



Active Learning Academy – 2020

The year 2020 presented more than ample servings of threats and uncertainties to challenge us all. On top of the usual fare of personal trials and tribulations we might encounter in any given year, 2020 served up a pandemic, civil unrest, wildfires, political tumult, and more. Despite the trying conditions that enveloped us all, examples of tenacity, courage, creativity, generosity, and kindness bloomed.

The COVID-19 pandemic threatened human health, exasperated economic disparities, and imposed the need to reimagine and reinvent models of education across grade levels. Many of us were thrust into the position of being teachers and daycare providers to our children at home. At the same time, from home, we remotely carried out the responsibilities of our positions at the university in the face of a furlough and salary reductions.

As the third month of COVID-19 restrictions came into play, the always present embers of deeply rooted racism in our nation were fanned and a resurgence of intense awareness reminiscent, most recently, of the 1960s and 1990s was fueled. While the hearts and minds of a new generation were ignited around civil rights issues, the hills in our backyard and elsewhere were ablaze with wildfires. Some of us were evacuated from our homes, others provided shelter for displaced friends and families, and we all wondered when the blazes would be extinguished.

Despite the threats and uncertainties in 2020, ASSETT's support helped the Active Learning Academy (ALA) run smoothly and brought an additional informed perspective to our new modality of teaching. The faculty fellows remained steadfast in their ongoing professional development as STEM educators and unwavering in their commitment to high quality undergraduate STEM education. Many participants appreciated the time to reflect and were left wanting more time together! One explained, "getting peer reviewed and feedback from my colleagues has been very useful in improving my learning plan for the class I'm redesigning. I hope to get this feedback in the future and hence would reach out to my colleagues and seek feedback if they are available." Please join us in recognizing these faculty fellows' accomplishments and celebrating the department chairs who supported their participation!

Dr. Tanya Alderete is an Assistant Professor in the Integrative Physiology Department. Supported by Department Chair Mark Opp, Tanya was an ALA faculty fellow in fall 2019 with teammate Dr. Steven Hobbs. Together, they re-envisioned the same course. In January 2020, she completed her *Learning by Design* teaching portfolio for IPHY 2800, "Introduction to Statistics."

Dr. Kathryn Arehart is an Assistant Professor in the Department of Speech, Language, and Hearing Sciences. Supported by Department Chair Brenda Schick, Kathryn was an ALA faculty fellow in fall 2019. In January 2020, she completed her *Learning by Design* teaching portfolio for SLHS 3106, "Hearing Science."

Dr. Derek Brown is an Instructor in the Department of Atmospheric and Oceanic Research. Supported by Department Chair Jeffrey Weiss, Derek was an ALA faculty fellow in fall 2019. In January 2020, he completed his *Learning by Design* teaching portfolio for ATOC 3300, "Analysis of Climate and Weather Observations."

Dr. Lisa Barlow is a Senior Instructor in the Baker First Year Academic Experience (FYAE) Program. Supported by the Director of the Baker FYAE Program, Dr. Herbert Covert, Lisa participated in ALA's fall 2020 *Learning by Design* program. Her target course was GEOL 1060, "Global Change – An Earth System Science Perspective."

Dr. Janet Casagrand is a Senior Instructor in the Integrative Physiology Department. Supported by Department Chair Mark Opp, Janet has been an active ALA faculty fellow since fall 2019. In January 2020, she completed her *Learning by Design* teaching portfolio for IPHY 3430, "Introduction to Human Physiology." With her peer mentor, Dr. Alisha Clark, Janet participated in the spring 2020 *Follow-up Peer Mentoring* program. Additionally, Janet served as a co-facilitator for the fall 2020 *Learning by Design* program.

Dr. Alisha Clark is an Assistant Professor in the Department of Geological Sciences. Supported by Department Chair Robert Anderson, Alisha has been an active ALA faculty fellow since fall 2019. In 2020, she completed her *Learning by Design* teaching portfolio for GEOL 3010, "Introduction to Mineralogy." With her peer mentor, Dr. Janet Casagrand, Alisha completed the spring 2020 *Follow-up Peer Mentoring* program, with a focus on her GEOL 1170 course, "Our Deadly Planet." Alisha then embarked on the third and final ALA professional development program, the *Course Re/Design Award*, wherein she is focused on incorporating active learning elements, research-based instructional strategies, and societally relevant research into the GEOL 3010 course curriculum.

