

# allied sciences

THE COLLEGE OF PHARMACY, NURSING, & ALLIED SCIENCES

## news for you

SUMMER '11



### Flexible degree leads to new career

Radiologic sciences  
celebrates 10 years ③

Alumna tackles tobacco ④

Job outlook good ⑥

# Clinical laboratory science degree leads to research career

When Kacie Hughes graduated in 2007 with a bachelor's degree in clinical laboratory science, she wasn't sure what direction life would take her. She liked the course work of clinical lab science but was having a difficult time in the job market. A friend encouraged her to go for a doctoral degree in pharmaceutical science. The course work involved in clinical laboratory science and pre-pharmacy is very similar, said Hughes. She sat next to pre-pharmacy students every day in class.

Hughes earned her doctorate in May 2011 and started working at Upsher-Smith in Maple Grove, Minn. Part of what helped her stand out in a competitive job field was the clinical laboratory science background.

"I know when I interviewed, the other candidates applying for the job were pharmacy students going to become pharmacists," she said. "I came from a unique background and had a different perspective on things, which must have been appealing to them."

Hughes will be using her skills to take a drug from beginning to end in the testing process for the drug developing company. While in Fargo, she performed similar tasks at Cetero, where she performed her graduate research in the study of drug absorption through the skin.



Hughes grew up in Harwood, N.D., and was drawn to clinical laboratory science because she loved the medical field but was uncomfortable with the idea of working directly with patients. "I loved learning about physiology of the body and the lab tests and what you could diagnose."

After spending nine years at NDSU as a student, Hughes believes her ties to the university as an alumna will be strong.

"I've gotten so much from this university," she said. "It's given me so much."

# Alumna earns national new professional award



Victoria Rensink, a 2007 clinical laboratory science graduate, received the 2010 National New Professional Member of the Year award given by the American Society for Clinical Laboratory Science.

Rensink is a laboratory manager and supervisor in the biologics division at Bacterin International Inc. in Belgrade, Mont. Her position consists of microbiology in a tissue bank accredited by the American Association of Tissue Banks and

the Food and Drug Administration. She enjoys being able to give back to families of donors by sharing how many other people have benefited from implantation.

"Getting my degree in clinical laboratory science was the best decision I've ever made," she said. "Each state can nominate one person per year for the award, so to be picked from the entire group of new professionals around the country was a great honor and one of my greatest achievements thus far."

Rensink encourages other recent graduates to take advantage of any opportunity to become involved in a professional society. She previously served as the American Society of Clinical Laboratory Science-North Dakota student representative and has been involved in the organization at state, regional and national levels.

"I gained so much and learned so much from these opportunities given to me, and the experiences I've had being an involved member of ASCLS."

Alex Shepard, a 2009 graduate of clinical lab science, also was nominated for the award.

**QUESTIONS?**

Sara Wald, *Director of Advancement*  
sara.wald@ndsu.edu • 701-231-6461

# Tenth radiologic sciences internship site added

Emilie Lisburg was determined to find a spot to start her internship in radiologic sciences. So much so, that she was open to exploring a new location for the department to send students. By networking with an aunt's friend, she found out the Veterans Affairs Medical Center in Minneapolis takes interns from Bismarck, N.D.

"If they could do it, I figured NDSU could too," Lisburg said.

Lisburg is the first NDSU student to do her internship at the medical center and is enjoying it. The technologists are helpful and "love to teach," she said. Students are on the hospital floor on the first day, and they begin taking X-rays of patients three weeks later.

The Veterans Affairs Medical Center has been teaching students for 40 years and is authorized to instruct 15 students a year. Students in the program complete about 2,500 hours of clinical time and 3,000 hours of class time during two years.

"This program is not a program for someone to come into and stand back and watch," said Michael Stori, program director at the center.

As the trend for radiologic technologist education continues to move toward requiring a bachelor's degree, Stori said the Veterans Affairs Medical Center wants to make sure to have partnerships with programs like NDSU. The students also have a good opportunity to

convert internships into positions at the center. Since February of 2000, the Veterans Affairs Medical Center has graduated 111 students, and of those graduates, 30 percent are working at the center.

"This is a two-year job interview," Stori said. "The VA would love to hire as many (interns) as they can. They know the system."

