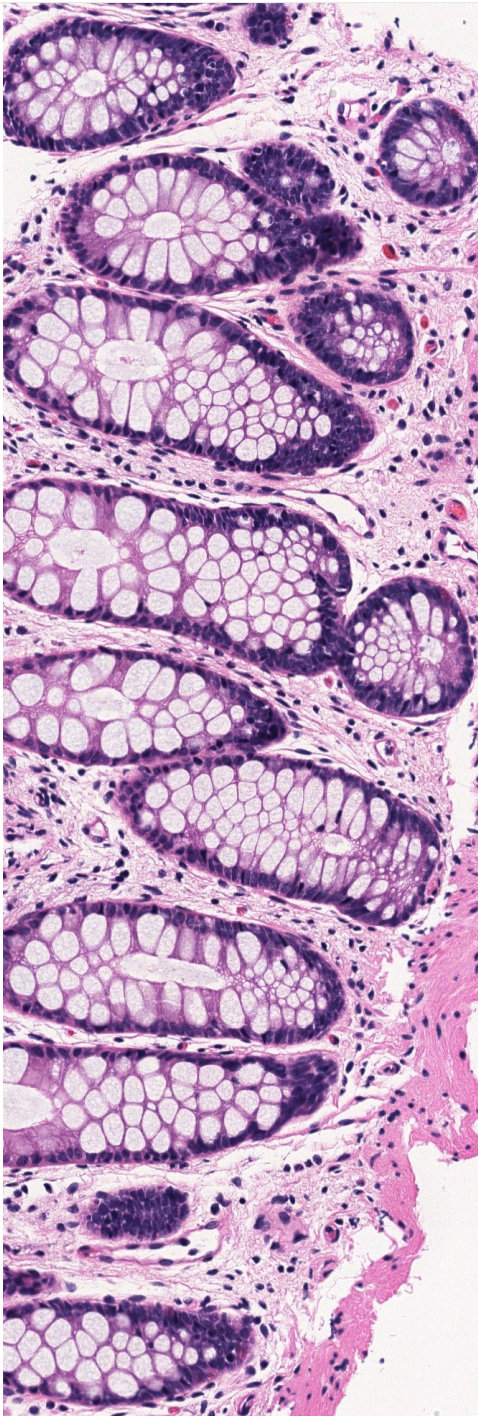




# PATHWAYS

Department of Pathology and Microbiology News Archive for 2013



## Dr. Gold presents in Greenfield Lectureship Series

Larry Gold, Ph.D., CEO and Chair of SomaLogic was the 2013 guest lecturer of the Robert E. Greenfield, M.D. Lectureship in Carcinogenesis.

Dr. Larry Gold is the founder, chairman of the board, and CEO of SomaLogic. Prior to SomaLogic, he also founded NeXagen, Inc., which later became NeXstar Pharmaceuticals, Inc. In 1999,

NeXstar merged with Gilead Sciences, Inc., to form a global organization committed to the discovery, development and commercialization of novel products for the treatment of infectious diseases. During nearly 10 years at NeXstar, Dr. Gold held numerous executive positions including chairman of the board, executive vice president of R&D, and chief

