CIPhER

Five-Year Impact Report



Center for Innovative Pharmacy Education and Research, 2017-2022





About CIPhER

The Center for Innovative Pharmacy Education and Research was established in 2017 under the direction of Professor Emeritus Thomas A. Angelo, EdD, to provide pharmacy educators and education scholars with innovative, evidence-based professional development and support.

<u>Mission</u>: To influence and transform health professions and graduate education and scholarship locally, nationally, and globally. More specifically, we aim to improve the effectiveness and efficiency of curricula and instruction by providing professional development and research support to faculty, clinical preceptors, postgraduate trainees and teaching assistants.

<u>Vision</u>: To transform strategically targeted, high-value areas of health professions education and research through the application of innovative best practices, powerful research methods, and advanced technologies.





Our Team



JACQUELINE MCLAUGHLIN, PHD

DIRECTOR

Dr. McLaughlin received her Doctor of Philosophy in Educational Research and Policy Analysis from North Carolina State University, Master of Science in Biomedical Engineering from University of Memphis/University of Tennessee, and Bachelor of Science in Biological Engineering from North Carolina State University. She has received the Excellence in Assessment Award, Emerging Teaching Scholar Award, and New Investigator Award from the American Association of Colleges of Pharmacy.



KATHRYN MORBITZER, PHARMD

ASSOCIATE DIRECTOR

Dr. Morbitzer received her Doctor of Pharmacy degree from Wayne State University and her Master of Science in biomedical and health informatics at the University of North Carolina. She completed a PGY1 pharmacy practice residency at the Medical University of South Carolina and an academic research fellowship at the UNC Eshelman School of Pharmacy. She has received the New Investigator Award from the American Association of Colleges of Pharmacy.



TEAM AND TRAINEES

RESEARCH AND SUPPORT

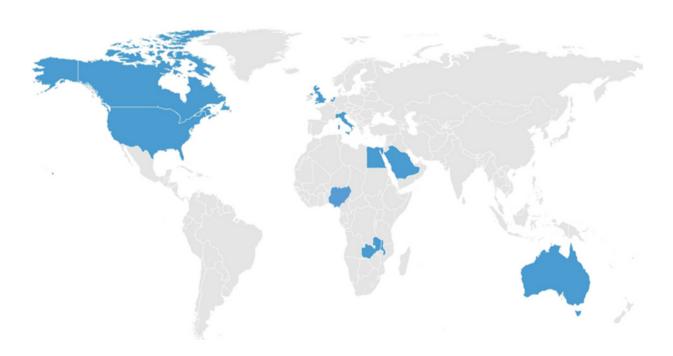
CIPhER is supported by a talented team of faculty, staff, and trainees. Our educational programs and education research are only possible with the help of our Center Administrator, faculty fellows, postdoctoral research assistants, and student interns. This team enables CIPhER to collaborate with educators across the School and academy to identify, design, study, and promote teaching and learning practices that will position us for success.





Our Reach

CIPhER collaborators and program attendees span the globe. Since 2017, our programs and invited talks have drawn more than 4,500 participants from 40 U.S. states and 12 countries, including Australia, Canada, Egypt, England, Nigeria, and Saudi Arabia. We have developed educational programs jointly with the School's Office of Experiential Programs, Office of Global Engagement, Office of Organizational Diversity and Inclusion, Office of Effectiveness, Planning and Assessment, Information and Educational Technology, PharmAlliance, and the University's Carolina Cancer Nanotechnology Training Program, UNC Adams School of Dentistry, UNC School of Medicine, UNC Medical Center, UNC School of Nursing, UNC School of Education, and Carolina Office for Online Learning.

