



HONORING **INDIVIDUALS** FOR
NEW **INVENTIONS, PATENTS,**
& **LICENSED TECHNOLOGIES**

INNOVATION 2021 AWARDS

THURSDAY **FEBRUARY 10**



tech transfer for nebraska

MISSION

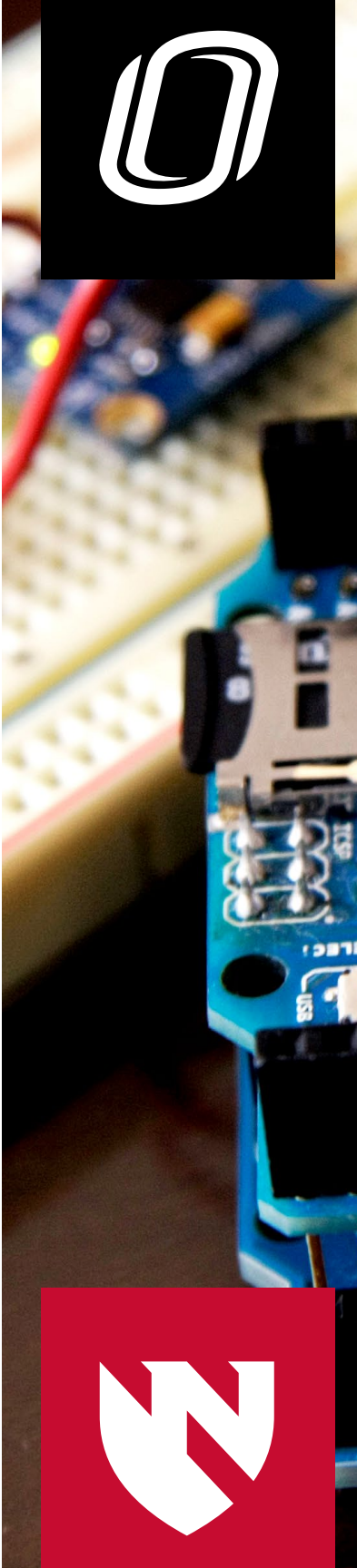
UNeMed fosters innovation, advances research, and engages entrepreneurs and industry to commercialize novel technologies

402-559-2468 | unemed@unmc.edu | unemed.com | @UNeMed

4460 Farnam St., Ste. 3000, Omaha, Nebraska, 68198-6099

INNOVATION AWARDS SCHEDULE

Welcome	Michael Dixon, Ph.D. President and CEO, UNeMed
Opening Remarks	Jeffrey Gold, M.D. Chancellor, University of Nebraska Medical Center
Commercializing Innovation	Jennifer Larsen, M.D. Vice Chancellor for Research, University of Nebraska Medical Center
Innovation Rewind: The Year in Review	Michael Dixon, Ph.D. President and CEO, UNeMed
Presentation of Awards: <ul style="list-style-type: none">• New Inventions• Issued Patents• Licensed Technologies• Startup of the Year• Most Promising New Invention• Innovator of the Year	Matt Boehm, Ph.D. Director of Licensing, UNeMed





On behalf of UNMC and UNO leadership and UNeMed staff, we welcome you to the virtual 2021 Research Innovation Awards ceremony as we celebrate all those who make our continued existence possible: You, the innovative UNMC and UNO faculty, staff and students who we honor today.

Our mission is simple: *UNeMed fosters innovation, advances research, and engages entrepreneurs and industry to commercialize novel technologies.*

Innovations all have the same humble beginning—an idea or a hypothesis. The path for an idea to become a product that improves the lives of millions is a daunting and perilous journey fraught with many obstacles. That is why UNeMed was created 30 years ago. We are here to help provide the advice, pathways and connections for your idea to grow and make the world a better place.

The Innovation Awards represent the culmination of Innovation Week as we celebrate the creators of novel technologies. Today, we will recognize the inventors who have submitted new inventions, were issued U.S. patents, and had a technology successfully licensed. We will also look to the future by recognizing Ensign Pharmaceuticals as the 2021 Startup of the Year, and hail a trio of UNO biomechanics innovators as awardees of the 2021 Most Promising New Invention.

We will also honor Hanjun Wang, MD, as our Innovator of the Year.

The UNeMed staff is committed to helping you develop your new inventions and make vital connections with industry. Please draw upon our expertise, and visit us at 4460 Farnam Street (Annex 14 on the campus map). Our goal is to help you create relationships that will enable your work to benefit the lives of people throughout Nebraska and around the world.

Sincerely,

A handwritten signature in blue ink, reading "Michael Dixon".

Michael Dixon, Ph.D.
President and CEO, UNeMed

INNOVATION
2021
AWARDS

INNOVATION WEEK HISTORY

Innovation Week dates back to 1998 when UNeMed and the Intellectual Property Office began hosting the Inventor's Recognition Reception, specifically tailored to honor UNMC researchers who had applied for or received patents in the previous year.

