The First University Professors Arrived in UNDNJ: Sowing New Research in Many Fields

By Kate O'Neill

A quintet of University Professors has joined the faculty of the UMDNJ-Robert Wood Johnson Medical School, following an initiative presented by Stuart S. Cook, president, UMDNJ. Two years ago, in his inaugural address, Dr. Cook introduced the university's support for a University Professorship program. As envisioned by Dr. Cook, the new program is bringing "some of the best and brightest research scientists in the nation to UMDNJ, expanding the nucleus of world-class faculty on all of our campuses and in all of our schools."

Starting in 2000, and for the next five years, said Dr. Cook, the UMDNJ schools would recruit annually five new faculty members, "leaders in their fields, working on the cutting edge of science." The university sustains each University Professor for five years at the rate of $125,000 per year. Subsequent support is the responsibility of the school in which the professor holds an appointment. Balancing the equation, each candidate must bring at least $.5 million dollars per year in direct research income from the National Institutes of Health (NIH) or an equivalent federal funding source, with evidence that this pattern of funding will continue or increase.

Jeffrey C. Merrill, MPH

"It is a terrific, win-win situation for everyone," says Jeffrey C. Merrill, MPH, professor of psychiatry, who was the first University Research Professor at RWJMS. Immediately prior to his appointment, Merrill served as co-scientific director and director for economic and policy research at the Treatment Research Institute, University of Pennsylvania School of Medicine.

For the school, explains Merrill, the program brings overhead gains that outweigh the annual costs of research. For the researcher, he adds, the funding and the title are magnets, promising the resources and independence to pursue topics of longtime interest. In his case, the University Professorship has opened a new area of funding for his research into the prevention and treatment of substance abuse. A former Peace Corps worker in Colombia, Merrill has retained a deep interest in Latin America. He has provided technical assistance in both the U.S. and Colombia, while achieving international success in substance abuse prevention and health care policy. As a He will help develop the Institute for Quality Research and Training, a joint program of the medical school and University Behavioral Health Care.

Yufang Shi, PhD

In September 2001, soon after accepting his appointment at RWJMS, Yufang Shi, PhD**,** University Professor and associate professor of molecular genetics and microbiology, was able to advertise: "NIH-funded post-doctoral positions… to investigate the role of TNF family proteins in the regulation of immune responses and the effect of stress on the immune system. The laboratory is in a state-of-the-art new research facility with new equipment and an excellent collaboration environment." Clearly, the combination of new construction at RWJMS and additional funding are making a difference to Dr. Shi, his department, and the medical school.

Dr. Shi's research on the interaction of morphine with T lymphocytes should make a major contribution to understanding the cell death induced by opioids used in pain therapy.
Equally important, his established, mature research program dovetails with the work of his colleagues at RWJMS, says Dr. Pestka, and adds an important link in the department between neurology and immunology. "It also fits in beautifully with current work at our other centers, including, The Cancer Institute of New Jersey (CINJ)," he adds.

Jianjie Ma, PhD

One of the first researchers to open a laboratory in the new RWJMS Staged Research Building was Jianjie Ma, PhD**,** University Professor and professor of physiology and biophysics. "The University Professorships meant the chance for us to create a bigger package and recruit a rising star," says Nicola C. Partridge, PhD, professor and chair. "Dr. Ma is a young, outstanding, innovative scientist, whose work has a broad scope that complements the core of the department."

Dr. Ma came to RWJMS from the faculty of Case Western Reserve University, bringing an experienced, five-person research team. He also brought funding from the National Institute on Aging/NIH. He is at work on "five or six projects," he says, all related to his research on the structure-function relationship of ion channels. A major attraction at RWJMS, says Dr. Ma, was the "huge potential of collaborating with researchers at the Cardiovascular Institute, the Child Health Institute, and The Cancer Institute of New Jersey." He emphasizes that "you don't do research in isolation any more. Everything is a team effort and a team decision. Here I have the opportunity to work with other departments, as well as with Rutgers University, and other schools, nationally and internationally."

Sunil J. Wimalawansa, PhD

Sunil J. Wimalawansa, PhD, University Professor, professor of medicine, was the first in his department to hold the new title. Prior to accepting the University Professorship, he was a tenured professor and a clinician researcher at the University of Texas.

Like Jeffrey Merrill, Dr. Wimalawansa pursues complementary research interests. With principal funding by NIH , the Drug Enforcement Agency, and the pharmaceutical industry, he has earned worldwide recognition for his work on calcium metabolism in osteoporosis and other metabolic bone diseases. His current focus is on the use of nitric oxide in the treatment of osteoporosis. Additionally, he has conducted internationally acclaimed research on biochemical and molecular treatments for basic cardiovascular disease and gene therapy for coronary artery disease. He is further noted for his work on calcitonin gene-related peptide receptor research and on pre-eclamptic toxemia and premature delivery.

Dr. Wimalawansa brings RWJMS his experience not just as a researcher but as an administrator, clinician, and teacher. He has established two independent university osteoporosis centers and directs the newly established Osteoporosis Center he initiated at RWJMS. As a physician, he has proven adept in the diagnosis and management of patients with general endocrine disorders. He has an outstanding record in mentoring students at all levels: MD's and PhD's as well as high school and college students.

Joseph R. Bertino, MD.

The newest University Professor at RWJMS is Joseph R. Bertino, MD, professor of pharmacology. Dr. Bertino joined and The Cancer Institute of New Jersey in January 2002, after serving as chairman of the Molecular Pharmacology and Therapeutics Program, Sloan-Kettering Institute for Cancer Research. He has been an American Cancer Society Professor since 1976.

Widely regarded as the world's leading pharmacologist, Dr. Bertino has received his specialty's most prestigious awards. They include the General Motors Award for Cancer Research, the Karnofsky Award from the American Society for Clinical Oncology (1992), and the American Cancer Society Medal of Honor (1992). Dr. Bertino was the founding editor of the *Journal of Clinical Oncology* and, says Dr. Hait; he has served as president of all the major associations in his field.

A renowned clinician as well as a scientist, Dr. Bertino will treat lymphoma patients at CINJ. Dr. Bertino was the first to design a chemotherapy regimen to cure lymphoma. Second, he designed groundbreaking chemotherapy for young women who had undergone breast cancer surgery that would not affect their fertility. Third, 15 years ago, he designed gene therapy "with a unique twist," says Dr. Hait. "As a young cancer center, we wanted to have a 'scholar-in-residence,' an internationally known scientist who would serve as a beacon for the world's best and brightest cancer researchers. We are delighted that Joe Bertino is here: he is ideally suited for that role."