

RURAL STUDENTS EXPLORE HEALTH CARE OCCUPATIONS

On a sunny June morning, 30 high school students from rural areas in eastern North Dakota and western Minnesota gathered in Sudro Hall for a new health occupations and professions exploration program offered by NDSU and Sanford Health, Camp HOPE.

The camp provided an up-close look at many health care disciplines, including respiratory care, radiology, medical laboratory science, pharmacy and nursing.

"We planned hands-on experiences to help students understand what they are getting into," said Dana Davis, camp co-organizer and director of recruitment in the College of Pharmacy, Nursing, and Allied Sciences at NDSU.

The students delved into allied sciences professions at Sanford Health. They were introduced to radiologic sciences with a question and answer session led by radiographer Larae Close. Interns explained why they are pursuing a career in radiography, rewarding and challenging aspects of the internship and the most interesting image they have captured. The students viewed X-rays and tried to determine what was amiss. They also toured radiology, where they learned to work the equipment, how to position a patient and how to protect patients and themselves from radioactive elements.

The respiratory care session was divided into four rotations led by respiratory therapists Robyn Urlacher, BS '98; Angela MacAdams, BS '03; Stacy

Butts, BS '90; Shari Hanson, BS '93, and NDSU respiratory care interns. The students practiced intubation and arterial blood draws on a life-like arm with a simulated pulse and blood. They tried on "the vest," which showed them what cystic fibrosis patients experience during high-frequency chest wall oscillation to loosen and thin mucus. They also used the pulse oximeter and spirometer.

Recent NDSU graduate Alyssa Knudsen, BS' 09, introduced the students to medical laboratory science. Dressed in lab coats, they learned the function of different lab instruments and the process of blood banking. They used microscopes to simultaneously view normal and abnormal cells. Knudsen showed the students the variety of specimens that come into the lab and described how each one is processed to give doctors information needed to make a diagnosis.

Another goal of the camp was to emphasize health care career opportunities in North Dakota. "They can get a great education at an affordable cost, with lots of great job opportunities when they finish," said Susie Munyer, youth programming manager at Sanford.

The camp was held June 23-26. Planning is in progress for next summer's Camp HOPE. For more information, contact Davis at dana.davis@ndsu.edu or Munyer at susan.munyer@sanfordhealth.org.



RESPIRATORY CARE ALUMNA AND HER TEAM HELP MAKE ND SMOKE FREE

Improving the health of the community is something Chelsey Matter has always strived for in her professional career, especially her effort to ban smoking in North Dakota businesses. After chairing the Smoke-Free North Dakota committee, Matter and her team succeeded in getting the measure, which makes all public places 100 percent smoke free, passed in the November 2012 election.

In 2005, Matter earned her bachelor's degree in respiratory care. After graduating from NDSU, she worked as a respiratory therapist at Sanford in Fargo, before becoming a tobacco cessation coordinator for Fargo Cass Public Health.

"If I had not gone into respiratory care I wouldn't have had the experience of taking care of countless individuals who were ill because of their own or someone else's tobacco use," said Matter, a Kindred, N.D., native. "NDSU gave me the foundational knowledge and confidence to go forth and make a difference."

Smoke-Free North Dakota is a grassroots organization made up of passionate volunteers led by a committee of about 20 individuals. The group's goal is to reduce the burden of tobacco usage on the state, Matter said.

Along with her hard-working team, Matter also said she owes the passed measure to previous efforts in citywide smoke-free laws.

"Fargo and West Fargo were the first cities to introduce comprehensive smoke-free laws that covered bars. I was greatly involved with that effort," she said. "Fargo passing smoke-free by a landslide set the stage for other cities to do the same, with cities after Fargo passing smoke-free laws with much less opposition."

Before the election, Matter took it upon herself to spread the word about Smoke-Free North Dakota and asked community members to sign a petition to get the measure on the ballot.

