Health care education in the 21st century
(CHANCELLOR’S PERSPECTIVE)

EDUCATING MILLENNIALS IN HEALTH PROFESSIONS

Many of us pride ourselves on our digital fluency. After all, we have evolved into an increasingly digital device-dependent world, and it’s likely you won’t ever find any of us too far from our latest and greatest handheld device.

But today’s millennial learners are more than merely fluent. They are truly digital natives. They were born into today’s world of media and technology. It’s the language they speak naturally; they know no other way. They work, play and live online, thinking and communicating differently than previous generations, most often to their benefit and that of others.

But if they are to best treat tomorrow’s patients, our children and grandchildren, then we at UNMC must find the way to best reach and to best teach these digital natives today. Thus, you will read about an array of educational and technological innovation in this issue of Connect.

You’ve heard previously about the Interprofessional Experiential Center for Enduring Learning, a transformative initiative we commonly refer to as iEXCELSM, This new way of educating includes advanced simulation clinical settings and virtual immersive reality technology.

I always enjoy speaking with our students about iEXCEL and I particularly enjoy their excitement each time I am privileged to witness them experience a new way of learning or try out a new training tool. The energy level is incredible.

But what gets me most excited is that the energy level is equally incredible among a remarkable number of our faculty. One of our most important developments, which we will touch on in later pages, is the establishment of a new teaching academy at UNMC, the Interprofessional Academy of Educators.

This academy will help our faculty, together...across the health professions, best learn how to use our new educational model to its greatest potential; and how to reach, and to teach, these digital natives on their home turf.

The goal is not the use of technology for technology’s sake, but to find new ways to obtain greater competency, so as to better treat generations of future patients, at higher levels and at a lower cost.

Our teachers are as energized as our students by this new day. Our teaching academy already is giving our faculty a sense of community, while allowing them to think together about how to build this incredibly creative future.

Our students’ excitement for learning has reinvigorated our passion for teaching. It’s a journey we will all take together, as UNMC commits to being the world leader in using real-life virtual reality scenarios to transform performance in career-long health care education and skills developments.

Jeffrey P. Gold, M.D.
UNMC Chancellor
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Graduate students Seth Stauffer in blue and Tim Bielecki, officers in UNMC’s Makers 3D printing club, explore the new MultiTaction iWall that can transform collaboration and communication among students and faculty members.

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A common theme throughout UNMC’s transformative education initiatives is that health professions education must become more experiential, not only to reach today’s learners, but to better build competency at a lower cost.

In this, UNMC teams – not only administration and faculty, but students as well – are leading the way to a new model for health sciences education.

This new model is interprofessional as well as hands-on.

“It only makes sense for us to be working together,” said third-year pharmacy student Beau Ehlers. “That’s the way it’s going to be in the future. We might as well start today.”

To that end, faculty adviser David McMillan, Ph.D., professor, pharmacology and experimental neuroscience, mentored Ehlers in his collaboration with Caitlin Fee, a third-year medical student, to create their own e-module as part of the UNMC E-Learning Program. Their collaboration is a model for the future.
And, it made sense – in their second years, pharmacy and med students study pharmacology together. “We have to learn a lot of drugs in a very short amount of time,” Fee said.

“In our module, we try to integrate the microbiology principles with the antibiotics so students can better understand the structure of the cell wall and how cell wall synthesis inhibitors affect that,” she said. “And we also use little pictures to help students remember in a clever and unique sort of way.”

That’s just one of the new ways in which today’s millennial students – UNMC Chancellor Jeffrey P. Gold, M.D., calls them “digital natives” – learn differently than their predecessors.

Added Vice Chancellor for Academic Affairs Dele Davies, M.D., “I believe our future is one where we use a blend of different teaching methods, tools and technology that enable students to learn in the manner and speed that best suits them.”

And so, said Dr. Gold, “Not only have the millennial learners’ needs changed, but our faculty’s needs have changed as well.”

Thus, another innovative educational initiative – a new teaching academy – was born at UNMC. The academy will teach teachers how to reach today’s (and tomorrow’s) students. They will use the latest technology, new learning methods, fewer lectures, more simulation and experiential learning, all while teaching the students to teach themselves, through collaborative peer learning and the like. They’ll focus less on memorization, more on hands-on competency and collaborative problem solving.

It’s a whole new way of thinking. And teaching.

“We envision the Interprofessional Academy of Educators as that center where teachers from every college will come to share their ideas, solve common problems, and mentor the next generation of educators.”

Howard Liu, M.D., director of faculty development.

The academy will receive support from three separate funding streams: the University of Nebraska’s Programs of Excellence, the Grissom Fund and the College of Medicine Alumni Engagement Council. Dave Goldner, M.D., chair of the education committee of the UNMC College of Medicine Alumni Engagement Council, said the alumni will provide support to engage preceptors and alumni across the state with the teaching academy, to improve their teaching skills and better serve students and residents.

And, down the line, to better serve patients in Nebraska and beyond.

Geoffrey Talmon, M.D., associate professor, pathology/microbiology, Linder Residency Director Distinguished Chair and a Golden Apple Award Hall of Famer, has been named the academy’s inaugural director. His teaching philosophy made him a perfect fit for the job.

“What we need to do as physicians, nurses, pharmacists and other health care professionals,” Dr. Talmon said, “is apply the same evidence-based strategies to our education that we do to our clinical practices. We need to step out of our world and not simply do something because it’s the way it’s always been done, or it’s what we went through.

“And so we are becoming more problem-focused,” said Dr. Talmon, “rather than subject-focused. The emphasis becomes less on knowing a
particular fact, which anyone can look up in seconds now with today’s technology, but in learning how to reason, how to make the correct decisions.”

The academy’s associate directors, Kim Michael, Anderson Distinguished Professor of Imaging Sciences in the College of Allied Health Professions (CAHP), and Andrew Patterson, M.D., Ph.D., Larson Professor of Anesthesiology, make it a truly interprofessional leadership team.

“The team members have diverse backgrounds and skill sets that will foster innovation and are all strongly committed to the academy mission of fostering a vibrant interprofessional community of educators,” said Greg Karst, Ph.D., executive associate dean for academic affairs in the CAHP.

Dr. Karst served as co-director of the Interprofessional Academy Council Subcommittee, tasked with finding the academy’s leadership team. Dr. Liu also served as co-director.

But UNMC’s instructors also will have at their disposal world-class tools and infrastructure with which to teach – including the approved $102 million Global Center for Advanced Interprofessional Learning at UNMC, which will house the iEXCELSM initiative.

The 134,000-square-foot, multi-level structure is planned for the southeast corner of 42nd and Emile Streets, and will be connected to adjacent facilities – the Michael F. Sorrell Center for Health Science Education to the north and the Lauritzen Outpatient Center to the east – via skywalks.

The legislature in 2015 allocated $25 million toward design and construction of the Global Center, as well as $2 million for operations and maintenance of the new facility. Additional funding support for the Global Center for Advanced Interprofessional Learning and iEXCEL will come from public and private funds. UNMC leaders project construction of the Global Center to begin in January 2017, with substantial completion by summer 2018. According to an analysis by Tripp Umbach, a leading national consultant, the annual economic impact of iEXCEL will be $39.3 million.

iEXCEL, the campuswide initiative that includes surgical and advanced simulation clinical settings and virtual immersive reality technology, will help transform how health science education and clinical care is delivered through competency-based learning and assessment.

And students such as Fee and Ehlers aren’t the only ones exploring this technology’s new possibilities – with institutionwide encouragement, often through the teaching academy, faculty are too.

“The opportunities are only limited by your imagination, your willingness to have grit and to try things in a new way,” said Pam Boyers, Ph.D., associate vice chancellor for iEXCEL. “In addition to our academic mission, iEXCEL also has a research and business mission, providing for safe environments for faculty and staff to collaborate with industry and others in the research and innovation realms.”

Already, Michael and Tanya Custer, assistant professor of radiation science technology education, are leading the charge, having received funding from Dr. Davies’ office and the CAHP to develop a series of e-learning modules for UNMC’s Anatomage virtual dissection tables.

UNMC’s new e-Learning Development Laboratory offers a tremendous resource, with its facility, staff and software, to help faculty and students put together such modules.

And a new MultiTaction iWall in the Sorrell Center is an experiential tool that enables new ways of thinking and provides a safe place to innovate in an engaging manner. Its interactive way of presenting content in an innovative and
intuitive way can transform collaboration and communication as users flesh out ideas in real time.

Additionally, faculty and students at the colleges of nursing and allied health professions already are taking advantage of the technology and learning environment at the new $19 million Health Science Education Complex, which hosts UNMC’s programs on the University of Nebraska at Kearney campus. The Kearney complex features state-of-the-art technology equal to that of the Omaha campus, which also provides unprecedented distance-learning opportunities between the two sites and across the state.

Dr. Karst, who heads up allied health’s efforts in Kearney, noted that the complex features $2.5 million worth of audio/visual technology.

“People are in awe of everything going on inside this facility. It has been a tremendous transition,” said Mary Ann Mertz, Ed.D., interim assistant dean for the College of Nursing Kearney division.

She continued: “This building is pushing us to expand our teaching styles.”

The nation is noticing UNMC’s leadership in the transformation of health science education.

Competency, interprofessionalism and iEXCEL are key elements in UNMC’s College of Medicine being named one of just 20 medical schools nationwide selected by the American Medical Association (AMA) for its Accelerating Change in Medical Education Consortium. Through the consortium, UNMC takes a leading role in creating “the medical school of the future.”

“It signifies a new day for how physicians will be trained to provide care in the 21st century health delivery system;” Dr. Gold said. “The health system is evolving, and it’s important that we take a leadership role.”

UNMC’s project within the consortium will focus on transitioning interprofessional education into interprofessional practice with the goal of advancing teamwork and communication among health professionals.

