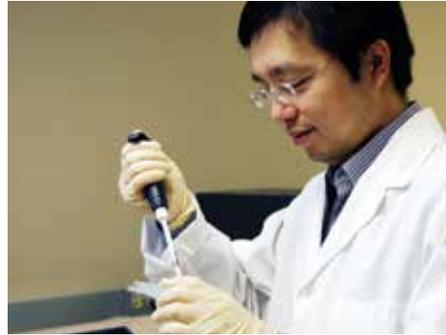


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Researcher receives \$1.35 million NIH grant to target colorectal cancer

Bin Guo, associate professor of pharmaceutical sciences, is developing a precision therapeutic delivery system for treating one of the most deadly forms of cancer in the United States. The highly targeted treatment will track down metastatic colorectal cancer cells, suppress their growth and allow conventional chemotherapy drugs to eliminate them.



Guo recently received a \$1.35 million Research Project Grant, or RO1 grant, from the National Institutes of Health to conduct the research. RO1 grants are among the most competitive and prestigious grants available to individual researchers.

“Dr. Guo is taking a creative and innovative approach to finding a more effective and efficient treatment for colorectal cancer,” said College of Health Professions Dean Charles Peterson. “The NIH grant is a testament to the caliber and importance of his work and the research that is being conducted in the School of Pharmacy overall.”

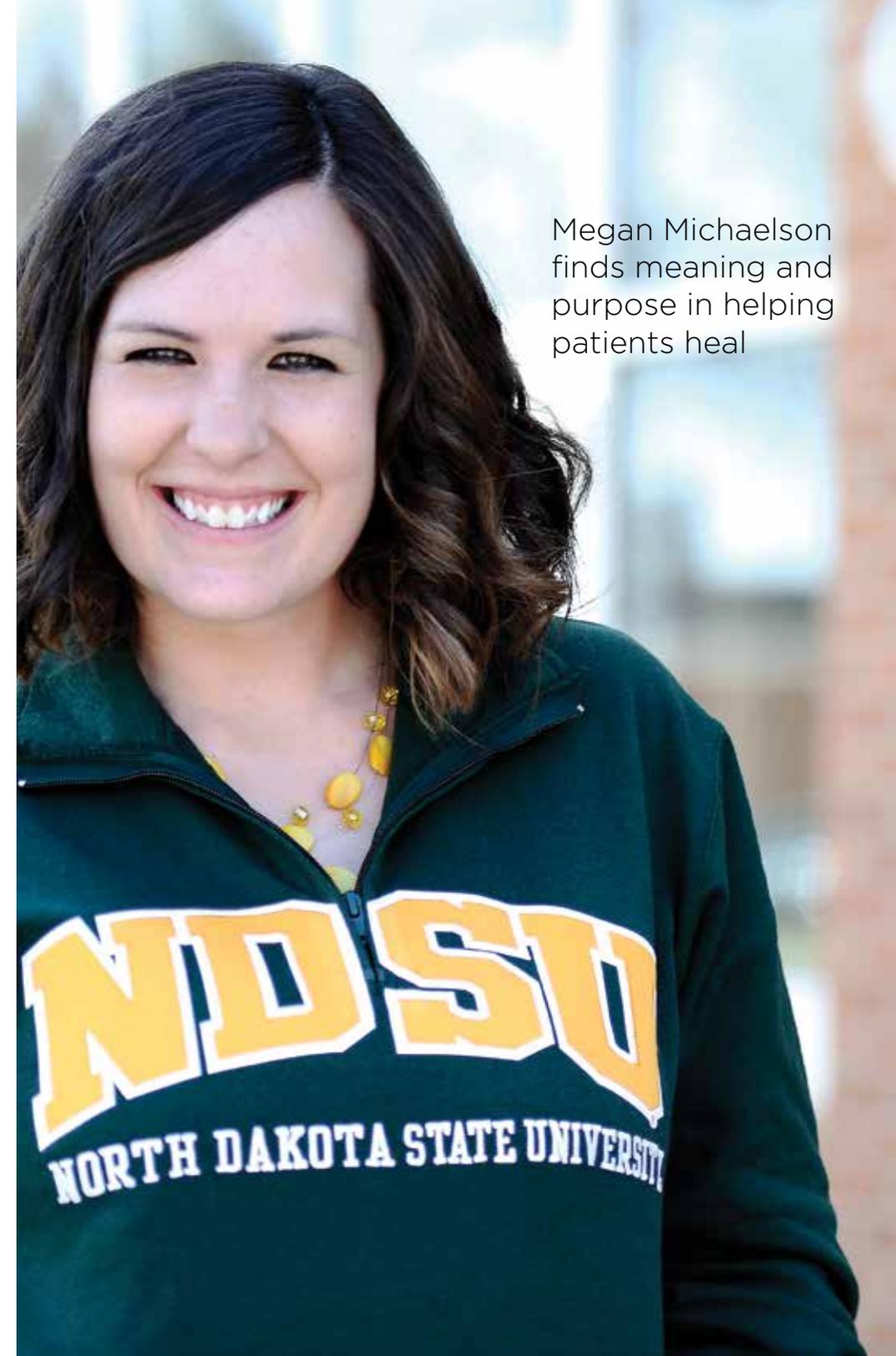
Guo identified a micro ribonucleic acid, or microRNA, that suppresses colorectal cancer cell growth in 2013. The challenge, he said, is that microRNAs are fragile and are easily destroyed by enzymes in blood.

