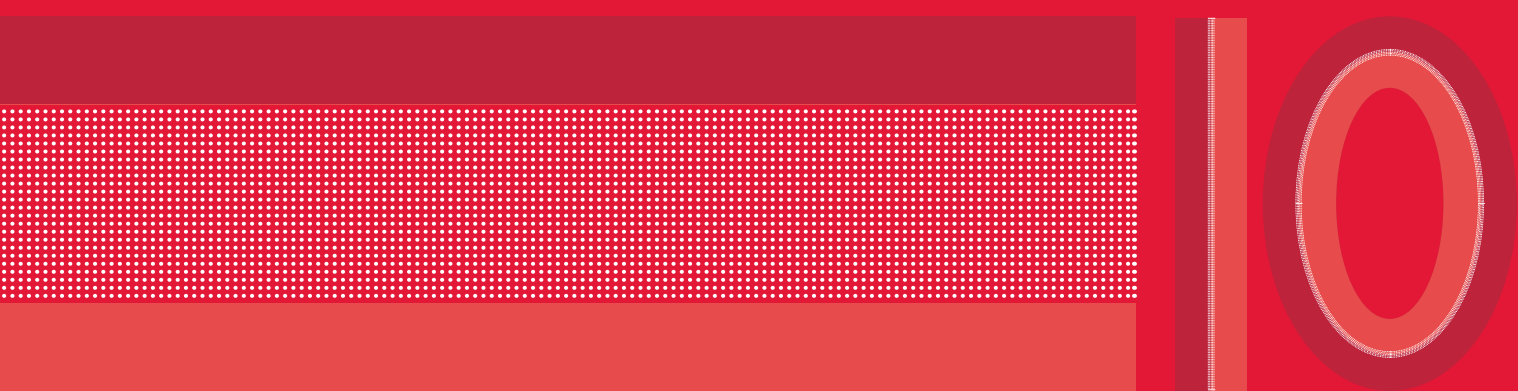


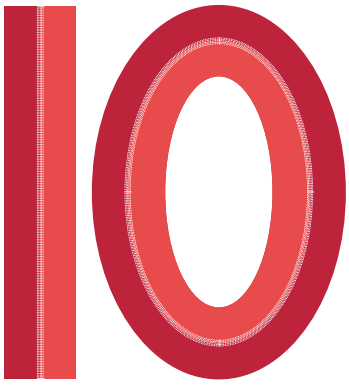


JOSIAH MACY JR. FOUNDATION
FACULTY SCHOLARS PROGRAM
ANNUAL MEETING

JUNE 27–29, 2022







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INTRODUCTION



The 2022 Macy Faculty Scholars Annual Meeting was a special one.

We were able to gather together in person for the first time since the onset of the COVID-19 pandemic in early 2020. How exhilarating to be in the same room with one another—learning from, catching up with, and celebrating alongside our friends, colleagues, and special guests.

Importantly, we marked the 10th anniversary of the Macy Faculty Scholars Program, a significant milestone that we did our best to celebrate in multiple ways. We welcomed our past president and Macy Faculty Scholars Program founder Dr. George Thibault, whose enthusiasm for health professions education—and, even more so, for the Scholars themselves—infused the meeting with a spirited zest. We commissioned a book, presented to each attendee as a commemoration of the first decade of the program. And we hosted the premiere of our Macy Faculty Scholars anniversary [video](#)—a heartfelt tribute to the entire group of Scholars, mentors, and staff who make the Macy Faculty Scholars Program what it is—a family.

The 2022 Annual Meeting also marked a turning point as we look ahead to the next 10 years and the next generation of Macy Faculty Scholars. We reiterated our vision for the next decade of the Macy Faculty Scholars Program and reaffirmed our commitment to not only sustaining the program but also to selecting and supporting diverse Scholars—both in terms of institutions represented and the individuals themselves—as we work to enrich the program and amplify meaningful change.

The 2022 Annual Meeting had it all. We experienced moments of jubilation during our celebratory dinner. We shared quieter, more reflective moments as Dr. Meg Chisolm guided us through Visual Thinking Strategies exercises and poetry readings. I believe that many of us left the meeting feeling reconnected and rejuvenated by the dazzling work being done by the Scholars.

I wish to thank all who continue to invest in the Macy Faculty Scholars Program—in the current Scholars, the alumni, and the Scholars yet to come. Your contributions are instrumental in our pursuit to effect positive change in nursing and medical education through the exemplary educators and leaders who make up the Macy Faculty Scholars.

HOLLY J. HUMPHREY, MD, MACP
President, Josiah Macy Jr. Foundation





TUESDAY, JUNE 28, 2022

Breakfast

WELCOMING REMARKS

Macy Foundation President
Holly J. Humphrey, MD, MACP

OPENING EXERCISE AND INVOCATION

Margaret "Meg" Chisolm, MD

2021 MACY FACULTY SCHOLARS' PRESENTATIONS AND DISCUSSION

Matthew Rustici, MD
Sunny Hallowell, PhD, RN, PPCNP-BC
Jennifer Best, MD

Lunch

2021 MACY FACULTY SCHOLARS' PRESENTATIONS AND DISCUSSION

David Diller, MD, MHPE
Jessica Devido, PhD, CPNP

GROUP DISCUSSION: VISUAL THINKING STRATEGIES

Led by Margaret "Meg" Chisolm, MD

SMALL GROUP DISCUSSIONS: CAREER DEVELOPMENT TOPICS

Facilitated by:
Kenya Beard, EdD, AGACNP-BC, CNE, ANEF, FAAN
How do you lead conversations about challenging topics like racism?

Alan Dow, MD, MSHA
Rethinking life structures and work goals coming out of the pandemic

Rachel Salas, MD, MEd, FAAN, FANA
Navigating feelings of imposter syndrome

Mayumi Willgerodt, PhD, MPH, RN
How do you initiate systems change around equity and racist structures?

Reception and 10th Anniversary Celebration Dinner

WEDNESDAY, JUNE 29, 2022

Breakfast

DAY 2 OPENING EXERCISE

Margaret "Meg" Chisolm, MD

2020 MACY FACULTY SCHOLARS' PLENARY PROJECT UPDATES AND SMALL GROUP DISCUSSIONS

John Burkhardt, MD, PhD
Benjamin Kinnear, MD, MEd
Dimitri Papanagnou, MD, MPH
Tatiana Sadak, PhD, PMHNP, ARNP, RN, FAAN
Danica Sumpter, PhD, RN

2019 MACY FACULTY SCHOLARS' PLENARY PROJECT UPDATES

Richard E. Greene, MD, MHPE, FACP
Amanda J. Kirkpatrick, PhD, RN
Barret Michalec, PhD
Rachel Salas, MD, MEd, FAAN, FANA
Michael Westerhaus, MD, MA

LUNCHEON AND FIRESIDE CHAT

Holly J. Humphrey, MD, MACP, and
Lepaine Sharp-McHenry, DNP, RN

CLOSING REMARKS

Macy Foundation President
Holly J. Humphrey, MD, MACP

FAREWELL POEM

Margaret "Meg" Chisolm, MD

2021 MACY FACULTY SCHOLARS' BIOGRAPHIES



JENNIFER BEST, MD

University of Washington

Dr. Best is Associate Professor in the Division of General Internal Medicine at the University of Washington School of Medicine. She is Associate Dean for Graduate Medical Education, overseeing accreditation and educational quality improvement for 120 residency and fellowship programs. As a Macy Faculty Scholar, Dr. Best will implement the “social-belonging intervention” in the transition from undergraduate medical education to residency. Partnering with an interdisciplinary team to adapt its application for first-year residents across medical, surgical, and hospital-based specialties, she will study the longitudinal impacts of this psychological strategy on academic outcomes and engagement, and psychological and physical well-being, with a focus on underrepresented learners.



JESSICA DEVIDO, PHD, CPNP

Duquesne University

As Associate Professor with tenure at Duquesne University School of Nursing, certified pediatric nurse practitioner, and former labor and delivery nurse, Dr. Devido's career aspirations center around improving maternal-child health (MCH) outcomes for vulnerable populations. Dr. Devido is a member of the steering committee for the School of Nursing and the Center for Women's and Gender Studies, the School of Nursing's BSN Curriculum and Curricular Changes Based on Societal and Social Justice Issues task forces, and Faculty Affairs Committee. She is also an active member of multiple executive boards. As a Macy Faculty Scholar, Dr. Devido's project is designed to develop and implement an MCH Equity Fellowship for undergraduate senior level nursing students with components including didactic, life-span education with community-based experiential and reflective interprofessional learning. This innovative fellowship will ultimately provide a model to better equip pre-licensure nursing graduates with skills necessary to improve the health and healthcare delivery to the nation's most vulnerable populations.



DAVID DILLER, MD, MHPE

University of Southern California

Dr. Diller is an emergency medicine physician and serves as the Assistant Dean for Clinical Curriculum at the Keck School of Medicine at the University of Southern California (USC). In 2021, he completed a Master of Health Professions Education through the University of Illinois-Chicago, and he was voted Educator of the Year in the Emergency Department at Los Angeles County + USC Medical Center. His overall career focus is on improving medical education through theory-based innovation.



**SUNNY HALLOWELL,
PHD, RN, PPCNP-BC**

Villanova University

Dr. Hallowell is an Associate Professor with tenure and Pediatric Nurse Practitioner at Villanova University's M. Louise Fitzpatrick College of Nursing. Dr. Hallowell has been recognized for her innovative mixed-methods approach to reduce medication administration errors using a game-based, immersive virtual reality simulation. Her pioneering work with nursing students in the design of virtual gaming simulations has created clinical learning environments rooted in science and social justice. As a member of Aequitas, Villanova's Presidential Task Force on Race, she is committed to cultivating positive cultural change across the campus. As a Macy Faculty Scholar, Dr. Hallowell will design, develop, and test Inclusive Clinical Advocacy – Responsible Education through a web-based virtual gaming simulation (ICARE-VGS) to support healthcare providers' development of clinical and communication skills to promote equity, diversity, and belonging in the communities they serve.



MATTHEW RUSTICI, MD

University of Colorado

Dr. Rustici is an Associate Professor of Pediatrics at the University of Colorado Anschutz Medical Center. He works clinically at Denver Health Medical Center in the Pediatric Emergency Department and Urgent Care, and he is also the co-director of a Transition To Residency (TTR) course at the University of Colorado School of Medicine. He works nationally to foster collaboration between TTR courses by co-leading an annual TTR symposium. He is the Principal Investigator of a national Delphi study establishing a consensus-based set of learning objectives for TTR courses. His Macy Faculty Scholars project will create a curricular materials compendium for TTR courses, providing free and open access to TTR teaching materials. These resources will be curated and edited from existing TTR courses and will provide a complete set of materials to run a new or existing TTR course.

GUEST SPEAKER BIOGRAPHIES



MARGARET "MEG" CHISOLM, MD

Dr. Margaret "Meg" Chisolm is Professor, Vice Chair for Education, and Director of the Paul McHugh Program for Human Flourishing, all within the department of Psychiatry and Behavioral Sciences at Johns Hopkins University School of Medicine. She has a secondary appointment in the department of Medicine. Board-certified in general psychiatry and addiction medicine, she has over three decades of clinical experience in both general and specialized psychiatric outpatient and inpatient settings and has served as principal investigator or co-investigator on multiple NIDA- and Foundation-funded research projects. She has published more than 100 scientific, clinical, and medical education articles and book chapters on substance use in pregnancy and other psychiatric disorders, as well as the use of social media and the arts/humanities in medicine. She is an author of a psychiatric textbook and a book on psychiatric illness for patients and families (*From Survive to Thrive: Living Your Best Life with Mental Illness*). Dr. Chisolm is a member of the Miller-Coulson Academy of Clinical Excellence, has been twice recognized as an Arnold P. Gold Foundation Humanism Scholar, and is the recipient of the 2014 Johns Hopkins University Alumni Association Excellence in Teaching Award. She is a Fellow in the Association of European Medical Education, the Association for Academic Psychiatry, and the American College of Psychiatrists. She was selected to participate as a Design Partner in the Art Museum-based Health Professions Education fellowship sponsored by the Cambridge Health Alliance and the Harvard Macy Institute, to which she has returned as associate faculty. Dr. Chisolm's current focus of education research is on the integration of the arts and humanities in health professions education across the learning continuum, and she is certified as a facilitator of Visual Thinking Strategies, an evidence-based visual arts-based teaching method.



LEPAINE SHARP-MCHENRY, DNP, RN

Dr. Lepaine Sharp-McHenry's experience in higher education, nursing practice, and regulation has gained her recognition as a transformational leader in the field who actively supports mentorship and leadership development. Her educational background includes an Associate of Science in Nursing at Southern Arkansas University, a Bachelor of Science in Nursing at the University of Arkansas, a Master of Science in Nursing as a Clinical Nurse Specialist in Psychiatric Mental Health Nursing from the University of Oklahoma, and a Doctor of Nursing Practice with a specialty in Executive Leadership at Union University. She is an enthusiastic advocate of branding your professional image among her colleagues and has gained the respect of industry leaders across the country. She is known for her extraordinary service in politics, education, and her community. She is committed to volunteerism and making a difference at the local, state, and national level. Dr. Sharp-McHenry currently serves as the Dean and Professor of the College of Natural, Behavioral, and Health Sciences at Simmons University in Boston, Massachusetts.





2021 MACY FACULTY SCHOLARS' PROJECT SUMMARIES



JENNIFER BEST, MD

University of Washington

ADAPTING THE SOCIAL-BELONGING INTERVENTION TO IMPROVE ACADEMIC AND WELL-BEING OUTCOMES IN GRADUATE MEDICAL EDUCATION (GME)

BACKGROUND

What does it mean to “belong” in the medical education community? And how does a sense of “belonging” manifest in graduate medical education (GME)? Medical education is a journey of professional identity formation, and Ludmerer offers: “The greatest influence on professional identity formation takes place during residency.” Bringing with them unique (often intersecting) personal identities, new residents undergo a process of “socialization” to cultivate new personal and professional identities, moving from “peripheral” to “full participation” within communities of practice. Consciously and unconsciously, they acquire and reflect group norms, informed by external and self-assessment; peer, supervisor, and/or patient interactions; formal curricula; and symbols. A resident’s sense of “belonging,” then, might in part reflect perceptions regarding their success in navigating socialization.

Belonging is an important GME target for intervention because training often involves geographic and experiential separation from one’s personal communities. Additionally, learner experiences within a new community differ based on identity; socialization may be more difficult for non-majority individuals. Underrepresented residents have described the GME experience as that of “an alien in one’s own land.” For all residents, adversity and/or perceived failure to socialize to a new training environment can lead to concerns about individual belonging (“Do I belong here?”) that for some may extrapolate to broader groups in which they participate (“Do people like me belong here?”). This may exacerbate “impostor syndrome,” prevalent in medicine and more so in Black, Indigenous, and people of color (BIPOC) learners, negatively impacting psychological well-being and mental health. Furthermore, belonging is a powerful target for innovation because the ability of medical educators to specifically define and cultivate a sense of belonging in the GME transition may impact academic outcomes for residents, as has proven successful in other contexts.

PROJECT AIMS

This project aims to 1) define “belonging” as experienced within GME; 2) use that definition to customize and implement a social psychology mindset intervention (Walton and Cohen’s “social-belonging intervention” [SBI]) in the transition to residency, utilizing a framework outlined by its originators; and 3) assess its longitudinal impact on resident academic, psychological, and well-being outcomes, with particular attention to underrepresented and stigmatized groups.

PROGRESS AND OUTCOMES TO DATE

Our team collected qualitative data from PGY2+ residents across medical, surgical, and hospital-based programs at the University of Washington School of Medicine utilizing semi-structured interviews and written reflections in six focus groups, and an anonymous survey. Written reflections and audio transcripts of focus groups were open coded by investigators using thematic analysis. Participants represented medical, surgical, and hospital-based training programs, as outlined by ACGME, as well as diverse identities

and backgrounds. Within the data, 901 unique codes and 38 subthemes were identified, representing eight overarching definitional anchors of belonging (**bolded**).

Our team defined “belonging” in GME as:

*“A determination of **personal value and opportunity**, co-constructed within **relationships** in a context of **learning and labor**. Belonging **evolves** as a resident: 1) is known and affirmed in **similarity and difference**; and 2) interprets the significance of their similarities and differences while navigating **experiences and/or feelings** within **i/Institutional and societal power structures**. This “belonging synthesis” reinforces or drives changes in behaviors or beliefs, which influences **professional judgements and outcomes** for all residents.”*

Key differences in belonging were identified when comparing narratives of majority residents with those of underrepresented/stigmatized residents.

This work laid the foundation for creation of the narratives that form the core of the SBI. Each narrative shares a representative story of adversity at the GME transition using a predetermined arc: recognition; reaction; turning point; rationale/sense-making; resolution. These narratives are under revision and nearing finalization.

NEXT STEPS

We plan to deploy the SBI via our learning management system to new PGY1 residents at the University of Washington on August 1, 2022. Following delivery of the SBI, this cohort will receive a brief psychometric and engagement survey every six months. Deidentified In-Training Exam (ITE) scores and ACGME-harmonized Milestone reports will also be provided by training programs yearly through completion of training, for comparison across groups.

ACKNOWLEDGEMENTS

I owe an immense debt of gratitude to the Macy Foundation for stepping into belonging with me by way of this generous gift of time. Thank you to my NAC mentor, Dr. Eve Higginbotham, who has provided kindness and wise guidance, as well as my fellow MFS cohort members, Drs. Devido, Diller, Hollowell, and Rustici. Watching each of you think is simply a marvel. Thank you to my qualitative team, Becca Gorrie, Dr. Gurjot Malhi, and Dr. Derrick Thiel and content experts Dr. Sapna Cheryan, Dr. Eric Holmboe, and Dr. Greg Walton. The expertise of my academic coach Dr. Helene Starks continues to make my work better. Finally, this project would not have been possible without the participation of University of Washington residents who entrusted our team with their stories, both raw and revelatory. Their trust deserves nothing but my best.

2021 MACY FACULTY SCHOLARS' PROJECT SUMMARIES



JESSICA DEVIDO, PHD, CPNP

Duquesne University

MATERNAL-CHILD HEALTH EQUITY FELLOWSHIP FOR PRE-LICENSURE NURSING STUDENTS

BACKGROUND

Racial disparities in birth outcomes are widening, partly due to America's history of racism and inequities in its maternal-child health (MCH) systems of care. Nurses must be committed to addressing disparities across all levels of care to improve outcomes such as maternal and infant mortality.

Nursing MCH education has typically placed greater emphasis on evidence-based healthcare delivered in acute care and inpatient settings as opposed to community settings. Therefore, nurses often begin their careers unprepared to provide MCH care outside the hospital setting. Through changes to education and partnerships with key stakeholders, academic institutions can create a workforce committed to community-engaged approaches to equitable care delivery.

PROJECT GOALS

I am developing an MCH Equity Fellowship for senior-level Bachelor of Science in Nursing (BSN) nursing students. The nine-month program is composed of two theory-guided academic courses (including one seminar course and one clinical course with a community-based practicum). The Fellowship is designed to promote health equity, cross-cultural sensitivity, and collaboration in the context of MCH so that students' approach to care is optimized with a focus on individual accountability in order to meet three goals:

1. Initiate a Fundamental Shift in Learning of MCH Inequities

Pre-licensure nursing students interested in MCH careers will become steeped in an intersectionality framework, reproductive justice, and critical race theory and hear directly from Black women, including patients, feminist scholars, and community activists.

