Rephactor and zyBooks; our Silver Supporters: ABET, CodeGrade, Coding Rooms, MongoDB, Pearson, and Repl.it; and our Bronze Supporter: Gradescope by Turnitin.

SIGCSE TS 2023 will be in Toronto, CA from March 15-18, 2023. We will offer it hybrid for 2023. SIGCSE TS 2023 will be our first TS

outside of the United States, and we look forward to meeting with you all there!

### ITiCSE 2022 Call for Participation: Fáilte go hÉirinn!

By Brett Becker, Keith Quille, and Mikko-Jussi Laakso, ITiCSE 2022 Conference Co-Chairs

The 27th annual ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE) will take place in Dublin, Ireland, hosted by University College Dublin (UCD), with support from the Technological University of Dublin (TU Dublin).

The conference will take place July 8-13, 2022, with Working Groups working July 8-10 and the main conference on July 11-13. This is a new format following last year's community consultation whereby working group members have three full days to work prior to the main conference, which they can then attend fully.



Glendalough - 50 minutes from ITiCSE 2022, and a shortlisted ITiCSE excursion location!  
Photo Credit: Brett Becker

The conference committee has been hard at work shaping the hybrid format, finalising excursion and banquet details, securing keynote speakers, and many more exciting developments. Here are some of the latest updates:

- Registration will open in April. We will send an announcement to the mailing list and on all the regular social media channels.

- This year we have a record number of paper submissions, beating ITiCSE 2021's record of 275 by exactly 1 for a grand total of 276, with 79 accepted, and a 29% acceptance rate.
- Accepted paper authors hail from six continents (sorry Antarctica, keep trying) representing: Australia, Austria, Belgium, Botswana, Brazil, Canada, Czechia, Denmark, Finland, France, Germany, India, Ireland, Italy, Jamaica, Liechtenstein, Netherlands, New Zealand, Poland, Portugal, Singapore, United Kingdom, and United States.
- There are 9 working groups, whose recruitment phase has just concluded with over 125 applications for working group membership. Details are here: [iticse.acm.org/2022/working-groups](https://iticse.acm.org/2022/working-groups)
- There are 11 doctoral scholars that will be attending the Doctoral Consortium.
- We are still planning on physical attendance, and know that many from Ireland and abroad are already making travel plans. Currently there are no Covid-19 restrictions on visitors entering Ireland. The shape of remote participation/attendance is still being refined but there will also be a remote attendance option, making this the first truly hybrid ITiCSE.

Please visit [iticse.acm.org/2022](https://iticse.acm.org/2022) for updates over the coming weeks. See you soon, physically or virtually, on the Emerald Isle!

### **ICER 2022 Call for Participation**

By Matthias Hauswirth, Jan Vahrenhold, Diana Franklin, and Kathi Fisler, ICER 2022 Chairs

The 18th annual ACM Conference on International Computing Education Research (ICER) will be hosted by Università della Svizzera italiana (USI) in beautiful Lugano, Switzerland. This hybrid conference will take place August 7-11, 2022. You can participate physically by traveling to Lugano or virtually through our conference platform.



Photo Credit: Matthias Hauswirth

The conference committee has been hard at work shaping the hybrid format, providing an excellent in-person experience with support for people in different time zones around the world. Here are some of the latest updates:

- Registration will open in May. We will send an announcement to the mailing list and on all the regular social media channels.
- We convened the largest Program Committee ever (103), collectively reviewing 173 submitted papers.
- There are many opportunities to participate - doctoral consortium, lightning talks, poster sessions, work-in-progress workshop, and paper presentations.
- This conference is co-located with the most delicious chocolate supply of any ACM computer science education conference this year!

Please visit [icer.acm.org](https://icer.acm.org) for updates or email [site-chairs@icer.acm.org](mailto:site-chairs@icer.acm.org) with questions. See you soon, physically or virtually, as we enjoy majestic views of Lake Lugano and the Alps.