Lisburg has one more year to go in the two-year internship, and hopes to use her education as a steppingstone to go into MRI or radiation therapy. She entered the radiologic sciences program after job shadowing and deciding it was a good match with her passion to work with people. Working with injured veterans at the Veterans Affairs Medical Center also has given her a greater sense of purpose.

"I didn't think of it as a perk at first, but you really feel like you are making a difference for the country," she said. "It's a great atmosphere. Everything is a little more fast-paced here, but you get used to it real quick."



# Radiologic sciences reaches 10th anniversary this summer

The eventual approval of a baccalaureate radiologic sciences program at NDSU in 2001 began with a phone call in 1998 from an imaging services administrator interested in a joint venture with NDSU to educate radiologic technologists.

For more than 30 years, the MeritCare School of Radiologic Technology had provided training for professionals. Students earned certificates, but not degrees, and the focus was on the technical aspects of the job. That program moved to Interstate Business College, and had recently closed. According to regional employers of radiologic technologists, staff shortages existed and they were not sure where they would get future workers.

A cooperative arrangement between NDSU and a hospital-based program, similar to what was already in place at NDSU for clinical laboratory science and respiratory care, would mean a new and improved approach to educating radiologic technologists. The planning process began, and with input from academic, health-care and imaging representatives a program and curriculum proposal was developed and approved by NDSU.



In July 2001, the State Board of Higher Education approved NDSU's proposal to start a radiologic sciences program. Polly Olson, director of the Department of Allied Sciences, facilitated the program's inception.

As interest in the program and numbers of majors seeking internships quickly grew, the department sought affiliation with additional accredited, hospital-based programs. The Veteran Affairs Medical Center in Minneapolis is

the tenth program to affiliate with NDSU and provide the two-year internship.

Currently there are 24 second-year interns and 33 students beginning internships this summer and fall.

"We started with one RS graduate," Olson said. "This year NDSU will graduate 25 RS majors. The growth in student interest would not have translated into this number of graduates without the commitment of our hospital partners to educate students in the applied didactic and clinical competencies of an RT."

# Matter transitions to public health to fight tobacco addiction

For almost five years, Chelsey Matter has been working to reduce smoking in North Dakota. As the tobacco cessation coordinator for Fargo Cass Public Health, she has worked one-on-one with smokers trying to end their addiction, supported efforts to end smoking on the NDSU campus and in Fargo businesses, and has seen those efforts spread to similar smoking bans around the state.

Matter earned her bachelor's degree in respiratory care in 2005. She worked a year at Sanford as a respiratory therapist, spending a lot of time in the tobacco department.

"I saw one side of it, what happens from tobacco-related disease, and decided to see what I could do about it on the other side of things," she said.

Moving into a public health role fit for Matter. She's in the process of earning her master's in public health through the University of Nebraska Medical Center.

"Not a whole lot of respiratory therapists go into public health realms," she said. "It makes sense; it's just not a traditional route."

Initially, her job with Fargo Cass Public Health consisted of seeing North Dakota residents trying to quit smoking. Her role has expanded

to contracting with area hospitals and health care organizations that have a larger reach than public health.



Matter wants everyone seeking health care in the area to be asked about tobacco use, advised to quit and referred to the right resources. In the past year, Fargo Cass Public Health has referred more than 600 people to the North Dakota quitline with the help of their partners. Matter used to see more people, but with her expanded duties in working with hospitals, she now sees about five people a week.

She considers her work with smoke-free Fargo and West Fargo her biggest accomplishment along with the partnerships generated with other public health tobacco programs. Such changes in public behavior are difficult to enact.

"When you come from the health approach, it's a no brainer that secondhand smoke does damage," she said. "The hostility when you try to implement a policy can be pretty intense."

Matter considers public health a dynamic and changing field, full of different opportunities.

"I would encourage graduates to seek out staffing public health," she said.

## A message from the director of allied sciences

Welcome to our newest hospital affiliate, the Veteran Affairs Medical Center in Minneapolis. The center will provide radiologic sciences internship opportunities. Coincidentally, the center is our tenth radiologic sciences affiliate and joins us at the tenth anniversary of our radiologic sciences program. You will find a brief history and overview of the NDSU radiologic sciences and center programs in this newsletter.

In the previous issue, I mentioned the merger of two national certifying agencies, the American Society of Clinical Pathology and the National Credentialing Agency for Clinical Laboratory Science, and the single credential of Medical Laboratory Science that resulted. Since the merger, the majority of our clinical lab hospital affiliates have made, or are in the process of making, a program name change to Medical Laboratory Science. NDSU approved our Clinical Lab Science program's name change to Medical Laboratory Science, effective fall 2011.