2. Facilitate Interprofessional Clinical MCH Competencies

Students will be exposed to MCH topics underrepresented in traditional nursing education that have been identified as priorities to reduce racial disparities in adverse MCH outcomes. They will also have an interdisciplinary practicum experience with an evidence-based MCH home-visiting program, engaging with community health workers, doulas, lactation counselors, social workers, and other health professionals.

3. Increase Leadership Capacity Through Critical Thinking and Communication

Students will complete a mentored leadership project that applies didactic and community-based learning with the goal of integrating clinical, public health, and safety net systems.

PROGRESS AND OUTCOMES TO DATE

The focus of year one of the project was on planning and curriculum in collaboration with key stakeholders.

▪ Team Development

I have forged deep relationships with local MCH experts and activists to build my interdisciplinary team. I engaged an MCH Equity Community Advisor, a role intentionally designed for a birth worker who serves as cultural advisor and community navigator, as well as a graduate assistant with experience transitioning nursing students into practice. I added two MCH organization leaders and community partners who were integral in planning the practicum experience. I developed an Advisory Board consisting of birth workers, MCH public health program directors, and MCH educators. I engaged content experts/consultants for a comprehensive perspective on curriculum development, including faculty with expertise in sociology, history, clinical practice, and simulation.

▪ Theory-Driven Design

I worked with my institutional and national mentors to identify and operationalize a model for the Fellowship. Two theories inform and guide this transformative educational experience. Transitions Theory provides a framework for concepts that affect the MCH equity role transition from novice student nurse to practicing MCH nurse equity activist. Social Cognitive Theory provides a framework influencing the transitional learning process.

▪ Curriculum Development

The Fellowship comprises two academic courses that I designed. I secured approval from my administration and faculty for the implementation of the Fellowship. The first course includes immersive “field trip” experiences where students will explore a variety of community-based interdisciplinary MCH-focused organizations and services. The second course includes a 15-week practicum experience that includes four components: MCH nurse-based home visiting, shadowing/observation experience with an MCH community-based organization, cognitive rehearsal sessions, and high-fidelity simulation.

▪ Identification of Inaugural Cohort of MCH Equity Fellows

My team developed and distributed an application

to all junior-level nursing students and held an informational and Q&A session. Applications were comprehensively reviewed, and 12 students were selected as the inaugural Fellows. Through this process, we learned how passionate nursing students are about their future role in MCH equity.

▪ Supplemental Funding

In addition to the Macy Faculty Scholar funds, I have secured three separate sources of funding for implementation of the educational intervention and to support the role of the Community Advisor, as well as a PhD graduate student assistant, which are integral to the success of my project. This funding not only provides salary support but also the ability of this team member to co-present this project at the NLN Summit in fall of 2022.

NEXT STEPS

In year two, the educational intervention will be delivered to the first 12 students. A comprehensive assessment will evaluate the extent to which the program met its goals. Student exposure to MCH equity learning will be measured via surveys after each activity; a formative and summative evaluation will be conducted for the required courses; and a pre- and post-program evaluation to measure cultural humility and anti-racist knowledge, attitudes, beliefs, and practices, along with additional items relevant to nursing practice. Follow-up surveys will be sent one year after graduation to determine the extent that the program influenced students’ interest in MCH nursing practice and clinical competencies. We plan to document any unmet learning needs of the students and needs of stakeholders.

Next steps also include continuous quality improvement of the Fellowship and sustainability. In the future, we plan on scaling up the MCH Equity Fellowship at other nursing schools. For this, we will seek additional funding, partners, and champions beyond our Pennsylvania region.

ACKNOWLEDGEMENTS

I thank the Macy Foundation for this opportunity, which has been professionally transformative. I wish to extend my deepest gratitude to my mentors Drs. Joan Bloch and Afaf Meleis for their inspiration, support, time, and expertise that they have devoted to me and this project. I also wish to thank my home institution, Duquesne University, my project team, Advisory Board, community partners, and consultants, as this work has been truly collaborative on all levels.

2021 MACY FACULTY SCHOLARS' PROJECT SUMMARIES



DAVID DILLER, MD, MHPE

University of Southern California

PROMOTING AN INCLUSIVE LEARNING ENVIRONMENT WHEN DIVERSITY IS DISCORDANT BETWEEN STUDENTS, FACULTY, AND PATIENTS: AN ASSET-BASED APPROACH

BACKGROUND

Diversity and inclusion, while often linked together in syntax, are distinct ideas that work together to promote equity. Diversifying the physician workforce can lead to improved healthcare and health equity outcomes for patients¹⁻⁸, but to optimize the true benefits of diversity, organizations must also focus on inclusion.⁹⁻¹¹

Inclusion is defined as a collection of organizational practices and cultural norms that promote a sense of belonging, while simultaneously recognizing and valuing individual uniqueness.¹² This definition is based on Brewer's optimal distinctiveness theory¹³, which states that individuals strive to balance assimilation and distinctiveness within and between a group. To encourage inclusiveness, a culture needs to be created where diverse individuals are accepted for being themselves.^{11,14} Conversely, exclusionary practices, like discrimination, microaggression, racism, and bias can undermine a culture of inclusion, leading to worsened academic outcomes and individual wellness.^{15,16} These exclusionary practices disproportionately affect individuals who identify as underrepresented in medicine (URM) and/or LGBTQ+.¹⁵⁻¹⁹

Recognizing the value of physician diversity in healthcare outcomes, organizations like the Association of American Medical Colleges (AAMC) have prioritized both diversifying the physician workforce and promoting an inclusive training environment as part of their strategic plan.^{5-7,20-22} Yet, despite these recommendations, compared to research on diversity, "relatively little research has been done on inclusion."²³

Recommendations on improving inclusion include having a mission statement that emphasizes a commitment to diversity²⁴, encouraging non-URM and non-LGBTQ+ faculty and students to be engaged in promoting diversity initiatives, ensuring that images and stories represented on medical school websites and in medical school case vignettes are representative of a diverse community, teaching cultural humility through faculty development workshops, and building collaboration and trust.²⁵ What prior research fails to provide details on is how to promote inclusion within the clinical learning environment (CLE).

The learning environment is a complex construct defined as "the social interactions, organizational culture and structures, and physical and virtual spaces that surround and shape the learners' experiences, perceptions, and learning."²⁶ Based on this definition, the learning environment has been conceptualized in a four-domain model (personal, social, organizational, and material) that allows for more structured evaluation.^{27,28} The CLE within a medical school is sprawling, heterogenous, and siloed. It involves medical students having immersive interactions within various departments from different medical specialties in different healthcare settings.

While the literature has illustrated systemic changes that can improve inclusion, as well as the many barriers and exclusionary practices that URM and LGBTQ+ learners face in the CLE, little has been identified regarding practices in the CLE that promote inclusion. Using a strength-based approach, we can take a different approach towards improving inclusion in the clinical learning environment. Strength-based approaches can identify practices that are currently in place, given existing systemic constraints, that positively enact change.^{31,32} Used in combination with addressing previously identified needs, a strength-based approach can help promote best practices within a heterogenous and siloed CLE to improve inclusiveness.

To identify the assets in the CLE that improve inclusiveness, we will use the positive deviance inquiry (PDI) model.³³⁻³⁵ Originating as a framework for public health interventions, the PDI model has been implemented in many disciplines bringing about personal, cultural, and organizational change. It is based on the belief "that in every community there are certain individuals/entities whose special practices or strategies enable them to find a better solution to a pervasive problem than their neighbors who have access to exactly the same resources."³⁶ The PDI model is an intrinsic approach that relies on the local community to identify the individuals, groups, and practices that promote change within their unique environment. By empowering the community, this approach can lead to a degree of sustainability.^{37,38}

PROJECT AIMS

The project aims to identify the assets of the clinical learning environment in the core clerkships at the Keck School of Medicine that promote inclusiveness for URM and LGBTQ+ medical students. Once these assets have been identified, the second aim of the project is to reproduce these inclusive behaviors and practices in other clinical settings within our learning environment.

PROGRESS AND OUTCOMES TO DATE

We are currently performing focus groups of fourth-year medical students who identify as URM and/or LGBTQ+ as part of a mixed methods two-phased qualitative study. Once completed, we will perform a thematic analysis on the data to identify any practices that promote inclusiveness within the clinical learning environment. Additionally, we will reach out to any individuals identified by the focus groups as displaying positive deviant

behaviors to participate in semi-structured one-on-one interviews. During these interviews we will explore specific inclusive practices and identify solutions that can be reproduced in other clinical settings.

Interestingly, while the focus groups have revealed some interesting findings regarding inclusive practices in the clinical learning environment, undoubtedly one of the most pervasive themes has been the perception that grades negatively impact learner inclusiveness.

NEXT STEPS

This research project is at an inflection point. While the project set out to identify unique practices that promote inclusiveness, the focus group data is leading us down an alternative, but equally important, path. It is evident that grading and assessment play an important role in learner inclusion, and concepts such as evaluator bias, stereotype threat, performance, and individuality need to be explored further. At this time, I intend to perform a deeper literature review and reformulate the focus group questions before continuing on with data collection, with the intent to further address student perceptions of assessment, grading, and inclusion in the core clerkships.

ACKNOWLEDGEMENTS

Thank you to the Macy Foundation, my local mentor Dr. Donna Elliott, and my Macy advisor Dr. David Irby. I would also like to thank Jacob Schreiber for help in conducting the focus groups.

REFERENCES



2021 MACY FACULTY SCHOLARS' PROJECT SUMMARIES



SUNNY HALLOWELL, PHD, RN, PPCNP-BC

Villanova University

INCLUSIVE CLINICAL ADVOCACY – RESPONSIBLE EDUCATION (ICARE VIRTUAL GAMING SIMULATION)

BACKGROUND

More than two decades of public health policy and rigorous scientific discourse have highlighted how the social determinants of health (SDOH) are a primary driver of health outcomes. While nurses are experts in clinical behavior, they possess limited skills to assess, diagnose, and treat issues of inclusion, equity, and diversity that impact the health of patients and communities they serve. Nursing curricula has yet to integrate the science related to SDOH to foster the foundation of skills necessary for nurses to be effective, racially literate, and anti-racist collaborative partners in healthcare systems.

- **Inclusive Clinical Advocacy.** Derived from the work of the Americans with Disabilities Act, the term “inclusive” refers to a person- or family-centered approach. “Clinical advocacy” refers to the call by the National Academy of Sciences *Future of Nursing Report 2030: Charting a Path to Achieve Health Equity* to nurses in every setting and role across the profession to develop the scientific evidence that demonstrates the link between the SDOH and health outcomes. Together, these terms describe how nurses may enact their role as patient advocates.
- **Responsible Education** refers to the idea that the transmission of ideals, values, and morals is not static. Stories are important and learning can be facilitated through a powerful narrative that may influence clinical behaviors and decision-making skills to address the needs of an ever changing and diverse population.
- **Virtual Gaming Simulation (VGS).** Cancellation of in-person clinical and laboratory (e.g., high-fidelity manikin and standardized patient simulation) experiences due to the COVID-19 pandemic exacerbated the persistent challenge of schools to secure high-quality clinical experiences for thousands of students in all healthcare disciplines. VGS provided an open educational resource (OER) when clinical practicum rotations were cancelled during the pandemic. This evidence-based method uses branching case-based scenarios displayed as video clips to engage learners in decision-making using a game-based format to assess students’ knowledge and allow them to demonstrate decision-making skills. We anticipate creation of a library of several OERs focused on communication and clinical skills necessary to teach learners how to mitigate the effects of discrimination and implicit bias on health through their everyday decisions.

PROJECT GOALS

The purpose of this project is to design, develop, and test VGS for use with senior-level undergraduate nursing students focused on team-based, pediatric family-centered care. Kolb’s Experiential Learning Theory underlies the design and interpretation of learning outcomes using the VGS intervention, while design of decision point questions follows Tanner’s Clinical Judgment Model.

PROGRESS TO DATE

The project will unfold in three phases: Writing, Production, and Research. Preliminary data collected during the pandemic revealed positive satisfaction and use of VGS. The games have been designed to address findings from focus group data where students identified three key areas they needed more experience with: Spirituality & Cultural Humility, Clinical Reasoning, and Communication Oral and Written.

- **Phase 1 (Writing):** We recruited a diverse group of clinical experts, community leaders, patients, faculty, and students to form Expert and Student Advisory Boards. These advisors have provided review, feedback, and guidance during the development of the script for the first game. A collaborative mentorship was established with the innovators of the evidence-based VGS program in Toronto, Canada to design this first game. Writing the script has allowed us to engage in nuanced discussions that focus on empathy, reflect on clinical care, and address needs of our simulated patients through a health equity lens. The first game is set in the neonatal intensive care unit.
- **Phase 2 (Production):** We harnessed the available resources at Villanova University by engaging with the Documentary Film course. Through this partnership, professional actors were hired to participate in the project to enhance the fidelity of the simulation.
- **Phase 3 (Research):** We intend to use a mixed-methods, quasi-experimental, pre- and post-test design to test the intervention in four cohorts of senior-level nursing students (approximate n=150) before engaging in a larger, longitudinal, multi-site trial of the game (Fall 2022). The research phase involving all of the games in the project may extend beyond my current tenure as a Macy Faculty Scholar.

NEXT STEPS

This method of simulation holds promise for future interdisciplinary collaboration with the goal to design games that more closely simulate team-based decision-making. The intervention may be shared across nursing programs as an OER with the potential for global application. We hope to partner with national educational organizations to scale up the use and availability of interventions.

ACKNOWLEDGEMENTS

I am deeply grateful to the Josiah Macy Jr. Foundation for investing in my potential as a healthcare leader and innovator. Many thanks to my mentor Dr. Christine Tanner for her guidance and use of her model. Special gratitude to my institutional mentor Dr. Elizabeth B. Dowdell whose unwavering support, kindness, and patience have sustained me through the transition from postdoc to faculty member. I am deeply indebted to fellow Macy Faculty Scholar Dr. Ashley Darcy-Mahoney whose steadfast encouragement and faith in my work continue to leave me overwhelmed by her grace, generosity, and friendship. Thank you to Margaret Verkuyl and Michelle Hughes (Centennial College, Toronto, Canada) for guiding me through the VGS design process. I gratefully acknowledge Villanova University filmmakers Professor Hezekiah Lewis, Caleb Lucky, Andra Cain, and Dean Donna Havens for their continued support. Most of all, thank you to the patients and providers whose stories inspire this project through which we hope to cultivate more knowledgeable and compassionate 21st-century clinicians.

2021 MACY FACULTY SCHOLARS' PROJECT SUMMARIES



MATTHEW RUSTICI, MD

University of Colorado

REALIZING THE GOAL OF NATIONAL EDUCATIONAL COLLABORATION THROUGH A COMPENDIUM OF TRANSITION TO RESIDENCY COURSE TEACHING MATERIALS

BACKGROUND

If US medical schools could collaborate and use a common set of curricular elements, there could be both a large gain in efficiency and a more effective distribution of labor/ talent to produce higher quality educational products. Despite interest in creating common resources, there are scarce examples of large-scale collaboration in any domain of medical education.

Transition To Residency (TTR) courses are designed to prepare graduates to be day-one-ready interns through didactic and skill practice in clinical, communication, and procedural skills. TTR courses provide a unique opportunity to collaborate on common curricular materials as most courses are new, flexible, and must prepare students to practice in diverse residency settings.

Medical educational leaders have attempted to create collaborations across institutions in multiple different areas, but widespread adoption of a common set of curricular materials has remained an unrealized goal. This suggests that a successful solution to collaboration may require a more deliberate leadership-focused approach using techniques of change management.

PROJECT GOALS

This project will curate and widely distribute a compendium of TTR course materials on core topics. The materials will be produced using standardized frameworks to reduce the adaptation and implementation workload for TTR course directors. The compendium is being created in multiple phases.

- **Phase 1:** A governance “Editorial Board” will be created and will draw from a geographically diverse set of six schools with established and successful TTR courses. Through consensus decisions, the board will determine the initial topics, structure, and standards of the materials as well as copywriting approach, editorial process, and which specialty versions will be offered within each topic. Each pedagogical approach will have rigid standards that include a session duration, file format, faculty guide format, and the planned faculty-to-student ratio. This will reduce the amount of time and effort to adapt materials to different courses, especially for courses that have schedules that use the same standards as the compendium materials. Materials will have flexibility in other aspects to encourage innovation, and materials will be designed in a way that encourages course directors to adapt and improve the materials for their particular context.
- **Phase 2:** A primary set of materials that includes multiple versions in different specialty contexts will be curated from Editorial Board members’ courses. The Editorial Board will create a cross-institution editorial process that will curate and standardize future materials from courses across the country. This will provide a mechanism to expand and revise the compendium materials by allowing different courses to share their best materials in a format that is widely compatible

across schools. During Phase 2, we will find and meet with as many TTR course directors and coordinators as possible to uncover the current needs of courses, identify exemplar sessions for future compendium contributions, and to inform courses of the standards and materials included in the compendium.

- **Phase 3:** After the initial topics are released in the compendium, we will create a marketing campaign to raise awareness of the materials and encourage use. A yearly survey of course directors will be created to identify emerging needs as well as to solicit feedback about existing compendium materials. Compendium authors will be expected to update materials every year based on feedback and adaptations submitted by course directors. Materials will be open to all with a liberal approach to adaptation to encourage a continual process of updating and improvement.

PROGRESS TO DATE

The project is currently in late Phase 1 and early Phase 2. The compendium will offer each topic in seven different specialties: Emergency Medicine, Family Medicine, Internal Medicine, Psychiatry, Obstetrics-Gynecology, Pediatrics, and Surgery. It will include materials in one of five pedagogies: Case-Based Discussion, Simulation, Standardized Patient Role Play, Procedural Skills, and Lecture slides. Each pedagogy has been assigned a session duration, faculty-to-student ratio, materials file format, and maximum time for pre-work completion. All materials will be given a Creative Commons BY (CCBY) license. Ten initial topics were selected using data from a Delphi study establishing consensus topics for TTR courses and through identification of curricular strengths within the Editorial Board schools. Initial topics are: responding to microaggressions, professionalism, delivering serious news, informed consent, opioid use, patient clinical changes, on-call labs, on-call vitals, pain management, and resuscitation simulations.

NEXT STEPS

- **Phase 1:** The curricular standards will be vetted more widely to refine as needed. The Delphi topic study will be completed and published.
- **Phase 2:** Materials will be released and disseminated via the AAMC's Clinical Teaching and Learning Experiences collection.

- **Phase 3:** We will find and contact all TTR course directors in all US and Canadian medical schools. The annual TTR symposium will be held in October, which will include a separate "New Course Bootcamp" that will introduce the Compendium materials to course directors creating new courses.

ACKNOWLEDGEMENTS

Thank you to the Macy Foundation for this amazing opportunity to commit fully to this ambitious project and for connecting me with my mentor Dr. Kelley Skeff. He has provided great feedback and is a constant source of new literature to read. Dr. Rita Lee has been an amazing local mentor helping me take on the challenges of health equity and seamlessly integrating it into our curriculum. Dr. Genie Roosevelt has been invaluable at helping sort through the complexity and keeping me focused on key aspects of the project. The Editorial Board members (Drs. Andrea Anderson, Meredith Atkins, Jason Brainard, Lauren Heidemann, Brad Monash, and Kathryn Mutter) have committed an enormous amount of time and effort to creating ideal curricular standards and have managed tough conversations with humility, laughter, and extremely helpful feedback. Lastly, I want to thank my Macy Faculty Scholars cohort who are some of the most supportive, brilliant, funny, and deeply genuine group of people I have ever met.