This is precisely the kind of thing the aforementioned medical and pharmacy students, Fee and Ehlers, already work on. Together.

But, that’s on the micro level. Big picture: “Joining this initiative provides greater opportunity to collaborate within the UNMC colleges and Nebraska Medicine,” said Kelly Caverzagie, M.D., associate dean for educational strategy in the UNMC College of Medicine and principal investigator for UNMC in the consortium. “The colleges have been working on curriculum changes related to interprofessional practice.”

Meanwhile, a framework developed by Dr. Caverzagie helps faculty “see” competence by defining, and then evaluating students on their demonstration of pre-defined competencies. This framework can help UNMC assess interprofessional practice and interprofessional care.

As Dr. Talmon noted, the same evidence-based strategies being used in research and clinical care are coming to education as well.

As a reflection of UNMC’s efforts in these areas, the Liaison Committee on Medical Education (LCME), which accredits medical schools, honored Dr. Gold with the organization’s Outstanding Service Award for 2015. The honor has been given only three times in the LCME’s history.

It’s a sign that UNMC is headed in the right direction, one in which both faculty and students are learning to be innovators, taking the lead in a new era of health care education and delivery.
We all have to deal with stress in our lives. But, it turns out that medicine is one of the most stress-filled occupations. The stats are alarming:

- Between 300 and 400 physicians each year commit suicide.
- An estimated 11 percent of all U.S. medical school students seriously consider suicide each year.
- One out of every two physicians has experienced job burnout.
- The burnout rate for physicians is the highest of nearly every occupation. It’s about double the burnout rate for attorneys.

Looking back on my years as a medical student, it’s easy to see how stress levels are elevated. The reasons:

- The pace of medical school is much faster than undergraduate school. The workload is greater and comprehension is more difficult.
- Most medical students were A students at the undergraduate level. Now, they are competing against the brightest of the bright. Someone has to be in the middle or bottom part of the class, and it can be difficult for students to accept.
- For some, medical school means starting over in a new city. Support systems are gone and the needs of daily life compete with a grueling study schedule. Time out for grocery shopping and haircuts adds stress.

Nobody is immune from these pressures. Personally, I can still recall how stunned I was when I failed an undergraduate genetics exam. It was completely deflating.

I also can recall, as an infectious diseases fellow at the University of North Carolina, when I submitted my first research paper to my adviser for his review. I had worked on this paper for weeks. When it came back, it was covered in so much red ink that it looked like it had been colored by a 3-year-old.

Events like these can be demoralizing. But, it happens. The key is how we react when things don’t go our way...how resilient can we be?

For me, I salvaged an A in genetics by doing well in the final two exams (everyone’s lowest exam score was thrown out). And, I gained so much
“Perhaps no other effort on our campus is as important as our initiative to reduce the outcome and stigma associated with stress, burnout, and mental illness, and to provide services for our students, faculty, and staff who are experiencing this type of distress.”

Jeffrey P. Gold, M.D., UNMC chancellor

from my adviser’s edits on my research paper, I used it as a learning opportunity to develop future research articles.

As stressful as medical school and residency was for me more than 30 years ago, it’s probably even more stressful today.

For example, in my day, the United States Medical Licensing Examination (USMLE) Step 1 was an exam that you passed and moved on.

Now, at the end of the second year of medical school, students must take that same exam and do well because that score has become a screening device to help residency programs, overwhelmed with applicants, decide who to invite for interviews.

You could be the No. 3 student in your medical school class, but if you have a bad day and get a poor score on the USMLE-1, it may impact your medical career options. Consequently, our second-year students find themselves trying to carve time out of their already busy and stress-filled lives for extra weeks and months studying for this exam.

Unless good coping and stress management skills are learned as a student, it will be hard to create a healthy work-life balance in the future when faced with difficult emotional challenges, like dying patients and mourning families.

UNMC wants to be a national leader in helping students, faculty and staff better deal with stress and burnout.

In December, UNMC hired a psychologist, Jennifer Yalof, Psy.D., as wellness coordinator – a new faculty appointment within the department of psychiatry. Dr. Yalof will help medical students and residents better navigate their educational training.

In addition, the College of Medicine hired Marcia Shadle Cusic to provide personalized support for our students, with a particular focus on first- and second-year students. We welcome the addition of Marcia and Jennifer to the college and thank Sue Pope as well, who, for many years, has been a similar resource particularly for third- and fourth-year students.

These initial efforts will be largely focused in the College of Medicine. But, it is hoped that the program can become a model for the entire academic campus.

In late January, UNMC brought in four nationally recognized experts on stress, burnout and mental illness to offer their insights to faculty, staff and students. It was time well spent.

Bradley Britigan, M.D., is the dean of the UNMC College of Medicine.

HOW TO COPE

Stress is not inherently bad, but it’s important to recognize and manage the inevitable stress in our lives. Here’s how:

- Maintain a sense of optimism.
- Take care of yourself – exercise regularly, eat right, get enough sleep and take time to play.
- Develop and maintain friendships and support systems.
- Keep a sense of humor.
- Engage in a relaxing hobby.
- Show emotion – laughter and tears are natural stress mitigators.
- Get help if you need it.
Fourth-year medical student Suzanne Higgins knew her residency search presented an adventure.

She traveled the country, interviewed with program directors and caught glimpses of new cities that held potential for great excitement.

What she didn’t anticipate was an interesting visit with Jean Moon, M.D., class of 1989, on her residency interview in Phoenix. The visit was made possible through the alumni association’s HOST Program (Help Our Students Travel).

Through the work of the UNMC Alumni Association, Suzanne was able to connect with Dr. Moon, stay at her home during her visit and get inside information on the community, all while getting to know a UNMC alumnus personally.

“We had wonderful conversations. I appreciate the alumni association setting me up with Dr. Moon and her husband, Tom,” Suzanne said.

“It helped provide a whole new level of understanding about Phoenix.”

Dr. Moon agreed. “It was great to learn about Suzanne’s experience at UNMC. It brought back many memories about my time as a student,” she said.

It’s these kinds of interactions that will occur more frequently for UNMC alumni in what is being called the New Era of Engagement, a new era for UNMC alumni relations.

First initiated by the leadership of the UNMC Alumni Association Board of Directors, the new era brings positive changes including a sharpened focus on alumni engagement. The first change was to open association membership to all graduates to increase the number of alumni actively engaged with UNMC, its colleges and its students. Doing so provides exciting opportunities for alumni and makes a real difference for UNMC’s next generation of proud health sciences students.

One of the earliest advocates of the new model, College of Allied Health Professions Dean Kyle Meyer, Ph.D., sees the benefit of welcoming all students as alumni association members immediately upon graduation.

“The new model just makes sense,” he said. “Our alumni represent one of our greatest assets – the goal is to do everything possible to ensure their ongoing engagement with UNMC.”

That engagement will come from alumni association work focused in the areas of:

- Serving and engaging graduates;
- Disseminating effective communications;
- Forming meaningful connections between alumni and students; and
- Facilitating opportunities for alumni to invest in their UNMC passions.
UNMC Chancellor Jeffrey P. Gold, M.D., a strong advocate of the new era of engagement, will serve a term as president of the UNMC Alumni Association to help facilitate the transition.

“Working together, our goal is to strengthen our alumni’s relationship with UNMC, to become more inclusive, to enhance our alumni engagement activities and continue to build upon our strong culture of alumni philanthropy,” he said. “We are proud of our alumni.”

On March 18, Higgins was matched to a pediatric residency at the University of California Davis Medical Center, Sacramento, but no matter where she is, she has the support of the UNMC Alumni Association and its network of 42,000 members.

What alumni can expect in the new era of engagement:

- Upon graduation, all alumni are now welcomed into the UNMC Alumni Association with automatic membership. Lifetime members will continue to be recognized as special members.
- Increased emphasis on strategic alumni engagement, including new programs, activities and communications that emphasize supporting UNMC and its colleges.
- Strengthening partnerships and collaboration between UMMC colleges and Alumni Engagement Councils (formerly named Alumni Chapter Board of Directors).
- Alumni still have the opportunity to support their college and their alumni association. The University of Nebraska Foundation has created the UNMC Fund, which includes an Innovation Fund for each college to provide student assistance, support the people and programs of the UNMC Alumni Association, fund White Coat and professionalism ceremonies, upgrade and enhance technology, and much more.

Learn more about the new era of engagement
unmc.edu/connect

Maybe the bank you’re looking for, isn’t a bank at all!

Not all financial institutions are created the same. Metro Credit Union is the financial institution created by health care professionals to serve fellow health care professionals.

And, in our 62 years, we’ve learned a thing or two about service. Come experience the Metro Credit Union difference. Our service promises guarantee you a new outlook on financial institution service.
Our students…

UNMC’s Jakeb Riggle is set to receive his medical degree in May after years of intense schooling. It won’t be his first graduate diploma though. Jakeb, a student in UNMC’s M.D./Ph.D. program, already earned a doctorate in biomedical engineering.

But it will be his final degree before completing his residency in internal medicine at UNMC and then embarking on a career that he hopes brings him back to an academic health science center.

In the future, Jakeb, who is from Elkhorn, Neb., said he plans to practice internal medicine and be involved in training residents, fellows and medical students through simulation technology.
“Basically I want to be involved in technology to make sure students know what they are doing before they interact with patients.”

In other words, Jakeb wants to help train future health care professionals so “we can provide even better medical care to those in Nebraska.”

Our future…

Jakeb had assistance getting to this level. A Regents scholarship and other scholarships helped him through the University of Nebraska-Lincoln for undergraduate studies.

Support for students like Jakeb – those who will become Nebraska’s future workforce – is the focus of a two-year, $200 million fundraising effort for the University of Nebraska.

Our Students, Our Future seeks to secure private gifts for:

- Programs that improve student outcomes, particularly among traditionally underrepresented students;
- Improvements to facilities that will enhance the learning experience;
- Scholarships that will make students’ college education more affordable; and,
- Other student-focused priorities.

