The Donoho Academy of Clinical and Educational Scholars (ACES)

Annual Report 2024

Office of Faculty Affairs

ACES VISION, MISSION AND GOALS

Vision

To create a community of dedicated educator scholars whose creativity and innovation will address important issues in medical education for tomorrow's physicians.

Mission

To develop and promote expertise in medical teaching, educational scholarship, and leadership among the Renaissance School of Medicine faculty.

Goals

- Enhance the visibility and value of the educational mission within and outside the institution.
- Promote innovative curricular design and evaluation of outcomes.
- Develop an infrastructure to promote and sustain educational innovation and research.
- Create and sponsor institutional programs to enhance faculty development and mentoring for educators.
- Advance, augment and celebrate our skilled teaching faculty.
- Support the professional development and career advancement of all faculty with an academic focus on medical education.
- Serve as an institutional think tank to set strategic directions for our educational mission.

MEMBERSHIP

ACES membership signifies an outstanding commitment to the educational mission of the Renaissance School of Medicine. ACES Fellows seek to engage in academic and clinical scholarship challenges facing our medical or neighboring community and produce novel educational tools to address them. Fellows serve as thought leaders participating in all facets of medical education scholarship.

There are two categories of scholars within ACES: Fellows and Senior Fellows. All Fellows are expected to carry out at least one scholarly project throughout their tenure in the program. Fellows apply and are selected for ACES with a tenure of two years. Senior Fellows have extended their ACES projects beyond the two years and remain engaged with the Academy, participating in the monthly meetings.

The call for applications for Fellows is sent out in the Fall. Applicants (at the Assistant Professor level) submit project proposals, which include their educational proposal, and identify a Faculty Mentor as well as a junior mentee (e.g., residents, fellows or medical students). The Faculty Mentors are expected to advise and guide a Fellow, providing guidance and support for their research project.

The Admissions Committee, led by Dr. Ana Costa, an ACES alum, selects at least two projects/year. Evaluation of proposals is done by a review committee (Drs. A. Costa, S. Ahmad, S. Lane, M. Athanasopoulou and S. Tsirka). The selection is based on the following criteria: clear objectives and outcomes; significance and innovation of the proposal; feasibility and practicality of the proposal; consideration of mentees' involvement and mentoring plan; and use of service learning to solve a problem in the community. Awardees receive a $5,000 research grant to complete the project. Awardees serve a two-year term beginning the following Spring.

NEW ACES FELLOWS

In 2024, two new ACES Fellows were selected: Drs. **Samita Heslin** (Emergency Medicine) and **Zhaosheng Jins** (Anesthesiology). They are mentored by Seniors Mentors Drs ***Steve Vitkun*** and ***Ana Costa***, respectively, who will guide them towards completing their educational scholarly projects.

ACES Fellows and their Projects' Update



Karrisa Weidman, M.D.
Department of Medicine

ACES Fellow: Dr. Karissa Weidman
ACES Mentor: Dr. Sahar Ahmad

Project Title:
Founding a Stony Brook Post-ICU Clinic: Improving Functional Outcomes in ICU Survivors

Accomplishments summary:

Initial patients have been screened by fellows and critical care PAs, who have then been able to be scheduled to be evaluated in my office and initial screening for post-ICU syndrome has taken place. Fellow education has increased both in MICU and in clinic setting.

Accomplishment details:

Approximately 40 patients have been evaluated for post-ICU syndrome and surveys have been implemented, including HADS, PCL-5, EQ-5D-5L, iADLs, ADLs and MOCA as able. In addition to screening patients in the ICU, fellows have been involved in learning about post-ICU syndrome through didactics, rotating through clinic to evaluate these patients, implementing the above surveys during the clinic visit and referring patients to the appropriate providers as indicated. I have also started receiving some referrals from patients who have survived the CCU as well.