2020 MACY FACULTY SCHOLARS' PROJECT UPDATES



JOHN BURKHARDT, MD, PHD

University of Michigan

ADDRESSING UNCONSCIOUS BIAS IN MEDICAL CARE USING INDIVIDUAL PRACTITIONER DATA

PROJECT UPDATE

By the time of the Macy Faculty Scholars Annual Meeting, the second stage of the crossover design will have been completed (session is scheduled for June 15th). After completion of the second teaching session, data analysis will be possible. Given the difficulty with encouraging resident involvement, it seems likely that an innovation report with detailed post-mortem is the most likely first scholarly product that will come from the project. Following this, a revised second phase will be attempted with a new strategy for resident engagement. Expansion to other medical specialties may be possible, but given the issues in emergency medicine, it is likely that any practical involvement will be delayed until both faculty and resident champions in each program can be identified. This has been both an incredibly informative and humbling experience, which I plan to use in my own personal development as a Scholar.

CAREER UPDATE

Since beginning as a Scholar, I have had several major accomplishments with hopefully more in the near future. Most notably, I completed my Fulbright Scholar time at the Royal College of Surgeons in Ireland in the spring (March 1–May 31) and returned to the US with renewed purposes. Macy's support made that transformative experience possible, and I believe the combination of Macy and Fulbright time will define the next phase of my career. Also during the Macy Faculty Scholar time period, I have launched my own research lab, which was highlighted in a larger article I co-wrote on similar labs in *Academic Medicine*. I have also had six other articles published

with others currently under review. While I have submitted several internal and external grants in the past 1.5 years, unfortunately I have not had another major funding award to date. I plan to continue to learn from the feedback and reapply. Looking forward, I am in the process of developing a new potential position aimed at medical education innovation in concert with the medical school leadership. Finally, I am preparing my materials for promotion and tenure review in the next 18 months.

BENJAMIN KINNEAR, MD, MED

University of Cincinnati

TRANSITIONS IN INTERNAL MEDICINE EDUCATION LEVERAGING ENTRUSTMENT SCORES AND STANDARDS (TIMELESS)

PROJECT GOALS AND ACHIEVEMENTS

The goal of TIMELESS is to pilot competency-based time-variable training (CBTVT) to better understand how CBTVT impacts resident learning and clinical competency committee (CCC) decision-making. We are also learning about the affordances and challenges of implementing CBTVT in GME.

Nine internal medicine residents have participated in the pilot over the last two years. Thus far, 56% (5/9) of TIMELESS residents were promoted early. Two PGY-1s were promoted to indirect supervision an average of 2.5 months early, while three PGY-3s were promoted early to unsupervised practice an average of 4.5 months early. We have completed data analysis on two qualitative studies: one investigating the effects of time-variability on resident learning and motivation (under review), and the other investigating the impact on CCC decision-making (nearing submission). We also improved the validity (defensibility) of summative decisions made in our CCC through process changes that occurred due to TIMELESS.

At an institutional level, we have garnered support from departmental leaders, the GME office, clinical administrators, frontline supervising faculty members, financial officials, and credentialing leaders. Through this coalition, we have developed and approved a novel credentialing pathway for TIMELESS residents who are deemed ready for unsupervised practice by the CCC. At a national level, we have joined a chorus of voices calling for innovation and research to learn more about the implementation and effects of CBTVT.

I have delivered multiple departmental grand rounds presentations and three national meeting plenaries on CBTVT, co-authored four peer-reviewed publications on CBTVT, and been featured on four podcasts including *Explore the Space* and *Curbsiders Teach*.

NEXT STEPS

TIMELESS will continue in the coming years, with iteration based on our research findings. We have begun collaborating with other CBTVT pilot programs from other institutions, loosely forming a consortium that meets quarterly to share knowledge and expertise. We will continue to engage national stakeholders including the AMA, ACGME, and ABMS to advocate for innovation mechanisms related to CBTVT.



2020 MACY FACULTY SCHOLARS' PROJECT UPDATES



DIMITRI PAPANAGNOU, MD, MPH, EDD(C)

Thomas Jefferson University

BRIDGING HEALTH SYSTEMS SCIENCE WITH PREPARATION FOR PRACTICE: A VERTICALLY INTEGRATED, LONGITUDINAL CURRICULUM IN UNCERTAINTY

PROJECT GOALS

My project develops a formal curriculum for uncertainty in clinical practice. It is a vertically aligned, four-year curriculum housed within the medical school's Health Systems Science (HSS) thread. The curriculum is informed by complexity science and the Marsick and Watkins Model of Informal and Incidental Learning in the Workplace. Project goals include developing and evaluating a curriculum for uncertainty in clinical practice and identifying opportunities for interprofessional collaboration between the Colleges of Medicine and Nursing. Curricular experiences afford learners the opportunity to develop their ability to reflect on decision-making and actions when confronting uncertainty, as well as equip them with tools and strategies to navigate uncertainty in clinical practice.

MAJOR ACCOMPLISHMENTS

- **Year 1 and 2 Students:** Productive struggle is introduced through case-based learning (CBL). Case learning objectives link to domains of uncertainty. "Navigating uncertainty" has been integrated as a discrete element for student assessment during CBL sessions. HSS block themes and learning objectives have been mapped to domains of uncertainty in the clinical learning environment (CLE). Concepts are reinforced during Clinical Experience sessions, the practical component of HSS.

- **Year 3 Students:** Clerkships immerse students in required simulations representative of various CLEs, which directly link to specific uncertainty domains. During interclerkship days, students participate in faculty-facilitated, small-group observation-and-reflection sessions, where they discuss disorienting dilemmas and experiences they have encountered on clerkships. Sessions have been dedicated to topics and readings surrounding uncertainty.
- **Year 4 Students:** During the Gateway for Internship course, students deliberately practice critical incident debriefing skills. Simulations, lectures, and small-group workshops focus on communicating diagnostic uncertainty to patients and problem-solving during times of clinical uncertainty.

PERSONAL ACHIEVEMENTS

The Macy Faculty Scholars Program has allowed me to fully immerse myself in opportunities to advance my career as a leader in medical education. I have joined a network of international research colleagues who are exploring how the intersection of complexity and uncertainty influence learning in the workplace. I am working with the developers of the Marsick and Watkins Model of Informal and Incidental Learning in the Workplace, who now serve as my research mentors.

HSS continues to offer curricular opportunities to house the work my project advances. Participation in the HSS Scholar's Program through the American Medical Association (AMA) helped further disseminate my work. Our team at Jefferson was also a recipient of the AMA 2021 *Accelerating Change in Medical Education Innovation Grant*, which will

advance HSS training in graduate medical education.

As a Scholar, I have been first author or co-author on over 25 peer-reviewed publications, which have appeared in *Academic Medicine*, *Advances in Simulation*, and *MedEdPORTAL*. I have been invited to give over 15 grand rounds presentations and visiting speakerships and have presented over 20 research abstracts at academic conferences, including AAMC's Learn Serve Lead. In 2021, I was promoted to Professor of Emergency Medicine.

NEXT STEPS

I am incredibly grateful for my time as a Scholar. I have had the time to think critically about my work as a medical education researcher, develop strong professional collaborations, and develop meaningful insights into the research questions I am tackling. I intend to continue to advance educational interventions that prepare learners to navigate clinical uncertainty and specifically focus on diagnostic uncertainty. I was recently selected to participate in the National Academy of Medicine's Scholars in Diagnostic Excellence Program, through which I will implement national-scale training on communicating diagnostic uncertainty. To further enhance equitable care transitions in the emergency department, my work will inform provider-patient conversations during times of diagnostic uncertainty so that they are inclusive of and attentive to patients' unique healthcare needs.

ACKNOWLEDGEMENTS

I would like to express my utmost gratitude to the Macy Foundation for welcoming me into the Macy Family. I want to thank my mentors, Drs. Deborah Ziring, Victoria Marsick, and Kristin Rising. I am grateful for the support of two deans, Dr. Mark Tykocinski (Sidney Kimmel Medical College)

and Dr. Marie Marino (Jefferson College of Nursing). I am grateful for the support of my Chair, Dr. Theodore Christopher. I would also like to acknowledge the support of Dr. Samuel Thier, my Macy national advisor, for his continued guidance.



2020 MACY FACULTY SCHOLARS' PROJECT UPDATES



**TATIANA SADAK,
PHD, PMHNP, ARNP, RN, FAAN**

University of Washington

REVOLUTIONIZING DEMENTIA EDUCATION AND TRAINING FOR HEALTH CARE PROFESSIONALS

GOAL

The project's primary goal is to increase access to comprehensive dementia care by transforming dementia education for registered nurses (RN) from pre-licensure through the entire trajectory of their professional development.

ACCOMPLISHMENTS

Accomplishments over the past two years include:

1. Launching the Dementia and Palliative Education Network (DPEN) within the University of Washington (UW) School of Nursing (SoN);
2. Development of the core components of comprehensive dementia care competencies for RNs;
3. Partnering with national dementia experts to develop the curriculum;
4. Establishing an infrastructure for piloting and disseminating this education by creating an Excellence in Long-Term Care externship for UW SoN students and partnering with Emory University's Integrated Memory Care Clinic, which will provide DPEN education to their nurses;
5. Completing the National Science Foundation Innovation Corps (I-Corps) boot camp on business development and commercialization of our curriculum; and securing a

grant from the UW CoMotion Innovation Gap program, which funds the development of technology that will support nurses in providing comprehensive dementia care.

PERSONAL ACHIEVEMENTS

Personal achievements include:

1. Induction as an American Academy of Nursing Fellow;
2. Professional Nursing and Health Care Council Nurse Educator Award – Washington State Nurses Association;
3. Regional Geriatric Nursing Education Award – Western Institute of Nursing;
4. Publications in *The Gerontologist*, *Journal of Medical Internet Research*, *Journal of Gerontology: Medical Sciences*, *The American Journal of Geriatric Psychiatry*;
5. Appointment as the Chair of the Washington Nursing Commission Long-Term Care workgroup; and
6. Promotion as the Interim Associate Dean for Academic Affairs (ADAA) at UW SoN. I am leveraging the position as the Interim ADAA and the leadership on the Nursing Commission to support the mission and the vision of the UW SoN and to further expand and disseminate dementia education by developing academic-community partnerships at regional nursing homes and operationalizing the roles of nurses in dementia care.

**DANICA FULBRIGHT SUMPTER,
PHD, RN**

University of Texas at Austin

**TOOLKIT FOR ANTI-RACIST TEACHING
(T-ART) IN THE HEALTH PROFESSIONS**

GOALS

My Macy Faculty Scholar project seeks to increase the knowledge, skills, and self-efficacy of health professions faculty to teach about race and racism, and thereby increase the presence of anti-racist curricula in academic health professions institutions. It originally involved the creation of a Toolkit for Anti-Racist Teaching, and after delving into anti-racist pedagogy and realizing that we need more “chefs” rather than more “cookbooks,” it has evolved into a *Tools for Transformation Kit*. After reviewing the literature and surveying health professions faculty, I am in the process of getting a “rough, ready, and right prototype” of an interactive textbook primed for feedback based on the knowledge gained from the Leading Health Innovations course at the Harvard Macy Institute.

ACHIEVEMENTS

Through previous Macy Faculty Scholars (namely Kenya Beard), I have been introduced to many wonderful collaborators whom I have published with and continue to work with on national committees to address structural racism, bias, equity, diversity, and inclusion. I have continued to facilitate an ART (anti-racist teaching) Club at my institution, and I am working with the National League for Nursing to upscale the club for broader impact. I have presented locally and nationally about the importance of anti-racist pedagogy and praxis to achieve educational inclusion and health equity.

NEXT STEPS

Next year I will be stepping into a newly created faculty development role as nursing schools across the country move towards competency-based education and face a growing faculty shortage. I am excited about the opportunity to co-create transformative learning for faculty and students as I continue to build the *Tools for Transformation* and a community of anti-racist health education practitioners.

ACKNOWLEDGEMENTS

I cannot thank the Macy Foundation enough for providing the opportunity to focus on educational innovation and my personal growth and development as a Scholar. I have been connected with so many amazing individuals who have helped accelerate my scholarly evolution and the ability to show up as my full authentic self.



SMALL GROUP DISCUSSION SUMMARIES

HOW DO YOU LEAD CONVERSATIONS ABOUT CHALLENGING TOPICS LIKE RACISM?

FACILITATED BY KENYA BEARD,
EDD, AGACNP-BC, CNE, ANEF, FAAN

Think of an injustice you witnessed or were a part of. What were the values assigned to that injustice? One example that resonated with the group consisted of structural disparities and assumptions made in healthcare when caring for the maternal health population. What happens when a post-partum appointment is changed, missed, or delayed? Who considers the transportation issues and hardships that some women experience with their first post-partum visit? Are these disparities ignored? What expectations and assumptions are endorsed by members of the healthcare system?

The group shared how injustices could trigger opportunities to modify policies and practices. Discussing assumptions and harms that emerged from injustices served as a gateway to more difficult conversations that focused on racism. Introducing racism as a root cause of some structural disparities could fuel different emotions. Racism, “a system of structuring opportunity and assigning value based on the social interpretation of how one looks, which is what we call race, unfairly advantages other individuals and communities and saps the strength of the whole society through the waste of human resources” (Camara Phyllis Jones, MD, MPH, PhD).

How should leaders engage in conversations about challenging topics like racism? While there is no panacea or one-size approach to discussing racism, the group shared the following skills for leading critical conversations about racism.

1. Embrace humility and acknowledge uncertainty.
2. Be transparent about your vantage point as a leader.
3. Accept different emotions. Avoid elevating oneself by distancing from the behaviors of others.
4. Make links to institutional values. What value does the injustice violate?
5. Seek first to understand and create an atmosphere of inquiry (listening more than talking). What would you like me to know or hear? What would you like to be different?



6. Be data-curious.
7. Be intentional about calling in and calling out the voices of others.
8. Recognize the impact the conversation is having on the group.

Some believe that leaders set the stage for others to bring about change. The 6 Rs could be used as a guide to creating an ethos for courageous conversations that address racism (Beard, Julion, Waite, 2022).

1. Recognize the disparity or bias rooted in racism.
2. Restate the bias or stereotype.
3. Remove the issue away from any one individual and center it on the broader issue.
4. Reflect on what was said and how racism could be operating in the shadows.
5. Recover by inviting conversations that explore how racism operates.
6. Rebuild by identifying actions that align with professional values.

Regardless of one's race, racism can be difficult to understand or address for a variety of reasons. Nevertheless, leaders in healthcare education must possess the skills to facilitate discourse that addresses racism as a root cause of healthcare injustices.

NAVIGATING FEELINGS OF IMPOSTER SYNDROME

FACILITATED BY RACHEL SALAS, MD, MED

Participants were asked to first complete their definition of happiness and success. Next, Dr. Salas shared background on imposter phenomena and provided the difference between imposter phenomena and imposter syndrome. She also went on to discuss how imposter phenomena can be helpful when used strategically and how the environment plays a role in imposter phenomena/syndrome. She stated that while participants (as educator leaders) may not be able to change the inner critics of their learners and mentees, they can learn how to improve the environment. She discussed how they can improve imposter experiences for those they mentor/teach (and for themselves) by using different tools. She then went on to discuss some ways to do this.

She shared her own experience with imposter syndrome and steps she initially took to address it (formal education). This did not “treat” her imposter syndrome but heightened it. She also mentioned how the Macy Faculty Scholars Program also caused an imposter exacerbation. She then went on to briefly discuss a strengths approach. She then spoke about values and how values can be an inducer or exacerbator of imposter phenomena when values are misaligned. Participants then completed a values exercise to identify their top values. They were then asked to rank their top five values and record them in their worksheet. Then participants were asked to think about a time their experienced imposter phenomena or syndrome. They were then asked to look at their top values and were provided a prompt (“Did one or more of your values play a role in your imposter experience?”). Dr. Salas shared a personal story to provide an example. Dyads were then created so participants could share their insights on how their value(s) may have played a role in their imposter experience.

The group came back together to share take-home points. Some of the more revelatory discussion points included:

- We all (even as Macy Faculty Scholars) still suffer from imposter phenomena.
- Vulnerability is important to treat imposter phenomena (e.g., sharing stories).
- There is a difference between imposter syndrome and imposter phenomena, and the latter can be used in a strategic (positive) way.



- “I did not ever think about how a disconnect between my values and the values of the group I am working with could be a source for not feeling like I belong”—thus fostering imposter phenomena.
- “I want to think more about how my values and my strengths can be used to treat imposter phenomena/syndrome.”

Dr. Salas gave summary points and thoughts to continue the reflection. She challenged the group to think more deeply about the values they ranked on their worksheets and shared another story about how these values may actually not be their true values, but instead values that they may have been trained to think are important. She shared how this was the case for her and that she encountered a powerful transformation when she was able to dig deeper and uncover her *true* top values. It was only when this happened that she was able to better treat her imposter syndrome.

Dr. Salas ended with a summary and spoke a little more about how she uses strengths and values in her professional development workshops and coaching to help manage imposter experiences. She then ended with referring the group to what they wrote for their definitions of happiness and success and that when you are not able to define your own happiness or success, then you allow others to define that for you. This was yet another way to feel like you don’t belong or have meaning in your work/life. This, along with not identifying, developing, and leveraging your strengths, are other ways to allow for imposter syndrome to ensue, which can lead to feeling disconnected, burned out, and, for some, leaving their profession. She ended with the idea that while imposter phenomena/syndrome are widely spoken about, the angle of values, success, happiness, strengths, and the environment are not focused on often. These are opportunities to make a difference for not only ourselves but those we mentor, coach, teach, and care for.

SMALL GROUP DISCUSSION SUMMARIES

RETHINKING LIFE STRUCTURES AND WORK GOALS COMING OUT OF THE PANDEMIC

FACILITATED BY ALAN DOW, MD, MSHA

Our discussion, which included 14 Scholars and mentors, was framed around three questions:

- What did you start doing during the pandemic that you want to keep doing?
- What did you stop doing during the pandemic that you want to start doing again?
- What does this reflect about our values? What does this mean for us as leaders and mentors?

Reponses to each question are summarized below.

What did you start doing during the pandemic that you want to keep doing?

The ability to work from home, at least in part, was universally seen as valuable. Some specific positives included being more likely to have meals with loved ones, such as lunch with significant others and having dinner more often with children. Not commuting was recognized as tremendous time-saver.

Adoption of web-based communication tools such as Zoom was seen as a positive as these tools allowed broader participation in meetings and helped reduce hierarchy. Similarly, formal activities like grand rounds were noted to have better and more diverse attendance. However, it was also noted that too much time in front of a screen on meetings had downsides in terms of fatigue and loss of personal connections. Some individuals described recent efforts to build relationships with colleagues in spite of the virtual distance between people.

The pandemic also catalyzed rapid change and demonstrated the capacity for institutions to change quickly. Individuals were given permission to think and act creatively. Important technologies for clinical care like telehealth were widely implemented while virtual learning became the norm.

Finally, several participants noted the impact of the pandemic on personal priorities. Time spent in various activities was reconsidered and reprioritized. Several people deeply examined their personal fit with an institution. Out of the chaos of the pandemic, some people received increased clarity.

What did you stop doing during the pandemic that you want to start doing again?

The lack of in-person interaction was identified as a loss during the pandemic. Individuals missed in-person work meetings as well as seeing friends. Networking and professional development activities were hampered, and a lot of emphasis was placed on the importance of serendipitous interactions to drive personal satisfaction and career growth.