The initiative was announced last fall by the university and the University of Nebraska Foundation. It will conclude at the end of 2017.

Through Our Students, Our Future the university hopes to not only advance its highest priority of affordable excellence, but also position its campuses to attract more students in support of goals to significantly grow enrollment and produce more graduates for Nebraska’s workforce.

For UNMC, the initiative focuses on private support for:

- The Interdisciplinary Experiential Center for Enduring Learning (iEXCELSM), a bold, visionary initiative that will change health education and training for new and continuing learners.
  In the future, health care professionals will be able to practice and hone skills in a simulated environment before ever encountering the challenges in a real-life clinical setting.
  Funding is being sought for a cutting-edge educational facility where students will be immersed in virtual, life-like scenarios that will develop and test their skill and competency levels without putting patients at risk.
  When deployed across the state, this technology will be a resource for training students and health professionals statewide.
  (See story page 4)

- Programs that expose high school and undergraduate students to opportunities in health care create a stronger pipeline of future health professionals, as well as scholarship programs for rural, low-income and other underserved students.

In the next decade, retirement and population changes will challenge Nebraska’s health care community, leaving a shortage of health care professionals across the state, but especially in rural areas and areas with concentrated levels of poverty. Support for these programs and for financial assistance will help UNMC attract students to health careers.

- Graduate students – those who will teach and conduct lifesaving research in the future. These students are heavily recruited by other institutions because they are the entrepreneurs and leaders in biomedical research, pharmaceuticals and other areas of health care and innovation. Fellowships and stipends are critical to keeping this population in Nebraska.

Any gift made to the University of Nebraska Foundation in support of a student scholarship fund or student-oriented program before the end of 2017 will count toward the $200 million goal. To learn more about Our Students, Our Future and matching gift opportunities, contact Amy Volk at amy.volk@nufoundation.org or 800.432.3216, or visit nufoundation.org/ourstudentsourfuture.
In 1995, Kayla Rankin was just 2 years old when her mom, Allison Rankin, entered the physical therapy program at the then UNMC School of Allied Health Professions.

“I remember studying at the table and Kayla sitting next to me with her own little books studying right along with me,” Allison Rankin said fondly.

Twenty years later, Kayla enrolled in the UNMC College of Allied Health Professions at the University of Nebraska at Kearney and expects to graduate in December 2017, with a different degree than her mother. She is pursuing a career as a physician assistant.

“I like the way the physician assistant can spend time with patients, really get to know them and guide them through their medical treatment,” she said.

Kayla grew up on her family’s cattle ranch in Spalding, Neb., the oldest of four. She played every sport offered in her small school, from volleyball and softball to track, and graduated in a class of 10 students.

Through the years, Kayla watched as her mom and grandmother, a nurse, took care of family, friends and neighbors in Boone County. And, while she admired the work they did, Kayla wasn’t always interested in a health care career. She had her heart set on landscape and housing design.

She changed her mind after a course at Nebraska Wesleyan University introduced her to the variety of allied health careers. The PA program in particular caught her eye.

By Christmas break, she was job shadowing a physician assistant who worked at a clinic in Spalding. By spring break, she was ready to sign up for the prerequisite courses needed for acceptance into UNMC’s PA program.

“The Boone County Health Clinic physician assistants are outstanding and really set the bar high on what a PA does,” Kayla said. “They know their patients and their patients trust their judgement. It was amazing to watch them work.”

Kayla, who plans to practice in rural Nebraska, near Kearney if possible, said she is particularly interested in specializing in family medicine “so I can work with people in any age group.

“It’s been a goal of mine, since I entered the program to serve in rural communities,” Kayla said. “It’s tough to know there are families who do not get the health care they need because of where they live. I want to change that disparity.”

Kyle Meyer, Ph.D., dean of the College of Allied Health Professions, remembers Allison as an outstanding student when he was associate professor of physical therapy.

“Imagine my surprise when I ran into her at this year’s White Coat ceremony only to find out she was there for her daughter,” he said.

“I was delighted, but not the least bit surprised that Allison had passed her love for health care and for rural communities on to her daughter. What an inspiring legacy for her, and what a tremendous testimony of our programs to provide generations of health care providers to serve rural Nebraska.”
Artist Dale Chihuly will bring his vibrant works of art to patients, families and staff at the Fred & Pamela Buffett Cancer Center when it opens in the spring of 2017.

Chihuly, a pioneer of the studio glass movement and considered to be one of the world’s foremost artists working in glass today, will create an installation known as the Chihuly Sanctuary inside the cancer center.

“I really wanted to create a space for people to meditate and find a moment of peace,” Chihuly said.

Jeffrey P. Gold, M.D., UNMC chancellor and chairman of the Nebraska Medicine Advisory Board, said that the Chihuly Sanctuary will be an integral part of the Healing Arts Program, which has been developed using evidence-based research to aid in the healing of patients.

“We are fortunate to have Mr. Chihuly’s art as a part of our campus,” Dr. Gold said. “I have no doubt that the brilliant colors and innovative shapes he’s known for will serve as an inspiration to our patients on their journey toward healing, and to our staff and students as we travel on this journey together.”

The Healing Arts Program will include the most motivating and meaningful works of art to help heal the human spirit – from reduced pain perception, anxiety, stress, loneliness and depression to providing new insight and emotional clarity about a cancer diagnosis and treatment.

“Art can have a very positive effect on the healing process,” said Kenneth Cowan, M.D., Ph.D., director of the Fred & Pamela Buffett Cancer Center. “Having beautiful, peaceful and creative pieces by one of the most talented artists in the world today, as one of the cornerstones of our Healing Arts Program, gives me great confidence that we are doing everything possible to help our patients heal emotionally, as well as physically.”

“This small corner of the city is well on its way to becoming a world-class medical center, so we thought it was worthy of some world-class art,” said Walter Scott, the lead donor.

An artist’s rendering of the Chihuly Sanctuary.

“The Chihuly Sanctuary will be an integral part of the Healing Arts Program, which has been developed using evidence-based research to aid in the healing of patients.”

Jeffrey P. Gold, M.D.
IamUNMC

Incredible work happens every day at UNMC. But, it can be challenging to replicate the excitement I hear and see daily on campus through social media.

When I became the Web Content/Social Media Specialist and began managing UNMC’s social media presence at the beginning of the school year, I wondered how I could engage students to be loud and proud on social media about their UNMC experience.

The answer: A hashtag campaign, #IamUNMC.

Whether students are studying in a lab, working on a group project, or skating on the ice rink, including “#IamUNMC” in their Twitter and Instagram posts has become a great way for students on all of our campuses to let their UNMC pride shine.

College of Dentistry student Olivia Rauschenbach said #IamUNMC is a fun
way to connect with students on other UNMC campuses. “It’s encouraging to relate via day-to-day activities with students who, like you, are pursuing their dreams in the medical field.”

The impact is best seen in the volume of #IamUNMC posts. I love checking out the photo stream where all posts are displayed, with photos shared from Hawaii to the New York City marathon!

College of Allied Health Professions student Lauren Akahoshi said the photo stream also provides prospective students with a peek at campus life. It “adds so much more liveliness to the UNMC image. It shows that UNMC is much more than just medicine and school… There are so many other things that happen here on a daily basis.”

Using #IamUNMC also gives students a sense of unity, recognizing that they are a part of something greater. College of Nursing student Lyndsay Thornton said she values that cohesiveness. “I’ve bounced around many schools obtaining pre-requisite courses, so I’ve never had the feeling of belonging anywhere. UNMC and this campaign make me feel like I finally belong to something!”

Using #IamUNMC also gives students a sense of unity, recognizing that they are a part of something greater. College of Nursing student Lyndsay Thornton said she values that cohesiveness. “I’ve bounced around many schools obtaining pre-requisite courses, so I’ve never had the feeling of belonging anywhere. UNMC and this campaign make me feel like I finally belong to something!”

Photo A: Third-year pharmacy students Adam Lee, Stephen Jones and Matthew Klinginsmith, take a moment to show their UNMC pride between classes.

Photo B: Third-year pharmacy students, from left, Derek Neihardt, Kyle Hoeltig, Christopher Zaleski, Subash Baniya and Jason Blaser, enjoy lunch at the Sorrell Center.

Photo C: First-year medical student Hannah Johnke appreciates some pet therapy during a study break.

Photo D: Graduate Studies research technologist Monalisha Elango and Graduate Studies students Charles Schutt and Denise Cobb, all from pharmacology and experimental neuroscience, have a fun afternoon at the UNMC Skate-a-thon for Parkinson’s.

Photo E: First-year allied health students Kayla James and Bianca Patel pause for a selfie while studying.
Clinic offers care that’s comprehensive, convenient

Nebraska Medicine, UNMC’s primary clinical partner, recently opened a new Multidisciplinary Breast Cancer Clinic at Village Pointe Cancer Center in Omaha to provide a personalized and comprehensive approach to care.

“Patients benefit from getting a comprehensive plan developed by a multitude of breast cancer experts using the most recent studies,” said Sarah Thayer, M.D., Ph.D., professor of surgical oncology at UNMC, surgical oncologist at Nebraska Medicine and physician-in-chief of the Fred & Pamela Buffett Cancer Center. “This model allows for enhanced communication between providers and the patient to ensure her goals and individual needs are met.”

Located at 175th and Burke streets, west of the Village Pointe shopping center, the clinic offers easy access with care provided in an intimate and comfortable environment.

The multidisciplinary team of experts includes cancer physicians, surgeons and radiologists, plastic and reconstructive surgeons, geneticists and social workers. The team helps each patient navigate through the many decisions available in breast cancer treatment in a collaborative approach that is based on a woman’s personal choices.