In 2007, UNMC restructured its technology transfer efforts into one organization, merging UNeMed with the Intellectual Property Office. UNeMed—under the leadership of then-CEO, James Linder, MD—transformed the Inventor's Recognition Reception into the Research Innovation Awards.

The awards ceremony was the final event in a week of activities that celebrated research and innovation at UNMC. In addition to recognizing researchers who secured intellectual property rights, UNeMed also added emerging inventor and lifetime achievement awards. In 2008 it also added the “Most Promising New Invention” as an annual award. In 2013, UNeMed presented for the first time ever, an “Innovator of the Year” Award. In 2018, another distinction was added when UNeTech—the University's new incubator and accelerator program—presented the first Startup of the Year award.

Innovation Week is now about far more than recognizing a handful of UNMC scientists with issued patents. It's a celebration that recognizes, rewards and encourages innovative thoughts and ideas, whether they come from the most seasoned and esteemed researcher or a first-year student who might know a better way. The program has grown into the Research Innovation Awards Banquet, an exclusive, invitation-only event that brings together innovators and leadership from two different campuses.

Last year, the Most Promising New Invention was a device designed to improve spinal surgeries. Inventors Joseph McMordie, MD, and Daniel Surdell, MD, created a cervical space spreader that helps create more working space for neurosurgeons during complicated cervical spine procedures.

The 2020 Startup of the Year award went to Steve Salzbrenner, MD, and his company, BreezMed. Dr. Salzbrenner is developing a software solution that could help patients get their prescription medications more quickly.

Finally, UNeMed's 2020 Innovators of the Year were the 43 UNMC and UNO inventors who contributed to 28 new inventions directly related to the COVID-19 pandemic during the fiscal year ending in 2020.

Most COVID-19 innovations focused on helping protect healthcare providers. Two were fast-tracked to market: An intubation shield that found its way into several hospitals and care facilities throughout the United States; and an infectious disease filter adapter for air masks sold in bulk quantities to the U.S. Air Force.

Other pandemic-related innovations included mobile applications; new mouse models and assays; solutions to personal protective equipment shortages; and solutions to limit the spread of infectious disease. In addition, there were other innovations that weren't technically “inventions” but nonetheless helped the nation's fight against the pandemic, including a protocol for using ultraviolet light to sanitize equipment and an early clinical study of Remdesivir.



Dr. McMordie



Dr. Surdell



Dr. Salzbrenner





Most Promising New Inventions

2021	<i>Improved Self-Pacing Treadmill</i>	<ul style="list-style-type: none"> • Brian Knarr, PhD • Travis Vanderheyden • Russell Buffum
2020	<i>Anterior Cervical Space Spreader</i>	<ul style="list-style-type: none"> • Joseph McMordie, MD • Daniel Surdell, MD
2019	<i>PDE4B Selective Inhibitors</i>	<ul style="list-style-type: none"> • Corey Hopkins, PhD
2018	<i>Multiplex Assay for Rapid Detection of HSV1, HSV2, EBV and CMV by qPCR</i>	<ul style="list-style-type: none"> • Catherine Gebhart, PhD • Varun Kesharwani, PhD
2017	<i>Nanofiber Sponges for Hemostasis</i>	<ul style="list-style-type: none"> • Jingwei Xie, PhD • Shixuan Chen, PhD • Mark Carlson, MD
2016	<i>Compositions for Modulated Release of Proteins and Methods of Use Thereof</i>	<ul style="list-style-type: none"> • Joyce Solheim, PhD • Tatiana Bronich, PhD
2015	<i>Emergency Medicine Care Portfolio: Wound Irrigation System & Oral Airway Management</i>	<ul style="list-style-type: none"> • Michael Wadman, MD, FASEP • Thang Nguyen, MSN, APRN, FNP-C
2014	<i>Orthogonal AquaBlade</i>	<ul style="list-style-type: none"> • Jason MacTaggart, MD
2013	<i>Targeted Glyoxalase-1 Gene Transfer to Prevent Cardiovascular and End-Organ Complications in Diabetes</i>	<ul style="list-style-type: none"> • Keshore Bidasee, PhD
2012	<i>Small Molecule in Vivo Inhibitors of the N-Terminal Protein Interacting Domain of RPA1</i>	<ul style="list-style-type: none"> • Gregory Oakley, PhD
2011	<i>Novel Target for the Treatment of Renal Fibrosis</i>	<ul style="list-style-type: none"> • Babu Padanilam, PhD
2010	<i>Noninvasive Monitoring of Functional Behaviors in Ambulatory Human Populations</i>	<ul style="list-style-type: none"> • Stephen Bonasera, MD, PhD
2009	<i>Novel Antibiotic Compounds</i>	<ul style="list-style-type: none"> • Paul Dunman, PhD
2008*	<i>Anti-HIV Peptides and Methods of Use Thereof</i>	<ul style="list-style-type: none"> • Guangshun (Gus) Wang, PhD
2008*	<i>Sex Hormone Binding Globulin: New Target for Cancer Therapy</i>	<ul style="list-style-type: none"> • Janina Baranowska-Kortylewicz, PhD

*In 2008 the Most Promising New Invention award was shared.