Recognitions / Awards / Grants:

Submitted as co-investigator on NIH R01 grant with Dr. Farrukh Koraishy (PI) in the Nephrology department. This is an inter-institutional project working with Indiana University with a proposed randomized clinical trial. We plan to implement an innovative interdisciplinary post-discharge recovery program for ICU survivors of AKI. We hypothesize that a comprehensive intervention addressing multiple risk factors during the post-discharge phase can enhance cognitive function, slow eGFR decline, and improve quality of life in AKI survivors compared to standard routine care.

Goals for 2025:

1. Incorporating data into quality improvement projects for MICU
    a. focusing on physical therapy and early intervention will improve functional outcomes
        i. Utilizing the same critical care PAs and Dr. Qadeer, the head of MICU QI as additional resources. Engaging with the physical therapy department as it appears one of the major hurdles is staffing.
2. Creating a formal curriculum for fellows focusing on ICU liberation and post-ICU syndrome

List of presentations / publications:

SBUH DOM Grand Rounds in 4/2023 on Post-ICU syndrome
Jacobi DOM Grand Rounds 9/2024 on Post-ICU Syndrome

Pan D, Diaz JL, **Weidman K,** Graham J, Goyal P, Rajan M, Lau J, Pinheiro L, Rachid L, Simmons W, Schenck EJ, Safford MM, Lief L. Social Networks as a Key Health Determinant in Acute Illness Recovery: A Lesson from the COVID-19 Pandemic. Am J Med. 2024 Apr 25:S0002-9343(24)00236-5. doi: 10.1016/j.amjmed.2024.04.024. Epub ahead of print. PMID: 38677397.

Abstract:

Di Pan, J.M. Graham, E. Schenck, **K. Weidman**, L.Lief. Exploring the Relationship Between Social Determinants of Health and Recovery Outcomes in Patients Hospitalized with COVID-19 Pneumonia. Chest. October 2023. A815





Kathleen Scarbrough, M.D.
Dpt of Family, Population and Prev. Medicine

Senior ACES Fellow: Dr. Kathleen Scarbrough
ACES Mentor: Dr. Barbara Nemesure

Project Title:
An Educational Initiative to Address Racial Disparities in Prostate Cancer Screening on Long Island, NY

Accomplishments summary:

As of December 2024, we have completed the initial goals of the ACES research project. We evaluated the Stony Brook Cancer Center database to look for disparities associated with stage at diagnosis for prostate cancer. We held several focus groups with African American men to understand their perspective and knowledge about prostate cancer and prostate cancer screening. We published our findings in two separate journals. We worked with our interdisciplinary team and developed and utilized existing educational materials based on our results to reach out to the African American community. We developed a Community Advisory Panel (CAP) to help develop trust in and to work with African American and Latino communities in the Stony Brook catchment area to understand their needs. We expanded our project to include research and educational material development for colorectal and cervical cancer.

Accomplishment details:

1. Creation of an interdisciplinary research and outreach team (CREATORS)
2. We have presented our findings at several different local and national conferences (see below).
3. Creation of CAP – 4 meetings were held in 2023-2024 with members of CAP and the stony Brook Cancer Center Office of Community Outreach and Engagement
4. We have held 3 focus groups with African American men about prostate cancer and prostate cancer screening. We have held 2 focus groups with men and women from the African American community about colorectal cancer and colorectal cancer screening
5. We have extracted and analyzed data from the Stony Brook Cancer Center registry for prostate cancer and colorectal cancer to look for disparities at diagnosis and survival.
6. We have analyzed data from a survey distributed to SBU students regarding the HPV vaccine and a manuscript is being prepared.

