

N O R T H   D A K O T A   S T A T E   U N I V E R S I T Y

# allied sciences

THE COLLEGE OF PHARMACY, NURSING, & ALLIED SCIENCES

## news for you

SUMMER '10



### Respiratory care program honored

Tribute to a hero ②

Career outlook ⑤

New student club ⑥



# Anderson was a real-life super hero

*Editor's note: Michelle Anderson died on May 30, 2010, as the result of a collision with a vehicle while riding her bicycle. Anderson was interviewed for this story in April. We present this story as a tribute to her life and the lives of those she helped save.*

As any super hero would at a moment's notice, Michelle (Wiese) Anderson flew into the night to help save lives.

Anderson was a clinical specialist in respiratory care and a member of the Mayo One Specialty Transport Team at Mayo Clinic-St. Mary's Hospital in Rochester, Minn. At any time during her regular 12-hour work shift, she was prepared to board a helicopter or an ambulance to help transport a neonatal or pediatric patient to a high-level care medical center.

Anderson had been at Mayo Clinic since she graduated from NDSU in the spring of 2007 with a respiratory care degree. She started in the cardiac intensive care unit. In January 2009, she was promoted to a respiratory therapy specialist and became part of the Mayo One Transport Team, which is credited for saving thousands of lives since it began in 1984.

Since January, Anderson went on more than 20 helicopter flights and about 40 ground runs to assist with medical emergencies.

"Coming into work, you have no idea what you are getting yourself into," Anderson said. She recently flew to a small town where a mother, only 26 weeks into her pregnancy, was going into labor. The one-pound baby was delivered shortly before the transport team arrived. They immediately intubated the baby, put fluids into the umbilical cord and put the baby on a ventilator.

Once at the hospital, Anderson continued caring for the patients they transported. "That baby will be here for 14 weeks if all goes

well," Anderson said. "A lot of times we get to see that family core group of people repeatedly. We really get to watch these babies thrive. We get sent pictures when they turn two or three; we really become part of the families' lives."

At 24, Anderson was one of the youngest members of the team, composed of more than 20 nurses and 15 respiratory therapists, but she was completely confident in her abilities.

"It's always that good adrenaline pumping, that's why I love it so much. It's not a calm, quiet job," Anderson said.

In May 2009, Anderson completed her master's in business administration to open the doors to management possibilities. She was already expanding her career into teaching.



Michelle Anderson, first row second on left, is one of the youngest members of the neonatal transport team.

She was hired by DeVry University in Oakbrook Terrace, Ill., to develop curriculum for several upper-level undergraduate respiratory care courses. She also taught upper-level courses at Apollo College, Phoenix, Ariz., and was a guest lecturer and clinical practice educator for the University of Minnesota Respiratory Care students at Mayo Clinic. Anderson also recently was accepted into a doctoral program for higher education and organizational change with Benedictine University, based in Lisle, Ill. She planned to start in the fall of 2010.

While juggling work and school, Anderson kept perspective of what's most important – her family. She was married to Eric Anderson, BS '08, and was the mother of a two-year-old daughter.

Like all good super heroes, Anderson stayed humble, giving credit to those who assisted her along the way.

"I feel if somebody or something has helped me, I always like to say thank you when I have an opportunity ... I'm so thankful to NDSU for the opportunities to get where I am at such a young age ... We have one of the best programs in the country."

## a message from the associate dean of Nursing and Allied Sciences

I was appointed associate dean of nursing and allied sciences at NDSU on Aug. 1, 2009. It is an exciting time for the allied health professions as we study and practice in an ever-changing healthcare environment. There has never been a better time to enter a healthcare field. As we look to the future, my vision is to design a state-of-the art simulation lab with a special focus on interdisciplinary education. This only can be accomplished by building and strengthening our partnerships with alumni, healthcare leaders and the community.

Together we can advance our commitment to innovative, evidence-based clinical education, scholarships and the provision of quality care, especially to rural and underserved populations

in North Dakota, which ultimately has the potential to impact health care at regional and national levels.

On behalf of the Department of Allied Sciences, I thank you for your support of our programs. If you live in Fargo-Moorhead or are visiting the area, we would like to schedule a tour of the department and discuss the future of our programs.



Loretta Heuer



# NDSU and MeritCare Respiratory Care program honored

The Committee on Accreditation for Respiratory Care recognized the NDSU and MeritCare Respiratory Care program for Excellence in Education during the American Association for Respiratory Care Summer Forum this past July in Marco Island, Fla.

