

## Exploring the Use and Application of Implementation Science in Health Professions Education June 14-15, 2022

**Workshop Objective:** To introduce the concept of implementation science\* to health professional educators to consider its potential use in the classroom and the clinical learning environment.

*\*Implementation Science is the study of what works, for whom, and when.*

### June 14, 2022

4pmET

#### **Welcome from the Co-chairs**

##### **Co-Chairs:**

- **Toby Brooks**, Program Director and an Associate Professor in the Master of Athletic Training Program, Texas Tech University Health Science Center
- **Nasreen Jessani**, Center for Evidence-Based Health Care, Stellenbosch University, South Africa; Associate Faculty, Department of International Health, Johns Hopkins Bloomberg School of Public Health, USA

### Opening Session

**Objective:** To lay a foundation for understanding implementation science (IS) in anticipation of a small group activity applying IS in health professions education (HPE); and to hear from IS health professions researchers about opportunities and challenges to applying IS in HPE

4:10pm

#### **What is implementation science? Why do it? What could it look like in HPE?**

**Speaker:** Raechel Soicher, School of Psychological Science, Oregon State University

##### **Q&A**

4:30pm

#### **Applying IS in HPE to Build a Stronger Learning “HPE” System**

**Moderator:** Raechel Soicher, School of Psychological Science, Oregon State University

1. Reviewing the Literature on IS in HPE: What educational practices are used in HPE? And what is the evidence for using those practices?

- Questions

4:50pm

2. Interprofessional Reflection Roundtable\* on using IS in HPE:

- **Natalie Douglas**, Professor, Communication Sciences and Disorders, Central Michigan University
- **Hannah Wilson**, Nutrition, Dietetics and Exercise Science, Concordia College, MN
- **Gail M. Jensen**, Vice Provost for Learning and Assessment, Professor of Physical Therapy; School of Pharmacy and Health Professions, Creighton University

*\*developed with assistance from workshop planning committee member, Shawna Hudson*

5:20pm	<p align="center"><b>Preparation for Day 2</b></p> <p><b>Moderator:</b> Raechel Soicher, School of Psychological Science, Oregon State University</p> <ol style="list-style-type: none"> <li>1. Review a case study on using IS in HPE within simulation based education</li> <li>2. Present the small group activity guide &amp; instructions for Day 2 small group discussions</li> </ol>
5:30pmET	<p><b>Forum members adjourn to dinner</b>  Carmines Italian Restaurant  425 7th St NW, Washington, DC</p>
<p align="center"><b>June 15, 2022</b></p>	
8:00amET	<b>Breakfast available</b>
<p align="center"><b>Preparation for applying implementation science concepts</b></p> <p><b>Objective:</b> To frame the work of the breakout groups</p>	
8:30am	<p><b>Welcome from the Co-chairs</b></p> <ul style="list-style-type: none"> <li>• <b>Nasreen Jessani</b>, Workshop Planning Committee Co-chair</li> <li>• <b>Toby Brooks</b>, Workshop Planning Committee Co-chair</li> </ul> <p><b>Breakout Group Instructions</b>  Raechel Soicher, School of Psychological Science, Oregon State University</p> <ul style="list-style-type: none"> <li>• Review the guide</li> <li>• Attendees across different institutions/disciplines will be assigned a virtual breakout group where they will work together on an IS activity based on simulation learning</li> <li>• In-person attendees will work as one, interprofessional group</li> <li>• The work will be guided by a facilitator and a scribe who will fill-in responses on a specially designed worksheet</li> </ul> <p><b>Questions?</b></p>
<p align="center"><b>Breakout groups</b></p> <p><b>Objective:</b> To provide opportunities for participants to use implementation science</p>	
9:00am	<p>Send participants into breakout groups  [provide a 5-10min break(s)]</p> <p><b>Breakout Group Leaders:</b></p> <ul style="list-style-type: none"> <li>• <b>G1 in person</b> – Eric Holmboe (facilitator) &amp; Loretta Nunez</li> <li>• <b>G2</b> – Shawna Hudson (facilitator) &amp; Zohray Talib</li> <li>• <b>G3</b> – Toby Brooks (facilitator) &amp; Gail Jensen</li> <li>• <b>G4</b> – Kim Dunleavy (facilitator) &amp; Nicole Anselme</li> <li>• <b>G5</b> – Nasreen Jessani (facilitator) &amp; Hannah Wilson</li> </ul> <p><b>Raechel will float</b></p>

