

# VITAL SIGNS

## 2015 COMMUNITY REPORT

June 2014



October 2014



September 2015



EDUCATE DISCOVER SERVE

# LEADERSHIP

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Vice President for Health Affairs and Dean UND SMHS



# EDUCATE, DISCOVER, SERVE

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## A Community-Based School of Medicine and Health Sciences

UND is one of 28 medical schools in the country that is community-based, meaning we don't own or operate our own hospital. Rather, we partner with healthcare providers in the community to educate our students.

### Basic Medical Sciences

Doctor of Philosophy and Master of Science degrees are available in the following disciplines:

- Anatomy and Cell Biology
- Biomedical Sciences
- Biochemistry and Molecular Biology
- Microbiology and Immunology
- Pharmacology, Physiology, and Therapeutics

### Medical Doctor (MD) Program

All medical students spend their first two years in Grand Forks. They learn through lectures, laboratories, patient simulations, and in patient-centered-learning groups, where basic and clinical sciences are taught in the context of patient cases. They then spend two years of clinical training in Bismarck, Fargo, Grand Forks, Minot, or a rural community through the Rural Opportunities in Medical Education (ROME) Program.

### MD/PhD Scholars Program

Outstanding students are prepared for careers in academic medicine and research. Students pursue original research in laboratories or clinical settings with members of the graduate faculty while also completing the medical school curriculum.

### Master of Public Health

Raymond L. Goldsteen, DrPH, is the director of the School's Master of Public Health program, a unique graduate program offered by the University of North Dakota (in conjunction with North Dakota State University) that serves North Dakota and the Northern Plains.

Students can specialize in either health management and policy or population health analytics. Both specializations emphasize rural health issues and the development of excellent critical thinking, analytical, and communication skills. The inaugural Master of Public Health degree class started in the fall of 2012 and graduated in 2014.

The program recently developed the Center for Comparative Effectiveness Analytics; its mission is to improve population health in North Dakota and the Northern Plains through research on the quality, value, accessibility, and effectiveness of healthcare and public health. The Center develops public and private collaborations, as well as seeks more typical academic funding from government and foundations.

### Health Sciences

#### Athletic Training

- Four-year Bachelor of Science

#### Medical Laboratory Science

- Four-year Bachelor of Science or post-baccalaureate certificate
- Categorical Certificate
- Master of Science
- More than 60 clinical training sites in 10 states; more than half in North Dakota and the surrounding region

#### Histotechnician Certificate

#### Occupational Therapy

- Five-year Master of Occupational Therapy

#### Physician Assistant Studies

- Two-year Master of Physician Assistant Studies

#### Physical Therapy

- Three-year pre-physical therapy and three-year Doctor of Physical Therapy

# EDUCATE

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The primary purpose of the University of North Dakota School of Medicine and Health Sciences is to educate physicians and other health professionals and to enhance the quality of life in North Dakota. Other purposes include the discovery of knowledge that benefits the people of this state and enhances the quality of their lives.

—North Dakota Century Code

## The University of North Dakota School of Medicine and Health Sciences is a national leader in rural health—serving North Dakota since 1905

### Areas of Strength

Your School of Medicine and Health Sciences educates healthcare providers and scientists and strives to discover new knowledge to serve North Dakotans.

The School has a well-deserved reputation for excellence as one of 28 community-based medical schools in the country, which gives our medical and health sciences students the chance to practice in hospitals and clinics across North Dakota. The School is grateful for the more than 1,000 part-time or volunteer clinical faculty in over 30 communities throughout the state who help to educate medical students and residents. There are four clinical campuses located in Bismarck, Fargo, Grand Forks, and Minot. Health sciences students receive training not only here in North Dakota but also across the country, including an occupational therapy campus in Casper, Wyoming, and a medical laboratory science campus at Mayo Clinic in Rochester, Minnesota.

## The UND School of Medicine and Health Sciences *educates* students to focus on patients and communities

- The School's patient-centered-learning curriculum is nationally recognized for producing caring, patient-centered, and dedicated practitioners.
- At the forefront of medical education, the School uses the latest in simulation technology for teaching and serves as a valuable resource for healthcare professionals throughout North Dakota and the region.
- An interprofessional healthcare course makes the School a national leader in providing students with a strong practical understanding of the various healthcare professionals on their team.
- Medical students and residents provide direct care to North Dakotans through the Centers for Family Medicine in Bismarck and Minot as well as through clerkships in communities throughout the state.
- Health sciences students provide direct care and services through internships in healthcare facilities across North Dakota.



# DISCOVER, SERVE

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Colin Combs, PhD, was named the chair of the Department of Basic Sciences at the University of North Dakota School of Medicine and Health Sciences. Combs is a professor in the department and has worked at the School since 2000.



Combs is a research scientist noted for his study of neurodegenerative diseases such as Alzheimer's and Parkinson's. His research is supported by the highest-level grant funding awarded by the National Institutes of Health and private foundations such as the Michael J. Fox Foundation for Parkinson's Research.

As a teacher at the UND SMHS, Combs has received five Block Instructor Awards from medical students in recognition of his outstanding performance in the encouragement, enrichment, and education of tomorrow's physicians. His most recent award was in 2015. In 2009, he received the H. David Wilson Academic Award in Neuroscience as well as the UND Spirit Award. He is a member of the Society for Neuroscience, the American Society for Neurochemistry, the Alzheimer's Association of Minnesota-North Dakota's Medical and Scientific Advisory Council, and the International Society for Neurochemistry.

Combs has collaborated with other researchers and received U.S. and international patents on treatments for Alzheimer's, Parkinson's, and stroke.

In September, the National Institutes of Health awarded over \$1.4 million to Professor Combs for a unique approach to Alzheimer's disease treatment in which Combs's research team hopes to demonstrate that Alzheimer's disease can be tracked and even treated by focusing on the intestines.

## The UND School of Medicine and Health Sciences *serves* North Dakota

- The School improves the health and healthcare of North Dakotans through research, community engagement, and prevention programs.
- Direct primary care to North Dakotans is provided through its family medicine clinics in Bismarck and Minot.
- The School leads the nation in rural health through the Center for Rural Health, one of the nation's best. It is home to seven national programs: the National Resource Center on Native American Aging, the National Indigenous Elder Justice Initiative, the Rural Assistance Center, the Rural Health Research Gateway, the Rural Health Reform Policy Research Center, the Seven Generations Center of Excellence in Native Behavioral Health, and TruServe, a web-based information tracking system that is now used by most State Offices of Rural Health. The Center is a UND Center of Excellence in Research, Scholarship, and Creative Activity, and in 2013 was awarded the UND Departmental Award for Excellence in Research.
- The Master of Public Health program is training students to contribute to prevention of disease and disability and to improvement of health and healthcare in North Dakota and the Northern Plains. The program's educational and service goals are achieved through partnerships within UND, including with medicine and the health sciences, public administration, geography, environmental health sciences, and engineering, as well as with state and local public health departments, health systems, and insurers.
- The School is a major provider of healthcare practitioners for the state of North Dakota, especially family physicians practicing in rural areas.

# EDUCATE

## Student Enrollments by Major, Fall 2015

<b>Basic Sciences</b>		<b>Health Sciences</b>	
Anatomy and Cell Biology (Graduate—Master and Doctoral)	4	Athletic Training	
Biochemistry and Molecular Biology (Graduate—Master and Doctoral, includes Pathology)	14	Pre–Athletic Training	37
Biomedical Sciences (Graduate—Master and Doctoral)	17	Bachelor of Science	32
Microbiology and Immunology (Graduate—Master and Doctoral)	8	Medical Laboratory Science	
Pharmacology, Physiology, and Therapeutics (Graduate—Master and Doctoral)	8	Pre–Medical Laboratory Science	66
	<b>Total 51</b>	Certificate	96
		Bachelor of Science	122
		Master of Science	51
		Occupational Therapy	
		Pre–Occupational Therapy	137
		Professional Year I (Undergraduate)	58
		Professional Year II (Undergraduate)	60
		Professional Year III (Graduate—Master)	50
		Physical Therapy	
		Pre–Physical Therapy	242
		Doctoral	152
		Physician Assistant (Graduate—Master)	67
		Public Health (Graduate—Master)	28
			<b>Total 1,198</b>
<b>Medical Doctor</b>			
Year 1—Class of 2019	79		
Year 2—Class of 2018	71		
Year 3—Class of 2017	68		
Year 4—Class of 2016	74		
	<b>Total 292</b>		
<b>Residents</b>			
(Post-MD degree training in family medicine, internal medicine, surgery, psychiatry, and transitional)			
	<b>Total 105</b>		

The School’s faculty also teach basic science courses to 822 UND undergraduate students each semester who will become nurses, dietitians, teachers, and forensic scientists.