INNOVATION WEEK HISTORY: AWARDEES

Special Awards

2021	Hanjun Wang, MD	Innovator of the Year
2021	Ensign Pharmaceutical	Startup of the Year
2020	COVID-19 Inventors	Innovators of the Year
2020	BreezMed	UNeTech Startup of the Year
2019	Benson Edagwa, PhD	Emerging Inventor
2019	FutureAssure.	UNeTech Startup of the Year
2018	Biomechanics Dept., UNO	Innovator of the Year
2018	Centese, Inc.	UNeTech Startup of the Year
2017	Donny Suh, MD.	Emerging Inventor
2016	Irving Zucker, PhD	Innovator of the Year
2015	Tammy Kielian, PhD	Innovator of the Year
2014	Marius Florescu, MD	Emerging Inventor
2013	Howard Gendelman, MD	Innovator of the Year
2012	Tammy Kielian, PhD	Emerging Inventor
2011	Jonathan Vennerstrom, PhD	Lifetime Achievement
2010	Amarnath Natarajan, PhD	Emerging Inventor
2009	Rodney Markin, MD, PhD	Lifetime Achievement
2008	Dong Wang, PhD	Emerging Inventor
2007	Robert LeVeon, MD	Lifetime Achievement





NEW INVENTION NOTIFICATION CONTRIBUTORS

Arpan Acharya*
Rizwan Ahmad
Christine Allmon*
Alec Anderson
Walker Arce*
Rebecca Aron
Michael Ash*
Janina Baranowska-Kortylewicz
Aaron Barksdale
Surinder Batra
Kenneth Bayles
Elizabeth Beam
Mediha Becirovic-Agic
Gregory Bennett*
Linda Berg Luecke*
Gloria Borgstahl
Mara Jana Broadhurst
Tatiana Bronich
Keegan Brown
Keely Buesing*
Russell Buffum*
Siddappa Byrareddy*
Carly Cameron
Abraham Campos*
Mark Carlson
Jennifer Caspari
Jennifer Cera
Ioannis Chatzizisis
Pi-Wan Cheng
Kathryn Cooper
Jesse Cox*
Justin Cramer
Sean Crimmins
Brian Curtis
Christine Cutucache
Kaitlin Dailey*
Paul Davis
Dawn Davis
Doug Derrick*
Punita Dhawan
Danae Dinkel
Yuxiang Dong
Paul Dye*
Benson Edagwa*
Joel Elson*
Maggie Emerson
Bryant England*
Stacie Ethington
Wesley Fisher
Marius Florescu
Ann Fruhling
James Gehringer*
Howard Gendelman*
Bill Glass*
Stephen Gliske*
Santhi Gorantla
Beth Guericke
Rebekah Gundry*
Channabasavaiah Gurumurthy*
Antony Habib
Hani Haider
Matthew Halanski
Mahmudul Hasan
Mellissa Helligso
Jonathan Herskovitz
Andrew Huang Pacheco
Trevor Huff
Barbara Jackson
Parker Jensen
Jason Johanning
Hayley Jurek
Ashley Kahlandt
Ranjana Kanchan
Meghana Kashyap
Bhavesh Kevadiya*
Ali Khan
Deepak Khazanchi*
Brian Knarr*
Virender Kumar
Anthony Lanza*
Premila Leiphrahpam*
Gina Ligon
Merry Lindsey
Steven Lisco
Eric Livesay
Robert Lobato

