

PATHWAYS

Department of Pathology and Microbiology News Archive for 2011



The Loss of a UNMC Legend - Dr. Harry McFadden

The Department of Pathology and Microbiology morns the death of one of their preeminent leaders, Harry W. McFadden, Jr., M.D. Dr. McFadden was a renowned pathologist, teacher and mentor, holding several key posts within UNMC and on the national level. His expertise and commitment were honored numerous times - one of which he was named as one of five Legends of UNMC.

At his memorial service, the one reverberating phrase from his colleagues, friends and family used to describe Dr. McFadden was he was a "true gentleman".



To learn more about his wonderful life and career, please read this <u>UNMC</u>

Today article or the <u>Omaha World-Herald story</u>. Memorials can be made to the <u>UNMC Foundation</u> or the <u>Nebraska Methodist Hospital Foundation</u>.

2011 Distinguished Scientists

Three faculty members from the Department of Pathology and Microbiology were honored during UNMC's Distinguished Scientist Award Ceremony on May 2, 2011. Overall, twenty-four UNMC researchers were recognized, including a Scientist Laureate and New Investigator recipients.

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Dr. McDonald receives Gates Foundation grant

<u>Dr. Thomas McDonald</u>, professor, receives \$100,000 in funding through the <u>Grand Challenges Exploration</u>, an initiative created by the <u>Bill and Melinda Gates Foundation</u>.

Dr. McDonald's research is aimed at reducing infectious diarrheal diseases, a major cause of infant mortality. To learn more about this project, please read this UNMC Today article.

Building US-China Research Relations



Faculty from the Department of Pathology and Microbiology are involved in building lasting relations between UNMC and Chinese institutions in the promotion of healthcare, education and research. Over the last year, Drs. John Chan, Kai Fu, Ken Bayles and Steve Hinrichs have been part of UNMC delegations to foster continual and innovative partnerships with China.

UNMC in China - joint research symposium broadens collaboration

Drs. John Chan and Ken Bayles were in China to participate in the 2011 Annual Symposium of the China-US Research Center for Life Sciences on Cancer and Stem Cells. Their efforts will help UNMC to foster relationships with China's health care professionals and institutions.

Lymphoma partnership helps Chinese patients

Dr. Kai Fu discusses the success and future of the first lymphoma center established between the U.S. and China. The center has allowed both groups to study the pathogenesis and biology of lymphomas that are uncommon in the United States, but common in China, greatly improving lymphoma research on an international level. One can look back at the progress this collaboration has made since 2009, which was originally featured in UNMC News.

Out of Many, ONE

We are beginning to have greater clarity on the challenges and opportunities arising from the health care reform legislation. There should be no surprise that medicine collectively and laboratory sciences specifically will have to reduce costs and improve our ability to demonstrate the quality of our work. We are proceeding with the expectation to reduce costs five percent a year for each of the next three years. We are fortunate that our institution and our department are financially strong and that we are equipped to deal with challenges of this nature.

While many of those phrases sound like business language, we must remember that our business is different from others in certain respects. We serve to improve the health of people and in most situations at our institution, our clients have diseases that are life threatening,

defenses are down, family dynamics are stressed and tension is high. Not only do our laboratory services contribute to the majority of medical decisions, our research creates new therapies and diagnostic approaches to improve health care and our educational programs equip the next generation to accomplish what we do not.

It is part of our nature to not only constantly improve, but also to drive the improvement process. Therefore, the effort to document quality and improve outcomes from efforts made by our department and institution should not deter anyone from happily carrying out their duties and pursuing our common goals and mission. We are a very diverse group of people with outstanding talents in the complex fields of pathology, microbiology and immunology.

Given our resources and capabilities, we will succeed. While "Carpe Diem" captures the thought for addressing our medical opportunities, we must also keep in mind the phrase originated during one of our country's most challenging times: "E Pluribus Unum".

- Dr. Steven H. Hinrichs, Chair

2011 Distinguished Scientists

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John Chan, M.D., professor and Amelia and Austin Vickery Professor of Pathology, who is a two-time recipient, Sam Cohen, M.D., Ph.D., professor and Havlik-Wall Professor of Oncology, and Paul Fey, Ph.D., associate professor, received UNMC Distinguished Scientist Awards for their outstanding research achievement and sustained contributions to UNMC's research mission. To learn more about these individuals, please see the following UNMC Today articles.



Meet UNMC
Distinguished Scientist
Wing-Chung (John)
Chan, M.D.

Meet UNMC
Distinguished Scientist
Samuel Cohen, M.D.,
Ph.D.

Meet UNMC
Distinguished Scientist
Paul Fey, Ph.D.

Faculty recognized in 2011 UNMC Innovation Awards

Nine faculty members from the department of pathology and microbiology were recognized as New Invention Notification (NIN) Contributors at the 2011 UNMC Innovation Awards ceremony.

- Oluwatoyin Aosjo, Ph.D.
- Kenneth Bayes, Ph.D.
- Wing C. (John) Chan, M.D.
- Shi-Jian Ding, Ph.D.
- Timothy Greiner, M.D.
- Steven Hinrichs, M.D.
- Tammy Kielian, Ph.D., for multiple NINs submitted
- James Talmadge, Ph.D.
- Geoffrey Talmon, M.D.