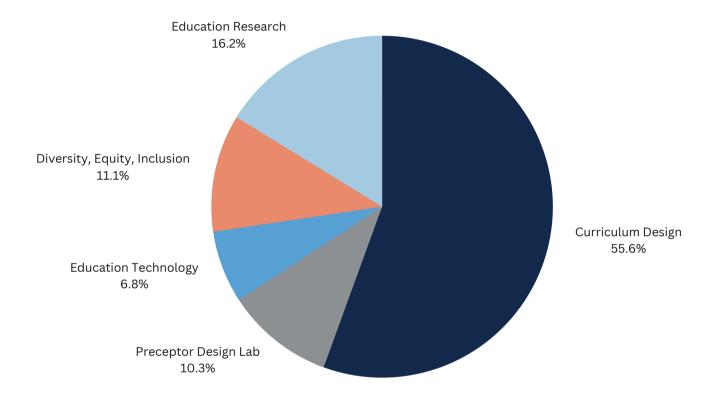


Our research collaborations extend to schools within and beyond the U.S., including faculty from various disciplines at Duke University, Elon University, Midwestern University, Monash University, North Carolina State University, Northwestern University, Purdue University, University of British Columbia, University College London, University of Colorado, University of Kentucky, University of Florida, University of Minnesota, and UNC-Wilmington. This work has advanced our educational knowledge and practice related to core concepts, design thinking, diversity, flipped classrooms, graduate education, growth mindset, learning theories, metacognition, motivation, and more.

Educator Development

160 Programs

4,500 Attendees



Since 2017, CIPhER has offered more than 160 programs aimed at improving teaching and learning. These programs include bimonthly seminars, individualized instructional coaching sessions, evidence-based teaching sprints, customized curriculum design workshops, and various research and writing support. In addition, CIPhER has hosted visiting scholars from around the world to learn directly from experts of critical education topics, such as core concepts, entrustable professional activities, and leadership development.

More than 4,500 attendees have joined CIPhER programs to learn about various teaching and learning topics, such as curriculum design, education technology, precepting, education research and diversity, equity, and inclusion. Overall, attendees have rated their learning as very high value (4.3 out of 5), the programs as very high quality (4.4 out of 5), and the presenters as very effective (4.5 out of 5).







SUMMER INSTITUTE IN EVIDENCE-BASED TEACHING AND COURSE DESIGN

Led by world-renowned educators, the Summer Institute is a four-day program designed to provide health science educators with the knowledge, skills, and techniques needed to improve the effectiveness of teaching, assessment, and course design aimed at enhancing student learning quality and success.



SCHOLARSHIP OF TEACHING & LEARNING BOOTCAMP

Designed by CIPhER and led by world-renowned faculty educators, the SoTL Bootcamp is a two-day program designed to aid health science educators in increasing scholarly productivity though SoTL and improving their teaching through systematic evaluation, analysis, and dissemination.

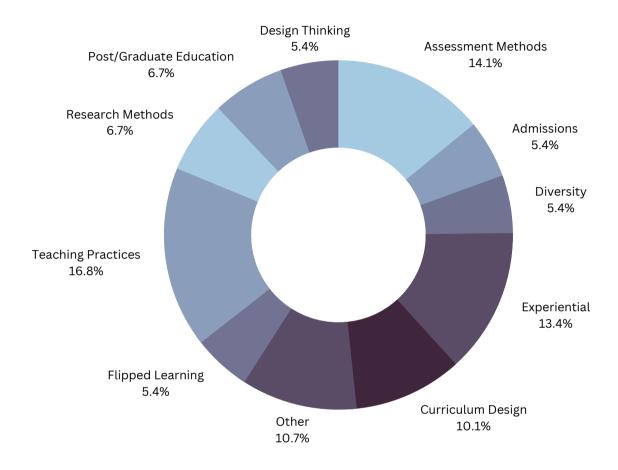


TEACHING & LEARNING CERTIFICATE

Created by CIPhER, the Teaching & Learning Certificate program is an asynchronous, self-paced program offered online and focused on evidence-based teaching and learning strategies. Participants can select elective content to cater the program to their own educational interests.