“When a patient arrives for an appointment, they will see all of the specialists required for that visit in one setting and one appointment,” Dr. Thayer said. “Not only is this saving our patient’s time, but it helps eliminate duplication of tests and services.”

The clinic is expected to be able to provide 3-D mammography for all patients by early summer.

“Studies have shown that 3-D mammography when used with standard digital mammograms can bump up breast cancer detection rates and reduce callbacks,” Dr. Thayer said.

Patients also will be given the opportunity to participate in breast cancer clinical trials offered through UNMC as part of their treatment program.

UNMC College of Pharmacy dean receives prestigious Fellow designation

Courtney Fletcher, Pharm.D., one of the select few deans of a school or college of pharmacy to maintain an active, NIH-funded research program, was named a Fellow of the American Association for the Advancement of Science (AAAS) in November.

Dr. Fletcher, dean of UNMC’s College of Pharmacy, earned the honor bestowed upon AAAS members by their peers for “distinguished contributions to the field of antiviral pharmacology, particularly for clinical studies to identify the mechanisms for variable drug response.”

The AAAS is an international non-profit organization dedicated to advancing science for the benefit of all people. It was founded in 1848, and the tradition of AAAS Fellows began in 1874.

“We are tremendously proud of Dr. Fletcher, for the College of Pharmacy and for UNMC,” said UNMC Chancellor Jeffrey P. Gold, M.D. “This remarkable honor is well-deserved and a great example of leadership in academic medicine. Despite heading one of the nation’s outstanding colleges of pharmacy, Dr. Fletcher also continues to conduct life-changing research.”

Dr. Fletcher is a longtime leader in HIV research and has led clinical pharmacologic studies in both children and adults. Early in his career, he traveled to Romania, then an epicenter of pediatric AIDS, to establish treatment protocols for HIV-infected children and provide drug-related education for Romanian health professionals.

His more recent efforts have been focused on research in adults to investigate why – despite HIV being eminently manageable – it is not yet curable. In 2014, he was first author on a National Institutes of Health (NIH)-backed study that took the first steps in answering this question.

Dr. Fletcher and his collaborators, Timothy Schacker, M.D., and Ashley Haase, M.D., of the University of Minnesota, discovered that anti-HIV drugs are less effective at getting to where the virus actually replicates – in lymphatic and gut tissues.

The drugs let patients live with HIV, but the persistent low-level replication in these areas keeps the virus from ever being completely knocked out. Dr. Fletcher has co-authored a paper extending this work, which was published in the Jan. 27 issue of Nature.

Dr. Fletcher is one of 347 new Fellows this year. The new Fellows were honored in February at the 2016 AAAS annual meeting in Washington, D.C. The late Denham Harman, M.D., Ph.D., Emeritus Millard Professor of Medicine, was the only other UNMC faculty member named as an AAAS Fellow.
Karoly Mirnics, M.D., Ph.D., is new director of MMI

Following a nationwide search, Karoly Mirnics, M.D., Ph.D., has accepted the position of director of the Munroe-Meyer Institute for Genetics and Rehabilitation.

Dr. Mirnics will begin serving in his new position as of July 15. He replaces J. Michael Leibowitz, Ph.D., who retired in late 2015, and Wayne Stuberg, Ph.D., who has served in an interim role.

“The Munroe-Meyer Institute is an important part of UNMC’s mission,” said UNMC Chancellor Jeffrey P. Gold, M.D. “Dr. Mirnics brings an extraordinary degree of experience to this important role, and under his guidance, I am sure we will see MMI expand on its already impressive accomplishments in research, education and clinical care.”

“We are excited to have such an accomplished leader and researcher taking the helm at MMI,” said Juliann Sebastian, Ph.D., dean of the UNMC College of Nursing, who led the search committee. “During his visits to UNMC’s campus, Dr. Mirnics impressed the search committee, the staff of MMI and the wider campus community with his passion and commitment.”

“I am looking forward to further developing this already exceptional enterprise and to engaging the broader intellectual and developmental disability community statewide,” he said. “I strongly believe that with our joint efforts MMI will become the national and worldwide leader of IDD-related patient care, education, outreach and research.”

His wife, Zeljka Korade, D.V. M., Ph.D., also will join the UNMC faculty as a professor of pediatrics.

Former ‘Star Trek’ actor, LeVar Burton, to headline 2016 Nebraska Science Festival

The former “Star Trek” actor and “Reading Rainbow” producer, LeVar Burton, will share how mentors, technology, storytelling and science fiction have impacted his life, when he headlines the 2016 Nebraska Science Festival presented by UNMC.

Gearing up for its fourth year, the Nebraska Science Festival – set for April 15-23 – will feature an array of science- and technology-related activities in communities across the state with the goal of making science accessible, interactive, relevant and fun for all ages.

“We’re thrilled to bring LeVar Burton to Omaha to share his life story and the role science and technology has played in it,” said Kacie Baum, SciFest coordinator.

Past SciFest speakers have included scientist Bill Nye, “Animal Planet” host and conservationist Jeff Corwin, and meteorologist and extreme storm chaser Reed Timmer.

On April 22, the Emmy Award winning actor will present “Technology & Storytelling: Making a Difference in the Digital Age” at Joslyn Museum’s Witherspoon Concert Hall in Omaha. His 7:30 p.m. presentation is free to the public and is suitable for all ages.

Although the presentation is free, tickets that are required for admittance when doors open at 6:30 p.m. have been sold out.

The Nebraska Science Festival is a collaboration of organizations and individuals interested in the advancement of science literacy. Besides UNMC, other sponsors to date, include the Nebraska Coalition for Lifesaving Cures, Metro Credit Union, West Corporation and media sponsors KETV and the Omaha World-Herald.

In addition to NeSciFest.com, you will find SciFest updates and information on Twitter (@NESciFest) and Facebook (NE SciFest).
College of Allied Health Professions
- Tanya Custer, assistant professor in radiation science technology education, and Kim Michael, program director of diagnostic medical sonography, were published in the Journal of Tomography and Simulation. The article, “The Utilization of the Anatomage Virtual Dissection Table in the Education of Imaging Science Students,” documents their research investigating the use of this virtual technology and assessing the beliefs and perceptions of the students in regard to using the Anatomage Table for teaching imaging-based anatomy and pathology.
- The physical therapy education program’s Application for Approval of Substantive Change to expand to the University of Nebraska at Kearney campus has been approved. Notification, which came from the Commission on Accreditation in Physical Therapy Education in December 2015, included a commendation for the program, citing the high quality and clarity of the application. Physical therapy students will begin at the UNK campus this fall.

College of Dentistry
- The American Dental Association honored Richard Reinhardt, D.D.S., Ph.D., with the Burton C. Borgelt Faculty Advisor Award during its annual meeting in Washington, D.C., in November. Dr. Reinhardt, the Moran Professor of Periodontology, received the award in recognition of his outstanding work in mentoring students in dental research since 1981.
- Grant Essink, a third-year dental student, is the fourth student in the past eight years chosen to participate in the National Institute of Dental and Craniofacial Research (NIDCR) Summer Dental Student Award program at the National Institutes of Health in Bethesda, Md. Essink participated in the summer of 2015.

College of Medicine
- UNMC and Nebraska Medicine have established a center that will help health providers across Nebraska reduce the number of infections patients get in health care facilities. Health facilities across the state will be encouraged to employ current guidelines and tools for infection prevention as well as evaluate the status of existing capacities and policies, provider training and the capability to detect and control infectious disease outbreaks.
- UNMC/Nebraska Medicine re-started its lung transplant program. The addition of lung transplantation makes UNMC/Nebraska Medicine one of only a few institutions nationwide to offer all solid organ transplants. Over the years, more than 7,000 transplant procedures have been performed at UNMC/Nebraska Medicine. In recent years, the med center has averaged around 250 total transplants per year.
- UNMC and Children's Hospital & Medical Center have become a joint site in a National Institutes of Health study to chart the progression of the brittle bone disease osteogenesis imperfecta. The UNMC/Children's partnership has long been a clinical leader in the care of patients with brittle bone diseases.

College of Nursing
- Ann Berger, Ph.D., was appointed associate dean for research in the College of Nursing. Kathleen Hanna, Ph.D., was appointed as the college’s new director of the Ph.D. program.
- Liane Connelly, Ph.D., assistant dean, Northern Division, and Jana Pressler, Ph.D., assistant dean, Lincoln Division, were awarded a nursing workforce diversity grant from the Health Resources and Services Administration in July 2015 titled, “Link to Learn.”

College of Pharmacy
- The College of Pharmacy welcomes associate professor D.J. Murry, Pharm.D., and clinical assistant professor Angela Hawkins, Pharm.D., in the department of pharmacy practice.
- Progress is being made on the new College of Pharmacy building with move-in expected in mid-May. The college’s first event in the new building will be the preceptor retreat on Aug. 12, followed by the start of fall classes on Aug. 22.

College of Public Health
- The college launched the fall 2015 semester with 254 enrolled students, including 22 from different states and 20 from different countries. Nebraska residents represented 54 percent of the total student body. This mix provides a rich and diverse cultural environment for students, faculty and staff.

College of Medicine
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College of Allied Health Professions
- Ten M.P.H. and Ph.D. students spent summer 2015 conducting cancer epidemiology research through the Cancer Epidemiology Education in Special Populations training program, funded by the National Institutes of Health. The students worked in Omaha, Michigan, Tanzania, Egypt and Bulgaria under cancer specialist preceptors. Forty-four COPH students have benefited from the program since Amr Soliman, M.D., Ph.D., transferred it to UNMC from the University of Michigan in 2012.

Eppeley Institute/Fred & Pamela Buffett Cancer Center
- In June 2015, the Cattlemen’s Ball raised more than $853,000 for cancer research at the Fred & Pamela Buffett Cancer Center. This year’s ball will be June 3–4 in Princeton, Neb., at the Lienetics Ranch.
- A topping off ceremony for the new Fred & Pamela Buffett Cancer Center building was held in August 2015. Several beams bearing signatures from people from across Nebraska were raised to become a permanent part of the structure.

