

Mayo School of Health Sciences

Connections A publication for alumning at udanta, faculty, and friends of Mayo School of Health Sciences A publication for alumning at udanta, faculty, and friends of Mayo School of Health Sciences

A publication for alumni, students, faculty and friends of Mayo School of Health Sciences



Tap into free career resources

Think about one basic work skill you use every day. Where did you learn it? You likely learned that skill many ways, in the classroom, in lab, in clinicals, from a colleague, at the computer or on the job. You learned it, improved it, expanded it and perfected it. The learning doesn't stop, it builds and blends from one situation to the next.



That's why I'm so pleased to see that Mayo School of Health Sciences (MSHS) is offering more blended learning programs, where students learn in the classroom, in the clinic and online. (See story page 10). I've taught distance learning courses and have studied in blended learning programs at Johns Hopkins and Virginia Commonwealth University, Richmond. From the perspective of teacher and student, I found the blended learning format richer than the standard classroom lecture in front of a blackboard. I'm proud to be an alumnus of a school that's exploring new ways to teach.

You are a member — and it's free

As a graduate of a MSHS program, fellowship or internship, you are a member of MSHS Alumni Association. (Did you notice? No dues to be part of this illustrious group!)

So take advantage of the connnections at your fingertips. Explore the MSHS Alumni Association website or find us on Facebook.

As the new president of the MSHS Alumni Association, I hope

"The learning doesn't stop, it builds and blends from one situation to the next."

- TODD A. MEYER

you'll consider how this group can support you throughout your career. Looking for a new job? Considering a new city? There are likely fellow alumni who could provide tips on job openings. Considering additional education? Other alumni have been there and have experiences to share.

Tap in and connect. We're here for you, with information, resources and contacts when you need them, for the first job or 10, 20 or 30 years down the road.

Suggestions, comments or ideas about the MSHS Alumni Association? I'd love to hear them. Please email me at mshsaa@mayo.edu

Todd A. Meyer, DNAP, CRNA Department of Anesthesiology Mayo Clinic

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Mayo School of Health Sciences

Connections



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MSHS alumna recognized for Outstanding Contribution

The Mayo School of Health Sciences (MSHS) Recognition of Outstanding Contribution honors alumni of MSHS programs whose contributions are exceptional in one or more of the following areas: clinical care, research, mentoring and education, or humanitarian endeavors. This year's recipient is Amy Wendel Spiczka, Cytotechnology Program, 1997, manager of Anatomic Pathology at Mayo Clinic in Arizona and assistant professor of Pathology and Laboratory Medicine at the Mayo Clinic College of Medicine.



Growing up in tiny Eagle Bend, Minn. — population 535 — it was hard for Amy Wendel Spiczka to imagine herself learning or working at Mayo Clinic.

"Being from such a small town, getting to Mayo seemed like a big stretch," she says. "It almost seemed an impossible dream."

Fortunately, someone in Eagle Bend encouraged impossible dreams: science teacher Gabriel Rapatz, PhD. "Dr. Rapatz encouraged us to set our sights high," says Wendel Spiczka. "He opened our eyes and made science come alive."

Dr. Rapatz helped the farm kid with an interest in science hone her direction, and by her senior year, Wendel Spiczka was set on a career in health care. She earned an associate's degree as a histology technician from Fergus Falls Community College and then enrolled in MSHS Cytotechnology Program.

"People in our community had gone to Mayo when they thought they had no hope left," she says. "If I really wanted to help people and make a difference, Mayo was where I needed to be."

After graduating, Wendel Spiczka joined Mayo Clinic's staff. Jill Caudill, director of the Cytotechnology Program at that time, says she was a welcome addition.

"I knew Amy was an exceptional individual from the first time I met her," says Caudill. "She was an outstanding student, constantly working to master all aspects of the field and always taking advantage of every new learning opportunity."

To Wendel Spiczka, every new bit of information absorbed meant there was more she could do for her patients.

"As a cytotechnologist, you have the opportunity each and every day to give patients the freedom of knowing they don't have cancer, or if they do have cancer, that the disease state may have been detected at an early stage," she says. "Lab work is definitely a passion of mine."

Turning point

As her love of the laboratory grew, Wendel Spiczka decided to apply to medical school with the goal of becoming a pathologist. About the same time, she had an epiphany that would mark a turning point in her career. "I decided to set my sights closer, and that opened my eyes to abundant opportunities and other career paths."

Many of those opportunities were in education. She earned a graduate certificate in laboratory management and a master's degree in education, then became program director for the MSHS Histology Technician Program and education coordinator for the MSHS Cytotechnology Program.

"Not only does Amy possess the technical skills for both cytology and histology, but she has been able to translate that into superior teaching of those subjects," says Caudill. "She is a kind and empathetic educator, but also maintains the high expectations required of any medical profession."

Beyond the technical aspects of cytology and histology, Wendel Spiczka teaches her students to think of the patients behind the specimens.

"As a student, I was taught to remember that every specimen belongs to someone," she says. "I need to treat every specimen like it belongs to my loved one. I've tried to

"This award belongs to those who have inspired and helped me along the way."

- AMY WENDEL SPICZKA

pass that along to the students I've worked with."

Her skills as a teacher and mentor have been recognized with several awards, including the MSHS Clinical Educator and Outstanding Educator awards and the MSHS Mentor Award. She's also deployed those skills as education coordinator and then education supervisor for the Division of Anatomic Pathology in Rochester, where she developed continuing education programs for allied health staff, residents, fellows and consultants.



Early in her career, Wendel Spiczka began attending meetings of the professional societies in her field. Before long, she was invited or elected to sit on committees and boards at the state, regional and national level.

She says one unexpected benefit of her involvement was meeting Matthew Zarka, MD, who connected her to the volunteer organization Grounds for Health, which provides cervical and breast cancer testing to women living in developing, coffee-growing countries. Inspired by the organization's mission, she has traveled to Mexico to volunteer with the group three times. She's also volunteered with the Mayo Hospice Program and Mayo Eugenio Litta Children's Hospital.

"I've gotten to see firsthand what it looks like to be on the receiving end of a cancer diagnosis," she says. "Those experiences remind you to take a look at each and every cell as if it has the opportunity to change a life, because it does."

Today, Wendel Spiczka manages the Division of Anatomic Pathology in Arizona. While she says she misses working at the bench, her



Science teacher Gabriel Rapatz, PhD, encouraged Amy Wendel Spiczka to dream big. He attended the celebration when she graduated from the MSHS Cytotechnology Program.

new roles bring her a different type of satisfaction.

"Education and operations management are no less gratifying than benchwork," she says. "It's just a delayed gratification."

Though delayed, she knows it is no less meaningful. She often thinks of Dr. Rapatz, Jill Caudill and the many other teachers — in and out of the classroom — who helped shape her life. "This award belongs to those who have inspired and helped me along the way," she says."The alumni award has everything to do with the people who have taught and mentored me. I am forever grateful."

These days, Wendel Spiczka is more often the teacher than the student. And she has some advice to offer graduates just beginning their professional careers.

"Anyone who graduates from MSHS has a passion for what they do," she says. "Keep that passion. Be dedicated and sincere, and be the best you can be every day." That's one of many lessons Wendel Spiczka teaches by example.