Under the leadership of President Dean L. Bresciani, strategic planning is under way for NDSU. These committees are charged with identifying criteria that define outstanding programs for future enhancement as resources become available. The strategic planning documents are available at [www.ndsu.edu](http://www.ndsu.edu).

Another key administrative change at NDSU this year was the resignation of Craig Schnell, provost and vice president for academic affairs. President Bresciani recently announced his selection of Bruce Rafert as NDSU's next provost who will begin in July. He will play a key role in guiding NDSU as chief academic officer responsible for coordinating university scholarly and instructional activities. We appreciate Provost Schnell's commitment to the allied sciences during his tenure and anticipate working with him on future projects when he assumes a faculty position in our college.

Next academic year, Sara Wald, director of advancement, and I will establish an alumni advisory board that will address program needs and build alumni relationships. If you want to be involved, contact me or Sara.

I hope you enjoy reading our newsletter. If you have comments, stories to share or suggestions for future issues, contact me at [polly.olson@ndsu.edu](mailto:polly.olson@ndsu.edu) or Sara Wald at [sara.wald@ndsu.edu](mailto:sara.wald@ndsu.edu).

Thank you and have a great summer and year!



Polly Olson

## Notes from our interns at affiliated programs

The clinical laboratory science class of 2011 interns have been involved in research projects and seminar presentations.

At Fairview Hospital in Minneapolis, clinical lab science student projects were: **Laura Hagen**, “Comparing the Stago Sta-R to the Stago-R-Evolution” (mentor: Sandy Bohn); and **Tina Larson’s** “Antibody Screen Detection Using Gel Method: Does Using Saline vs. MTS Diluents Cause a Change in Reactivity Strength?” (mentor: Susan Bielick).

**Kelly Horvey, Haihua Jin, Kendra Schmalz, Leah Schmidt, Samie Silleck, Jennifer Wadeson and Lori Winter** participated in the group research project titled “Eliminating Pre-Analytical Variables and New Employee Training: A Dual Focus.”

A project begun by the Sanford clinical lab science class of 2010, the students developed a laminated badge attachment to serve as a lab resource and completed an interactive employee-training module.

**Lindsay Rezac’s** research project, “Evaluating new Giardia/Cryptosporidium Kit and Campylobacter Method,” compared ease and cost of test, sensitivity and specificity to update current methods in the lab at St. Luke’s Hospital, Cedar Rapids, Iowa.

**Kelly Wilkinson and Nicole Rimmereid**, Mercy College of Health Sciences Clinical Lab Sciences Program, Des Moines, Iowa, are preparing final case study presentations. They are in their second rotation through the major areas. They attended the ASCP-IA state meeting in Omaha, Neb., where they learned about new technologies, unusual disease states and forensic aspects of clinical lab science.

**Melissa Quam**, Mercy Medical Laboratory Science program, Sioux City, Iowa, is performing differentials in her second rotation of hematology. She was chosen as an American Society for Clinical Pathology scholarship recipient.

Many interns attended their first professional conferences this past spring.

NDSU/Sanford respiratory care interns attended the North Dakota Society for Respiratory Care convention in Grand Forks, N.D. One speaker with cystic fibrosis, provided a particularly impactful personal perspective on living with cystic fibrosis and respiratory care. Students also participated in the annual “Sputum Bowl,” a knowledge bowl for respiratory care students and staff.

St. Cloud radiologic science students attended the University of Iowa Student Educator Seminar in Iowa City. **Kendra Beckley** was a member of the winning student team in “Who Wants to Be a Radiographer?”



Melissa Quam studies abnormal peripheral blood smears at Mercy Medical Laboratory.

Avera McKennan radiologic science seniors in Sioux Falls, S.D., attended the Association of Collegiate Educators in Radiologic Technology (ACERT) convention in Las Vegas, and along with Sanford-Sioux Falls respiratory care interns, attended the annual South Dakota Society of Radiologic Technologists conference in Mitchell, S.D. **Kayla Braaten’s** scientific paper presentation, “One Image at a Time,” received first place and **Carter Ellenson** and **Grant Lannoye** won the golf tournament. Avera McKennan seniors also began to pick up shifts as student technologists.

