



PATHWAYS

Department of Pathology and Microbiology News Archive for 2012



Department hosts three international conferences

Whether in tropical climes or right here in Omaha, our faculty will be host to three international events.

On October 7-10, 2012, the fourth biennial **International Conference on Gram-Positive Pathogens (ICG+P)** will be held in Omaha, NE. The ICG+P is entirely devoted to Gram-positive pathogens, touching on a variety of topics from physiology to pathogenesis. Hosted by the Department of Pathology and Microbiology at UNMC, as well as other valuable contributors, this truly international event attracts over 200

researchers from across the globe, converging in Omaha to present and discuss their recent findings with their scientific community members. Dr. Paul Fey is co-chair of the conference with Drs. Ken Bayles and Tammy Kielian as committee members. To learn more about this conference, please visit the [ICG+P website](#).

UNMC and M.D. Anderson Cancer Center will be hosting the **Neoplastic Hematopathology Update: New Insights into Old Questions** in Palm Beach, Florida from November 15-17, 2012.

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2012 Schenken Awards

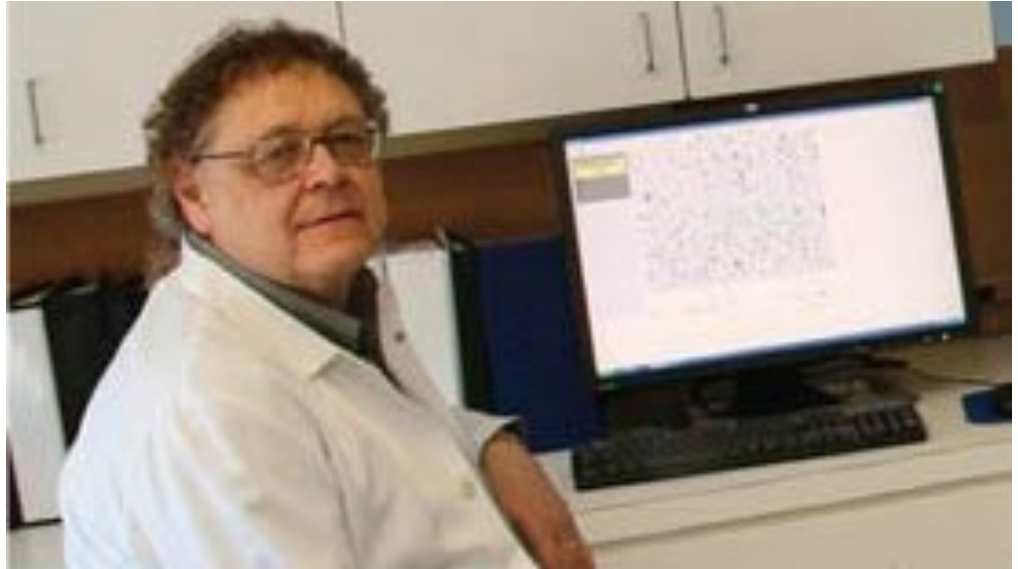
Drs. Michael Carter, Valerie Prescher, and Lauren Valentine were presented with the 2012 Schenken Award during a dinner ceremony on April 18, 2012. We congratulate these three medical students on their outstanding achievement in pathology and microbiology, and wish them all the best in their future careers. To learn more about Dr. Schenken and this award, please visit our [Distinguished Lectureships and Awards webpage](#).

Celebrating National Medical Laboratory Professionals Week

The Department of Pathology and Microbiology commemorated National Medical Laboratory Professionals Week with multiple activities during the week of April 23rd. On Friday, technologists from UNMC and TNMC clinical laboratories concluded the activities with a luncheon in the DRC2

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After 28 extraordinary years of UNMC service, Dr. Weisenburger will become department chair at City of Hope



Big changes for Weisenburger

Dennis Weisenburger, M.D., was honored for nearly 20 years of service as director of the hematopathology fellowship program at UNMC this spring. A dinner event was attended by current fellows and residents, as well as past fellows of the UNMC training program, including Deborah Perry, M.D., from Children's Hospital, Omaha, NE and Michael Duggan, M.D., of Pathology Medical Services, PC, Lincoln, NE.

During his tenure at UNMC, Dr. Weisenburger achieved

international distinction for his work in standardizing hematopathology classification systems, in addition to establishing mechanistic correlations between specific cytogenetic alterations and distinct clinical entities. He is also recognized for his work in characterizing mantle cell lymphoma.

