

INSTITUTE OF COGNITIVE SCIENCE



*Cinnamon Bidwell,
Interim Faculty Director*

FROM THE INTERIM DIRECTOR

Friends,

What a beautiful fall we're having! It's been a lively and inspiring start to the academic year, and, as we learned at the KickOff, we have more in motion than ever across research, teaching, and community engagement. Here are a few highlights I'm especially excited to share.

Leadership and Community. We kicked off the new year by hosting CU Boulder's new Chancellor at ICS in January, a wonderful opportunity to showcase the breadth of our interdisciplinary work.

Our new Institutes Advancement team has also hit the ground running, helping strengthen connections between research, partnerships, and public impact. Congratulations are also in order for Monica Ko and Leanne Hirshfield, both promoted this year! And don't miss our Holiday Party on December 5th this year, always a highlight and a chance to celebrate together.

New and Continuing Research Initiatives. Even amid a challenging federal landscape for science funding and the direct pressures that places on our research community, ICS continues to grow its footprint in interdisciplinary research, with several major projects gaining momentum. The Institute for Student-AI Teaming (iSAT) received renewal funding, continuing its mission to reimagine how AI can serve as a collaborative learning partner that helps students and teachers work and learn more effectively, engagingly, and equitably.

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The LEVI Project was also renewed, and seeks to scale the effectiveness of human, high-dosage math tutoring by developing AI technologies that support the professional learning of tutors to promote more collaborative, rich, and rigorous tutorials. Kate Henson and team were funded by NSF to develop new approaches for improving how K-12 districts adopt and implement high-quality science curricula, while Bill Penuel is leading an NSF project to analyze the practices of collaborative design pursued in NSF-funded projects in the last decade, to understand how and when the educational innovations produced through co-design spread and are sustained. And through a new contract between the Colorado Department of Education and iHub, ICS researchers are supporting the implementation of evidence-based instructional practices statewide.

Academic and Training Initiatives. On the academic side, we continue to innovate. Alba is leading efforts to expand our triple PhD program through collaboration with CU Anschutz, a long-term goal that will strengthen the cognitive science and neuroscience bridge between campuses. She also submitted the first assessment plan for our dual PhD program to the Office of Academic Planning and Assessment. Our undergraduate Cognitive Science course remains a hit, now offered twice a year to meet ongoing demand. And we're excited to roll out Shared Equity Leadership training and the Simplify Language workshop (co-hosted with IBS) to build a more inclusive and accessible research community.

People and Space. We've rounded out our staff team with Tayloe McMacken and Patty Ray, whose energy and expertise have already made a difference in keeping our operations running smoothly. With Alba on parental leave this fall and early winter, Danielle, Cat, Cinnamon, and Monica are tag-teaming her duties until she's back. On the space front, Alba and Danielle have been hard at work refreshing the second floor of CINC, new paint, more open work areas, a new kitchen countertop, and some thoughtfully chosen furniture to make the space brighter and more functional.

Events and Connections. This spring we hosted the inaugural Voices for Science event, which brought together researchers and community partners to celebrate the power of interdisciplinary collaboration, an event we hope will become a standing tradition.

As always, thank you for all you do to keep ICS vibrant, curious, and moving forward. Thank you also for the opportunity to allow me to serve our community in Tammy's stead, while keeping her favorite boat-related metaphors afloat. We're charting new waters together, sometimes paddling, sometimes gliding, and occasionally bailing, but always moving toward something bigger and brighter. Here's to another year of discovery and smooth(ish) sailing ahead!

Warmly,
Cinnamon

Dr. Rosi Kaiser, Presidential Early Career Award for Scientists and Engineers Recipient

Dr. Rosi Kaiser was awarded the **Presidential Early Career Award for Scientists and Engineers** (PECASE)! This is the highest honor bestowed by the US government on outstanding scientists and engineers early in their careers.



Dr. Kaiser, ICS Fellow, is a national leader in the science and treatment of adolescent depression. Together with her research group, Dr. Kaiser embraces a moonshot vision: to end youth depression and foster emotional resilience for all young people. Towards this vision, Dr. Kaiser is accelerating discovery of biomarkers of youth depression and resilience, and working to develop scalable, effective interventions. In 2025, in partnership with an interdisciplinary team of scientists, educators, and young people with lived experience, Dr. Kaiser and her team are launching an exciting initiative to scale and translate rigorous scientific discovery into high-impact programs aimed at promoting mental health.



The PECASE is awarded to scientists and engineers who show outstanding potential for leadership and innovation. The award recognizes innovative and far-reaching developments in science and technology, expands awareness of careers in science and engineering, recognizes the scientific missions of participating agencies, enhances connections between research and impacts on society, and highlights the importance of science and technology for our nation's future.

A huge congrats to Rosi on this honor!

Mentoring and Distinguished Career Awards

Dr. Cinnamon Bidwell Receives a 2025 Outstanding Postdoc Mentor of the Year Award



Cinnamon Bidwell, ICS Interim Faculty Director, has been selected as a 2025 Outstanding Postdoc Mentor of the Year Award recipient.

Those who nominated Cinnamon described her as “the pinnacle of a capable, compassionate and creative leader who comports herself with utmost professionalism.” As leader of a lab of nearly 30 researchers, her commitment to supporting postdocs was highlighted – particularly her instrumental mentorship through the complex process of seeking NIH-funded K and R funding.

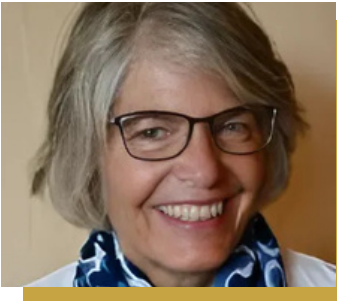
What an accomplishment! Congrats, Cinnamon!



