



ECU

BRODY SCHOOL OF MEDICINE

DISTINCTION TRACK PROGRAM ANNUAL REPORT

Academic Year: June 2024 - May 2025

The Brody School of Medicine offers five distinction tracks related to the core missions of the school: Health System Leadership and Transformation, Medical Education and Teaching, Research, Service-Learning and Medical Humanities and Ethics.

The distinction tracks provide a mechanism to formally recognize the exceptional accomplishments of medical students, while allowing the students to independently pursue areas of interest that inspired them to pursue a career in medicine. Mentors work closely with students throughout the rigorous, longitudinal three-year experience, guiding and evaluating their progress throughout.



Track Leader: Weili Chang, MD

Distinction Track: Health System Leadership and Transformation (LINC)

Description of Learning Activities:

Summer Immersion:

The summer immersion is an 8-week program that uses a variety of instructional techniques, using adult learning theory, to educate on Health Systems Science topics. In general, students spent about 15 hours/ week for in-class didactics, activities, and experiences and the remainder of the 25 hours/week on outside experiential activities, independent study, project work and group activities. The students reflect on their educational content through many techniques including small group discussion, debate, written reports, small and large group presentations. Lessons learned during COVID allowed us to move to a hybrid approach for the summer immersion with the ability to invite more outside speakers. Sessions for the immersion included:

The session themes included:

- 1. Systems Thinking and QI**
 - Intro. to Health Systems Science
 - Historical Overview (PS/QI)
 - Systems Thinking
- 2. Patient Safety**
 - Patient Safety
 - QI vs research
 - Sustainability
 - Improvement Models
 - Change Management
 - Six-sigma
 - Patient Safety & RCA
- 3. Health Policy & Leadership**
 - Health Policy
 - International Health
- 4. Data and Economics**
 - Billing & Coding
 - Informatics and Data Analysis
 - Accountable Care Organizations
 - Value Based Care
 - Pricing of Health Care
- 5. Population Health and Public Health**
 - Population Health
 - Public Health

6. Team Science and IPE

- Interprofessional Practice/Team Science
- Interpersonal Communication Skills

7. Communication

- Interpersonal Communication
- Media Training
- Poster Development

8. Wrap Up

- Innovation
- Leading Others
- Change Management

M2: This longitudinal curriculum builds on the summer immersion to enhance the foundational material and include experiential activities in the real-world setting. The students met five times over the year with curriculum included several small group sessions with readings, small group activities, and presentations. The students continued to participate in a mentored quality improvement activity. The progress on the project was monitored through regular updates and submitted reports. The leadership thread was developed with attention to leading others with a DiSC assessment and group feedback session.

M3: This longitudinal curriculum builds on prior year to enhance the foundational material. The curriculum included several small group sessions with readings, small group activities and presentations. Focus for this year was writing of a Quality Improvement manuscript and what makes it different from research manuscript. The students continued participation in their mentored quality improvement activity. The progress on the project was monitored through regular updates and submitted reports. The leadership thread was continued.

M4: This longitudinal curriculum continued to build and enhance the foundational material, culminating in a Capstone experience. The focus of this curriculum for this year was to complete the quality improvement project, prepare a presentation and manuscript suitable for publication. The students had regular activities as they did in prior years. The capstone experience reinforced the completion of the project, preparation of a manuscript and public presentation. The leadership thread was continued with a formal Emotional Intelligence assessment, M2-M4 group meeting for pearls of wisdom from the upper classes, and group feedback session.

Scholarship:

Student Presentations/Publications:

David Oakley: Enhancing Chlamydia and Gonorrhea Screening Rates among Female Teens – A Pediatric Outpatient Clinic Initiative at 2025 ECUH QI symposium

Nathan Barefoot: Increasing Pulmonary Hypertension Screening via Echocardiography in Neonates with Bronchopulmonary Dysplasia in the NICU at 2025 ECUH QI symposium

Pankti Sheth: Timely Extubations in Extremely Preterm Neonates at 2025 ECUH QI symposium (received honorable mention)

Alissa Meyerhoffer: Improving Patient Throughput at the ECU Health Pediatric Specialty Clinic at 2025 ECUH QI symposium (best quick shot presentation)

Elizabeth Davidson: Implementation of a Hydrocortisone Discontinuation Protocol for Septic Shock in ICU Patients at 2025 ECUH QI symposium

Michael Wright: Standardizing Inpatient Pediatric Handoffs to Improve Percentage of Safe Morning Discharges at 2025 ECUH QI symposium

