

FACULTY profile in leadership

SURVIVAL *of the* FITTEST

Story: Audrey R. Browka Photos: Eric Frick



Long hours and late night study sessions may be the hallmarks of pre-med students but today it takes more than good grades and great MCAT (Medical College Admissions Test) scores for students to secure a spot in medical and health professional schools.

"Applying to medical school is arguably one of the most competitive, grueling and expensive processes," explains **Adam P. Pendleton '08, MBA '09**, a first-year medical student at Creighton University.

In fact, it's been compared to a modern-day game of survival of the fittest. Consider these hard facts: The Association of American Medical Colleges says less than half (46 percent) of the estimated 42,300 individuals who apply to medical school are accepted each year. For Canisius students, it's a much healthier condition. In the past 10 years, the college's pre-med students realized an 80 percent acceptance rate - well above the national average. Factor in those students who applied to dental, podiatry, optometry, chiropractic and veterinary schools in the past decade and the college's acceptance rate climbs to 93 percent.

Nevertheless, the acute reality is that admission into health science professional programs is increasingly selective - and only the most fit - those students "with firsthand medical experiences, active involvement in research and a genuine sense of humanity" - will endure, says **Laura J. Hechtel, PhD**, director of the Dr. George E. Schreiner '43 Pre-Medical Center. "While good grades and good schooling are still very important, it's vital for today's applicants to be well-rounded," adds Hechtel. "Therefore it's my job to make Canisius students the most attractive applicants out there to health professional schools."

Canisius appointed Hechtel as director of the Schreiner Pre-Medical Center in June 2008. The university already had a long-standing national reputation for the strength of its pre-professional programs in the health sciences, due in large part to **Marguerite D. Kermis '72, PhD**, professor of psychology,



Pictured (l-r): Laura J. Hechtel, PhD, director of the Dr. George E. Schreiner '43 Pre-Medical Center, along with biology majors Bishoy Saleeb '13, John Garfoot '13, Elizabeth Kermis '10 and Nicholas Wodo '13

who served 10 years as director of the Pre-Med Center. Her emphasis on a strong curriculum, careful academic guidance, and valuable clinical and research experiences continues to make Canisius students prime candidates for health professional schools across the country. Under Hechtel's care, the college hopes that the pre-med program will advance to the next level, and the early prognosis is excellent.

"Laura is genuinely engaged in the Pre-Med Program," says **Margaret Paroski '76, MD, MMM**, executive vice president and chief medical officer at Kaleida Health. "She demonstrates not only a vision of where the program needs to go but the ability to translate that vision into tangible actions that benefit the students in meaningful ways."

Hechtel's remedy is her mix of academic, scholarly and practical know-how. She holds master's and doctorate degrees in biology from Illinois State University, and bachelor's degrees in biology, secondary education and physical education from Augustana College, in Rockland, IL. Her scholarly work is in evolutionary ecology, which applies the principles of evolutionary theory to explain the relationships of organisms in their environments. Hechtel has also held faculty positions at a number of colleges and universities, including Canisius, where she continues to serve as an adjunct professor of biology.

"I've been teaching since 1982 and I still love to see the light bulb go off in students," says Hechtel. "To see them start to think at a much higher level and develop as individuals is just so rewarding as an educator."

But it is Hechtel's expertise at the Pre-Health Professions Program at Augustana that made her an ideal candidate for director of the Schreiner Pre-Medical Center.

"Laura doesn't just talk the talk, she walks the walk," states **Philip J. Aliotta '76, PhD**, a member of the college's Medical Advisory Board. "She is highly motivated and dedicated to making Canisius students successful in their scientific pursuits."

Approximately 40 Canisius students apply to health professional schools each year. Each application requires any number of documents, including student records, letters of recommendation and personal essays. It can all become overwhelming for students, which is why Hechtel, along with her program coordinator, Cynthia M. Travers, whom she describes as "indispensible to the Pre-Med Center," manage the details of the application process. This way, students can concentrate on fulfilling other much-needed requirements.

"Students are expected to have had a diverse academic background and set of experiences when they apply," says Hechtel, who first meets with freshman pre-med majors during summer orientation. That is where she lays the ground work for what will be expected of them throughout their Canisius years. Among their freshman-year priorities: to learn how to study and manage their time. Equally important, notes Hechtel, is that students study what they like.



"Students often think, or are told, that because they're good in science that they have to become doctors. What they don't understand is that there are so many more ways to make contributions to the sciences and health fields," says Hechtel. One way she introduces students to these diverse opportunities is by inviting Canisius alumni, from various health and medical professions, to speak on campus. **Dominic A. Cimato '84**, a doctor of osteopathic medicine; **Lori (Skrzypek) Lee '90**, a surgical physician's assistant; and **Paul B. Wirth '84, MD**, a micrographic surgeon who specializes in dermatology, are among this year's guest speakers. Hechtel also hosts health career seminars, which feature representatives from such health professional schools as Cornell's College of Veterinary Medicine, New York College of Podiatric Medicine, SUNY Buffalo School of Pharmacy, SUNY School of Optometry and Lake Erie College of Osteopathic Medicine. "I want to help students discover where their real callings lie because that is what will ultimately ensure their successes in the classroom and in whichever career paths they choose."