One week following the event, Dr. Weisenburger announced he has accepted the position of chairman of the pathology department at the City of Hope, Duarte, California. This will be a return to

Denny's roots as he completed his fellowship in hematopathology in Southern California while working for Dr. Henry Rappaport.

We had a wonderful send off for Denny on Wednesday, August 15, 2012 in which people across the department and campus came to wish him all the best. We anticipate his transition to City of Hope will facilitate future interactions between the organizations.

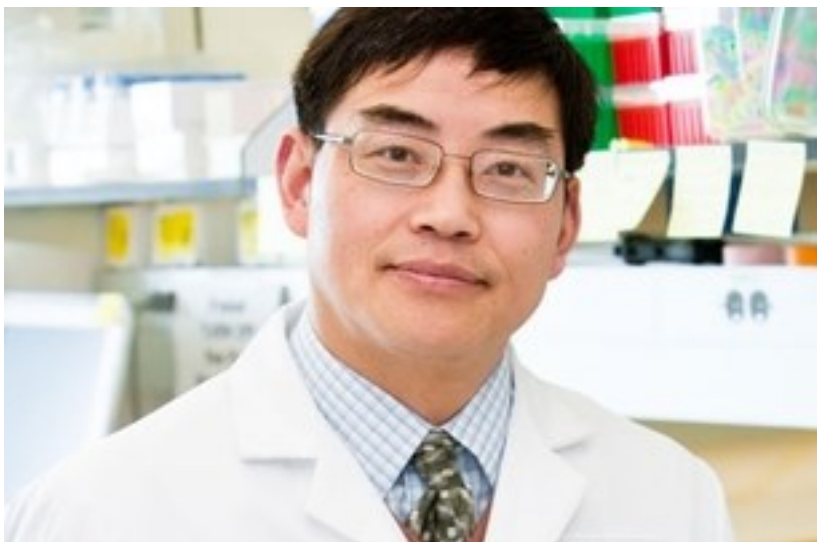


Fourth time Golden Apple Teaching Award Recipient, Dr. Talmon



More teaching honors for Talmon

Congratulations to Geoff Talmon, M.D., who has received both the Hirschmann Prize for Teaching Excellence for Basic Science Education and a Golden Apple Teaching Award. Dr. Talmon also received the College of Medicine Class of 1962 Basic Science Outstanding Teacher Award. Link to read the full [UNMC article](#).



Dr. Wang, New Investigator Awardee

Wang recognized for research efforts

Guangshun (Gus) Wang, Ph.D., has received a New Investigator Award for his research achievements over the past two years for having secured his first external funding, as well as his other scholarly activity such as publishing their research and/or presenting their findings at national conventions. Dr. Wang was one of 23 researchers across the UNMC campus who was honored in the May 22, 2012 ceremony. Dr. Wang joined the department in 2010 with research into the development of new compounds to combat cancer and infectious diseases. [UNMC Today](#) spotlighted Dr. Wang.



The Fab Four of pancreatic cancer research, Drs. Hollingsworth, Johnson, Singh and Batra.

Singh pursues CXCR2's role in pancreatic cancer

The National Cancer Institute (NCI) has awarded \$4.2 million to a multidiscipline contingent of UNMC researchers and clinicians who are determined to find out what causes pancreatic cancer to be so lethal in humans.

UNMC has a strong reputation in the study of pancreatic cancer, including establishing a Specialized Program of Research Excellence (SPORE) in Gastrointestinal (Pancreatic) Cancer – one out of only three in America. Surinder Batra, Ph.D., professor and

chairman of the department of biochemistry and molecular biology, is the principle investigator on the new grant leading the UNMC investigation team made up of Rakesh Singh, Ph.D., professor, department of pathology and microbiology; Tony Hollingsworth, Ph.D., professor, Eppley Cancer Institute; and Keith Johnson, Ph.D., professor, College of Dentistry.

As the pancreas is located deep within the body, pancreatic cancer is often diagnosed in its advance stage when it has metastasized to the lymph nodes or other distal sites. Pancreatic cancer is the fourth leading cause of cancer-related death in men and the third leading cause of cancer-related death in

women with a 5-year survival rate of only 5%. This group will not only study the micro-environment of cancer cells, but they will also develop new therapeutics to improve outcomes for patients with pancreatic cancer.