"I was out every night of the week most of last summer talking to anyone and everyone. I met a lot of people from all different backgrounds and felt such overwhelming support throughout the whole effort," she said.

Although Matter considers her work with Smoke-Free North Dakota as one of her biggest accomplishments, she can't emphasize enough how proud she is of the benefit the measure has helped the health of the community.

"The Smoke-Free North Dakota committee decided to move forward because of the positive health and economic impact a smoke-free law would have on the people of North Dakota," Matter said. "Smoke-free laws are proven to reduce smoking rates in adults and children. The passing of this law means lives will be saved and that's the best thing of all."



ALUMNI INSPIRED BY MEDICAL MISSION TRIP

In February 2013 two NDSU allied sciences alumni traveled to Chimbote, Peru, for 10 days as part of Friends of Chimbote, Father Jack's health care mission trip. Jocie Bonk, BS '09, radiologic sciences, and Justin Rosenau, BS '09, medical laboratory science, were among approximately 60 interdisciplinary health care providers and support staff who provided medical, dental and eye care to more than 4,500 patients.

"If I had to choose a word to describe my experience in Chimbote, I would have to choose 'unbelievable.' Unbelievable in the sense that so many people with so little could be so happy to receive something many of us take for granted – health care," Rosenau said. "From a 2-year-old child who has never seen a doctor before, to a 68-year-old dying from cancer, everyone was so appreciative to have the chance for someone to listen to them. This experience definitely reminded me exactly why I chose to go into the medical field. I would highly recommend it to anyone."

Bonk agrees. "This amazing medical mission trip impacted me in so many ways," she said. "I've gained a deeper appreciation for the simple health care needs many of the people we helped were so grateful for. The care packages we gave out with a toothbrush, visor and pair of sunglasses brought so many heartfelt smiles to the people of Chimbote."

Through limited Spanish and the help of an interpreter, Bonk communicated with patients. "The connections I made with every patient were the most memorable. I found un peluche (a stuffed animal) might be all you need to get through a pediatric X-ray," she said. "I'm very grateful for such an incredible, humbling and inspirational experience."







Photos courtesy of L. Lystao

ALUMNI IMPACT: MENTORSHIP OPPORTUNITIES AVAILABLE

As alumni, you may remember an exchange that changed your perspective, encouraged you to research a career in health care or motivated you to pay more attention to your studies. We know your interactions with future and current students impacts our students.

A recent research study published by the Hechinger Report showed students frequently cited "a conversation" as one of the most powerful influences on their direction and/or persistence in achieving their educational goals.

Many of our prospective students mention their interest in the field was sparked by a talk with a neighbor, friend or relative who works in the profession. Some students were your patients and their career choice was inspired by the quality of care you provided them. Current pre-professional students often share how job shadowing changed their perception of the field.

Our professional-level students regularly interact with alumni who serve as classroom educators, clinical preceptors or members of the health care team. If you are interested in getting more involved with allied sciences students and fostering their success, here are a few ways how:

- Serve as a guest speaker for classes or extracurricular organizations
- Be a mock interviewer for students applying to internships
- Meet one-on-one with students interested in learning about your career
- Speak at your hometown high school to raise awareness about the variety of careers in health care

If you are interested in serving in one of these roles, please contact Angeline Walswick, allied sciences academic adviser, at angeline.walswick@ndsu.edu or Polly Olson, director of allied sciences, at polly.olson@ndsu.edu.

Thank you for sharing your time and talents. You make a difference for our students.

MEDICAL LABORATORY SCIENCE DIRECTOR RETIRES

For 10 years Carol McCoy, Ph.D., medical laboratory science, has dedicated herself to helping students become certified medical laboratory scientists. As founder and director of the Fairview Health Services Medical Laboratory Science program, a 12-month internship in Minneapolis, she has helped numerous students gain the theoretical knowledge and practical experience necessary to sit for the national certification exam.