see MAIN pg 2

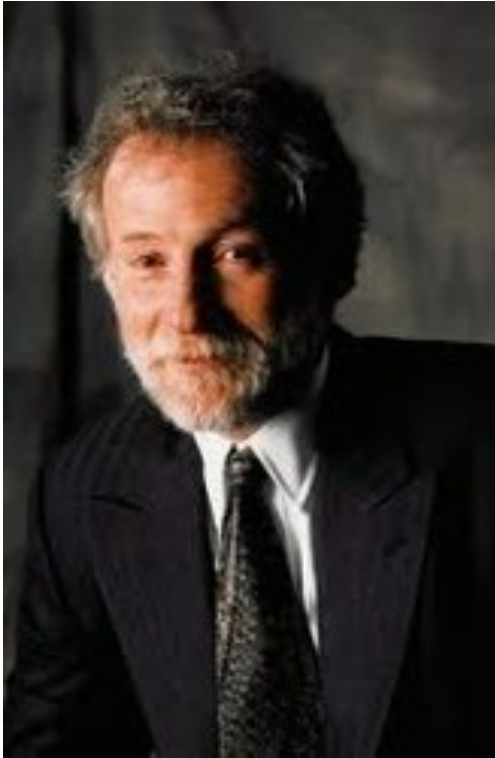
### Kielian as GRC co-chair

[Tammy Kielian, Ph.D.](#), will be the co-chair of the 2017 Staphylococcal Diseases Gordon Research Conference (GRC). In preparation for this meeting, Dr. Kielian will serve as co-vice chair for the preceding 2015 conference, which will be held in Europe.

### Faculty who excel at teaching

Congratulations to [Geoffrey Talmon, M.D.](#) and [Thomas McDonald, Ph.D.](#), who were presented with awards for excellence in teaching by students and featured in [UNMC News](#). This is not the first time that these faculty have received such awards.

## MAIN *continued from pg 1*



Dr. Larry Gold  
CEO and Chair, SomaLogic,  
Professor, University of Colorado, Boulder

science officer. Before forming NeXagen, he also co-founded and served as co-director of research at Synergen, Inc., a pioneering biotechnology company later acquired by Amgen, Inc.

Since 1970, Dr. Gold has been a professor at the University of Colorado Boulder, including serving as the chairman of the Molecular, Cellular and Developmental Biology Department from 1988 to 1992. Dr. Gold has received many citations and awards, including the CU Distinguished Lectureship Award, the National Institutes of Health Merit Award, the Career Development Award, and the Chiron Prize for Biotechnology. In addition, Dr. Gold has been a member of the American Academy of Arts and Sciences since 1993 and the National Academy of

Sciences since 1995. Dr. Gold also serves on the board of directors of CompleGen and Plato BioPharma, and is a member of the Institute for Genome Biology External Advisory Board at the University of Illinois at Urbana-Champaign.

The Robert E. Greenfield, M.D. Lectureship in Carcinogenesis was established in 1985 in honor of Dr. Robert E. Greenfield, Jr., who held an illustrious career in cancer research at the National Cancer Institutes and was mentor to two of our department's former chairs.

The 2013 Greenfield Lecture was held on Friday, October 18th. Dr. Gold's lecture is entitled, "Proteomics and Human Health."

### *Lookin' at Rothgeb*

Kim Rothgeb, Office Associate I, discusses her professional career and personal activities in *UNMC's Today Lookin' at U* section.