When the School’s Healthcare Workforce Initiative (HWI) is fully implemented in the 2017–2018 academic year, 64 additional medical students (16 per year), 90 health sciences students (30 per year), and 51 residents (post-MD degree trainees, with 17 per year added) will be educated. And to house these 205 new trainees (not to mention the requisite added faculty and staff), we are building a new medical school and health sciences facility in which to house everyone. In addition to expansion of class sizes, the HWI utilizes a number of strategies to maximize success

in increasing North Dakota’s healthcare workforce:

- Acceptance of students to medical school weighted toward those from rural areas of North Dakota.
- Tuition forgiveness for those who commit to practice primary care in a rural community.
- Increased longitudinal experiences in rural communities.
- Increased geriatrics, population health, and public health focus.

### **Marc D. Basson**

Marc D. Basson, MD, PhD, MBA, FACS, was named the inaugural associate dean for medicine at the University of North Dakota School of Medicine and Health Sciences.

He is an educator, scientist, and surgeon who is recognized internationally for his research on the extracellular physical forces that affect intracellular signaling in cancer biology and the healing of the gastrointestinal tract of critically ill or injured patients. Basson previously served as professor and chair of the Department of Surgery, director of the Program for Surgical and Biomedical Research, and assistant dean for faculty development in research in the College of Human Medicine at Michigan State University in Lansing.

As associate dean for medicine, Basson helps coordinate the School's teaching, clinical, and research efforts related to medical students, residents, and practicing physicians. All of the clinical departmental chairs as well as the regional campus deans report to Basson. His position is analogous and equivalent to that of Dr. Tom Mohr, who was recently named the associate dean for health sciences; all of the health science departmental chairs now report to Mohr.

"We are fortunate indeed to be able to recruit an outstanding individual of the caliber of Dr. Basson," said Joshua Wynne, MD, MBA, MPH, UND vice president for health affairs and dean of the UND School of Medicine and Health Sciences. "Marc is the consummate quadruple threat—he is an accomplished and clinically active surgeon, a first-rate scientist, a revered teacher, and an experienced administrator. Additionally, he brings a unique fusion of experiences at both a large research-intensive medical school like Yale University as well as more recent experience at a smaller community-based medical school like Michigan State. Both of those experiences will stand him in good stead here in North Dakota."



### **Richard Van Eck**

Richard Van Eck, PhD, was named the founding Dr. David and Lola Rognlie Monson Endowed Professor in Medical Education at the University of North Dakota School of Medicine and Health Sciences. Van Eck is an educator and scientist, who is recognized internationally for his research in instructional simulation and game theory. Before joining the SMHS, Van Eck was a professor in the Department of Teaching and Learning in UND's College of Education and Human Development, where he taught courses on human performance technology, eLearning, instructional design, and instructional simulations from 2004 to 2015.

This new position is an outgrowth of the School's Healthcare Workforce Initiative, which is intended to help address current and especially future workforce shortages through a variety of approaches. Expansion of class size is an essential component.

As the associate dean for Teaching and Learning at the UND SMHS, Van Eck provides leadership for the ongoing development, implementation, and evaluation of the educational programs at the School of Medicine and Health Sciences. He works with SMHS leaders, the director of Education Resources, and faculty, students, and staff to implement and improve curricula, engage faculty and provide faculty training, provide curriculum management, oversee student assessment and competency, accomplish course and program evaluation, and encourage the scholarship of teaching.

"The SMHS has been an innovator in medical education for a long time. Our small-group, patient-centered learning method is widely admired and emulated," said Joshua Wynne, MD, MBA, MPH, UND vice president for health affairs and dean of the UND School of Medicine and Health Sciences. "But we need to continue to innovate and refine our pedagogical approach. With the recruitment of Dr. Van Eck, we have a renowned educator and innovator who helps ensure that the education that our students receive continues to be at the cutting edge."





# EDUCATE

Our goal is for our students in the health sciences and medicine to meet or exceed the accepted standard on nationally recognized exams measuring academic progress.

## School of Medicine and Health Sciences Student Performance on Nationally Recognized Exams

Program	UND Pass Rate	National Pass Rate
Athletic Training	100%	81%
Medical Laboratory Science	97%	78%
Histotechnology	100%	74%
Occupational Therapy*	98%	86%
Physical Therapy	87%	93%
Physician Assistant	96%	95%
<b>Medical Student</b>		
Step 1		
Basic Science	97%	96%
Step 2		
Clinical Knowledge	98%	95%
Clinical Skills	98%	96%
Step 3		
Independent Clinical Practice	98%	97%

Sources: Data are from the most recent examination in each respective area.

\* Rates are for first-time test takers from Grand Forks, N. Dak., and Casper, Wyo., campuses.

# EDUCATE

The University of North Dakota School of Medicine and Health Sciences received the American Academy of Family Physicians Top 10 Award for UND's consistent contributions to building the family physician workforce.

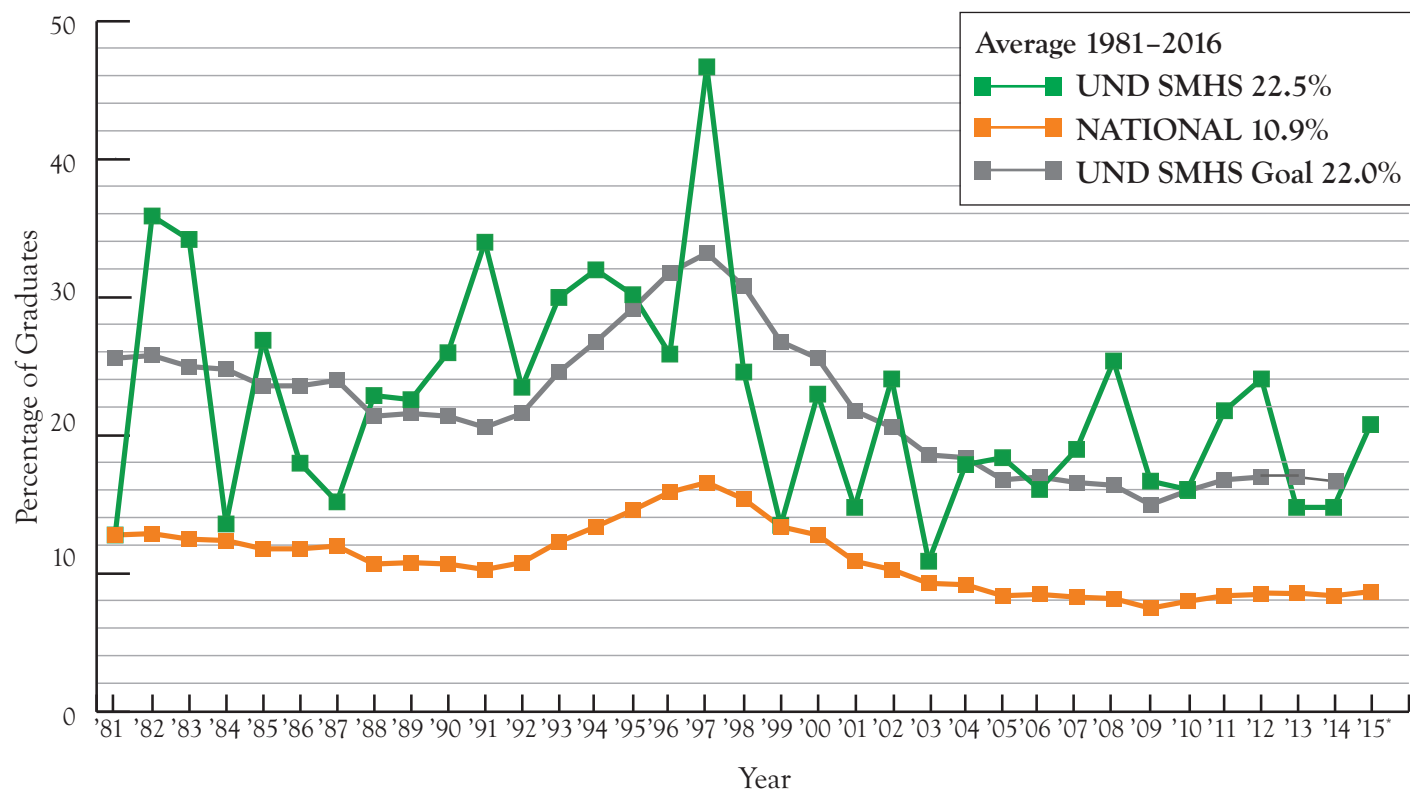
The award, presented during the Society of Teachers of Family Medicine Annual Spring Conference, marks the fifth consecutive year the School has received the honor.