Approximately 25 NDSU students have completed the internship, which provides students experience in hematology, hemostasis, body fluids, chemistry, microbiology, immunology, immunohematology,

endocrinology, flow cytometry, molecular diagnostics, management, education and research. In addition to NDSU, students from Minnesota State University-Mankato, Winona State University, St. Cloud State University and the University of Wisconsin-La Crosse also have benefited from the program.

"I set up the program at Fairview in 2004 and it is a wonderful program," said McCoy, who also is an adjunct professor of allied sciences at NDSU. "We were able to recruit great students, had wonderful faculty and every one of our graduates is board certified, and for the past six years we have had a 100 percent first-time pass rate."

Unfortunately, the program is scheduled to close in May 2014 as McCoy is set to retire this summer. "It is truly sad as it is such an outstanding program, but the program operated at a financial loss to Fairview and we were no longer part of the strategic plan," she said.



McCoy (center) with NDSU/Fairview 2013 graduates, Jennifer Dotzenrod and Rebecca Ystebo.

The first NDSU students were admitted to Fairview in 2006. "MLS students coming to NDSU from the Twin Cities area found Fairview to be an attractive internship option not only for its location, but also its diversity in the lab and its excellent program outcomes," said Polly Olson, director of the NDSU Department of Allied Sciences.

"Carol did an excellent job keeping me up to date with student progress in their courses and clinical experience. Fairview also offered sponsorships for student interns who wanted to stay to work at Fairview, making an easier transition from intern to employee for a number of NDSU students,"

Olson said. "We certainly wish Carol the very best in retirement and truly have appreciated her dedication to our partnership in educating students."

After retirement McCoy plans to stay engaged in the career she loves. She is a contributing editor to the CLS Journal, is part of the volunteer pool for Clinical Laboratory Standards International Global Health Partnerships and plans to spend some time in a country with limited resources helping them improve the quality of laboratory testing.

"When one retires from a profession, you are still part of that profession so you still have an interest it its growth you just take different roles," McCoy said. "There will always be a great need for educated, critical thinkers in the laboratory, so the future is bright for those entering the profession."

McCoy earned her bachelor's, master's and doctoral degrees from the University of Oklahoma.

AMBASSADORS RECOGNIZED AT DISTRICT CONFERENCE

Congratulations College of Pharmacy, Nursing, and Allied Sciences Ambassadors on receiving Organization of the Year by district 6 of the Council for Advancement and Support of Education–Affiliated Student Advancement Programs. The award was presented during the district's annual conference in Des Moines, Iowa, on April 13.

Daniel Reedstrom, medical laboratory science ambassador Hannah Magrum, respiratory care ambassador



SCHOLARS PROGRAM PREPARES ALLIED SCIENCES STUDENTS FOR ADVANCED EDUCATION

Medical laboratory science students Kathy Mok, a senior from Singapore, and Nassir Abdi, a senior from Somalia, are part of the Ronald E. McNair Postbaccalaureate Achievement Program at NDSU.

Selected from undergraduate students who demonstrate strong academic potential and show an interest in research, McNair scholars are provided educational and support services to help prepare for an advanced degree. For example, scholars earn a monthly research stipend, can engage in graduate-level research under the guidance of faculty and library mentors and have opportunities to attend conferences related to their studies.

The program's benefits have exceeded Mok's expectations on all accounts. "A field research project that can highlight my graduate school application? Check. An awesome faculty mentorship to help

me in becoming a professional in my discipline? Check. Help with the Graduate Record Examinations? Check. What else can I ask for?"

Abdi feels the same. "I have attained research experience, gained knowledge on methods and ethics of research, and participated in national seminars, which introduced me to different graduate-level careers," he said. "These achievements wouldn't have been possible if not for the McNair Scholars Program. The program has energized my lifelong dream and has opened windows of opportunities."

"[My] achievements wouldn't have been possible if not for the McNair Scholars Program. The program has energized my lifelong dream and has opened windows of opportunities."