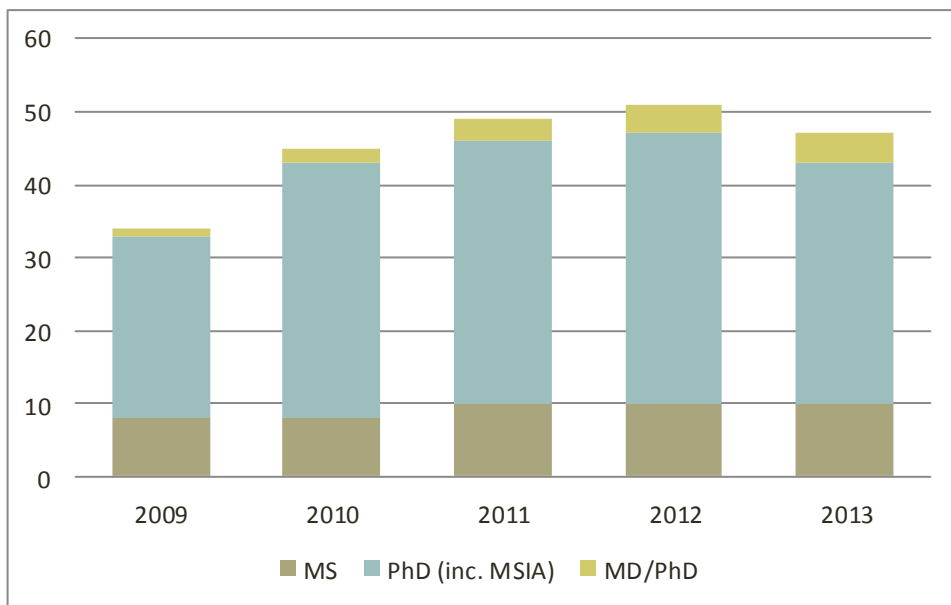
### Living "green" and large on campus

Our staff, students and faculty are part of UNMC's efforts to be environmentally sound and energy efficient. You can see the [UNMC's Green Team](#) handing out candy to those who have turn off their lab and office lights and the "Sash Fairy" finding that we do "shut our sashes."

[Carolyn Schaeffer](#), PhD candidate in Dr. Paul Fey's lab, has amassed a huge ball of aluminum - waste that would have normally gone in the trash - which she will recycle.



Our graduate program continues to be one of the largest on campus with opportunities in microbiology, immunology, bioinformatics, and cancer research



## Five faculty noted for distinct achievements

In [UNMC Today Research Highlights](#), five of our department's faculty achievements are discussed.

### Research grants

[Nora Chapman, Ph.D.](#), will be the UNMC lead for a project funded through the Network for Pancreatic Organ Donors Viral working group in collaboration with the University of Florida. The group focuses on the role of viruses in type 1 diabetes.

[Steven Tracy, Ph.D.](#), has received a Juvenile Diabetes Research Foundation award to explore the mechanisms by which intestinal viral infections may persist and mutate after the initial infection has passed and the role these persistent viruses may play in the development of diabetes.

[Javeed Iqbal, Ph.D.](#), has received a Lymphoma Research Foundation award to continue his exploration of gene expression profiling and pathway-targeted therapy in peripheral T-cell lymphoma.

### Industry sponsored contracts

[Samuel Cohen, M.D., Ph.D.](#), is evaluating the expression of cellular antigens in human vascular cell tumors.

### Scientific journal articles

[John Chan, Ph.D.](#), has published in the February 18 online edition of PNAS (Proceedings of the National Academy of Science) on how related F-box proteins control cell death in human lymphoma. A link to this article is [here](#).

“Dr. Wang is a very special scientist as he has the rare ability to work in multiple areas including proteomics, information technology and microbiology ”

- Dr. Steven H. Hinrichs, chair of the pathology and microbiology department at UNMC



Dr. Guangshun Wang is an assistant professor in the department of pathology and microbiology.

## New play against antibiotic resistant bacteria

Guangshun Wang, Ph.D., is teaming up with a Japanese pharmaceutical company to tackle antibiotic resistant bacteria.

Taisho Pharmaceutical Company will sponsor Dr. Wang, an expert in peptide research, in a bid to identify and develop antimicrobial peptides as a new form of therapy against bacterial infections. Some bacteria have become resistant to standard antibiotic treatment, so the design and production of new therapies are invaluable. Peptides are ideal as bacteria are far less likely to develop a resistance to them.

Dr. Wang has developed a massive database of new peptide sequences reported in the scientific community that can be mined by other researchers and companies to “find or even create peptides that have the potential for use as new medications,” said Dr. Hinrichs. Such international collaboration and commercialization of scientific research are supported by our department, UNMC and UNeMed.

Dr. Wang’s partnership is featured in the [Omaha World Herald](#), [UNeMed](#), as well as [UNMC Today News](#).





## CSR strikes at MRSA both on and off the pitch

With the start of school sports season, the surveillance for Methicillin-resistant *Staphylococcus aureus* (MRSA) infections in athletes also begins.

