Renaissance School of Medicine at Stony Brook University

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Medical Education Program Highlights
In 2012, Renaissance School of Medicine (RSOM) began a curriculum renewal process involving over 150 faculty, educators, and students across the education continuum. This led to the creation of the new LEARN (Learning-centered, Experiential, Adaptive, Rigorous, Novel) curriculum, implemented in 2014.1 LEARN provides opportunities for integrated training in basic sciences and clinical disciplines and includes 3 phases: Phase I, foundational phase (18 months); Phase II, primary clinical phase (12 months); and Phase III, advanced clinical phase (16 months).

Curriculum highlights include:
• Transition courses are offered at moments of “educational giant leaps”: entering medical school, entering clinical care, and entering residency. Each transition course provides opportunities for students to prepare for the academic and professional rigors of the next phase in training.
• Translational pillars introduce cutting-edge basic science and translational medicine after each 12-week clinical clerkship block in Phase II. Each pillar is organized around a key biomedical concept, such as medical genetics, cancer biology, and metabolic diseases.
• Professional identity formation (PIF): We have integrated foundational approaches to enhance PIF and wellness among trainees and faculty.2 A standing PIF Working Group provides leadership and support for PIF initiatives.
• WE SMILE (We Can Eradicate Student Mistreatment in the Learning Environment) is a multipronged program to mitigate learning environment concerns.3,4 An educational element reviews policies and procedures related to reporting inappropriate behaviors in the learning environment and group discussions of video case scenarios help students identify inappropriate behaviors. WE SMILE training is integrated into each transition course.
• Selective courses focus on current topics in health care. Examples include addiction and pain, telehealth, business of medicine and value-based care, issues in women’s health and gender-based medicine, and law and medicine. All students are required to choose at least one selective.

Curriculum changes since 2010
• Introduced instructional strategies such as team-based learning and provisions for early clinical exposure
• Moved USMLE Step 1 examination requirement to after completing Phase II
• Launched Mobile Medical Education Initiative, with all entering students receiving an iPad
• Established Pathways to Success, a cocurricular program integrating academic and career advising throughout the curriculum
• Initiated 2 academic support programs—Shelf Rx and Clinical Rx—for students identified as at risk for NBME shelf exam and/or USMLE Step 2 CS failure
• Integrated reflection rounds in all clerkships and Schwartz rounds in several clinical departments
• Increased entering class size from 128 to 136
• Forged new affiliations with Southampton Hospital, Eastern Long Island Hospital, and South Nassau Communities Hospital; in negotiations with Long Island Community Hospital

Assessment
Our 20 institutional learning objectives (ILOs) are based on the 6 ACGME competencies.


Assessment changes since 2010
Phase I:
• Criterion-referenced grading system
• Biomedical Building Blocks, Introduction to Clinical Medicine (ICM), Medicine in Contemporary Society (MCS), Themes in Medical Education (TiME) courses changed to pass/fail
• Customized NBME exams in all Integrated Pathophysiology courses
• 16 OSCEs and a summative final OSCE in ICM

Phase II:
• 10 clerkship OSCEs (formative and/or summative), several with a Step 2 CS style postencounter note
• 11-station end-of-Phase II Clinical Performance Examination with postencounter notes and a lab interpretation station
• Competency-based common clerkship evaluation (C3) form used in all core clerkships, providing cumulative competencies mapping for each student

Phase III:
• Standardized subinternship/elective evaluation form
• Established robust curricular management and program evaluation system using both internal and external quality metrics5

Curriculum
Curriculum description
Parallel curriculum or tracks

Three-year MD (3YMD):

- Introduced a 3-year curriculum track for a limited number (10–15 per year) of selected students. Acceptance into the 3YMD track includes provisional acceptance into an RSOM residency.
- 3YMD students take all Phase I and II courses in LEARN, a 4-week Health Systems Performance summer course before the start of Phase I, Teaching in Medicine and
- Interprofessional Conversations on Cultural Diversity courses, and participate in GME mentored experiences during the second summer.
- 3YMD students complete 135 weeks of credit and must fulfill the same clinical and professional requirements as students in the 4-year LEARN track.

