



**TRESTLE Meeting Attendees
September 28-30, 2017**

Indiana University

Campus Project Leaders/PIs: George Rehrey, Dennis Groth

Dr. Ryan Henry is an assistant professor in the computer science department at Indiana University. His research explores the systems challenges of applied cryptography, with an emphasis on using cryptography to build secure systems that preserve the privacy of their users. In addition to designing and analyzing privacy-enhancing systems, Professor Henry is interested in practical matters like implementing and working toward the deployment of such systems, as well as more theoretical matters like devising number-theoretic attacks against non-standard cryptographic assumptions and developing new models and theories to understand just how efficient "heavy-weight" cryptographic primitives can be. He received his Math (2010) and Ph.D. (2014) from the University of Waterloo, where he held a Vanier Canada Graduate Scholarship, the most prestigious graduate scholarship in Canada.

Dr. Carol Hostetter is a professor of social work at Indiana University. She is past director of the Mack Center for the Advanced Inquiry in Teaching and Learning at Indiana University and was awarded the prestigious P.A. Mack Award for Distinguished Service to Teaching. She is the recipient of many major teaching awards and has made numerous keynote speeches. In addition to a strong research program in social work, Carol is active in the scholarship of teaching and learning. She has many publications, presentations, and workshops, focusing on engaging undergraduates in research, creating community in online classes and building capacity for SoTL.

Dr. Laura Hurley is an Associate Professor of Biology and Director of the REU Program in Animal Behavior at Indiana University. Her work focuses on exploring a neurochemical signal, serotonin, which is one of the mechanisms allowing the auditory system to filter important information. She is interested in the function of serotonin-auditory interactions, how these are influenced by behavioral context, and how they change the way the auditory system interprets behaviorally relevant information. Dr. Hurley got her Ph.D. from the University of Washington in 1997.

Dr. Apu Kapadia is an Associate Professor of Computer Science at Indiana University Bloomington and received his Ph.D. from the University of Illinois at Urbana-Champaign. His research focuses on computer security and privacy from an interdisciplinary perspective and has received five NSF grants, including an NSF CAREER award in 2013, and a Google Research Award in 2014. Kapadia was a recipient of the Indiana University Trustees Teaching Award in 2013 and a Distinguished Alumni Educator Award from the Department of Computer Science at the University of Illinois at Urbana-Champaign in 2015.



Erika Lee is a Lecturer in Informatics at Indiana University where she specializes in teaching and learning, digital design, human computer interaction design, and visualization. She received her B.A. in Biology at Oberlin College in 1996 and her M.A. in Journalism at Indiana University in 2014.

Suzanne Menzel is a Senior Lecturer in Computer Science at Indiana University where she specializes in computer education, research on teaching and learning, and creating identity-safe classrooms. She received the Computer Science Departmental Teaching Award in 2006 and 2004, and the Trustees Teaching Award for Lecturers in 2006. She received her M.S. in Computer Science at Rutgers University.

Dr. Joan Middendorf is the Co-director of Faculty Learning Community, Associate Director of Campus Instructional Consulting (CIC). With a Ph.D. in Instructional Systems Technology from Indiana University, she has taught faculty and instructors at IU to assess and improve their teaching by presenting workshops, observing classroom teaching, and collaborating on course development and testing procedures. She has traveled to South Africa several times to train staff at universities and in the health care field to adapt their teaching to an influx of diverse students. She studies T'ai Chi for relaxation and as an exercise in learning.

Dr. George Rehrey is the director of Indiana University's Scholarship of Teaching and Learning (SOTL) program, leading efforts to support instructors of all ranks as they transform their courses, conduct classroom research, collect evidence of student learning, form Communities of Transformation, and disseminate their work locally, nationally, and internationally. He also leads the Student Learning Analytics program, where faculty are making use of analytics at the course, program and curricular level to improve student learning and success. George is a member of the Bay View Alliance Steering Committee, an international organization funded to transform the teaching and learning culture in STEM departments, and serves on BVA Governance Committee as well.

Amberly Reynolds is a Ph.D. student in Anatomical Education in the Medical Sciences Department of Indiana University School of Medicine with an interest in the progression of anatomical knowledge from high school through medical school. She received her M.S. in Clinical Anatomy at the Tulane School of Medicine. She was formerly a high school Science teacher, and has research interests in engaging students in STEM learning and vocations. Clinical anatomist (M.S. Clinical Anatomy Tulane School of Medicine) by trade, educator at heart.