	<p style="text-align: center;"><b>Participant Reflections</b></p> <p><b>Reflections Objective:</b> To see whether participants plan to apply IS in HPE after the workshop; and to assist the planning committee in considering whether and how to structure an appropriate closing session for the workshop</p>
10:30am	<p><b>Reconvene</b></p> <p><b>Moderator: Nasreen Jessani</b>, Workshop Planning Committee Co-chair</p> <p>Breakout Group <u>Leader/Facilitator</u> Roundtable Questions</p> <ul style="list-style-type: none"> <li>• In your breakout group, what challenges did you encounter with thinking about using implementation science?</li> <li>• What were some of the a-ha moments as noticed as you led the conversation about IS in HPE?</li> <li>• How might opportunities in using implementation science be transferred to the clinical learning environment?</li> <li>• Did your group talk about any opportunities for using IS in HPE?</li> </ul>
11:00am	<p><b>Reflections – Discussion</b></p> <ul style="list-style-type: none"> <li>• <b>Toby Brooks</b>, Workshop Planning Committee Co-chair</li> </ul> <p>POLL QUESTION</p> <ol style="list-style-type: none"> <li><b>1. More comfortable &amp; Same Level Groups:</b> <ol style="list-style-type: none"> <li>a. What aspect of health professions education might you use implementation science to study?</li> <li>b. Did you identify opportunities for using implementation science outside of simulation?</li> </ol> </li> <li><b>2. Less comfortable Group:</b> <ol style="list-style-type: none"> <li>a. What might help you feel more comfortable in using IS?</li> <li>b. For anyone, what points about implementation science in general would you like clarification and/or additional training on?</li> </ol> </li> </ol> <p><b>Next Steps</b></p> <ul style="list-style-type: none"> <li>• What would HPE educators need to support IS approaches?</li> <li>• What are some next steps for using implementation science in health professions education?</li> </ul>
11:30am	<p><b>Adjourn</b></p>

## **Resources:**

Curran, G. M., Bauer, M., Mittman, B., Pyne, J. M., & Stetler, C. (2012). Effectiveness-implementation hybrid designs: combining elements of clinical effectiveness and implementation research to enhance public health impact. *Medical care*, 50(3), 217–226. <https://doi.org/10.1097/MLR.0b013e3182408812>

Lane-Fall, M.B., Curran, G.M. & Beidas, R.S. Scoping implementation science for the beginner: locating yourself on the “subway line” of translational research. *BMC Med Res Methodol* **19**, 133 (2019). <https://doi.org/10.1186/s12874-019-0783-z>

Nilsen, P. Making sense of implementation theories, models and frameworks. *Implementation Sci* 10, 53 (2015). <https://doi.org/10.1186/s13012-015-0242-0>

Soicher, R.N., Becker-Blease, K.A. & Bostwick, K.C.P. Adapting implementation science for higher education research: the systematic study of implementing evidence-based practices in college classrooms. *Cogn. Research* **5**, 54 (2020). <https://doi.org/10.1186/s41235-020-00255-0>

<https://bmcmmedresmethodol.biomedcentral.com/articles/10.1186/s12874-019-0783-z>

[https://journals.lww.com/academicmedicine/Documents/Conducting\\_Research\\_eBook.pdf](https://journals.lww.com/academicmedicine/Documents/Conducting_Research_eBook.pdf)

## **Speaker Biographies:**



**Natalie Douglas, PhD, MA**, has spent the last 20 years supporting people living with acquired communication disorders through clinical practice, quality improvement projects, teaching, and research. Dr. Douglas is a faculty member at Central Michigan University; her research aims to advance evidence based, person-centered practices for people living with acquired communication disorders and their care partners. She is particularly interested in applying implementation science to improve outcomes for people living and working in long-term care environments.