Munroe-Meyer Institute
- The Munroe-Meyer Institute has signed a contract with the Nebraska Department of Education’s Early Intervention Program to oversee the Family Care Enhancement Project (FCEP). FCEP places parent resource coordinators (PRCs) in medical clinics to provide information and support to families that have children with disabilities and special health care needs. MMI currently has PRCs in place in three sites with plans to expand.
- Max Kurz, Ph.D., associate professor in the department of physical therapy, is collaborating with Tony Wilson, Ph.D., on a project funded by the National Institutes of Health that uses MEG brain imaging, diffusion weighted imaging and advanced biomechanics to evaluate how children with cerebral palsy learn motor skills.
Alumni Relations Office Welcomes Kat Hamilton

In an effort to develop new and ongoing engagement strategies, the UNMC Alumni Relations Office hired Katherine “Kat” Hamilton to serve as the strategic engagement coordinator. Hamilton will spearhead new avenues of engagement with the alumni relations office staff, the University of Nebraska Foundation, UNMC deans and alumni.

“I’m thrilled to join in the momentum that the Alumni Relations Office has created with its partners. I look forward to meeting and engaging with our diverse alumni to better enhance the connection between our alumni and our current students and UNMC,” Hamilton said.

Prior to joining UNMC, Hamilton spent five years as the communication coordinator for Hastings Public Schools in Hastings, Neb. She received her bachelor of arts in business administration with an emphasis in advertising and public relations from Hastings College and her master of science in management from Bellevue University in Bellevue, Neb.

College of Nursing Class of 1952 Connects “Virtually”

In December, 11 members from the UNMC College of Nursing Omaha campus class of 1952 had the opportunity to connect via conference call for an hour of sharing memories from their school days, their careers and family updates. The phone call, hosted through the UNMC Alumni Relations Office and facilitated by alumni classmate Jean Molde, brought together alumni from eight states.

The call originated after a conversation about the classmates remaining close, but being unable to get together because of travel limitations. The reunion call sparked laughter, tears and blessings as UNMC classmates shared memories of their times in nursing school.

The Alumni Relations Office can facilitate opportunities for classes to gather through a similar teleconference. Alums who think their class may be interested in this form of reunion should contact Kat Hamilton in the Alumni Relations Office at 402.559.1063 or kat.hamilton@unmc.edu.

College of Medicine Alumni Engagement Council Hosts 30th John S. Latta Lecture


The presentation, hosted by the College of Medicine Alumni Engagement Council, provided insights into spearheading efforts to advance women and promote gender equity in the academic medical center setting. Dr. Thorndyke is the vice provost for faculty affairs at the University of Massachusetts Medical School, where she leads an office responsible for all matters related to faculty.

The John S. Latta Lectureship was established by the College of Medicine Alumni Chapter in 1980 to commemorate Dr. Latta’s dedicated service to the College of Medicine. Dr. Latta taught courses in embryology and histology at UNMC from 1921 until 1963. He was chairman of the department of anatomy from 1940 to 1960, when he retired. Dr. Latta is one of the most admired and respected faculty members of the college. He died in 1989 at the age of 94.

The 31st John S. Latta Lecture is scheduled for Oct. 6 and will feature Catherine Lucey, M.D., vice dean for education at the University of California San Francisco. Dr. Lucey directs the undergraduate, graduate and continuing medical education programs of the School of Medicine and the Office of Medical Education.
UNMC Alumni Reunion Weekend Marks Highest Participation in Five Years

The UNMC Alumni Association hosted the fourth annual alumni tailgate party prior to the South Alabama vs. Nebraska football game in Lincoln, Neb. The event was held at the Grand Manse on Sept. 12. Attendees included 80 alumni and their guests representing every UNMC college. Alumni who attended the football game enjoyed watching the Huskers beat the Jaguars 48-9. The tailgate gathering was part of the UNMC Alumni Association's outreach events held across Nebraska and around the country. The UNMC Alumni Association will host an event, the sixth annual Showdown in O-Town featuring Nebraska vs. Creighton on April 26. For more information about this event, visit: unmc.edu/alumni.

During the 2015 reunion:

- 130 alumni and guests participated in a continuing education or information session;
- 292 alumni attended a class dinner or gathering;
- Five alumni awards were presented;
- 35 states were represented by alumni and their guests;
- 84 alumni participated in one of two campus walking tours and 45 alumni rode along for an Ollie the Trolley tour of Omaha; and
- A countless number of friends were reunited, as well photographs taken and memories made!

Photographs from the reunion are available by visiting the Alumni Relations Office website, unmc.edu/alumni.

The 2016 Alumni Reunion Weekend for alumni of the colleges of medicine and nursing, as well as UNMC Graduate Studies, will be Oct. 7-8 and will include new events in partnership with UNMC Innovation and Research Week.

Alumni Gather for Tailgate Party

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Family of alums tailgate together. Jill Skrabal CAHP '96, and Julie Skrabal N’93’97, sisters of John Skrabal P’94, celebrate with his daughter, Lauren Skrabal and wife, Maryann Skrabal P’94, at the Kickoff with the UNMC Alumni Association tailgate in September.
UNMC Alumni Association Presents Awards at Reunion Weekend

Full biographies of these outstanding award recipients are available on the Alumni Relations Office’s website at unmc.edu/alumni. You also can download a nomination form to nominate a colleague for a 2016 alumni award.

<table>
<thead>
<tr>
<th>Alumni Chapter</th>
<th>Award Name</th>
<th>Recipient</th>
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<tbody>
<tr>
<td>College of Medicine Alumni Engagement Council</td>
<td>Distinguished Alumnus Award</td>
<td>James R. Newland, M.D. (1965)</td>
</tr>
<tr>
<td>College of Medicine Alumni Engagement Council</td>
<td>Early Career Achievement Award</td>
<td>Michael Feilmeier, M.D. (2005)</td>
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<tr>
<td>College of Medicine Alumni Engagement Council</td>
<td>Honorary Alumnus Award</td>
<td>Philip Welsch Smith, M.D.</td>
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<tr>
<td>College of Medicine Alumni Engagement Council</td>
<td>Dedication to Student Excellence Award</td>
<td>Carol Swarts, M.D. (1959)</td>
</tr>
<tr>
<td>College of Nursing Alumni Engagement Council</td>
<td>Distinguished Alumnus Award</td>
<td>Barbara “Bobbie” Swenson, BSN (1965)</td>
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</table>

Alumni representing each of the professions in the College of Allied Health Professions (CAHP) met in November and voted to form a single, all-inclusive CAHP Alumni Engagement Council. The group will meet quarterly.

The former “chapters” of clinical laboratory science, physician assistant, physical therapy, radiation science technology education and clinical perfusion will become committees within the larger single organization.

CAHP alumni are invited to participate in future council meetings and activities.

If you have any questions or are interested in participating in the council, please email alumni@unmc.edu or call Kat Hamilton in the Alumni Relations Office at 402.559.1063.

James R. Newland, M.D. ‘65 (left) accepts the College of Medicine Alumni Engagement Council’s Distinguished Alumnus Award from Chancellor Jeffrey P. Gold, M.D.
Alumni Class Notes

Indicates a Life Member in the UNMC Alumni Association

Hillcrest Physical Therapy in Bellevue, Neb., was named the director of Paul Gardner PT’00, Service Corps, United States Navy Reserve, assistant, lieutenant commander, Medical Walk-In Center. He is a retired physician working in a Family Practice-Urgent Care. Alan Gutman PA’99, Butte, Mont., works in Express Care in Mary Reindollar PA’98, Ogallala, Neb., joined Perkins County Health Services in the Grant Medical Clinic.

Joseph Kennedy PT’97, Fairbanks, Ala., continues to work on his education. In April of 2014, he attained a transitional Doctorate of Physical Therapy from Rocky Mountain University of Health Professions. In May of 2015, he attained an orthopedic certified specialist designation by the American Board of Physical Therapy Specialties. In June of 2015 he was promoted to rank of commander (O-5) in the United States Public Health Service.


Mary Reindollar PA’98, Dillon, Mont., works in Express Care in Butte, Mont.

Alan Gutman PA’99, Endicott, N.Y., is a physician assistant working in a Family Practice-Urgent Care Walk-In Center. He is a retired physician assistant, lieutenant commander, Medical Service Corps, United States Navy Reserve.

Paul Gardner PT’00, Bellevue, Neb., was named the director of Hillcrest Physical Therapy in Bellevue.

Amy Brower PT’01, North Sioux City, S.D., is an instructor and course director of human neuroscience, human pathophysiology and evidence-based practice, and the director of scholarly activity at Briar Cliff University. She also works on several projects at the American College of Medical Genetics and Genomics in Bethesda, Md., that have led to development of novel technologies used to screen for and diagnose diseases in newborns and children.

Todd Kielman PA’03, Kingwood, Texas, retired after 24 years with the United States Army and 14 years as a physician assistant. He now works with Homeland Security.

Shelley Reichmuth PA’04, Norfolk, Neb., joined Norfolk Oncology Consultants.

Renee Schroeder PT’05, Germantown, Tenn., was elected as Veteran’s Affairs representative for the Federal Chapter of the American Physical Therapy Association (APTA). She has obtained her Geriatric Certified Specialist from APTA.


Jessica Grosse PA’06, Omaha, Neb., is in her eighth year of employment with The Urology Center in Omaha. She and her husband are expecting their third child, a boy, in May.

Sonya Wemhoff PA’08, Columbus, Neb., joined the Columbus Community Hospital.

Stephanie Kotschwar CLS’09, Bentonville, Ark., is the new microbiology supervisor at Washington Regional Medical Center.

