It has been well-established that medical students in the pre-clinical years are seeking exposure to skills, procedures, and mentors within the field of medicine. As a result, many medical schools have interests groups in various specialties, such as an Emergency Medicine Interest Group (EMIG) where students can gain exposure, mentorship, and experience. Often, the curriculum for these groups is student-driven, and based on the interests of the learners, who may not know their future needs. While some studies have shown that students often choose hands-on skills sessions, faculty may prefer to focus on developing proficiencies that may be needed for standardized exams and actual patient care.

At our institution, we are implementing a novel approach in our EMIG for making connections from the pre-clinical years to the clerkships: A student-driven integrative curriculum approach to simulation. Our goal is to provide an outline for linking the basic science knowledge obtained in the first and second years with a related practicum in the simulation center at the time it is addressed in the curriculum. We have designed three pilot sessions to run in parallel to the pre-clinical themes of cardiovascular physiology, respiratory physiology, and neurology. For example, while the medical students are exploring the theme of respiratory gas exchange, the concurrent lab session is designed to focus on relative skills in this area such as endotracheal intubation, blood gas analysis, etc. Likewise, for the neurology theme, students review neurology cases and are introduced to lumbar punctures.

Regardless of career-path, medical students can benefit from a self-directed approach to their education in the skills lab, especially if taught in parallel to the existing undergraduate curriculum.