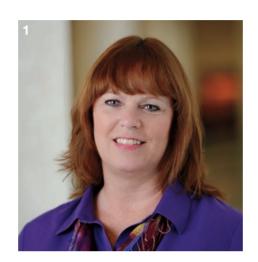
"Amy has contributed to the success of every lab and department she has worked for," says Caudill. "I'm proud to call her a friend and colleague. She's truly amazing."

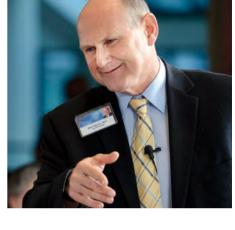
Alumni get together

Snapshots from the Annual Meeting

On April 26, 2013, MSHS alumni gathered in Rochester to reconnect with classmates and colleagues and to make new connections, too.

- **1.** Vicki Place, a supervisor in MR imaging at Mayo Clinic in Arizona, is the new president-elect of the MSHS Alumni Association
- **2.** Keynote speaker Mark Warner, MD, Mayo Clinic anesthesiologist and executive dean for Education spoke on "Star Wars Technology that Impacts Medicine and Everyday Life."
- **3.** Ashley Mroczenski is a physician assistant at Mayo Clinic Health System Eau Claire.
- **4.** Amy Wendel Spiczka, winner of the MSHS Recognition of Outstanding Contribution award, receives a congratulatory snuggle from her daughter.
- **5.** Attendees represented more than 26 MSHS programs.
- **6.** More than 140 guests attended the free event. (Don't miss out next year!)
- **7.** New board member Matt Bains chats with Troy Tynsky, MSHS operations manager.
- **8.** Sarah Oakley, AuD, is an audiologist at Mayo Clinic in Arizona and a member of the MSHS Alumni Association Board of Directors.
- **9.** New MSHS Alumni Association President Todd Meyer accepts the gavel from outgoing president Caren Hughes.
- **10.** Former board member Kathy Latcham, RN, CRNA, and her husband, John, enjoyed the evening out.
- **11.** Rochester musician Tim White entertained guests.
- **12.** Felisa Lee, RN, CRNA, completed the Nurse Anesthesia Program in 1980.





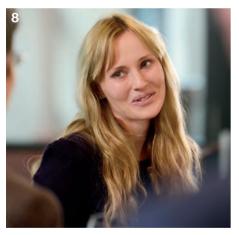




















SAVE THE DATE!

MSHS Alumni Association Annual Meeting April 25, 2014



Cardiology labs offer interdisciplinary learning

ncreasingly, health sciences and medical education institutions are interested in interdisciplinary education. Why? Because professionals from different disciplines who learn side-by-side become familiar with and respectful of each other's expertise.

In Arizona, Mayo School of Health Sciences (MSHS) fellows and students are learning alongside other disciplines in cardiology anatomy labs.

"We postulate that if everybody plays together in the same sandbox when they are young, they will play together better as a team when they are older," says Marci Farquhar-Snow, MN, CCRN, CMC, ACNP-BC, program director, Cardiology Nurse Practitioner Fellowship, MSHS in Arizona. "As we move closer to the possibility of having a medical school here in a couple of years, we want greater teamwork through more integrated training."

Electrophysiology training

To help prepare cardiology nurse practitioner (NP) fellows for their electrophysiology (EP) rotation, Farquhar-Snow organized an anatomy lab that included cardiology medical fellows.

"The EP rotation can be intimidating for our students," says Farquhar-Snow, who worked with electrophysiologist Komandoor Srivathsan, MD, to implement the

three-hour lab. During the lab, Dr. Srivathsan guided two NP fellows and four cardiology fellows through human heart dissection to demonstrate the organ's electrical conduction system and application to electrophysiology.

"Rather than simply dissect a heart, the fellows had the opportunity to apply that experience to actual treatment and procedures," says Farquhar-Snow. "Now, when the NP fellows have their clinical rotations, they will be more familiar with each profession's role in that area."

Echocardiography training

A subsequent lab involved two cardiology nurse practitioner fellows,

Working together in the cardiology anatomy lab are, left to right, Carl Gisnarian, CCP, program director, Cardiovascular Perfusionist clinical rotation; Ronald Ordas, MSN, ANP-BC, cardiovascular nurse practitioner fellow; William Schleifer, MD, cardiovascular disease fellow; Heather Andrus, MSHS Echocardiography student; Jocelyn Zeng, ACNP, nurse practitioner student, and David Pacheco, RDCS, Echocardiography Department.

one cardiology medical fellow, two echocardiography students and two cardiovascular perfusionist students.

Rochelle Tyler, RDCS, and David Pacheco, RDCS, directors of the Echocardiography Program, guided students and fellows through echocardiographic views in relation to pig heart sections and demonstrated catheter placement during cardiac bypass procedures.

Participants dissected pig hearts to see cross-section views of the structures affected by echocardiography. Cardiopulmonary Perfusion Program Director Carl Gisnarian, CCP, demonstrated catheter placement during cardiac procedures, including bypass.

For both labs, students and staff were invited to watch a live teleconference in the Mayo Clinic Multidisciplinary Simulation Center, and the proceedings were made available by webcast.

Inside views

Cardiovascular perfusion student Kyle Dana attended the echocardiography lab and says the experience helped him understand the big

"It was valuable to pick each other's brains during the debriefing at the end of the lab." - KYLE DANA

picture. "Perfusionists can feel isolated 'behind the pump,'" he says, adding that the lab helped him better appreciate the importance of each profession's role.

"The other participants seemed interested in how perfusion works to arrest and maintain cardiac activity during procedures. It was valuable to pick each other's brains during the debriefing at the end of the lab."

Echocardiography student Heather Andrus assisted in the second lab, showing where transducers are positioned during EKG. "Having hands-on access to hearts really helps to instill the training," she says. "And learning about the other disciplines was fantastic."

Ron Ordas, NP, cardiology nurse practitioner fellow, participated in both labs. "Echocardiograms are one of the most frequent tests we order, so building relationships with those professionals is important," he says. "I didn't have a good idea what perfusionists do, and now I understand their role in the cardiovascular surgery lab."

Ordas says these unique training opportunities are very helpful. "Cardiac anatomy is complex," he says. "Holding a heart in my hands and looking at the structures involved in how it works and how it is affected by disease processes makes abstract concepts more concrete. The things I know clinically are put into context."

Farquhar-Snow says more multidisciplinary labs are being planned. "I'm always looking for opportunities to integrate clinical knowledge with hands-on activities," she says. "It enhances learning and patient care when professionals who will be working together engage during training. This is the wave of the future in medical and health sciences education."

Family Medicine, **Pharmacy residents** learning together

Family Medicine residents who rotate through adult inpatient service at Mayo Clinic in Rochester are now receiving consistent pharmacybased education.

In the past, patient needs often dictated what pharmacy topics were covered in a given week, says Lori Herges, PharmD, RPh, a Family Medicine clinical pharmacist.

For more consistency, Herges and her Pharmacy colleague Shaun Bridges, RPh, collaborated with Family Medicine physicians to develop core lectures on topics including renal failure, anticoagulation, medications and the elderly, diabetes medications and antibiotics. Pharmacy residents and students participated in providing education.