**Gail M. Jensen, PT, PhD, FAPTA, FNAP** is Vice Provost for Learning and Assessment, Professor of Physical Therapy, and an administrative advisor for the Center for Interprofessional Practice, Education, and Research at Creighton University. She is an education researcher known nationally and internationally for scholarly contributions in expert practice, clinical reasoning, professional ethics, and interprofessional education. She is the founding Director for the Office of Interprofessional Scholarship, Service and Education (OISSE) at Creighton. She is a past member of the Board of Directors, past chair of the Executive Committee of the American Interprofessional Health Collaborative (AIHC), and a current member of the AIHC scholarship committee. Dr. Jensen is a

Distinguished Scholar fellow in the Physical Therapy Academy of the National Academies of Practice and was the recipient of the NAP Nicolas Cummings Award for extraordinary contributions to interprofessional healthcare. Dr. Jensen received her PhD in educational evaluation with a minor in sociology from Stanford University. She holds a master's degree in physical therapy from Stanford University and a bachelor's degree in education from the University of Minnesota.



**Raechel Soicher, MA**, is an instructor in the School of Psychological Science at Oregon State University. She recently received a Ph.D. after defending her dissertation, "Implementation Science in Teaching and Learning in Higher Education: A Mixed-Methods Study of the Utility Value Intervention in General Psychology Courses." As an applied psychologist, her interdisciplinary research focuses on applying an implementation science lens to the translation of cognitive psychology to promote evidence-based teaching in higher education.



**Hannah Wilson, PhD, RDN, LRD**, is an Assistant Professor and the DI/MS Program Coordinator in the Department of Nutrition, Dietetics, and Exercise Science at Concordia College in Moorhead, MN. Hannah has utilized implementation science in training of Cooperative Extension nutrition and health professionals and in evaluating implementation of community-based education programs, including the CDC's National Diabetes Prevention Program (DPP), in the context of Cooperative Extension.

**Planning Committee Members:**

**Toby Brooks, PhD (Co-Chair)**, Program Director and Associate Professor in the Master of Athletic Training Program, Texas Tech University Health Science Center

**Nasreen Jessani, DPH, MSPH (Co-Chair)**, Faculty, Senior Researcher, Stellenbosch University

**Darrin D'Agostino, DO, MPH, MBA (Vice Chair)**, Provost and Chief Academic Officer, Texas Tech University Health Science Center

**Zohray Talib, MD, FACP (Vice Chair)**, Senior Associate Dean of Academic Affairs, Chair of the Department of Medical Education and Medicine, California University of Science and Medicine

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**Nicole Anselme, MBA**, Co-Founder, Chief of Operations and Marketing, Strategic Healthcare Programs LLC

**Kim Dunleavy, PhD, PT, OCS**, Clinical Associate Professor and Director of Community Engagement and Professional Education, University of Florida Department of Physical Therapy

**Eric Holmboe, MD**, Chief, Research, Milestones Development and Evaluation Officer, Accreditation Council for Graduate Medical Education

**Shawna Hudson, PhD**, Professor, Rutgers Robert Wood Johnson Medical School

**Kathy Kolasa, PhD, RDN, LDN**, Professor Emeritus, Department of Family Medicine, Brody School of Medicine, East Carolina University

**Loretta Nunez, MA, AuD, CCC-A/SLP**, Senior Director, Academic Affairs & Research Education, American Speech-Language-Hearing Association

**Planning Committee Consultant:**

**Raechel Soicher**, School of Psychological Science, Oregon State University



## Planning Committee Biographies



**Nicole Anselme, MBA, MSN**, is a board-certified Critical Care Registered Nurse with 6 years of nursing experience in various specialties such as Emergency, Critical Care, Post-Anesthesia, Med/Surg, and School Nursing. She completed a Master of Science in Nursing in 2020 and is currently working towards completing an MBA in Healthcare Administration.

She possesses a strong passion for nurse innovation, design thinking, and strategy development to mitigate social determinants of health and improve population health in underserved communities. Her passion has been fostered through participation in hackathons and brainstorming events, as well as working towards developing an app to

improve health literacy and patient outcomes.