INNOVATION
2021
AWARDS

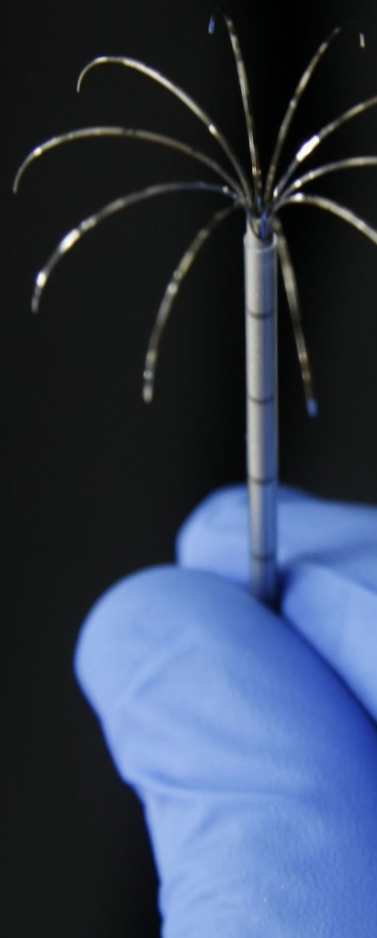
*Multiple

NEW INVENTION NOTIFICATION CONTRIBUTORS

Yaman Lu
Quan Ly
Scott Lyons*
Jatinkumar Machhi*
Sidharth Mahapatra
Ram Mahato
Jayapal Mallareddy
Rodney Markin
Eric Markvicka
Vivien Marmelat
Christine Marvin
Alec McCarthy
James McClay
Aaron Mohs
R. Lee Mosley*
Mai Mostafa
Sara Myers
Amarnath Natarajan*
Jarod Nekl
Thang Nguyen*
Thomas Nicholas*
Platt Niebur
Madeline Olson
Katherine Olson
Jonathan Pachuncka
Nicholas Palermo
Milankumar Patel
Peter Pellegrino
Naveen Kumar Perumal
Iraklis Pipinos
Larisa Poluektova
Rolen Quadros
Prakash Radhakrishnan
Abbie Raikes
Stephen Rennard
Catalina Rey
Riley Reynolds
Brian Ricks
Priscila Rodrigues Armijo
Nicole Rodriguez
Svetlana Romanova
Adam Rosen

Satish Sagar
Alicia Schiller*
Andrew Schnaubelt
Jonah Schreiner
Thomas Schulte
Courtney Schweikart
Bharti Sethi
Farah Shahjin
Mohammadali Sharzehee
Aleem Siddique
Harnoor Singh
Amar Singh
Ka-Chun Siu
Grayson Stanton
Kunal Sualy
Sabarinath Subramanian
Benjamin Terry
Travis Vanderheyden*
Dheeraj Varandani*
Sami Vasistha
Johnson Vitharikunnil John
Michael Wadman*
Seth Walker
Fei Wang
Junying Wang
Hanjun Wang*
Benjamin Wankum
Shinobu Watanabe-Galloway
Hannah Weber*
Jeremiah Wilt*
Melinda Wojtkiewicz
Ashley Wysong
Jingwei Xie*
Pravin Yeapuri
Aaron Yoder
Wesley Zeger*
Chi Zhang*
Ying Zhang
Siwei Zhao
Matthew Zimmerman
Irving Zucker*

**Multiple*



INNOVATOR OF THE YEAR



Hanjun Wang, MD

*Associate Professor, Department of Anesthesiology, College of Medicine
University of Nebraska Medical Center*

Hanjun Wang, MD, is our 2021 Innovator of the year, in recognition of his achievements and innovative work developing novel treatment strategies for a variety of diseases, including heart failure, acute respiratory distress syndrome and peripheral artery disease.

Dr. Wang's research focuses on the role that spinal afferent neurons play in regulating disease onset and progression. He has identified a number of different approaches to target spinal afferent neurons. One of these approaches focuses on localized administration of resiniferatoxin, a potent neurotoxin that can ablate specific nerves. Dr. Wang is exploring resiniferatoxin as a possible treatment for hypertension, heart failure, acute respiratory distress syndrome and peripheral artery disease.

Some of those applications have been licensed by an undisclosed biotech company that is working on developing them for clinical use. As part of this relationship, Dr. Wang has helped bring in more than \$1.1 million in sponsored research to develop this therapeutic approach.

In addition, Dr. Wang has developed other approaches for targeting spinal afferent neurons. One of which has been licensed into a startup company, Inflaneurgo, which is working on finding a partner to help advance some of these ideas.

In total, Dr. Wang has submitted 13 inventions, including three in fiscal year 2021. These inventions have resulted in 21 active patents and patent applications, three license agreements, and two sponsored research agreements.

Dr. Wang received his MD from Nanjing Medical University in 2003 and a Master of Science in 2006. In 2007 he joined UNMC as a postdoctoral fellow in the Department of Cellular and Integrative Physiology. In 2012 Dr. Wang became an instructor in the Department of Cellular and Integrative Physiology, and was promoted to an Assistant Professor in 2014. In 2016 Dr. Wang joined the Department of Anesthesiology, and in 2019 was promoted to Associate Professor.

MOST PROMISING NEW INVENTION



Brian Knarr, PhD
*Associate Professor,
Director of the Machining
and Prototyping
Core, Department of
Biomechanics, University
of Nebraska at Omaha*



Travis Vanderheyden
*Research and
Development Engineer,
Machining and Prototyping
Core, Department of
Biomechanics, University
of Nebraska at Omaha*



Russell Buffum
*Research and
Development Engineer,
Machining and Prototyping
Core, Department of
Biomechanics, University
of Nebraska at Omaha*

Improved Self-Pacing Treadmill

The Most Promising New Invention of 2021 is a brilliant twist on an old concept. The device is a self-pacing treadmill developed by Brian Knarr, PhD, Travis Vanderheyden and Russell Buffum at the University of Nebraska at Omaha's biomechanics facility.