On October 13th, 2011, UneMed hosted this event honoring individuals for new

inventions, patents, and licensed technologies at UNMC.

At the ceremony, Dr. Bayles was also acknowledged as an Inventor with Issued Patents – "Methods for altering acetic acid production and enhancing cell death in bacteria" (US Patent No. 7,842,479, issued November 30, 2010).

We congratulate our faculty, who are dedicated to the translation of innovative research into commercially viable processes and therapies to improve the public health for Nebraskans and the world.

Infection Control Awards

Dr. Pete Iwen and Tony Sambol received the 2011 Distinguished Service Award from the Nebraska Infection Control Network. The NICN consists of several state agencies that provide educational and training programs to professionals in efforts to improve healthcare Nebraskans through the prevention and control of infectious diseases. Both Pete and Tony have been involved with NICN activities across Nebraska.

Development of Next Generation Sequencing for Lymphoma

Denny Weisenburger, M.D., and John Chan, M.D., are amongst a team of international researchers who have recently published a paper in Nature about mutations that are important in the development of a substantial number of human lymphomas.

Their findings could improve diagnosis and treatment for patients who have the activated B-cell-like (ABC) subtype of diffuse large B-cell lymphoma (DLBCL), the common form of lymphoma. Despite recent advances in therapy, patients with ABC DLBCL achieve less than a 40% cure rate. These mutations affect MYD88, an adaptor protein that is an essential component of a signaling pathway essential for cell survival. MYD88 is abnormally activated by these mutations and

promotes the survival of ABC DLBCL. Using this genetic marker, our hematopathologists can identify those tumors dependent upon MYD88 signaling and in turn, oncologists can better treat patients who may benefit from therapies targeting various components of the pathways activated by the abnormal MYD88 such as agents targeting Bcell receptor signaling, NF-kB, or JAK -STAT3 pathways.

To read the Nature article, please see the following: Oncogenically active MYD88 mutations in human lymphoma. Nature. 2011 Feb 3;470 (7332):115-9. PMID: 21179087

LYMPHOMA RESEARCH AT UNMC

To learn more about other important mutations and the exciting potential of next generation sequencing for lymphoma research, please see the following articles.

Chronic active B-cell receptor signaling in diffuse large B-Cell lymphoma. Nature. 2010 463: 88-92. PMID: 20054396

Genomic analyses reveal global functional alterations that promote tumor growth and novel tumor suppressor genes in natural killer cell malignancies. Leukemia. 2009; 23: 1139-51. PMID: 19194464

Oncogenic CARD11 mutations in human diffuse large B cell lymphoma. Science. 2008; 319(5870): 1676-9. PMID: 18323416

Nebraska Public Health Laboratory (NPHL) at UNMC hosted the 2011 Association of Public Laboratories (APHL) Annual Meeting and Fifth State Environmental Laboratory Conference at the Qwest Center in Omaha, NE from June 5-8, 2011.

Laboratory participants from all 50 states as well as other individuals from the public health community attended to discuss a wide array of issues at the local, national and global levels. The agenda includes topics on emerging infectious diseases. emergency preparedness, informatics, food safety, and newborn screening. Distinguished speakers from the Centers for Disease Control (CDC), Environmental Protection Agency (EPA) and Food and Administration (FDA) were included in the program.

"Hosting this event in Omaha is an honor and recognition of our involvement in the national and international activities of APHL," said Dr. Steven Hinrichs. "We are fortunate not only to have this organization choose Omaha for its national meeting, but to have the opportunity to showcase the NPHL."

NPHL provides services to the state of Nebraska Department of Health and Human Services (NE-DHHS). To learn more about NPHL, please visit their website.





DR. BAYLES NAMED FIRST ASSOCIATE VICE CHANCELLOR FOR BASIC SCIENCE RESEARCH

HONORS & AWARDS

Staph Team shows team spirit at UNMC

Congratulations to Team Staph (Debbie Vidlak, Monica Holley, and Richa Hanamsager) from the Department of Pathology and Microbiology for winning fourth place in the campus scavenger hunt during this year's UNMC Spirit Week. See the fun photos.

Monica, Debbie and Richa— Team Staph

Richa from Team Staph finds a clue at the skating rink

Bringing Home the Silver

For their outstanding work and contributions to the department, Kara Brown, Office Associate II, and Anna Kunkel, Office Associate I, received UNMC's Silver "U" award in December 2010 and January 2011, respectively. Jeff Annin, our ITS specialist, was also awarded a Silver "U" in December 2011.

The Silver "U" Award program allows for the campus to honor employees whose overall performance is above and beyond the scope of their position.

2011: UNMC Service Years

30 Years

Sandra Irons

10 Years

Dana El-Hajjar Anita Jennings

5 Years

James Akers
Amy Aldrich
Amanda Bartling
Kathy Perrett
Kim Rothgeb
Laurie Wieting