How will Science Content be Included in Trek?

Basic Medical Science, Clinical Science, and Health Systems Science are integrated throughout the curriculum in several ways, depending on the phase of the curriculum. The foundational concepts behind all three of these science pillars are introduced to students during their first year of Medical School in the Plains, or the preclerkship phase. This phase places all science learning in the context of patient chief concerns and patient cases. These elements will start students off with a foundation that they can build upon as they advance in their education.

Advanced science concepts, or science concepts from each pillar that all students need to know, that were not taught in the Plains, are integrated into Foothills (LIC clerkship) phase. In this phase, students work with preceptors in the core medical specialties and participate in classroom learning that brings together advanced concepts from the Basic Science, Clinical Science, and Health System Science pillars as it relates to the patients that they are seeing. Previously designed stand alone “Advanced Science Courses” material is now being integrated into the Foothills curriculum. Students can then further enhance their learning by selecting experiences in the individualized Alpine (post clerkship) and Summit (post match) phases of the curriculum, as described previously. In this phase, students choose two Individualized Integrated Science courses (from a menu of options) where they learn selected cutting edge science concepts in the classroom alongside caring for related patients in advanced subspecialty clinical settings.

These Individualized Integrated Science courses will each be offered to students twice a year and have similar types of overarching requirements and learner outcomes that are achieved within a unique context for each course. For example, students in an Individualized Cardiovascular Connections Integrated Science course might demonstrate achievement of the CUSOM outcome: “form clinical questions, retrieve and appraise evidence to advance patient care” by exploring the science behind and emerging evidence for utilizing a left atrial appendage close device for reducing stroke risks in atrial fibrillation.

Currently, our Advanced Science Course Directors are reviewing all of their topics and objectives for the current curriculum and working with Course Directors and Content Directors to ensure that science content is spiraled throughout the Trek curriculum in a direct and intentional manner. We look forward to sharing more information about the menu of Individualized Integrated Science courses that we hope
to offer as a part of the Trek Curriculum in the coming months. If you would like to learn more about the Alpine and Summit phases, please review the May 2020 Curriculum Reform Newsletter. For questions about, or interest in, the integration of advanced (required for all students) and individualized (pursued by small cadre of students) science concepts throughout the Trek curriculum, please contact chad.stickrath@cuanschutz.edu.