"Professionals from both disciplines learn about the other's expertise," says Herges. "That can only help in practice."





Small-town practice, big-time benefits

t was Alison Ragatz's day off, but she was checking a hand injury for a patient — one who had stopped by her house, not the hospital, for help.

"That would make some people nervous, but I love it," says Ragatz, a physician assistant in Platteville, Wis., population 11,224.

Ragatz, a 2009 graduate of the Mayo School of Health Sciences (MSHS) Physician Assistant Program, says encounters like this one are among the reasons she sought a position at a small-town hospital after graduation.

"People stop by my house or call me at home at night to ask

questions," she says. "I know my patients' families. Not just their spouses and kids, but their aunts and uncles, nieces and nephews, and grandparents, too. I see them in the office and around town. It's old school. It's how I grew up, and I think it's great."

Not everyone shares Ragatz's enthusiasm for rural practice. According to the National Rural Health Association, 2,157 rural areas have been declared Health Professional Shortage Areas. That's compared to just 910 urban areas that have received the same designation. And while a quarter of

But Ragatz and other MSHS grads say there are big benefits to practicing in small towns.

One of those benefits is the chance to practice within the full scope of their licensure.

"We do everything," says Ragatz. "Our patients don't want to see specialists. They want to come to their primary provider for all of their care. That means we have to know a little bit about a lot of things. We do lesion removal, casting, joint injections, OB and peds care. I run the anticoagulation clinic for patients on blood thinners. We read our own X-rays and EKGs. It's never dull."

Respiratory care in Black River Falls

Kim Schlifer, a 2006 graduate of the Respiratory Care Program, has an equally diverse practice. She's part of the respiratory care team and



manages outpatient therapy at Black River Memorial Hospital in Black River Falls, Wis., population 3,622. Schlifer worked at Mayo Clinic for a year and a half after graduating, but when a position opened up at Black River Memorial Hospital — where she was born — she took it.

While moving back to her hometown was a big part of the draw, Schlifer says the position also offered unique professional opportunities.

"As soon as I started I got to develop a pulmonary function lab to test patients' lungs," says Schlifer, who also manages the pulmonary rehabilitation program and provides tobacco session counseling. She also works on the hospital's inpatient units, providing care to patients taking their first breaths, those taking their last, and those somewhere in between.

"I love the diversity," she says. "It means I have to stay up on a broad spectrum of knowledge. Sometimes I'm the only therapist in the hospital. It can be exciting and nerve-racking to have so much autonomy."



Nurse anesthetist in Slavton

Brian Peterson, a 2003 graduate of the Master of Nurse Anesthesia Program, remembers having similar feelings when he became the first anesthesia provider on staff at Murray County Medical Center in Slayton, Minn., population 2,150.

"It was nerve-racking the first year on my own," says Peterson, who worked at Mayo for several months before starting his position in Slayton. "At Mayo, you're part of a big team. That's a very comforting environment."

Ten years later, Peterson counts his independence as one of many perks his job provides.

"I have the latitude to decide the type of anesthesia and technology that we use," he says, noting that the technology rivals what's found in much larger hospitals.

"We use ultrasound-guided regional anesthesia for most orthopedic surgeries, and that's quite rare in a small hospital," says Peterson, who also provides anesthesia for general surgical, cataract, ENT and podiatry procedures. "We're very aggressive and innovative with technology."

Not just a Band-Aid station

Schlifer says her facility is similarly high tech.

"The technology here is just as good if not better than what you'd see other places," she says. "We provide high-quality care across the board. When people think rural, they sometimes think we're just a Band-Aid station or that the pace here is slow. But we have a busy ER and a busy practice overall."

Schlifer loves what she does and where she does it. Black River Memorial Hospital was ranked 11th on Modern Healthcare's 2012 list of the 100 Best Places to Work in Healthcare.



"I couldn't ask for a better place to work," Schlifer says. "Some of the doctors here took care of me when I was a kid with asthma. Now they're taking care of my kids. Our senior leaders come to our departments to talk to us. I know our CEO on a firstname basis."

'Where everybody knows your name'

Alumni agree that personal connections with colleagues and patients are highlights of working and living — in a small community.

"My patients know all about my life outside of work," Ragatz says. "I've had patients bring toys to my kids."

Schlifer says small-town life reminds her of the theme song to the television show, "Cheers" ... "where everybody knows your name."

"Everybody in town knows everybody else," she says. "I know my patients by name now instead of by room number. I love that feeling. It makes what I do so much more rewarding." C



f you are a histology technician, there is a right way to put on your gloves. Do it wrong, and you could jeopardize the tissue samples entrusted to you, as well as your own safety. In the past, Mayo School of Health Sciences (MSHS) instructors taught this basic skill at the beginning of the Histology Technician program. The fall of 2012 was different. Everyone walked into the first lab knowing exactly how to put on their gloves.

What made the difference? Blended learning.

During the 2012–2013 school year, the Histology Technician Program, along with programs for Clinical Neurophysiology Technology and Phlebotomy Technician, were part of a pilot study using a combination of classroom and clinical education blended with online learning. The program was funded by a \$1 million gift from an anonymous benefactor. The goals were to identify, study and implement effective combinations of online and traditional instruction to enrich learning, improve learning outcomes and offer education to larger groups of learners.

"Blended learning represents a transformation in education from being teacher-centered to being learner-centered," says Virginia Wright-Peterson, former MSHS operations manager. "We know that the quality of education goes up with this approach. Learners are more engaged. They are able to self-pace as it fits their needs."

A flexible format

Michelle Nelsen, Histology Technician program director, saw the benefits of blended learning clearly. In addition to basic skills, such as putting on gloves, much of the program's core knowledge is now covered online. Students work through that information on their own time, at their own pace, reviewing and repeating content until they feel comfortable with it.

"Historically, we would give the students a two-hour lecture to get them ready for all the lab work ahead of them during a week. It was often overwhelming," says Nelsen. "Now we can break it up into smaller portions online. That helps them prepare for and understand more

thoroughly what they can expect in the lab the next day."

A focus on improvement

Text, video, animation, graphics, quizzes and other interactive activities are all part of the new online offerings. Because updating online information is relatively simple, the programs can respond to student input.

"With each class, we try to continually improve on what we first created," says Mary Kaye Peterson, director of the 10-week Phlebotomy Technician Program. "We use the students' feedback and our own experience as guides."

Jan Buss, program director for the Clinical Neurophysiology Technology Program, agrees that student input is critical to success. "We are not just taking PowerPoint presentations and journal articles and dumping them online," says Buss. "This is a

"This is a fresh, interactive way of teaching and learning."

- JAN BUSS

fresh, interactive way of teaching and learning. The students help us see what they really need for the best learning to happen."

As part of the pilot, MSHS is measuring learning outcomes. The programs are conducting surveys to see if there are differences in classes before blended learning versus classes after blended learning. Program leaders are evaluating how much time students spend on the material, level of student preparation and understanding, and grades received.

"It will be several years down the road before we really know how this is going to work best," says Buss.