See Table 1—Academic Requirements for LEARN and 3YMD Parallel Tracks.

Pedagogy

Changes in pedagogy since 2010:

- Increased active learning by additional lab sessions, small-group discussions, clinical pathologic conferences, team-based learning, audience response sessions, community site visits, and clinical skills sessions; all Phase I courses use active learning strategies
- Increased the number of standardized patient encounters and formative and/or summative OSCEs in Phase II

Clinical experiences

Regional clinical campus:

- In 2011, Winthrop University Hospital was designated as a regional clinical campus for 40 clerkship students. All curricular elements, clinical experiences, assessment rubrics, and grading policies were standardized across the 2 campuses. Compliance was closely monitored by the Office of Academic Assessment and Evaluation. However, due to hospital mergers, they are not affiliated with us effective 2020.

Clinical sites:

- The primary clinical training site is Stony Brook University Hospital (SBUH), a 628-bed academic medical center. SBUH is the region’s only tertiary care center and Level I trauma center.
- The Veterans Affairs Medical Center (VAMC) at Northport includes a 508-bed acute care hospital, a 190-bed nursing care home facility, and 5 community-based outpatient clinics.
- Nassau University Medical Center (NUMC), a public teaching hospital, is a 631-bed acute care facility and Level I trauma center. NUMC also has an 889-bed long-term care facility.
- Stony Brook Southampton Hospital is a 125-bed facility located on the rural south fork of Long Island. It is a New York State-designated Stroke Center and its emergency department is the sole provider of emergency care on the South Fork.
- South Nassau Communities Hospital is a 455-bed, acute care, not-for-profit teaching hospital in Nassau County.
- Eastern Long Island Hospital is a clinical training site for emergency medicine. Mather Hospital, another local community hospital, is used for internal medicine.

Required longitudinal experiences

Three required longitudinal courses extend throughout Phase I:

- ICM teaches medical interviewing and physical examination skills, procedural skills, and clinical reasoning skills. Students participate in simulated patient encounters with standardized patients and develop their skills with real patients with their assigned preceptor.
- MCS gives students opportunity to expand their knowledge of ethical, social, cultural, and humanistic issues in medicine. The course focuses on core competencies in the areas of professionalism and ethics, communication, self-awareness, social context of medicine, and health care systems.
- TiME is presented in five 1-week blocks capping each major Phase I course. Each block centers on a different population or life stage.

Required and elective community-based rotations

Students rotate through community-based outpatient clinics in their primary care clerkship. During this clerkship, all students participate in a home hospice visit and home care visit, done in collaboration with community-based agencies.

Challenges in designing and implementing clinical experiences for medical students

Recruiting high-quality site directors and educators, increasing clinical demands faced by clinical educators, competition for clinical sites from new regional medical schools, and exclusive training contracts by international medical schools are ongoing challenges to maintaining high-quality clinical sites.

Curricular Governance

The Curriculum Committee is appointed by the Faculty Senate to develop and supervise the UME curriculum. The committee is chaired by a faculty member voted by the Faculty Senate and an administrative cochair, the vice dean for academic and
faculty affairs. The committee’s functions include specifying the educational mission, goals, and objectives of the medical school; defining the overall content of the curriculum; determining the length and sequence of courses; recommending course directors to RSOM’s dean; and reviewing and evaluating courses and the curriculum as a whole. Members include clinical and basic science faculty; representatives from the VAMC, affiliate sites, health sciences library, and medical informatics; and student representatives from each phase. The committee meets monthly.

See Figure 1—Curricular governance.

While course and clerkship directors’ salaries are maintained through their respective departments, administration of the curriculum and course and clerkship coordination are managed centrally in the Office of Academic and Faculty Affairs (OAFA). Academic and career advising through the Pathways to Success program is provided centrally along with a full-time learning specialist and specialty advisors recruited from clinical departments. All course and curriculum evaluations, ongoing quality monitoring, management of learner assessments, and curriculum database are coordinated centrally through this office as well.