- NASSIR ABDI

Mok's research project is to create a novel vaccine for swine influenza and porcine reproductive and respiratory syndrome viruses. "Using gamma irradiation to 'kill the viruses from the inside out,' viruses lose their ability to replicate but can still mount a sufficient immune response." Her mentor is Sheela Ramamoorthy, assistant professor in the veterinary and microbiological sciences department.

Abdi's research involves the study of genes that regulate biofilm formation, particularly the role of BasS and BasR genes and how it will lead to greater success in the eradication of resistant pathogenic bacteria. His mentor is Birgit Pruess, associate professor in the veterinary and microbiological sciences department.

Abdi and Mok began medical laboratory science internships in the Mercy and St. Luke's hospital programs in Sioux City, Iowa, this summer.

Visit www.ndsu.edu/trio/mcnair_scholars_program for more information on the McNair Scholars Program.



PRUNTY PLAYS PART IN STUDENT SUCCESS

Help and encourage students to reach their educational goals — that's been Rita Prunty's guiding principle throughout her 25-year career at NDSU. In countless ways, big and small, she has done just that. She has assisted students daily while serving in various capacities across campus. Most recently she was the program assistant for the allied sciences department. In this role, Prunty helped students with everything from applying for internships and creating a degree plan to finding campus resources and lending a listening ear.

In 2012, the same year she retired, Prunty decided to help students in a different way. She initiated the Prunty Allied Sciences Scholarship, two \$500 awards based on need for financial assistance and an outstanding commitment to self-financial support.

"I wanted to recognize students who have worked hard to put themselves through school while making the extra effort to keep their student loans as low as possible," Prunty said of why she established the scholarship. The one-time awards were presented to Kelley Weber of Mounds View, Minn., and Colton Knox, of Ellendale, N.D. Both students graduated with medical laboratory science degrees in May 2013.

Weber said the scholarship made a significant impact on her finances and helped alleviate some of the stress that comes with paying for college.

"Scholarships like the Prunty Scholarship really help us students to focus on our studies by helping pay for tuition," Weber said. "Being awarded these types of scholarships also is a high compliment, as it always feels good to be recognized for our hard work and dedication."

Prunty now lives in Algona, Iowa. In retirement, she enjoys spending time with family, taking road trips, practicing/learning marimba and piano, sewing quilts for her church group and volunteering.

While she stays busy, she misses interacting with students. "It was so rewarding to get to know them and see them gain confidence and maturity as they worked to attain their educational goals."

ALLIED SCIENCES STUDENT ORGANIZATION CENTERS ON SERVICE

In its fourth year, Students of Allied Sciences continues to build on the previous year's involvement and develop strong leadership. "We had a very successful year because of the group cohesion shown by all officers," said Maddy Stone, the organization's president. "Each and every officer contributed to our accomplishments the entire year."

Like previous years, the club contributed many service hours by partnering with various community organizations. The club worked closely with the local Ronald McDonald House by baking desserts for residents around the holidays and assisting them with their annual Sweetheart Ball. Several club members also volunteered during NDSU's Service Plunge event held on Martin Luther King Jr. Day

This year, the team focused on walking and fundraising for a cause during Relay for Life. The students' fundraising efforts, including a Sudro Hall bake sale, helped raise more than \$2,000 for Relay for Life. It was the largest amount raised by a student organization. In addition, roughly 20 Students of Allied Sciences members participated in Relay for Life. The club earned the Pack the Track Award for its high number of early registrations.

Jordan Daly, an officer in the organization, said, "Relay for Life was an awesome part of our involvement this year because it gave us a chance to participate with other organizations across campus in the fight against cancer and remember individuals we have lost."

The following club members were honored at the organization's year-end banquet for their consistent volunteer effort and engagement: Jordan Daly, Volunteer Award; Gretchen Rigge and Aaron Bedford, Involvement Award; Kelsey Murray and Jordan Daly, Leadership Award.