Taha Lodhi: Improving Bone Density Screening Rates at the ECU Adult Medicine and Pediatric Health Care Clinic at 2025 ECUH QI symposium

Chance Rector: Reducing Motion Artifact in Neuroimaging in the ECU Neonatal Intensive Care Unit at 2025 ECUH QI symposium

Grant Brown: Evaluating the Opportunity to Utilize Caprini Score Recommendations for VTE Prophylaxis in Surgical Patients at 2025 ECUH QI symposium

Hannah Rayala: Flag-Based Communication Enhancing Efficiency and Provider Satisfaction at ECU Family Medicine at 2025 ECUH QI symposium

Jonathan Bowling: Improving Sickle Cell Transition from Pediatric to Adult Care at 2025 ECUH QI symposium

Chikeluba Okafor: The Impact of Using a Health Systems Sciences Signposting On Student Health Systems Sciences (Hss) Knowledge During The Preclinical And Clinical Medical Education Curriculum at 2024 MedED Day as well as AAMC poster presentation in Virginia

Pankti Sheth: Timely Extubations in Extremely Preterm Neonates at Future Physicians for Change Conference

Nupur Jain: Screening for Thyroid Dysfunction in Infant Post Iodine Exposure at Future Physicians for Change Conference

Sheth, Pankti, Rodriguez Lopez, Armando, Acharya, Shradha, Dunn, Bryan, A Rare Presentation of Patient with CIDP Found to Have Respiratory Failure and Encephalopathy, *Case Reports in Critical Care*, 2025, 8875501, 6 pages, 2025. <https://doi.org/10.1155/crcc/8875501>

Michael McFayden and Nupur Jain submitted Postpartum Medicaid Coverage Expansion and Changes in The Risk of Health Insurance Loss Within The Second Year After Birth

Lodhi T, Deng F. Demographic Differences in the Radiology Residency Match, 2022 to 2024. J Am Coll Radiol. 2025 Jan;22(1):25-32. doi: 10.1016/j.jacr.2024.10.016. Epub 2024 Oct 29. PMID: 39477140.

David H. Ballard, Alexander Antigua-Made, Emily Barre, Elizabeth Edney, Emile B. Gordon, Linda Kelahan, Taha Lodhi, Jonathan G. Martin, Melis Ozkan, Kevin Serdynski, Bradley Spieler, Daphne Zhu, Scott J. Adams, Impact of ChatGPT and Large Language Models on Radiology Education: Association of Academic Radiology—Radiology Research Alliance Task Force White Paper, Academic Radiology, Volume 32, Issue 5, 2025, Pages 3039-3049, ISSN 1076-6332, <https://doi.org/10.1016/j.acra.2024.10.023>.

Faculty/Team Presentations/Publications:

Integrating Behavioral Health Services into an Existing Interdisciplinary Care Model at a Homeless Shelter presented at works in process at 2025 ECUH QI symposium
Others not relating to track

Non-Scholarly Communication (i.e. news stories):

Nupur Jain, Louisiana'S Creative New Ways to Fight Maternal Mortality. STAT News 2024

Barriers: lost 2 M2 students due to academic challenges. Continued need to balance of track director's time. Ideally an additional 0.05FTE could alleviate some of the scheduling needed for summer immersion to take some of the demand away from Jenna and Jess. This distinction track has the most demand for the track leader during summer emersion and a lot of balancing of wide variety of schedules is needed. Single person lecture email requests can be sent out by the track director, but vast majority of the balancing is being done by Jenna.

Do you anticipate implementing any changes to the program in the upcoming academic year?

Continue to incorporate minor changes based on scholar feedback. Focus on mentors who have projects starting or just started.

Track Leader: David A. Tulis, Ph.D., F.A.H.A.

Distinction Track: Research

Description of Learning Activities:

Summer Immersion (SSRP):

- A total of 23 Brody SOM students participated in the Summer Scholars Research Program (SSRP) in 2024.
- The following topics were covered by faculty during in-person and virtual sessions during the SSRP: developing a research question, searching and appraisal of the literature, data analysis, elevator speech, graphical abstracts, writing abstracts, poster presentations, and social media to promote your research.
- The 2024 Medical Student Scholarship Forum was held in person on July 29, 2024. During this Forum, students interested in participating in the RDT were interviewed. To increase awareness and advertise for the event, the week before the Forum the students posted quick-shot presentations of their project via Twitter.
- Seven SSRP students applied to the RDT and were accepted based on a written application and their presentation/interview during the Forum.