Dr. Rosie Cowell Wins the Graduate School's 2024-2025 Exceptional Graduate Faculty Mentor Award

Rosie Cowell, ICS Faculty, was chosen as a winner of the Graduate School's 2024-2025 Exceptional Graduate Faculty Mentor Award. Her nomination dossier was full of praise for the help and encouragement she gives to graduate students. Thank you, Rosie, for being willing to give so much of your time, energy, and intellect to supporting graduate students and the mission of graduate education.

A big congrats to Rosie on this award!



Dr. Marie Banich Receives Cognitive Neuroscience Society's 2025 Distinguished Career Contributions Award

Marie Banich, ICS Distinguished Professor, won the Distinguished Career Contributions Award (DCC) that was established in 2012. This award honors senior cognitive neuroscientists for their sustained and distinguished career, including outstanding scientific contributions, leadership and mentoring in the field of cognitive neuroscience.

An annual call for nominations for the Distinguished Career Contributions Award is made to the membership of the society. The recipient of the prize attends the annual meeting of the Cognitive Neuroscience Society and delivers the Distinguished Career Contributions lecture.

The Distinguished Career Contributions (DCC) award honors senior cognitive neuroscientists for their distinguished career, leadership and mentoring in the field of cognitive neuroscience.

What an accomplishment! Congrats, Marie!

Dr. Angela Bryan Receives 2024–2025 OFA Award for Outstanding Faculty Mentoring



ICS Fellow, Professor Angela Bryan won the 2024–2025 Office of Faculty Affairs (OFA) Award for Outstanding Faculty Mentoring. This award recognizes and honors faculty who go above and beyond in guiding and advocating for their colleagues, strengthening collaboration and excellence across the university.

A big congrats to Angela on this honor!

Meet Our New Fellows

Dr. Allison Hilger

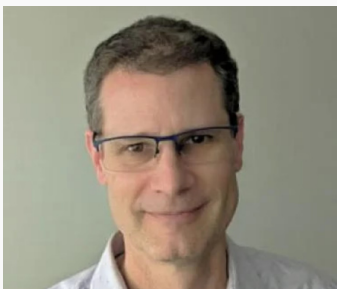
Assistant Professor, Department of Speech, Language, and Hearing Sciences, Coordinator of Undergraduate Study



Dr. Hilger's research investigates impaired speech production in motor speech disorders. More specifically, she looks at how prosody, or the production of pitch, loudness, and timing in speech, is affected in neurological disease or impairment.

Additionally, she researches how healthy speakers use auditory feedback of their voice to make adjustments to their speech, and how the use of auditory feedback can become impaired in motor speech disorders. Currently, she directs the CO Motor Speech Lab and is investigating prosody and auditory feedback in individuals with ataxic dysarthria.

Dr. Hilger joined CU-Boulder as an Assistant Professor in 2020 after earning a Ph.D. from Northwestern University and working clinically in Chicago, IL. She utilizes her clinical experience as an ASHA-certified speech language pathologist to investigate translational outcomes for evaluation and treatment in motor speech disorders. In addition to her research, Dr. Hilger teaches undergraduate and graduate classes that include Speech Science and Neurogenic Speech Disorders in Adults.



Dr. David E. Huber

Professor, Department of Psychology and Neuroscience

Dr. Huber received his PhD from the University of Indiana in 2000. His research focuses on human perception (e.g., visual cognition) and memory from a broad-based, computational perspective.

To shed light on these basic cognitive processes, we find converging evidence from behavioral studies (e.g., accuracy and reaction time measures of decision-making) and cognitive neuroscience measures (e.g., event-related potentials and fMRI) in combination with neural network and Bayesian modeling.

Dr. Annie Margaret
Associate Teaching Professor, ATLAS Institute

Dr. Margaret is an educator, researcher, and human enthusiast motivated by questions at the intersections of mental health, technology, addictive design, tribalism, the attention economy and mindfulness.



Her teaching and research address psychotechnologies and cognitive states that counteract the negative impact of social media on our mental health and wellbeing. She cultivates contemplative practices and classroom experiences to foster skills critical for human thriving in the rapidly growing attention economy – empathy, sovereignty, metacognition, embodied wisdom, self-inquiry and interpersonal communication.

She received her PhD in cell and molecular biology from Northwestern University in 2014, and balances this rigorous training in the scientific method with the empiricism of participatory knowledge. She enjoys working with companies to develop strong cultures of empathy through personalized feedback and facilitates workshops empowering creative technologists to find their voice and personal story.



Dr. Maria L. Pacheco
Assistant Professor, Department of Computer Science

Maria works in the areas of Natural Language Processing, Machine Learning and Computational Social Science. Before joining CU Boulder, she was a postdoctoral researcher at Microsoft Research NYC.

Maria completed her PhD at Purdue University in the Department of Computer Science, and her BS in Computer Science & Engineering at the Universidad Simon Bolivar in her hometown of Caracas, Venezuela.

Know someone who would like to be a Fellow?

Our Institute's uniquely interdisciplinary research program builds on the breadth and depth of expertise in our affiliated faculty, known as Fellows.

Fellows actively work together with other members of ICS in pursuing mutual research or practice in the areas of Learning and Education, Brain Health and Wellness, and Cognition and Development, as well as others.

To become a Fellow, fill out the [ICS Membership Application form](#) and send it to ICSPrograms@colorado.edu for review.

Meet Our New Operations Manager



Danielle Franklin, ICS Operations Manager

Danielle Franklin joined ICS in October 2024 as the Operations Manager, where she supports administrative and operational functions within the Institute of Cognitive Science. Her work contributes to the strategic and day-to-day management of administrative initiatives within ICS.

She brings nearly a decade of experience in higher education administration, operations, and student support. Prior to ICS, Danielle spent nine years at Oregon State University, where she held key roles across two dynamic units. She served six years with OSU's Ecampus division as the Office and Recruitment Manager, supporting online teaching and learning, and streamlining recruitment and HR processes. She also spent three years as the Learning Center Coordinator for INTO OSU, an international partnership focused on international student success in American higher education.