The NDSU and MeritCare Respiratory program prepares students with knowledge, skills and professional characteristics to become competent, advanced-level respiratory therapists. "It was such an honor to receive this recognition. I was so proud of our faculty, support personnel and students," says Robyn Urlacher, MeritCare Respiratory Care program director.

Urlacher says the program was honored based on the excellent outcomes of their graduates. The students achieved 90 percent or higher Registered Respiratory Therapist credentialing success for the most recent three-year cohort of graduates, based on the 2008 annual report. Graduates also met or exceeded Committee on Accreditation for Respiratory Care thresholds for Certified Respiratory Therapist credentialing success, attrition and job placement.

"I would be remiss if I did not mention Gary Brown, who was the program director from the beginning through 2007. He was instrumental in making this program the success that it is today. I feel very fortunate to have such a phenomenal mentor and supporter of our program," Urlacher said.



Today's respiratory care major at NDSU must satisfactorily complete a minimum of 58 credits of general education and major requirements and meet grade-point average criteria in order to apply for admission into the 15-month internship and specialty clinical rotation. Students who have graduation requirements remaining after the internship will return to NDSU to finish these prior to earning their degree (a total of 136 credits).

**1973** The NDSU and MeritCare Respiratory Care program began as a technician level respiratory therapy program at St. Luke's Hospital (now MeritCare), Fargo.

**1986** Changes in accreditation standards required respiratory therapy students receive credit for all academic and clinical courses. This prompted program administrators from the St. Luke's Hospital to approach NDSU with a proposal to jointly sponsor a Bachelor of Science degree in respiratory therapy.

**1989** Following its approval by the North Dakota State Board of Higher Education, the respiratory therapy major was added to the NDSU Department of Zoology in the College of Science and Mathematics. NDSU also entered a consortium arrangement with MeritCare Hospital to offer a full-time internship, including a combination of lecture, lab and clinical education, that would prepare the student at the registered respiratory therapist status in the profession of respiratory therapy.

**1998** Respiratory therapy became respiratory care.

**2006** Respiratory Care Program transferred to the College of Pharmacy, Nursing, and Allied Sciences.

## A message from the director of Allied Sciences



Polly Olson

I hope this issue of the Department of Allied Sciences newsletter finds you all well. A lot has happened at NDSU during this past year. President Chapman resigned in November, and under Interim President Richard Hanson's leadership, NDSU has been taking a close look at where we have been and how we will grow and move forward in the years to come as we continue to serve our region and provide an affordable, high-quality education.

Bresciani will work to continue the progress that NDSU has enjoyed while maintaining a student-centered focus on higher education.

With NDSU's support, our college and department remain committed to our mission to educate competent clinical laboratory scientists, radiologic technologists and respiratory therapists – a mission that would not be possible without all of you, our hospital partners, alumni and friends. As you read the articles in this issue, you will see the impact allied sciences students, alumni and friends are making.

I hope you enjoy this newsletter. If you have comments, stories to share or suggestions for future issues, please let me know by contacting me at Polly.Olson@ndsu.edu or Sara Wald, director of advancement, at Sara.Wald@ndsu.edu.

Thank you and have a great summer!

In June, we welcomed a new president, Dean Bresciani, former vice president for student affairs at Texas A & M University. President

## A glimpse at what's happening with our current interns

**Melissa Burkle**, radiologic science intern at Rapid City Regional Hospital, was one of four students chosen to present her scientific report at the recent South Dakota Society for Radiologic Technology conference. She received honorable mention.

Three of the five North Dakota State University clinical lab science interns at Fairview (Minneapolis) are planning summer weddings while keeping up with lecture and lab rotation responsibilities. Their research projects with presentations were:

- **Valerie Bryce:** Stability of the CBCD and Reticulocyte Parameters on the Sysmex XE 2100
- **Palleap Hour:** Comparing Effectiveness of Foaming Hand Rub and Lotion Skin Cleanser in the Clinical Lab
- **Emily Nelson:** Effect of the Pneumatic Tube System (PTS) on Lactate Dehydrogenase (LDH) Samples
- **Rebecca Nordberg:** Stability of Thyroid Stimulating Hormone After Delayed Blood Separation
- **Tania Strube:** Effects on PTT/PTINR When Considering the Order of Draw

Graduation from Fairview's program was May 14. Students are preparing for board exams and job searches.

First-year radiologic science students at Sanford (Sioux Falls) are beginning to work as limited radiographers and taking scrub call in interventional radiography to gain some great experience. Scrub call means they assist with setting up sterile fields and front scrub with the Neuro Rads. Students were amazed by the advances in radiology technology after working with digital radiography.