In addition, scheduling became problematic in a couple of ways. The ability to meet over web-based technology meant that the workday often stretched beyond business hours and into weekends. Scheduling “thinking time” for academic efforts like reading and writing became harder. Some individuals began to feel stuck because, after the early anxious days of the pandemic, a sense of inertia and dread about the state of the world set in.

What does this reflect about our values? What does this mean for us as leaders and mentors?

Several insights and perhaps reidentified priorities came from the pandemic. Several individuals embraced the importance of family more, and all recognized the increased importance of physical presence for many relationships. They also learned that organizations have a greater capacity for change, especially when leaders have courage and are given agency and autonomy to make change. This change was also found to be less frustrating, perhaps because of a sense of common purpose during the pandemic. Generally, personal fulfillment became more of a priority than formal advancement, which led to greater pursuit of personal wellness and greater value in authenticity in relationships.

As leaders, the group identified several leadership strategies that should be retained going forward. First, the group felt leaders should be intentional about when and how to be physically present. This presence has impact. Second, leaders should facilitate the level of connection needed among team members. This may vary by the individual. Finally, leaders should model work-life integration. An example included scheduling and engaging in web-based meetings in ways that demonstrate sensitivity to the personal lives of attendees.

Overall, the group thought the pandemic was a time of turmoil that also was an important inflection point for change and evolution. Many good things happened during the pandemic and hopefully some of these can be sustained as the pandemic wanes.



SMALL GROUP DISCUSSION SUMMARIES

HOW DO YOU INITIATE SYSTEMS CHANGE AROUND EQUITY AND RACIST STRUCTURES?

FACILITATED BY MAYUMI WILLGERODT, PHD, MPH, RN

BACKGROUND

Recent attention to improving equity in academia has focused on identifying strategies to change behaviors and interactions among and between faculty, students, and staff. However, any meaningful and sustained change requires examination of structures and systems that perpetuate these inequities. The reality is that academia is inherently hierarchical and many faculty who are attuned to the systems that need changing do not perceive themselves to be in positions of power. For example, the need to be "voted" on to be promoted is one barrier to being a change agent, yet we cannot rely on senior faculty to initiate the needed change.

DISCUSSION QUESTION

How can we initiate systems change in a culture that is hierarchical, racist, and slow to change?

DISCUSSION

The group began with identifying challenges to initiating change and ended with possible implementable solutions to consider moving forward.

Challenges:

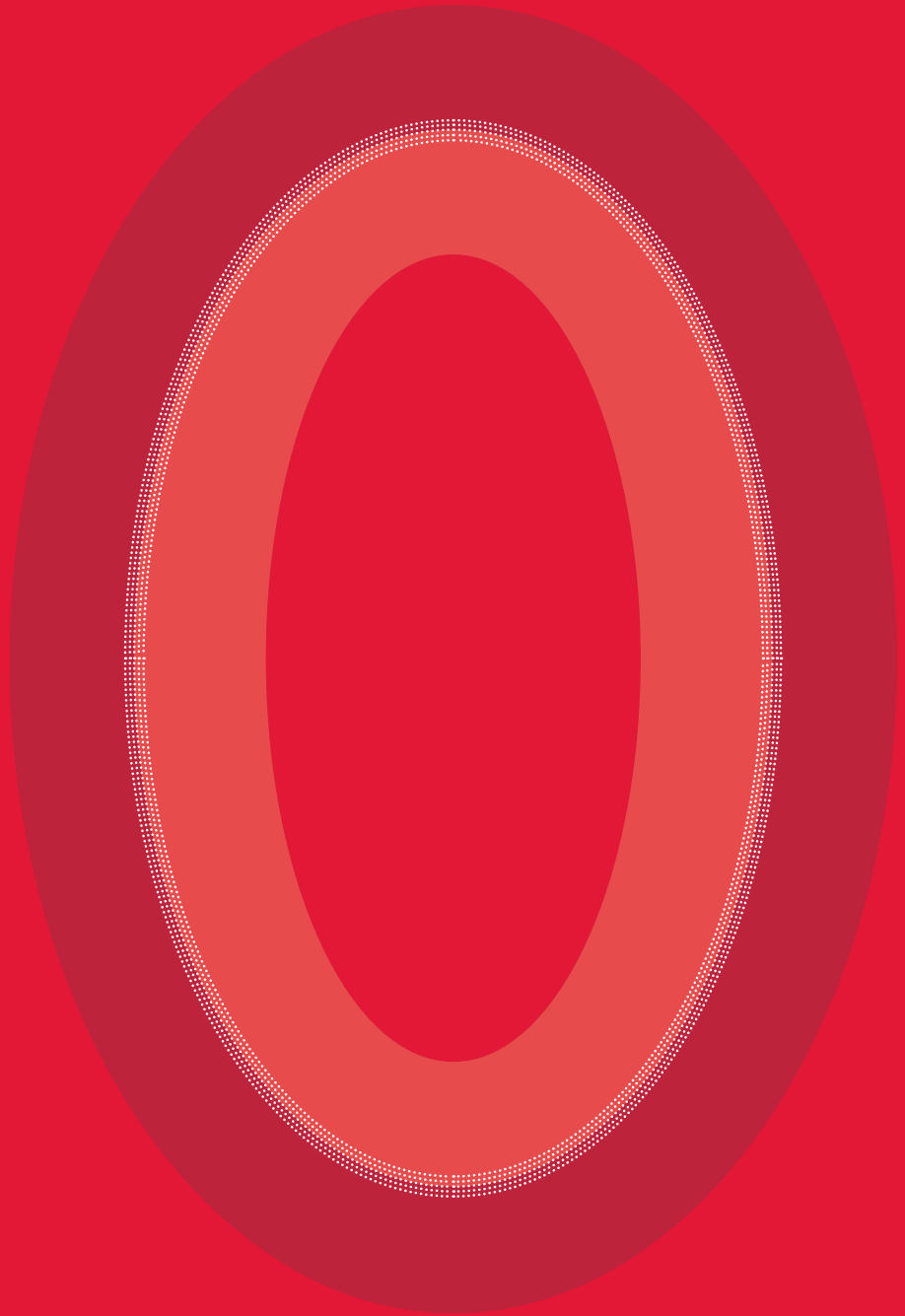
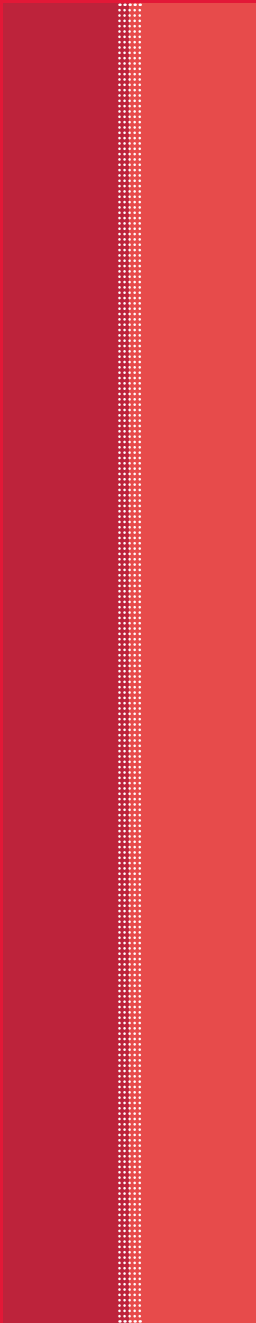
- Individuals within academic units or divisions not owning or acknowledging that some established systems are racists. A general lack of awareness that racist structures exist.
- Choosing (consciously or not) to not call out these structures or processes.
- Lack of knowledge about the narrative in which structures/processes were established at an institution, including general historical contributions to racist structures.
- Perception that change is already underway or being addressed.
- For some institutions, addressing equity is merely another task to be done or an issue of tokenism.

- Legislative regulations that prohibit race-based decisions can be a barrier to progress.
- Student voices, which can be powerful, can also create a potentially adversarial relationship by fostering an "us vs. them" milieu.
- Communication style differences can impact how conversations are initiated, perceived, and resolved.
- Misalignment (varying degrees of commitment to the cause, different approaches to handling change, and differences in behavior among clinicians and preceptors) between educational and clinical settings result in mixed messages to students and frustration for faculty on how to address racism.

Strategies to influence change:

- Agitate, support fearless questions and those who raise them.
- Engage students to voice concerns; as academic institutions, we are/should be accountable to students.
- Partner with scholars to create and/or provide recommendations for processes that can sustain change; emphasis should be on the creation of processes and not dependent on individuals who may leave.
- Encourage constructive scholarship to address structural inequities.
- Create systems that force accountability.
- Identify individual-level competencies that can be used to hold people within systems accountable.
- Review and make changes to DEI requirements in promotion criteria that move from process to outcome criteria.
- Create a structure and plan for how faculty may discuss inequities within a setting.





MACY FACULTY SCHOLARS PROGRAM

A Decade of Supporting
Leaders and Innovators in
Health Professions Education





In 2010, the Josiah Macy Jr. Foundation launched a new faculty development program to nurture educational leaders and change agents in America's medical and nursing schools. The initiative, the Macy Faculty Scholars Program (MFSP), provides substantial financial support and career development opportunities to up-and-coming faculty engaged in transforming health professions pedagogy to better align what is taught and how it is taught with changes underway in health care practice and the needs of patients.

The Foundation welcomed its first class of five Scholars in 2011 and, with the current 2021 class, the total number of Scholars (active and alumni) has reached 56. Those 56 Scholars were selected from 46 different medical and nursing schools. A fundamental goal of the MFSP is to grow a national network of Faculty Scholars who are actively working to advance the Macy Foundation's mission to improve health and health care by advancing the education of health professionals.

The Macy Foundation is small compared to others working in the national health care space, according to William Wright, chairman of the Foundation's board of directors and former managing director at Morgan Stanley, but its mission to improve health by improving health professions education is outsized and ambitious, requiring board members to serve as extremely judicious stewards of the Foundation's resources. "Even though we had every reason to believe the Faculty Scholars Program would succeed, given the thoughtful background work and expert advice that informed its design, it was still a leap of faith for the board to commit to an ongoing expenditure representing nearly one-quarter of our annual budget," said Mr. Wright.

"Now, a decade later, it has proven to be an exemplary program," continued Mr. Wright. "I would happily make that leap again, and I believe my board colleagues would as well. We are impressed every year without fail by the caliber of the new Scholars coming in and the ongoing achievements of the alumni Scholars. I firmly believe that both individually and together they represent a force for positive change in health professions education."

Mr. Wright's opinion of the MFSP is shared widely by the program's leaders and Scholars. For example, Rachel Salas, MD, MEd, a 2019 Macy Faculty Scholar at Johns Hopkins University School of Medicine, called to mind a different kind of force when asked to comment on the career benefits of the MFSP. "I notice some clinicians



just starting out, and they appear to have the [Star Wars] 'force' within them; they have so much potential you can almost see it," she said. "They advance...like Jedi knights, then Master Jedis. As Macy Faculty Scholars, they become like Yoda; they are teachers and exemplars with the power to champion and lead change."

This paper explores the characterization of the Macy Faculty Scholars—and, by extension, the MFSP itself—as a "force" for good in health professions education. In recognition of the MFSP's 10th anniversary, the following pages describe the program at what may be a relatively early point in its history. A decade is enough time to know that the program has relevance and staying power and, even more importantly, that it is having an impact in terms of fostering innovative educational changes and supporting visionary faculty leaders. Since impact is difficult to measure, however, this paper takes a qualitative, anecdotal approach to exploring the program's impact. It takes readers through the design and operation of the MFSP and provides an overview of the Scholars' primary program-related experiences—their projects and their career advancement activities. It concludes with a peek at plans for the program's future.

MFSP Overview: Program Design and Operation

Citing “dramatic changes in the content of medical practice, in the health delivery system, and in the demographics of the patient population,” the MFSP, in its original program materials, called for “equally dramatic changes in the educational system that prepares health professionals for practice and leadership.” The implication in this call for reform: The health professions education system and the health care delivery system, having evolved separately and with little interaction, are not aligned—too many graduates of health professions schools emerge not able to advance and promote the team-based, patient-centered, population-oriented health care that will best serve the needs of patients and the health of the public.

Without a deliberate effort to create synergies between the two systems, the gap between them will continue to widen, with health professions schools becoming less and less likely to graduate health professionals with the demonstrated competencies necessary for the most advanced and forward-thinking clinical practice. Further, while educational reform is imperative if health professions education is to align with health care delivery, the pressures on medical and nursing school faculty to focus on their patient care and research responsibilities have made it difficult for those who want to pursue careers as educators and become leaders in educational reform.

For these reasons, the MFSP was launched to nurture educational leaders and innovators in the health professions. “One of my dreams, when I became president of the Macy Foundation in 2008, was to create a scholars program for health professions educators,” said George E. Thibault, MD, who served as the Foundation’s president until 2018. “I knew from my own experience as faculty at Harvard Medical School that the pathway for educators was, and still is, difficult—there was no training program or real funding available to them, and they were under constant pressure to see more patients and write traditional grant proposals. When I got to Macy, I understood that improving health professions education would require substantial investment not just in efforts to change the process and content of education, but also in the people—the change agents—who we need to lead those efforts.”



PROGRAM DESIGN

Once settled in his new role, Dr. Thibault said that he began investigating what such a program might look like. “We took a couple of years to figure out the details and, in the process, we reviewed a lot of other programs,” he said. His efforts to assess the design and function of other faculty development programs included those found within health professions education—such as those in the faculty academies that, at the time, were increasing in number at U.S. medical schools—and those in higher education more generally.

Also, as part of their efforts, Dr. Thibault and his Macy Foundation staff solicited input from several internationally distinguished medical and nursing educators, including:

- David Irby, PhD, professor emeritus of medicine and former vice dean for education and director of the Office of Medical Education at the University of California, San Francisco (UCSF) School of Medicine;
- Afaf Meleis, PhD, FAAN, LL, professor and dean emerita of the University of Pennsylvania School of Nursing and professor emerita at UCSF;
- Kelley Skeff, MD, PhD, professor of medicine and a co-founder, in 1985, of the Stanford Faculty Development Center for Medical Teachers at Stanford University School of Medicine;



- Christine Tanner, RN, PhD, FAAN, professor emerita of the Oregon Health & Science University School of Nursing and former editor of the *Journal of Nursing Education*; and
- Samuel Thier, MD, professor emeritus of health care policy and medicine at Harvard Medical School as well as a former head of Partners Health System, Massachusetts General Hospital, and the Institute of Medicine (now the National Academy of Medicine).

When the Macy Faculty Scholars Program officially launched in 2010, these five individuals comprised its National Advisory Committee (NAC). As of the program's 10th anniversary, three founding NAC members—Drs. Irby, Tanner, and Thier—had retired from the committee, their places filled by expert educators Larry Gruppen, PhD, professor of learning health sciences and director of the Master of Health Professions Education program at the University of Michigan Medical School; Eve Higginbotham, SM, MD, ML, vice dean for inclusion and diversity and professor of ophthalmology at the University of Pennsylvania Perelman School of Medicine; and Carmen Portillo, PhD, RN, FAAN, executive deputy dean and professor at the Yale School of Nursing.

“By the time we were designing the [Macy Faculty Scholars] Program, we knew we wanted it to have certain features,” said Dr. Thibault. “We wanted our Scholars to be mid-career with enough of a track record to support their continued success, but with time ahead of them to

really dig into an innovative educational research project and carry it through. We knew we needed to provide them with substantial support, enough so that they could devote protected time to a scholarly project and to career development. And we knew the program had to be interprofessional, so we focused it on medicine and nursing, the two largest health professions. A major priority of the Foundation was supporting grant projects in teaching teamwork and collaboration across the health professions, and we wanted that to be one of the innovations the Scholars would explore through their projects.”

In fact, the program was set up so that Macy's priorities for advancing health professions education are the focus of the Scholars' projects. The program provides its Scholars, who must meet certain eligibility requirements, with up to \$100,000 of salary support per year for two years, during which they devote 50% of their salaried time to conducting a scholarly project that seeks to advance health professions education in ways that align with clinical practice. They also receive support that allows them to participate in career development activities. “We were always particularly interested in applicants pursuing projects that align with Macy's priority areas, such as interprofessional education,” said Dr. Thibault. “While we would consider applications that proposed projects in other areas, we would always look at whether or not they had a connection to our priorities.”



PROGRAM OPERATION

Every year since 2011, the MFSP NAC has met and, together with Macy Foundation staff, selected five Macy Faculty Scholars (except in 2014, when they chose six) from a pool of applicants who have been nominated by the dean of their medical or nursing school. Schools may only nominate one faculty member each year.

According to interviews with a handful of Scholars, the nomination process varies by school. At some schools, especially as the program has become more well-known over the years, the nomination process is very competitive. At those schools, interested and eligible faculty members must successfully navigate an internal selection process to receive their dean's nomination, enabling them to then go through the Macy Foundation's rigorous selection process. At other schools, it may be that only one or two faculty members are interested and eligible in any given year, so the process of seeking the dean's nomination is very different.

As one Scholar who applied internally three times before being selected as the nominee said, "My sense is that there are institutions where the dean looks around and spots the faculty member they want to nominate, or maybe a faculty member asks the dean to nominate them, but at other schools, the nomination process is demanding and the competition is fierce."

"The first year, we didn't know what to expect in terms of response to the program," said Dr. Thibault, "and we were thrilled to receive more than 100 applications. We thought there might be a backlog of people interested in a new program like this and that the numbers would drop off, but they never really have." The MFSP currently averages more than 80 applications every year, and, according to Dr. Thibault and several NAC members, the proportion of exemplary applications grows every year, making it more and more difficult to choose only five Scholars from among them.

As mentioned above, the MFSP provides funding to support half of a Scholar's time to pursue their educational innovation project. Each Scholar also receives funds to support career development activities, including participation in developmental coursework designed especially for health professions educators, as well as for travel to the MFSP annual meeting and for other program-related travel. In addition, each Scholar is mentored by a member of the MFSP's distinguished National Advisory Committee. They also are expected to work with a mentor based at their home institution.

"Every Scholar is different when it comes to the types of professional challenges they are wrestling with and the types of assistance they need from us as mentors," said former NAC member Dr. David Irby. "Some are big, creative thinkers and they need help with the practicality and process of their projects, what steps to take and in what order to successfully introduce a new course into the curriculum, for example. Others are exceptionally good at the details, at navigating the process that will ensure their project's success within their institutions, but they might have trouble seeing the bigger picture beyond that success. They might not see that there's a larger national audience for their work or see how their project can help advance health professions education more broadly. And some Scholars, especially at smaller and less wealthy schools, face resource challenges. They may need help connecting with others outside their institutions—finding mentors in other settings, embedding themselves on national committees, presenting at national meetings. Our role as mentors is to help them however and whenever we can."





MFSP in Action: Scholars' Activities, Experiences, and Impacts

During the two-year period that the MFSP provides them with salary support, Scholars devote themselves to an innovative educational scholarship project and participate in career development activities, including mentorship and coursework. Alumni Scholars also retain access to the growing national network of Macy Faculty Scholars and remain part of the Macy "family" in perpetuity. According to a 2020 independent evaluation of the MFSP commissioned by the Macy Foundation: "The increase in academic productivity observed most prominently during the two-year period of the program highlights the importance of investing in health professions education faculty through protected time. The mentorship and community of practice provided were also commonly cited as the most valuable components of the program for achieving its stated goals." These two activity streams are explored more below.