“Five consecutive years of recognition says much about the University of North Dakota School of Medicine and Health Sciences’ focus on educating students to meet the needs of the nation.”

—Stan Kozakowski, Director of Medical Education,  
American Academy of Family Physicians

Our goal is to exceed the national average of students going into family medicine by 100 percent.

## Graduates Entering a Family Medicine Residency 1981–2015



Sources:  
Medical Education Division  
American Academy of Family Physicians, Leawood, KS  
*Family Medicine*, STFM Journal  
Department of Family & Community Medicine  
University of North Dakota School of Medicine 3/16

\*U.S. seniors successfully matching in the National Resident Matching Program

# EDUCATE

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## Growing Our Own

### Innovative Programs to Produce Healthcare Providers for North Dakota

#### Healthcare Workforce Initiative (HWI)

Thanks to the generous support of the 2013 and 2015 North Dakota Legislatures and strong leadership from Governor Jack Dalrymple and Lt. Governor Drew Wrigley, the School has implemented the Healthcare Workforce Initiative (HWI) and is constructing a new \$124 million home. The HWI is a four-pronged plan to help address North Dakota's healthcare workforce needs now and in the future by reducing disease burden, retaining more of our graduates for practice in North Dakota, training more practitioners, and improving the efficiency of our healthcare delivery system.

#### RuralMed

RuralMed is a tuition waiver program (or scholarship) designed to encourage medical students to select careers in family medicine and increase the number of family medicine providers for rural North Dakota. Students accepted for the RuralMed Program have the entire cost of tuition waived in return for their practicing in North Dakota. Students will not have to borrow money for tuition and accrue interest for medical education. Currently, 21 students are accepted or enrolled in the program, and all are destined for rural practice in North Dakota.

#### INMED

The Indians into Medicine Program (INMED), which was established in 1973, is a comprehensive program designed to assist American Indian students who aspire to be health professionals to meet the needs of our Indian communities and to serve reservation populations. INMED has assisted approximately 20 percent of U.S. American Indian physicians with their education.

#### ROME

Rural Opportunities in Medical Education (ROME) is a 24–28 week interdisciplinary experience in a rural primary care setting that is open to third-year students at the School of Medicine and Health Sciences. Students live and train in nonmetropolitan communities under the supervision of physician preceptors. ROME students experience healthcare delivery in rural areas throughout the state of North Dakota, where providing access to healthcare is sometimes challenging. Students learn about problems commonly encountered in primary care, from routine health maintenance to medical emergencies and rare and unusual diagnoses. Each primary preceptor is board-certified in family medicine, but students also work with board-certified surgeons, internists, pediatricians, and other specialists available in the community.

#### Interprofessional Healthcare Course (IPHC)

The course includes eight allied health professions on campus and is run on a collaborative model that doesn't assign a "higher" value to any one profession or specialty over any other. Over 3,000 students have completed the course.

The IPHC is modeled on the School's acclaimed patient-centered learning small-group curriculum. The focus of the course is to learn about the role of other healthcare professionals and how to interact as a healthcare team. Eight disciplines are involved in the course: medicine, nursing, occupational therapy, physical therapy, music therapy, communication sciences and disorders, social work, and nutrition and dietetics.

The goal of IPHC education is collaborative practice. Students learn every person on a team is a patient advocate, which significantly reduces errors in the healthcare system and that leads to improved cost efficiency, an appropriately important issue for the twenty-first century.



### Minot Integrated Longitudinal Experience (MILE)

A clerkship is a course of clinical training that third-year medical students undertake in specialty areas. In the summer of 2012 in Minot, the first cohort of medical students undertook an integrated, longitudinal experience.

Students work with preceptors in each of the specialties; for example, spending a half day every week in the office with each primary care preceptor, less frequent office time with surgery and obstetrics and gynecology preceptors, balanced by operating room and delivery room time, and regular emergency department shifts. An important feature of the new MILE is that students develop a panel of patients whom they follow throughout the year, accompanying them to consultant visits and procedures, and following them through hospitalizations.

Ample evidence from several schools shows that students in longitudinal, integrated clerkships perform as well or better on standardized tests than their traditional counterparts, and MILE students increase in their patient-focus through the year, while traditional students decrease in this important measure of attitude.

### R-COOL-Health Scrubs Camps

Rural Collaborative Opportunities for Occupational Learning in Health (R-COOL-Health) Scrubs Camps are one-day learning experiences where students are able to explore healthcare careers from their local healthcare providers through hands-on, interactive activities. Since the program's start in 2010, 3,907 students, 1,630 volunteers, and 335 communities have participated in the Scrubs Camp program. Students who have participated in Scrubs Camps have learned about various healthcare careers and participated in interactive activities, including dissecting pig hearts, typing blood samples, and participating in mock emergency scenarios.

### R-COOL-Health Scrubs Academy

Fifty-six North Dakota junior high students participated in the fifth annual Scrubs Academy, held at the University of North Dakota campus, June 15–18. Students participated in a dissection, explored the inside of a 32-foot inflatable colon, and learned more about anatomy, medical laboratory science, emergency medical services, mental health, occupational therapy, physical therapy, public health, nutrition, music therapy, radiology, and other health careers. As part of the academy, students received CPR training and became certified in the Health Insurance Portability and Accountability Act (HIPAA). Most health facilities in North Dakota require that students be HIPAA-certified before allowing them to job shadow, and job shadowing is an important step in selecting a career path. Students also were given the opportunity to explore and learn more about the School of Medicine and Health Sciences, the UND campus, and the Grand Forks community.