Dr. Sam Tobin-Hochstadt is an assistant professor of Computer Science in the School of Informatics and Computing at Indiana University. He has taught introduction to computer science, object-oriented software management, object-oriented software development, and introduction to class-based program design. Sam's research areas of interest include compilers, programming



languages, and software systems. He received his Ph.D. in Computer Science from Northeastern University in 2010.

Dr. Yuzhen Ye is an Associate Professor in the department of Computer Science at Indiana University, Bloomington. She is interested in microbiome studies, protein bioinformatics, and biological pathway analysis and reconstruction. Her research in metagenomics centers on the development of new algorithms and tools for data mining in microbiome studies. She earned her Ph.D. in computational biology from Shanghai Institute of Biochemistry, Chinese Academy of Sciences, China in 2001, and then pursued postdoctoral studies at the Burnham Institute for Medical Research from 2001 to 2004. She was a Research Assistant Professor at the same institute before she joined IU in 2007. She received an NSF CAREER award in 2009.

Queens University

Campus Project Leaders/PIs: Brian Frank, Natalie Simper

Dr. Bei Cai is a Teaching and Learning Fellow in the Department of Physics, Engineering Physics and Astronomy at Queen's University. She works with faculty to redesign undergraduate physics lab courses. She helps implement course changes and measures the effectiveness of the new approaches. Dr. Cai teaches General Physics Laboratory—PHYS 350 in the Fall terms. She has a Ph.D. in experimental particle astrophysics from the University of Minnesota Twin Cities.

Dr. Brian Frank is the Associate Dean (Teaching and Learning) and the DuPont Canada Chair in Engineering Education Research and Development in the Faculty of Engineering and Applied Science, and a Professor in the Department of Electrical and Computer Engineering.

Dr. Deena Salem is the Teaching and Learning Fellow in ECE, Faculty of Engineering and Applied Science at Queen's University. She works with faculty to incorporate active-learning approaches in large courses, providing support to enhance learning outcomes by introducing best teaching practices. After the implementation of these interventions she investigates the impacts of different interventions on the students' learning and success. Dr. Salem earned her Ph.D. in Electronics and Communication Engineering, she also earned a Bachelor of Education, and is currently working towards the completion of a Masters of Education degree with focus on formative feedback in Engineering Education.

Dr. Richard Sellens is an Associate Professor in the Department of Mechanical and Materials Engineering at Queen's University. His research background is in Fluid Mechanics and more recently in Biomechanics. He has been actively involved in facilities and curriculum development to support active learning, including the Integrated Learning Centre at Queen's.



University of British Columbia

Campus Project Leaders/PIs: Gulnur Birol and Warren Code

Dr. Matt Coles completed his PhD in Mathematics from The University of British Columbia (UBC) in 2017. During his graduate studies he taught calculus in the math department, worked as a peer facilitator running workshops on instruction, and helped develop activities aimed at high school students for a program called Future Science Leaders. Currently, he works at UBC as a Science Education Specialist (SES) where, in addition to working on course transformation, he is administering professional development programs for graduate students and postdocs learning to teach.

Dr. Georg Rieger is a tenure-track Instructor in Physics & Astronomy and in Vantage College at the University of British Columbia. He is also a long-time member of the Carl Wieman Science Education Initiative (since 2009) and served as the CWSEI department director for Physics & Astronomy from 2011 to 2015. He received his Ph.D. in physics from the Ruhr-Universitaet Bochum, Germany in 1993 and went to Canada in 1995. Georg mostly teaches large first-year introductory physics courses and uses a worksheet-based approach that he describes in a CWSEI video (<http://blogs.ubc.ca/wpvc/intro-physics-active-class/>). Georg is also actively engaged in blended learning where he explores the use of an edX edge (edge.edx.org) platform to support student learning outside of class.

Dr. Sarah Bean Sherman has been a Science Teaching and Learning Fellow in the Earth Ocean and Atmospheric Science Department at UBC since December 2014, bringing extensive experience in geoscience education – teaching, faculty development, both geoscience education and disciplinary research, and curriculum work – from her time in Hawaii. At UBC, her course transformation work includes assistance in course design using research-based strategies, with classroom observation and feedback with the instructor to ultimately provide a teaching development experience, as well as measuring student learning and experiences in the course via surveys and other assessments.