M2:

- Seven M2 students entered this cohort this past year. These students were accepted into the RDT following their successful completion of the SSRP. This M2 cohort met four times this past year in person, and topics covered included how to write for the (scientific) reader, emotional intelligence, where and how to publish a scientific/medical article, data assessment and analyses, writing a scientific manuscript, and facets of time management.

M3:

- Seven M4 students were enrolled in the RDT this past year. This M3 cohort met six times this past year in person, and topics covered included how to write for the (scientific) reader, emotional intelligence, where and how to publish a scientific/medical article, data assessment and analyses, and writing a scientific manuscript.

M4:

- Originally eight M4 students were enrolled in the RDT this past year. One M4 student took an LOA to conduct research and will join the upcoming M4 class; in turn, seven M4 students remained in the cohort and will graduate in May 2025. This cohort met eight times over the year leading up to the mandatory Capstone Block (a 2-week block) in April 2025. Topics during these (mostly) virtual meetings included grant applications and finding a funding source, writing specific aims and overall grantsmanship, how to prepare a resume/c.v., Personal Statement, and biosketch, emotional intelligence, making time for research in Residency, and preparing an abstract and poster for presentation.

Scholarship:

Student Presentations: 24 (CO2025 = 10; CO2026 = 4; CO2027 = 10)

Student Publications: 22 (CO2025 = 10; CO2026 = 11; CO2027 = 1)

Accomplishments: An impressive number of scientific presentations, manuscripts, and awards/honors were made by the M2, M3, and M4 classes this past year in the RDT. The students remained engaged and seemed to benefit greatly from their RDT experiences. In a 'debrief' session at the end of Capstone with the graduating M4 cohort, this class was appreciative of the track and its activities.

Barriers: Several barriers or limitations to progress were mentioned by students in the RDT this past year. These included the unexpected departure of a mentor (with the mentee having to find another mentor), Step 1 studying time (detracting from time for research), lack of availability/time of the mentor (PI), the time-consuming nature of preparing an IRB or IACUC application, and the time-consuming nature of conducting research.

Technical Assistance Needed: This past year assistance has been provided for preparation of IRB/IACUC applications and for funding for student travel and research costs.

Timeline/Work plan for next year: No changes are expected for the upcoming year.

Do you anticipate implementing any changes to the program in the upcoming academic year?

There have been considerable changes in the RDT leadership over the past year and a half. At this point, the RDT needs to stabilize and regroup, and no new changes are recommended for the upcoming year.

Budget/Expenses: Based on student feedback, more explicit information regarding available funding for various RDT uses (such as travel to present at a scientific meeting, purchase of needed laboratory or study resources, etc.) should be made available to both the mentee and the mentor.

Track Leader: Jennifer Crotty, MD

Distinction Track: Service-Learning Distinction Track

Description of Learning Activities:

Summer Immersion: 50 hours of volunteer time with a community partner and weekly didactics focusing on advocacy, Social Drivers of Health, Community Project Development, Leadership Development courses. Group service-project working with the Farmville community garden. Scholars presented their summer work at the Medical Student Summer Research Forum in August 2023.

M2: Longitudinal Resilience Curriculum from A Doctor's Dozen Book and group community service project prepared meal at the Ronald McDonald House. 20 hours of volunteer time required. Longitudinal involvement with community partner. All track Leadership/Personality testing.

M3: Longitudinal SDoH curriculum every 6-8 weeks and group community service. 20 hours of required community service time. Longitudinal involvement with community partner. All track Leadership/Personality testing.

M4: Longitudinal curriculum focusing on transitioning advocacy and service in residency and beyond, participation in All track Leadership/Personality testing, and 2-week Capstone with focus on presentation and completion of projects. All projects presented at Distinction Day. As a group-led a service-learning project at the Food Bank with participants from all distinction tracks.

Scholarship:

Student Presentations/Publications: 4 publications and 12 presentations

Faculty/Team Presentations/Publications: none relating to track

Accomplishments:

SLDT scholars performed 1854 hours of community service between May 2024- April 2025
Four M2s, Three M3, 4and two M4 SLDT scholars were inducted into ECU's Servire Society in recognition of >100 hours of community service by each person in the preceding year.
Dr Crotty served on the state board of directors the American Academy of Pediatrics (NCPeds) for her work in child advocacy and received a grant to work on addressing the youth mental health crisis in NC

M4 awards day:

Arden Vessie received the Department of Emergency Medicine Achievement award.

Spencer Cooke received the Department of Surgery's Frank Longino award.