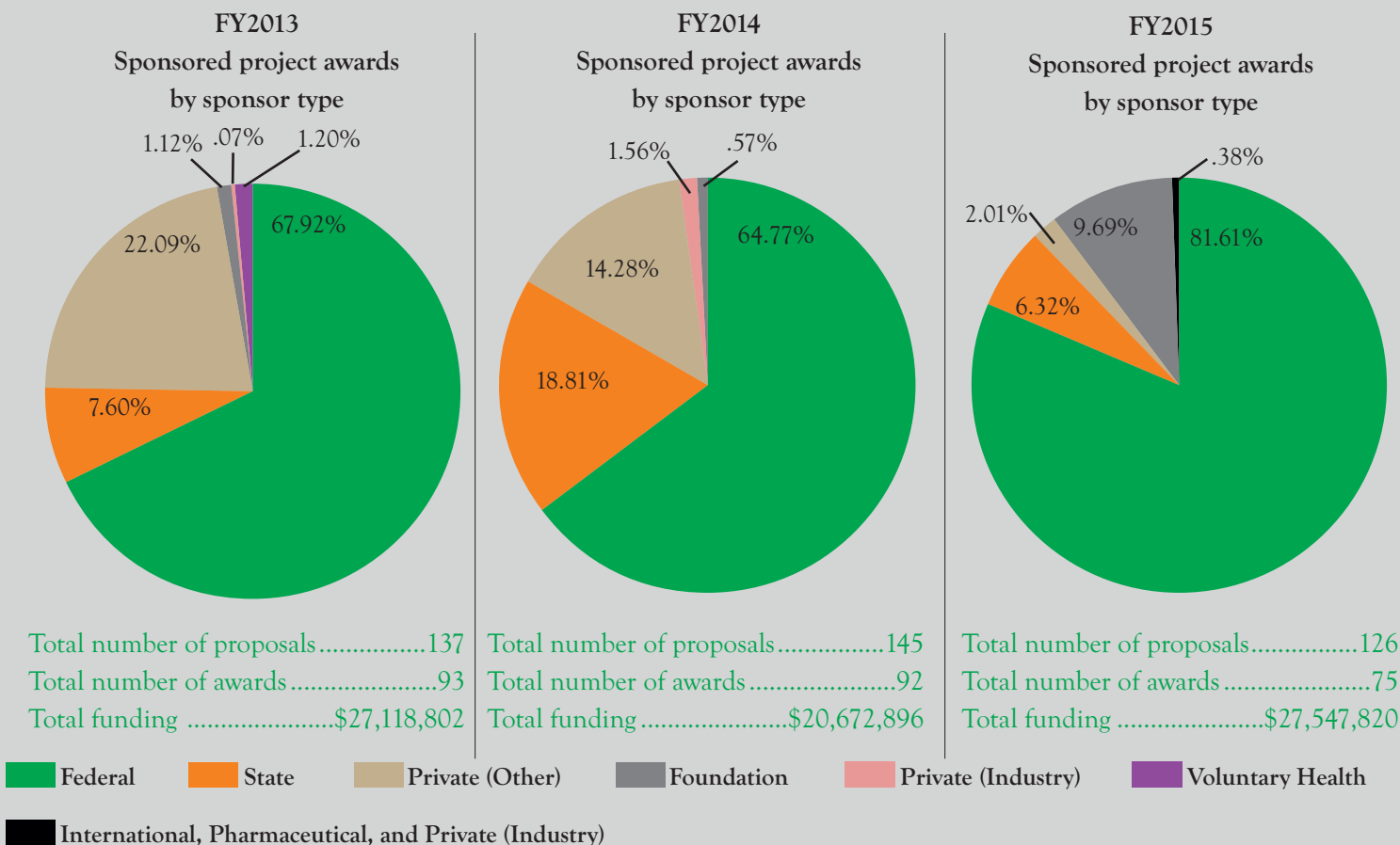
The North Dakota Area Health Education Center (AHEC) addresses critical healthcare workforce shortages in the state. Without an adequate workforce, access to essential health and medical services and the quality of care will suffer. With regional centers located in Hettinger and Mayville to serve the western and eastern parts of the state, North Dakota AHECs work with students in kindergarten through college, rural communities, medical professionals, and educators. The North Dakota AHEC program has reached over 12,440 participants, covering every county in the state. In addition, the AHECs have provided \$36,000 in grant funding to facilitate health occupation activities for 7,400 students. AHEC has assisted 85 students in clinical rotations, and contributed over \$110,000 toward continuing education for healthcare providers in rural North Dakota.

# DISCOVER

For fiscal year 2015 (July 1, 2014–June 30, 2015), total research funding was \$27,547,820, which was a record amount for the School. Of the 28 community-based medical schools in the United States, the SMHS is ranked in the top third of schools in external funding for sponsored projects. The School’s goal is to be No. 1.

## Studying Issues that Matter to North Dakotans

- Molecular and genetic bases of diseases
- Immune and inflammatory diseases
- Drug discovery and targeted therapeutics
- Applied microbiology



### **Donald Jurivich**

Donald Jurivich, DO, was named the founding Eva L. Gilbertson, MD, Distinguished Chair of Geriatrics at the University of North Dakota School of Medicine and Health Sciences. He is a nationally known and respected clinician who has conducted extensive research on aging and age-related diseases and their treatment. Since 1997, Jurivich was the Vitoux Endowed Chair and Associate Professor of Geriatric Medicine as well as chief of the Division of Geriatric Medicine at the University of Illinois College of Medicine at Chicago. He also was chief of Geriatric Medicine at the Jesse Brown Veterans Affairs Medical Center in Chicago.



At the UND SMHS, Jurivich is working collaboratively with the faculty and institutional leaders to found the Department of Geriatrics, and develop and provide oversight of the department's education, research, clinical care, training, and service programs. As chair, he works with the SMHS's clinical partners to innovatively meet the need for education and training of current and future health professionals to effectively serve an aging population.

"Because North Dakota has above-average life expectancy, we are fortunate to have proportionately more senior citizens and elders than comparable states," said Joshua Wynne, MD, MBA, MPH, UND vice president for health affairs and dean of the UND School of Medicine and Health Sciences. "The recruitment of a national leader like Dr. Jurivich to lead the School's geriatric program will help ensure that the care delivered in North Dakota will be the most advanced. He will play a critical role in shaping the future of healthcare delivery to the elderly in North Dakota."

Jurivich's research and scholarly interests are Alzheimer's and other chronic diseases of the elderly. He receives research support from the National Institutes of Health's National Institute of Aging—the primary federal agency supporting and conducting Alzheimer's disease research—the U.S. Department of Veterans Affairs, as well as medical research foundations. His award-winning research has received recognition from the NIA and the Department of Veterans Affairs.

### **Gary G. Schwartz**

Gary G. Schwartz, PhD, MPH, PhD, has been named the founding chair of the Department of Population Health at the University of North Dakota School of Medicine and Health Sciences. He is a scientist and educator who is recognized internationally for his research on prostate cancer and on vitamin D. Since 1999, Schwartz was scientific director of the Prostate Cancer Center of Excellence at Wake Forest University School of Medicine in Winston-Salem, N.C., a National Cancer Institute–designated Comprehensive Cancer Center. At Wake Forest, Schwartz was an associate professor in the Departments of Cancer Biology, Urology, and Epidemiology and Prevention.



Reducing the disease burden of North Dakotans is an integral goal of the Healthcare Workforce Initiative developed by the UND School of Medicine and Health Sciences through its Legislature-appointed Advisory Council. The HWI identified a strategy of focusing on population health to positively influence the health of North Dakotans. The new Department of Population Health was established with the help of a generous appropriation by the 63rd North Dakota Legislative Assembly.

The department provides the academic home for faculty who conduct research on the determinants of health and disease in populations, provide education and training in public health and related disciplines to students and faculty, and develop collaborative relationships with researchers, clinicians, communities and institutions to improve the understanding of health and to inform policy and practice.

"The faculty members in these units haven't had a common academic home dedicated to population health," said Joshua Wynne, MD, MBA, MPH, UND vice president for health affairs and dean of the UND School of Medicine and Health Sciences. "Now they will, with a department chair who has dedicated his career to improving health through population-based approaches. I'm thrilled that Dr. Schwartz has joined us."



# SERVE

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Since 2010, through funding from the state Legislature, the Center for Rural Health helped communities hold 58 Scrubs Camps and 5 Scrubs Academies for 4,274 children across North Dakota. Scrubs Camps are one-day learning experiences for kids to learn about health professions; the Scrubs Academies are four-day experiences held at the School of Medicine and Health Sciences for middle-school students.

The Center for Rural Health at the School of Medicine and Health Sciences provides services to all 53 counties and 100 communities in North Dakota. The Center provides technical assistance to all 38 rural hospitals, 36 of which are critical access hospitals. The assistance is focused on improving access to care, viability of rural health systems, quality of care, and rural health system development. Direct grants to health organizations in North Dakota awarded and administered through the Center for Rural Health totaled \$1,353,161 for FY 2010, \$1,812,459 for FY 2011, \$1,556,381 for FY 2012, \$1,763,662 for FY 2013, \$1,365,904 for FY 2014, and \$1,389,561 for FY 2015.

## FY 2013

- \$778,229 to rural hospitals for health services development or expansion (federally supported Rural Hospital Flexibility program and Small Hospital Improvement Program, Quality Improvement Network, KOGNITO-mental health screening, Frontier Community Health Improvement, and Hospital Stroke program).
- \$691,033 for Health Workforce Development (federally supported Area Health Education Center, Student/Resident Experiences and Rotations in Community Health, state appropriations for Scrubs Camps, Scrubs Academy, and workforce development assistance to rural communities).
- \$294,400 (funding source is Blue Cross Blue Shield of North Dakota's Rural Health Grant Program to increase physical activity for all ages).

## FY 2014

- \$665,278 to rural hospitals for health services development or expansion (federally supported Rural Hospital Flexibility Program and Small Hospital Improvement Program, Quality Improvement Network, KOGNITO-mental health screening, Frontier Community Health Improvement, and Hospital Stroke Care Program).
- \$700,626 for Health Workforce Development (federally supported Area Health Education Center, Student/Resident Experiences and Rotations in Community Health, state appropriations for Scrubs Camps, Scrubs Academy, and workforce development assistance to rural communities).