Athletes in particular are at a higher risk of contracting the disease due to close contact with other athletes and shared equipment and facilities. These

community-associated MRSA infection rates have not seen the decrease that has been reported in hospital settings according to the September 2013 report from the [Centers for Disease Control and Prevent \(CDC\)](#). Therefore, Omaha doctors, school officials and parents are stressing the need for the prevention and containment of MRSA infections often based on expert advice from the physicians and researchers from the Center for Staphylococcal Research (CSR) at

the University of Nebraska Medical Center.

In [KMTV's report](#), Dr. Mark Rupp, a UNMC physician who specializes in infectious disease and is a member of the CSR, discusses how MRSA can be transmitted amongst athletes and what can help to prevent infections such as disinfecting sports equipment and facilities, as well as keeping injuries covered. Approximately 30% of people carry MRSA on their skin

## An extraordinary educator passes



Dr. William M. Berton

Emeritus faculty member, William M. Berton, M.D., has passed away on September 1, 2013. Dr. Berton was a transformative figure in the department, particularly in regards to our medical education program. Jim Newland, M.D., stated "Students were his first concern and only concern." Samuel Cohen, M.D., Ph.D., remembers him as being "instrumental in breaking the medical students into small groups and getting them into the laboratory setting" - a standard that is used in medical education today.

A memorial service was held Saturday, September 21 at Dundee Presbyterian Church. Memorials should be made to the UNMC Department of Pathology & Microbiology or to Dundee Presbyterian Church.

To read more about Dr. Berton and his 44-year career at UNMC, please read [UNMC Today's article](#) or [the Omaha World Herald story](#).

### Striking at MRSA [from pg 5](#)

occur. This particular strain is difficult to treat and prevalent everywhere according to Ken Bayles, Ph.D., in an [interview with KETV](#).

[In further news](#), the CSR has developed the [Nebraska Transposon Mutant Library](#) which holds over 2,000 *Staphylococcus aureus* strains and is an instrumental research tool. It is gratifying to know that such a resource can be cultivated in Nebraska at UNMC and shared by the international staphylococcal research community to improve the understanding and treatments of MRSA.

### Warkentin honored with ASBMT Public Service Award

[Dr. Phyllis Warkentin](#) will be presented with the 2014 American Society for Blood and Marrow Transplantation (ASBMT) Public Service Award during the BMT Tandem Meetings in Texas. Geraldine Ferraro; Myra Jacobs; Harry Pearce; Sen. Orrin Hatch; Robert Klein and Congressman C.W. Bill Young.

The award recognizes her support and tireless efforts on behalf of cancer patients and medical research. The ASBMT is an association of nearly 2,000 physicians and investigators promoting research, education and clinical practice in the field of blood and marrow transplantation and related cellular therapies.

The previous recipients of this award have been William D. Merritt, PhD; Nancy DiFronzo, PhD; Robert Baitty; Claude Lenfant, MD; Adm. E. R. Zumwalt, Jr.; Susan Stewart; Ray Wu, PhD; Richard Klausner, MD; The Hon.

# Creating a Universal Language for Tumors

Dr. Julia Bridge knows that getting people to agree on one definition for anything can be an overwhelming task, but trying to get 159 writers from 24 countries to do it is an entirely different story.

Dr. Bridge was part of a team of international physicians with a variety of specialties that collaborated and debated until an international standard for classifying tumors was agreed upon. “WHO Classification of Tumours of Soft Tissue and Bone 4<sup>th</sup> edition” published by the World Health Organization (WHO) International Agency on Research for Cancer (IARC) not only defines tumors, but creates a universal classification system for them. It provides names, features, color photographs, and even synonyms for the tumors. This book is meant for every healthcare professional, according to Dr. Bridge, “from students to all variety of clinicians on a global basis”, allowing them to use this book as resource to make diagnoses and decisions regarding what course of treatment should be pursued.