The MeritCare (Fargo) clinical lab science class of 2010 recently presented their capstone project, "Increasing the Quality of Patient Care with Proper Blood Collection." The class worked with the

nursing staff, supervisors and educators to investigate pre-analytical variables associated with blood collection. Their study resulted in developing a training module and reference binders for the nursing stations aimed at improving patient care and safety by resolving specimen collection issues that result in inaccurate test results.

MeritCare respiratory care interns finished their second clinical block and presented their first major case study. Topics included adult respiratory distress syndrome, smoke inhalation, pulmonary emboli and obstructive sleep apnea. They were the first group of students to be involved in managing H1N1 patients with pulmonary complications this past fall.

Besides reviewing for their registry board exams, the Medcenter One (Bismarck) radiologic science seniors are working in the evenings and weekends as student technologists. The program structure provides a realistic view of radiography through this new, paid work experience.

The MeritCare radiologic science seniors are working on a 25-page research paper and a 45-minute presentation on a radiology/health topic, completing rotations through various modalities and job hunting. The juniors have completed nearly all studies on general x-ray for all body systems with the exception of the skull, some C-ARM procedures in surgical cases, and, after completing Advanced Cardiac Life Support this summer, will begin doing needle sticks with intravenous urology studies.

The radiologic science interns at St. Cloud and Avera McKennan (Sioux Falls) hospitals attended educational conferences this spring at the University of Iowa and the South Dakota Society of Radiologic Technology, respectively, where they mingled with students from other radiologic technology programs, technologists and vendors as well as received a general radiology review. The first-year interns at Avera are busy fundraising to attend a national educational conference in Las Vegas next spring.

## Look mom, I got an A+

The "Spread the Health" health fair was held Oct. 20, 2009, at the NDSU Memorial Union. The MeritCare School of Clinical Laboratory Science sponsored an NDSU clinical lab science booth to determine blood type, provide education on frequency of occurrence in the general population and answer questions about working in a medical laboratory environment. This year, more than 100 health fair attendees stopped by the booth to have their blood type determined. In this photo, Lisa Vilhauer, CLS intern at MeritCare, explains how a person's blood type is determined using a simple lab test.



## Job outlook: ‘positive with a however’

Like many graduating seniors, Amanda Wentz enters the job market feeling both excitement and a little anxiety. The nation’s economic downturn during the past couple of years has dominated the headlines, and most people are searching harder and longer to find employment.

NDSU students in the allied sciences can expect a somewhat mixed employment landscape.

“I watched some of those who graduated last year in the class above me struggle to find jobs. I am very excited to get out on my own and have a steady job doing what I love to do. However, right now, it’s scary out there,” explained Wentz, a native of Napoleon, N.D., who is finishing up a 24-month internship at Sanford Medical Center’s School of Radiologic Technology in Sioux Falls, S.D., and plans to take her board exam this summer. “I decided that I needed to do whatever I could to make myself more marketable.”

In addition to her studies in radiologic science at NDSU, Wentz took the extra step of online classes through a university in Topeka, Kan., to earn an education in computed tomography.

That was a good move on her part in a challenging job market, according to NDSU Career Center director Jill Wilkey. “The general outlook for students in the allied sciences is pretty solid. Health care hasn’t been affected as negatively as some other industries,” she said. “But, there is a big ‘however’ in this. It is still highly competitive, with pockets where hiring is not as strong.”

Wilkey said the Career Center and students majoring in clinical lab sciences, respiratory care and radiologic science have developed a strong relationship throughout the years. Center staff teaches students how to write cover letters and resumes, and helps them properly fill out applications and develop interviewing skills. Resume critiques and mock interviews are part of the process.

“The mock interviews were a huge help to me,” said Wentz, who hopes to find employment in North Dakota, South Dakota or

### CAREER FAIR TO SHOWCASE JOB OPPORTUNITIES

NDSU students will get a glimpse at their job future at the upcoming College of Pharmacy, Nursing, and Allied Sciences Career Fair. Scheduled for Sept. 16 from 10 a.m. to 2:30 p.m. in the Fargodome, the gathering is an opportunity for students and employers to meet, mingle and plan for jobs and internships.



Minnesota. “The Career Center even looked over my resume and made corrections and suggestions. Now, when I’m applying for jobs, I am confident that my education at NDSU and Sanford Medical Center has made me highly qualified for my career.”

Wilkey offered further advice for the students entering the workforce.

“We encourage flexibility and adaptability. If students really want a job, they need to go where the jobs are – and that may not be in their priority geographic location,” Wilkey said. “Over the long term, things look positive. Projections I’ve seen through 2020 show all health care areas are going to be strong. The recession has had some impact, but as the economy becomes stronger, so will the creation of new jobs.”