Goals for 2025:

1. Submission for publication "Factors Associated with Stage at Diagnosis of Colorectal Cancer: A single-Center Retrospective Study"
2. Submission for publication " Factors Associated with HPV vaccination among college students at a large public university in the Northeast"
3. Conduct focus groups to evaluate effectiveness of educational materials about HPV and HPV vaccines developed or customized for university students
4. Continue to outreach to communities in need of cancer prevention education and screening

List of presentations / publications:

Publications:

1. Caravella G, Grimaldi J, Bily L, Dineen P, Martillotti R, Mock KO, Moyer A, Mermelstein L, Payne JB, **Scarbrough K**, Nemesure B. "Establishing Focus Groups in Underserved Communities: It's All About Trust." IJMSCH (in press)
2. Nemesure, B., Mermelstein, L. K., & **Scarbrough, K. H**. (2023). Does Community Affluence Improve Survival of Colorectal Cancer?. AJPM focus, 2(4), 100144. PMID: 37941822
3. Nemesure, B., **Scarbrough, K. H**., & Mermelstein, L. (2022). Racial Disparities in Prostate Cancer Stage at Diagnosis Persist Despite Community Affluence. Research and Reports in Urology, 14, 305-312. PMID: 36065337

Presentations:

1. Martillotti R, Mock O, Patel, D, Moyer A, Mermelstein L, **Scarbrough K,** Caravella G, Bily L, Grimaldi J, Dineen P, Phillips J, Houghton K, Nemesure B. Shattering barriers to colorectal health disparities in Black communities through transformative power of knowledge, community events, and online resources. Poster presented at: Society of Behavioral Medicine 2024; March 13-16, 2024; Philadelphia, PA
2. Payne J, Martillotti R, Mock O, Francois J, Moyer A, Bily L, Caravella G, Grimaldi J, Jadotte Y, Mermelstein L, Phillips J, **Scarbrough K**, Nemesure B. A Qualitative Study of Black Men's Prostate Cancer Attitudes, Beliefs, Barriers to Care, and Access to Health Information. Poster presented at: Society of Behavioral Medicine 2023; April 26-29, 2023
3. Marzolini L, **Scarbrough K**, Nemesure B. Factors Associated with Stage at Diagnosis of Colorectal Cancer Patients at Stony Brook University Hospital. Poster presented at: 17th Women in Medical Research Day; March 6, 2023; Stony Brook, NY
4. **Scarbough K**, Nemesure B, Mermelstein L. Racial Disparities in Prostate Cancer Persist Despite Community Affluence and Access to Quality Health Care. Poster presented at: 8th Annual NYC Epidemiology Forum; May 23, 2022; New York City, NY



Sobia Khan, M.D.
Department of Medicine

Senior ACES Fellow: Dr. Sobia Khan
ACES Mentor: Dr. Sandeep K. Mallipattu

Project Title:
Develop a novel curriculum to address the psychosocial needs of ESKD (End-stage kidney disease) patients and assist in the transition toward kidney transplantation

Progress Description

Aim 1: To improve literacy on kidney transplant for chronic dialysis patients among Nephrology fellows and to develop and implement educational interventions to eliminate potential barriers in achieving these goals.
Three fellows are recruited each year for the study. The idea is to increase awareness of kidney transplant in the trainees so they can improve the rate of transplant in our chronic dialysis patients and advanced chronic kidney disease patients.
The study has 2 folds, one is improving communication among the fellows and then after that they were taken to the SIM lab for observed structural clinical examination (OSCE). The second part is to increase education and understanding of the transplant among the trainees.
Out of six fellows, 3 fellows have completed the project, the rest have completed the first half of the project (Communication) and on their next ambulatory rotation, they will be assigned to complete the Transplant education and readiness.
We are also looking forward to the start of the new academic year: from 07/2025, the plan will be to recruit more Nephrology fellows from the new incoming class.
By the mid of 2025, we plan to review the data of the project and evaluate whether there was a significant change in the fellows' attitude in communicating with our end stage kidney disease (ESKD) patients and whether they were able to help the patients in dealing with stressful disease in their lives. We also plan to look in our data set to see the improvement in transplant knowledge among our fellows.
Aim 2: To improve the rate of kidney transplant in chronic dialysis patients by investigating the reasons for decline in their participation and to optimize strategies for their awareness and better participation.
We are in the process of recruiting dialysis patients to increase the rate of kidney transplant and will make them aware of the improved life expectancy and quality of life benefits.
The goal of this project is to develop and assess two-year longitudinal novel curriculum for addressing the psycho-social needs of the ESKD patients and help them achieve kidney transplant by educating Nephrology fellows how to address their needs.