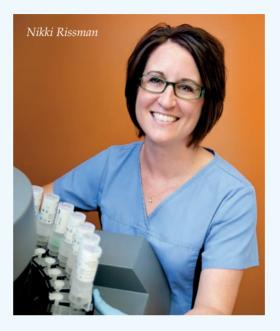
A broader reach

All three programs will continue using the blended approach. MSHS also is investigating other ways to expand blended learning throughout, and beyond the school. In particular, educators are looking at ways content developed for one area may have applications for many learners. For example, similar courses on research, physics and anatomy are taught in multiple programs. Online content for these subjects offers greater efficiency and ensures consistency in content.

MSHS also is developing online courses for individuals throughout Mayo Clinic who are interested in preparing for certification exams in imaging, such as MRI, CT and positron emission tomography.

"Our experience has given us confidence in the value of offering this core content to a wide range of students," says Wright-Peterson. "Rather than transitioning more full programs to blended learning, we want to continue to leverage these opportunities for interdisciplinary learning. We see many avenues for enhancing the education we offer."

Closing the distance: Blended learning beyond the Mayo campuses



Nikki Rissman knows lab work. She's been a medical technologist since 1998. She's currently the lead technologist in the histology lab at Winneshiek Medical Center in Decorah, Iowa. But she wanted to learn more. With MSHS's Histology Technician Program she was able to do just that — even though she's 70 miles away from Mayo Clinic in Rochester.

Rissman enrolled in the program to prepare for the American Society of Clinical Pathology histotechnician certification exam. With her

past lab experience and training, she was already qualified to take the test. But she felt the Histology Technician Program would ensure her knowledge and skills were up-to-date.

The program typically requires being in Rochester for lab work at Mayo Clinic during the day. That didn't fit with her schedule at Winneshiek Medical Center. So she volunteered to participate in a MSHS distancelearning pilot project. She worked with the online blended learning curriculum and applied what she learned to her work activities in the lab.

"It was an amazing opportunity. I looked into other online courses, but this was unique," says Rissman. "By working closely with the instructors and using their online resources, I was able to meet my learning goals."

Rissman took advantage of a new virtual classroom technology that allowed her to actively participate in classes that were not offered online. For example, in her microanatomy course, when students put a slide under a microscope in the classroom, she could view the slide on her computer as if she were looking under the microscope herself.

"I felt like I was a full participant in the class," she says.

Throughout the program, Rissman stayed in close contact with her MSHS instructors. "They made it a smooth process, and it worked well," she says. "The technology that enabled me to do this is wonderful. I cannot emphasize enough what a great benefit this program was for me."

"It was an amazing opportunity ... By working closely with the instructors ... I was able to meet my learning goals."

- NIKKI RISSMAN



Vithout scholarships, some Mayo School of Health Sciences (MSHS) students wouldn't be able to pursue allied health education. And next year, fewer scholarships will be available because of declining gifts from benefactors.

In the 2012–13 school year, MSHS distributed 187 scholarships to about 10 percent of enrolled students. The average scholarship was \$2,000.

"While we have had generous alumni benefactors, MSHS has not asked for financial support from MSHS alumni," says Troy Tynsky, MSHS operations manager. "Like other colleges and universities, we realize we need to do more financially to support our students." Tynsky is hoping more MSHS alumni will contribute.

Marcy Landswerk, MSHS financial aid coordinator, says student debt of \$20,000 is common, and for some it's much more. "It's not unusual for Physical Therapy and Nurse Anesthesia graduates to have education debt of \$100,000,"says Landswerk.

MSHS students use personal savings for tuition and take advantage of federal student loans. But the federal loans often don't cover the full cost of tuition. And some MSHS students max out government loans for their undergraduate education. "Then they are looking at private loans with higher rates and end up paying multiple lenders postgraduation," says Landswerk.

Tuition for MSHS programs ranges from \$1,900 for the 10-week Phlebotomy Program, which doesn't qualify for federal student loans because of the short program length, to \$82,000 for students starting the doctorate-level Physical Therapy Program.

"We hope alumni will embrace the opportunity to support the next generation of their colleagues," says Tynsky. "For a student in financial need, any amount can make a big difference."

Join the Edith Graham Mayo Society

Philanthropic Society honors MSHS donors of \$1,000 or more

More than 135 MSHS alumni have donated \$1,000 or more to Mayo Clinic, earning membership in the Edith Graham Mayo Society. This philanthropic society was launched in 2012 to recognize MSHS benefactors.

Gifts to Mayo Clinic can be designated to specific areas, including MSHS scholarships and programs.

Alumni who are considering a donation have several options:

- Make a gift of \$1,000 or more
- Make a new gift that brings your total cumulative to \$1,000 or more
- Pledge to give \$1,000, payable at \$200 per year for five years
- Make contributions toward a pledge via Mayo Clinic payroll deduction (for Mayo Clinic employees)
- Pledge to give \$2,500 or more through your estate G

Students make big investments in education

Balance career costs, benefits

JEROME CRAWFORD

Physical Therapy Program Class of 2014

Education and work history:

- Bachelor's degree in kinesiologymovement science, Penn State University, full academic scholarship
- Personal trainer, conditioning coach at Penn State for three years
- Master's degree in exercise science, Northeastern Illinois University, financed with savings, scholarships and loans
- MSHS Physical Therapy Program, financed with loans and a generous MSHS scholarship

Since he's worked for a time, Jerome Crawford feels he has a broader lens on the debt he's incurring. "The money challenges will be somewhat mitigated because physical therapy is a high-demand profession that pays a reasonably decent salary for new graduates," he says.

He advises students to find the career path they are passionate about and consider the full cost of graduate education. For example, PT students do seven clinical rotations, half of them away from Mayo Clinic. This summer, he paid more than \$2,000 for two months' housing and expenses in Chicago.

Crawford says he's confident the investment in his doctorate in physical therapy will pay off. And, support from MSHS scholarships has eased the burden substantially.

Scholarship a 'miracle'

VYANA (VEE) ARIFIN

Surgical First Assistant Program Class of 2014

Education and work history:

- Bachelor's degree in health sciences, Trisakti University in Jakarta, Indonesia, financed by her father
- Medical/surgical transcriptionist, Mayo Clinic, 2003-present
- MSHS Surgical First Assistant Program, financed with current income, Mayo Clinic employee tuition reimbursement and \$6,000 in scholarships

Vyana (Vee) Arifin was thrilled when MSHS launched the Surgical First Assistant Program in 2012. "Surgery is my dream," says Arifin, who realizes that the need for her skills — transcription services — is declining with new technology.

When she was accepted into the inaugural Surgical First Assistant class, she didn't know how she'd pay the \$18,000 tuition. Federal loans covered about \$12,000. As a single parent, she didn't have the reserves to cover the rest.

She was awarded \$6,000 in scholarships from MSHS. "It was a miracle," says Arifin, who was worried she might not be able to complete the program.

Arifin works nights and weekends as a transcriptionist. "My department has been very supportive, making it possible to work around my clinicals." For Arifin, MSHS scholarships have opened new doors to a future in surgery.

Level of debt 'scary'

MCKENZIE WATZKA

Echocardiography Program Class of 2014

Education and work history:

- Bachelor's degree in biology, University of Wisconsin-La Crosse, financed with part-time jobs and loans
- MSHS Echocardiography Program, financed with part-time work, loans and \$4,000 in scholarships

Her mom's diagnosis of cardiomyopathy inspired McKenzie Watzka to pursue a health care career. "I knew I wanted to get into this field, and I wanted a four-year degree," she says. She's pursued both on her own. She works in a hospital cafeteria during school breaks and babysits occasionally.