Her professional interests include research and scholarly writing, discussing topics currently affecting the nursing profession, and exploring opportunities to support changes in nursing practice and education. She enjoys mentoring students and newly licensed nurses, and is a fierce advocate against nurse incivility and bullying.



**Toby Brooks, LAT, ATC, PhD**, is a dreamer, a learner, and a doer. He currently serves as Assistant Dean for Faculty Development in the TTUHSC School of Health Professions and as an Associate Professor and Director of the Master of Athletic Training Program at TTUHSC in Lubbock. His masters and doctoral work in Teaching and Teacher Education at the University of Arizona paved the way for a career as an educator, with two decades of experience in the classroom teaching athletic training, strength & conditioning, and general kinesiology coursework. He is a six-time recipient of the SGA Outstanding Faculty Award for the MAT Program and also received the Dean's Award for Excellence in Teaching in 2017.



**Darrin D'Agostino, DO, MPH, MBA**, is a graduate of NY College of Osteopathic Medicine, completed his Internal Medicine Residency, his MPH and fellowship in Neuromusculoskeletal Medicine at the University of Connecticut Health Science Center. Darrin began his career at Hartford Hospital in Connecticut and was the program director for the Osteopathic Internal Medicine residency for the University of Connecticut School of Medicine, eventually becoming the Director of Medical Education for UConn. He helped develop the Graduate Medical Education expansion in the state of Connecticut for the American Osteopathic Association. Darrin's clinical practice focused on population health issues and his research on community based diabetes care has helped develop programs for patient centered diabetes

education. Dr. D'Agostino went to the University of North Texas Health Science Center in 2008 and is the former Chairman of the Department of Medicine. He was promoted to Associate Dean of Community Health and created and implemented a population health curriculum for the medical school. Dr. D'Agostino completed his MBA at the University of Texas, Dallas in 2013. He believes that a paradigm shift is occurring in medical education and that pre-doctoral education must embrace innovation and interprofessional education if the health of the United States is to improve. In 2021, Dr. Dagostino became the Provost and Chief Academic Officer at Texas Tech University Health Sciences Center and is using IPE, simulation and innovation to help TTUHSC create a new model for health professions education.



**Kim Dunleavy, PT, Ph.D., OCS, FNAP** represents the American Council of Academic Physical Therapy on the National Academies of Science, Engineering and Medicine Global Forum on Innovation in Health Professions Education. She has extensive academic experience in Physical Therapy education at the University of Central Arkansas, Wayne State University, and the University of Florida. She is a Clinical Professor and the Director of Community

Engagement in the Department of Physical Therapy at the University of Florida. Dr. Dunleavy's training includes an entry level professional Physiotherapy Bachelor's degree from the University of Cape Town, a Masters in Physical Therapy from the University of Central Arkansas, and a PhD in Instructional Technology from Wayne State University. She has been Board Certified by the American Physical Therapy Association as an Orthopedic Specialist since 1993 and was elected as a Distinguished Scholar and Fellow of the National Academies of Practice Physical Therapy Academy in 2017. She served on the planning committee for the Global Forum workshop on the Non-Pharmacological Management of Pain in December 2018, and is on the planning committee for the 2022 workshop on Exploring the use and application for implementation science in health professions education, and is one of two co-editors for a collaborative special edition on Exemplars and Models for Interprofessional Pain Education - a collaborative project initiated by Global Forum members and the International Society for the Study of Pain Education group.



**Eric Holmboe, MD, MACP, FRCP, FAoME(hon), FRCPSCanada(hon)**, is Chief, Research, Milestones Development and Evaluation Officer at the Accreditation Council for Graduate Medical Education (ACGME). He is Adjunct Professor of Medicine at the Yale University School of Medicine and the Uniformed Services University of the Health Sciences. He is Adjunct Professor of Medical Education at the Feinberg School of Medicine at Northwestern University.

He previously served as the Associate Program Director, Yale Primary Care Internal Medicine Residency Program, Director of Student Clinical Assessment, Yale School of Medicine, and Assistant Director of the Yale Robert Wood Johnson Clinical Scholars program. Before joining Yale in 2000, he served as Division Chief of General Internal Medicine at the National Naval Medical Center. Dr. Holmboe retired from the US Naval Reserves in 2005. He served as the Chief Medical Officer at the American Board of Internal Medicine from 2009 until 2014.