SCHOLARS INNOVATE IN HEALTH PROFESSIONS EDUCATION

The MFSP was developed as a new way for the Foundation to invest in its priority areas—to help develop educational change agents who will undertake projects relevant to Macy's priorities. In the original MFSP materials, the selection criteria by which applicants were judged (and still are) included the "merit of the educational innovation proposed and the likelihood that it will influence national trends in health professions education."

"Macy's priority areas focus on areas where there has been inadequate connection between the education of health professionals and the health care system in which they ultimately work," said NAC member Dr. Kelley Skeff. "The issues facing health care delivery were not being appropriately emphasized in health professions education—at least not at the time the Macy Faculty Scholars Program was developed. Education in the basic sciences and clinical training were delivered effectively, but there was far less emphasis on the social sciences—the connection to the community, to the social determinants of health—until a shift began to bring together clinical teams of providers from medicine, nursing, pharmacy, social work, public health, etc., to



work together instead of separately to meet the needs of patients. The Macy Foundation has long supported this interdisciplinary integration, and the Foundation's efforts are helping to move things along."

In 2010, Macy's stated priority areas included:

- Interprofessional education (IPE) to promote teamwork and interdisciplinary collaboration;
- New models of clinical education that emphasize longitudinal, integrated experiences with patients, families, and faculty;
- New content in health professions curricula, such as quality improvement, patient safety, systems analysis, health economics, and the social determinants of health;
- Education of health professionals to care for underserved populations, including addressing the need for more primary care providers; and
- Programs to diversify the health professional workforce across many dimensions so that it more closely matches the populations to be served.

Over time, the Foundation's leadership and staff have refined this list of priorities, zeroing in on fewer focus areas and adjusting the number and amount of grants and other investments made in any given area. Today's priority areas—updated most recently after



Holly J. Humphrey, MD, became president of the Foundation in 2018—are focused on improving the clinical learning environment and include the following:

- Promoting diversity, equity, and belonging;
- Increasing collaboration among future health professionals; and
- Preparing future health professionals to navigate ethical dilemmas.

“The Macy Foundation has been and will continue to be a major champion of interprofessional education and collaborative practice,” said Macy Foundation President Holly Humphrey, when asked to explain the latest adjustments to the Foundation’s priority areas. “But Macy also has a long history of working to increase diversity in health professions education, and we want to continue that commitment. There also is an epidemic of burnout among providers whose physical and mental well-being are deteriorating in the face of daily ethical dilemmas and challenges for which there are few resources and little or no support to help resolve.”

Aside from the changes made, the Foundation’s list of priorities over the last 10 years has always included

interprofessional education, and the majority of the Scholars’ projects feature research, development, implementation, and/or evaluation related to new interdisciplinary courses, curricula, certificate programs, or other types of resources that support teaching and learning in teamwork and collaborative care (~36 projects¹). Specific examples² of Scholars’ efforts in this topic area include Dr. Laura Hanyok’s 2014 project, *Preparing Learners for Interprofessional Practice in Primary Care: Developing Interprofessional Clinical Learning Teams*, and Dr. Amanda Kirkpatrick’s 2019 project, *Virtual Interprofessional Simulation: A VISION for the Future of Health Professions Education*.

“My project to implement an IPE curriculum had a very positive impact,” said Eve Colson, MD, MHPE, a 2011 Macy Faculty Scholar at Yale University School of Medicine who is now at Washington University School of Medicine (Wash U SOM). “I was on faculty at Yale and getting my master’s in medical education at the University of Illinois Chicago. I was very interested in identifying barriers to interprofessional education for my master’s thesis and was also engaged in efforts at Yale to revise the medical school curriculum. As a Macy [Faculty] Scholar, I was able to immerse myself in developing, along with colleagues from other health professions, a longitudinal, interprofessional, clinical experience for first-year medical

¹ In this section, the numbers of projects that are said to focus on a given priority area should be considered very close approximations because Scholars’ projects undergo modifications following design, implementation, and/or evaluation, and a variety of sources—with varying levels of detail and produced at differing times over the first decade of the program—were used to draft this paper. Plus, projects vary in the levels to which they incorporate different priority areas, so the counting is somewhat subjective.

² Brief descriptions of all Macy Faculty Scholars’ projects are provided in Appendix A and a bibliography of relevant publications and presentations is provided in Appendix B.



students. There had never been anything like it at Yale—such an early clinical experience with other health professions students. I was able to oversee it until I left Yale, and a version of it is still going.”

A significant number of Scholars’ projects (~22) involve efforts that ultimately seek to increase diversity, equity, and belonging in learning environments and care settings, including efforts to develop coursework related to the social determinants of health and health disparities; mitigate the effects of harmful bias in providers’ communication and decision-making; and increase belonging and inclusion among learners, faculty, and patients from underrepresented groups. Scholars’ projects in this broad area include Dr. Kenya Beard’s 2012 project, *Multicultural Education Training Session*, and Dr. John Burkhardt’s 2020 project, *Addressing Unconscious Bias in Medical Care Using Individual Practitioner Data*. Many projects—such as Dr. Cheryl Woods Giscombé’s *Development of the Interprofessional Leadership Institute for Mental Health Equity* (2015), and Dr. Danica Fulbright Sumpter’s *Toolkit for Anti-Racist Teaching in the Health Professions* (2020)—incorporate both the interprofessional education and the diversity, equity, and belonging priority areas.

“It’s important that Macy’s priority areas have evolved over the life of the [Macy Faculty Scholars] Program because it means that they are paying attention,” said Cristina M. Gonzalez, MD, MEd, a 2016 scholar at the Albert Einstein College of Medicine who created a

longitudinal curriculum on implicit bias recognition and management. “Ten years ago, interprofessional education was a relatively new topic, and Macy made major investments in moving it into the mainstream. Today, I don’t know anyone who doesn’t think interprofessional education is important, so it makes sense that most Scholars’ projects have been interprofessional. But I wonder, in 10 more years, if diversity, equity, and belonging will still be a primary focus of the projects, or maybe most projects will be moving on to something new because Macy will have helped advance diversity, equity, and belonging in health professions education the way it has helped to advance interprofessional education.”

Many projects also have a longitudinal component or otherwise introduce time variability and/or competency-based assessment into the traditional time-bound curricula. Examples include Dr. Wendy Madigosky’s project, *Achieving the Vision: A Longitudinal and Interprofessional Patient Safety and Health Care Improvement Curriculum* (2012), and Dr. Benjamin Kinneer’s project, *Transitions in Internal Medicine Education: Leveraging Entrustment Scores and Standards* (2020). Many projects also introduce learners to new content areas, such as health systems science, quality improvement, patient safety, transitioning patients between settings, and providing certain kinds of care or care to certain populations. Examples include Dr. Mayumi Willgerodt’s project, *Addressing Pediatric Oral Health Disparities Through Interprofessional Education and Collaborative Practice* (2013); Dr. Jed Gonzalo’s project, *Interprofessional Co-Learning Health Systems Science Academy to Promote Excellence in Clinical Learning Environments* (2017); and Dr. Tatiana Sadak’s project, *Revolutionizing Dementia Education and Training for Nurses and Health Care Professionals* (2020).

And, while evidence-based research undergirds all of the Scholars’ projects, some Scholars are focused less on the practicalities of designing and implementing new courses, curricula, toolkits, guidelines, or related resources, and focused more on the research that informs advancements in health professions pedagogy. Examples of projects that are primarily research-focused include Dr. Dena Hassouneh’s 2011 project, *Promoting Diversity in the Health Professions*; and Dr. Daniel Schumacher’s 2018 project, *Clinical Competency Committee Entrustment Decisions: An Exploration of Crucial Assessment Data, Barriers, and Gaps*.



All of this is to say that the Scholars' 56 projects—individually and in the aggregate—are improving and advancing health professions education.

According to expert nursing educator and NAC member, Dr. Afaf Meleis: "The Macy Faculty Scholars Program is a game changer when it comes to supporting educational scholarship. The Scholars are showing their colleagues and peers around the world how to develop and operationalize new teaching models and the best strategies for innovative interprofessional education. They are demonstrating how to develop new curricular content, in areas such as collaborative palliative care. They are showing us how to have very difficult conversations about our own implicit and explicit biases and how to create antiracist teaching environments. I love seeing all the work being done in simulation, in using new technologies to create virtual learning environments.

"The Scholars are sharing all of these innovations with the world through their presentations and publications, and their work with national organizations and on national committees," she continued. "Keeping up with the Scholars gives me ammunition to speak very convincingly about these innovations everywhere I go—and I do go many places globally. My Macy and NAC colleagues do too. I don't think we can overestimate the impact of the ever-expanding body of work being produced by the Macy [Faculty] Scholars—they are growing the field of health professions education through evidence and innovations."

SCHOLARS ADVANCE THEIR CAREERS

"When it comes down to it, we designed a faculty development program," said Dr. Thibault. "The program may give large grants to undertake innovative projects, but ultimately, it's about capitalizing on those projects and spreading educational transformation. The best people to capitalize on them are the Scholars. They are the obvious advocates and champions, so Macy also invests in their professional development as educational leaders and change agents."

The MFSP's career development activities engage Scholars in:

- An expanding national network of peer Scholars;
- A one-on-one mentoring relationship with a member of the National Advisory Committee;
- The Program's annual meeting, typically attended by the full network of current and alumni Scholars;
- At least one Harvard Macy Institute professional development course designed for health professions educators; and
- The *Mastering Medical Teaching* course, taught by Stanford's Dr. Kelley Skeff.

All of the Scholars interviewed for this paper said that they benefit professionally from their interactions with other Scholars—"we're a sort of community of practice," said one. Others supported this observation, noting that many Scholars have collaborated on papers, presentations, and other work. For example, Macy Faculty Scholars Dr. Kenya Beard (2012), Dr. Wrenetha Julion (2012), and Dr. Roberta Waite (2011) have written two papers together: "Racism and the Diversity Policy Paradox: Implications for Leaders," published in *Nursing Economics* in 2020; and "Educators Countering the Impact of Structural Racism on Health Equity," currently under review by *Nursing Clinics of North America*. Plus, each of these three Scholars has collaborated with other Scholars on other papers. Another of the many examples of collaboration: 14 Scholars and Dr. Thibault co-authored an editorial calling for the establishment of an interprofessional professional society in the *Journal for Interprofessional Education and Practice*.³

³ Dow AW, Reising D, Peyre S, Zomorodi M, Hanyok LA, van Schaik S, Karpa K, Colson ER, Hasnain M, Day L, Beard K, Willgerodt MA, Julion W, Madigosky W, Thibault G. Is it time for an interprofessional professional society? *J Interprof Educ Pract*. 2015;1(3-4):79-82. doi: 10.1016/j.xjep.2015.08.001.

"I find the camaraderie among Scholars, with our NAC mentors, and with the Macy team energizing and inspiring," said Deepthiman Gowda, MD, MPH, MS, a 2015 Scholar at Columbia University College of Physicians and Surgeons who is now at Kaiser Permanente Bernard J. Tyson School of Medicine. "I've connected with several Scholars over the years and have developed a wonderful relationship with my mentor, David Irby. When I think back to 2019, when I decided to leave Columbia after 20 years and come to a newly launched medical school, I felt fortunate to be able to consult with other Scholars, with David, and with Holly and George too, about my choice. Those conversations were invaluable to me; I had access to outside perspectives I would not have otherwise had—and they came from people who know me and care about my success.

"You'd have to look at how each and every Scholar's career is evolving to have a better understanding of Macy's impact," Dr. Gowda continued, "but I'd be very surprised if they don't all say that the program has had a transformative effect on their career. For myself, I absolutely know that being a Macy [Faculty] Scholar and being connected to other Scholars across the country has changed my way of thinking about medical education and about my impact at my own institution."

When asked about the career development activities that the MFSP supports, Matt Rustici, MD, a 2021 Scholar at the University of Colorado School of Medicine, said: "Aside from the salary support, which enables me to take risks on my project and push the boundaries of innovation in ways I could have never done if I was working full time and trying to complete my project on the side, being a Macy [Faculty] Scholar is also helping me develop as both an educator and a leader. Kelley Skeff has been a great mentor who listens intently and offers insightful and nuanced feedback about my project, while being very supportive of me as a person. Having that kind of personal investment from such an accomplished educator and leader is transforming the way I see myself and my potential impact on medical education.

"My fellow Scholars are also one of the best benefits of the Macy Faculty Scholars. My cohort and I have touch-base meetings every other week and I leave inspired by how intelligent and talented they all are—and also with a few new papers to read. The Harvard Macy Institute course has also been incredible. I have already implemented multiple approaches like logic models, cognitive load theory, and change management theory to my project. I have been a Macy [Faculty] Scholar for



less than a year, but I already feel like a different person than when I started. It has been life-changing and an opportunity for which I am so grateful."

"I can't assign value to my Macy [Faculty] Scholars experience; it has been invaluable," said Roberta Waite, EdD, PMHCNS-BC, ANEF, FAAN, a 2011 Scholar who recently left Drexel University College of Nursing to become dean of the Georgetown University School of Nursing. "My project launched a leadership program with a curriculum that centered leadership competency, health, and social justice. The embedded program is foundational for undergraduates at Drexel's College of Nursing because it teaches students important skills about self, group, and team dynamics and community health. Macy gave me the protected time I needed to launch, evaluate, and refine the course to make it successful—I don't know of any other entity that provides that level of support.

"At the same time," Dr. Waite continued, "Macy helped me grow outside of my institution; they connected me to other Scholars, to mentors, to others in the Macy family, and to people and opportunities outside Macy. They want to see you succeed in your career. They encourage you to publish and present and connect and join and lead. I have formed lifelong friendships."

MFSP in the Future: Relevance and Next Steps

The MFSP has supported (or is currently supporting) 56 faculty members in their efforts to progress in their careers and lead innovative educational reform projects at their institutions and nationally. Given that the MFSP selects faculty who have demonstrated early promise, they very likely would continue achieving and succeeding without Macy's support, but when asked, they readily attest to the immeasurable benefits conferred by their status as Macy Faculty Scholars.

"Becoming a Macy Scholar was like being shot out of a cannon; it accelerated my career in medical education," said Wash U SOM's Dr. Colson. "The Macy Foundation name carries substantial weight; it's no small thing to say you are a Macy [Faculty] Scholar. It opens doors and gives you immediate credibility. Similarly, Johns Hopkins' Dr. Salas said that being a Macy Faculty Scholar is like "a large, glittering feather in my hat; it puts you on the map as a medical educator."

And, while Macy is supporting the Scholars, the Scholars are supporting Macy's (and their own shared) priorities for the future of health professions education. In the next 10 years, the current community of practice will increase from 56 to 106 total Scholars (assuming 50 new Scholars during the program's second decade) at even more institutions. By design, the program's potential for impact will continue to expand.

At the same time, the Foundation is beginning to shift the program's focus in an effort to reach a more diverse field of potential Scholars and further expand its impact. Changes are being introduced based on recommendations that emerged from the independent evaluation of the program, which concluded in 2020. "In implementing these innovations," Dr. Humphrey stated when announcing the changes, "we believe we have an opportunity to not only enhance the Macy Faculty Scholars Program, but also to help ensure that the program aligns even more closely with the priority areas of the Macy Foundation."

Recent changes to the MFSP include the following.

- **A more diverse generation of Scholars:** There is great enthusiasm for developing the next generation of Macy Faculty Scholars—a group that will include more junior and even more diverse Scholars than in the past. Building a cadre of faculty leaders who represent the diversity of learners and patients is both a goal of the Foundation and a goal of medical and nursing schools nationwide.
- **Expanded opportunities:** The Foundation will encourage applications from medical and nursing schools that have not historically applied to the program. The Foundation believes that representation from diverse institutions—differentiated by characteristics such as geography, populations served, and community-based vs. research intensive—will further enrich the MFSP and amplify meaningful change in more institutions and communities across the country.
- **A new timeline:** Scholars will now know of their selection to the program in February, with appointments beginning in July of the same year. This timeline—compared to the previous timeline, which ran later in the year—will more closely align the program with most institutions' academic calendars and planning cycles.

When asked if the MFSP is as necessary and relevant today as it was when it was launched a decade ago, Dr. Thibault said yes. "What we've seen in the past couple of years—the pandemic, the protests calling for social justice—tells us that we must keep preparing health professions educators to innovate and lead change. COVID showed us that the health professions education we've been advocating for—team-based, patient-centered, community-focused—is headed in the right direction, but we must accelerate the transformation because the needs are so great."

"We view the impacts that the Scholars are having as profound," said Dr. Humphrey. "At their home institutions, most Macy [Faculty] Scholars are well-regarded leaders and champions of transformation. At the national level, they are preeminent scholars in their areas of focus. They are the future of health professions education—they're doing the scholarly work, they're developing the curricula, they're championing change at many levels, and they are teaching the next generation of health professionals. We are honored to support them."



2011

Jennifer Myers
Alan Dow
Dena Hassouneh
Roberta Waite
Eve Colson



2012

Wrenetha Julion
Sandrijn van Schaik
Ted James
Wendy Madigosky
Kenya Beard



2013

Kelley Skeff*
Afaf Meleis*
Mayumi Willgerodt
Kelly Karpa
Memoona Hasnain
Lisa Day
Samuel Thier*
David Irby*
(missing: Lauren Meade
and Christine Tanner*)

*NAC Member



2014

Douglas Larsen
Laura Hanyok
Deanna Reising
Sarah Peyre
Charles Vega Jr.
Meg Zomorodi



2015

Bridget O'Brien
Lauren Collins
Lisa Kitko
Cheryl Woods Giscombé
Deepthiman Gowda



2016

Cristina Gonzalez
Tyler Reimschisel
DorAnne Donesky
Temple Ratcliffe
Jing Wang



2017

Edward Hundert*
Jennifer Kesselheim
Angela McNelis*
Ashley Darcy-Mahoney
Maja Djukic
Judith Haber*
Paul Haidet*
Jed Gonzalo
Jeanette Tetrault
Eve Colson

*Mentor



2018

C. Jessica Dine
Cynthia Foronda
Holly Humphrey
Daniel Schumacher
Vineet Arora
(missing:
Coretta Jenerette)

2019

Amanda Kirkpatrick
Michael Westerhaus
Barret Michalec
Richard Greene
Rachel Salas



2020

Danica Fulbright Sumpter
Dimitri Papanagnou
Tatiana Sadak
John Burkhardt
Benjamin Kinnear



2021

Matthew Rustici
Sunny Hallowell
Jennifer Best
Jessica Devido
David Diller



NATIONAL ADVISORY COMMITTEE AND LEADERSHIP

Kelley Skeff
Holly Humphrey
Eve Higginbotham
Carmen Portillo
Larry Gruppen
Christine Tanner
George Thibault
Afaf Meleis





MACY FACULTY SCHOLARS BY YEAR WITH PROFESSIONAL TITLES AND DESCRIPTIONS OF THEIR MFSP PROJECTS

2011 SCHOLARS

EVE R. COLSON, MD, MHPE

Title(s) as a Scholar: Associate Professor of Pediatrics, Yale University School of Medicine

Current title(s): Professor of Pediatrics and Associate Dean, Program Evaluation and Continuous Quality Improvement, Office of Education, Washington University in St. Louis School of Medicine (Wash U SOM)

Project title & description: Dr. Colson's MFSP project, *Using Continuity of Teaching, Patient Care, and Interprofessional Learning: An Innovative Clinical Curriculum at Yale*, piloted an interprofessional curriculum that she designed with colleagues from the nursing school and physician associate program. Dr. Colson and her colleagues designed, implemented, and evaluated the pilot while she was heavily involved in all aspects of a major redesign of the entire medical school curriculum. Following the successful pilot, Dr. Colson integrated the *Longitudinal Clinical Experience (LCE)*—which provides first-year medical students with precepted, clinical learning experiences involving mentors, patients, and other health care providers—into Yale's revamped medical school curriculum. She directed the LCE, which continues today, until she left in 2019 for Wash U SOM, where she now serves as associate dean for program evaluation and quality improvement.