## FY 2015

- \$767,767 to rural hospitals for health services development or expansion (federally supported Rural Hospital Flexibility Program and Small Hospital Improvement Program, Critical Access Hospital Quality Network, Frontier Community Health Improvement, Blue Cross Blue Shield Rural Health Grant Program, and Statewide Stroke Care Improvement Program).
- \$621,794 for Health Workforce Development (federally supported Area Health Education Center, Student/Resident Experiences and Rotations in Community Health, state appropriations for Scrubs Camps, Scrubs Academy, and workforce development assistance to rural communities).



*At the fifth annual R-COOL-Health Scrubs Academy held at the School in June, Dean Joshua Wynne helps Jessie Udem, Valley City (left), and Grace Beauchamp, Grand Forks (right), with a dissection.*



*On October 14, the School's Department of Physical Therapy was the Program of the Day on social media as a part of the Global PT Day of Service. On October 17, first-year, third-year, and pre-PT undergraduate students volunteered at Valley Eldercare Center in Grand Forks. Shown above are the third-year DPT students who participated.*

# EDUCATE

## More than 620 Practicing Physicians Serving North Dakota Communities Received Their Education at UND

### Percentages of Healthcare Providers Practicing in North Dakota who are Graduates of the University of North Dakota School of Medicine and Health Sciences

Athletic Trainers	23%
Occupational Therapists	53%
Medical Laboratory Scientists	40%
Physician Assistants	41%
Physical Therapists	54%

Data were collected from North Dakota state licensing boards and academic departments.

### Percentages of Physicians Practicing in North Dakota who are Graduates of the UND School of Medicine and Health Sciences

All Specialties	40%
Family Medicine	67%
Internal Medicine	48%
Obstetrics and Gynecology	57%
Pediatrics	37%
Psychiatry	42%

Source: Medical Marketing Service. (2013). *AMA Master File, 2013*. [Data file]. Wood Dale, IL: Medical Marketing Service.

### The School of Medicine and Health Sciences Alumni

Medical Laboratory Scientists	2,139
Athletic Trainers	216
Doctor of Medicine	2,031
Physical Therapists	1,713
Occupational Therapists	1,788
Physician Assistants	1,747
Master of Public Health	9





Buddy is a trained and certified service dog for the chair of the Occupational Therapy Department on the University of North Dakota campus. Buddy also serves a dual role and is authorized to be on campus to work with the educational mission of the Occupational Therapy Department and the School of Medicine and Health Sciences. Master of Occupational Therapy 2015 graduates Hannah Eickenbrock, Grand Forks, N.Dak., and Marlee Wheelhouse, Crookston, Minn., worked with University officials to complete paperwork to allow Buddy to function in his dual role. MOT '15 graduates Vanessa Dvergsten, Greenbush, Minn., Alexie Traiser, Bismarck, N.Dak., and Katie Huot, Morris, Minn., identified ways the curriculum can be modified to use Buddy in simulated assessment and intervention approaches. He allows students the opportunity to determine how to make recommendations for who is capable of using a service dog and how therapy dogs can play an integral role in an individual's life.





# SERVE

## A Stable Workforce

The School of Medicine and Health Sciences faculty turnover rate (faculty who have left their jobs) was 7.1% for FY 2014. In 2014, the average turnover rate for North Dakota University System faculty was 10.8%.

The School of Medicine and Health Sciences staff turnover rate was 10.5% for FY 2014. In 2014, the average turnover rate for North Dakota University System staff was 13.2%.

## Benefited\* Faculty and Staff for Fiscal Year 2014

Total Benefited Faculty—183  
Full-time—166; Part-time—17

Total Benefited Staff—285  
Full-time—262; Part-time—23

\*Benefited appointment is 20 hours/week or more.



On July 22, the first “Java with Josh” get-together took place in the Vennes Atrium of the SMHS building in Grand Forks. About two-dozen faculty members, staff, and students visited with Dean Wynne over coffee and tea. A variety of topics were discussed.

### 40 Years of Service

*Lila Pedersen*, Library of the Health Sciences

### 30 Years of Service

*Mary Reinertson-Sand*, Center for Rural Health  
*Mona Shilling*, Family and Community Medicine

### 25 Years of Service

*Brian Berg*, Minot—Center for Family Medicine

*Kristi Hofer*, Southeast Campus—Fargo

*JoAnn Johnson*, Research Affairs  
*Mary Johnson*, Continuing Medical Education

*Barry Pederson*, Center for Rural Health

*Kathleen Spencer*, Center for Rural Health

*Barbara Swann*, Internal Medicine

### 20 Years of Service

*Dawn Drake*, Educational Resources  
*Diane Hillebrand*, Research Affairs

### 15 Years of Service

*Claudia Boettcher*, Minot—Center for Family Medicine  
*Jan Gunderson*, Library of the Health Sciences  
*Denelle Kees*, Basic Sciences  
*Donna Latusus*, Basic Sciences

### 10 Years of Service

*Patricia Abrahamson*, Minot—Center for Family Medicine  
*Jacquelyn Bickford*, Bismarck—Center for Family Medicine

## 2015 Staff Recognition Luncheon



Deb Kroese

Mary Beth McGurran

At the 2015 Annual Staff Recognition Ceremony and Luncheon, UND staff employees with continuous, benefited employment at UND were recognized for their years of service. Deb Kroese, administrative officer in the Department of Basic Sciences, and Mary Beth McGurran, an administrative assistant in the Department of Medical Laboratory Science, were honored with the prestigious Meritorious Service Award.



The School celebrated Professor Richard Wilsnack, PhD, and his 37 years of service to UND at an open house on June 29.



Phyllis Tweton, an administrative assistant at the School, was honored at a retirement reception in June. Phyllis had been with the University for 48 years.

*Tonya Brey*, Minot–Center for Family Medicine

*Lisa Brown*, Basic Sciences

*Sharon Bruggeman*, Student Affairs and Admissions

*Sarah Glasoe*, Minot–Center for Family Medicine

*Donald Heap*, Library of the Health Sciences

*Jennifer Hershey*, Basic Sciences

*Sabrina Kraus*, Minot–Center for Family Medicine

*Jodi Myrvik*, Bismarck–Center for Family Medicine

*Monica Paczkowski*, Bismarck–Center for Family Medicine

*Cheryl Stauffenecker*, ND Simulation, Teaching and Research Center for Healthcare Education

*Debra Walker*, Psychiatry and Behavioral Science

*Joshua Wynne*, Office of the Dean

### 5 Years of Service

*Terrilyn Braasch*, Minot–Center for Family Medicine

*Elizabeth Bradshaw*, Family and Community Medicine

*Deidra Brown*, Minot–Center for Family Medicine

*Joshua Burbank*, Family and Community Medicine

*Kimberly Burris*, Master of Public Health Program

*Svetlana Golovko*, Basic Sciences

*Melanie Hepper*, Office of the Dean

*Marilyn Kitzman*, Minot–Center for Family Medicine

*Nicole Pape*, Center for Rural Health

*Jessica Sobolik*, Office of Alumni and Community Relations

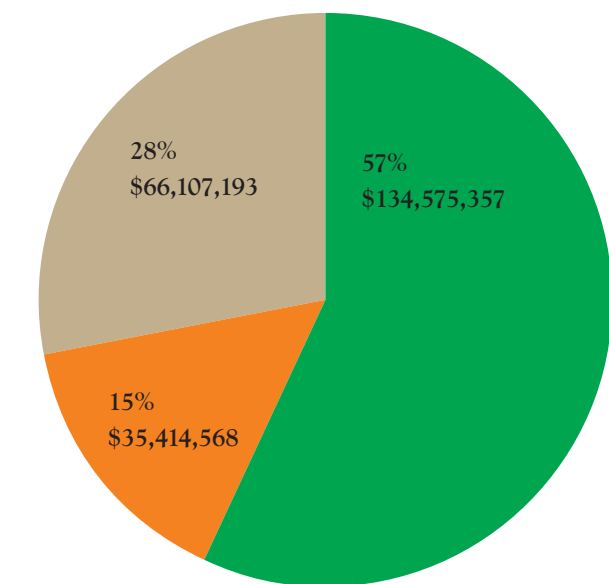
# EDUCATE, DISCOVER, SERVE

Biennial budget is \$236,097,118 The majority comes from non-state sources such as grants, contracts, patient revenue, and tuition.