Dorothy Brokering PT’10, Hickman, Neb., joined Tabitha Home Health.

Jed Droge PT’10, Tecumseh, Neb., served as the keynote speaker for the 2015 Division of Physical Therapy Education Professionalism Ceremony at UNMC.

Nicole Fisher PT’10, Omaha, Neb., joined Methodist Home Care and Hospice in June 2015 as a physical therapist and case manager.

Colby Fox PT’10, Nelson, Neb., joined the physical therapy staff at Brodstone Memorial Hospital in Superior, Neb.

Megan Frickel PT’10, Rifle, Colo., became the supervisor of rehabilitation services at Grand River Hospital District in Parachute, Colo., in July of 2015 and then married in October.

Beverly Russell PA’10, Marshall, Mich., joined the team at Bronson Center for Colon & Rectal Diseases.

Duane Oftedahl PA’11, Detroit Lakes, Minn., joined Sanford Health and specializes in neurology.

Cassandra Gauer PA’12, Fargo, N.D., joined the Essentia Health Heart and Vascular Center.

Ethan Stout PT’12, Hastings, Neb., joined Physical Therapy and Sports Rehab.

Neal Hahn PA’13, Omaha, Neb., joined the Howard County Medical Center in St. Paul, Neb.

Megan King PA’14, Omaha, Neb., joined South Lyon Medical Center’s Barnett Clinic in March 2015.

Evan Volzke PT’14, Hastings, Neb., joined Balance and Mobility.

Andy Leider PT’15, Alliance, Neb., joined the team at the Rehab and Wellness Center.

Michaela Schweitzer PT’15, Omaha, Neb., joined Nebraska Medicine as an inpatient physical therapist.

Amelia Shane PA’15, Atkinson, Neb., joined Greater Sandhills Family Healthcare.

Katelyn Thiele PA’15, Aurora, Neb., joined Memorial Community Health.

Members of the Clinical Laboratory Science (formerly Medical Technology) class of 1965 gathered for their 50 year reunion in Omaha in September 2015.


**Medicine**

Vernon Ward M’54  
Omaha, Neb., was designated as an emeritus member of the board of directors of Chi Club of Upsilon Nu, Phi Chi medical fraternity in Omaha. The distinction comes in recognition of many years of outstanding service to the organization.

Rudolf Link M’59  
Middleton, Wis., recently retired and moved to an independent living complex with his wife, Rose.

Robert Taylor M’64  
Litchfield Park, Ariz., plays golf, rides motorcycles and entertains as a magician.

Robert Travnicek M’65  
Long Beach, Miss., was featured in a book about Hurricane Katrina's aftermath titled “Katrina, Mississippi: Voices from Ground Zero,” written by NancyKay Sullivan Wessman.

Wayne Weston M’65  
Lexington, Neb., was recognized for his 50-year career by the Nebraska Medical Association.

Donald Gentry M’68  
Gering, Neb., was honored at the Regional West Foundation’s fifth annual gala in October 2015 for his years of patient care, contributions to the medical center, and his involvement in the community.

Daniel Clark M’69  
Gering, Neb., was honored at the Regional West Foundation’s fifth annual gala in October 2015 for his years of patient care, contributions to the medical center, and his involvement in the community.

James Craig M’71  
Red Cloud, Neb., received the Caring Kind Award from the Chase County Community Hospital for his compassion for patients, cooperation with co-workers and dedication to excellence.

Paul Madison P’68, M’72  
Nebraska City, Neb., accepted a position on the Nebraska Community Foundation Board of Directors.

Gerald Luckey M’73  
David City, Neb., received the Nebraska Medical Association’s 2015 Physician of the Year award at the association’s 147th Annual Session and House of Delegates in Omaha.

William Marsh M’73  
Grand Island, Neb., was elected a fellow of the American College of Radiology in April 2014 and retired from full-time practice of radiology in May 2015.

Larry Moeller M’73  
Omaha, Neb., was honored as distinguished alumni from Scribner High School for his work in the U.S. Army, his service as a primary care physician and his research in medicine.

Jim Freudenburg M’74  
Longmont, Colo., retired from the Longmont Clinic after 38 years in the family practice department. He lives on 35 acres north of town where he raises a few Black Angus cattle and enjoys traveling.

Allan Bach M’75  
Colorado Springs, Colo., is retired, but stays busy with woodworking projects and outdoor pursuits.

Carol Mosier Bach M’75  
Colorado Springs, Colo., enjoys retirement with her husband, Allan, and stays busy with Rotary projects and the Science Fair Board. She travels back to Nebraska nearly every six weeks to visit family.

Patricia Klar M’80  
Northville, Mich., is an assistant clinical professor of anesthesiology and director of the University of Michigan Hospital Operating Rooms. Recently, Dr. Klar was honored to participate in cloaking her son, Daniel, who was accepted into medical school at the University of Michigan. In addition, Daniel’s great uncle, Ronald Prigent M’85, attended the ceremony.

Steven Mayfield M’80  
Portland, Ore., retired from medicine and is writing his next book, Delphic Oracle U.S.A., which was scheduled to be released in late 2015 or early 2016.

Rod Markin M’83 PhD’80  
Omaha, Neb., chief technology officer and associate vice chancellor for business development at UNMC, has been named a fellow of the National Academy of Inventors.

Paul Goetowski M’84  
Aiken, S.C., joined the Mabry Center for Cancer Care, a department of the Regional Medical Center in Orangeburg, S.C., as director of radiation oncology.

Paul L. Marz M’87  

Ron Hamilton M’89  
Pittsburgh, Pa., was featured in the movie “Concussion” which was released in December 2015 and starred Will Smith.

Joel Reel M’89  
Arlington, Neb., was inducted into the Millard South High School Hall of Fame. She was the first pediatrician at the Memorial Community Hospital and Health System’s Blair Clinic.

Todd Stull M’92  
Omaha, Neb., is the full-time director of sports psychology for the Husker’s 24 varsity sports at the University of Nebraska-Lincoln. He implements programs to maximize the performance and well-being of Nebraska’s student-athletes. He was previously a consulting psychiatrist for the University. He is NU’s first full-time sports psychiatrist.

Brooke Renard M’94  
Spearfish, S.D., moved to Spearfish, S.D. with her husband and two sons to join the Regional Health System as an OB-GYN. She had spent the previous 15 years in Oregon.

Richard Bean M’95  
Omaha, Neb., retired from USAF in January 2014.

Shiuvaun Jaeger M’98  
Cambridge, Neb., was selected as a sentinel physician for her role as the Southwest Nebraska Public Health Department Medical Director.

Burt McKeeag M’98  
Kearney, Neb., joined the Franklin County Memorial Hospital Outpatient Specialty Clinic in Franklin, Neb.

Douglas Koch M’99  
Walton, Neb., recently joined York General Health Care Services. He also serves as team physician for the Lincoln Saltdogs and the Lincoln Stars.

David Weeks M’99  
Austin, Texas, was recently appointed to the faculty of Texas A&M Medical School.

Paul Dietze M’87 (center) poses with his daughter, Jamie, a first-year medical student, and his son, Jared, a third-year medical student. Jamie earned her white coat at UNMC’s College of Medicine White Coat Ceremony on Aug. 21, 2015.
David Priebe M’00
Maywood, Neb., became a full-time provider at the Family Medicine Specialists Clinic at the Lexington Regional Health Center.

Steven Volin M’00
Lincoln, Neb., has joined the Jefferson Community Health Center in Fairbury, Neb., as a spine care specialist.

Geoffrey Talmon M’03
Papillion, Neb., was honored in the Midlands Business Journal’s 40 under 40 section for his work in leading the introduction of the UNMC High School Alliance program and many professional accomplishments at UNMC.

Andrea VerMaas M’04
Blair, Neb., joined the staff at the Fremont Health Medical Center as a family physician.

Michael Feilmeier M’05
Elkhorn, Neb., was named a 2015 Junior Chamber International (JCI) Ten Outstanding Young Persons of the World recipient in the category of humanitarian and voluntary leadership. He received the award at the 2015 JCI Awards Ceremony on Nov. 7, 2015, at the JCI World Congress in Kanazawa, Japan. He also received the UNMC College of Medicine Alumni Engagement Council Early Career Achievement Award at the UNMC Alumni Association Celebration and Awards Banquet on Oct. 3, 2015.

Michelle Sell M’06
Central City, Neb., received the Nebraska Medical Association’s 2015 Young Physician of the Year Award at the association’s 147th Annual Session and House of Delegates.

Dustin Volkmer M’06
Columbus, Neb., joined the Boone County Health Center outreach specialty clinic in Albion, Neb., where he will focus on sports medicine.

David Rupiper M’08
Fremont, Neb., joined the radiology team at Fremont Health.

John Steuter M’08
Lincoln, Neb., became a full-time provider at the Family Medicine Specialists Clinic at the Lexington Regional Health Center.

Katie Barger M’09
Tecumseh, Kan., joined the Cotton-O’Neil Clinic as a pediatric endocrinologist. The clinic is located in Topeka.

John Bishay M’09
Omaha, Neb., joined Columbus, Neb., Community Hospital as a part of the Urology Center of Omaha’s outreach location.

Benjamin Bixenmann M’09
Lincoln, Neb., was recognized by Cincinnati Magazine in its 2015 Top Doctors issue for his innovative research on the diagnosis and management of athletic concussions.

Daniel Mosiel M’09
North Platte, Neb., is the new visiting dermatologist at Chase County Community Hospital.

Caleb Schroeder M’10
Juniata, Neb., joined Central Nebraska General Surgery in Hastings, Neb.

Andrew Opp M’11
Wahoo, Neb., recently joined the 23rd Family Medical Clinic in Fremont, Neb.

Jenna Van Pelt M’11
Lincoln, Neb., recently joined the Women’s Clinic of Lincoln.