### **Koli Calling 2022 Call for Participation**

By Andrew Petersen and Ilkka Jormanainen, Koli Calling 2022 Co-Chairs

We invite you to submit a paper or poster to the 22nd Koli Calling International Conference on Computing Education Research (Koli Calling 2022), to be held on 17-20 November 2022.



Photo Credit: Sven Hüsing

Koli Calling is one of the leading international conferences dedicated to the scholarship of teaching and learning and to education research in the computing disciplines. Koli Calling is a single-track conference for original and novel work with research, practice and systems presentations as well as a keynote and invited talks. The conference is known for its moderate size, intimate atmosphere, and lively discussions.

After two years of fully online Koli Calling conferences, we are returning this year to the traditional Koli Calling venue in the beautiful Koli National Park in Eastern Finland. Due to the continuing pandemic and travel restrictions around the world, we are also preparing to provide an opportunity for virtual participation. We are strongly committed to maintaining the essence of Koli by facilitating interaction and feedback opportunities between on-site and online audiences.

We welcome submissions in the area of computing education: the teaching and learning of computing topics. Within that broad scope, contributions may involve one or more of the following:

- Empirical studies of computing education;
- Teaching approaches and assessment in computing education;

- Development, use, and evaluation of tools to support computing education;
- Theory in computing education;
- The learning of computing in any context; e.g., higher education, K-12, informal learning, lifelong learning, teachers' professional development;
- Distance, online, and blended learning of computing topics;
- Learning analytics and educational data mining in the area of computing education;
- Methodological development and instruments for computing education research;
- Reviews to support computing education or computing education research;
- Any other aspects of the teaching and/or learning computing topics.

### Submission Categories

Koli Calling 2022 will accept submissions in four categories. Each category of paper will be reviewed using a reviewer template specific to and appropriate for the submission category by reviewers interested in papers of that type.

**Research papers** (up to 16 pages single-column plus 2 pages of references) present high-quality research. These submissions will be evaluated on the quality of the contribution, its contextualization in the literature, and sound application of methods appropriate to the topic of investigation. Most research papers can be described as empirical, theoretical, or review papers.

**System and tool papers** (up to 16 pages single-column plus 2 pages of references) present a software system or other tool of value in a computing education setting. They will be evaluated based on the potential contribution of the system to the community, the effectiveness of the comparison to and differentiation from existing similar systems, and the quality of the evaluation and/or discussion of the design of the tool. Evaluation will typically involve empirical data collection, but other incisive



forms of evaluation (e.g., critical argumentation derived from theory) can be considered.

**Short papers** (up to 5 pages single-column plus one page for references) disseminate and discuss new ideas and promising initiatives in computing education practice or research. They will be reviewed based on the quality of the discussion, their use of appropriate evidence or argumentation, and their potential to be of interest to the community.

**Poster/demo papers** (up to 2 pages single-column plus one page for references) are presentations of emerging ideas for research, teaching practice, or tools. These presentations are typically interactive with the participants.

### Important Dates

Submission deadline (research, system/tool, and short papers): Midnight AOE, Friday, 22 July  
Notification of acceptance (papers): Monday, 12 September

Registration opens: Monday, 12 September  
Submission deadline (posters and demo papers): Midnight Friday, 23 September  
Submission of revised manuscripts (all categories): Midnight Monday, 10 October

For more complete information, please see the online CFP and submission guide at <https://www.kolicalling.fi/> If you have questions, please contact Andrew Petersen and Ilkka Jormanainen at [chair@kolicalling.fi](mailto:chair@kolicalling.fi). We look forward to welcoming you to Koli!

### CSEdResearch.org: Don't Let Bots Botch Your Surveys

By **Monica McGill**, CEO and Founder of [CSEdResearch.org](https://www.kolicalling.fi/)

Sharing your survey on social media? Better think again. Bots are ever present and they really, really like to take surveys that are floating around—particularly if they are shared on social media, with Twitter being the most delightful place for bots to swarm. This is especially true if

a survey provides incentives. How do we know? We've learned the hard way.