His research interests include interventions to improve quality of care and methods in the assessment of clinical competence. His professional memberships include the American College of Physicians, where he is a Master of the College, Society of General Internal Medicine, and Association of Medical Education in Europe. He is an honorary Fellow of the Royal College of Physicians in London, honorary Fellow of the Royal College of Physicians and Surgeons of Canada, and honorary fellow of the Academy of Medical Educators.

Dr. Holmboe is a graduate of Franklin and Marshall College and the University Of Rochester School Of Medicine. He completed his residency and chief residency at Yale-New Haven Hospital and was a Robert Wood Johnson Clinical Scholar at Yale University.



**Shawna Hudson, Ph.D.** is a Professor, Research Division Chief and Henry Rutgers Chair of Family Medicine and Community Health at the Rutgers Robert Wood Johnson Medical School. She is a full research member of the Rutgers Cancer Institute of New Jersey in the Cancer Prevention and Control Program and has a secondary faculty appointment in the Rutgers School of Public Health in the Department of Health Behavior, Society and Policy. Dr. Hudson serves as Director for the Community Engagement Core of the New Jersey Alliance for Clinical and Translational Science. Dr. Hudson is a medical sociologist and specializes in primary care research. Her research uses implementation science methods to understand how health care contexts impact patient experience, clinician experience and patient outcomes.

She served as a standing member of the NIH Dissemination and Implementation Research in Health Study Section and as a member of the National Academies of Sciences, Engineering, and Medicine's Committee on Implementing High-Quality Primary Care.



**Nasreen Jessani, DrPH, MSPH**, is responsible for capacity strengthening in evidence-informed decision-making (EIDM); health systems strengthening, knowledge translation (KT) and implementation science at the Centre for Evidence Based Health Care at Stellenbosch University in South Africa. She has over 20 years of experience working at the nexus between



health policy and systems research; innovations in evidence-informed policy and practice; and the relationship between academia and public policy. Globally recognized as a leader in her field of EIDM (and listed amongst the top Canadian women in Global Health), the results of her work have been used by development agencies to determine priorities for funding, by policymakers to determine priorities for interventions, by schools of public health to determine roles and incentives for academics engaging with policy and practice stakeholders, by practitioners exploring advocacy, and by faculty as content for their academic courses. In addition to her faculty position at the Johns Hopkins School of Public Health, she has served on several boards including WHO's Knowledge Translation and Policy Group and as Vice-Chair of the Evidence to Action TWG for Health Systems Global. She currently serves on the advisory board for INASP, UK and AcademyHealth, USA.; the Canadian Association for Global Health (CAGH), Canada and the Forum for Health Professions Education at the National Academies of Sciences, USA. She is also Associate Editor of Health Research Policy and Systems Journal. Nasreen was previously the Head of Strategy for the Africa Evidence Network and Program Officer at Canada's IDRC. Nasreen has lived and worked in Kenya, UAE, Canada, USA, Switzerland, Senegal, Uganda, and South Africa. Nasreen holds a DrPH (Johns Hopkins University), MSPH (UNC-Chapel Hill), BSc (McGill University).



**Loretta Nunez, M.A., AuD, CCC-A/SLP, ASHA Fellow, FNAP** is Senior Director of Academic Affairs & Research Education at the American Speech-Language-Hearing Association (ASHA) where she directs activities that support academic, clinical and research education; personnel preparation and faculty development; and higher education trends and forecasting in communication sciences and disorders. Dr. Nunez leads ASHA's Envisioned Future 2025 strategic objective to advance interprofessional education and collaborative practice and represents ASHA on the Interprofessional Professionalism Collaborative (IPC), the Interprofessional Education Collaborative (IPEC), and the Global Forum on Innovation in Health Professional Education. She is an Advisory Board Member (2020-2023) of the American Interprofessional Health Collaborative. Prior to joining ASHA in 2003, Dr. Nunez worked in both academic and clinical settings and held faculty appointments at Johns Hopkins University, the University of Akron, and Kent State University. She is an audiologist and speech-language pathologist, an ASHA Fellow, and a Distinguished Fellow and Practitioner of the National Academy of Practice in Speech-Language Pathology. She earned a Doctor of Audiology degree from Central Michigan University and earned her master's and bachelor's degrees in speech-language pathology and audiology from The Ohio State University.