Danielle is passionate about creating efficient systems, fostering inclusive environments, and supporting teams that make a meaningful impact. She's excited to bring her collaborative spirit and strategic mindset to ICS.

ICS Administration and Staff

Interim Faculty Director Cinnamon Bidwell
Associate Director Alba Tuninetti

Administrative, Organization, and Academic Team (AO&A)

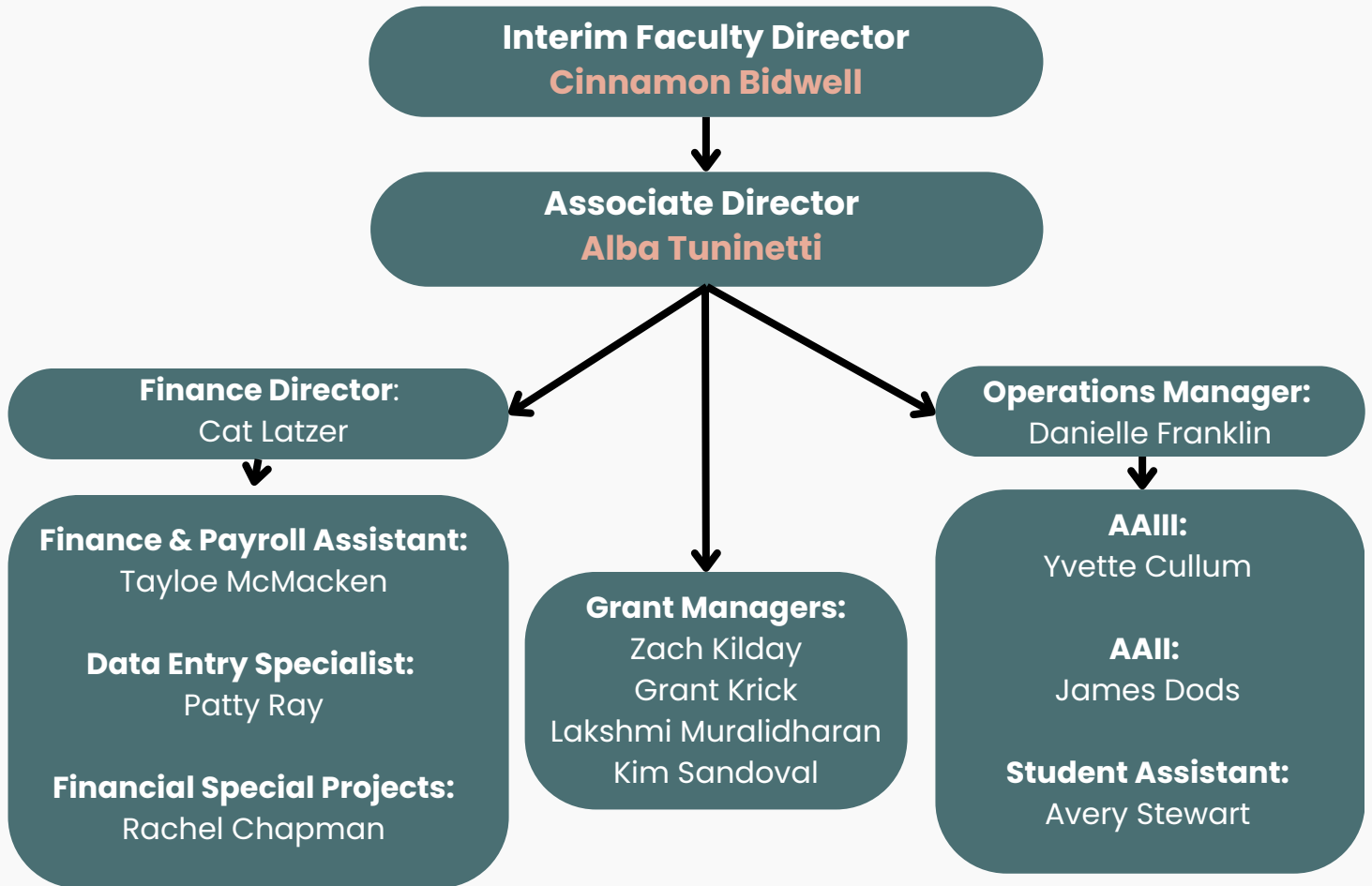
Danielle Franklin, Operations Manager
Yvette Cullum, Administrative Assistant III
James Dods, Administrative Assistant II
Avery Stewart, Student Assistant

Finance Team

Cat Latzer, Finance Director
Lakshmi Muralidharan, Sr. Grant Manager
Kim Sandoval, Grant Manager
Grant Krick, Grant Manager

Zach Kilday, Grant Manager
Taylor McMacken, Finance & Payroll Asst.
Patty Ray, Data Entry Specialist
Rachel Chapman, Financial Special Projects

Administration and Staff Organizational Chart



ICS staff outing to
The Wild Animal Sanctuary

Introducing the CMAP Lab



Dr. Rosie Cowell, Director of
the CMAP Lab

The Computational Memory and Perception Lab (CMAP) Lab conducts interdisciplinary cognitive neuroscience research involving studies of human behavior, neuroimaging and computational methods. Having moved to CU in 2023, the lab now has three graduate students and a host of undergraduate researchers. CMAP also conducts studies into diverse phenomena in the domain of memory and visual perception, motivated by both furthering basic science and generating socially-relevant applications.