Dr. Singh will build upon his preliminary data and published reports that show aggressive pancreatic cancer cells express higher levels of CXC chemokine receptor 2 (CXCR2) and its ligands that play important roles in inflammation, angiogenesis and metastasis. Dr. Singh's laboratory will test the hypothesis that CXCR2 and its ligands play a critical

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Toxicology honors for Cohen



[Samuel Cohen, M.D., Ph.D.](#), will be awarded the [George H. Scott Memorial Award](#) at The 38th Annual Summer Meeting of The Toxicology Forum. This award was established by the Toxicology Forum in 1983 to honor George H. Scott, a Procter & Gamble scientist, and his contributions in the fields of human and environmental toxicology, as well as his support of the Forum itself. Dr. Cohen is being recognized for his outstanding role in developing and applying the science of toxicology and risk assessment.

Dr. Cohen will also be honored in October when he will receive the Lifetime Achievement Award from the [Association for Environmental Health and Sciences](#) for his research into arsenic and cancer.

As Dr. Cohen has been at UNMC for 30 years, he has amazing insight and history of the campus featured in [UNMC News](#).

Hosting International Conferences [continued from pg 1](#)

This conference provides cutting-edge information on clinically-relevant developments including new techniques and innovative uses of existing techniques, new prognostic markers, targeted therapies, and diagnostic approaches. Our hematopathology team of Drs. Pat Auon, John Chan, Kai Fu, Tim Griener, Sam Pirruccello, and Denny Weisenburger will be part of the conference faculty. To learn more, please visit the [conference website](#) created by the UNMC Center for Continuing Education.

Also in November is the 2012 **Association of Pathology Chairs, and Pathology Department Administrators (APC/PDAS)**, Midwest and West

sectional meeting to be held in Cancun, Mexico. Dr. Steve Hinrichs is co-chair for this event which brings together chairs and department administrators to discuss realistic perspectives and challenges faced by pathology departments regarding federal funding and regulations. The conference runs from November 8-11, 2012. To learn more about this conference, please visit the [APC/PDAS West-Midwest website](#).

Lab Week [continued from pg 1](#)

Commons area. One of the activities at the luncheon was display of a living marquee Petri dish created by technologists in the Clinical Microbiology Laboratory. Although this “billboard” was produced as a group effort, the major designer was Michele Jurgensmeier with the organization and inoculation of the plate completed by Coleen Dickens. The plate was inoculated on Monday with various strains of colored bacteria and molds and allowed to “grow” over the course of laboratory week. Shown is a [video montage](#) from creation of the plate through display of the final product to honor Laboratory Professionals.

Roseland's recognitions

2012: UNMC Service Years

30 Years

Sam Cohen, M.D.,
Ph.D.
Donald Johnson,
Ph.D.

10 Years

Karen Gaser
Cynthia Lachel
Rhonda Noel-
Hurst
Kirsten Stites

25 Years

Brian Lenz
Karen Pennington

5 Years

Melissa Bradford
Debbie Headley
Connie Rosales-
Winters

20 Years

Mike Arington
John Chan, M.D. *

15 Years

Adrianna Hudson
Carolyn McKinley
Debbie Vidlak

*Denotes TNMC Service

Lisa Roseland, Office Associate I, has been recognized twice for excellence in 2012.

Lisa was one of the first recipients of a Vital Pin, which is part of the new UNMC Vital Thank "U" program at UNMC. The program recognizes employees who demonstrate UNMC's brand values of Leadership, Team, Resource and Excellence. Lisa received six Thank "U" awards from colleagues for her cooperative efforts, which earned her Teamwork Vital Pin, which was announced in [January 2012](#).

Lisa went on to be recognized for her

work accomplishments by her co-workers with a Silver 'U' award for August 2012. Her supervisor, Kathryn Dufek stated "Lisa consistently exceeds performance expectations in both accuracy and production. She is always willing to help whenever someone needs assistance. Her attitude is always positive. Lisa is the first to volunteer to take on extra projects. In summary, Lisa is a terrific employee and a wonderful person." The Silver "U" Award Program allows for the campus to honor employees whose overall performance is above and beyond the scope of their position.