Education Research



CIPhER leads the world in pharmacy education research, publishing more than 125 peer-reviewed papers in its first five years. Our team engages in the rigorous investigation of teaching and learning as well as strategic development of new knowledge that informs educators, researchers, and policy makers about contemporary and emerging educational practices. This research provides critical insight into various topics, such as assessment, curricular interventions, education frameworks, methodological approaches, and lived experiences that underscore student learning and institutional effectiveness.

CIPhER also boasts a highly collaborative research environment, working with more than 300 co-authors since 2017. To support the development of faculty and trainees who desire to learn and apply best practices in educational research, we host topic discussions, writing groups, visiting scholars, and various training programs, such as the Scholarship of Teaching & Learning Bootcamp. CIPhER research has been supported and recognized by numerous grants and awards from various organizations.





High-Impact Papers

Based on citations per year



THE FLIPPED CLASSROOM-FROM THEORY TO PRACTICE IN HEALTH PROFESSIONAL EDUCATION

Persky AM, McLaughlin JE. Am J Pharm Educ. 2017;81(6): 118. Focuses on key theories that support the flipped model and translates those key theories into practice across core aspects of flipped classrooms



A QUALITATIVE REVIEW OF THE DESIGN THINKING FRAMEWORK IN HEALTH PROFESSIONS EDUCATION

McLaughlin JE, Wolcott MD, Hubbard D, Umstead K, Rider TR. BMC Med Educ. 2019; (1): 1-8.

Reviews use of design thinking, a problem-solving framework that can enhance patient experiences, improve clinical outcomes, and refine medical curricula



REVIEW TO CHARACTERISE AND MAP THE GROWTH MINDSET THEORY IN HEALTH PROFESSIONS EDUCATION

Wolcott MD, McLaughlin JE, Hann A, Miklavec A, Beck Dallaghan G, Rhoney D, Zomorodi M. Med Educ. 2021; 55(4): 430-440. Summarizes growth mindset research, describes benefits of growth mindset theory and outlines strategies that may promoting a growth mindset





Training Programs

CIPhER offers multiple training programs aimed at developing the next generation of education scholars. These programs immerse learners across the full spectrum of research activities, including study design, implementation, analysis, and dissemination. Our training programs include faculty fellowships, postdoctoral research assistantships, graduate student funding, and eight-week internships. Our postdoctoral trainees and student interns have gone on to secure faculty positions and advanced graduate and postgraduate training around the world.

ALUMNI SPOTLIGHT



DR. KYLE FASSETTSenior Research Associate for Diversity,
Equity, and Inclusion
University of North Carolina at Chapel Hill



DR. NIKKI LOBCZOWSKIAssistant Professor, Learning Sciences
Faculty of Education
McGill University, Canada



CARLY LUPTON BRANTNERDoctoral Student, Biostatistics
Bloomberg School of Public Health
Johns Hopkins University



DR. KAYLEY LYONSDigital Health Workforce Development Lead
Centre for Digital Transformation of Health
University of Melbourne, Australia



AMELIA MIKLAVEC

Clinical Pharmacist - Monash Health
Doctoral Student

Monash University, Australia



DR. LANA MINSHEWAssistant Professor & Director of the Human-Centered Design Lab Medical College of Wisconsin



DR. AMANDA OLSENAssociate Professor
College of Education & Human Development
University of Missouri



DR. MICHAEL WOLCOTTAssociate Professor & Assistant Dean Workman School of Dental Medicine High Point University





Contact Us



919-966-4557



CIPhER@unc.edu



https://pharmacy.unc.edu/rese arch/centers/cipher/

SCAN HERE FOR MORE INFORMATION



Customized Workshops: Tailored workshops on curriculum design, teaching, assessment, and educational research.

Research Collaborations: Partnerships with researchers around the world to design and research complex educational issues across health professions education.

Program Subscriptions: Discounts for individuals and schools interested in participating in multiple CIPhER programs.