It is in students' freshman years that they also begin to prepare for the MCAT exams. "Our core sequences of courses, in chemistry, physics and biology, do a really good job in addressing all those areas covered on the exam. So students get an early introduction to what they'll be expected to know when they take the exam in spring of their junior years," says Hechtel. She adds that representatives from Princeton Review and Kaplan Review visit students in their junior years to offer test preparation services.

But what a student does outside of class is as important as what he or she does inside of class. In addition to intellectual endurance, medical schools look for evidence of maturity, inquisitiveness, a demonstrated interest about what medicine encompasses, and an authentic sense of humanity. These are lessons best learned through clinical and volunteer experiences. Neither experiences are prerequisites for health professional schools but Hechtel prescribes a large dose of these to students at the start of their sophomore years.

She works closely with members of the Medical Advisory Board, which is comprised of health professionals from across the region, to pair physicians with students who are interested in extended clinical – or shadowing – opportunities.

"Being a doctor is not about making money. It's about a person's passion to serve and this is a quality that a Jesuit education breeds naturally," says Hechtel, who last year introduced a new, international service trip intended specifically for pre-med and pre-health professionals.

"It was one of the best experiences of my life," says **Elizabeth D. Kermis '10**, the niece of Marguerite Kermis. A biology major, Elizabeth Kermis traveled with Hechtel and 14 other students to Nicaragua and Costa Rica in May through International Service Learning (ISL), an educational agency that recruits medical volunteers to provide healthcare services to underserved populations of Central and South America. Under the training and supervision of ISL health professionals, students travel to small towns and villages where they set up field clinics to provide blood pressure and pulse monitoring; diabetes screenings; eye examinations; dental cleanings; pediatric ear, eye, nose and throat exams; and urinalysis testing. "These are skills that you don't normally develop until medical school," says Elizabeth Kermis. "So to be able to get that real world experience as an undergrad is a huge asset and one that I know will give me an edge on my application essay."

A personal statement is a student's opportunity to make a significant first impression upon admissions committees. Applicants are required

to present distinctive characteristics, individuality and virtues in about one page of double-spaced type. An exceptional application essay is what can ultimately earn a student a place in the medical school program of his choice. The hurdle, however, is that "students don't know how to self-promote," says Hechtel. To help students overcome that hurdle, Hechtel enlisted the expertise Communication Professor **Melissa B. Wanzer, EdD**. Together, the two now offer workshops that teach students how to 'wow' admissions committees with their personal statements.

"Laura has brought a human face to students' medical school applications and essays," says Aliotta. A managing partner at Main Urology Associates, Aliotta also serves on the admissions committee for the SUNY Buffalo School of Medicine and reviews thousands of medical school applications each year. "Canisius students now present themselves not only as scholars but as whole individuals who are actively engaged in the life of the college and the community at-large."

But while an effective personal statement may get an individual's foot in the door, it's a candidate's performance during the medical school interview that separates the pre-meds from the pre-MDs.

"Medical schools want individuals who can communicate with the poorest of the poor yet also be able to speak with the patient who is a PhD in physics," explains Aliotta. "They want the person who can calm a sick and frightened child or who can help a patient understand the complexity of medicine in terms that he or she can have a good feeling about."

To help ease the pain of what is often deemed the most arduous portion of the application process, Hechtel preps students on their interviewing skills. They get a primer on interpersonal relations from Melanie Booth-Butterfield, PhD, a nationally-recognized expert in speech communication. During her campus visit, Booth-Butterfield advises students on how to remain calm and confident while they answer difficult, thought provoking questions in a professional and concise manner.

Hechtel also organizes an annual "mock interview day" for senior pre-med students. Each fall, applicants come dressed for success and undergo a formal interview by Medical Advisory Board physicians in their fields of interest. Students are then interviewed by representatives from the Canisius College Career Center. When all the interviews are complete, the interviewers offer individual feedback on students' strengths and weaknesses.

"This was an incredibly helpful exercise that provided valuable insight as to the type of questions I'll be asked during the interview process and feedback as to how I can differentiate myself from the competition," says Kermis. "It was one of many great resources offered by the Pre-Med Center to help strengthen my chances of getting into the osteopathic school of my choice."

Such resources are vital in an environment that has thousands of pre-med majors vying for limited openings in medical and health professional schools, explains Paroski, who serves alongside Aliotta on the Medical Advisory Board and the admissions committee for the SUNY Buffalo School of Medicine. "As the playing field gets more competitive, it's those little differences that applicants bring to the process that will now make a much bigger difference."

Just as medical and health professional schools will continue to modify their qualifications to secure the most ideal candidates, Hechtel will adapt the Schreiner Pre-Med Program to ensure that the passion, persistence and professionalism of Canisius students endures. ■