Emily Hill Bowman M’12
Omaha, Neb., joined Boys Town Internal Medicine.

Robert Daro M’12
David City, Neb., recently joined the Butler County Clinic and was a guest of honor at an open house to welcome him to the community.

Brian Jundt M’12
O’Neil, Neb., joined the clinic at Avera St. Anthony’s Hospital.

Dena Jundt M’12
O’Neil, Neb., joined the clinic at Avera St. Anthony’s Hospital.

Jessica Ott M’12
Alliance, Neb., joined Greater Nebraska Medical & Surgical Services as a family practice physician.

Megan Schuckman M’12
Chadron, Neb., joined the Chadron Medical Clinic.

Kylene Stanley M’12
Omaha, Neb., joined Fremont Health Internal Medicine.

Bronson Boosalis M’13
Omaha, Neb., joined the Columbus Community Hospital Emergency Department staff.

Justin Westengaard M’13
Kearney, Neb., will begin his practice at the newly constructed Family Medicine Clinic at the Community Medical Center in Falls City in 2016.

Residency

Joseph Hoagbin
Family Practice’76
Council Bluffs, Iowa, received an Iowa Hospital Heroes Award from the Iowa Hospital Association. This honor is given to a hospital employee or physician who has performed a heroic deed or given of his or her resources to improve the organization and the world around him or her.

Atul Ramachandran
Internal Medicine’96
Sonora, Calif., joined Sierra Cardiology in Sonora.

Beth Rawlings
Internal Medicine’09
Omaha, Neb., was named chief medical officer at CHI Health St. Elizabeth.

Hina Anjum
Family Practice’15
Spartanburg, S.C., joined the Mary Black Physician’s Group.

Elizabeth Dayton Freeland
Family Practice’15
Beatrice, Neb., joined the Beatrice Medical Center.

Heidi Johnson
Pediatrics’15
Omaha, Neb., joined Boys Town Pediatrics.

Jeffrey Ottmar
Anesthesiology’15
Fargo, N.D., joined Essential Health.

Patricia Terp
Ophthalmology’15
Fremont, Neb., joined the ophthalmologist team at Fremont Eye Associates.

Gregory Dammann
Orthopedics’15
Freeport, Ill., started at the FHNP Family Healthcare Center as an orthopedic surgeon.

Nursing

Beatrice Kalisch BSN’65
Ann Arbor, Mich., was inducted into the Omaha Central High School Hall of Fame.

Sue Scherer-Hicks N’71
West Point, Neb., is retired after working in public health, mental health and addictions. Her work in Arizona over 10 years was her big adventure. Family life eventually took her back to her hometown where she enjoys spending time with her family.

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Jeanette Ekberg N’75
Bennington, Neb., retired from nursing in 2013 after 55 years. She volunteers at the Methodist Cancer Center in Omaha and at the Omaha Community Playhouse. She spent many hours visiting the nursing home where her husband resided until he died in January 2018 of Alzheimer’s disease.

Kathy Wilson N’76
Whitehouse, Texas, teaches mental health nursing at the University of Texas at Tyler. She and her husband also are grandparents. Grandson Sutton Kyle was born in October 2015.

Debra Stark N’77
Savannah, Ga., is retired and living at The Landings on Skidaway Island.

Susan Black N’78
Loves Park, Ill., is trying to retire, but is back teaching in a new field — mental health clinical nursing and concepts of professional nursing. She enjoys the students and is pleased to keep growing at age 72.

Nancy Wältman N’78
Lincoln, Neb., received the UNMC Distinguished Scientist Award on Feb. 11.

Connie Booth N’80
Boone, Iowa, recently retired from Des Moines Area Community College, where she served on the nursing faculty for 33 years and was Boone Campus nursing chair for 29 years. She serves as treasurer for the Iowa League for Nursing and serves on boards for Habitat for Humanity fundraising and Hospice of Central Iowa.

Rebecca Pick N’83
Oakton, Va., enjoys playing tennis up to four times a week and is learning to play bridge. She is in two book clubs and is active in politics.

Janet Wintle N’90
Papillion, Neb., retired in 2011 and is an active member of the Nebraska Organization of Nurse Leaders.

Catherine Pallas N’95
Lincoln, Neb., joined the team at People’s Health Center as a family nurse practitioner.

Ann Young BSN’96, MSN’00
Lexington, Neb., received the Caring Kind Award from the Lexington Regional Health Center (LRHC) for her compassion for patients, cooperation with co-workers and dedication to excellence. Ann is a nurse practitioner at LRHC.

Bonnie Fuerst N’97
Hildreth, Neb., retired from the Franklin County Memorial Hospital Hildreth Medical Clinic after serving there as a nurse for 48 years.

Sydney Buckland N’98
Omaha, Neb., is working on her PhD in nursing at UNMC, while working as a family nurse practitioner for Methodist Urgent Care clinics and as a graduate assistant for the UNMC faculty.

Jody Halcott N’04
Holyoke, Colo., joined the Melissa Memorial Hospital and Family Practice of Holyoke as a family nurse practitioner.

Amy Lloyd N’07
Morse Bluff, Neb., joined North Bend Central as a nurse and will teach the certified nurse assistant classes.

Meagan Goodman N’11
Lincoln, Neb., joined the team at Radiology Associates, PC and Advanced Medical Imaging as a nurse practitioner.

Raisa Ameh N’12
Tyler, Texas, works at a non-profit in Tyler to provide health care to low and uninsured women and men of reproductive age.

Jennifer Osborne N’14
Papillion, Neb., completed a year-and-a-half of working as a staff nurse at Nebraska Medicine and has decided to take her skills overseas by completing a 27-month journey with the Peace Corps. Her destination is the South Pacific Islands of Vanuatu. As a community health facilitator, she will conduct surveys, do health promotion projects, malaria prevention and more.

Stephanie Reutlinger N’15
Lexington, Neb., joined the urgent/primary care team at Lexington Regional Health Center.

Barbara “Bobbie” Swenson N’65, (center) earned the College of Nursing Alumni Engagement Council’s Distinguished Alumnus Award during Alumni Reunion Weekend 2015. Presenting the award is College of Nursing Alumni Engagement Council President Amy Thimm N’91 and Chancellor Jeffrey P. Gold, M.D.

Pharmacy
Howard Holmquist P’60
Burwell, Neb., recently retired after a successful 55 year career.

Charles Moore P’74
York, Neb., owner of Charlie’s U-Save Pharmacy in York is pleased to share that the business was named the Outstanding Small Business for 2015 by the York Chamber of Commerce. Charlie’s U-Save has been in business since 1964.

Tim Schleppenbach P’76
Dallas, Texas, grew up in Pierce, Neb., and worked for 10 years at local pharmacies after graduating from UNMC. He then moved to Arizona and worked at a local pharmacy full time, as well as doing relief at area hospitals. He has been in Dallas for the past 26 years and has worked in retail, hospital and home infusion pharmacy. He has one daughter in the nursing program at UNMC-Lincoln; another daughter is a freshman at Northwestern State in pre-medical classes and has a volleyball scholarship.

Michelle Jones P’81
Scottsdale, Ariz., is an instructor in pharmacy at the Mayo School of Medicine and is an ICU pharmacist.

Philip Minnick P’85
Kearney, Neb., recently retired from the Commissioned Corps of the U.S. Public Health Service after 27 years of service in the Indian Health Service at duty stations in Arizona, New Mexico and Montana.

Jayanth Panyam P’90
Minneapolis, Minn., was named head of the pharmaceutics department at the University of Minnesota in August 2015.

Connie Bolte P’95
York, Neb., of Charlie’s U-Save Pharmacy in York was pleased to have her employer named the Outstanding Small Business for 2015 by the York Chamber of Commerce.
Lisa Potter P’01
Chicago, Ill., was named a fellow of the American Society of Transplantation.

Tim Candy P’02
Grayslake, Ill., recently accepted a position at Baxalta, Inc., as director of regulatory affairs-advertising/promotion.

Ann Philbrick P’06
St. Paul, Minn., was promoted to associate professor at the University of Minnesota College of Pharmacy.

Mary Baumert P’11
Howells, Neb., is a clinical pharmacist for the Pender Medical Clinic and a consultant for Medtronic and the Siouxland Community Health Center on an as-needed basis.

Adam Douglas P’14
Nebraska City, Neb., was named director of pharmacy at George C. Grape Community Hospital in Hamburg, Iowa, in March 2015.

Dentistry

Kenneth Kalkwarf D’70
San Antonio, Texas, was recognized by the UNMC College of Dentistry Alumni Association with its Distinguished Service Award.

Michael Houk D’77
Sioux Falls, S.D., was named the UNMC College of Dentistry Alumni Association Outstanding Educator.

Darold Opp D’84
Aberdeen, S.D., was recognized by the UNMC College of Dentistry Alumni Association with its Alumni Achievement Award.

Lana Schlecht D’87
Ellendale, N.D., was named the vice chairman of the North Dakota Council on the Arts board of directors.

Nicholas Woodward D’07
Gretna, Neb., released a record with his band, The Dust Jackets.

Brian Penly D’10
Ralston, Neb., joined OneWorld Community Health Centers as the new director of dental services at OneWorld’s Livestock Exchange campus.

Jon Jessen D’12
O’Neill, Neb., purchased the Spencer Dental Clinic in Spencer, Neb., and will begin his practice there.

Christina Carter D’14
Orr, Minn., joined the Miller Hill Dental team in Duluth, Minn.

Caitlyn Lastovica D’15
Scottsbluff, Neb., took over the practice of long time Scottsbluff dentist, Dr. Steven Combs.