BACK ROW Stephanie Dykema, sophomore in pre-radiologic sciences, Rachel Klein, junior in radiologic sciences, Kelsey Murray, senior in radiologic sciences, Blake Bixby, senior in respiratory care, Keri Lenzmeier, senior in radiologic sciences, Breanna Klein, junior in pre-radiologic sciences

FRONT ROW Daniel Reedstrom, junior in pre-medical laboratory science, Gretchen Rigge, junior in pre-medical laboratory science

NDSU Relay for Life was held April 27-28 in the Bison Sports Arena. Approximately 20 Students of Allied Sciences members participated by fundraising or walking at the event. The group raised \$2,189 - the largest amount raised by an NDSU student organization.

-- Rachel Klein, SAS secretary

SCHOLARSHIP RECIPIENTS

A ALLIED SCIENCES ALUMNI AND FRIENDS SCHOLARSHIP

Larae Close, left, and recipient Sara Dell, Mapleton, N.D. Recipient Charles Johnson, Fargo, not pictured.

B CAPP SCHOLARSHIP

Polly Olson and recipient Troy Longtin, Barnesville, Minn.

C DEAN'S SCHOLARSHIP

From left to right, Dean Charles Peterson and recipients Elizabeth Solma, Luverne, Minn.; Beth Burns, Vadnais Heights, Minn.; and Cassandra Jacobs, Villard, Minn.

DONOVAN R. PETERSON MEMORIAL SCHOLARSHIP

Recipient Angela Stevens, Pipestone, Minn., not pictured.

PRUNTY ALLIED SCIENCES SCHOLARSHIP

Angie Walswick, center, and recipients Kelley Weber, Mounds View, Minn., and Colton Knox, Ellendale, N.D.

E SANFORD HEALTH FOUNDATION - MARY JO LANGENWALTER MLS SCHOLARSHIP

From left to right, recipient Troy Longtin, Barnesville, Minn., presenter Mike Hannaher, and recipient Colton Knox, Ellendale, N.D.

F MICHAEL SOLOGUK MEMORIAL SCHOLARSHIP

Recipient Elizabeth Solma, Luverne, Minn., and presenter Sally Backman













Thank you donors!

One of the ways your generous gifts support allied sciences students is through scholarships. For a complete list of donors, visit www.ndsu.edu/pharmacy/donor_list.

If you are interested in funding a scholarship or contributing to the Allied Sciences Alumni and Friends Scholarship, please contact Sara Wald, director of advancement, at 701-231-6461 or sara.wald@ndsu.edu.

ALLIED SCIENCES INTERNS RECEIVE HONORS

Congratulations to the following allied sciences students who earned special recognition as interns within their hospital program this past year.

Rebecca Ystebo, Fairview Medical Laboratory Science program, was awarded the Minnesota-American Society for Clinical Laboratory Science Elizabeth Panning Scholarship. Ystebo graduated in May and is employed by Fairview Health Systems.

Peggy Ronke, Avera McKennan School of Radiologic Technology, received a South Dakota Society of Radiologic Technologists Life Member Scholarship.

Additionally, at the society's annual educational conference, Victoria Wieser, also an intern at Avera McKennan, received third place for her scientific paper, "Challenges in Rural Healthcare." Jordan Schoppe, Rapid City Medical Radiography program, received second place with her paper, "Using Dual-energy X-ray Absorptiometry to Help Reduce the Rates of Obesity in the United States." Schoppe also completed a scientific exhibit, Fibrodysplasia Ossificans Progressiva (Stone Man Syndrome) and received second place out of 35 exhibits.

Sara Dell and Angie (Minnich) Arnold, interns in the St. Cloud School of Diagnostic Imaging, received second place honors for essays on cholelithiasis and Crohn's disease, respectively, during the University of Iowa Student/Educator seminar. Lisa Blair was presented the Dr. Held Scholarship funded by the St. Cloud Hospital Foundation.