## UND School of Medicine & Health Sciences

Expenditures: 2015–2017

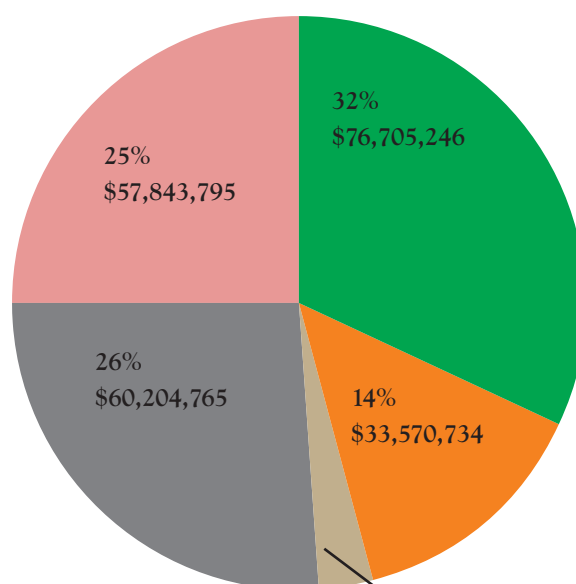
Total: \$236,097,118



- Salaries
- Fringe Benefits
- Operating & Equipment

Revenue: 2015–2017

Total: \$236,097,118



- State
- Tuition
- Mill Levy
- Patient & Education
- Grants & Contracts

For every \$1 appropriated to the School by the Legislature, the School will generate another \$2 in grants, contracts, tuition, and service revenues. The total economic impact of the SMHS over the next three biennia should exceed \$450 million.



# The New School of Medicine and Health Sciences Building



The building is a four-story facility with a north–south oriented “Main Street” around which are clustered various educational classrooms, small-group rooms, lecture halls, simulation and gross anatomy labs, and other associated pedagogical support space. To the east is a wing for faculty and administrative offices, and the west wing houses much of the School’s research enterprise. One of the features of the layout are the two offices that are by the front door of the building to service the School’s two most important constituencies—students and the people of North Dakota who are footing the bill for the new facility. The Office of Student Affairs and Admissions is front and center to welcome prospective and to assist current students. The Office of Alumni and Community Relations will similarly welcome and assist the public and alumni visiting the building. Dean Wynne very much hopes that the community will utilize their building, and to facilitate this, the architects designed a capacious learning hall (auditorium) right by the front entrance and adjacent to the two office suites.

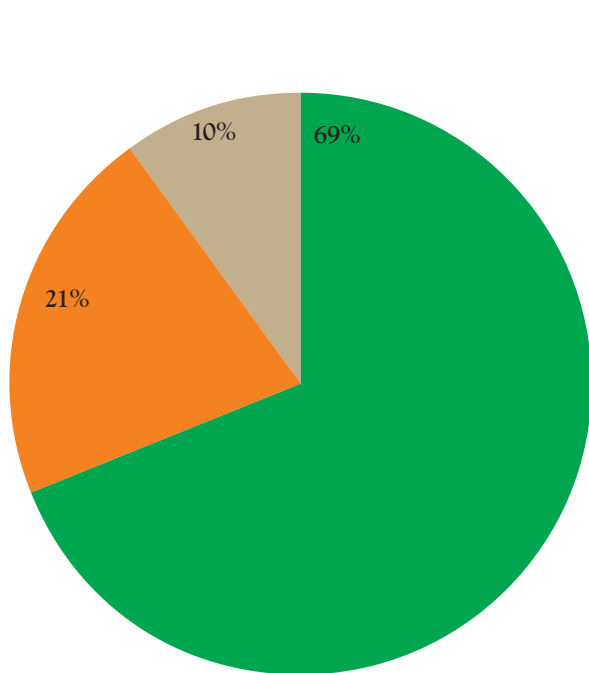
You can see renderings and floor plans of the building at our construction website:  
<http://www.med.und.edu/construction/renderings.cfm>.

You can also view time-lapse video of the construction:  
<http://oxblue.com/open/pcl/UNDSMHS>.

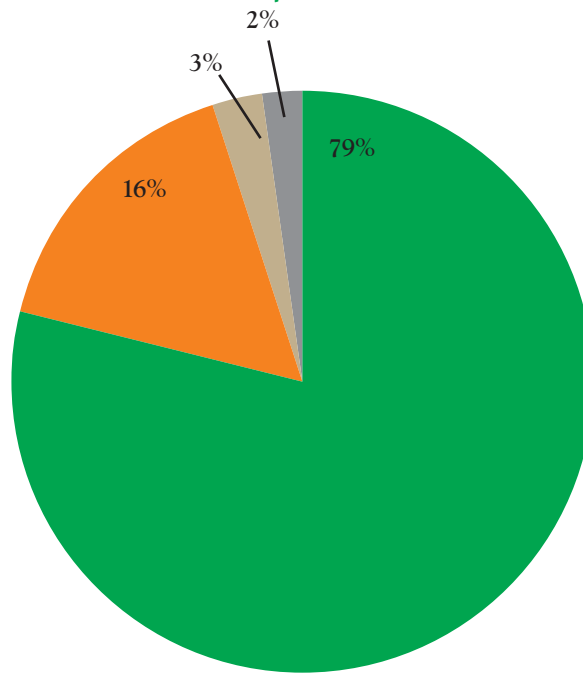


# EDUCATE, DISCOVER, SERVE

## Philanthropy Sources of Donations Fiscal Year 2014



Retained Donors	507
Re-engaged Donors	151
New Donors	70
<b>Total Donors:</b>	<b>728</b>

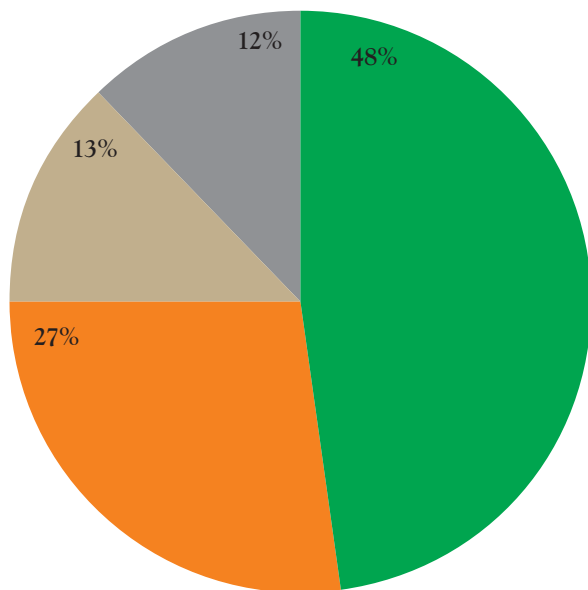


Alumni	576
Friends	113
Corporations/foundations/matching gifts	23
Other	16
<b>Total Donors:</b>	<b>728</b>

"Thank you for your very generous gift of a stethoscope. Receiving my own stethoscope was a very exciting moment for me, and your donation made it even more special. I know it will be an important tool as I continue my medical education."

—Katherine Wilt  
MD Class of 2018  
Williston, North Dakota

## Philanthropy Uses of Donations Fiscal Year 2014



Students	\$2,321,155.05
Priority Needs	\$1,289,455.35
Programs	\$604,350.00
Educators (faculty)	\$557,665.57
<b>Total:</b>	<b>\$4,772,625.97</b>

“Thank you for your contribution to our School’s MLS program. Having the ability to use digital slides has allowed us to see diseases and conditions firsthand that we would not have been able to see otherwise.”