In one project, we are investigating "the testing effect" – a well-known finding relevant to education in which students do better on memory test if they have had an opportunity to practice retrieving the material beforehand. They have found for the first time that such an effect can occur with purely visual stimuli, which challenges many prominent theories of how the testing effect arises. Now, they are using the MRI scanner at the Intermountain Neuroimaging Consortium (INC) to investigate whether they can reveal "visual pattern completion" processes in visual cortex that might underlie this effect. In another project, they are using the MRI scanner to ask how visual representations of objects change depending on whether the observer is asked to think about the visual versus the semantic properties of the object; they are asking where in the brain, and how, conceptual information emerges from visual information, and whether that differs for animals compared to non-living things. Finally, they are applying their cognitive neuroscience skill set to understanding the cognitive aftereffects of concussion. In this project, they are attempting to characterize the profile of lingering cognitive deficits caused by mild traumatic brain injury in a theoretically coherent way, and asking whether we can link those deficits to damage to specific brain structures or networks.

CMAP Lab works closely with Dr. David Huber's Cognitive Experiments, Models, and Neuroscience Lab (CEMN Lab) in the Psychology and Neuroscience department (three more grad students and a postdoc!), co-hosting lab meetings, co-mentoring undergraduate research assistants, and brainstorming ideas together. They are very much enjoying the interdisciplinary ICS community, and are especially grateful for the fantastic INC resources that have enabled them to get their brain-imaging projects off the ground quickly!



*Dr. Rosie Cowell, CMAP Lab Director,
and Dr. David Huber, CEMN Lab Director,
with their lab members.*

Research in the Spotlight



Alaa Ahmed; ICS Fellow, Mechanical Engineering

- [BBC Article, "Quick home health tests: Check your reaction times"](#)



Sidney D'Mello; ICS Faculty, Computer Science, Psychology and Neuroscience

- [MSN Article, "Can AI read and rate college essays more fairly than humans do?"](#)



Cinnamon Bidwell; ICS Faculty Interim Director and Psychology and Neuroscience

- [WSAZ3 News Segment "Researchers are working to develop a breathalyzer that detects THC levels in high drivers"](#)



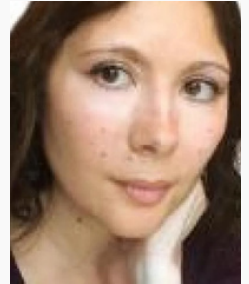
Bill Penuel; ICS Distinguished Professor and School of Education

- [New York Times Article, "Funding Cuts Are a 'Gut Punch' for STEM Education Researchers"](#)

To view more articles and news segments featuring ICS faculty and fellows, [click here](#).

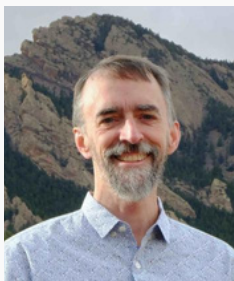
Fellow & Faculty Awards

Associate Professor Iskra Fileva, ICS Fellow, won the 2024 Public Philosophy Op-Ed Contest from the American Philosophical Association for her blog, "Is It Hubris to Think We Matter?" Fileva's article was originally published in 2023 in *Psychology Today*, for which she is a regular contributor. Congratulations on this accomplishment, Iskra!



ICS Fellow, Professor June Gruber, received the 2025 Boulder Faculty Excellence Award for Research, Scholarly, and Creative Work. Provided by the CU Boulder Chancellor, the BFA Excellence Awards include a monetary prize, an engraved plaque, and other gifts from the Boulder Faculty Assembly. Congratulations, June, on this honor!

Professor Michael Klymkowsky, ICS Fellow, was the recipient of the annual CU OER (Open Educational Resources) Champion Award! This award recognizes significant achievements of CU faculty, staff, and students in expanding the use of open educational resources. As an award recipient, Dr. Klymkowsky received an OER Champion digital badge and a monetary award of \$1200. Congratulations, Michael, on this achievement!

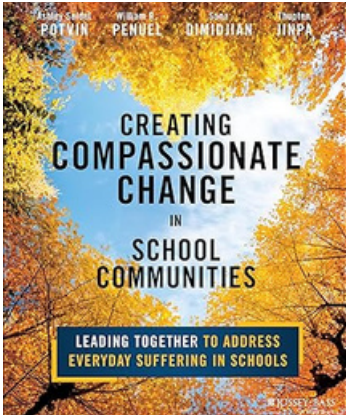


Distinguished Professor Bill Penuel was the 2025 AERA (American Educational Research Association) Annual Meeting's speaker at the Wallace Foundation Distinguished Lecture. The 2025 AERA Annual Meeting is the single largest gathering of scholars in the education research field and is a showcase for groundbreaking, innovative work in a diverse array of areas. Congratulations, Bill, on this accomplishment!

Joe Polman, ICS Fellow, and co-authors earned "Paper of the Year" honors from the *Journal of the Learning Sciences*. Congratulations on this honor, Joe!



Titles From ICS Members



Creating Compassionate Change in School Communities: Leading Together to Address Everyday Suffering in Schools

**Co-Authored by Bill Penuel, Distinguished Professor
ICS and Psychology and Neuroscience**

Compassion and dignity provide an essential framework for building caring and inclusive schools.

Creating Compassionate Change in School Communities examines how educators can develop compassion and collaborate to foster humane, dignifying school cultures. Grounded in evidence and case studies, it provides tools for teachers, counselors, and other school leaders to strengthen school environments that support healing and student flourishing.



Unfinished Business: Rational Attitudes in Reasoning

**Julia Staffel, Associate Professor & ICS Fellow
Philosophy**

Unfinished Business develops a theory of the transitional stages of complex deliberation, integrating philosophical analysis with findings from cognitive science.

Julia Staffel introduces the notion of *transitional attitudes*—states of mind directed at potential answers while reasoning is ongoing—which follow their own rationality conditions distinct from those governing conclusions. This framework illuminates structural similarities across diverse intellectual activities, from historical interpretation and legal judgment to philosophical inquiry and mathematical proof. By theorizing about reasoning in progress rather than only its starting points or outcomes, Staffel offers a novel account of how we generate insight, model logical learning, and assess confidence in our own positions.