List of presentations / publications:

Sobia Khan. "Increasing Transplant awareness & addressing barriers to transplantation among dialysis patients." American Society of Nephrology Kidney Week 2024.



Lauren Maloney, M.D.
Department of
Emergency Medicine

ACES Fellow: Dr. Lauren Maloney
ACES Mentor: Dr. Stephen Post

Project Title:
Impact of Emergency Department Art Therapy on Patients' Self-Reported Pain and Anxiety

Accomplishments summary:

- Interim analysis was performed, results of which were shared at 2 institutional presentations, and an abstract was submitted for the Society for Academic Emergency Medicine annual conference in May 2025.

Accomplishment details:

- The two institutional presentations were for the RSOM Scholarly Concentrations Program Research Day, and the Dept of Emergency Medicine Resident Research Day.
- Will know the outcome of the abstract submission to SAEM by February 2025.

Recognitions / Awards / Grants:

- Received a LINCATS K12 grant for an unrelated project.

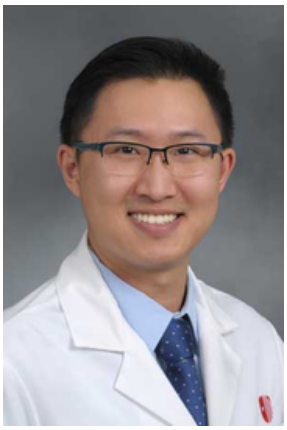
Goals for 2025:

- Conclude patient enrollment and begin data analysis.

List of presentations / publications:

1. Chan C, Resnick A, **Maloney LM**. "Impact of Emergency Department Art Therapy on Patient's Self-Reported Pain and Anxiety: Interim Analysis." SBU Department of Emergency Medicine Resident Research Day; 2024 June 13; Stony Brook, NY

2. Chan C, Resnick A, **Maloney LM**. "Impact of Emergency Department Art Therapy on Patient's Self-Reported Pain and Anxiety." Renaissance School of Medicine at Stony Brook University Scholarly Concentration Program Research Day; 2024 April 25; Stony Brook, NY.



ACES Fellow : Dr. Zhaosheng Jin
ACES Mentor: Dr. Ana Costa

Project Title:
The development of an integrated program for academic mentorship and education

Zhaosheng Jins, MD
Department of Anesthesiology

Accomplishments summary:

Ongoing academic mentorship program operations:

- 30 projects submitted or published in academic year 2023-2024
- 11 projects submitted or published in the current academic year
- To date, the project supported 67 student co-author positions

ASA annual meeting network luncheon:

- Attended by 2 faculty, 1 senior resident and 7 students

Featured article in ASA Monitor

Accomplishment details:

To date, the academic mentorship program has supported 49 published papers, this includes 5 in the current academic year and 26 in the last academic year. The program has generated 67 positions for medical student coauthors. By involving expert faculty both within and outside the department of anesthesiology, we were able to cover a wide range of topics including perioperative care, pain management, surgical (colorectal, pediatric, neurosurgical) and medical (gynecology, stroke management) fields. Over the next year, the goal is to focus project opportunities on under-represented subspecialties within the department of anesthesiology (e.g. general, vascular and obstetric anesthesiology).

The primary resident mentor (research chief resident), who is under direct mentorship of the ACES fellow, has mentored a total of 19 projects (including 15 student coauthors). She is expected to graduate in Jun 2025, the selection and development of the new research chief resident is ongoing. The medical student lead is expected to graduate in Jun 2025 and is pursuing residency in anesthesiology. She has supported the organization of 40 projects. The learning needs survey and academic workshop series planning are currently under way.

At the American Society of Anesthesiologists (ASA) annual meeting this year, the scholar organized and funded a network luncheon for students. This was attended by two department of anesthesiology faculty, a senior resident and 7 students (Group photo below from the network luncheon and students at the departmental group photo).