Dr. Donata Giglio is an Assistant Professor in the Department of Atmospheric and Oceanic Sciences. Supported by Department Chair Jeffrey Weiss, Donata participated in ALA's fall 2020 *Learning by Design* program and focused on an upper-division undergraduate ATOC course called "Data Science Lab."

Dr. Steven Hobbs is a Senior Instructor in the Integrative Physiology Department. Supported by Department Chair Mark Opp, Steven was an ALA faculty fellow in fall 2019 with teammate Dr. Tanya Alderete. Together, they re-envisioned the same course. In January 2020, he completed his *Learning by Design* teaching portfolio for IPHY 2800, "Introduction to Statistics."

Dr. Caitlin Kelly is an Instructor in the Department of Ecology and Evolutionary Biology. Supported by Department Chair Deane Bowers, Caitlin was an ALA faculty fellow in fall 2019. In January 2020, she completed her *Learning by Design* teaching portfolio for EBIO 1210, "General Biology I."

Dr. Jan Lenaerts is an Assistant Professor in the Department of Atmospheric and Oceanic Sciences. Supported by Department Chair Jeffrey Weiss, Jan was an ALA faculty fellow in fall 2019. In January 2020, he completed his *Learning by Design* teaching portfolio for ATOC 4500, "Ice Sheets and Climate."

Dr. Kyle Luh is an Assistant Professor in the Mathematics Department. Supported by Department Chair Alexander Gorokhovskiy, Kyle participated in ALA's fall 2020 *Learning by Design* program and focused on an upper-division undergraduate MATH course called "Introduction to Probability."

Dr. Florencia Orosz-Hunziker is a Burnett Meyer Postdoctoral Fellow in the Mathematics Department. Supported by Department Chair Alexander Gorokhovskiy, Florencia participated in ALA's fall 2020 *Learning by Design* program and focused on an upper-division undergraduate MATH course called "Abstract Algebra I."

Dr. Dennis Perepelitsa is an Assistant Professor in the Physics Department. Supported by Department Chair Michael Ritzwoller, Dennis participated in ALA's fall 2020 *Learning by Design* program and focused on PHYS 2210, "Classical Mechanics and Mathematical Methods I."

Dr. Julian Resasco is an Assistant Professor in the Ecology and Evolutionary Biology Department. Supported by Department Chair Andrew Martin, Julian participated in ALA's fall 2020 *Learning by Design* program and focused on EBIO 4060, "Landscape Ecology."

Dr. Harrison Stalvey is an Instructor in the Department of Mathematics. Supported by Department Chair Alexander Gorokhovskiy, Harrison participated in ALA's fall 2020 *Learning by Design* program and focused on MATH 2130, "Introduction to Linear Algebra for Non-Math Majors."

Dr. Aneesh Subramanian is an Assistant Professor in the Department of Atmospheric and Oceanic Sciences. Supported by Department Chair Jeffrey Weiss, Aneesh was an ALA faculty fellow in fall 2019. In January 2020, he completed his *Learning by Design* teaching portfolio for ATOC 4500, "Climate Modeling."

Dr. Lizzy Trower is an Assistant Professor in the Department of Geological Sciences. Supported by Department Chair Robert Anderson, Lizzy was an ALA faculty fellow in fall 2019. In January 2020, she completed her *Learning by Design* teaching portfolio for GEOL 1020, "History of a Habitable Planet."

Dr. Colin West is an Instructor in the Department of Physics. Supported by Department Chair Michael Ritzwoller, Colin participated in ALA's fall 2020 *Learning by Design* program and focused on PHYS 2010, "General Physics I."



The fall 2020 *Learning by Design* cohort of faculty fellows convened remotely every other week via Zoom.

Active Learning Academy (ALA) Faculty Fellow programs



1. **Learning by Design** program: Learn about Course Design Principles and Research-Based Instructional Strategies. (fall)
2. **Follow-up Peer Mentoring** program: Implement and observe implementation of CDPs and RBISs with mentor. (spring)
3. **Course Design** program: Apply CDPs and RBISs to the re/design of undergraduate STEM course. (summer-fall)

Interested in being an ALA Faculty Fellow?

Contact Amanda.McAndrew@Colorado.EDU or Leilani.Arthurs@Colorado.EDU for an application or more information.