Lisa joined the Department of Pathology and Microbiology in 2009. All those who have worked with Lisa know her commitment to her work, the department and UNMC, so we congratulate her on these well deserved honors.



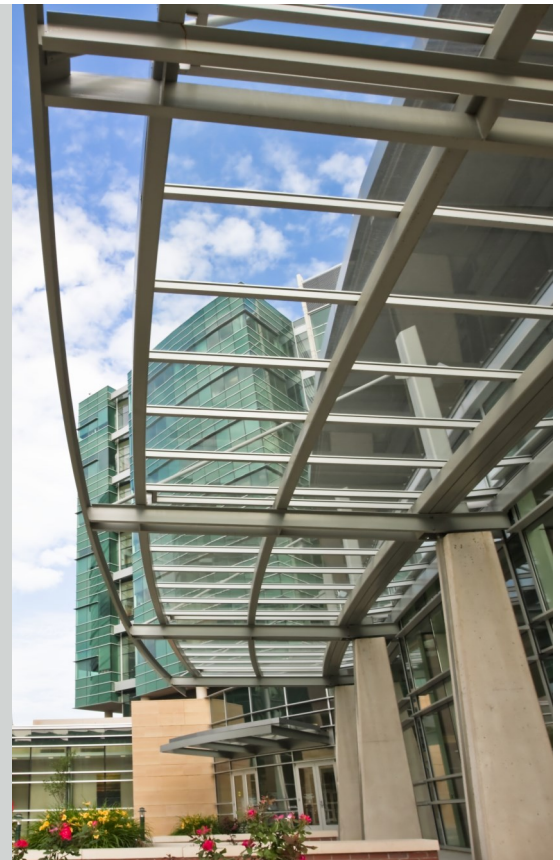
Pancreatic Cancer Research [continued from pg 4](#)

pro-tumorigenic role in inflammation-driven spontaneous tumorigenesis, angiogenesis and metastasis, and the ability to recruit myeloid bone marrow-derived cells (BMDCs) is of key importance to these activities by explore the role of CXCR2 and its ligands using xenogenic transplant models and autochthonous animal models of pancreatic cancer progression and metastasis.

They will determine the causal relationship among local CXCR2 and its ligands expression in tumor microenvironment with myeloid bone marrow-derived dendritic cell (BMDC) recruitment, angiogenesis and metastasis. Dr. Singh states, "[this] study will provide critical insight into pancreatic cancer progression and

metastasis and reveal the origin and significance of CXCR2 and its ligands. We believe that the identification of CXCR2 and associated ligands in pancreatic cancer development, progression and metastasis will allow us to develop novel CXCR2 targeting as an approach to pancreatic cancer management, thereby improving the overall outcome of patients with advanced pancreatic disease."

More can be read about this project in [UNMC Today article](#) and also in the [UNMC Discover Spring 2012](#).



TechTalk: New Department Seminar Series

The [Tissue Sciences Facility](#) has developed a new technical seminar series to assist campus technicians, students and researchers with research projects that involve histology, microscopy and/or image analysis. Future TechTalks can be found on the [department's calendar](#).

Cechin: UNMC Gold “U”

Tuire Cechin, Office Associate II, has received the Chancellor’s Commendation Gold ‘U’ Award. This award is the top campus honor that recognizes employees of the University of Nebraska Medical Center who consistently deliver outstanding performance and service to UNMC.

Tuire will be honored throughout the

month of October with a breakfast with UNMC Chancellor Harold Maurer and department administration, as well as a special citation during the University of Nebraska Board of Regents meeting. She will receive several gifts including a \$2,500 Career Development Award. We congratulate Tuire on her Gold “U”. To read more, follow this [link](#).

Hanke: UNMC Postdoctoral Pathway to Independence

Mark Hanke, Ph.D., is the inaugural honoree of the UNMC Postdoctoral Pathway to Independence Award. He received this honor at the Postdoctoral Pathway to Independence Award ceremony and

seminar on Friday, October 12, 2012. Dr. Hanke works in the laboratory of Dr. Tammy Kielian, and to read more about Mark and his research, please follow this [link](#).

UNMC’s *Discover* showcases advances made by our faculty

UNMC's *Discover* Fall 2012 issue highlights research activities of three of our faculty members.