Lastly, the mentorship program's faculty panel published a featured editorial in ASA Monitor, the official news publication of the ASA.





Group photo from the network luncheon

Goals for 2025:

- Creation of the learning needs surveys and feedback forms
- Implementation of the academic workshop series
- Preparation manuscript on the organization of the academic mentorship process
- Discussing the implementation science framework with institutional experts

List of presentations / publications:

Zhaosheng Jin, Michelle Humeidan, Joy Schabel, Ana Costa, Sergio Bergese. Expanding the Horizon of Resident Development. ASA Monitor June 2024, Vol. 88, 14-15.



Samita Heslin, MD
Department of Emergency

SACES Fellow: Dr. Samita Heslin
ACES Mentor: Dr. Steve Vitkun

Project Title:
Digital Horizons in Emergency Care: Developing & Implementing a Hands-On Digital Health Curriculum for Emergency Medicine Residents

The goal of our project is to address the current gap in Undergraduate and Graduate medical education by developing, implementing, and evaluating a comprehensive Digital Health, Informatics, and Artificial Intelligence (AI) curriculum. This curriculum aims to equip residents and medical students with the knowledge and practical skills necessary to integrate emerging digital technologies into clinical practice, thereby improving patient care and operational efficiency. Designed as a 2-week hands-on elective course, the curriculum will be built using Kern's 6-Step Approach to Curriculum Development and assessed through Kirkpatrick's Levels 1 and 2 of Training Evaluation. By publishing the curriculum, we intend to enable other medical schools to adopt and adapt it, setting a new standard for education in this rapidly evolving field.

Accomplishments summary:

- Created the project group, which will be working with me on creating the curriculum & implementing the course (Drs. S. Heslin and Leah Gancz from Emergency Medicine; Drs Joel Saltz, Janos Hajagos, Tengfei Ma, Rachel Wong and Mathew Tharakan from BioMedical Informatics (the last two also from Internal Medicine) and Dr. Mary Saltz from Radiology & Biomedical Informatics).
- We have had several meetings already and have designed the overview of the curriculum, which includes: Timeline of the course design & implementation (; Audience for the course; Literature search; Brainstorm Topics included in the course; Draft Needs Assessment). So far the Project Group creation, the Overview & Audience for the course, the review of Current BMI Edu Programs, the Literature search and the Ideas for Topics for the course and a Draft Needs Assessment have been completed. The next steps (the Complete Needs Assessment, Curriculum design, Application for Macy AI education Grant, the Curriculum piloted with medical students, and the writing of abstract/paper will be completed by Fall 2025.

The course will last 1 or 2 weeks, and will be offered 1 or 2 times a year, with Medical Students & Residents as target audience. It will integrate with BMI Edu Programs, with Bootcamps 2x a year (day long); Programming Bootcamps (multiple days, once a year); Fellowship Program for Radiology (6-8 people), projects, lectures; BMI Clinical Informatics courses; Intro to BMI, Intro to CI ; BMI Grad course curriculum; Intro to BMI, Intro to CI, Programming w/ Life Science Backgrounds ; Clinical Informatics Fellowship, Master's courses; and Resident Rotators.

The Brainstorm topics for the course (will be refined with needs assessment) will include: Introduction to Digital Health, Artificial Intelligence, and Machine Learning in Healthcare; Generative AI and Ambient AI; Mobile Health (mHealth) Applications; Telemedicine and Virtual Care; Wearable Devices and Remote Patient Monitoring; Data Analytics and Clinical Decision Support Systems.