Sanford-Fargo radiologic science seniors are in the final phases of their senior project. To assist prospective students to learn

about the radiology profession, they created a video titled “Life as an Intern in the RT Program.”

Across programs, radiologic science juniors are finishing up their first year of competencies with spines and skulls and becoming more proficient at routine diagnostic exams. Having gained proficiency in various exams, juniors are looking forward to gaining paid work experience in radiology departments or surgery centers, rotating through the various imaging modalities and participating in fundraising to attend their state conferences next year.

## CELEBRATION HELD FOR NEW INTERNS



On April 7, the Department of Allied Sciences hosted a “send-off” for the newly accepted interns to celebrate their admission into the professional level of their program and offer answers to frequently asked questions before leaving campus to begin this final phase at the hospital. Fifty-nine allied sciences majors will begin internships in 15 of the allied sciences hospital affiliated programs in summer and fall 2011.

Best wishes!

# Scholarship winners

## Allied Sciences Alumni and Friends Scholarship

A \$500 scholarship awarded on the basis of scholarship, merit and need. Alumni and friend annual contributions provide funding for this scholarship.



Romano Tuya, Sudan

## CAPP Scholarship

A \$500 award to an allied sciences intern based on **C**ommitment to their major, putting **A**dvice to **P**ractice, and **P**erseverance. This award is funded by Polly Olson, recipient of the 2009 Dean's Award for Outstanding Advising in the College.



Moses Samura, Sierra Leone

If you are interested in funding a scholarship or contribution to the Allied Sciences Alumni and Friends Scholarship, please contact Sara Wald, director of advancement, 701-231-6461 or [sara.wald@ndsu.edu](mailto:sara.wald@ndsu.edu).

## Dean's Scholarship – Allied Sciences

Three \$1,000 scholarships awarded by the Office of the Dean to allied sciences students based on high scholastic achievement, extracurricular involvement and demonstrated leadership in the college.



Alicia Kerr, Velva, N.D.  
Tania Peters, West Fargo, N.D.  
Kendra Schmalz, Killdeer, N.D.

## Sanford Health Foundation – Mary Jo Langenwalter CLS Scholarship

A \$500 award presented to a student accepted into the Sanford School of Clinical Laboratory Science to be used toward tuition.



Samantha Silleck, Portland, Ore.

## Michael Sologuk Memorial Scholarship

A \$320 scholarship awarded to a junior or senior respiratory care major accepted as an intern at Sanford Medical Center. One criterion for selection of the recipient is an essay pertaining to cystic fibrosis.



Alyson Maine, Cogswell, N.D.

# Job outlook is good

A sluggish return from economic recession has affected all employment, however, the general outlook is good for job opportunities in allied sciences for the next 10 years. According to the U.S. Labor Department, the need for respiratory therapists, clinical laboratory scientists and radiologic technologists is expected to continue to grow faster than average for all occupations.

The NDSU Career Center annual employment report for 2010 found that 100 percent of clinical laboratory science majors who responded to the survey found employment related to their major. 80 percent of radiologic sciences majors and 78 percent of respiratory care majors found employment in the three to four months following graduation, when the survey took place.\*

Jill Wilkey, NDSU Career Center director, said focus is a key word for recent graduates in the job market. Seekers do well to focus on specific areas to generate success:

- learning how to job search
- identifying potential people that might hire you
- geographic location

"Before the recession, you could get away with one resume suiting everything," she said. "You can't do that today. It has to be incredibly focused on who the reader is."

In preparation for internship and employment applications, students in allied sciences have two class sessions and a critique session to learn and apply resume, cover letter and interviewing skills.

"Seniors involved in job searches have commented on how glad they were to have had this practice, making it much faster and easier to complete a job application," said Polly Olson, director of the Department of Allied Sciences.

The internships themselves are often a source of employment. The summer 2009 to spring 2010 NDSU grads in respiratory care and clinical laboratory sciences translated about half of their internships into positions at the same hospital. For radiologic sciences graduates, about 35 percent of NDSU student interns became employed by their internship hospital.

As they enter internships or the wider job market, both Wilkey and Olson are starting to see more opportunities than during the last two years.

"It looks pretty good for our 2011 grads," Olson said. "A number of students have already secured jobs."

*\*The NDSU Career Center 2010 annual employment survey included graduates with baccalaureate degrees earned in August and December 2009 and May 2010. Since this survey was conducted, 91% of respiratory care and 88% of radiologic sciences grads have confirmed employment as respiratory therapists and radiologic technologists.*

## CAREER FAIR TO SHOWCASE 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. 15 in the Fargodome, students and employers can meet, mingle and plan for jobs and internships.