The improved self-pacing treadmill is patent pending, and Impower Health, a new startup, has licensed the technology. With the support of UNeMed, UNeTech, and Proven Ventures—a Burlington Capital Fund—Impower Health looks to revolutionize the common treadmill with equipment that adjusts its speed to the runner, not the other way around.

Whether a user wants to run, walk or trot, the treadmill adjusts to the user's pace, without needing any other input. In speeding up or slowing down to match a runner's speed, the new treadmill will make home and gym workouts safer and more realistic.

The remarkable innovation originally began as an algorithm created that three biomechanics graduate students created in the summer of 2016: Will Denton, Casey Wiens, and Molly Schieber, currently an MD-PhD candidate at UNMC. They developed and successfully demonstrated a robust algorithm, but the project stalled there.

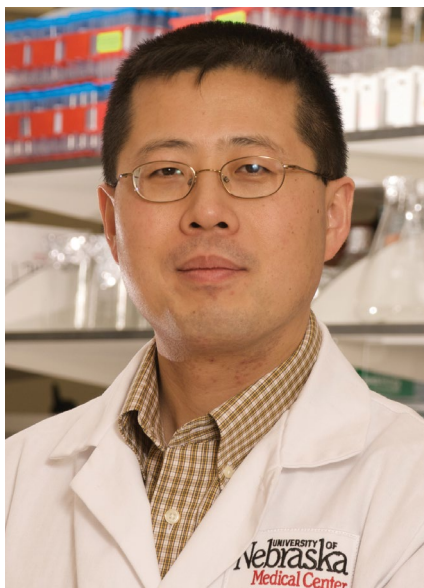
Five years later, Dr. Knarr and his team resuscitated the project, re-writing the algorithm to work with a new sensor array, and creating a module to make the technology work on pre-existing treadmills. The new work sparked additional funding from the University's startup incubator, UNeTech, and keen interest from Doug Miller, a biomedical engineer and former executive at Life Fitness, perhaps the world's most popular and recognizable exercise equipment company.



STARTUP OF THE YEAR

Ensign Pharmaceutical

UNMC chemist Dong Wang, PhD, created a thermosensitive hydrogel formulation called ProGel, a novel platform technology that can deliver a variety of therapeutics. ProGel has attracted wide interest as the cornerstone technology for Dr. Wang's startup, and its massive potential makes Ensign Pharmaceutical the 2021 Startup of the Year.



Dong Wang, PhD
Ensign Pharmaceutical

On the shelf, ProGel is a liquid. However, after ProGel is injected, it transforms into a gel-like substance as it warms to body temperature. The gel is then more likely to linger in the affected area, concentrating the pharmaceutical payload exactly where it needs to be.

Ensign's first product will incorporate a potent steroid, dexamethasone, into the ProGel formulation. An up-coming Phase II SBIR study will identify the optimal formulation, and evaluate its long-term efficacy in the treatment of arthritic joint pain.

While effective for pain relief, the benefit of dexamethasone is unfortunately short-lived, usually lasting only a few days. However, when formulated with Dr. Wang's ProGel, dexamethasone has the potential to remain active much longer, potentially providing relief for months.

The hydrogel allows a slow release of the payload—dexamethasone, in this case—while being retained at the injection site. In addition to providing a more sustained and stable local release of medication, the hydrogel also has the benefit of limiting potential harmful side effects, including weight gain, increased blood sugar, insomnia and osteoporosis.

Ensign Pharmaceutical recently secured nearly \$2 million in federal research grant funding, which will support pre-clinical studies needed to approach regulatory approval. Ensign won the 2020 Business Innovation Live Pitch competition in Phoenix during the Orthopaedic Research Society's annual meeting.

Also, Ensign was selected to present at highly selective startup conferences, the Invest Midwest Venture Capital Forum and Destination Startup.

