

PA Helps Take Profession into Next Age of Medicine

By DOUG SCOTT

When medical historians look back at the beginning of the 21st Century, they will surely conclude that it was the end of the age of antibiotics, imaging, and anesthesia, and the beginning of the age of genomic medicine.

Francis Collins, M.D., director of the National Human Genome Research Project (NHGRP), who is noted for his landmark discoveries of disease genes and visionary leadership in the development of the Human Genome Project, recently told *AAPA News* that genomics is going to change the way clinicians practice medicine.

Whether regarding a patient's risk of breast cancer or heart disease, Collins said, the most important thing a PA can do to incorporate genetic thinking into his or her daily practice is to recognize that all diseases have hereditary contributions. Today, he said, the best method is to take a good family history that will help predict the patient's risk of disease. In the future, however, the patient history will be augmented by specific genetic testing.

"I think it's great that PAs are really out in front in recognizing the relevance of genomic medicine," said Collins, speaking from his office at the National Institutes of Health (NIH) in Bethesda, Maryland.

"We are well aware that unless the new knowledge, tools, and approaches that have come from the Human Genome Project are integrated into clinical practice, the project's huge potential to improve health will have been merely a false promise. Rocky [Rackover] has been particularly helpful to us in thinking about how best to accomplish this integration."

PA Michael "Rocky" Rackover helped establish the Philadelphia University PA Program in 1995 and has been its director for the past two years. But perhaps his most important role has been as liaison to national health organizations over the past six years, helping to bring AAPA and its members the latest information and promoting the implementation of genomics into PA clinical practice.

As a member of the board and liaison to the National Coalition for Health Professionals Education in Genetics (NCHPEG), in 2006 Rackover helped AAPA secure a \$20,000 grant from NCHPEG to develop a Web-based program to educate PAs, PA students, and PA educators about the role of genetics in a primary care setting.

In September, Rackover also worked with the Accreditation Review Commission on Education

for the Physician Assistant (ARC-PA) to include genetics and molecular mechanisms of health and diseases in the core curriculum in PA education.

Rackover in December completed a four-month term as visiting scholar at the National Human Genome Research Institute (NHGRI), where he worked alongside such notable giants in genomics as Collins and Alan Guttmacher, M.D., deputy director of the NHGRI.

"The primary goal of my time spent here," Rackover explained, "was focusing on implementing projects that enhance integration of genetics and genomics into physician assistant practice and education."

"That includes development of a manuscript [for PAs] that addresses genetic clinical applications in the next five to 10 years. I am also working on developing the essential physician assistant clinical competencies and curriculum guidelines for genetics and genomics with PAs Connie Goldgar, Kris Healy, and Chantelle Wolpert."

As a visiting scholar, Rackover was invited to attend meetings at NIH and around the country, including a seminar in Boston presented by the Harvard Partners for Genetics and Genomics, entitled *The Genetic Basis of Adult Medicine: What the Primary Care Provider Needs to Know*. He also attended a personalized medicine seminar, *From Promise to Practice*, cosponsored by the George Washington (GW) University School of Public Health and the Genetic Public Policy Center meeting on genetic testing at GW.

"As a result of this," Rackover said, "I am also trying to plan a short course on medical/clinical genetics for PA educators to be able to support them in training physician assistant students."

Rackover is organizing a meeting at the NIH in March of representatives of AAPA, the National Commission on Certification of Physician Assistants (NCCPA), the Physician Assistant Education Association, and ARC-PA, to talk about the future practice of medicine, utilizing personalized medicine involving genetics and genomics, with Collins, Guttmacher, and other NHGRI staff.

"Rocky has been quite successful at demonstrating to the NHGRI and the NIH the important role of physician assistants in our nation's health care system and at making sure that PAs are key partners in the founding of 'genomic medicine,'" Guttmacher said. "We look forward to developing further our relationship with Rocky and with the physician assistant community."



Michael "Rocky" Rackover recently spent four months as a visiting scholar at the National Human Genome Research Institute in Bethesda, Maryland.

Guttmacher added that, thanks to Rackover, AAPA is one of the few national health care organizations that has supported teaching and practicing clinical genetics to its members. Through Rackover's endeavors, he said, ARC-PA has approved standards for education in clinical genetics, PA students are now tested on genomics on NCCPA certifying exams, and, over the past four years at AAPA's annual conference, there have been various lectures on medical and clinical genetics. At AAPA's 35th Annual PA Conference in Philadelphia in May, Rackover will present a CME session entitled *Personalized Medicine: Integration of Medical Genetics into Clinical Practice*.

"The NHGRI profited immensely from having Rocky share his experience, perspective, and wise counsel with us last fall," concluded Collins. "We have benefited from his willingness to measure our hopes and plans against the realities of today's clinical practice settings."

Rackover reflected that "There has never been a boring day working at the NIH. To have an open door policy to be able to talk to Drs. Collins and Guttmacher on a weekly basis about my projects and about what I have learned has been an inspiring time in my life. I got to share their concerns about the future of science of genetics."

In addition to learning about genomics, Rackover received an opportunity to teach NHGRI something about PAs.

"I was fortunate enough to give a 20-minute PowerPoint presentation about the history of the PA profession, and we had a good question-and-answer period after that, so NHGRI has a better understanding of who physician assistants are, where we came from, and where we are going," said Rackover.

"It was certainly an honor to be at the National Institutes of Health and work alongside Drs. Collins and Guttmacher," he said. "But right now, I'm homesick and just happy to be returning home to my wife and my life in Philadelphia."