"I have 22 months to give this program my all," she says. "It's demanding, and it's hard to find jobs that are flexible to work around my schedule."

Watzka says she is confident in her choices, but her debt is "scary." The cost of attending the Echocardiography Program is about \$27,000. Watzka is very thankful for a \$4,000 MSHS scholarship made possible by generous benefactors.

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Bachelor of Science in Health Professions

"n 2013, 13 students — the first graduating class under a unique partnership — received both a certificate Lfrom Mayo School of Health Sciences (MSHS) and a Bachelor of Science in Health Professions (BSHP) degree from the University of Minnesota Rochester (UMR).

The BSHP program was created to respond to the health care industry's need for professionals who can handle new technologies and the increased complexity required by specialization.

"I thank UMR leadership for their collaborative spirit and their ability to recognize the value of allied health education," says Claire Bender, MD, dean of MSHS. "They were breaking the traditional model. They took the time to learn and understand allied health professions to develop

a program where the student could get University of Minnesota credit for education on the Mayo campus. It's a triple win for Mayo, UMR and our students."

UMR, one of the few offering a bachelor's degree to allied health students, is the gateway to the BSHP program, which admits juniors. Students must complete all University of Minnesota general- and liberal-education requirements at UMR or another accredited university or college prior to admission. Then, as UMR juniors, they begin specialized education in one of four MSHS programs: Echocardiography, Radiography, Respiratory Care or Sonography.

"The BSHP program creates new and innovative opportunities for students in the health professions," says

In 2014, Chelsey Mahoney, Jessica Wojcik and Marissa Morris will earn a certificate from MSHS and a Bachelor of Science in Health Professions from the University of Minnesota Rochester.

UMR Chancellor Stephen Lehmkuhle. "It is a delivery model that I expect will be emulated by other institutions over the years."

Roots of collaboration

In 2005, Dr. Bender served as Mayo Clinic's representative on the Governor's Rochester Higher Education Development Committee (RHEDC), which recommended establishing "a world-class higher education institution that leverages the University of Minnesota's research capability, in partnership with IBM, Mayo Clinic and other industry leaders, to build signature academic and research programs that complement southeast Minnesota's existing leadership roles in health sciences, biosciences, engineering and technology."

A year later, UMR was designated a campus of the University of Minnesota system.

"Fast forward to the BSHP program and '2+2' — for allied health — a bachelor of science delivered jointly with two years at UMR and two years at MSHS," says Dr. Bender. "I've always been a strong advocate for offering the best education to support the allied health professions. It's like a dream come true to see this come to fruition."

The program launched with Respiratory Care and Echocardiography in 2011, then expanded to Sonography and Radiography in 2012. Along the way, the relationship has fueled a variety of outcomes:

1) Growth. Enrollment has grown slower than anticipated. But with UMR taking the lead on recruiting and a competitive admissions process, BSHP admissions at MSHS have grown from 14 in 2011 to 39 in 2013.

"We're getting higher numbers of applicants and stronger applicants," says Becky Madery, BS, RDMS, RVT, academic coordinator of the Sonography Program. "I do have to credit UMR for making our program more well known. We were able to pick from the cream of the crop for the 2013-14 school year after UMR selected about 50 applicants, more than triple the previous year."

All four programs continue to enroll students who only want a certificate, usually because the student already has or is working toward a college degree.

2) Graduates with stronger futures. The move to upgrade four programs to a bachelor of science was driven by Mayo Clinic needs for professionals with more education.

"The clinical departments wanted people to be better prepared than the level of an associate's degree," says Bethany Krom, administrator, MSHS in Rochester and the school's primary contact with UMR.

Students and faculty say the bachelor's degree is a strong draw. For example, of 437 respiratory care programs in the United States, only 55 offer a baccalaureate. And until last year, Minnesota had only one baccalaureate radiography program.

"I'm hoping this will give them an advantage in the job market if competing against someone with an associate's degree or a certificate," says Jill Anderson, MBA, RT(R) (M)(CT), Radiography Program director. "The BSHP ultimately better prepares students for their profession with better communication and management skills and better understanding of health care as a whole."

That's true even for the Respiratory Care Program, which previously partnered with the University of Minnesota Twin Cities to offer a bachelor of applied science.

"The bachelor of science is a more respected degree that requires more rigor," says Vanessa King, RRT, Respiratory Care Program director.

Now King hears that employers are eager to hire respiratory technicians with a bachelor's degree. "The



Many people contributed to the launch of the Bachelor of Science in Health Professions including, seated left to right, Holly Renn, Claire Bender, MD, and Stephen Lehmkuhle; standing left to right Jill Anderson, Bethany Krom, Joshua Finstuen, Becky Madery, Troy Tynsky and Vanessa King.

reputations of the University of Minnesota and Mayo Clinic make our students very attractive to hire," she says. "It's more than just the degree itself. For our students, it's the best package deal on the market."

With a bachelor's degree, graduates also are stronger candidates for supervisory positions and have the option of applying for graduate education.

Joshua Finstuen, RDCS, Echocardiography Program director, welcomes the baccalaureate degree as a deserving reward for students with plenty of schooling. "We've had students in the past who went through the program after prior associate-level education. They could go to school for five or six years and still not get a bachelor's degree."

3) Students with a strong foundation.

BSHP requirements for graduation from UMR include math, science and liberal arts, such as literature and a foreign language. UMR academic advising before admission ensures that MSHS gets qualified students. Most BSHP students complete their prerequisites at other colleges and universities.

"Math and science have prepared these students for radiography," Anderson says. "They have a better understanding and better foundation." Thanks to that math and science base. MSHS could shorten the Radiography Program from 24 months to 21.

Completing two years of college also means students have the ability to handle the academic challenge they'll encounter at MSHS.

"When exposed to the rigor of bachelor-level coursework, sometimes the students are better prepared for our program," Madery says. "They are strong with their critical thinking skills and their ability to manage a big course load."

For nearly all prospective students, UMR works with MSHS to set up a four-hour observation of a health professional on the job to help narrow and confirm their career choice before they apply.

"We're connecting them with a deeper experience in the profession," says Holly Renn, UMR program director, health professions. "Our hope is that students will be able to find a good fit at an early stage. Some realize they're better suited to work in a laboratory setting versus direct

STUDENT PROFILES

Chelsey Mahoney

Program: Echocardiography

Graduation: May 2014

Education: Graduated from Chatfield, (Minn.) High School. Attended Washington & Jefferson



College in Pennsylvania for 11/2 years to study pre-med. Transferred to Rochester Community Technical College to finish prerequisites.

Value of Bachelor's Degree: "Degrees are everything in this world and I'd already gone through three years of college. The degree will help me get a better job and I might use it to get a master's in echo or become a physician's assistant."

Career Choice: She hopes to find a job in congenital or pediatric echocardiography.

Trivia: Her parents are biostatisticians at Mayo Clinic.

Marissa Morris

Program: Radiography

Graduation: May 2014

Education: Graduated from Medford (Minn.) High School. Enrolled at UMR to

pursue BSHP.