ALAN DOW, MD, MSHA

Title(s) as a Scholar: Assistant Dean of Medical Education and Associate Professor of Medicine, Virginia Commonwealth University (VCU) School of Medicine

Current title(s): Seymour and Ruth Perlin Professor of Medicine and Health Administration, Assistant Vice President of Health Sciences for Interprofessional Education & Collaborative Care, and Interim Division

Chief of Hospital Medicine, VCU School of Medicine/VCU Health System

Project title & description: For his Macy Faculty Scholars project, *IPE Curriculum for Five Health Sciences Schools*, Dr. Dow proposed and oversaw the formation of the Center for Interprofessional Education and Collaborative Care for the purposes of creating, implementing, and evaluating an interprofessional education curriculum across VCU's five health sciences schools. During his two years of Macy funding, Dr. Dow engaged in researching how best to train health professions learners to work in teams and in developing and testing various curricular approaches to teach interdisciplinary students how to work together and practice collaborative care. Today, among his many IPE-related roles, Dr. Dow heads the Center he helped create, which oversees the evolving interprofessional education and practice environments across VCU.

DENA H. HASSOUNEH, PHD, RN, ANP, PMHNP, FAAN

Title(s) as a Scholar: Associate Professor, Oregon Health & Science University School of Nursing

Current title(s): Professor, Oregon Health & Science University School of Nursing

Project title & description: For her MFSP project, *Promoting Diversity in the Health Professions*, Dr. Hassouneh undertook a national study and developed a theoretical understanding of the experiences of faculty of color in health professions education. The research was intended to help health professions schools identify and address the professional needs of faculty of color and improve recruitment and retention of faculty members from diverse backgrounds. Dr. Hassouneh conducted interviews with 100 faculty of color at nursing, medical, pharmacy, and dental schools across the nation. As she was wrapping up the two-year project, she successfully sought support to turn the work into a book. Published by Dartmouth Press in 2018, *Faculty of Color in the Health Professions: Stories of Survival and Success* was the first

book of its kind to address issues pertaining to faculty of color in health professions education.

JENNIFER S. MYERS, MD

Title(s) as a Scholar: Associate Professor of Clinical Medicine and Director of Quality and Safety Education, Perelman School of Medicine at the University of Pennsylvania

Current title(s): Professor of Clinical Medicine and Director of the Center for Healthcare Improvement, Perelman School of Medicine at the University of Pennsylvania

Project title & description: As her institution's inaugural director of quality and safety education, Dr. Myers focused her MFSP project—*A Toolkit for Advancing Quality & Safety Culture for Residents*—on aligning graduate medical education (GME) and the Penn Medicine health system's quality infrastructure. The project enhanced resident education and engagement in health care quality, safety, and value by: expanding a longitudinal pathway for residents interested in quality improvement careers to all programs within GME; launching a house staff quality and safety leadership council to provide a forum for collaboration between residents and the health system's quality and safety leaders; and introducing a series of faculty development programs designed to develop a cadre of quality and safety educators at Penn.

ROBERTA WAITE, EDD, PMHCNS-BC, ANEF, FAAN

Title(s) as a Scholar: Associate Professor and Assistant Dean of Academic Integration and Evaluation of Community Programs, Drexel University College of Nursing and Health Professions

Current title(s): Dean, Georgetown University School of Nursing

Project title & description: Dr. Waite implemented the *Macy Undergraduate Leadership Fellows Program* as a voluntary, for-credit, leadership certificate curriculum for undergraduate nursing students at Drexel. During the two years of her Macy funding, Dr. Waite formed a national advisory committee for the new program, oversaw and evaluated the experiences and learning outcomes of the program's first cohort of nursing students, and modified and further refined the curriculum. Today, the

popular, 10-year-old program enrolls students from all undergraduate programs in the College of Nursing and Health Professions as well as the School of Public Health. Over three courses taken sequentially, students are taught by interdisciplinary faculty. Students learn leadership competencies and gain an individual, team, community, and systems orientation grounded in racial and social justice.

2012 SCHOLARS

KENYA BEARD, EDD, AGACNP-BC, CNE, ANEF, FAAN

Title(s) as a Scholar: Assistant Professor, Hunter College (now Hunter-Bellevue) School of Nursing of the City University of New York

Current title(s): Associate Provost for Social Mission and Academic Excellence, Chamberlain University

Project title & description: For her Macy Faculty Scholars project, *Multicultural Education Training Session*, Dr. Beard developed a multicultural education training program to strengthen the preparedness of nursing faculty in creating culturally responsive learning environments that support the academic success of all students. The six-hour continuing education workshop, whose ultimate goal was to help build a more diverse nursing workforce, used Banks' Conceptual Framework of Multicultural Education to help faculty mitigate stereotypes and deliver a more equitable pedagogy. The program was so successful that it was opened to faculty from all health professions and attracted educators from other institutions. Dr. Beard also founded and directed the Center for Multicultural Education and Health Disparities to disseminate educational research and best practices in building inclusive environments that support academic excellence, workforce diversity, and culturally responsive care.

TED JAMES, MD, MS, FACS

Title(s) as a Scholar: Associate Professor of Surgery and Director of Clinical Simulation for the Interprofessional Clinical Simulation Laboratory, University of Vermont (UVM) College of Medicine

Current title(s): Associate Professor of Surgery and Director of *Transforming Health Care* course, Harvard Medical School; Vice Chair of Academic Affairs,

Department of Surgery, Beth Israel Deaconess Medical Center

Project title & description: Dr. James' MFSP project, *UVM Patient Safety Interprofessional Education Curriculum*, was part of an effort to integrate interprofessional education (IPE) more fully across UVM's medical, nursing, and pharmacy schools. The curriculum, consisting of a blended learning model, team-based learning, and elements of simulation-based education, was very well-received by students, consistently averaging a rating of 4.5 out of 5 on student evaluations. In addition to the student program, Dr. James also was involved in developing an IPE faculty group to help resolve barriers to and increase opportunities for IPE, and a complementary interprofessional faculty development program to build a critical mass of IPE faculty and mentors. Dr. James' work in developing IPE programming spurred several other collaborative interprofessional projects throughout the UVM medical center.

WRENETHA JULION, PHD, MPH, RN, FAAN

Title(s) as a Scholar: Associate Professor, Rush University College of Nursing

Current title(s): Professor and Inaugural Dean for Equity & Inclusion, Rush University College of Nursing

Project title & description: The goal of Dr. Julion's MFSP project is clearly stated in its title: *Transforming Interprofessional Education and Promoting Cultural Competency Through Service Learning*. Dr. Julion and her colleagues developed and implemented an elective, 15-week, online cultural competency course for nursing students, which was expanded to include other health professions students and still continues today. The course, which requires students to partner with nearby community-based organizations around community-driven, service-learning projects, builds health professions students' confidence in their cultural competency skills by getting them out of the academic environment and into local neighborhoods to interact with community members. As part of the coursework, students are required to develop cultural competency frameworks to guide their professional practice.

WENDY S. MADIGOSKY MD, MSPH

Title(s) as a Scholar: Associate Professor of Family Medicine, University of Colorado School of Medicine

Current title(s): Associate Professor, Department of Health Systems Science, and Interprofessional Collaboration Lead, Kaiser Permanente Bernard J. Tyson School of Medicine (KPSOM); and Associate Clinical Professor, Department of Family Medicine, University of Colorado School of Medicine

Project title & description: Dr. Madigosky's MFSP project, *Achieving the Vision—A Longitudinal and Interprofessional Patient Safety and Healthcare Improvement Curriculum for the Anschutz Medical Campus*, brought together faculty and learners from six health professions schools/programs on campus to clarify what was being taught around patient safety and quality improvement. The group used its findings to develop a model quality and safety curriculum, which led to patient safety and quality improvement being integrated into a required, interprofessional course spanning the six schools. In the wake of her Macy project, Dr. Madigosky became an assistant director of the campus-wide Center for Interprofessional Practice and Education (CIPE); represented the School of Medicine to the CIPE Council; and oversaw a two-year, interprofessional curriculum for almost 800 students from six health professions programs. Today, she is leading interprofessional collaboration efforts and supporting the development of health system science curriculum at KPSOM.

SANDRIJN M. VAN SCHAİK, MD, PHD

Title(s) as a Scholar: Assistant Professor of Pediatrics, Associate Fellowship Director for Pediatric Critical Care Medicine, and Education Director of the Kanbar Center for Simulation, Clinical Skills, and Telemedicine Education, University of California, San Francisco (UCSF)

Current title(s): Professor of Pediatrics; Education Director of Kanbar Center for Simulation and Clinical Skills, Director of Faculty Development for the Learning and Caring Environment, and Vice Chair for Education, Department of Pediatrics, UCSF

Project title & description: Dr. van Schaik's MFSP project, *Interprofessional Feedback: The Hidden Challenge*, was focused on understanding how learners and practitioners on interprofessional teams communicate with each other and, specifically, how they provide feedback to one another aimed at optimizing teamwork. During her two years of Macy funding, Dr. van Schaik studied learners' perceptions of feedback received from peers in other disciplines, and she conducted interviews with a variety of stakeholders to identify the factors that impede and

facilitate successful interprofessional feedback. She subsequently used this information to create guidelines for facilitated debriefing after simulation-based team training with interprofessional teams. These debriefing conversations enable team members from different professions to share performance-related feedback effectively with the goal to optimize high-quality collaborative care.

2013 SCHOLARS

LISA DAY, PHD, RN, CNE, ANEF, FAAN

Title(s) as a Scholar: Assistant Professor, Duke University School of Nursing

Current title(s): Professor, University of New Mexico College of Nursing

Project title & description: Dr. Day's *Interprofessional Affective Domain Learning* project was an effort to make professional values more visible in health professions education. Specifically, she taught an existing process-based course in the development of professional nursing values to undergraduate nursing students. She then adapted that course and piloted it with undergraduate nursing and medical students as well as graduate-level physical therapy students to determine the feasibility and perceived benefits of using the course to promote cross-professional understanding and support. The well-received course led students through exercises in recognizing, articulating, interpreting, and reconciling values—their own and those of their colleagues—and in integrating these values into their professional work with individuals, families, and communities.

MEMOONA HASNAIN, MD, MHPE, PHD

Title(s) as a Scholar: Associate Professor and Associate Head for Faculty Development & Research, Department of Family and Community Medicine, University of Illinois at Chicago (UIC) College of Medicine

Current title(s): Professor and Associate Head for Faculty Development & Research, Department of Family and Community Medicine, and Inaugural Associate Dean for Faculty Development, UIC College of Medicine

Project title & description: For her MFSP project, *Longitudinal Team-Based Interprofessional Education to Care for Special Needs Populations*, Dr. Hasnain and

her colleagues developed, launched, and evaluated a 12-month, team-based, community-oriented training course called *Interprofessional Approaches to Health Disparities (IAHD)*. Twenty-eight students from medicine, nursing, pharmacy, and public health participated in the inaugural program year and worked with community-based partner organizations in five focus areas: geriatrics, HIV/AIDS, homelessness, immigrant and refugee health, and intimate partner violence. Student teams engaged in didactic and experiential learning activities, including mentored community-based participatory research and quality improvement projects. The IAHD course has continued to grow; a new "incarcerated populations" focus area has been added, and dentistry students are now included in the course. In 2021, the IAHD course was awarded UIC's inaugural Interprofessional Teaching in Action Matters (I-TEAM) Award for excellence in interprofessional education.

KELLY KARPA, PHD, RPH

Title(s) as a Scholar: Associate Professor, Department of Pharmacology, Penn State College of Medicine

Current title(s): Professor and Associate Dean of Institutional Effectiveness and Innovation, Director of IPE Research, Quillen College of Medicine at East Tennessee State University (ETSU); and Adjunct Professor, ETSU College of Pharmacy

Project title & description: The overarching goal of Dr. Karpa's MFSP project, *Interprofessional Pharmacology Clinical Reasoning (i-PCR) Curriculum*, was to develop and pilot test an interprofessional clinical pharmacology curriculum at Penn State College of Medicine's regional campus. The i-PCR curriculum, which involved use of standardized patients, brought together medical, nurse practitioner, and pharmacy students for a total of 15 classroom hours over six months. Specific learning objectives included: medication optimization, medication communication, dosage calculation, medication selection, and medication monitoring/intensification. A control group of medical students received the same curricular content, but only with other medical students. Assessment data showed that medical students who participated in the interprofessional curriculum performed better than their peers when taking patient histories. Focus groups revealed that none of the medical students had opportunities to interact with pharmacists outside of the curriculum; those that participated in the interprofessional curriculum learned how pharmacists could be incorporated into patient care, while those in the

medical-students-only course were somewhat resentful about not having had the opportunity to take the course with other learners.

LAUREN MEADE, MD, FACP

Title(s) as a Scholar: Assistant Professor, Tufts University School of Medicine; and Associate Program Director for the Internal Medicine Residency Program, Baystate Health

Current title(s): Associate Professor of Medicine, University of Massachusetts Medical School-Baystate

Project title & description: For her MFSP project, *A Safe and Effective Discharge from the Hospital (Safe-D)*, Dr. Meade and her colleagues in the Educational Research Collaborative developed and implemented a hospital patient discharge curriculum for internal medicine residents. To design the curriculum, the Collaborative conducted focus groups with interprofessional teams of patients, learners, nurses, and physicians and asked them what practitioner behaviors are most effective in ensuring a safe hospital discharge. The resulting curriculum required attending physicians to directly observe residents in six behavior categories—medication reconciliation, discharge summary, patient/caregiver communication, team communication, active collaboration, and anticipation of post hospital needs—until the attending determined the resident competent. Dr. Meade and her colleagues found that the curriculum increased physician direct observation, feedback, and entrustment of competence. Attendings perceived an increase in patient-related interprofessional decision-making, but did not perceive an increase in interprofessional communication or collaboration.

MAYUMI WILLGERODT, PHD, MPH, RN, FAAN, FNASN

Title(s) as a Scholar: Associate Professor, University of Washington (UW) School of Nursing

Current title(s): Professor and Vice Chair for Education in the Department of Child, Family, and Population Health Nursing, UW School of Nursing

Project title & description: Dr. Willgerodt's Macy-supported project, *Addressing Oral Health Disparities Through Interprofessional Education and Collaborative Practice*, developed, piloted, and evaluated an interprofessional curriculum designed to teach health professions students both why and how to provide

coordinated, collaborative oral health care to underserved children. The curriculum, known as i-TEETH (or Interprofessional Teams Engaged in Education for optimal Health), included an online module, a seminar, and a four-hour clinical experience, and was first introduced to a group of pediatric nurse practitioners and pediatric dental residents at UW's Center for Pediatric Dentistry. After successfully piloting the curriculum and positioning the Center as a model for interprofessional teaching and practice, Dr. Willgerodt was able to expand the curriculum to include students from other health professions.

2014 SCHOLARS

LAURA HANYOK, MD

Title(s) as a Scholar: Associate Professor of Medicine and Director of Interprofessional Education, Johns Hopkins University School of Medicine, with a joint appointment in the School of Nursing

Current title(s): Associate Professor of Medicine and Assistant Dean, Office of Graduate Medical Education, Johns Hopkins University School of Medicine

Project title & description: For her Macy Faculty Scholars project, *Preparing Learners for Interprofessional Practice in Primary Care: Developing Interprofessional Clinical Learning Teams*, Dr. Hanyok developed, implemented, and evaluated a curriculum in interprofessional primary care practice to prepare health professions learners to meet the needs of complex patients in a patient-centered medical home. Students from chaplaincy, medicine, nursing, and pharmacy participated in learning to provide collaborative care in a patient-centered medical home model. Further, a mentoring program for internal medicine residents to become skilled and effective teachers of interprofessional practice was piloted and met educational objectives. Program evaluations demonstrated benefits to learners with regards to understanding roles and responsibilities and working effectively in teams.

DOUGLAS P. LARSEN, MD, MED

Title(s) as Scholar: Associate Professor of Neurology & Pediatrics, and Director of Medical Student Education for the Division of Pediatric Neurology, Washington University in St. Louis School of Medicine (Wash U SOM)

Current title(s): Professor of Neurology & Pediatrics, and Director of Medical Student Education for the Division of Pediatric Neurology, Wash U SOM

Project title & description: Dr. Larsen's MFSP project, *High-Frequency Learning Goals: A Tool for Culture Change*, introduced medical students to the Patient-Centered Learning Goals program, designed to help them take responsibility for their own learning (a concept known as self-regulated learning) as well as to generate collaborative learning experiences with faculty and resident supervisors. Health professions education seeks to develop life-long, self-regulated learners, but these skills are seldom taught. The program introduced through this project teaches learners to identify weekly learning goals related to patient care and to create a plan for tracking and achieving the goals. As an essential component of the program, students share their goals and plans with their care team members to facilitate collaborative learning in the clinical environment. Dr. Larsen's program was incorporated across third-year clerkships and was subsequently incorporated into a first-year clinical skills course.

SARAH E. PEYRE, EDD

Title(s) as Scholar: Director of the Center for Experiential Learning, Associate Professor of Surgery, and Assistant Professor of Nursing, University of Rochester

Current title(s): Professor, School of Nursing; Dean, Warner School of Education; and Interim Provost, University of Rochester

Project title & description: Dr. Peyre's MFSP project, *Patient-Centered Use of the Electronic Medical Record: Leveraging Technology for Patient Engagement*, involved a thorough needs assessment to understand what different health care stakeholders (patients, learners, providers) want out of technology and identify strategies to increase patient-centered use of the electronic medical record (EMR). The needs assessment included focus groups with patients, direct observations of EMR use in ambulatory settings, and a survey of providers to identify issues and concerns related to use of EMRs in the ambulatory setting. Dr. Peyre found that patients want more EMR use because it facilitates health-related interaction, information, and education largely through patient portals. The survey conducted with primary care teams identified providers' issues regarding EMR use to address patient care needs. The overall needs assessment findings led to the creation of a learner-focused *InTouch*:

Communicating with CARE curriculum on patient portal communication, and an effort to educate physicians on neurocognitive ergonomics centered on the use of the EMR in their practice flow.

DEANNA L. REISING, PHD, RN, ACNS-BC, FNAP, ANEF, FAAN

Title(s) as a Scholar: Associate Professor, Indiana University School of Nursing

Current title(s): Professor, Indiana University School of Nursing

Project title & description: Dr. Reising's MFSP project, *Educational Innovation: Scalable Models of Interprofessional Collaborative Practice Affecting Patient Outcomes*, created a new collaborative program between Indiana University's Schools of Nursing and Medicine, Bloomington. The "Navigator Program" involved Indiana University Health Bloomington transitional care nurse managers working with senior nursing students and first-year medical students assigned to newly discharged hospital patients at risk for readmission. The navigator teams saw patients in the hospital before discharge and conducted routine home visits after discharge. According to evaluation findings, the navigator teams improved transitional care of patients by correcting medication errors, securing additional resources for patients at home, ensuring patient adherence to follow-up visits, decreasing readmissions, and successfully assisting patients in distress. The success of the navigator teams enabled additional financial support for the program, and the program continues in a telehealth design since the COVID-19 pandemic.