The teaching guide can be downloaded from [PhilPapers](#).

Promotions & Re-appointments

CONGRATULATIONS!



Quentin Bidy was re-appointed to his position as an Assistant Research Professor



Thomas Breideband, Research Scientist Level II, promoted to Program Director Level I (Associate Director, Institute for AI Student Teaming)



Leanne Hirshfield, Associate Research Professor, promoted to Research Professor



Mon-Lin (Monica) Ko, Assistant Research Professor, promoted to Associate Research Professor

ICS Colloquia Update

**Please join us in person or over Zoom to hear from visiting researchers and our own!
Snacks are provided!**

- Find our current colloquia schedule [here](#) and on the left side of the homepage on the ICS website.
- Past colloquia recordings are archived for your viewing [here](#) on the ICS website.

**Zoom: <https://cuboulder.zoom.us/j/98256300067>?from=addon
Meeting ID: 982 5630 0067**

ICS Centers' Updates

INC (Intermountain Neuroimaging Consortium)

We are excited to have started several new studies in the past year, with even more on the near horizon. Some of the new studies will be with new institutions, including University of Wyoming and Boulder Community Health, as well as new industry clients in the UK. The fNIRS equipment that was set up last year has been an exciting addition, and more new studies are utilizing it, along with additional response devices that give us even more flexibility to run various types of task paradigms. Despite a challenging budget, we have been able to maintain our on-call MRI tech positions and are optimistic about reinstating in the future to accommodate even more scanner availability.

While staffing was recently decreased by 50%, the Data and Analysis team remains dedicated to providing INC members with a high level of service and support. We're excited to announce a new initiative — Advanced Data, Analysis, and Training (ADAA_T) — designed to help INC members advance their research through on-demand training for lab staff and custom analysis support for building and running advanced workflows. This summer, we successfully launched our first Neuroimaging Fundamentals course, where undergraduate and graduate students gained hands-on experience using the Flywheel.io platform and performing neuroimaging analyses on our high-performance computing environment. Looking ahead, INC is hosting bi-weekly Neuroimaging Methods meetings this fall, providing a forum for students, staff, and faculty to connect and discuss current topics in neuroimaging. Our staff continues to collaborate closely with CU Research Computing, the CU Boulder Core Facilities group, and Flywheel.io to enhance the overall user experience across INC's data and analysis ecosystem.



INC staff with participants from the Department of Psychology and Institute of Cognitive Science at the Neuroimaging Fundamentals summer course.

The INCternship Program continues to be a cornerstone of INC's success. Since 2024, six INCterns have completed the Data and Analysis rotation, with one even serving as a teaching assistant for the Neuroimaging Fundamentals course this past summer. A major highlight of the program has been the successful launch of the Research Operations Advancement Series, which provides students with hands-on training to take on advanced responsibilities within facility operations. We are also proud to celebrate the recent graduation of two of our INCterns—Alix Matthews and Laura Whited—and while we are sad to see them leave, we look forward to welcoming a new cohort of talented students soon.



The INCtern Team gathered for the Fall INCternship Program Retreat

CRT (Center for Research on Training)

Current research in the CRT is focused on machine learning, including algorithms for neural network optimization and methods to give them more human-like inductive biases. We have also been wrapping up projects on learning in construction settings, learning models as diagnostic tools for psychiatric disorders, and relational concept learning.

Some papers from the past year:

- Shaier, S., Pereira, F., von der Wense, K., Hunter, L., & Jones, M. (2025). More Experts Than Galaxies: Conditionally-Overlapping Experts with Biologically-Inspired Fixed Routing. International Conference on Learning Representations (ICLR25). arXiv:2410.08003
- Warmuth, M., Kotłowski, W., Jones, M., & Amid, E. (2025). Noise misleads rotation invariant algorithms on sparse targets. Algorithmic Learning Theory (ALT 2025). arXiv:2403.02697
- Alexandre Galashov, Matt Jones, Rosemary Ke, Yuan Cao, Vaishnavh Nagarajan, Michael C. Mozer (2025). Catch Your Breath: Adaptive Computation for Self-Paced Sequence Production. arXiv: 2510.13879
- Chaudhari, R. G., Goodrum, P., Bhandari, S., Hallowell, M., Jones, M., & Yeh, T. (2025). How does augmented reality head-mounted display impact the ability to detect changes while performing piping assembly? International Journal of Industrial Ergonomics, 107, 103751.
- Lopez, J., Bhandari, S., Perry, S., Ayer, S. K., Hallowell, M. R., & Jones, M. (in press). Do virtual reality and haptic feedback improve safety skills of construction workers? Journal of Construction Engineering and Management.
- Kim, K., Stoddard, J., Khosravi, P., Kircanski, K., Jones, M., Cardenas, S., Pine, D., & Haller, S. (in press). Sensitivity and bias in face-emotion labeling: Replication and extension to youth with irritability and anxiety. Journal of the American Academy of Child and Adolescent Psychiatry.
- Corral, D., & Jones, M. (in press). Encouraging unitary and compositional representations for relational concept learning. Cognition.