## Certifying changes made for lab professionals

On Oct. 23, 2009, graduates of accredited medical technology (MT) and clinical laboratory science (CLS) programs took the first national certification exam for Medical Laboratory Science (MLS) credentials.

The change is the result of a merger of the two separate credentialing agencies for laboratory professionals – the American Society for Clinical Pathology (ASCP), which certified MTs, and the National Credentialing Agency for Clinical Laboratory Science (NCA), which certified the CLS. In the merger, the ASCP Board of Registry also became the ASCP Board of Certification. The NCA has dissolved.

Any lab professional currently certified as an MT or CLS may opt to keep their credential or may become an MLS by participating in a certification maintenance program offered by the ASCP, which includes a continuing education requirement and annual fee. The certification maintenance program has been required for MTs since 2004.

The NDSU Clinical Laboratory Science Program is not planning to change its name in the near future. However, it will consider a revision as affiliated, hospital-based programs pursue name changes.



## Students of Allied Sciences club marks first year

The Students of Allied Sciences (SAS) club is a group of about 20 students majoring in allied sciences (clinical lab science, radiologic science and respiratory care). This year was our first year as a club. We are considered a “temporary” organization through NDSU, but soon will be reaching permanent status as an official group. We meet once a month to listen to professionals, interns and other guest speakers while still having fun through social gatherings and bake sales. These meetings allow us to learn about the allied sciences and plan different service events to help out the community.

We learned a lot this year from our various guest speakers. A panel of interns from different programs gave us some personal insight and answered questions our members had about internships. This was really beneficial because all of our students need to apply for internships in order to graduate.

We also volunteered a lot this year. Events included helping with the Great Healthcare Adventure, fundraising and walking the MS Walk, and serving meals at the New Life Center. One of the most

notable events was the challenge of the MS Walk. Our group chose to walk the event after listening to a neurologist’s physician assistant from MeritCare. By walking, we represented allied sciences and raised \$380 in only a few weeks.



Students of the Allied Sciences club help in the community.

We look forward to spending more time volunteering in the Fargo-Moorhead area next year. We’d like to help in more events, reach out to more people and educate the public about the three areas of allied sciences. By participating in more community events, SAS will hopefully catch the attention of more students (including non-majors who are interested in allied sciences) and gain more new members. We also really want to lend a helping hand by helping guide incoming allied sciences students through their time at NDSU.

We had a blast learning and volunteering this year, and can’t wait to see the difference we can make for students and the community next year.

*Nicolas Steidl and Emily Tappainer, SAS officers*

## Ambassadors named organization of the year

The Pharmacy, Nursing, and Allied Sciences Ambassadors had numerous highlights throughout the 2009-2010 academic year.

Our ambassadors kicked off the 2009 fall semester with becoming an officially recognized NDSU student organization. We had numerous highlights this past fall with alumni including their 50 year reunion, current student activities such as the H1N1 booth and homecoming parade, and prospective students through Discover NDSU and the Great Healthcare Adventure. The Great Healthcare Adventure allowed our ambassadors to show second and third graders future careers related to the majors in our college.

The spring semester was just as exciting as the fall semester starting with recruiting new members. We added 19 new members from various majors in the college with one representing allied sciences as a radiologic sciences major. In addition to training our new members, we volunteered at the YWCA, Dorothy Day pantry and Expanding Your Horizons day. Some of the events we took part in were Discover NDSU, Pharmacy Interview Day and our college’s Flag Ceremony.

Our organization also pushed forward with our goals for the year by creating a monthly newsletter as well as thanking our faculty and staff members through an appreciation event. Our last goal is to create a Web site for our organization, which will be completed in fall 2010.

We also congratulated numerous students for internships or graduation through Allied Sciences Intern Send-off, Pharmacy Hooding and Nurse Pinning.

The 2009-2010 academic year was a great year for the ambassadors as well as the college. The school year ended with surprise and honor by being selected as NDSU Student Government’s Organization of the Year. Also, Dana Davis, one of our advisers, was selected as Adviser of the Year.

We look forward to the 2010-2011 academic year, and the growth and development our organization continues to strive for with the college.

Mary Raven, Ambassadors member  
*College of Pharmacy, Nursing, and Allied Sciences*

**Congratulations to Rita Prunty, program assistant for the Department of Allied Sciences, for receiving a 2010 NDSU Staff Recognition Award.**

## Memorial scholarship reaches 10 years



To promote education and understanding of cystic fibrosis among respiratory therapists, the family and friends of Michael Sologuk established the **Michael Sologuk Memorial Scholarship in Respiratory Therapy** in 2000. Cystic fibrosis is an inherited disorder that affects many functions of the body: breathing, digestion and reproduction, and is the top genetic killer of young people.