CHARLES VEGA, JR, MD

Title(s) as a Scholar: Clinical Professor of Family Medicine, Director of Patient-Centered Advanced Clinical Education Program, and Director of the Program in Medical Education for the Latino Community, University of California, Irvine (UCI) School of Medicine

Current title(s): Clinical Professor of Family Medicine and Associate Dean, and Director of the Program in Medical Education for the Latino Community, UCI School of Medicine

Project title & description: Dr. Vega's Macy-supported project, *Toward a Patient-Centered Curriculum at the University Of California, Irvine*, was focused on introducing

the Patient-Centered Advanced Clinical Education (PACE) Curriculum at UCI School of Medicine. The PACE Curriculum's hallmark is the longitudinal clerkship, which spans the first two years of medical school. It was designed to connect the basic and clinical sciences and build the nascent clinical skills of junior medical students. Dr. Vega launched the PACE clerkship at UCI in 2015 and, today, it is a fundamental part of the medical school curriculum. The longitudinal clerkship requires first- and second-year medical students to spend half a day per week in clinical practice settings for a total of 26 weeks as well as participate in reflection sessions to reinforce clinical lessons. Second-year students also complete a self-directed project to address practice quality and efficiency.

MEG ZOMORODI, PHD, RN, ANEF, FAAN

Title(s) as a Scholar: Clinical Associate Professor, University of North Carolina at Chapel Hill School of Nursing

Current title(s): Professor, School of Nursing; and Assistant Provost for Interprofessional Education and Practice, University of North Carolina at Chapel Hill

Project title & description: Dr. Zomorodi's Macy-supported project, *Developing an Interprofessional Program for Population Health and Systems Management: Empowering the Current and Future Workforce*, implemented and evaluated an interdisciplinary curriculum focused on population health and quality improvement. In its first year, the program brought together 23 students from pharmacy, medicine, social work, nursing, and public health to complete a three-credit course, *Population Health: Interprofessional Management in a Changing Health Care System*, consisting of online modules and face-to-face sessions on team building and population health management. Most of those students then completed a team-based, clinical immersion experience at a partnering primary care site, where they designed and implemented a performance improvement project. Students demonstrated increased understanding of roles and responsibilities of team members and a deeper appreciation for team-based population health management. In 2015, the program expanded to include dental and dental hygiene students, and in 2018, it received funding from the Kenan Trust to establish the Rural Interprofessional Health Initiative (RIPHI), in which students partner with clinical practices to complete quality improvement projects in rural parts of North Carolina. The initial Macy-supported project now has the continued

support of the Kenan Trust for RIPHI (over \$2.5 million) and has engaged 150+ students in nine rural counties. In addition, the Partnership for Population Health curriculum, which engages more than 600 students each year, is now embedded in the Schools of Dentistry, Medicine, Nursing, Pharmacy, and Public Health, and in the physician assistant program.

2015 SCHOLARS

LAUREN COLLINS, MD

Title(s) as a Scholar: Associate Professor, Family and Community Medicine and Geriatrics, Thomas Jefferson University

Current title(s): Associate Provost of Interprofessional Collaborative Practice and Education and Associate Professor, Family and Community Medicine and Geriatrics, Thomas Jefferson University

Project title & description: Dr. Collins' MFSP project, *Creating a VERTICAL Interprofessional Education and Collaborative Practice Curriculum*, built on existing programming to develop a new, comprehensive interprofessional and collaborative practice curriculum. Known as *VERTICAL* (for Value-driven, Ethical, Responsible, Team-based, Interprofessional, Collaborative, Aligned Leaders), the two-year curriculum—which engages more than 2,200 students from across the university's five health sciences schools—features innovative core experiences, advanced elective opportunities, and an "Excellence in Collaborative Practice" transcript designation for students who achieve proficiency. *VERTICAL* also features an electronic mobile application that enables real-time, 360-degree assessment of teamwork behaviors.

CHERYL L. WOODS GISCOMBÉ, PHD, RN, PMHNP-BC, FAAN

Title as a Scholar: Distinguished Professor of Quality of Life, Wellness, and Health Promotion, University of North Carolina at Chapel Hill School of Nursing

Current title(s): Associate Dean and Distinguished Professor of Quality of Life, Wellness, and Health Promotion, University of North Carolina at Chapel Hill School of Nursing

Project title & description: Dr. Giscombé's MFSP project focused on *Development of the Interprofessional Leadership Institute for Mental Health Equity*, a first-of-its-kind effort in its region to address mental health inequities. Based at a community health center in Durham, NC, it engages health professions students—from several colleges and universities and at all levels across a wide variety of disciplines—in a formal curriculum of educational activities and clinical experiences designed to enhance their knowledge and understanding of the health disparities experienced by people from historically marginalized groups. Students are trained to provide culturally sensitive, team-oriented, holistic care focused around the social determinants of health. Since the MFSP support, the Institute received grants from the National Institutes of Health and the Health Services and Resources Administration. It is now called the Interprofessional Leadership Institute for Behavioral Health Equity and its home is in the Giscombé Mind-Body Health, Equity, and Arts Laboratory (mb-HEAL).

DEEPTHIMAN GOWDA, MD, MPH, MS

Title(s) as a Scholar: Associate Professor of Medicine, Columbia University College of Physicians and Surgeons

Current title(s): Assistant Dean for Medical Education and Associate Professor of Clinical Science, Kaiser Permanente Bernard J. Tyson School of Medicine

Project title & description: Dr. Gowda's Macy Faculty Scholars project, *Integration of Interprofessional Education into a Patient-Centered Medical Home: A Contextualized Approach to Achieving Education and Team Effectiveness*, introduced narrative medicine into interprofessional primary care practices to help reduce burnout and enhance team communication and effectiveness. Narrative medicine is a branch of medical humanities in which health professionals engage with literature, art, and reflective writing in order to explore their own, their team members', and their patients' experiences of health care. For one year, Dr. Gowda regularly gathered and implemented narrative medicine activities with health care teams at three primary care clinics. Participants read literature, viewed artwork, wrote reflectively about the experience, and shared their writing with the group. The sessions lasted 30-40 minutes and involved approximately 8-15 people in a given session; nearly 80 total staff participated over the year. Participating staff members expressed acceptance and engagement of the activities as well as support for ongoing implementation.

LISA KITKO, RN, PHD, FAHA, FAAN

Title(s) as a Scholar: Assistant Professor, Pennsylvania State University College of Nursing

Current title(s): Associate Professor and Associate Dean for Graduate Education, Pennsylvania State University Ross and Carol Nese College of Nursing

Project title & description: Dr. Kitko's MFSP project focused on *Developing an Interdisciplinary Primary Palliative Care Certificate Program*. Its twofold purpose was to help expand the pool of health care professionals with knowledge of basic palliative care and improve the quality of care for seriously ill patients. Organized around end-of-life care competency domains established by the Institute of Medicine, the certificate program consists of three required courses: two online, didactic courses on the essentials of interdisciplinary palliative care, and one interprofessional palliative care practicum that can be taken online or in person.

BRIDGET O'BRIEN, PHD

Title(s) as a Scholar: Associate Professor of Medicine University of California, San Francisco (UCSF) School of Medicine

Current title(s): Professor of Medicine and Co-director of Teaching Scholars Program, UCSF School of Medicine

Project title & description: Dr. O'Brien's *Crossing Professional Boundaries for Interprofessional Collaboration* project was developed to help facilitate potentially difficult interactions between interprofessional care team members. Specifically, Dr. O'Brien conducted research to identify common overlaps between health professional roles, perspectives, and expertise and how professionals negotiate these overlaps—which have the potential to spark conflict—when they occur. The research entailed analyzing videos of interprofessional teams engaging in the same standardized patient exercise, which required them to interview a patient and develop a care plan. The video review revealed a variety of “teachable moments” when teammates missed chances to listen to, learn from, and educate one another, and to explore and respect diverse perspectives. The research team used its findings to produce three video re-enactments of teachable moments in interprofessional education that were then used in faculty development sessions and medical education Grand Rounds on research related to the project.

2016 SCHOLARS

DORANNE DONESKY, PHD, ANP-BC, ACHPN

Title(s) as a Scholar: Associate Professor and Director of Interprofessional Palliative Care Education, University of California, San Francisco (UCSF) School of Nursing

Current title(s): Professor Emeritus, Clinical Nursing, UCSF School of Nursing

Project title & description: Dr. Donesky's MFSP project, *Interprofessional Center for Palliative Care Education*, was spurred by the need for interprofessional training designed by and for the four core professions that constitute the palliative care team. Dr. Donesky has built the foundation for the Center by developing a self-sustaining, interprofessional continuing education program for practicing clinicians. The Practice-PC curriculum was designed by Dr. Donesky and colleagues from medicine, nursing, social work, spiritual care, and pharmacy. Launched in 2017 with 36 learners from medicine, nursing, social work, spiritual care, speech therapy, dental hygiene, and respiratory therapy, Practice-PC delivers nine monthly day-long sessions on topics consistent with the National Consensus Project for Quality Palliative Care guidelines, with additional coursework on advanced communication, interprofessional practice, diversity and inclusion, and well-being. The course is currently enrolling its sixth cohort and its community of practice includes more than 130 alumni. Dr. Donesky is the lead author of the first edition of the *Oxford Textbook of Interprofessional Palliative Care*, scheduled for publication in 2023.

CRISTINA M. GONZALEZ, MD, MED

Title(s) as a Scholar: Associate Professor of Clinical Medicine at Albert Einstein College of Medicine and Academic Hospitalist at Montefiore Medical Center

Current title(s): Professor of Medicine, Albert Einstein College of Medicine

Project title & description: For her Macy-supported project, *Implicit Bias Recognition and Management: Teaching the Next Generation of Physicians*, Dr. Gonzalez implemented, evaluated, and disseminated a longitudinal medical school curriculum that ultimately seeks to reduce health care disparities and improve patient outcomes by mitigating the influence of implicit bias on clinical practice

behaviors. Through active-learning exercises and role play, Dr. Gonzalez's curriculum in implicit bias recognition and management teaches participants how to recognize their own biases and mitigate the harmful effects of those biases on both their own clinical encounters (through communication skills and restoring rapport with patients when bias has been perceived) and in addressing perceived bias in the learning environment. Today, Dr. Gonzalez's implicit bias curriculum is taught across the medical school and clinical learning environments and to faculty. Dr. Gonzalez is currently principal investigator on a National Institutes of Health grant to measure associations between implicit racial bias, specific communication behaviors, and medical decision-making.

TEMPLE RATCLIFFE, MD, MS-HPED

Title(s) as a Scholar: Associate Professor/Clinical of Medicine, University of Texas Health San Antonio

Current title(s): Associate Professor/Clinical of Medicine and Director, Internal Medicine Clerkship, University of Texas Health San Antonio

Project title & description: Dr. Ratcliffe designed his *Implementing Collaborative Care on General Medicine Teams* project to advance a previously launched patient-partnered, collaborative, interprofessional care model that immerses learners in an authentic team-based clinical experience. Specifically, he focused his Macy project on improving learners' experiences related to the collaborative care initiative's orientation process, curricular content, and assessment approach. To improve orientation, Dr. Ratcliffe and his team created new orientation processes, including written and audiovisual materials. In terms of curricular content, Dr. Ratcliffe mentored two medical students in the creation of an interprofessional pre-rounding tool and introduced interprofessional simulation for staff and learners new to collaborative care. In the area of assessment, Dr. Ratcliffe focused on team communication behaviors and designed and established initial validity evidence for a team communication tool.

TYLER REIMSCHISEL, MD, MHPE

Title(s) as a Scholar: Associate Professor of Pediatrics and Neurology, Vice Chair for Pediatrics Education, and Director of the Division of Developmental Medicine and the Center for Child Development, Vanderbilt University Medical Center

Current title(s): Founding Associate Provost for Interprofessional Education, Research, and Collaborative Practice, Case Western Reserve University and Cleveland Clinic

Project title & description: For his Macy-supported project, Dr. Reimschisel launched a *Pilot of a Working-Learning Health System (WLHS)*, which he defines as a multi-generational, interprofessional team of health care providers who learn together while delivering comprehensive, longitudinal care—including direct care and care navigation—to panels of patients across all types of settings. For the WLHS project, participating medical, nursing, pharmacy, social work, and physician assistant students enrolled patients with complex care needs into a care navigation pilot through a partnering community clinic in urban Nashville. In addition to care navigation activities, learners also participated in weekly complex care discussion meetings with clinic personnel and weekly team-based learning sessions on health systems science. Building on the success of his Macy project, Dr. Reimschisel collaborated with professionals from multiple institutions and the State of Tennessee to create two interprofessional entities: The Nashville Interprofessional Collaborative and the Tennessee Interprofessional Practice and Education Consortium.

JING WANG, PHD, MPH, MSN, RN, FAAN

Title(s) as a Scholar: Associate Professor, University of Texas Health Science Center at Houston School of Nursing, and adjunct faculty at the School of Biomedical Informatics

Current title(s): Dean, Florida State University College of Nursing

Project title & description: For her MFSP project, *Designing an Innovative Interprofessional Curriculum on Mobile and Connected Health Technologies*, Dr. Wang developed and piloted a team-based curriculum designed to increase students' competency in using mobile and connected health technologies to facilitate the delivery of patient-centered interprofessional team-based care. After extensive interviews and focus groups with key stakeholders, the pilot was implemented across five health professions, including medicine, nursing, biomedical informatics, dentistry, and public health. The curriculum included team training, innovative thinking, patients as health mentors, flipped classroom, and Hackathon concepts. Dr. Wang and her colleagues founded a center of excellence on mobile and connected health

technologies under UTHealth Consortium on Aging as a platform to gather expertise and talent to initiate and sustain the curriculum.

2017 SCHOLARS

ASHLEY DARCY-MAHONEY, PHD, NNP-BC, FAAN

Title(s) as a Scholar: Assistant Professor; and Director of Infant Research, Autism & Neurodevelopmental Disorders Institute, The George Washington University (GWU) School of Nursing

Current title(s): Associate Professor; and Director of Infant Research, Autism & Neurodevelopmental Disorders Institute, GWU School of Nursing

Project title & description: Dr. Darcy-Mahoney's MFSP project, *Integrating Pediatric Social Determinants of Health in Medical and Nursing Education*, focused on improving pediatric providers' understanding regarding the effects of poverty and other social determinants on children's health and development. Specific project goals included development of a collaborative, interdisciplinary course focused on educating health professions learners about pediatric social determinants of health and improving the health and well-being of vulnerable children. An interprofessional, elective course on pediatric adversity was developed and offered in Fall 2017 and has since been evaluated and refined, and course materials were used to create a toolkit. Available through the National League for Nursing's Advancing Care Excellence-Pediatrics initiative, the *Pediatric Adversity and Early Brain Development* toolkit includes four modules that guide nurse educators through integrating social determinants of health throughout undergraduate and graduate curricula.

MAJA DJUKIC, PHD, RN, FAAN

Title(s) as a Scholar: Assistant Professor, New York University Rory Meyers College of Nursing

Current title(s): Distinguished Associate Professor, Jane and Robert Cizik School of Nursing at University of Texas Health Science Center at Houston

Project title & description: Dr. Djukic focused her Macy-supported time on *Integrating Management of Patient Panels Across the Curriculum with Technology*

(IMPPACT): *Project to Prepare RN Students for Enhanced Roles in Primary Care*. The IMPPACT project resulted in a curriculum to prepare pre-licensure nursing students for enhanced roles in primary care by building their panel management competencies using a virtual patient practice model. Specifically, Dr. Djukic, in collaboration with faculty and practice partners, developed six interactive, web-based modules with virtual patient panels to educate nursing students about: 1) empanelment or assigning each patient to a team of providers, 2) risk stratification, 3) identifying population health care gaps, and 4) using standardized care guidelines to close population health care gaps. Both students and faculty participated in the program, with students reporting increased panel management self-efficacy.

JED GONZALO, MD, MSC

Title(s) as a Scholar: Assistant Professor, Medicine and Public Health, and Associate Dean for Health Systems Education, Penn State College of Medicine

Current title(s): Professor, Medicine and Public Health, and Associate Dean for Health Systems Education, Penn State College of Medicine

Project title & description: For his Macy-supported project, Dr. Gonzalo built on a medicine-centric pilot to *Develop an Interprofessional Co-Learning Health Systems Science (HSS) Academy to Promote Excellence in Clinical Learning Environments*. His goal for the HSS Academy: to develop a cadre of leaders, educators, role models, clinicians, and others from across the health professions who can lead health system science education initiatives and apply health systems science principles to improving patient care. Academy enrollees are given time to participate in the nine-month program, which brings together faculty (physicians, nurses, physician assistants), resident/fellow physicians, and graduate-level health professions students to learn health systems science through coursework and pursue a longitudinal, mentored project. More than 160 clinicians from across the health professions have completed the program, which is now in its sixth year. The HSS Academy at Penn State was the prototype for the first annual National HSS Academy conference in 2018.

JENNIFER KESSELHEIM, MD, MED, MBE

Title(s) as a Scholar: Assistant Professor of Pediatrics, Harvard Medical School

Current title(s): Associate Professor of Pediatrics, Harvard Medical School; Program Director, Pediatric Hematology/Oncology Fellowship, Dana-Farber Cancer Institute/ Boston Children's Hospital

Project title & description: Dr. Kesselheim's Macy-supported project focused on *Integrating Interprofessional Education into the Pediatrics Clerkship at Harvard Medical School*. Like so many domains of health care, the care of children is optimally delivered by a well-coordinated interprofessional team, so the Pediatrics clerkship emerged as fertile ground to embed new opportunities for interprofessional learning and assessment. Dr. Kesselheim integrated four new curricular elements into the six-week clerkship, including a case-based, interactive introduction to interprofessional collaboration; daily participation in interprofessional practice; reflection on the interprofessional collaborations observed in the clerkship; and an interprofessional simulation experience to develop communication skills. Outcomes measured included satisfaction along with a pre/post analysis of students' self-assessed interprofessional competency. Since the initiation of the project, Dr. Kesselheim has been given a new leadership role integrating interprofessional education throughout the curriculum, leading to additional opportunities for educational intervention and scholarship. Medical students now complete interviews of interprofessional colleagues on numerous clerkships and reflect with their patients about the interprofessional team's role in delivering holistic, high-quality care.

JEANETTE M. TETRAULT, MD, FACP, FASAM

Title(s) as a Scholar: Assistant Professor of Medicine, Section of General Internal Medicine; and Founding Program Director, Addiction Medicine Fellowship, Yale School of Medicine

Current title(s): Professor of Medicine and Vice Chief of Education for General Internal Medicine, Yale School of Medicine

Project title & description: Dr. Tetrault's Macy-supported project, *Bridging the Gap: Development of an Interprofessional, Longitudinal, Clinical Curriculum in Substance Use and Addiction*, built on her expertise as

a physician who has devoted her career to advancing scholarship and education in addiction medicine. The new curriculum she designed and implemented teaches trainees—medical, advanced practice registered nurse, and physician assistant learners—to apply the chronic disease model to caring for patients with substance use and addiction. The goal is to produce health professionals who: 1) will screen and assess for substance use and substance use disorder, and 2) understand the role of interprofessional teams in developing treatment plans for patients. Dr. Tetrault built the curriculum on a well-established platform—the *Interprofessional Longitudinal Clinical Experience*—created by 2011 Macy Faculty Scholar Dr. Eve Colson.