## Students of Allied Sciences club gains permanent status

The Students of Allied Science club has made great progress as it completes its second academic year.

We are excited to have earned permanent status as a club at NDSU. We also have gained many new students majoring in allied science programs (respiratory care, radiologic sciences and clinical laboratory science, which has just seen a name change to medical laboratory science) at NDSU.

The club meets once a month to hear from invited professional speakers, current NDSU interns and other guest speakers. One of the highlights of our meetings is when current interns share with us aspects of their internships. Allied science majors are required to complete an internship to graduate, so their insights are beneficial. The interns discuss aspects of the application process, interviews, actual internships and answer questions.

Our members also participate once a month in a volunteer project in the Fargo-Moorhead community. This year we took a different approach. Nicolas Steidl, our volunteer chair, arranged for us to partner for the year with the Ronald McDonald House Foundation. The projects we participated in were fun and exciting. The highlights

were Christmas tree decorating and the Valentine's Day Sweetheart Ball. We also helped the community by filling sandbags in preparation for the spring flood.

To raise money and awareness for the Cystic Fibrosis Foundation, we participated in a Cystic Fibrosis walk and held a butter braid fundraiser.

We had a great year as a club and look forward to even more adventure in the future. Next year we hope to continue growing as a club, reach and inform others on the NDSU campus and community about our majors and continue providing service projects for our community.



Students filled sandbags for the flood.

**Beth Burns,**  
*public relations representative*

## Penny war fought and won by college ambassadors

A lot has happened with the Pharmacy, Nursing, and Allied Sciences Ambassadors this past year.

The fall semester was packed for ambassadors. We launched our new website, <http://sites.google.com/site/pnasambassadors>. Please check it out. We started out the semester with Ticket to Your Success, an annual event for new students to get information about the college and to ask questions. Despite the inclement weather, our annual retreat was again a success at bringing us together as an organization and a great way for us to get to know each other better.

In October, ambassadors gave tours of Sudro Hall to the Nursing Alumni Advisory Board, walked in the Homecoming parade, talked with prospective students and gave tours of Sudro Hall during Discover NDSU. We also held a Student Appreciation Day

before Halloween where we served homemade cookies, brownies and cider to students to give them a boost during the dreaded midterms.

November marked the time of our elections. From this year's results, it looks like next year will be great. It's also the start of The Great Healthcare Adventure, a project put together by our co-adviser Dana Davis. Ambassadors travel to a local elementary school and introduce grades K-12 to healthcare and the different career paths available. It was a great success last year and is starting out very well again this year.

This spring marked the start of a competition between our ambassadors and the College of Engineering and Architecture that included a weeklong penny war. The ambassadors are proud to announce we surpassed our joint goal of raising \$1,000 and beat the College of Engineering and Architecture. The money we raised went to the Dakota Medical Foundation.

Our organization is moving in the right direction with the help of our advisers, Dana Davis and Sara Wald. Hopefully next year will be even more successful for the Ambassadors.

**Katie Montag,**  
*Ambassadors president 2011*

### Allied Sciences Ambassadors

Kathleen Borts  
Marc Estes  
Nathaniel Freng  
Tacy Masters  
Madison Stone  
Rebecca Ystebo



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# allied sciences news for you

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## Congratulations Class of 2011

### **Clinical Laboratory Science**

Laura Hagen  
Kelly Horvey  
Haihua Jin  
Tina Larson  
Melissa Quam  
Lindsay Rezac  
Nicole Rimmereid  
Kendra Schmalz  
Leah Schmidt

Samantha Silleck  
Amber Stola  
Jennifer Wadeson  
Kelly Wilkinson  
Lori Winter

### **Respiratory Care**

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Andrea Rader  
Emily Tappainer  
Brianna Strube  
April Vincent  
Hibiki Yamanaka

### **Radiologic Sciences**

Cari Auen  
Kendra Beckley  
Kayla Braaten  
Jillian Brummer

Toni Clarys  
Alexandra Daly  
Ashley Denne  
Carter Ellenson  
Bailey Flach  
Holle Grade  
Rebecca Hoistad  
Jennifer Jenkins  
Grant Lannoye  
Abigail Malone  
Sadie Mathson

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