NDSU/Sanford respiratory care intern awards presented at the fall 2012 graduation ceremony were: Intern of the Year – Kara Misemer; Lambda Beta – Becca Gemar and Kara Misemer; Clinical Performer of the Year – Nicolas Gangl. All are employed by Sanford Health Systems, Fargo.

Troy Longtin and Kelley Weber, Sanford-Fargo Medical Laboratory Science program, were selected to receive \$500 North Dakota – American Society for Clinical Laboratory Science scholarships. Longtin is employed by Altru in Grand Forks, N.D., and Weber is employed by North Memorial Hospital, Robbinsdale, Minn.

Olivia Kershaw, an intern in the Mercy College Medical Laboratory Science program in Des Moines, Iowa, was inducted into Alpha Eta, the Allied Health National Honor Society.

Recent radiologic sciences graduate Angela (Minnich) Arnold was recognized as a 2012-13 Distinguished Military Graduate by the U.S. Army Cadet Command.



NORTH DAKOTA STATE UNIVERSITY DEPT 2680 PO BOX 6050 FARGO, ND 58108-6050

www.ndsu.edu/alliedsciences 701.231.7456

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CLASS OF 2013

CONGRATULATIONS

RADIOLOGIC SCIENCES

Jessica Allen Bismarck, N.D.

Chelsea Anderson Farmington, Minn.

Colin Binnie Fargo, N.D.

Lisa Blair Glenwood, Minn.

Jenna Bosak Moorhead, Minn.

Danielle Coalwell Dilworth, Minn.

Michaela Collins Omaha, Neb.

Danielle Daly Fargo, N.D.

Sara Dell Mapleton, N.D.

Brady Harms Hawley, Minn.

Moriah Heffron Grand Forks, N.D.

Siera Huber Jamestown, N.D.

Cassandra Jacobs Villard, Minn.

Braden Jorud Barnesville, Minn. Kayla Kipp Burnsville, Minn.

Kaila Kugler Fergus Falls, Minn.

Caitlin Larson Tioga, N.D.

Sophie Le Fargo, N.D.

Sondra Lenarz Alexandria, Minn.

Justin Lill Grand Forks, Minn.

Alyssa Link Renville, Minn.

Angela Minnich Ramsey, Minn.

Robyn Mithun Glenwood, Minn.

Erin Mooney Hillsboro, N.D.

Chelsey Nokleberg Bloomington, Minn.

Andrew Puchalski Hutchinson, Minn.

Erica Reishus Watertown, S.D.

Peggy Ronke Watertown, S.D. Jordan Schoppe Hastings, Minn.

Jena Smedshammer West Fargo, N.D.

Jessica Steffen Hazen, N.D.

Nicolas Steidl Fargo, N.D.

Victoria Wieser Wahpeton, N.D.

RESPIRATORY CARE

Phung Chung West Fargo, N.D.

Patrick Culhane Fargo, N.D.

Marc Estes Farmington, Minn.

Abdirahman Farah Fargo, N.D.

Vickie Lee Detroit Lakes, Minn.

Dylan Meyer Fargo, N.D.

Rebecca O'Brien Maplewood, Minn.

Bethany Pelzer Long Prairie, Minn. Elizabeth Solma Luverne, Minn.

Ben Zillgitt Dexter, Minn.

MEDICAL LABORATORY SCIENCE

Beth Burns

Vadnais Heights, Minn.

Rhoderissa Dizon Fargo, N.D.

Jennifer Dotzenrod Wyndmere, N.D.

Erin Smith Elznic Fargo, N.D.

Olivia Kershaw Menoken, N.D.

Colton Knox Ellendale, N.D.

Troy Longtin Barnesville, Minn.

Ashley Setter Fargo, N.D.

Megan Staroba Wyndmere, N.D.

Kelley Weber Mounds View, Minn.

Rebecca Ystebo Moorhead, Minn.