

Genetic counseling program alumna now reaches more

When Courtney Rowell was a prenatal and pediatric genetic counselor, she helped clients one by one to navigate through the emotional journey of information gathering and decision making.

Now she's taken her genetic health communication skills on the road, meeting with OB/GYN physicians around the country to make them aware of genetic testing available for breast and other types of cancer.

"I enjoyed my time at the University of Alabama-Birmingham (genetic counseling center), but I was also interested in the business side of genetic medicine," said Rowell, a 2000 graduate of the University of South Carolina School of Medicine Genetic Counseling Program who went on to earn an MBA at the University of North Carolina.

Rowell is now a product manager in the women's health division for Myriad Genetic Laboratories, which owns patents for screening BRCA1 and BRCA2 breast cancer genes. She received the School of Medicine's Distinguished Master's in Genetic Counseling Award earlier this year.

"Instead of giving information to just one person at a time, I'm now casting a much wider net, educating groups of physicians about genetic testing information that they can share with their patients," said Rowell. "I credit Carolina's Genetic Counseling Program with helping me to see career opportunities beyond the traditional role of genetic counseling."

Rowell foresees genetic diagnostics becoming even more sophisticated and providing more individualized treatment.

"Medicine is very reactive, right? We wait for people to get sick and then we treat them all the same. I've got colon cancer, you've got it, and we both get the same protocol," she said.

"I think genetic testing will move us toward a more individualized risk assessment: Person A has a 20 percent chance of getting colon cancer, Person B does not. And that information will point the way toward individualized lifestyle choices.


"It will also lead us toward more individualized chemotherapy choices. Breast cancer treatment is probably the most advanced in this regard."

When the School of Medicine launched its genetic counseling program in 1985, it was only the tenth such program in the country (there are 32 accredited programs now). Since then, the program has trained more than 150 students as genetic counselors, most of whom have achieved national certification status through the American Board of Genetic Counseling.

"We accept six to eight students every year, and most have the qualifications to get into medical school," said Janice Edwards, director of the program. "Genetic counseling students tend to be fascinated, absorbed really, with genetics and want to have more interaction with people. They also typically have strong analytical skills, understand risk assessment, and know how to communicate complex information."



Courtney Rowell, '00



Because many genetic conditions involve cancer, debilitating illness, or birth defects, genetic counselors work with patients at a critical moment in their lives—the place where medical ethics, diagnostic screening, and sometimes dire diagnoses intersect. The situation calls for an astute grasp of a genetic diagnosis and an ability to offer empathic, effective counseling.

“That’s part of the challenge and the inspiration of this profession: You’re working in real life with the things that happen to us as human beings,” Edwards said.

The Genetic Counseling Program exposes students to pre-natal, pediatric, and adult cases. Students are instilled with a deep awareness of disability through community outreach activities such as providing respite care to families with children who have chronic disabilities.

Weekly conferences help students learn from faculty and each other the psycho-social nuances of counseling patients. Management of ethical dilemmas is taught in the final year of the curriculum, using actual cases for discussion.

The School of Medicine’s Genetic Counseling Program is part of the Division of Clinical Genetics and Molecular Medicine. The program collaborates with other genetic centers throughout the Carolinas and Georgia, where students rotate for clinical experience.

Edwards has also spearheaded efforts to create the Transnational Alliance for Genetic Counseling, which held its second meeting in Barcelona, Spain, in June. The alliance now includes 17 countries from six continents, collaborating on genetic counselor education worldwide. ■

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