Education Staff

The OAFA provides leadership, service, and support to advance RSOM’s mission in UME. The vice dean of academic and faculty affairs conducts regular bimonthly meetings with the senior leadership team. The OAFA is supported by 9 administrative assistants and the RSOM registrar. It holds weekly meetings with the medical informatics liaison to discuss ongoing updates to our homegrown curriculum database. The OAFA also maintains regular communications with other offices across the health sciences schools and the University. The OAFA is not responsible for premed, GME, or CME activities.

See Figure 2—Undergraduate medical education administration.

The Office of Admissions, led by an associate dean, is responsible for all aspects of the admissions process. The assistant dean for student diversity reports to the associate dean. Final decisions regarding admissions are made by the Executive Committee of the Committee on Admissions, which reports to the Faculty Senate.

The Office of Curricular Affairs includes 2 assistant deans and the director of Pathways to Success, who report to the vice dean. Each assistant dean is responsible for planning and implementing curricular initiatives in their assigned curricular phase. One assistant dean cochairs the Phase I Subcommittee and one cochairs the Phase II/III Subcommittee.

The Office of Academic Assessment and Evaluation is responsible for ongoing collection/collation of student feedback through end-of-course evaluations, surveys, focus groups, end-of-phase assessments, and OSCE assessments. This office is also responsible for developing evaluation summaries of courses/ clerkships, curricular phases, and overall curricular monitoring. Compliance with LCME requirements is monitored on an ongoing basis. Biannual LCME dashboards are presented at the Phase I and Phase II/III Subcommittee meetings. The director coordinates, conducts, and reports new course proposals, course QI reports, and Level 1 and 2 course reviews in conjunction with faculty to the Learner Assessment and Curricular Evaluation Subcommittee.

Figure 1 Curricular governance.
The Office of Student Affairs is led by an associate dean. The registrar, an assistant dean for student affairs, who is responsible for financial aid support, and a learning specialist report to the associate dean.

The Office of Faculty Affairs (OFA) is led by the vice dean, supported by the director of faculty development. OFA is responsible for all faculty development activities. Annual retreats, workshops, faculty awards, and longitudinal faculty development programs are coordinated through this office. Working in conjunction with the Donoho Academy of Clinical and Educational Scholars, OFA supports junior faculty scholarship through a project implementation and mentoring program.

**Faculty Development and Support in Education**

**Professional development for faculty as educators**

- Through a generous grant, the Donoho Academy for Clinical and Educational Scholars was established in 2014.

- A Donoho Distinguished Teaching Professorship was established. One-on-one mentoring to enhance faculty scholarship is provided to junior members over a 3-year period.

- 3 longitudinal faculty development fellowship programs are offered through OFA: Master Educator Fellowship Program, Career Development Fellowship Program, and Leadership in Medicine Fellowship Program. Cohorts of 12–18 faculty are accepted into these programs through a rigorous application process.

- Faculty workshops are offered monthly on various topics. External speakers are regularly invited to present on topics of general interest to faculty.

- An annual medical education retreat with keynote speakers, multiple workshops, and discussions are regular features.

- OAFA coordinates all annual junior and senior faculty awards for teaching, leadership, research, mentoring, and citizenship.
Role of teaching in promotion and tenure

• There are tenure-eligible (educator–scholar) and tenure-noneligible (clinician–educator, basic science educator) tracks for promotion of faculty whose primary career focus is education. Promotion on these tracks requires submission of a summative educator portfolio highlighting the faculty member’s achievements in any of the 5 educator activity domains. A standard point system is used to determine eligibility for promotion.

Initiatives in Progress

• Multiple mini-interviews will become an element of the admissions process beginning with recruitment for students entering in 2021.
• The 4-week generic Transition to Residency course at the end of Phase III will be divided into 2 components: a 2-week general training session plus 2-week specialty-specific activities and experiences.

References