Dana Shefet received awards from the Dept. of Bioethics & Interdisciplinary Studies and the Edgar T. Beddingfield, Jr., M.D. Family Medicine Award.

Micah Furr, Micah Lee, Dana Shefet were inducted into the Gold Humanism Honor Society.

Barriers: NC Agromedicine was unable to fully support a partnership this summer. Dr Irons, who has been a support and mentor for many of the students, has retired.

Do you anticipate implementing any changes to the program in the upcoming academic year?

Yes, adding a new summer session with the new MHEDT on Readers Theater

Track Leader: Kacie Lord, MAEd., EdS., EdD, and Dave Eldridge, MD (Co-Directors)

Distinction Track: Medical Education & Teaching (MET)

Description of Learning Activities:

Summer Immersion:

- MET Scholars completed a Summer Immersion Teaching Experience (SITE) through the Allied Health Gross Anatomy course, Brody Rise Program, and the Clinical Simulation Center. Students acted as Teaching Assistants throughout these programs, refining their curricular design and deployment, assessment design and evaluation, program development and administration, and peer-to-peer tutoring and feedback skills.
- Scholars completed two online Adult Education courses: ADED 7580 and 6491 through the ECU College of Education.
- Scholars participated in small-group discussion sessions focused on adult learning theory, effective teaching strategies, and medical education research planning. Research planning involved completing IRB online training modules and RefWorks training, and preliminary literature searches, how to create research posters, and how to present scholarly research.
- Scholars reflected on their teaching experiences through an open-ended essay and provided program feedback after the SITE was completed.

M2:

- Scholars secured an educational research mentor in an area of interest, and worked to develop a unique IRB-approved, hypothesis-driven Medical Education Research Project (MERP), designed to fill a curricular gap in either basic science or clerkship curricula.
- Progress was mapped quarterly to promote student completion.
- Scholars engaged in small group meetings throughout the M2 year focused on further developing their understanding of adult education and the role of educators in academic medicine, strengthening their knowledge of instructional tools, and ensuring milestones were achieved in relation to their longitudinal MERP

M3:

- MERP data collection and analysis continued, and scholars prepared preliminary results for presentations locally, regionally, and/or nationally.
- Progress was mapped quarterly to promote student completion.
- One scholar in the track for the M3 cohort required a revision to existing M3-year curricula, with individual progress meetings to discuss topics of specific interest to the learner, USMLE and NBME study strategies, possible pathways for future involvement in academic medicine, and current topics of interest related to institutionally relevant accreditation requirements.

M4:

- Scholars began to prepare final MERP results for presentations at Distinction Day, as well as for manuscript submission to a scholarly journal.
- Scholars finalized teaching portfolio elements prior to residency interview season.
- Scholars completed a Capstone Course in which they honed their peer-review skills, interviewed a clinical educator, and practiced designing and delivering an educational session.
- Select scholars completed online Adult Education coursework (ADED 6495 and 6487), rounding out the requirements for the ADED graduate certificate.

Scholarship:**Student Awards:**

- Emily Tate, Department of Pathology and Laboratory Medicine Curriculum Development
- Hunter Geneau, 1st place Poster at NC Medical Society

Student Presentations/Publications:

- Geneau, Hunter. Simulation Modules for the Identification of Heart Murmurs. 2024 Medical Student Scholarship Forum.
- Geneau, Hunter. The Proportion of Patients Consuming Cannabidiol (CBD) Products with Medications Known to cause a Drug-Drug Interaction. NC Medical Society LEAD Conference.
- Geneau, Hunter. The Utility of a Simulation Auscultation and Ultrasound Module for the Identification of Heart Murmurs: A Supplementation to the Cardiovascular Curriculum - Podium Presentation. BSOM Medical Education Day.

Faculty/Team Presentations/Publications:

- One poster presentation accepted:
 - Lord K, Wade K. "Curricular Leadership and Succession Planning in Undergraduate Medical Education: The Teaching, Education, and Leadership in Academic Medicine (TEL-AM) Faculty Training Program." SPACE Staff Track. September 13, 2024. Virtual.

Accomplishments:

- The track produced two graduates with the MET distinction, all of whom confirmed the track was an invaluable experience, aiding in their ERAS applications. All graduates noted they were asked about this experience in all their residency interviews.

Barriers:

- Summer Immersion Teaching Experiences (SITEs) for the summer anatomy course appeared to provide an unbalanced workload for scholars compared to other sites, based on feedback from students across all SITEs.
 - This workload has been considered during SITE placement for the upcoming cohort of summer immersion students, and track leadership will be working directly with SITE administrators to facilitate a more equitable workload for all learners.