CREATORS OF LICENSED TECHNOLOGY

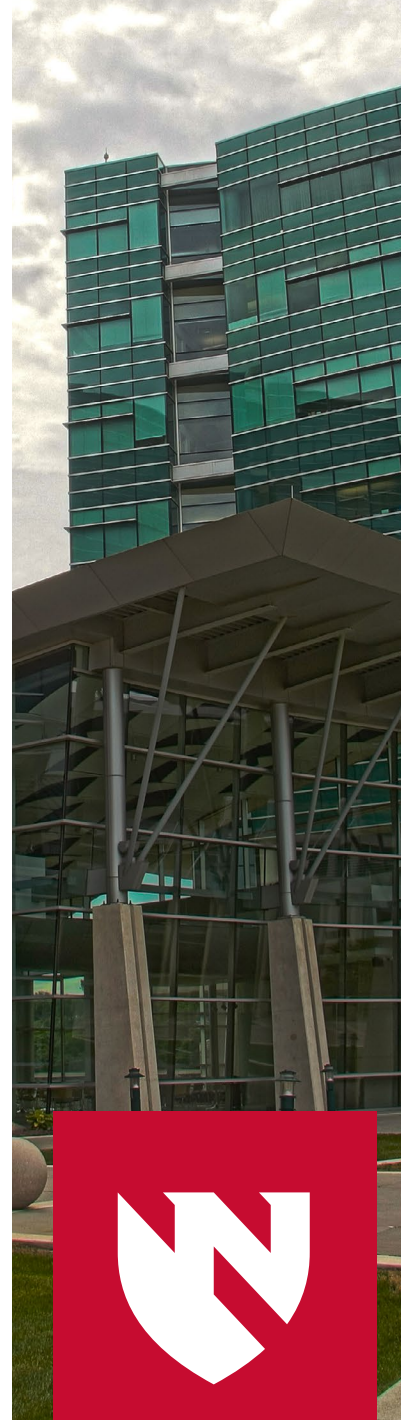
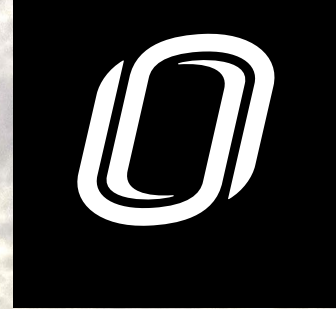
Christie Barnes
David Brett-Major
Mara Jana Broadhurst
Keegan Brown
Carly Cameron
Ioannis Chatzizisis
Anastasia Desyatova
Jayme Dowdall
Benson Edagwa
Lie Gao
Howard Gendelman
Jeffrey Gold
Hani Haider
Mahmudul Hasan
Jonathan Herskovitz
Alexey Kamenskiy
Bhavesh Kevadiya
Christopher Kratochvil
Michael Lankhorst
James Lawler
Steven Lisco
Jason MacTaggart

Kaspars Maleckis
Rodney Markin
Thang Nguyen
Thomas Nicholas
Samuel Pate
Milankumar Patel
Amol Patil
Prakash Radhakrishnan
Abbie Raikes
Rongguo Ren
Stephen Rennard
Satish Sagar
Mohammadali Sharzehee
Harnoor Singh
Grayson Stanton
Nicholas Stergiou
Benjamin Stobbe
Michael Wadman
Dong Wang
Hanjun Wang
Wesley Zeger
Irving Zucker

INVENTORS WITH ISSUED PATENTS

Dennis Alexander
Chandranth Are
Madhuri Are
Janina Baranowska-Kortylewicz
Bernard Baxter
Kenneth Bayles
Ioannis Chatzizisis
Shane Farritor
Daniel Firestone
Marius Florescu
Sarah Holstein
Zhenshan Jia
Jiang Jiang
Alexey Kamenskiy

Tammy Kielian
Rongshi Li
Yan Liu
Jason MacTaggart
Eric Markvicka
Peter Pellegrino
Stephen Salzbrenner
Alicia Schiller
Jonathan Vennerstrom
Joseph Vetro
Dong Wang
Guangshun Wang
Hanjun Wang
Jingwei Xie
Irving Zucker



PATENTS ISSUED

1. "Robotic Device with Compact Joint Design and an Additional Degree of Freedom and Related Systems and Methods"

U.S. Patent No. 10,702,347 — issued July 7, 2020

- Lou Cubrich
- Tom Frederick
- Shane Farritor

2. "Anti-Microbial Peptides and Methods of Use Thereof"

U.S. Patent No. 10,723,764 — issued July 28, 2020

- Guangshun Wang

3. "Distal Radius Plate"

U.S. Patent No. D892,330 — issued August 4, 2020

- Daniel Firestone

4. "Methods for Administration and Methods for Treating Cardiovascular Diseases with Resiniferatoxin"

U.S. Patent No. 10,729,643 — issued August 4, 2020

- Irving Zucker
- Hanjun Wang

5. "Methods, Systems and Devices Relating to Force Control Surgical Systems"

U.S. Patent No. 10,743,949 — issued August 18, 2020

- Joe Bartels
- Shane Farritor
- Jacob Greenburg
- Tom Frederick
- Kearney Lackas

6. "Automated Retrievable Hemorrhage Control System"

U.S. Patent No. 10,758,386 — issued September 1, 2020

- Jason MacTaggart
- Alexey Kamenskiy

7. "Stent to Assist in Arteriovenous Fistula Formation"