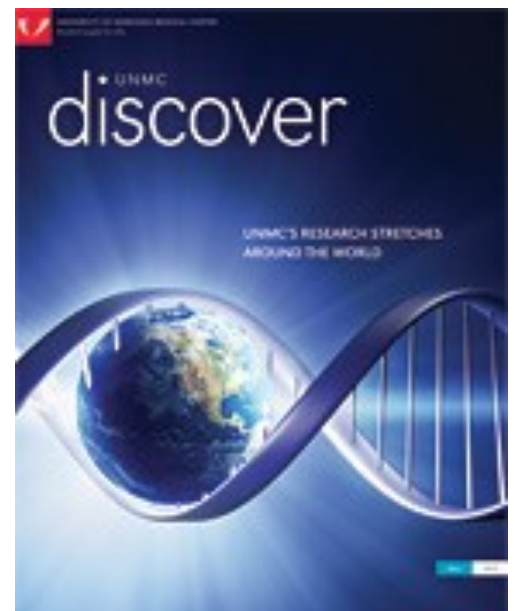
[Dr. John Chan](#) is continuing his collaboration with China with the analysis of a follicular lymphoma database to discover genetic abnormalities associated with its transformation and find molecular targets for treatment.

[Dr. Tammy Kielian](#) discusses her professional and personal involvement in Juvenile Batten disease research, specifically identifying whether aberrant glial activation contributes to neuron loss

during the childhood neurodegenerative disease.

[Dr. Tom McDonald](#) is part of a research team that developed two active ingredients, Alpha-GEE and creatine HCl, that can be now found in Vireo Resources' nutritional supplements CON-CRET and AminoActiv.

You can read more about these stories in [Discover Fall 2012 issue](#).



Kielian recognized as 2012 Emerging Inventor

During the UNeMed Innovation Awards Ceremony, Tammy Kielian, Ph.D., was honored with UNeMed's Emerging Inventor Award, along with a research grant of \$25,000. Dr. Kielian's research interests span the fields of neuroimmunology, infectious diseases, and neuroscience with a unifying theme of innate immunity. In the past ten years, Dr. Kielian's laboratory has employed a multi-disciplinary approach to investigate immune responses to the gram-positive pathogen *Staphylococcus aureus* (*S. aureus*) during abscess formation in the central nervous system (CNS) and biofilm formation in the periphery.

Recently, Dr. Kielian's research has broadened to examine mechanisms whereby *S. aureus* biofilms thwart immune-mediated clearance utilizing mouse models of catheter-associated and orthopedic-device infection, as well as a novel model of cranial bone flap infection developed in the Kielian laboratory.

A new area of research in Dr. Kielian's laboratory is focused on identifying whether aberrant glial activation contributes to neuron loss during the childhood neurodegenerative disease, Juvenile neuronal ceroid lipofuscinosis (JNCL or Juvenile Batten disease). Dr. Kielian's laboratory is aggressively pursuing therapeutics for the

prevention and treatment of device-associated biofilm infections as well as slowing the progression of Juvenile Batten Disease. This is both a personal and professional quest as [Dr. Kielian's niece was recently diagnosed with JNCL.](#)



In addition to developing therapeutics for biofilm infections and Juvenile Batten Disease, Dr. Kielian has worked with other UNMC researchers to develop a number of innovative technologies that together continue to generate significant commercial interest from companies such as Pfizer, Amgen, and Genentech.

Dr. Kielian received her B.S. in Biological Sciences from the University of Nebraska-Lincoln in 1991, a M.S. in Immunology from Kansas State University in 1994, and a Ph.D. in Microbiology from the University of Kansas in 1998. Following two and a half years of postdoctoral training and promotion to Research Assistant Professor at Dartmouth Medical School, Dr. Kielian joined the faculty of the University of Arkansas for Medical Sciences in 2001.

In July 2008, Dr. Kielian was recruited to UNMC in the Department of Pathology and Microbiology. Dr. Kielian was raised in Stanton, NE and her parents are Douglas Raetz and Charlene Geiger. She is married to Dr. Mark Kielian and has two sons, Nate and Matt, ages 10 and 8. They have and continue to be tremendous supporters of her research endeavors.

Her family were able to attend the ceremony in which Dr. Kielian was honored. It goes without saying that a successful investigator has a talented and hardworking group of people backing him/her. On that point, Dr. Kielian would like to acknowledge the dedication and loyalty of her laboratory crew.