The NIH grant supports his work with a co-investigator at the University of Kentucky to create a highly stable nanoparticle platform to deliver the microRNA. The goal is to use an antigen that is only expressed by cancer cells as a guide so therapeutics will be delivered specifically to them without accumulating in the liver, lungs or other vital organs or causing the side effects typical to most chemotherapies.

This research is supported by the National Cancer Institute of the National Institutes of Health under Award Number 1R01CA186100-01A1. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

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Megan Michaelson finds meaning and purpose in helping patients heal

Pharmacy is 'meant to be' for Michaelson

Megan Michaelson's time as a student at NDSU has changed the way she views the role of a pharmacist. She says it's much more than a person counting pills behind a counter; it's a profession filled with purpose and meaning.

That's why Michaelson is leaning toward a hospital residency, where she can use her clinical skills and work as part of a team with other health-care colleagues.

"It's where you are helping patients on potentially the worst days of their lives," she said. "I can help them heal and have an impact on their lives. That is what stands out to me most about being in pharmacy."

The Dickinson, North Dakota, native first became interested in pharmacy practice in high school during a job-shadowing trip to her older sister's workplace at Children's St. Paul Pediatric Hospital. It was there she learned how much teamwork and collaboration is involved in the profession. She loved that idea and the thought of helping people live better lives, so she followed in her older sister's footsteps to NDSU.

She will begin her fourth-year rotations this year. After that it's graduation and what will surely be a



rewarding career. Even though she can see the finish line and is ready for the next challenge, she can't help but look back at her time in the NDSU School of Pharmacy.

It hasn't just changed her view of the profession. It's changed her life.

"I've loved it here," said Michaelson. "I can't brag about NDSU enough. I've always felt welcomed and that I was meant to be here."

Future pharmacists

We will post future pharmacist submissions in a photo album on the College of Health Professions Facebook page. This will ensure your submission is available more quickly and to more people. Please note that by submitting a photo you are granting the College of Health Professions permission to use it in publications and online. facebook.com/ndsu.chp



NATHAN ARODI 9.13.14
Parents: Chris and Jessica (Kilzer), '05 Arodi



AVA PETERSON 1.13.15
Great Grandparents: Clair, '63-deceased and Shirley Fojen



JOHN (JACK) HANSEN LUKENS 1.2.15
Grandpa: Leon Galehouse III, '70



AANDERS MAERTENS 4.28.14
Parents: Kinsey (Oakland), '11 and Adam Maertens



PARKER SCHAAF 7.7.14
Parents: Andrew, '12 and Erin Schaaf



LEONARD (LEO) YATSKIS 11.6.12
Parents: Jennica (Kalianoff), '06 and Paul Yatskis



JOHAN HSIUNG (with brothers Julien and Bjorn) 12.30.14
Parents: Julie Seidlinger-Hsiung, '05 and Roger Hsiung
Grandparents: Ray, '71 and Diane Seidlinger



SID GHATTA 8.18.13
Parents: Dee Nimmagadda, '05 and Sri Ghatta, '06



HENRY WINTERS 2.13.14
Grandma: Virginia (Voigt) Winters, '81

Phonecast connects alumni with Dean Peterson



Alumni got answers right from the top during the NDSU School of Pharmacy's first phonecast on June 16. It was the largest gathering of NDSU pharmacy graduates in history. Nearly 600 alumni connected with Dean Charles Peterson on the call for give and take about the school's latest news and advances. They also were able to engage on Facebook and Twitter during the call.

"Our alumni are our strongest supporters, not to mention our best sources of information and ideas," Peterson said. "We're delighted with how this first phonecast worked out, thanks to the alumni who participated, and we look forward to hosting more in the future."

Alumni who were not able to participate can listen to a recording of the entire call at ndsu.edu/pharmacy/alumnicall.

COLLEGE HEADLINES

- Pharmacy becomes a school, gains its own identity as part of college name changes
- U.S. Chief Pharmacy Officer discusses future of pharmacy with NDSU students
- Chair named for NDSU Department of Pharmacy Practice
- DNP alum is the driving force behind a respite care program for homeless people
- MPH director receives inaugural Public Health Innovation Award
- Helmsley Trust, N.D. Challenge Grant fund endowed scholarships for NDSU American Indian public health program

Visit ndsu.edu/healthprofessions to read these and other recent stories.

LET'S CONNECT

We want to stay in touch and keep you updated about what's happening in the School of Pharmacy. In addition to mailers like this one, we provide several ways to get information and engage:

- Website: ndsu.edu/pharmacy
- Facebook: facebook.com/ndsu.chp
- Twitter: @NDSUPharm

Feel free to contact us at 701-231-7456 or NDSU.Pharmacy.Alumni@ndsu.edu.