Gordon Bartek M’49

Harold Daum M’51
Lincoln, Neb., Dec. 28, 2015

Richard Marshall D’51
Lincoln, Neb., Nov. 9, 2015

Richard Toren M’51
Lincoln, Neb., Dec. 18, 2015

Harley Batie D’52
Lincoln, Neb., Dec. 5, 2015

Lee Mohr D’52

Dale Capek D’54
Lincoln, Neb., Oct. 10, 2015

William Davis M’54
Arcata, Calif., March 25, 2015

Milton Maisel D’54
Los Angeles, Calif., Sept. 21, 2015

Patricia Beyersdorf N’55
Doniphon, Neb., Oct. 20, 2015

Thomas Harley D’55
Omaha, Neb., Sept. 11, 2015

Curtis Weatherhogg M’55
Madison, Wis., Dec. 1, 2015

Robert Brockley D’56
Lincoln, Neb., Nov. 8, 2015

Donald McCosh P’56

Herbert Lemon M’60

David Rosenberg M’60
Omaha, Neb., Oct. 5, 2015

Rodney Rutt M’60
Eugene, Wyo., Nov. 30, 2015

Reuben Samani M’60
Lincoln, Neb., Nov. 22, 2015

Carl Moore D’61
Denton, Texas, Nov. 25, 2015

Stanley Mountford M’61
Omaha, Neb., Dec. 8, 2015

Judith Hagglund N’62
Norman, Okla., Dec. 12, 2015

Verlyne Phillips CLS’62
Corvallis, Ore., Oct. 30, 2015

James Nickel M’63
Helena, Mont., Sept. 19, 2015

Public Health

John Linville PH’04
Omaha, Neb., was recently promoted to director of the USDA’s Food Safety and Inspection Service, Office of Policy and Program Development, Policy Development Staff.

Lisa Vajgrt-Smith PH’13
Berkeley, Calif., recently received the 2015 California Emergency Medical Service Inter-Service Recognition Award. This was awarded for her capacity as a medical reserve corps coordinator, to deploy much needed resources, equipment and trained personnel, to offer medical assistance to more than 900 evacuees of the Valley Fire. In April, she will present at the NACCHO 2016 Preparedness Summit in Dallas.

Daniel Lomelin PH’14
Lincoln, Neb., completed his service learning/capstone at the UNMC Center for Advanced Surgical Technology and was hired by the center as a research data associate following graduation. He was recently accepted into medical school at UNMC.

Caryn Vincent PH’14
Yorks., Neb., is now the special assistant to the CEO at the Nebraska Department of Health and Human Services.

Graduate Studies

Rocco Rotello GS’85
Cederville, Ohio, received Chadron State College’s Distinguished Alumni Award.

Amy Brower GS’01
North Sioux City, S.D., joined the faculty at the Briar Cliff Doctor of Physical Therapy program.

In Remembrance…

Ronald Reuben M’41

Paul Kern D’44
Lincoln, Neb., Oct. 29, 2015

Donald Buck D’47
Palm Springs, Calif., Oct. 20, 2015

Eugene Merchant D’47
Lincoln, Neb., Oct. 6, 2015

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Births

Amber Carroll PT’06
Cheyenne, Wy., and her husband Trent, welcomed a daughter, Ella Danielle, on Dec. 7, 2015.

Megan Doughty P’10
North Platte, Neb., and her husband Marcus, welcomed a daughter, Emerson Blaine, on Jan. 6, 2016.

Kevin McGuire CLS’11
Omaha, Neb., and his wife Kayla, welcomed a daughter, Kenleigh Michelle, on Aug. 19, 2015.

Adam Douglas P’14
Nebraska City, Neb., and his wife Anna, welcomed a daughter, Cecilia, on May 4, 2015.

Marriages

Emily Hays N’06 & Patrick Jensen
Grand Island, Neb., Nov. 7, 2015

Jacqueline Wells M’10 & Richard Hobbs
Bellevue, Neb., October 2015

Mary Baumert P’11 & Ryan Baumert
Howells, Neb., July 18, 2015

Hilary Miller M’12 & David Carracher
Spalding, Neb., March 28, 2015

Holly DeVors PA’12 & Leslie Solt
Grand Island, Neb., Dec. 12, 2015

Adam Anderson D’13 & Kelly Russell D’13
Valentine, Neb., Sept. 5, 2015
Nature study suggests pathway to possible HIV-1 cure

by Kalani Simpson

An international team of scientists — among them Courtney Fletcher, Pharm.D., dean of UNMC’s College of Pharmacy — published a study in February’s issue of the journal Nature, which shows findings that suggest a pathway to a possible cure for HIV-1 infection.

The work builds upon a 2014 publication in the Proceedings of the National Academy of Sciences, of which Dr. Fletcher was first author, that investigated the question of why, despite being driven to undetectable levels in blood by powerful antiretroviral drugs, HIV is never fully wiped out in patients with the disease.

In that study, Dr. Fletcher and colleagues found that a much lower concentration of the drugs made it to lymph node and lymphoid tissues, allowing viral replication — and persistence — of reservoirs of HIV in those tissues.

Finding out why low levels of HIV were hanging on, “allowed us, for the first time, to have a scientific-based conversation about a cure — is it possible?” Dr. Fletcher said.

This latest study takes it a step further — and finds that while the levels of drug concentration that make it to those tissues are too low to wipe out HIV, the virus also has not developed a resistance to those drugs, as might usually be expected. In the current paper, the authors suggested this is likely because the levels of the drugs are so low, there was no reason for the virus to develop resistance.

“In simple terms, we think there is no evolutionary advantage to have developed a resistance,” Dr. Fletcher said.

And if it has no drug resistance, the scientists may have found a pathway to a possible cure.

“Can we deliver more of the drug to these tissues and see if we can shut down replication?” Dr. Fletcher asked. That’s the next problem to solve.

“Will this cure HIV? No one knows,” Dr. Fletcher said. “But it is a rational, evidence-based approach.

“This is a problem that we are extremely well positioned to address. We think this problem of ongoing viral replication in lymphoid tissues may be solved by enhanced drug delivery, and that’s something that we here at UNMC are really good at.”

Already, Dr. Fletcher has a significant grant application in with the National Institutes of Health, and he is optimistic that UNMC will be tasked with finding a way to deliver enough drugs to the hard-to-reach places where the last remaining bits of HIV hide out.

“We believe we are one of the few places in the country — with some help from experts in virology around the country,” he emphasized — “to do this work.”

An international collaboration

Courtney Fletcher, Pharm.D., dean of UNMC’s College of Pharmacy, stressed that it took an international collaboration of top-notch academic medical centers, each bringing its own world-class expertise, to take on a project like this.

For example:

- Investigators at the University of Minnesota, with which Dr. Fletcher has long collaborated, recruited the patients into the original study, obtained the plasma and tissue samples and measured the amount of virus in the tissues;
- Northwestern University researchers explored the evolution of the HIV virus;
- University of Oxford scientists took the lead on the mathematical side; and
- Researchers at the University of Edinburgh in Scotland, brought to life the story of how the virus changes its genetic makeup.

Investigators at the Fred Hutchinson Cancer Research Center in Seattle, the University of Porto in Portugal, the University of California, San Diego, Korea National Institutes of Health and King’s College London also made crucial contributions.

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These three words may indicate this story is about a karate master who wants to know the distance to one of Earth’s nearby planets.

Instead, this is about the new Mind and Brain Health Labs (MBHL) created by UNMC and its clinical partner, Nebraska Medicine.

The labs are a linchpin of a broader Mind and Brain Health Initiative to further establish UNMC/Nebraska Medicine as a national and global force in the neurological sciences – neurology, neurosurgery, psychiatry, psychology, anesthesia pain management and spine – providing the highest quality care across the lifespan, said Matthew Rizzo, M.D., professor and chair of neurological sciences and lead physician in the neuroscience service line.

The labs support a suite of advanced research tools including driving simulation and real-world data recording systems unlike those in any other medical institution, Dr. Rizzo said. These include:

- A large high-fidelity driving simulator featuring a real full-sized automobile and an ultra-high definition wrap-around visual display with better resolution than the human retina. Named SENSEI (Simulator for Ergonomics, Neuroscience, Safety Engineering and Innovation), the simulator will be used for multidisciplinary research studies with collaborators across UNMC and the University of Nebraska system.

- A smaller advanced clinical driving simulator that fits in an exam room and will be used to help diagnose functional deficits and aid patients in their recoveries. Named PARSEC (Performance and Rehabilitation Simulator for Embodied Cognition), this simulator will aid in the care of patients with conditions such as Alzheimer’s disease, Parkinson’s disease, stroke, multiple sclerosis and peripheral neuropathy. Another simulator named SENSE (Simulator for Ergonomics Neuroscience and Scenario Engineering) is being used to program virtual environments and scenarios for testing drivers on the other simulators.

- An instrumented vehicle called VENUS (Vehicle for Ergonomics, Neuroscience and Safety) that can be used to test research subjects in actual on-road driving experiences.

- Special “black box” data recorders are being built and deployed by the MBHL. They can be placed in a driver’s own vehicle to test driving behavior in the real world, providing many years of continuous data collection and a treasure trove for health researchers around the world.

Dr. Rizzo is using this technology for a clinical study of older driver mobility and safety.

“We aim to immerse people in a realistic environment with all cylinders running,” Dr. Rizzo said. “The simulators provide realistic challenges to assess critical aspects of human performance and cognition – attention, decision making and memory all at once, under pressure of time. We can learn a lot about driver safety and risk and nobody gets hurt.”

Marv Welstead, a 94-year-old from Fremont, Neb., demonstrates the new driving simulator at the Mind and Brain Health Labs.
New Era of Alumni Engagement

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October 7-8, 2016

For alumni of the UNMC Colleges of Medicine & Nursing, and UNMC Graduate Studies

**Medicine and Nursing Honor Years:**
(those who graduated before 1966)

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Embassy Suites Downtown/Old Market
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Watch for new events in partnership with UNMC Innovation & Research Week

For more information: unmc.edu/alumni or call 888.725.8664