Mike Sologuk, a life-long resident of North Dakota, was diagnosed with cystic fibrosis at a young age. He died on Oct. 7, 1999. His wife, Sally Backman, and their daughter, Brynn, established the scholarship in Mike's memory.

It is their hope that the scholarship will enable deserving students in respiratory therapy to complete their studies and make significant contributions to the health and comfort of cystic fibrosis patients and their families.

"A lot of medical people didn't seem to know much about cystic fibrosis even though it's a common genetic disease," Backman said. "There are so many different facets to this disease, I just wanted to promote more awareness in the medical community."

The 2009 recipient of the scholarship was Lindsay Schmitz of Perham, Minn.

Michael Sologuk Memorial Scholarship in Respiratory Therapy



Lindsay Schmitz

## New scholarship tied to advising

The **CAPP Scholarship** was presented for the first time at the 2009 College of Pharmacy, Nursing, and Allied Sciences Scholarship Recognition Program. This \$500 award to an allied sciences intern is based on their commitment to their major, putting advice they receive to practice and their perseverance. The award is funded by Polly Olson, director of allied sciences and recipient of the 2009 Dean's Award for Outstanding Advising in the College.

**Nicole Bunn**, a radiologic science major from Sheldon, N.D., is the recipient of this year's award and will graduate with a Bachelor of Science degree in August. "To have been chosen as the first person to receive this award was a great honor, especially after I heard what CAPP stands for," said Bunn.

"The monetary award associated with the Dean's Award for Outstanding Advising gave me the opportunity to assist our students in another way,

through a scholarship," said Olson. "Advising is a high priority in our department. The criterion for selection of this scholarship is different than many of those awarded based on merit and financial need."

Since Olson received the award for advising, she considered the other aspect of outstanding advising as the advisee. "This CAPP Scholarship recognizes the important role that the student plays in the equation of effective academic advising, which is making a commitment, taking advice, putting it to practice, and persevering, even when things don't go exactly as planned," she said.

CAPP Scholarship



Nicole Bunn

## Scholarships awarded to allied sciences students

### Allied Sciences Alumni and Friends Scholarship

A \$250 scholarship awarded on the basis of scholarship, merit and need. Funding is provided by annual alumni and friends contributions.

- **Tasha Peltier**, Ft. Yates, N.D. (no picture)

### MeritCare - Mary Jo Langenwalter CLS Scholarship

A \$500 award presented to students accepted into the MeritCare School of Clinical Laboratory Science.

- **Tristin Frank**, Levittown, N.Y.

### Dean's Scholarship - Allied Sciences

Three \$1,000 scholarships awarded by the Office of the Dean to allied sciences students based.

- **Daniel Clark**, Horace, N.D.
- **Alyson Maine**, Forman, N.D.
- **Abigail Malone**, Wadena, Minn. (not pictured)

Dean's Scholarship - Allied Sciences



Daniel Clark  
Alyson Maine

MeritCare - Mary Jo Langenwalter CLS Scholarship



Tristin Frank

# allied sciences news for you

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## Congratulations to our 2010 allied sciences graduates

### Clinical Laboratory Science

Jorja Bloomquist  
Valerie Bryce  
Brianna Carlson  
Daniel Clark  
Kayla Dykema  
Tristin Frank  
Palleap Hour  
Emily Nelson  
Rebecca Nordberg  
Nathan Roth  
Tania Strube  
Lisa Villhauer

### Respiratory Care

Beau Billadeau  
Jaleesa Hageman  
Rachel Holte  
Whitney Hylden  
Alicia Kerr  
Brittany Neshem  
Danielle Pitzl  
Lindsay Schmitz  
Jamie Thiesen  
Marissa Unhjem  
John Westphal

### Radiologic Sciences

Lindsay Arhart  
Kelsey Bauer  
Kylie Brogren  
Michelle Brytowski  
Nicole Bunn  
Melissa Burkle  
Kaley Caillier  
Kayla Dobberstein  
Kayla Espeseth  
Krista Field  
Abby Hoffbeck  
Janelle Johanneck  
Jamie Kramer  
Kami Krause  
Megan Lange  
Kathleen McGuane  
Sara Meyer  
Chelsy Nelson  
William Orr  
Megan Palczewski  
Ryan Pattee  
Travis Rud  
Amanda Wentz