—Aaron LaMontagne,  
Class of 2015 Medical Laboratory Science  
Bismarck, North Dakota

### Fiscal Year 2013

Retained Donors	587
Re-engaged Donors	297
New Donors	82
<b>Total Donors:</b>	<b>966</b>

Alumni	800
Friends	122
Corporations/foundations/ matching gifts	25
Other	19
<b>Total Donors:</b>	<b>966</b>

Priority Needs	\$ 3,793,263
Students	926,418
Programs	183,075
Educators (faculty)	\$ 65,827
<b>Total</b>	<b>\$ 4,958,583</b>

### Fiscal Year 2012

Retained Donors	626
Re-engaged Donors	224
New Donors	105
<b>Total Donors:</b>	<b>955</b>

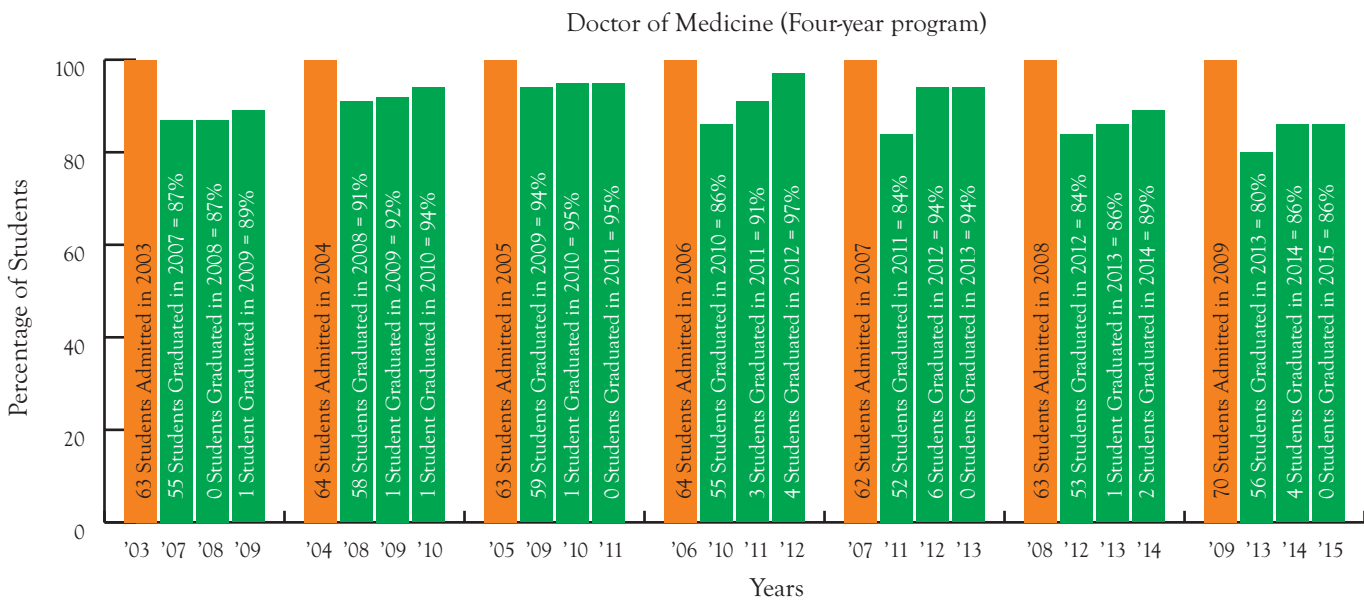
Alumni	788
Friends	131
Corporations/foundations/ matching gifts	18
Other	18
<b>Total Donors:</b>	<b>955</b>

Faculty	\$ 1,044,122
Students	614,210
Priority Needs	337,497
Facilities	300,000
Programs	181,050
<b>Total</b>	<b>\$ 2,476,879</b>

# EDUCATE

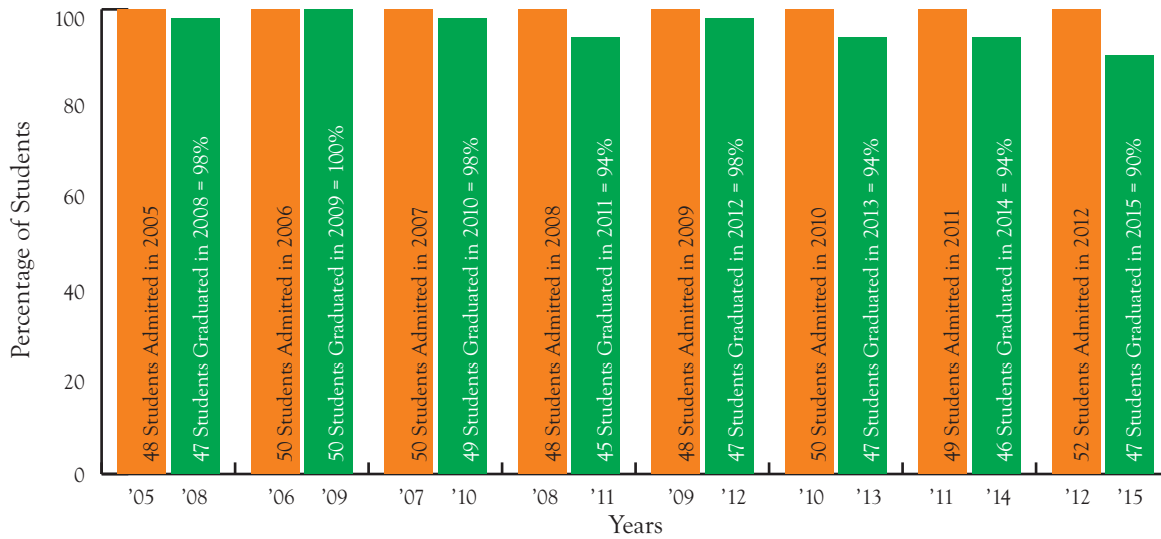
Completion rates\* measure the full-time, first-time students who enrolled in a professional degree program and completed their degree within the maximum allowable time, which varies based on the program. For medical doctorate students at the School, the maximum time allowed to complete a four-year degree is six years. The national completion rate for medical students who graduate within seven years is 94 percent.

Our goal is to exceed the national benchmark for completion.

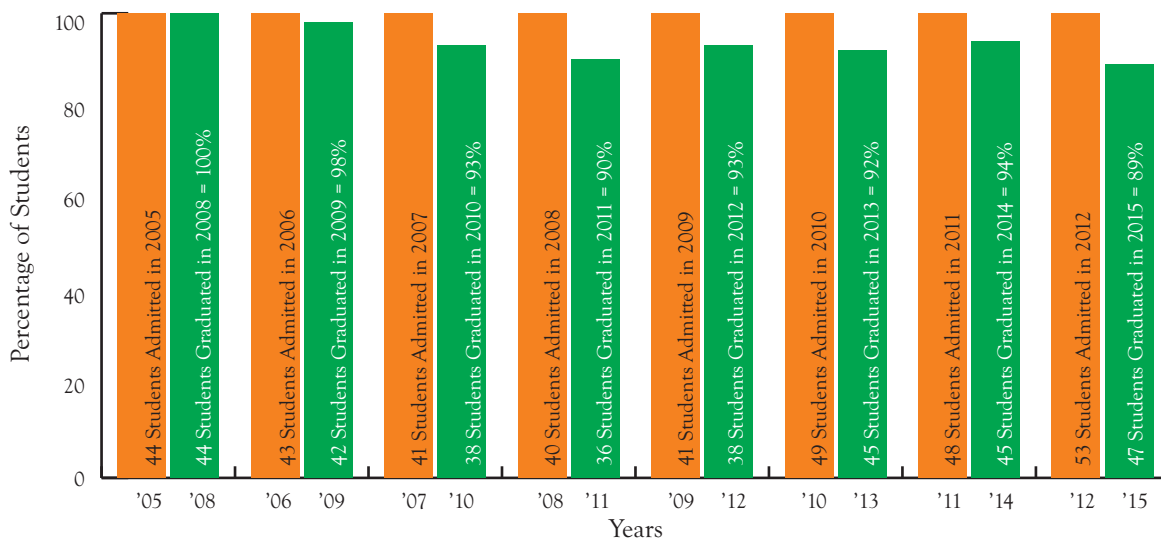


\* Number Graduated/Number Admitted = Completion Rate

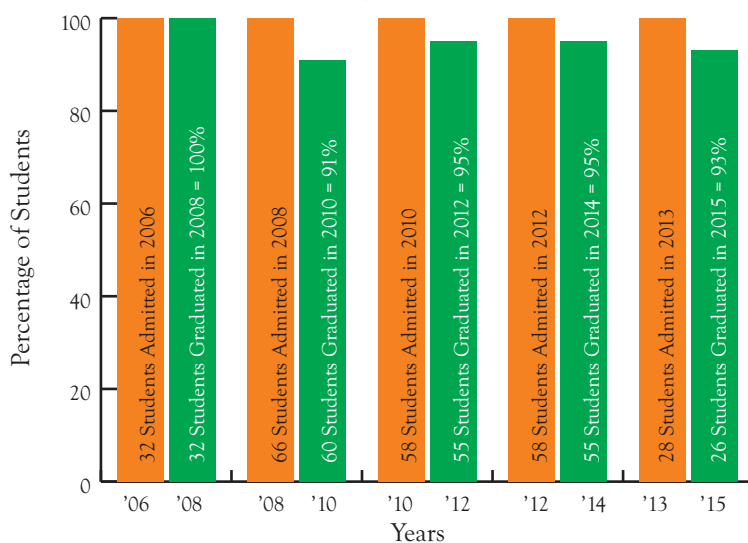
Doctor of Physical Therapy (Three-year program)



Occupational Therapy (Three-year program)



Master of Physician Assistant Studies



(Two-year program. Beginning with the class matriculating in 2006, the program accepted a class every other year, but has returned, effective with the class matriculating in 2012, to an annual admission structure.)