Value of Bachelor's Degree:

"With a B.S., you have more opportunities. My mom is an LPN, and she pushed me to get a four-year degree."

Career Choice: "I chose Radiography because there are so many different career paths. I'd like to become CT-certified. I think that's becoming the next big diagnostic tool."

Trivia: Has wanted a career in medical imaging since age 16. She did job shadowing with several health professionals at the hospital in Faribault, Minn., where her mother works.

patient care. More often, students do an observation and say, 'Yes, I can see myself doing that.""

4) Innovations to promote learning. Both institutions strive to improve the delivery of education, including the use of technology. While learning from each other, they are pushing in tandem for further evolution of the learning environment, says Krom, who admires UMR's integrated, student-centered model.

"The BSHP program is a testing ground for applied learning and competency-based education," Krom says. Several examples stand out:

- · Writing integrated into the curriculum. UMR and MSHS faculty have worked in concert to incorporate scholarly writing and effective communication into MSHS courses. And MSHS students on the BSHP track can receive help from UMR writing instructors.
- Joint classes. In 2012, all BSHP students at MSHS attended a course on patient care, which covered patient-

focused techniques that apply to all four programs. For the first time at MSHS, faculty from multiple programs taught students aspiring to multiple professions.

"We probably wouldn't have designed that class if not for the B.S. degree," King says. Faculty members are looking at other opportunities for joint classes among the four BSHP programs and possibly other MSHS programs.

• Coaching for success. MSHS has already started to emulate UMR's use of student success coaches instead of academic advisors. At UMR, success coaches help students take advantage of their strengths, learn additional study skills and strategies, and become aware of their own work styles and how to work with other people with different work styles.

"We work together to provide the support services that the student needs," says UMR's Renn. "We mentor them and develop a student success plan. With coaching, no one has been dismissed from the BSHP program."

Abdisalam Muse

Program: Respiratory Care

Graduation: May 2014

Education: Attended Normandale Community College, Bloomington, Minn., where he learned about the BSHP program.



Value of Bachelor's Degree: "The bachelor's degree is very important to me because, if you want, you can apply to medical school in the future."

Career Choice: "My older brother had asthma. My dream was, 'How can I help my brother?' He's considering specializing in pediatric and pulmonary rehab.

Trivia: Originally from Somalia, he and his family immigrated to Minnesota eight years ago.

Jessica Wojcik

Program: Sonography

Graduation: May 2014

Education: Graduated from St. Michael-Albertville (Minn.) High School, taking college-level courses to earn one year of credits. Attended UMR to finish prerequisites.



Value of Bachelor's Degree: "That four-year degree and a certificate from Mayo Clinic should put me a step ahead of those with a certificate."

Career Choice: "At UMR last year, I shadowed a sonographer at Mayo Clinic for a full day. After that, I felt absolutely confident that this was what I wanted to do."

Trivia: Often takes advantage of 24-7 access to the sonography lab. "I go in over the weekend to practice. You can scan anything on yourself. I find that very helpful."



n the first five years of his career, Brad Karon, MD, PhD, discovered a variety of interests in a community pathology practice at a hospital in Las Vegas. But part of him was unfulfilled.

"The thing I missed was teaching — sharing knowledge, designing curriculum and working one-on-one with students," Dr. Karon says. "That drove me to change jobs nine years ago. I wanted to be involved in education."

He joined the Department of Laboratory Medicine and Pathology on Mayo Clinic's Rochester campus in 2004 and soon was immersed in formal and informal teaching. In mid-May, MSHS in Rochester presented the 2013 Outstanding Physician/Scientist Educator Award to Dr. Karon, co-director of Laboratory Services and director of Hospital Clinical Laboratories, Physician Offices Labs, and Point of Care Testing.

"Working with students is energizing," says Dr. Karon, an

associate professor of Laboratory Medicine and Pathology and chairman of the department's education committee. "They ask questions about why we do things as we do, which allows me to look at things from a new perspective."

Mary Kaye Peterson, director, Phlebotomy Technician Program, and Nicole Tolan, PhD, clinical chemistry fellow, nominated Dr. Karon "for his commitment to the education of staff, medical students, residents, fellows and MSHS students." They wrote that his "teaching extends beyond the didactic session and into clinical laboratory practice."

Dr. Karon is medical director of both the Phlebotomy Technician and Medical Laboratory Science programs. Hoping to attract bright minds to his or another Mayo laboratory, he presents three or four lectures a year to Medical Laboratory Science students. And he was instrumental in converting Mayo Clinic's career path for phlebotomists from employee

FACULTY AWARDS HONOR TEN IN ROCHESTER

Ten people from the MSHS campus in Rochester received awards on May 15 at the 2013 Faculty Recognition Dinner.

OUTSTANDING EDUCATOR

- Kim Chandler MEdL, CNMT, PET, program director, Nuclear Medicine Technology Program
- · Desiree Lanzino, PT, PhD, assistant professor of Physical Therapy
- Jennifer Talmo, BS, MT (ASCP) education specialist

OUTSTANDING PHYSICIAN/ SCIENTIST EDUCATOR

- Brad Karon, MD, PhD, Laboratory Medicine and Pathology, and associate professor of Laboratory Medicine and Pathology
- Brad Kemp, PhD, Radiology, and assistant professor Radiologic **Physics**
- · Amit Sood, MD, General Internal Medicine, and associate professor of Medicine

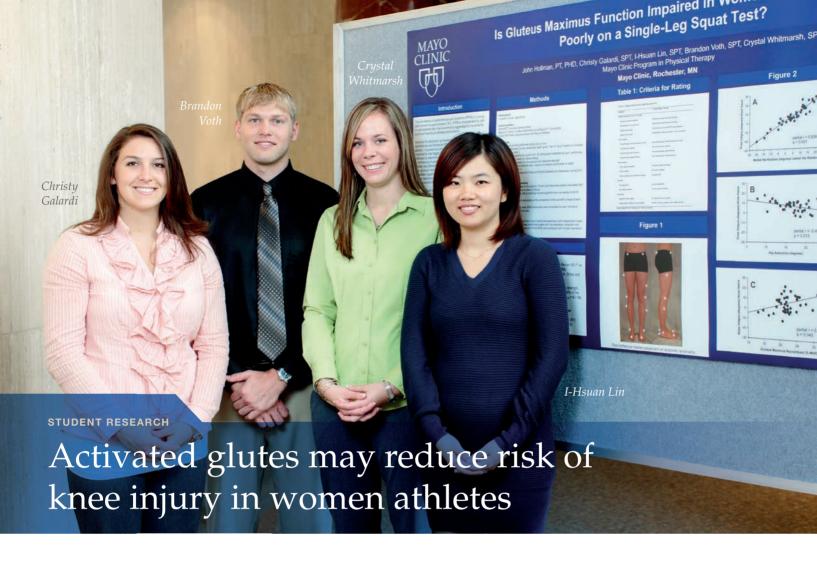
OUTSTANDING SERVICE AWARD

- · Robin Molella, MD, Preventive, Occupational and Aerospace Medicine
- · Venables Library Team
 - Danielle Gerberi
 - Vladana Gaiic Zoric
 - Dawn Littleton

training to an MSHS education program in 2009.