CUChange (Center for Health & Science, Genes & Environment)

- Postdoc Jonathon Lisano was awarded funding for a new project, CAPPS, through the Rocky Mountain Cannabis Research Center.
- Two new graduate students joined Dr. Bidwell's team, Claire Pince and Megan Brown.
- Professional Research Assistant Elicia Azua launched a Feedback Survey to collect data on participants' experiences in CUChange studies, and is currently in the process of analyzing the results.
- CUChange Co-director Angela Bryan won the University of Colorado Office of Faculty Affairs (OFA) Award for Outstanding Faculty Mentoring.
- CUChange Co-director Cinnamon Bidwell won the Outstanding Postdoc Mentor of the Year Award.
- CUChange graduate Students Irene DeLaTorre and Luiza Rosa received new funding through the Rocky Mountain Cannabis Research Center.
- CUChange had numerous new publications, including a new paper from the LABeL Study, a new paper from graduate student Margy Chen, a paper from Assistant Research Scientist Cari Skrzynski, and many more! Our publications can be found on the research findings page of our website:
<https://www.colorado.edu/center/cuchange/research/research-findings>



iSAT (NSF National AI Institute for Student-AI Teaming)

The NSF National AI Institute for Student-AI Teaming (iSAT) was launched in 2020 to explore how classrooms could become more effective and engaging learning environments with the help of artificial intelligence (AI). NSF iSAT offers an exciting and compelling vision for 21st century AI-enhanced classrooms, where all students experience the joy of learning by working together to co-construct knowledge, making discoveries through inquiry, and developing their interests and passions. After a highly competitive national review, the National Science Foundation (NSF) has awarded NSF iSAT renewed funding to continue its national leadership in preparing students and teachers for a future shaped by AI.

Headquartered at CU Boulder and in partnership with five institutions across the country—Boston University, Brandeis University, Colorado State University, the University of California Berkeley, and Worcester Polytechnic Institute—NSF iSAT brings together a highly interdisciplinary community of researchers, educators, and technologies. Since its founding, NSF iSAT's work has reached more than 6,000 middle and high school students and their teachers through hands-on, inquiry-based projects in AI and STEM. We have developed three multi-lesson AI literacy curriculum units exploring environmental sensors, self-driving cars, and moderating online communities. NSF iSAT researchers have also created and tested two AI partners that are being used in real classrooms to give students real-time feedback and prompts as they learn to collaborate and solve complex problems together. A hallmark of our approach is co-design: students and teachers work alongside researchers to imagine, test, and refine AI-enabled learning tools. This model empowers students to think critically about technology and its social impacts while preparing teachers to guide classroom innovation. Over the next five years, the Institute will expand its AI-enabled curricula to more schools nationwide, deepen partnerships with industry, and explore new ways to help students become better collaborators and more AI-literate in order to build the next generation of AI-ready learners and educators and strengthen the nation's capacity to innovate in an AI-driven world.

iSAT Retreat attendees met to develop the strategic and implementation plan for the 2025/2030 performance period

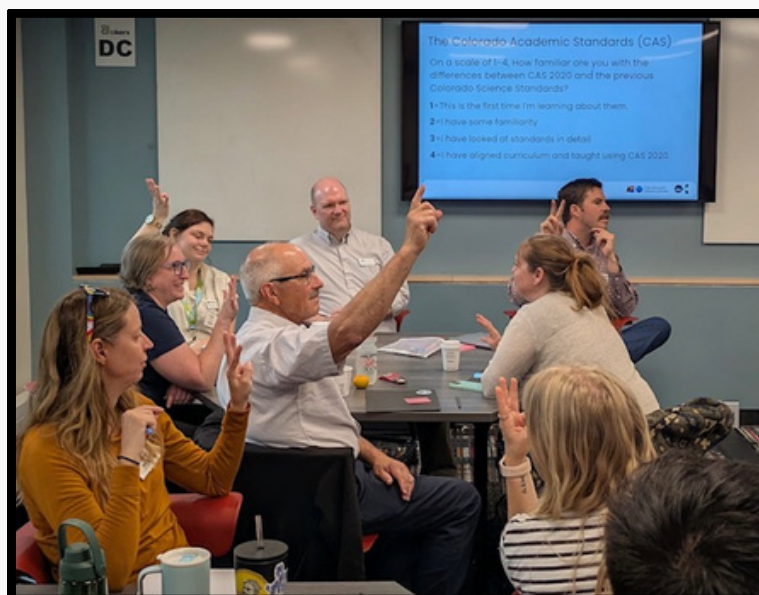


iHUB (inquiryHub)

In 2025, our work in Denver shifted from developing the high school OpenSciEd program—a three-course NGSS-aligned sequence in biology, chemistry, and physics—to supporting district-wide implementation. After independently adopting both middle and high school OpenSciEd programs, Denver Public Schools (DPS) partnered with BSCS Science Learning and inquiryHub at CU Boulder to advance equitable STEM learning. Building on years of collaboration, the team led a five-day summer institute for over 250 teachers, who found the learning highly responsive to district needs and practical. Implementation data show strong uptake: 96% of observed classrooms are using OpenSciEd materials, and 88% feature teachers elevating and connecting students' ideas to explain phenomena.

iHub also has developed partnerships with other districts (in Colorado, California, Illinois, and Minnesota) to support piloting and adoption of high-quality instructional materials as well. We are particularly excited about a new [NSF-funded project](#) that is supporting the gathering and use of evidence from improvement-oriented measures of implementation as part of pilots of materials, to inform how to allocate time and resources for district-wide implementation. We are also partnering with the Colorado Education Initiative to support 8 districts across the state with the integration of AI into the classroom and district.

