

Get to Know NYCPM Faculty:
Josef Michl, MD
Adjunct Professor of Pre-Clinical Sciences



Josef Michl, MD, obtained his medical degree from the Johannes Gutenberg-University Mainz (Germany) in 1970; he had attended the Humanistic Gymnasium at Sankt Stephan in Augsburg, Germany, for his undergraduate degree, and the Friedrich Alexander University of Erlangen-Nuernberg and Johannes Gutenberg University of Mainz for his degree in Human Medicine. He completed a doctoral thesis for the Doctor of Medicine Magna cum Laude (MD) on the development of a hapten-based inhibitor of penicillin allergy at the Institute of Allergology at the University Clinic (Inselspital) Bern, Switzerland, and Institute of Microbiology and Immunology of the University of Mainz, Germany.

After a brief externship in Columbus, OH, Dr. Michl went back to Switzerland to continue his residency in internal medicine and clinical immunology at the University Clinic of Bern, Inselspital. He practiced medicine in an outpatient clinic at the University Clinic in Bern for three years, concentrating on diseases of the kidney, hypertension, diabetes and endocrine tumors of the pancreas, dialysis and kidney transplantation.

Afterwards, Dr. Michl went back to basic science, as he describes it. Supported by a fellowship from the German Research Foundation he trained to become a Medical Microbiologist and Immunologist at the Institute of Medical Microbiology and Immunology, Johannes Gutenberg-Universität, Mainz, Germany. Thereafter he became an assistant professor of Medical Microbiology at the Ruhr University of Bochum, Germany.

As he had become ever more strongly motivated in a career as a biomedical research scientist and in Immunology, Cell Biology and Physiology rather than a practicing physician, Dr. Michl, supported by a H. Hertz Research Fellowship, was invited in 1974 as a Guest Investigator into the Laboratory of Cellular Physiology and Immunology at The Rockefeller University. After becoming a Heiser Foundation-supported Fellow in 1976 and Special Fellow of the National Broadcast Council of the Leukemia Society of America and Assistant Professor at The Rockefeller University in 1977, Dr. Michl moved to SUNY Downstate Medical Center in 1982 where he progressed from Assistant Professor to Associate Professor in Pathology, Cell and Molecular Biology, and Microbiology and Immunology. He still is actively involved in research and teaches at Downstate.

Dr. Michl maintains a research laboratory at Downstate. His current research involves the development of

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novel diagnostic and therapeutic approaches to cancer, especially pancreatic cancer. As people live longer, are they exposed to more environmental toxins? Are they experiencing earlier and more mutations? Are there ways to diagnose pancreatic cancer earlier to extend the chance of the patient of longer survival? Another interest is investigating cell surface antigens (white blood cells) and their role in infectious diseases. His educational and research activities have resulted in graduating many Ph.D. students, in introducing and guiding numerous high school, college and M.D. students in basic laboratory research. Furthermore, his investigations have resulted in many publications and patent applications.

He has been teaching at NYCPM since 2000, as an Adjunct Professor and Director of Immunology. For his first 10 years here, he taught second-year students, but now instructs first years. To ease their understanding and their study of Immunology, students really should have a good background in microbiology and infectious diseases, biochemistry and cell biology and histology, he said. "The foot doesn't exist in a vacuum and independent of the rest of the body. Pre-clinical studies involve studying the whole body, not just its composition from and learning about what happens from the knee down. Everything the students learn goes into one entity: the whole human of which the foot is just an extension even though an important one! At NYCPM we still teach the basics", he says.

Dr. Michl has been teaching for 45 years, and in that time has seen many changes in students. He thinks they have narrower interests today, perhaps unwittingly forced by the volume of knowledge that has increased hugely (with genetics, cell and molecular biology, for example). He thinks that the movement to expose students to patients earlier in their educations has led to an emphasis on diagnosis and practice at the expense of curriculum content. New technologies have removed students further from the human body, but, on the other hand, he feels interest in medicine and in becoming a practicing physician has grown thanks to the earlier exposure to patients.