Dr. Karen Smith is a lecturer in the Dept. of Microbiology & Immunology at the University of British Columbia and has been educating students from first to fourth year in the life sciences. She is the recipient of the 2016 Killam Teaching Award that honors outstanding contributions by teaching faculty and has been actively involved in transforming science education as part of the life science team for education reform at UBC called the Biology Flexible Learning Initiative. Her role as an educator and researcher in many undergraduate science education Initiatives has helped shape her own scholarship of teaching and learning on threshold concepts, productive failure and wellbeing in the classroom. Karen's motto "let's bring *life* into the life sciences classroom" supports active learning strategies to enhance and strengthen the student learning experience.



University of California, Davis

Campus Project Leaders/PIs: Marco Molinaro, Stephanie Pulford

Dr. Marina Crowder, is a Lecturer with Potential Security of Employment (tenure-track teaching faculty) in the Molecular and Cellular Biology Department at UC Davis where she teaches high-enrollment majors and non-majors genetics courses. She is currently working on projects related to teaching practices that impact student success and learning at the upper-division course level with a specific focus on transfer student success as well as developing a pedagogical professional development program for graduate students in the biological sciences.

Amanda Modell is a graduate student researcher at the Center for Educational Effectiveness at UC Davis, where she currently conducts research on engineering writing education and engineering identity. In addition to research, Amanda has worked in graduate student professional development as a Teaching Assistant Consultant and Teaching Assistant Consultant Coordinator, where contemplative, inclusive, and feminist pedagogies informed her work. She has also contributed to curriculum development for graduate student instructors and pedagogy resources for faculty and graduate students. As a Cultural Studies PhD candidate, Amanda's dissertation considers how musical ability becomes understood as hereditary through sciences such as eugenics, genetics, and physical anthropology.

Dr. Marco Molinaro is the Assistant Vice Provost for Educational Effectiveness and Director of Center for Educational Effectiveness at the University of California Davis. His research expertise is on developing evaluation techniques for technology use in formal and informal educational settings, research on learning in free-choice environments especially as related to understanding of research, how students engage with and use technology in a free-choice setting with a focus on social interactions, and using technology to assess student understanding. He has a dual B.S. in Biophysics and Chemistry from Wayne State University and a Ph.D. in biophysical chemistry from the University of California Berkeley.

University of Colorado

Campus Project Leaders/PIs: Stephanie Chasteen

Dr. Daniel Bolton is an Instructor in the Physics Department at the University of Colorado Boulder. His scholarly research is in the field of nuclear theory and he is also an active participant in the department's Physics Education Research Group. Daniel earned his B.S. in Engineering Physics from the Colorado School of Mines and his Ph.D. from the University of Washington in 2011. He was a Lecturer at Baylor University from 2011-2014 before moving back to Colorado.



Dr. Stephanie Chasteen focuses on STEM educational reform, with a focus on faculty adoption of evidence-based teaching practices and institutional change. She is the associate director of the [Science Education Initiative](#) and is a current research associate with the [Center for STEM Learning](#) and PI of the TRESTLE project at CU. In her consulting work (which takes up most of her time), she provides evaluation for national educational change projects including the American Physical Society, the American Association of Physics Teachers, and many universities around the country.

Dr. Pamela Harvey is an Instructor in the Molecular, Cellular and Developmental Biology department at the University of Colorado, Boulder. She became an ASSET Faculty Fellow at CU in 2016 and was recognized as an Education Fellow in the Life Sciences by the National Academy of Sciences in 2012. Pamela currently teaches a Discovery-based Laboratory as well as Teaching in CUREs at Colorado. She received her Ph.D. from Tufts University in 2009.

Dr. Eve-Lyn Hinckley is an Assistant Professor in the Environmental Studies Program (ENVS) at the University of Colorado, Boulder. She was awarded a TRESTLE grant in 2017 to create a new introductory course for undergraduates focused on quantitative methods of analysis, and to map learning goals across the ENVS introductory core series. Eve's research background is in biogeochemistry and sustainability science, and she loves to bring her students into the field—and the field into the classroom—to inspire continued engagement in research and STEM disciplines.

Dr. Natalie Mendoza is a Postdoc in the Department of History at the University of Colorado, Boulder, where she leads a pedagogy project focused on re-thinking undergraduate curriculum. Before earning her PhD in US history at UC Berkeley, Natalie taught high school in Northern California. In addition to studying the past, Natalie's research includes history and the practice of pedagogy at multiple levels, leading her to co-organize two international K-16 teaching history conferences. The American Historical Association (AHA) recently invited Natalie to discuss the role of pedagogy in the Career Diversity initiative, the AHA's latest effort at preparing history doctoral students for careers within and outside the professoriate.