"I got involved from the ground up," Dr. Karon says. "It was a lot of fun."

He graduated summa cum laude with a bachelor's degree in chemistry from the University of Minnesota, earned his MD and PhD from the University of Minnesota Medical School, and completed three fellowships with the National Institutes of Health before his residency in clinical pathology at Barnes-Jewish Hospital, St. Louis, and Washington University School of Medicine. C



dolescent and young adult female athletes have a high prevalence of patellar femoral pain syndrome (knee pain), and some relationship between the mechanics in the knee and hip can contribute to the likelihood of injury, including ligament tears.

A team of third-year students in the Physical Therapy Program at MSHS in Rochester conducted a study to determine what causes

RESEARCH SUMMARY

MSHS Physical Therapy students studied the hip-knee mechanics that contribute to increased risk for injury in active females. Understanding what increases risk could help physical therapists recommend ways to prevent injury.

the knee to turn inward in certain positions, putting women at greater risk of injury. Determining the causal factors could help physical therapists develop prevention strategies.

In the study, 40 healthy, active women performed single leg squats. Their hip muscle function was evaluated with 3-D motion analysis, electromyography and strength testing. The Physical Therapy students examined which components of hip function predicted inward knee movement, increasing the risk of injury.

The students found that women who did not activate their gluteus maximus muscle efficiently were more likely to have the knee movement that is associated with increased injury.

"It wasn't a question of whether or not the women had sufficient

gluteal or hip strength — they did," says Christy Galardi, PT. "Rather, it was about whether they were using the muscle properly. If we can teach people to control and activate that muscle during activity, we may be able to help prevent injury. We also may be able to screen athletes to identify those at risk for injury and recommend preventive steps."

John Hollman, PT, PhD, director of the Physical Therapy Program, presented the research at the American Physical Therapy Association conference in San Diego in January. Galardi and her fellow researchers I-Hsuan Lin, PT, Brandon Voth, PT, and Crystal Whitmarsh, PT, presented a poster on this work at the Minnesota Physical Therapy Association fall conference. They are preparing a paper for publication.



he human vestibular system in the inner ear controls balance and steady vision, providing cues about orientation in space. Problems in the vestibular system can cause dizziness, imbalance and falls. Vertigo and falls significantly affect quality of life, creating a need for treatment options.

Audiology Fellow Sarah Shepherd, AuD, researched galvanic vestibular stimulation (GVS), a method of applying a small amount of electrical current to the nerves in the ear, modifying inner ear function and perception.

RESEARCH SUMMARY

Audiology research focused on manipulating the ear with electrical stimulation to enhance and alter the vestibular system's natural adaptation. This work could have implications for future use of galvanic vestibular stimulation (GVS) to counteract motion sickness and spatial disorientation during flight simulator training, and improve dizziness and imbalance in people with vestibular disturbances.

"I knew that GVS applied via electrodes on the bone behind the ear creates a sense of movement or motion in patients who are sitting perfectly still," says Shepherd. "Normally, when we spin at a constant speed, we eventually lose the perception of rotation because of the adaptation of the inner ear."

Shepherd evaluated the response of reflexive eye movements during rotation with and without GVS. Normally the eve movements will cease at the time of adaptation. Shepherd hypothesized that GVS could effectively manipulate the reflex to add a new method of extending the adaptation response time of the inner ear under normal conditions of rotation.

The ear interprets GVS in a similar fashion as rotation but, because GVS is not limited by the underlying physiologic response to rotation, the normal times of adaptation did not occur, according to Shepherd. "This indicates that GVS is a strong stimulus," she says. "Through further study, if we can predict how GVS will alter eye movements, we may be able to enhance or alter normal adaptation."

While the study participants had normal vestibular systems, Shepherd hopes to apply what she learned to people with vestibular disorders. "GVS may be able to improve the symptoms, daily functioning and quality of life of patients who have vestibular disturbances and for whom traditional therapies and medical treatments have been insufficient," she says.

Shepherd conducted her research at the Aerospace Medicine and Vestibular Research Laboratory (AMVRL) at Mayo Clinic in Arizona under the direction of Michael Cevette, PhD, and Jan Stepanek, MD. The lab conducts ongoing studies related to motion sickness and spatial disorientation in the aerospace environment.

"Adding GVS in a flight simulator may help pilots and others adapt more quickly and prevent motion sickness," she says. "It's exciting to think about the possibilities of developing technology to provide disturbed vestibular systems with electrical stimulation cues about movement and motion to counteract responses to the symptoms of vertigo and imbalance."



ealth care providers often use the Life Space Assessment (LSA) to measure the mobility of older adults and to guide recommendations for patients' health and well-being. Second-year physical therapy students at Mavo School of Health Sciences in Rochester assessed how this tool works for patients with spinal cord injuries.

"Like health care in general, physical therapy has moved toward looking at the whole patient and how they interact with their environment, their social and family roles, rather than just looking at how the elbow or the knee

RESEARCH SUMMARY

MSHS Physical Therapy students evaluated whether a mobility assessment tool used for older adults could be a useful tool for patients with spinal cord injuries. They concluded that the Life Space Assessment could effectively measure mobility in this population and may be valuable in applying therapeutic interventions to improve patients' well-being

moves," says Ashley Jones, Physical Therapy student. "We lack a tool to measure spinal cord injury patients' participation in the community, and we found that the LSA may be useful to assess patients' ability to move at home and in the community."

The study included telephone interviews with 50 adults with spinal cord injuries recruited from the Mayo Clinic patient database. Each person was interviewed twice, two weeks apart, to test the reliability of the tool. They were asked about their movement within their home, neighborhood and community.

The students found no differences in LSA scores related to age, sex, level of spinal cord injury or living alone. However, lower (worse) scores in the spinal cord injury population were related to full-time wheelchair use, lack of employment and complaints of pain, fatigue or spasticity.

"Typically, low scores on the LSA correlate to morbidity, mortality, hospitalization and overall health," says Physical Therapy student Bethany Mansch. "If we employ the LSA with outpatient spinal cord

injury patients, we can focus physical therapy interventions on relieving pain and spasticity, and teaching patients how to move more efficiently so they are less fatigued."

Physical Therapy student Elizabeth Sander says the study helped prepare her for a clinical rotation at the Minneapolis VA Health Care System. "I'd had minimal interactions with spinal cord injury patients," she says. "I have more insights now about how their injuries affect their whole lives, and I'll be more attuned to tailoring therapy toward that."

The research project did not evaluate the use of the LSA as a way to provide interventions to spinal cord injury patients, but the students' work could pave the way for future study in that area, according to Desiree Lanzino, PT, PhD, assistant professor, Physical Therapy Program.

The research was presented at the Spring Conference of the Minnesota American Physical Therapy Association in April, and is being prepared for submission to the Archives of Physical Medicine and Rehabilitation. C

IN THE NEWS



MAYO CLINIC

Building the Destination Medical Center

n innovation partnership is Amoving the Destination Medical Center (DMC) closer to reality.

Mayo Clinic, the city of Rochester and Olmsted County successfully lobbied the State of Minnesota to support an estimated \$5.6 billion in capital investments. The groundbreaking legislation, part of the state's tax bill, provides for \$585 million in public investment to be made over 20 years to support public infrastructure and economic development initiatives for the DMC vision.