Dr. Bridge serves as an editor of this book which proved to be a “herculean task, but absolutely worth it.” The brilliant thing about this book is that it is not just directed at one audience. Dr. Bridge stated that, “It provides a universal consensus on how tumors are classified.” The other editors and authors of the book are from all over the world from Sweden to America and beyond. Dr. Bridge believes that “as physicians we are obligated to work together and combine our expertise.” She is no stranger to international collaboration being a Founding Member of International Society of Bone and Soft Tissue Pathology and part of the International Skeletal Society.

The earlier versions of the book focused more on the pathology of the tumors rather than the genetics. It is only in the last couple editions that the genetic factor becomes more prominent. Dr. Bridge is an internationally recognized expert in the field of cancer genetics of bone and soft tissue tumors and that experience is one of the reasons this publication is so respected amongst clinicians across the globe. The unique combination of pathology and



genetics makes this book invaluable to any clinician. The genetic component of this book is particularly fascinating to Dr. Bridge as it is constantly evolving and increasing our knowledge about the genetic biological markers that define these entities. “Some of the varieties of tumors in the text are so rare that you would have to have a reference to even know that they exist” said Dr. Bridge and it is this aspect of discovery that makes a project like this so exciting.



# Hello and goodbye for faculty

We welcomed eight new faculty to the department during the same week as bidding farewell to Dr. John Chan.



**Chan's Farewell Reception**  
Dr. Hinrichs presents to Dr. Chan



**New Faculty Reception**  
Dr. Naushad discusses with Dr. Abdalla



**New Faculty Reception**  
Dr. Boissy meets Dr. Greiner



**New Faculty Reception**  
Robert Boissy, PhD, Steven H. Hinrichs, MD (Chair),  
Alina Sofronescu, PhD, Keer Sun, PhD, W. Scott Campbell, PhD,  
Hina Naushad, MD, Scott Koepsell, MD, PhD,  
Jessica Kozel MD, and Maher Abdalla, PhD



**Chan's Farewell Reception**  
Hematopathology Group: Drs. Greiner, Chan, Naushad and Fu



**New Faculty Reception**  
Dr. Abdalla talks to a colleague



**Chan's Farewell Reception**  
Dr. Chan talks with Dr. Britigan, COM Dean



**New Faculty Reception**  
Dr. Campbell and Dr. Lazenby





## Pillar of Science

Dr. John Chan named a Pillar of Science by the Department of Pathology and Microbiology.

Twenty-two years at UNMC as a pathologist and researcher might sound like a life-time of work for many, but not for Dr. Wing-Chung (John) Chan. He is off to start a new career challenge by joining the department of pathology at the City of Hope,

and we wish him all the best and continued collaborative relations.

To say that Dr. Chan had an impact at UNMC is an understatement. He has been instrumental to the department of pathology and microbiology as a hematopathologist, as well as a researcher focused on the identification of genetic and gene expression abnormalities in non-Hodgkin's lymphoma with the goal to improve the diagnosis and prognostication of lymphoma and also to find new therapeutic targets for

treatment. Dr. Chan's significant contributions were recognized when he was named an Amelia and Austin Vickery Professor of Pathology in 2006.

As a co-director of the UNMC Center for Lymphoma and Leukemia Research, he once stated, "(W)e've been building resources to study lymphoma. That is our lifetime interest. We hope our research efforts will improve the survival and quality of life of patients. The diagnostics and prognostics are just one part

## Pillar of Science from pg 9

of the project." He was twice named as a Distinguished Scientist once in 2006 and again in 2010 by UNMC for his outstanding research achievement and sustained contributions to UNMC's research mission.

Dr. Chan was also a driving force in establishing partnerships between UNMC and China's academic institutions, building on the strengths of both to advance lymphoma and leukemia research and patient care.

With this said, the department presented Dr. Chan with the Pillar of Science Award, the second one bestowed to its faculty.