**Kathryn M. Kolasa, PhD, RDN, LDN**, is Professor Emeritus and Affiliate Faculty in the Department of Family Medicine and a Professor of Pediatrics; Brody School of Medicine at East Carolina University. Dr. Kolasa earned her Ph.D. in Food Science from the University of Tennessee, Knoxville in 1974. Her Bachelor's Degree is from the Michigan State University in Home Economics with Communication Arts. She served on the Michigan State University faculty from 1974-1983. At East Carolina University she served as Chair of the Human Nutrition and Hospitality Management Department from 1983-86. She then joined the Department of Family Medicine and has held a joint appointment in the Department of Pediatrics from 2003-2013. From 2004 to 2020, she has served as Consultant to Vidant Health, a 9-hospital system in eastern North Carolina. She was awarded a Kellogg National Leadership Fellowship in 1986. She has worked internationally in more than 20 countries. She has served as a consultant to universities (including accreditation and program reviews), government and non-profit agencies, trade associations and the food and pharmaceutical industries and grant reviewer. She served as an external advisor to the Children's Healthy Living program, a childhood obesity prevention program in the American Pacific (2011-2016).

In 2008 she received the Centennial Award for Excellence—Service from East Carolina University. She was named a Master Educator at The Brody School of Medicine at East Carolina University and also received the ECU Board of Governors Distinguished Professor for Teaching Award in 2002. In 2003 she began serving as a

consultant to the Nutrition Initiative of the University Health Systems (now ECU Health). In 2004, she was appointed to “FIT FAMILIES NC, A Study Committee for Childhood Overweight/Obesity”. She provided leadership for the development and implementation of the Pitt County “Achieving Healthy Weight in Children Medical Nutrition Therapy Protocol adopted by pediatric practices throughout the country. Dr. Kolasa directed the Food Literacy Partners from 1998-2008. In 2001-2002 she played a leadership role in the preparation of the North Carolina Blueprint for Changing Policies and Environments in Support of Healthy Eating and was a member of the writing team for the three NC plans to combat Obesity. She has been writing a weekly nutrition column for the Daily Reflector, Greenville, NC since 1986. Dr. Kolasa is a Licensed Dietitian Nutritionist (LDN) and a member of the Society for Nutrition Education, the American Society for Nutrition, and the Academy of Nutrition and Dietetics. She serves on many advisory committees. In retirement she is a volunteer Affiliate faculty at the Brody School of Medicine where she teaches nutrition to medical students and residents as well as mentors junior faculty in publication and presentation. She is a contributing editor for Nutrition Today.



**Zohray M. Talib, MD** is Senior Associate Dean of Academic Affairs, Chair of the Department of Medical Education, and Professor of Medical Education and Medicine at the California University of Science and Medicine. Her experience spans the field of medical education and global health, with a particular focus on social accountability in health professions education. Dr. Talib is currently serving as the Co-Chair for the National Academy of Medicine’s Global Forum on Innovations in Health Professional Education.

Dr. Talib has worked with medical education programs in the US and across Sub-Saharan Africa to bring best practices, especially into low-resource settings. Her particular areas of interest include community-based education and building a robust and diverse faculty

workforce for institutions in underserved communities. Dr. Talib's research across ten countries in Africa sheds light on the value of bringing learners into community-based health care settings. Her research also examines the burden of mental health and strategies to integrate mental health into primary care. She has visiting faculty appointments at Mbarara University in Uganda, Aga Khan University in Kenya, and the University of Global Health Equity in Rwanda.

Dr. Talib brings to the field of academic medicine and global health the unique perspective of being a primary care clinician, educator, and researcher. She is a licensed and practicing internal medicine primary care physician. She teaches clinical medicine, health policy, and health systems to medical students. Dr. Talib was previously at the George Washington University where she was Associate Program Director for the Internal Medicine program and a researcher with the Health Workforce Institute.