# EDUCATE

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## Residency Training

Beyond the MD degree, the School of Medicine and Health Sciences provides residency training: a period of advanced intensive training for medical school graduates in their chosen medical specialty before independent practice as a physician. Depending on the medical specialty, medical school graduates complete anywhere from three to seven years of residency training after medical school. Residency training through the School is provided in five specialties.

- Family Medicine (Bismarck—West River Health Services, Hettinger; and Minot—Mercy Medical Center, Williston)
- Internal Medicine (Fargo)
- Surgery (Fargo, Grand Forks)
- Psychiatry (Fargo)
- Transitional (Fargo)—a yearlong program designed to introduce graduates to a wide range of medical and surgical specialties. The goal is to build a broad foundation of clinical skills as a base for future training in a medical specialty.

(An additional program in Family Medicine is provided through Altru Health System in Grand Forks.)

The School is or will provide funding to support the following new residency programs:

- Altru Health System Family Medicine Program—a rural track as part of the family medicine program.
- UND Family Medicine programs at Bismarck and Minot—a rural track located in Hettinger and Williston.
- UND Surgery Program—a rural track designed to train general surgeons for practice in rural areas of North Dakota and the region.
- UND Rural Psychiatry Program—training in providing behavioral and mental health care that will emphasize telemedicine approaches to improve patient access.
- St. Alexius Medical Center
  - Novel hospitalist training program with development of a rural hospitalist model.
  - Geriatrics training to care for North Dakota's aging population.
- UND Department of Geriatrics—training in geriatric medicine.

Funding appropriated by the Legislature for residency slots under the Healthcare Workforce Initiative was awarded to the following residency programs:

- Two one-year geriatrics training slots in conjunction with Sanford Health and through our Department of Geriatrics.
- An additional psychiatry residency slot with an emphasis on telepsychiatry through our Department of Psychiatry and Behavioral Science.

- Funding for the Western North Dakota Area Health Education Center (AHEC) to complete Phase II of a study exploring ways to expand health student education in rural communities in North Dakota.
- Five residency slots per year (three-year program) for a new family medicine program in Fargo, based at Sanford Health and with collaborative arrangements with Essentia Health in Fargo and various rural communities in the state.



On this page, Davenport, N.Dak., native Sadie Skarloken, MD '15, displays her Match results, revealing that she will complete her residency in pediatrics at the University of Wisconsin Hospitals and Clinics in Madison. Match Day for medical students is one of the most important milestones of their careers. On Match Day, March 20, members of the Doctor of Medicine Class of 2015 at the University of North Dakota School of Medicine and Health Sciences and medical school seniors across the country opened envelopes to discover where in the United States they will hone their skills as resident physicians.

Match Day is the culmination of the National Resident Matching Program, a private, not-for-profit corporation founded in 1952 at the request of medical students to standardize the residency selection process and establish a uniform date of appointment to positions in graduate medical education training programs.

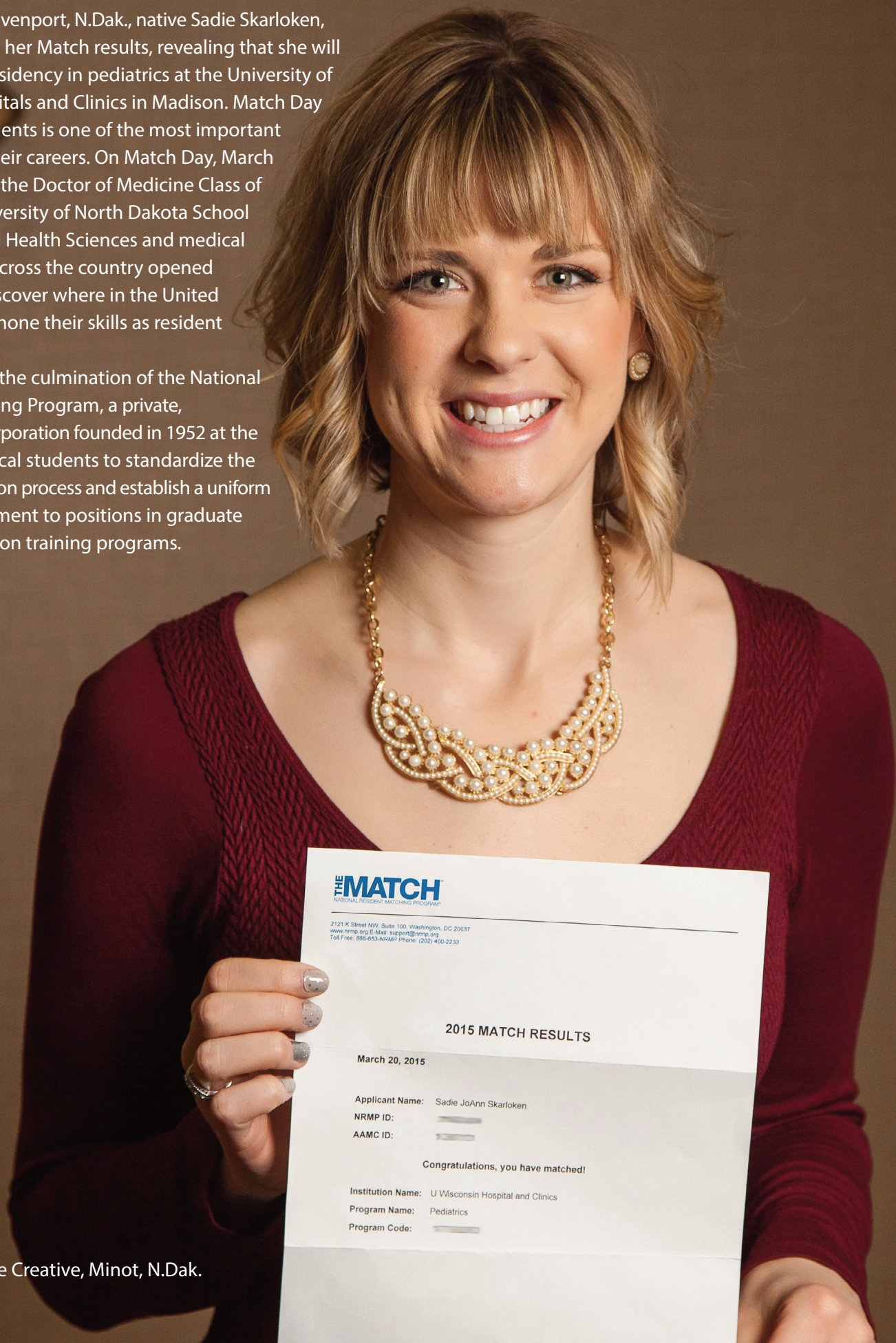


Photo Credit  
Joel Dennis, Blue Creative, Minot, N.Dak.



# EDUCATE, DISCOVER, SERVE

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Keep your finger on the pulse of the latest news and events from the School of Medicine and Health Sciences



Read Dean Joshua Wynne's weekly column in *E-News*, the School's digital newsletter delivered to your inbox.



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<http://twitter.com/#!/UNDSMHS>

To subscribe to *E-News* or *North Dakota Medicine*, please contact Kristen Peterson, [kristen.peterson@med.und.edu](mailto:kristen.peterson@med.und.edu), (701) 777-4305.



See familiar faces posted on our Flickr account:  
<http://www.flickr.com/photos/undsmhs/>

If you would like further details about the information in this Community Report or the programs, departments, or research at the School, please contact Denis MacLeod, assistant director, Office of Alumni and Community Relations, UND School of Medicine and Health Sciences, (701) 777-2733, [denis.macleod@med.und.edu](mailto:denis.macleod@med.und.edu)

*Vital Signs* 2015 represents the good-faith effort of the UND School of Medicine and Health Sciences to provide current and accurate information about the School. Numerous sources were used in gathering the information found in this community report. We welcome corrections, which we will incorporate in subsequent issues of *Vital Signs*.