Dr. Jennifer Stratford is an Instructor in the Department of Psychology and Neuroscience at the University of Colorado Boulder. Dr. Stratford teaches a variety of lower- and upper-division courses, including General Psychology, Research Methods, and Statistics for the Behavioral Sciences; however, her current focus is on ways to integrate new active learning approaches into teaching General Psychology to a large (400 +), diverse student population (i.e. psychology majors, non-majors, freshman through seniors, etc.).



University of Texas at San Antonio

Campus Project Leaders/PIs: Timothy Yuen, JoAnn Browning

Dr. Mark Appleford currently serves the University of Texas at San Antonio College of Engineering as the Associate Dean for Undergraduate Programs. His research laboratory works on the large scale reconstruction of musculoskeletal tissues using natural and synthetic scaffolds. Basic research in this laboratory focusses on understanding the molecular, cell and tissue level repair mechanisms in cranial facial, orthopedic and periodontal environments. Translational research has focused on cell to biomaterial interactions with emphasis on regenerative pathways of soft and hard tissue wounds. Dr. Appleford helps mentor and train biomedical engineering students at the undergraduate and graduate level at UTSA, and at the University of Texas Health Science Center at San Antonio as a core faculty member of the Joint Graduate Program.

Stephanie Garcia is a second year Doctoral Fellow in the Department of Interdisciplinary Learning and Teaching at the University of Texas at San Antonio. Her research examines how critical pedagogy and social justice transforms science teaching and learning experiences. She teaches in UTSA's teacher preparation program and is a research assistant for the TRESTLE project at UTSA.

Robin Nelson is a doctoral student in the Department of Interdisciplinary Learning and Teaching and is pursuing a cognate in Instructional Technology at the University of Texas at San Antonio. Her research interests include the development of TPACK in preservice teachers, the use of robots in autism therapy, and the use of problem-based gaming in secondary-education. She is a Graduate Research Assistant for the TRESTLE project at UTSA.

Dr. Timothy Yuen is an Associate Professor of Instructional Technology in the Department of Interdisciplinary Learning and Teaching at the University of Texas at San Antonio. His research examines how technologies and transformative teaching practices support learning and engagement in computer science and engineering. He is the project manager and an embedded expert for the TRESTLE project at UTSA.

University of Kansas

Campus Project Leaders/PIs: Andrea (Dea) Greenhoot, Caroline Bennett, Mark Mort

Dr. Caroline Bennett is an Associate Professor in Civil, Environmental, and Architectural Engineering at the University of Kansas. She is an expert in the areas of steel bridge design and fatigue and fracture of structures, and has taught such courses as Design of Steel Buildings, Design of Steel Bridges, Structural Analysis, Elastic Stability, Introduction to Fracture Mechanics, and How to be an Effective College Instructor. Caroline is leading the Course Transformation Initiative for the KU School of Engineering, served as the faculty mentor for the KU Engineering



Postdoctoral Teaching Fellow and is a former CTE Faculty Fellow. She is co-PI on the TRESTLE Project.

Dr. Andrea Follmer Greenhoot (“Dea”) is Professor of Psychology, Director of the Center for Teaching Excellence and Gault Teaching Scholar at the University of Kansas. Her disciplinary expertise is in cognitive development and memory and she teaches courses on child development, cognitive development, memory, and theories of developmental science. She was drawn to the work of the Center for Teaching Excellence through her interest in applying cognitive and developmental science to questions about teaching and learning in higher education. She leads KU’s postdoctoral Teaching Fellows program and the C21 Course Redesign Consortium, and is PI of the TRESTLE Project.

Dr. Molly McVey is a post-doctoral teaching fellow at the University Of Kansas School Of Engineering where she works with faculty to incorporate evidence-based and student-centered teaching methods, and to research the impacts of changes made to teaching on student learning and success. Specific interests include the implementation of team-based learning and peer mentors into engineering courses. Dr. McVey earned her Ph.D in Mechanical Engineering from the University of Kansas in 2012.

Dr. Mark Mort is an Associate Professor in the Department of Ecology and Evolutionary Biology as well as an Associate Curator of Botany in the Biodiversity Institute at the University of Kansas. For the past five years he has been heavily involved in redesigning one of the large enrollment (400+ students) introductory courses for Biology majors, and served as the faculty mentor of the Teaching Fellow in Biology. He serves as a faculty fellow at KU’s Center for Teaching Excellence and regularly participates in campus-wide workshops on teaching strategies. He is co-PI on the TRESTLE project.