Recognitions / Awards / Grants:

- We are applying for the AI Macy Grant, Due March 2025

Goals for 2025:

- Complete the design of the Course Curriculum
- Implement the course in the medical school
- Apply for the AI Macy Education Grant (due March 2025)
- Submit 1-2 abstracts
- Write & submit 1 manuscript for publication



ACES Mentors' Team



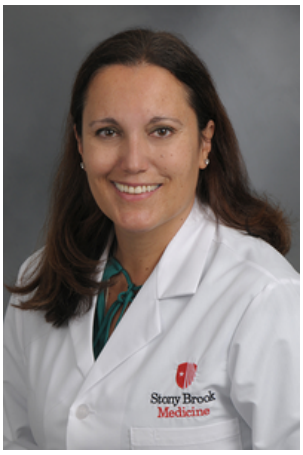
Susan Lane, M.D.

Department of Medicine



Sahar Ahmad, M.D.

Department of Internal Medicine, Division of Pulmonary, Critical Care, and Sleep Medicine



Ana Costa, M.D.

Department of Anesthesiology



Barbara Nemesure, Ph.D.

Department of Family, Population, and Preventive Medicine



Stephen Post, Ph.D.

Department of Family, Population, and Preventive Medicine



Lisa Strano-Paul, M.D.

Department of Medicine, Geriatrics



Sandeep K. Mallipattu, MD, FASN

Department of Nephrology



Steve Vitkun, M.D., Ph.D.

Department of Anesthesiology

Professional Development Opportunities

Many professional development opportunities were provided in 2024:

☑ **February 2024: Developing Clinician Scholars** by Kaveh Sadigh MD,MPH (ACES Alum)
Topics:

- Teaching in the Clinical Setting
- Using Technology to Enhance Learning Opportunities
- Developing a Course / Curriculum (part I)
- Developing a Course / Curriculum (part II)

☑ **April - June 2024: ACES Leadership Series: How to live, Lead, and Work Well -Executive Skills** by Dr. Katherine Biagas, Clinical Professor of Pediatrics, RSOM & Dr. Chelsey Saunders, Co-founder of STEEL Advising
Topics:

- Flourishing, Personal Values, Anti-Bias, and Community
- Decision Matrices and Executive Functioning Skills Assessment
- SMART Goals and Effective Goal Achievement Systems
- Synthesis of Work-Life Rhythms and Tides of Leadership

☑ **October 2024: Library info session: Research Data Management Services at SBU**
by Jessica Koos, Interim Head of the Health Sciences Library

☑ **October - November 2024: AI in Medical Education**

- Dr. Amie Vedral Cohen, Assistant Director of the Center for Excellence in Learning and Teaching (CELT) and Dr. Jenny Zhang, Senior Instructional Designer from the Center for Excellence in Learning and Teaching (CELT) presented the topic: **Generative AI in Medical Education: An introduction to AI tools and applications to assessment** .

- Dr. Luis Colon, instructional designer and Dr. Jenny Zhang, Senior Instructional Designer from the Center for Excellence in Learning and Teaching (CELT) presented the topic: **Generative AI in Medical Education: AI Toolkit for Faculty**

Events and News

ACES Fellow Graduation

The Senior ACES Fellow, **Dr. Erin Hulfish,** completed her project and was awarded a completion certificate at the annual Spring retreat held in March 2024

Project: Creation of an Interprofessional Telehealth Education course

The Renaissance School of Medicine at Stony Brook University developed an *interprofessional telehealth education course* that can be integrated into the health science schools' using a hybrid virtual learning model to address the core competencies of telehealth and interprofessional education (IPE).

This curriculum was designed by faculty from different health professional schools, including the School of Nursing, the School of Social Welfare, and the School of Health Professions. The workgroup developed interactive online modules encompassing the core competencies that formed the backbone of our educational initiative. These modules are available as a standalone curriculum and eligible for CE/CME credit. With the incorporation of the learning modules, the faculty created case-based learning activities to be studied in facilitator-led small groups to allow for the application of core concepts. This course provides standardized assessments with simulated patients with longitudinal follow-up assessments to determine the impact on live clinical encounters.



The Annual ACES Retreat

The Retreat is scheduled for March 27th, 2025 at the Garden Hilton Inn



***Tentative Topic*: Health Care Equity QI: design for Medical Education**