DMC is a strategy designed to secure Mayo Clinic's — and the state of Minnesota's — position as a global medical destination by spurring economic growth and optimizing experiences for patients, visitors and community members. The legislation created a nonprofit corporation, the Destination Medical Center Corporation, to decide how to plan, implement and finance the public investments that will support the DMC expansion.

"Mayo Clinic not only intends to protect its current status as one of the world's premier medical institutions but to significantly expand our highly effective practice model and medical assets to be clearly recognized as the premier destination medical center for decades to come," says John Noseworthy, MD, president and CEO of Mayo Clinic.

For information, visit http://dmc.mn



Nurse practitioners Lynn Borkenhagen, Claudia Swanton and Barb Timm regularly visit Silver Creek Corner, a residence for people with chronic alcoholism.

FACULTY

Giving back leads to sacred grounds

Three Mayo School of Health Sciences (MSHS) nurse practitioner alumnae are forging unique friendships by playing Uno, cribbage and cleaning up sacred parkland.

Three Thursday evenings a month, Claudia Swanton, CNP, Lynn Borkenhagen, CNP, and Barb Timm, CNP, visit Silver Creek Corner (SCC), a Rochester residence for those who suffer from chronic alcoholism. Their visits are part of a community service component of a doctorate in transcultural nursing at Augsburg College, Minneapolis.

"As far as I know, it's the only degree of its kind," says Swanton, director of the MSHS Nurse Practitioner Program.

Six to 10 people, most often just men, join the nurse practitioners during their visits to play games or hear a speaker. "This is a completely different population than we are used to seeing in our jobs," says Swanton, who along with Timm and Borkenhagen works on Mayo Clinic's Rochester campus.

Swanton says she and her colleagues have forged amazing relationships with SCC residents. "The guys wanted to do something to give back to the community and asked us to come up with a plan."

The plan: remove buckthorn, an invasive plant, from Indian Heights Park, a small park in Rochester that is recognized as a Native American (Dakota) burial site. The nurse practitioners coordinated the successful park cleanup with SCC residents, Boy Scouts, graduate students from Augsburg College and other community members.

Swanton and her colleagues expect to complete their degrees in 2014. But it likely won't be the end of their work at SCC. They hope to encourage MSHS nurse practitioner students to volunteer at SCC. Swanton will be there, too. "I can't imagine Thursday nights without the guys," she says.

FACULTY

Sonography program director edits textbook

onography students will see Ofamiliar names on a new textbook this fall. Diane Youngs, MEd, RDMS, RVT, Sonography program director, edited the Clinical Guide to Sonography, 2nd Edition. Her co-editors were Charlotte Henningsen, MS, RT(R), RDMS, RVT, FSDMS, FAIUM, who edited the original version published in 2004, and Kathryn Kuntz, MEd, RT(R), RDMS, RVT, FSDMS, former program director, MSHS Songraphy Program.

Henningsen is chair of the Sonography Department, Adventist University of Health Sciences, Orlando, Fla., and Kuntz is a clinical assistant professor, College of Health Sciences, University of Wisconsin-Milwaukee.

Youngs wrote three of the 34 chapters and recruited Mayo Clinic colleagues to review and update other chapters. More than 30 sonography professionals were involved, about 13 of them from Mayo Clinic.

Youngs says she's looking forward to using the textbook in the classroom. "It's very flexible," she says. Each chapter starts with a clinical scenario, followed by discussions of pathologies and differential diagnoses, patient scenarios and review questions.

This was Youngs' first experience with book editing. She says the project took many weekends of work over two years, but it was worth it. "It was an honor to do this," she says. "I learned so much. Editing this book has enhanced my skills as an educator."



Diane Youngs

The 576-page textbook, was published in July by Elsevier.



Mike Bentele

STUDENTS

Sharing the joy of song

etween his studies at Mayo School of Health Sciences (MSHS) and a part-time job as a radiology aide at Mayo Clinic's Rochester campus, Mike Bentele still finds time to bring the sound of music to young patients at Saint Marys Hospital.

A guitarist, Bentele serenades youngsters and their families in the atrium of the Pediatrics floor about twice a month. With the help of a friend and music therapist at Saint Marys, he has been playing kid-friendly tunes at the hospital since January.

"I'm just sharing my appreciation of music," Bentele says. "I'm trying to bring a little joy to their stay."

During his volunteer gigs, Bentele might play, "Somewhere Over the Rainbow" or "Moon River," lead a singalong of "The Alphabet Song," or offer a child the opportunity to strum a few chords on the guitar.

Bentele came to MSHS in August 2011 after receiving a bachelor's degree in exercise science from the University of Minnesota Duluth. He completed the Radiography Program in August 2013 and starts the 12-month Radiation Therapy Program in September.

"I enjoy doing it," says Bentele, who grew up in a musical family in Truman, Minn. "Anytime I can play music, it's a good thing."

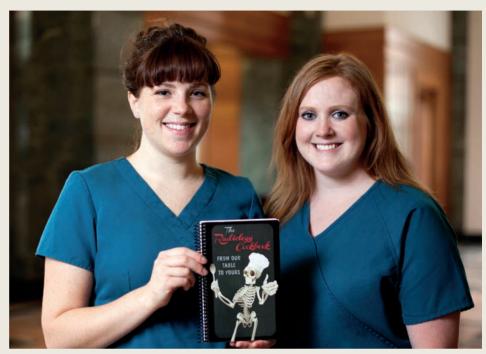
ALUMNI

Cooking up teamwork

lere's a recipe for a great project: foodies, teamwork and assistance for women in need.

Organizers of the Radiology Cookbook project connected with their fellow foodies in Radiology and collected recipes for a cookbook. The results were great recipes, 250 cookbooks printed and sold, and proceeds of \$1,600 donated to the Women's Shelter, a Rochester organization that assists women affected by domestic violence.

The Cookbook Committee was led by MSHS Radiography Program alumnae Ashley Rosier (2009), Bry Johnson (2010) and Jody Mies (2005). Other alumnae involved included Kim Brossoit (1987) and Lisa Johnson, (2004).



Ashley Rosier and Bry Johnson show the Radiology Cookbook. Not pictured: Jody Mies.



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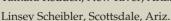
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We welcome alumni and student news

Your comments, academic and career news, and story ideas are welcome. Send to: Editor, Connections / Mayo Clinic / Siebens 5 / 200 First St. S.W. / Rochester, MN 55905 / Email: connectionsmageditor@mayo.edu

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Connections is published three times a year and mailed free of charge to alumni, students and friends of Mayo School of Health Sciences (MSHS).

MSHS has a distinguished history of preparing students for successful careers in the health sciences. Mayo Clinic has been training allied health professionals for more than 100 years.

About 1,590 students are enrolled in more than 139 MSHS programs representing more than 60 health sciences careers. Programs are available at Mayo Clinic campuses in Arizona, Florida and Rochester.

• Enrollment information

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Fax: 507-284-0656

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www.mayo.edu/alumni (Select "Mayo School of Health Sciences Alumni Association") Deborah Oscarson, Alumni Relations Coordinator 507-284-2317

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