U.S. Patent No. 10,772,718 — issued September 15, 2020

- Marius Florescu

8. "Fluid Jet Arterial Surgical Device"

U.S. Patent No. 10,779,851 — issued September 22, 2020

- Nicholas Phillips
- Jason MacTaggart
- Alexey Kamenskiy
- Amy Mantz

9. "Ring and Tubular Structures and Methods of Synthesis and Use Thereof"

U.S. Patent No. 10,799,620 — issued October 13, 2020

- Jingwei Xie
- Bernard Baxter
- Shixuan Chen

PATENTS ISSUED

10. “Compositions and Methods for the Treatment of Biofilm Infections”
U.S. Patent No. 10,821,178 — issued November 3, 2020
■ Tammy Kielian
11. “Lock-Block Shield Device”
U.S. Patent No. 10,856,819 — issued December 8, 2020
■ Gregory Gordon
12. “Gene Therapy for Juvenile Batten Disease”
U.S. Patent No. 10,876,134 — issued December 29, 2020
■ Tammy Kielian
■ Kevin Foust
13. “MIBG Analogs and Uses Thereof”
U.S. Patent No. 10,874,752 — issued December 29, 2020
■ Janina Baranowska-Kortylewicz
■ Zbigniew Kortylewicz
14. “Creatine Oral Supplementation Using Creatine Hydrochloride Salt”
U.S. Patent No. 10,881,630 — issued January 5, 2021
■ Jonathan Vennerstrom ■ Mark Faulkner
■ Donald Miller
15. “Devices and Methods for Detecting and Measuring Sympathetic Vasomotion”
U.S. Patent No. 10,881,303 — issued January 5, 2021
■ Irving Zucker ■ Peter Pellegrino
■ Alicia Schiller
16. “Polyethylene Glycol-Conjugated Glucocorticoid Prodrugs and Compositions and Methods Thereof”
U.S. Patent No. 10,933,071 — issued March 2, 2021
■ Fang Yuan ■ Xiaobei Wang
■ Zhenshan Jia ■ Dong Wang
17. “Controlled Release Peptide Compositions and Uses Thereof”
U.S. Patent No. 10,945,962 — issued March 16, 2021
■ Joseph Vetro
■ Sam Sanderson
18. “Pyrrolomycins and Methods of Using the Same”
U.S. Patent No. 10,954,192 — issued March 23, 2021
■ Kenneth Bayles ■ Yan Liu
■ Rongshi Li



PATENTS ISSUED

19. "Multifunctional Operational Component for Robotic Devices"

U.S. Patent No. 10,959,790 — issued March 30, 2021

- Nathan Wood
- Jason Dumpert
- Dmitry Oleynikov
- Mark Rentschler
- Shane Farritor
- Amy Lehman

20. "Portable Laparoscope System"

U.S. Patent No. 11,006,818 — issued May 18, 2021

- Dennis Alexander
- Chandrakanth Are
- Madhuri Are

21. "Single-Arm Robotic Device with Compact Joint Design and Related Systems and Methods"

U.S. Patent No. 11,013,564 — issued May 25, 2021

- Shane Farritor
- Joseph Palmowski

22. "Survival Predictor For Diffuse Large B Cell Lymphoma"

U.S. Patent No. 11,028,444 — issued June 8, 2021

- Wing (John) Chan
- Dennis Weisenburger

23. "Robotic Surgical Devices, Systems and Related Methods"

U.S. Patent No. 11,032,125 — issued June 8, 2021

- Kyle Strabala
- Amy Lehman
- Dmitry Oleynikov
- Ryan McCormick
- Tyler Wortman
- Shane Farritor
- Eric Markvicka

24. "Computational Simulation Platform for Planning of Interventional Procedures"

U.S. Patent No. 11,026,749 — issued June 8, 2021

- Ioannis Chatzizisis

25. "Nanofiber Structures and Methods of Synthesis and Use Thereof"

U.S. Patent No. 11,033,659 — issued June 15, 2021

- Jingwei Xie
- Jiang Jiang

26. "Triazole Bisphosphonate Geranylgeranyl Diphosphate Synthase Inhibitors"

