

## BLAZING A NEW TRAIL

## WENDY UHLMANN, MS, CGC PAVES THE WAY FOR HOW GENETIC COUNSELORS AND OTHER ALLIED HEALTH PROFESSIONALS REACH FACULTY APPOINTMENT AT U-M

To say that **Wendy Uhlmann**, MS, CGC, a clinical professor from U-M's Department of Internal Medicine and Department of Human Genetics, has followed an unconventional career path would be an understatement. A genetic counselor with the U-M Medical Genetics Clinic since 1993, Uhlmann is the first genetic counselor with a master's degree to reach the rank of clinical professor at the University of Michigan, and the only faculty member in the U-M Medical School at this rank with a master's degree.

"My faculty path was unconventional because of the master's degree, which is the terminal degree in the field of genetic counseling," says Uhlmann. "I was a student in U-M's program in 1986-1987, when the career was in its early years. The master's degree in human genetics (specialization in genetic counseling) was a 16-month program with coursework and clinical rotations. My class had just two students. Now it is a 20-month master's degree in genetic counseling, with research as an added degree requirement, the option for a dual degree in public health, nine students per class and growing." Back in the 1980s, genetic counselors took the American Board of Medical Genetics certification exam with the physicians; since 1993, genetic counselors are board certified (CGC) by the American Board of Genetic Counseling.

## FORGING PATHWAYS TO PROMOTION

Uhlmann has worked as a genetic counselor for over 30 years, 25 at U-M. In 1993, she was hired as the genetic counselor/clinic coordinator of the Medical Genetics Clinic. Since 1994, Uhlmann has taught in the Genetic Counseling Program. Teaching has expanded over the years to giving lectures in the Medical School, School of Public Health and School of Social Work, and she provides clinical supervision to genetic counseling students, medical students, residents and fellows. In 2013, Uhlmann received the Basic Sciences Teaching Award in Human Genetics.

In 1997, she was appointed clinical instructor of human genetics. It took 11 years and a cultural shift to be appointed clinical assistant professor of internal medicine and human genetics in 2008. In 2012, Uhlmann was promoted to clinical associate professor. And,

in September, 2018, she was promoted to clinical professor of internal medicine and human genetics. Uhlmann is appreciative of the support from division and department leadership in both Internal Medicine and Human Genetics.

"I became a clinical professor by achieving all of the benchmarks required in the clinical track. I did clinical work. I taught, I published, I was active nationally in my field. It just took time and a change in thinking to open the pathway to faculty appointment and promotion with a master's degree," she says.

Nationally, approximately 20 percent of genetic counselors have faculty appointments with just a few at the professor level. Uhlmann is fast to tell you that, in the early days, there was no established pathway for master's degree allied health professionals to reach faculty appointment. "I do not think every allied health professional should have a faculty appointment, but if

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actively involved in clinical care, teaching and research, then there should be consideration for appointment," she adds.

## CONTRIBUTIONS TO THE FIELD

Uhlmann oversees the operations of the U-M Medical Genetics Clinic, established in 1941, the oldest and one of the few adult genetics clinics in the country. She provides genetic counseling and coordinates genetic testing for adults with a personal and/or family history for a wide range of genetic conditions. Uhlmann is appreciative of the clinical team she works with and proud of the clinic's significant growth in patient numbers and conditions seen, which presents both opportunities and challenges.

"In 2018, about 190 different genetic conditions were seen, with approximately 160 seen just 1-2 times. Almost 70 percent of patients had genetic testing compared to 31 percent in 2014," says Uhlmann.

"Case preparation, including researching the conditions and genetic testing, is time-intensive. Genetic test results are often complex to interpret and explain and may require additional testing of the patient and/or family members."

Genetic advances mean that more patients will need genetic services and genetic testing. Uhlmann thinks U-M is well-positioned to be a leader nationally in genomic medicine and addressing genetic service delivery across the lifespan given that U-M is unique in having adult, pediatrics and prenatal genetics clinics in addition to genetics clinics in multiple specialties, including cardiology, neurology, oncology and ophthalmology. Furthermore, U-M has strong basic science and translational research in genetics being conducted throughout the university.

In addition to her clinical and educational roles, Uhlmann has been active in research and

has co-authored more than 50 peer-reviewed articles. She has been a co-investigator on NIH funded studies on Alzheimer's disease, direct-to-consumer genetic testing, and disclosure of genomic sequencing results, and has served as a mentor/committee member for more than 25 genetic counseling students' research projects. Uhlmann is interested in genetic testing, especially ethical issues, serves on the Adult Ethics Committee and is a faculty member of the Center for Bioethics and Social Sciences in Medicine.

She has received leadership awards from the National Society of Genetic Counselors (NSGC): Regional Leadership Award (1996), Outstanding Volunteer Award (2009) and a lifetime achievement award (2011). She was a co-editor and chapter author of both the 1998 and 2009 editions of "A Guide to Genetic Counseling," the first book devoted to the principles and practice of genetic counseling

and an international standard in the field.

Uhlmann has also held numerous national positions, most notably NSGC president in 1999-2000. "It was an amazing time to be leading NSGC and overseeing the work of the 21-member board and the organization. Highlights included testifying three times to the United States Secretary of Health and Human Services Advisory Committee on Genetic Testing (SACGT) [she later served on the SACGT's Work Groups on Test Classification and Informed Consent], representing NSGC at President Clinton's issuance of an Executive Order banning genetic discrimination in the federal workplace and then at the White House when the draft of the human genome was announced," she says.

Locally at U-M and nationally, Uhlmann remains committed to mentoring students and colleagues to be active professionally, contributing to the field of genetic counseling,

being at decision-making tables and seeking leadership roles and faculty appointments. It is important to Uhlmann that a pathway for master's degree genetic counselors and allied healthcare professionals has now been forged. "To see that the next generations will be able to go through faculty appointment and promotion knowing this is possible, is very gratifying," says Uhlmann. She likens this progression to a favorite quote from Ralph Waldo Emerson, which seems to define what she has accomplished at U-M: "Do not go where the path may lead, go instead where there is no path and leave a trail."