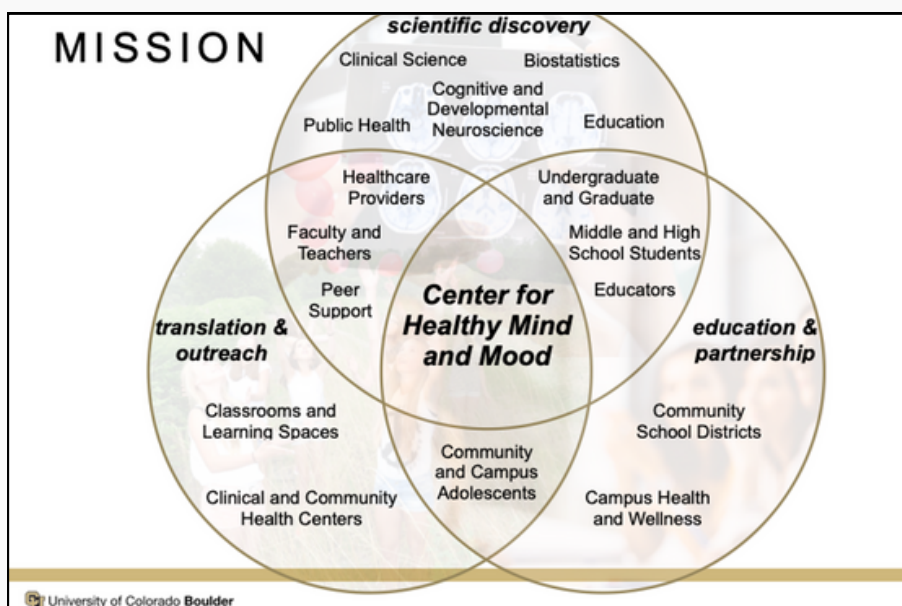
inquiryHub has partnered with the Colorado Department of Education to science support teachers with professional learning across the state through an initiative called [Science at its Peak](#). This work is funded by the Colorado State Legislature through house bill 1446. So far this year we have supported more than 100 teachers from Alamosa to Craig and everywhere in between!



iHub trains facilitators as part of the Science at its Peak initiative.

Center for Healthy Mind and Mood (CHMM)

The **Center for Healthy Mind and Mood** The Center for Healthy Mind and Mood is pioneering a transformative approach that shifts the paradigm of depression science to foster healthy mood in young people. The Center launched in Spring 2025 and focuses on the transdisciplinary discovery of the nature, prevention and treatment of youth depression, achieved by a team of diverse scientists, students, educators, campus leaders, and community stakeholders working together to produce integrative research with significant public health impact. Our three initiatives focus on (1) scientific discovery, (2) research translation to practice, and (3) education & outreach. The Center is led by Dr. Roselinde Kaiser, a clinical psychologist, neuroscientist, and national leader in the field of mood disorders and mental health. [Join the listserv](#) to stay up to date on programs and research opportunities!



GOALS & PROGRAMS				
	Programs			
Goals	Translational Research	Mentored Incubator	Classroom Program	Youth Voices Program
Discover the developmental origins and mechanisms of depression.	✓	✓		✓
Develop prevention and intervention programs informed by basic science.	✓	✓		
Deploy programs using scalable strategies.			✓	
Educate junior scholars in youth depression.		✓	✓	
Outreach in connection to communities.				✓

University of Colorado Boulder

Operations Update

Associate Director Alba Tuninetti

We have had another busy year on the operations side, but as of October 2025, we have a full permanent team on both the Academic, Operations, and Administrative (AO&A) team and the Finance team!

On the AO&A side, **Danielle Franklin** has become an integral and crucial leader of our AO&A team, learning the ropes, quirks, and idiosyncrasies of ICS and CU Boulder over the past year. She has managed to hit the ground running, including helming the (dreaded) inventory project last year, streamlining our academic program paperwork and processes, and stepping into our RIO DEI group. We're so thrilled to have her onboard and look forward to her next year with us!

Our finance team has been fully fleshed out with **Taylor McMacken** and **Patty Ray** joining us last fall as our Payroll & Finance Assistant and Data Entry Specialist, respectively. Importantly, we welcomed **Zach Kilday** fully as our fourth grant manager on our team in early 2025, and are elated at how well he has taken on this role for his portfolio.

Danielle and I have worked to revamp the **first and second floors of CINC** with RIO's financial help; the first floor now has a dedicated graduate student space, cozy with a tea nook and shared workspaces. If you walk up to our second floor, you'll see new paint, new cubicle layouts, more space, and a new kitchen countertop and layout! We're working on sourcing some comfy furniture to make it fully welcoming! While we couldn't splurge on a water-refilling fountain, we hope to have it be more welcoming and comfy for all, including the next 5 years of iSAT!

Our **ICS student programs** continue to grow as well. We are in the midst of pursuing an agreement with CU Anschutz to allow their students to pursue our triple PhD program; this will be a long time in the works, as it requires Board of Regents approval, but we are excited to helm a new collaboration and partnership with another CU campus. Additionally, we are in our first year of our academic assessment plan for our dual PhD, logged with the Office of Academic Planning and Assessment for the first time last year.

Overall, another busy year – and I will be on parental leave for a while throughout AY25–26, but am confident in our teams's ability to steer the ICS ship while I'm out. **Cinnamon, Tammy, Danielle, Cat, and our very capable Finance and AO&A teams have got you covered!**

On a personal note from me, a VERY special thank you to Yvette Cullum, without whom this newsletter would not have come together. THANK YOU YVETTE!!

Alumni Spotlight



Maggie Perkoff, Postdoctoral Researcher Summer 2025 Graduate; Combined PhD, Computer Science

I am a Postdoctoral Researcher in the Department of Computer and Information Science at the University of Pennsylvania.

For my role, I conduct research on the UGAIN project, using generative AI to help improve English learners' reading skills.

As I continue my career, I hope to continue to pursue research in generative-AI based education technology while also considering how teachers and students can integrate AI into their classrooms without depriving students of key learning opportunities.

ICS provides a phenomenal opportunity for students with interdisciplinary interests to come together to discuss their unique research projects. In particular, I loved the Research Practicum, having the dedicated support of a small group of researchers led by Drs. Bill Penuel and Tammy Sumner was a fun and motivating way to continue work on my dissertation milestones.

Student Programs

Let friends and colleagues know about our programs at ICS!

We encourage all Undergraduate and Graduate students to APPLY if interested in the ICS certificate and degree program(s).