U.S. Patent No. 11,033,560 — issued June 15, 2021

- Sarah Holstein
- David Wiemer

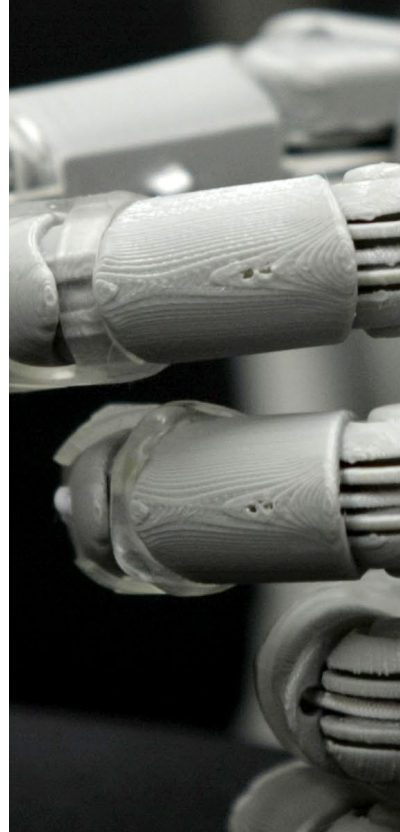
27. "Healthcare Provider Interface for Treatment Option and Authorization"

U.S. Patent No. 11,043,293 — issued June 22, 2021

- Stephen Salzbrenner

TECHNOLOGIES LICENSED

External Tool Tracking System	<ul style="list-style-type: none">• Hani Haider
Osteotropic Thermoresponsive Injectable Hydrogel	<ul style="list-style-type: none">• Dong Wang• Rongguo Ren
Nasopharyngeal Swabbing Trainer	<ul style="list-style-type: none">• Benjamin Stobbe• Christie Barnes• Jayme Dowdall• Samuel Pate
Localized Injection of Therapeutics for the Treatment of Cardiopulmonary Diseases	<ul style="list-style-type: none">• Hanjun Wang• Dong Wang• Michael Lankhorst• Steven Lisco• Irving Zucker• Thomas Nicholas• Lie Gao
COPD Detection Platform	<ul style="list-style-type: none">• Nicholas Stergiou• Stephen Rennard• Amol Patil
Bromelain for the Treatment of COVID-19	<ul style="list-style-type: none">• Prakash Radhakrishnan• Satish Sagar
Novel Aortic Stent Graft and the Aquablade	<ul style="list-style-type: none">• Jason MacTaggart• Alexey Kamenskiy• Kaspars Maleckis• Anastasia Desyatova
1-Check App	<ul style="list-style-type: none">• Jeffrey Gold• Rodney Markin• Michael Wadman• Wesley Zeger• Thang Nguyen• Harnoor Singh• Keegan Brown• Carly Cameron• Grayson Stanton
Portable Isolation Room	<ul style="list-style-type: none">• Mara Jana Broadhurst• James Lawler• Christopher Kratochvil• David Brett-Major
Long Acting Therapeutics & Gene Editing Technology for HIV	<ul style="list-style-type: none">• Howard Gendelman• Benson Edagwa• Jonathan Herskovitz• Mahmudul Hasan• Bhavesh Kevadiya• Milankumar Patel
Childcare Quality Assessment Tool	<ul style="list-style-type: none">• Abbie Raikes
Computational Planning of Coronary Artery Bypass Grafting	<ul style="list-style-type: none">• Mohammadali Sharzehee• Ioannis Chatzizisis
Treatment for Multi-Organ Failure	<ul style="list-style-type: none">• Hanjun Wang• Irving Zucker



UNEMED STAFF



Jeff Andersen

Contracts Manager

- JD, Creighton University School of Law
- Joined UNeMed: 2015



AJ Crawford

Licensing Associate

- PhD, Biomedical Research, University of Nebraska Medical Center
- MBA, University of Nebraska at Omaha
- Joined UNeMed: 2019



Valerie Gunderson

Office Manager

- Joined UNeMed: 2007



Lisa Jorgenson

Licensing Associate

- PhD, Immunology, Pathology, and Infectious Diseases, University of Nebraska Medical Center
- Joined UNeMed: 2021



Jason T. Nickla

Vice President & Director of Intellectual Property

- JD, Creighton University School of Law
- LL.M., International Intellectual Property Law, Chicago-Kent College of Law
- Joined UNeMed: 2009



Mindy Ware

Paralegal

- Joined UNeMed: 2010



Matthew Boehm

Director of Licensing

- PhD, Cancer Biology, University of Nebraska Medical Center
- Joined UNeMed: 2009



Michael Dixon

President & CEO

- PhD, Molecular Genetics, University of Nebraska Medical Center
- Joined UNeMed: 2003



Cori Harsh

Accountant

- Joined UNeMed: 2009



Charlie Litton

Marketing & Communications Manager

- MA, Journalism, University of Nebraska-Lincoln
- Joined UNeMed: 2013



Tyler Scherr

Licensing Specialist

- PhD, Biomedical Research, University of Nebraska Medical Center
- Joined UNeMed: 2016



tech transfer for nebraska

MISSION

UNeMed fosters innovation, advances research, and engages entrepreneurs and industry to commercialize novel technologies

402-559-2468 | unemed@unmc.edu | unemed.com | @UNeMed

4460 Farnam St., Ste. 3000, Omaha, Nebraska, 68198-6099

