

Get to Know NYCPM Faculty:
Patrick Gannon, PhD
Professor, Pre-Clinical Sciences



Dr. Gannon, who joined NYCPM in October 2020, is the Director for both the General and Lower Extremity Anatomy courses.

The trajectory of his education suggests a wide-ranging curiosity: BS in Chemistry and Physics from the University of Central London in 1978; following the move from his origin in Yorkshire, England to New York City, an MS in General Anthropology from CUNY Hunter College in 1990; and a PhD in Physical Anthropology from CUNY Graduate Center in 1995. Dr Gannon has held a variety of academic positions at both medical and scientific institutions. He has taught undergraduate human gross anatomy, and post-graduate courses in head and neck surgical anatomy. In tandem he conducted translational clinical research studies for 25 years in the Department of Otorhinolaryngology at Mount Sinai Hospital New York.

Dr. Gannon loves anatomy (“it is the foundation of physical anthropology”), and especially admires ... the human foot. He considers the human foot a “biomechanical masterpiece,” and espouses the conviction of evolutionary anthropologists that walking upright in early humans began with the adaptation of a bipedal foot. Feet first. Our bipedal foot enabled our forebears to travel much further than our common ancestor with chimpanzees; this innovation allowed humans to run, to explore, to carry and use tools, and to develop a system of communication to accommodate exploration over long distance, perhaps starting with a gestural language. Those activities enabled by the bipedal foot may have led to enhanced brain growth and development in our earliest ancestors, or perhaps the brain and foot evolved in tandem, as a package deal.

Chimpanzees don’t have an arch system in their feet, Dr. Gannon reminds us; our development of an arch and associated ligaments were utilized to help muscles for walking upright versus knuckle walking. It meant that feet and legs wouldn’t tire as much, thus allowing our bipedal ancestors to forage and hunt over longer distances. Humans are an exploratory species: “Mars next.” Arches are an amazing, adaptive system that rapidly evolved. The bipedal foot could have “happened suddenly, as a major adaptive shift. We weren’t even full-blown modern humans yet (*Australopithecus afarensis*), but fossilized footprints, discovered by Mary Leakey in Laetoli, Tanzania, spoke to us about an early manifestation of upright bipedalism from 3.6 million years ago,” he says.

See <https://humanorigins.si.edu/evidence/behavior/footprints/laetoli-footprint-trails>

Get to Know NYCPM Faculty:
Patrick Gannon, PhD
Professor, Pre-Clinical Sciences, cont'd

Encouraging podiatric students to become life-long learners, Dr. Gannon introduces them to evidence-based medicine. He wants students to learn research methods, to discover evidence for a particular (anatomical) region, to bring anatomy to life. He wants them to be able to utilize the best available evidence (under the conditions of decision-making under uncertainty) that helps them to formulate analytical clinical reasoning skills, diagnoses and treatment plans for their patients, as well to develop research questions and ways to translate ideas to “testable hypotheses.”