Step-by-step process is outlined in the online links:

- [Graduate Programs](#)
- [Undergraduate Programs](#)

All CU Boulder students are welcome to apply!

Please email if you have questions:
Email: ICSPrograms@colorado.edu

New Graduates

Fall 2024

Interdisciplinary Undergraduate Certificate in Cognitive Science

Ramey Yost – SLHS

Veronica Shlyapnikova – Linguistics

Interdisciplinary Graduate Certificate in Cognitive Science

Louisa Smith – Psychology & Neuroscience

HLT Certificate

Caitlin Cisar – Linguistics

Spring 2025

Interdisciplinary Undergraduate Certificate in Cognitive Science

Maddie Bennett – SLHS

Kate French – Linguistics

Autumn Gooseoff – SLHS

Janee Jackson – Psychology

Gabriella Kuykendall – Psychology, SLHS

Jason Pabelico, Jr. – Computer Science

Ashleigh Manney – Psychology

Maddie Nelson – SLHS

Interdisciplinary Graduate Certificate in Cognitive Science

Cole Baisch – Philosophy

Emily O'Leary – Education: Literacy Studies

Rebecca Lee – Linguistics

Yizhe Zhang – Linguistics

Combined PhD

Kathryn Conger – Linguistics

Andrew Mertens – Psychology

Summer 2025

Human Language Technology Certificate

Chelsea Stencel – Linguistics

Combined PhD

Chelsea Brown – Psychology

Maggie Perkoff – Computer Science

Triple PhD

Don Bell-Souder – SLHS

CONGRATULATIONS,
GRADUATES!

Student Awards and Special Mentions



Jon Cai & Maggie Perkoff – Graduate Student Research Assistants

- Jon & Cai were selected as recipients of this 2024 Nelson Prager and James H Mariin Fellowship! This fellowship has been established to benefit the Department of Computer Science Graduate Students who have focused their research in the area of Natural Language Processing.



Stevi Ibonie – ICS Graduate Student

- Won the 2024-2025 Dosier/Muenzinger Predoctoral Research Fellowship Award! This award recognizes students who demonstrate excellence in translational research, which involves applying findings from basic science research to solve practical problems or improve human health and well-being.
- Winner of the 2025 Beverly Sears Award! This competitive award is sponsored by the Graduate School to support the research, scholarship, and creative work of graduate students from all departments.



Brynn Paulsen – ICS Graduate Student

- Won the 2025 Dosier/Muenzinger Sean Hudson Leadership Award! This award recognizes students who have made exemplary service and/or leadership contribution to the department, university, or field.



Caroline Wendt – ICS Graduate Student

- Won the Draper Scholar Fellowship! As a Draper Scholar, Caroline will design robust lightweight multimodal machine learning models for real-time team functioning assessment.

Student Research and Travel Awards

Research



Stevi Ibonie
Fall 2024, PSYC

Research Award: \$800 to fund her dissertation research on *AWESOME: Assessing Wonder in Emerging-adults across Symptoms of Mood and Emotion*



Sophia Mehdizadeh
Fall 2024, ATLAS

Research Award: \$800 to fund her dissertation research on *Mechanisms of Music Appreciation and Shared Listening*



Min-Chun (Allen) Hsiao
Summer 2025, LING

Research Award: \$800 to fund dissertation research on *Testing Analogical Generalization of English Denominal Verbs in LLMs*



Raquel Yupanqui
Spring 2025, CS

Research Award: \$800 to fund her research on *Communicating Health Risks Related to Extreme Weather Events through Explainable AI to Low Socioeconomic Status Latino Communities*

Travel



Kayla Cormier
Fall 2024, SLHS

Travel Award: \$1000 to present her poster on *Cortical Neuroplasticity after Intervention in Hearing Loss* at the Society for Neuroscience conference



Chelsea Brown
Spring 2025, PSYC

Travel Award: \$1000 to present a paper and poster on *The Impact of Gesture on Preschoolers' Inference and Memory During a Narrativ Comprehension Task Activity Kits for Connection and Empowerment of Young Families During the COVID-19 Pandemic* at the Society for Research on Child Development, American Educational Research Association, and Cognitive Science Conference



Min-Chun (Allen) Hsiao
Summer 2025, LING

Travel Award: \$1000 to present his poster on *Learning to Align: Analogy-Based Models of English Verb Argument Structures* at the 2025 Linguistic Society of America Summer Institute and the colated workshop, Abstract and Item-Specific Knowledge Across Domains and Frameworks



Don Bell-Souder
Spring 2025, SLHS

Travel Award: \$229 to present his poster on *Stimulating and Recording Cortical Potentials Via Cochlear Implant* at the ACIA Conference on Cochlear Implants



Tyler Grimes
Summer 2025, CMDP

Travel Award: \$1000 to present his paper on *Fauxtanical - Co-Creation with the More-than-less-than-human* at the following conferences: XCoAX and Politics of the Machines



Emily Doherty
Spring 2025, CS

Travel Award: \$1000 to present her paper on *Piecing Together Teamwork: A Responsible Approach to an LLM-based Educational Jigsaw Agent* at the at the CHI 2025 Conference



Stevi Ibonie
Fall 2024, PSYC

Travel Award: \$1000 to present her paper on *Social struggles and strengths in bipolar disorder dimensions: Associations between social support and strain and mood disorder risk and symptom severity in a diverse sample of emerging adults* at the Society for Research in Psychopathology (SRP)



Kieran Smith
Spring 2025, AES

Travel Award: \$1000 to present his paper on *Concurrent Prediction of Performance-Critical Cognitive States from Physiological Signals* at the 54th International Conference on Environmental Systems



Thiago Roque
Summer 2025, ATLAS

Travel Award: \$1000 to present his paper on *Interpersonal Action Coordination Influences Inter-Brain Coupling During Live Music Improvisation: A Secondary Analysis* at the International Conference on Music Perception and Cognition