We use a survey system that provides us with the capability to add ReCAPTCHA to those and we sometimes include a particular question that asks for a particular answer—like an easy math problem, for example. We also check the time it took to complete a survey and we throw out those that are completed in just a few seconds, when the average expected time is several minutes.

You can learn more about how to fight bad bot behavior by reading [this helpful and brief blog](#).

### Member Spotlight

By **Jeffrey Miller and Charles Wallace**, SIGCSE *Bulletin* Co-Editors, **Adrienne Decker**

In this feature of the *Bulletin*, we highlight members of the SIGCSE community. This issue's spotlight is Adrienne Decker, Assistant Professor in the Department of Engineering Education and Adjunct Assistant Professor in the Department of Computer Science and Engineering at the University at Buffalo.



Photo Credit: University at Buffalo

### How did you first get involved with the CS education community?

I was a PhD student looking for a topic in 2002 when I wandered into the Doctoral Consortium (DC) at the SIGCSE Technical Symposium in



Covington, Kentucky. I was welcomed with open arms by the leads of the DC, the faculty mentors, and the students who were presenting their dissertation work. I immediately felt at home. That feeling continued as I attended my first academic conference in the following days. I decided to work on computing education as my PhD topic (specifically assessment in the first-year programming courses) and never really looked back. I was lucky enough to be recruited by Tom Cortina to be workshops chair for the SIGCSE TS in 2011 (Dallas) and met some amazing people on the conference committee. That experience helped to convince me that I wanted to do more, and I was lucky enough to be selected as SIGCSE TS program co-chair in 2014 (Atlanta) and symposium co-chair in 2015 (Kansas City, Missouri). And after those positions, I realized that I wanted to do more for the organization as a whole and ran for the SIGCSE Board treasurer (2016-2019) and then chair (2019-2022). For the 2022-2025 board, I will be serving as immediate past chair. This is a great time to plug the SIGCSE Board elections that will be happening in April/May 2022. Watch for a ballot in your email to vote for the next SIGCSE Board.

**Can you describe some of the ways you have been involved in developing and enhancing computer science education?**

My career path has been far from the traditional one. I spent 10 years as a teaching faculty in a Computer Science & Engineering department. During that time, I developed an undergraduate teaching assistant program and changed the curriculum for our Discrete Structures course and published papers about both. I also worked to create a curriculum around a graphics-focused objects-first CS1 and co-authored the text of the course. I was lured away to a department of Interactive Games and Media at another institution that changed from being teaching-focused to being research-focused in my first year. I made that switch as well and put back on the research hat I had stored away after my dissertation was complete and focused on

computing education research again. After achieving tenure and trying to transition into associate professor life, an offer of joining a newly formed Engineering Education department at University at Buffalo to bring Computing Education to that department and degree program came my way. It was an offer that presented a great opportunity, and that is currently where I am today. Our PhD program was just approved, and we are accepting applicants who are interested in computing education and would like to do computing education research.

With my focus back on research, I went back to look at issues surrounding teaching programming to introductory students and became involved in a project to bring subgoal labels into introductory programming courses to better support student learning in the first course. That is a collaborative project with Briana Morrison (UVA) and Lauren Margulieux (Georgia State) and we are just starting on a Phase 2 award that is expanding out our subgoals to additional topics and additional languages. See [www.cs1subgoals.org](http://www.cs1subgoals.org) for more information and resources.

In addition, I worked with Monica McGill (CSEdResearch.org) on creating a resource center that is housed at [csedresearch.org](http://csedresearch.org). The goals of the resource center were to improve the quality of K-12 computing education research by providing researchers, practitioners, and evaluators with information about research that exists, evaluation instruments, and research guides. The overarching goal of the work was to enable the community to be better positioned to understand the impacts of these interventions on the students in the long term and enable the community to grow research in this area. I also have two new projects looking at threshold concepts for intermediate students and training for CS faculty to help support neurodiverse students in their classrooms.