2018 SCHOLARS

VINEET ARORA, MD, MAPP

Title(s) as a Scholar: Associate Professor of Medicine, University of Chicago Pritzker School of Medicine; and Associate Chief Medical Officer-Clinical Learning Environment, University of Chicago Medicine

Current title(s): Herbert T. Abelson Professor of Medicine and Dean for Medical Education, University of Chicago Pritzker School of Medicine

Project title & description: Dr. Arora's *Evaluating and Sustaining IGNITE to Promote Interprofessional Clinical Learning Environments* project was an evaluation of certain aspects of her IGNITE program. IGNITE (Improving GME Nursing Interprofessional Team Experiences) engages residents, nurses, and other health professionals in performance improvement projects with the ultimate goal of improving patient care. IGNITE engages more than 100 physicians and nurses in nine service lines, including pediatrics, general medicine, and surgery. Dr. Arora and her colleagues evaluated IGNITE to ascertain its overall impact on physician-nurse collaboration, including if it has resulted in the creation of high-performance teams. They found improved clinician engagement for two years, increased interprofessional collaborative competence attainment, and improved patient outcomes.

C. JESSICA DINE, MD, MSHP

Title(s) as a Scholar: Associate Professor, Division of Pulmonary, Allergy, and Critical Care; and Director for Assessment and Evaluation, Department of Medicine, University of Pennsylvania Perelman School of Medicine

Current title(s): Associate Professor of Medicine, Associate Dean of Assessment, and Associate Dean of Faculty Development, University of Pennsylvania Perelman School of Medicine

Project title & description: Dr. Dine's Macy-supported project focused on *Development of an Interprofessional Workplace-Based Assessment Tool for Learners in the Health Professions*. The goal was to create a tool to measure learner competence in multiple domains of interprofessional collaboration. The initial project design, which engaged an interprofessional team of experts, used a reductionist approach that underscored the intricacies of interprofessional collaboration, so Dr. Dine looked at complexity theory and strength-based practice to design an alternative approach. She identified a previously validated strength assessment tool that identifies health professionals' differing patterns of strengths. In her research with this tool, preliminary data suggested that strength patterns may be associated with different collaboration strategies. Dr. Dine will continue developing a new assessment tool based on strength-based strategies.

CYNTHIA FORONDA, PHD, RN, CNE, CHSE, ANEF, FAAN

Title(s) as a Scholar: Associate Professor of Clinical, University of Miami School of Nursing and Health Studies

Current title(s): Professor of Clinical and Assistant Dean for Innovation, Clinical Research, and Scholarship, University of Miami School of Nursing and Health Studies

Project title & description: Dr. Foronda's Macy Faculty Scholars project was titled *Use of Simulation and Telehealth to Create Longitudinal Experiences with Students, Patients, and Families: A New Model Bridging Healthcare Education with Patient Outcomes*. As the name suggests, the project's goals were to: 1) determine the needs of family caregivers to a child with asthma; 2) develop a health education program to meet those needs; 3) have nursing students teach family caregivers about asthma management using simulation, and doctor of nursing practice students use telehealth to support the

caregivers over time; and 4) evaluate the project's impact on student learning, family caregiver outcomes, and child health outcomes. A curriculum for family caregivers was developed that incorporates information on how people with asthma breathe, medication management, and self-advocacy/communication with providers; it was offered through telehealth visits on participants' smartphones.

**CORETTA JENERETTE,
PHD, RN, AOCN, CNE, FAAN**

Title(s) as a Scholar and current title(s): Professor and Associate Dean for Diversity, Equity, and Inclusivity, University of South Carolina College of Nursing

Project title & description: Dr. Jenerette's MFSP project, *Simulation in PhD Programs (SIPP®)*, was designed to fill a gap in the educational preparation of PhD nursing students. Specifically, the project uses simulation to provide nurse-scientists, whose education is typically didactic, with experiential learning activities. The goal is to provide them with an understanding of the impact of social and structural determinants of health while moving them toward a social justice orientation. Three SIPP cases have been integrated into PhD courses: an online authentic learning activity focused on informed consent, semester-long activities integrated into a qualitative methods course, and an escape room scenario. A mask-making SIPP activity focused on identify has been added to orientation. Student feedback has been overwhelmingly positive.

DANIEL J. SCHUMACHER, MD, PHD, MED

Title(s) as a Scholar: Associate Professor of Pediatrics, Cincinnati Children's Hospital Medical Center (CCHMC) and the University of Cincinnati College of Medicine

Current title(s): Professor of Pediatrics and Director of the Research Unit, CCHMC and the University of Cincinnati College of Medicine

Project title & description: For his MFSP project, *Clinical Competency Committee Entrustment Decisions: An Exploration of Crucial Assessment Data, Barriers, and Gaps*, Dr. Schumacher explored the experiences of 22 pediatric residency programs that have implemented entrustable professional activities (EPAs) as a framework for assessment. Dr. Schumacher and his colleagues interviewed residency program leaders and clinical competency committee (CCC) members, asking them a series of questions about their experiences implementing EPAs. Participants described a range of facilitators and

inhibitors that influenced their efforts to implement EPA-based assessment. These fell into four areas: 1) alignment of EPA construct with local views of performance and assessment; 2) assessing EPAs illuminates holes in the residency curriculum; 3) CCC structure and process impacts EPA-based assessment; and 4) faculty engagement and development drives ability to assess EPAs. Areas described as facilitators by some participants were noted to be inhibitors for others. The sum of a program's facilitators and inhibitors led to more or less ability to assess EPAs on the whole. Finally, the first area functions differently from the others; it can shift the entire balance toward or away from the ability to assess EPAs overall.

2019 SCHOLARS

RICHARD E. GREENE, MD, MHPE, FACP

Title(s) as a Scholar and current title(s): Associate Professor of Medicine and Director of Health Disparities Education, Office of Equity Affairs, New York University Grossman School of Medicine

Project title & description: For his Macy-sponsored project, *A Novel Curriculum Assessment Program on Health Equity, Bias, and Cultural Humility*, Dr. Greene pursued several related activities. He and his colleagues reviewed the health equity elements in the undergraduate and graduate medical education (UME and GME) curricula for the purposes of enhancing and expanding those elements and proposing an assessment program. They also developed and introduced a three-week pre-clinical curricular block on health disparities and social determinants of health for incoming medical students, as well as a novel, asynchronous faculty development module to disseminate contemporary ideas about race and gender as social constructs and examples of ways to incorporate this information into teaching. In addition,

Dr. Greene is working on a scoping review of transgender health curricula and their assessments, as well as continuing to explore ways to augment health equity education across UME, GME, and faculty development programming.

AMANDA J. KIRKPATRICK, PHD, RN

Title(s) as a Scholar: Assistant Professor of Nursing, Creighton University College of Nursing

Current Title(s): Associate Professor of Nursing, Creighton University College of Nursing

Project title & description: Dr. Kirkpatrick's MFSP project, *Virtual Interprofessional Simulation (VISion): A VISion for the Future of Health Professions Education*, piloted and promoted a new online, interprofessional course in palliative care. The course employs virtual interprofessional simulation and features a series of instructional modules followed by sessions in which standardized patients act out palliative care scenarios while interdisciplinary teams of students develop care plans and work through the cases together, practicing teamwork and palliative care skills. The course was piloted with students from medicine, nursing, occupational therapy, physical therapy, and social work, and found VISion an effective method for evaluating students' team-based competencies and promoting their self-awareness and self-efficacy in palliative care. Following evaluation of the pilot, chaplaincy, dentistry, and physician assistant students were added; faculty teaching materials were produced; and more palliative care scenarios were developed and integrated.

BARRET MICHALEC, PHD

Title(s) as a Scholar: Associate Dean of Interprofessional Education & Interdisciplinary Initiatives, College of Health Sciences; and Associate Professor, Department of Sociology, University of Delaware

Current title(s): Associate Professor, Edson College of Nursing and Health Innovation; and Director, Center for Advancing Interprofessional Practice, Education and Research (CAIPER) at Arizona State University

Project title & description: Dr. Michalec's MFSP project, *Interprofessional Training in Empathy, Affect, & Mindfulness (I-TEAM)*, demonstrated the value of teaching empathy in an interprofessional education (IPE) setting. He piloted an in-person, semester-long version of the I-TEAM program with students from across the health professions who participated in short lectures on the science of teamwork and interconnectedness, interprofessional group exercises, and "workouts" to stretch and build their interpersonal and communication muscles. Evaluation of the I-TEAM pilot found students

significantly improved their empathy scores and highlighted the value in grounding IPE activities in enhancing common identity and personalization among health profession students. The results of the pilot evaluation also prompted Dr. Michalec to undertake new research into the roles of humility and belonging in health professions education and practice. After accepting a position at Arizona State University as director of CAIPER, Dr. Michalec revamped and restructured the program into I-TEAM By Design™ a now fully online, fully animated, and fully accredited series of e-Learning modules designed to expand the reach and impact of the tenets of the original program to all health care professionals and all health professions students.

RACHEL MARIE E. SALAS, MD, MED, FAAN, FANA

Title(s) as a Scholar: Associate Professor, Neurology and Nursing; Director, Interprofessional Education and Collaborative Practice; and Director, Neurology Clerkship; Johns Hopkins Medicine

Current title(s): Professor, Neurology and Nursing; Director, Interprofessional Education and Collaborative Practice; and Director, Neurology Clerkship; Johns Hopkins Medicine

Project title & description: Dr. Salas' Macy-supported project, *Interprofessional Educator Certificate Program*, is developing a certificate program, to be housed within the Johns Hopkins School of Education, to help health professions faculty members develop their interprofessional teaching knowledge and skills. Currently, only a small number of such certificate programs exist and most are housed in medical schools. Dr. Salas' program, intended as a much-needed centralized organization for health professions faculty engaged in interprofessional education, aims to foster an educational environment that facilitates excitement and innovation around teaching and learning. Dr. Salas is especially focused on creating a precision coaching component within the certificate program to develop participants as health education leaders.

MICHAEL WESTERHAUS, MD, MA

Title(s) as a Scholar and current title(s): Assistant Professor of Global Medicine, University of Minnesota

Project title & description: Through his Macy Faculty Scholars project, *Teaching to Transform: Designing, Delivering, and Evaluating a Community-Informed*

Curriculum on the Social and Structural Determination of Health, Dr. Westerhaus is focused on understanding whether and how social medicine courses with integrated transnational components can foster critical consciousness and global solidarity among health professions learners. He is learning how to use storytelling, performance, and somatic therapy as tools that engage health professionals and deepen their creativity and capacity to address the root causes of health injustice. His goal is to identify the learning environments and educational platforms that best develop health professionals' understanding of the social forces that harm their patients' health and prepare them to respond to and partner with communities to transform society in ways that advance health equity.

2020 SCHOLARS

JOHN BURKHARDT, MD, PHD

Title(s) as a Scholar & current title(s): Assistant Professor, Emergency Medicine and Learning Health Sciences, University of Michigan School of Medicine

Project title & description: For his Macy-sponsored project, *Addressing Unconscious Bias in Medical Care Using Individual Practitioner Data*, Dr. Burkhardt has proposed a new curricular assessment and program evaluation approach for medical education across Michigan Medicine. The approach, which teaches learners about unconscious bias in health care and leverages multiple sources of data to prompt resident self-reflection, has the potential to reduce health disparities. The scalable approach is being piloted with emergency medicine residents. It involves collecting data on participating residents through the electronic medical record and other sources; teaching residents about implicit bias and the social determinants of health using previously validated educational sessions; and evaluating the intervention via a two-stage, randomized control trial of participating residents.

BENJAMIN KINNEAR, MD, MED

Title(s) as a Scholar & current title(s): Associate Professor, Internal Medicine and Pediatrics, University of Cincinnati Medical Center and Cincinnati Children's Hospital Medical Center

Project title & description: Dr. Kinnear's Macy Faculty Scholars project, *Transitions in Internal Medicine*

Education: Leveraging Entrustment Scores and Standards (TIMELESS), is pilot testing competency-based, time-variable training (CBTVT) within a residency program. In 2020, six internal medicine residents (two in each program year) agreed to be progressed through residency based on demonstration of competence as determined by the clinical competency committee (CCC). This differs from the traditional model, in which residents progress at predetermined timepoints at the end of a program year. Three additional residents joined the pilot in 2021. As of February 2022, five out of nine residents were promoted earlier than usual timepoints. Dr. Kinnear and his colleagues are now evaluating how CBTVT impacts CCC decision-making, how residents learn and seek feedback, and implementation challenges and opportunities.

DIMITRI PAPANAGNOU, MD, MPH, EDD(C)

Title(s) as a Scholar: Associate Professor of Emergency Medicine; Vice Chair for Education, Department of Emergency Medicine; Associate Dean for Faculty Development; and Associate Provost for Faculty Development, Health Professions Education, and Scholarship at Sidney Kimmel Medical College (SKMC) at Thomas Jefferson University

Current title(s): Professor of Emergency Medicine; Vice Chair for Education, Department of Emergency Medicine; Associate Dean for Faculty Development; and Associate Provost for Faculty Development, Health Professions Education, and Scholarship at SKMC at Thomas Jefferson University

Project title & description: Dr. Papanagnou's *Bridging Health Systems Science with Preparation for Practice: A Vertically Integrated, Longitudinal Curriculum in Uncertainty* project is preparing undergraduate medical students for the challenging realities of clinical practice. Research shows that medical students struggle with the transition to residency training because clinical practice is full of complexities and uncertainties for which medical school does not prepare them. Dr. Papanagnou and his colleagues designed and are introducing and evaluating a four-year, vertically aligned "uncertainty" curriculum into the health systems science thread of the broader undergraduate curriculum at SKMC. The longitudinal curriculum teaches students how to navigate uncertainty and struggle productively in disorienting situations and settings. There also are plans for faculty development around certain parts of the curriculum, adding informal

and incidental learning to clinical experiences, and interprofessional education with the nursing school.

**TATIANA SADAK,
PHD, PMHNP, ARNP, RN, FAAN**

Title(s) as a Scholar: Associate Professor, University of Washington (UW) School of Nursing

Current title(s): Associate Professor and Interim Associate Dean of Academic Affairs, UW School of Nursing

Project title & description: Through her MFSP project, *Revolutionizing Dementia Education and Training for Nurses and Healthcare Professionals*, Dr. Sadak is overseeing the launch of the Dementia Palliative Care Education Network (DPEN). The DPEN seeks to optimize care for patients living with dementia and make dementia care an exciting professional destination for nursing leaders. Among its activities, DPEN is researching, developing, piloting, and evaluating dementia-focused curricula for undergraduate nursing students and registered nurses, as well as a day-long interprofessional workshop for 500+ students from UW's eight health sciences schools and programs. DPEN also is partnering with a regional network of long-term care facilities to create a clinical learning experience in dementia care for undergraduate nursing students. The DPEN is deeply committed to a core framework of anti-racism, anti-oppression, diversity, equity, and inclusion in every facet of its work.

DANICA FULBRIGHT SUMPTER, PHD, RN, CNE

Title(s) as a Scholar: Clinical Assistant Professor, University of Texas at Austin School of Nursing

Current title(s): Clinical Associate Professor, University of Texas at Austin School of Nursing

Project title & description: Dr. Sumpter is developing a *Toolkit for Anti-Racist Teaching (T-ART) In the Health Professions* for her MFSP project. The T-ART will equip and empower health professions faculty with the training and resources needed to teach their students why institutionalized racism persists as a significant "pre-existing condition" underlying health disparities and inequities. Dr. Sumpter is taking a two-pronged approach to developing the T-ART. One prong involves an integrative review of multidisciplinary literature examining best practices for teaching about racism, and the other

involves surveying faculty about their needs related to teaching about racism.

2021 SCHOLARS

JENNIFER BEST, MD

Title(s) as a Scholar: Associate Professor in General Internal Medicine and Associate Dean for Graduate Medical Education, University of Washington School of Medicine

Project title & description: For her MFSP project, *Adapting the Social Belonging Intervention to Improve Academic and Well-Being Outcomes in Graduate Medical Education*, Dr. Best is implementing and evaluating an intervention to support underrepresented students during the transition from medical school to residency. Working with an interdisciplinary team, she is adapting the "Social Belonging Intervention"—originally developed to assist underrepresented students adjust to college—and employing it with first-year residents across medical, surgical, and hospital-based specialties. She will study the intervention's effects on residents' educational outcomes, engagement, and psychological and physical well-being.

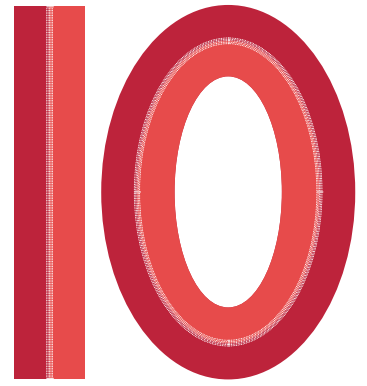
JESSICA DEVIDO, PHD, CPNP

Title(s) as a Scholar: Associate Professor, Duquesne University School of Nursing

Project title & description: For her Macy-supported project, *Maternal Child Health Equity Fellowship for Pre-licensure Nursing Students*, Dr. Devido is developing a program for undergraduate, pre-licensure nursing students to promote equity, cross-cultural sensitivity, and collaboration with community stakeholders. The Maternal Child Health (MCH) Equity Fellowship will: 1) initiate a fundamental shift in learning around MCH inequities; 2) facilitate interprofessional clinical MCH competencies; and 3) increase leadership capacity through enhanced critical thinking, community engagement, and communication.

DAVID DILLER, MD, MHPE

Title(s) as a Scholar: Assistant Dean for Clinical Curriculum and Assistant Professor of Clinical Emergency Medicine and Medical Education, Keck School of Medicine at the University of Southern California



Project title & description: Given the diversity that exists among patients and providers in health care, Dr. Diller's project, *Promoting an Inclusive Learning Environment when Diversity is Discordant between Students, Faculty, and Patients: An Asset-Based Approach*, will investigate how to improve inclusiveness in the health professions learning environment. His work will identify the personal, social, organizational, and material assets that improve learner inclusiveness through a positive deviance inquiry model. These practices and behaviors will be used to promote change throughout the local health care system and will be generalizable to medical schools nationwide.

SUNNY HALLOWELL, PHD, RN, PPCNP-BC

Title(s) as a Scholar: Assistant Professor and Pediatric Nurse Practitioner, Villanova University's M. Louise Fitzpatrick College of Nursing

Project title & description: Dr. Hallowell has been recognized for her work to reduce medication errors via a virtual reality simulation. Her project, *Inclusive Clinical Advocacy – Responsible Education Virtual Gaming Simulation (ICARE VGS)*, will design, develop, and test a game-based, virtual learning environment in which future nurses will learn clinical assessment, decision-making, and patient advocacy skills. The ICARE VGS will empower students to be clinical change agents, problem solvers, and provide care for diverse patients using a health equity lens.

MATTHEW RUSTICI, MD

Title(s) as a Scholar: Associate Professor of Pediatrics, University of Colorado Anschutz Medical Center

Project title & description: For his Macy project, Dr. Rustici is focused on the *Creation of a Patient-Centered, Team-Based National Compendium of Curricular Materials for Transition to Residency (TTR) Courses*. Dr. Rustici, who has been fostering collaboration among those responsible for TTR courses at academic medical centers across the nation, is curating and editing the compendium's contents from existing TTR courses. The new resource will give course directors free and open access to a complete set of materials that can be used in a new or existing TTR course.



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