Dr. Myunghyun Oh is a professor of Mathematics at the University of Kansas. She received her B.S. and M.S. from Ewha W. University in Korea and her Ph.D. from Indiana University. After years of teaching and research, she is integrating education and research to enhance students’ engagement and learning. She has explored and utilized a variety of educational approaches to support and sustain her research-based course which she developed.

Dr. Blair Schneider is a post-doctoral fellow at the University of Kansas Center for Teaching Excellence where she serves as the TRESTLE program manager. Her specific interests include team-based learning and developing in-class activities and assignments that promote scientific communication and literacy skills, particularly in lower-level courses. She has taught introductory earth science courses at both KU and Emporia State University. In addition, she has assisted in course transformation activities with several KU geology faculty including the introductory geology labs, petrology, and an upper-level course that explored ore mine deposits. Dr. Schneider earned her Ph.D in Geophysics from the University of Kansas in 2017.



Dr. Drew Vartia is a postdoctoral teaching fellow in the KU chemistry department, where he works to implement nontraditional teaching methods in the classroom and assess student learning. Drew earned a B.S. degree in biology/biochemistry from Purdue University (2003) and a Ph.D. in chemistry from the University of Kansas (2012). As the ability to “see” or imagine molecules is an imperative skill in learning chemistry, Drew’s own interests focus on using largely untapped technologies (3D printing, holography) to help students visualize the molecular world.

Dr. Robert Ward received his Ph.D. from Duke University in 1998, conducted postdoctoral work at the University of Utah, and joined the faculty at KU in 2003. His research interest is in characterizing mechanisms that provide spatial and temporal control of tissue morphogenesis in *Drosophila*. Dr. Ward is teaching BIOLOGY 350 (Principles of Genetics) and BIOLOGY 155 (the HHMI-sponsored SEA-PHAGES lab). He has been recognized with the J. Michael Young Mentor Award in 2010, the Barbara Schowen Undergraduate Research Mentor Award in 2011, and the W.T. Kemper Fellowship for Teaching Excellence Award in 2011. He attended the Northstar Summer Institute on Undergraduate Education in Biology in 2012.

**External Evaluators: National Center for Higher Education Management Systems
(NCHEMS)**

Marianne Boeke is a Senior Associate at the National Center for Higher Education Management Systems (NCHEMS). She joined NCHEMS as a Research Associate in March 2004. Marianne works on a variety of long-term projects including those associated with the Lumina Foundation for Education, Bill and Melinda Gates Foundation, the Aspen Institute, and the Western Interstate Commission for Higher Education (WICHE/WCET). Marianne is also involved in many other short-term projects and has co-authored reports for the Center for State Policy on Student Progression (C2SP) projects. In addition, she is the co-author of *Critical Connections: Linking States’ Unit Record Systems to Track Student Progress* (co-authored with Peter Ewell for the Lumina Foundation for Education, 2007) and *Adult Learners in the United States: A National Profile* (co-authored with Karen Paulson for the American Council on Education, 2006). Additionally, Marianne was the editor of the *Technology Costing Methodology Casebooks* (Fund for the Improvement of Postsecondary Education (FIPSE), 2001 & 2004).

Peter Ewell is President of the National Center for Higher Education Management Systems (NCHEMS), a research and development center founded to improve the management effectiveness of colleges and universities. A member of the staff since 1981, he served as Vice President of the Center for 10 years and as a Senior Associate prior to that. Dr. Ewell’s work focuses on assessing institutional effectiveness and student learning, and involves both research and direct consulting with institutions and state systems on collecting and using assessment information in planning, evaluation, and budgeting. He has directed many projects on this topic, including initiatives funded by the W. K. Kellogg Foundation, the National Institute for Education, The Consortium for the Advancement of Private Higher Education, The Spencer Foundation, Lumina Foundation, the Bill



and Melinda Gates Foundation, and The Pew Charitable Trusts. In addition, he has consulted with over 400 colleges and universities and twenty-seven state systems of higher education on topics including assessment, program review, accreditation, and student retention. His international consulting on quality assurance includes work in the U.K., Chile, Germany, Australia, Hong Kong, Japan, and with the OECD. He has also been actively involved in NCHEMS work on designing longitudinal student databases and other academic management information tools. Although Peter will not be attending the meeting, he and Marianne will be collaborating on the external evaluation of the TRESTLE Project.