- A number of Step and Course failures in previous cohorts created a very small cohort for the current and graduating M4 classes, which presented a challenge with some of the group work session
 - We have reimagined some of the group-based activities for implementation over the last year, focusing on a more fluid approach for the two cohorts, allowing for more individualized discussion on topics of interest and relevance to the three scholars (1 current M4 and 2 graduating M4's)
 - Students seemed to appreciate this approach and will continue to monitor how these changes may impact the overall track experience
 - With a cohort of 6 scholars for the incoming M2 cohort, we anticipate shifting to accommodate more groupwork that was part of the initial curriculum

Technical Assistance Needed:

- Continued assistance with managing the new VidaNova site and posting items within the course page.
- Jess Day-Brinkley does an amazing job with managing this side of things and is an invaluable part of successfully executing our track.

Additional Recourses Needed:

- No additional resources are being requested at this time

Timeline/Work plan for next year:

- Continuing to explore additional SITEs for future cohorts. As we continue to build our cohorts back up, we would like to expand SITE offerings.
- For the coming year, we have added two new SITEs, including:
 - Program Assistant for the Office of Medical Education
 - Program Assistant for the Office of Faculty Development and Leadership
- We are pursuing partnerships with additional SITEs for future iterations of the course, including:
 - Summer Teaching Assistant for the College of Education
 - Teaching Assistant for the Summer Program for Future Doctors (once the program begins again)
 - Potential Program Assistant opportunities within GME

Do you anticipate implementing any changes to the program in the upcoming academic year?

- While we will continue to utilize the summer anatomy course as a SITE for two scholars this year, we anticipate moving away from this as a SITE for future cohorts
- Given the heavier workload and extended weeks required by the SITE, we are continuing to explore replacement options to ensure all students are receiving placement at a SITE with an equitable workload

Budget/Expenses:

- We hope to have our students attend appropriate conferences to share the results of their innovational endeavors. Some of our students are also requesting additional resources to help start and continue their medical educational projects. More specific expenditures are not available at this time.

Track Leader: Sheena M Eagan

Distinction Track: Medical Humanities & Ethics (MHE)

Description of Learning Activities:

Summer Immersion: The inaugural summer immersion is scheduled to begin in June 2025. This 8-week intensive program is designed to introduce students to core themes in the medical humanities and ethics. Students will engage in a combination of didactic sessions, reflective writing, creative workshops, clinical observations, and archival research.

M2: No M2 activities yet, as this is the inaugural summer and students have not yet progressed to their second year.

M3: No M3 activities this cycle; these components will be developed and implemented as the inaugural cohort advances.

M4: No M4 activities this cycle; these components will be developed and implemented as the inaugural cohort advances.

Scholarship:

Student Abstracts (include abstracts submitted but not accepted): Inaugural cohort, nothing to report at this time.

Student Presentations/Publications: Inaugural cohort, nothing to report at this time.

Faculty/Team Presentations/Publications: Inaugural cohort, nothing to report at this time.

Non-Scholarly Communication (i.e. news stories): A news story about the inaugural cohort of the Medical Humanities & Ethics Distinction Track was included in ECU's alumni communications.

Accomplishments:

- Successful approval and launch of a new longitudinal distinction track at Brody School of Medicine.
- Recruitment and onboarding of inaugural student cohort.
- Development of a comprehensive summer curriculum grounded in ethical reflection, narrative practices, and interdisciplinary inquiry.

Timeline/Work plan for next year:

- Complete first summer immersion (June–July 2025)
- Develop and pilot M2-year activities and mentorship infrastructure (Fall 2025–Spring 2026)
- Begin planning for M3 and M4 integration based on cohort needs and feedback

- Assess and refine curricular components based on inaugural year evaluation

Do you anticipate implementing any changes to the program in the upcoming academic year?

As this is the inaugural year, no major changes are anticipated, but we will be responsive to student feedback and may adjust aspects of the curriculum accordingly. We also anticipate expanding mentorship opportunities and refining the M2 experience.

Budget/Expenses:

Minimal expenses to date. Anticipated upcoming costs include project costs and travel funds for potential student presentations in future cycles. Additionally, funds may be needed for next year's immersion to help cover materials for creative/art-making workshops

Other:

We are deeply grateful for the institutional support that enabled the creation of this track. The early enthusiasm from students and faculty alike has been promising, and we look forward to growing the program in the years ahead.