**Where do you think computer science education is headed in the next 5-10 years?**

Well, I'm not sure I have answers for 5-10 years, but I have been working with Mark Weiss (FIU) on a project that brought 43 computing education researchers together to discuss what we should focus on 15 years out. Results of our work are available at [cerfutureworkshop.org](http://cerfutureworkshop.org). Going back to my passions, thinking about the future of computing education in the teaching and learning space is of most interest to me, along with focusing on issues of research to practice. How can we take what we understand about the teaching and learning of computing and get it into the real live classrooms in front of students? What are the challenges of translating and scaling the research findings that exist? In addition, I think we need to confront what we do and don't know about the learning of computing. Much of our time as computing educators is devoted to the learning of a fairly complex skill called programming. I don't believe we spend enough time thinking of that as a skill and what it actually means to teach someone a skill - a skill that improves with practice and that requires practice to achieve competence. Why do we continue to expect absolute proficiency of students after one year (or one semester) of learning that skill? Why do we not consider that the skill of programming will take years to develop and that we shouldn't expect students to be ready to go to work as a software engineer after one or two semesters of training? We don't expect that of our doctors, artists, nurses, actors, pharmacists, dancers, lawyers, and many other professions that spend years practicing their skills before they are considered proficient. Why do we as a community still talk about how important it is to teach a language in CS1 that the industry wants? Why aren't we focused on thinking about how to train students who will be proficient in the skills we need them to be proficient in to be a successful member of the computing community?

**What do you think are the biggest challenges facing the community?**

As outgoing SIGCSE Board chair, I think there are many challenges facing the community, some of which were backburnered because of the pandemic. Prior to that, we were a growing community and dealing with how to maintain that sense of community as we grew. Now, we are rebuilding that community and, in many ways, that culture. Hopefully we can focus on the lessons that the pandemic has taught us and build a better and even more inclusive community than we had before.

We have seen some of the benefits and some of the drawbacks of remote work, meetings, gatherings, and conferences. I think that it would be wonderful if we as a community can think about what those events online should be and push the envelope on what they could be as opposed to simply re-creating in-person experiences. There seems to be untapped potential to do something very innovative in the virtual space that will make virtual events unique, different, and rewarding in the same ways (but different ways) that in-person events are.

And lastly, I think we have a bit of a ways to go as a community in terms of disciplinary rigor in research and in reviewing. Steps have been made in both areas, but there is work left to do, and I believe we can do it, but it will require a lot of time and effort to enact the changes that we need. We have a hill to climb still in terms of garnering the respect of the larger computing research community. We are producing computing education scholars at a higher rate than we were when I first came to the doctoral consortium in 2002, and we need for them (and us old-timers) to be recognized for doing meaningful scholarly work at their institutions in terms of tenure and promotion.

**What are the biggest challenges for diversity, equity, and inclusion in CS education today? And what can CS educators do to help encourage diversity?**

I think the biggest challenges involve the culture of IT and tech as exclusionary. It is extremely difficult to recruit members of underrepresented groups into our programs and even harder to retain them both in the programs and in industry afterward. The toxic culture that exists in many IT departments and tech companies trickled down into our departments and has created an un-welcoming culture from the start. How do we combat that and change that so that more people will be attracted to the discipline and feel like they belong? However, one of the other things I've come to appreciate as SIGCSE chair is the value of listening. With all things DEI, I feel like taking the time to listen to those whose voices are not often heard and taking our cues from them can be one of the best things we can do. I can represent one piece of a complex puzzle of underrepresentation, but not all of it, so we need to work to bring all those voices to the table to understand what we need to do, and then do it.

**What do you enjoy doing when you are not working?**

I like to spend time with my family (my husband, son, daughter, and two German Shepherds). I have a daughter who is a competitive dancer and competitive figure skater, and she keeps me quite busy between practices, rehearsals, shows, and competitions. I also have a Christmas tree/Christmas ornament hobby that keeps me busy leading up to the Christmas season (and throughout the year). In 2020, there were 36 decorated Christmas trees in my house, of various sizes, each with a unique theme. There were a few less completed in 2021 but holding out hope for 2022 to return to full strength.