

## UCSD Cancer Researcher Richard D. Kolodner Honored with Landon-AACR Prize for Basic Cancer Research

March 22, 2007 |

**S**cientists whose discoveries have led to fundamental advances in the science and treatment of cancer are the recipients of two prestigious international prizes offered by the Kirk A. and Dorothy P. Landon Foundation and the American Association for Cancer Research. The Kirk A. Landon-AACR Prize for Basic Cancer Research and Dorothy P. Landon-AACR Prize for Translational Cancer Research are the largest such awards offered to cancer researchers from a professional society of their peers. The recipients for each prize receive an unrestricted cash award of \$200,000 and present a scientific lecture at the AACR Annual Meeting, held this year from April 14-18 in Los Angeles, California.

### **The Kirk A. Landon-AACR Prize for Basic Cancer Research**

This year's winner of the Kirk A. Landon-AACR Prize for Basic Cancer Research is Richard D. Kolodner, Ph.D., member of the Ludwig Institute for Cancer Research, and professor of medicine and member of the Moores Cancer Center at the University of California, San Diego School of Medicine. Kolodner is recognized for his fundamental discoveries in the field of DNA mismatch repair and its connection to human cancer.

"I am deeply honored to have been selected as the recipient



Richard D. Kolodner, Ph.D.

of this year's Landon Prize in Basic Cancer Research, and am pleased that this year's award recognizes how basic research can make important contributions to understanding the causes of cancer and advancing cancer diagnosis," Kolodner said.

"DNA mismatch repair has proven to be a fundamental concept in cancer genetics and we are proud to honor Richard Kolodner for his work," said Margaret Foti, Ph.D., M.D. (h.c.), AACR's chief executive officer. "The ingenuity and resourcefulness that led to Dr. Kolodner's discoveries strongly represents the spirit with which the Kirk A. Landon-AACR Prize for Cancer Research is given."

Kolodner's major contribution to cancer biology has been in defining the molecular mechanisms of DNA mismatch repair, the ability of cells to repair genetic errors that could disrupt the stability of DNA. His work has demonstrated how inherited defects in mismatch repair are directly linked to human cancer. Kolodner was the first to tackle the study of mismatch repair through a creative combination of bacteria/yeast genetics and biochemistry, along with human genomic approaches. He is a pioneer in using the power of yeast genetics to uncover multiple genes and the interactions between them that keep the genome stable, and he has continued to make fundamental contributions to this field through the combination of genetics and biochemistry.

"Richard Kolodner has played a seminal role in our understanding of cancer genetics and pioneered many of the techniques that have become standard tools in cancer research," said Inder M. Verma, Ph.D., professor of biology at University of California, San Diego, faculty at the Salk Institute for Biological Sciences, and chair of the committee that selected Kolodner for the Landon Award.

"Kolodner's research has provided the research community with the tools and knowledge it needs to progress in the fight against cancer," Verma said. "His discovery of the role of faulty mismatch repair in hereditary nonpolyposis colorectal cancer, for example, has directly led to the use of genetic screening for the disease."

Kolodner has served on numerous advisory and review boards including the National Cancer Institute Board of Scientific Councilors and presently serves on the Howard Hughes Medical Institute Scientific Review Board. Kolodner has received numerous honors and awards, including most recently: a National Institutes of Health MERIT Award; the Charles S. Mott Prize from the General Motors Cancer Research Foundation; the Mutation Research Award for Scientific Excellence; the Ernst W. Bernter Award from the M.D. Anderson Cancer Center; election to the National Academy of Sciences (USA); and the Katharine Berkan Judd Award from the Memorial Sloan-Kettering Cancer Center.

### **The Dorothy P. Landon-AACR Prize for Translational Cancer Research**

This year's Dorothy P. Landon-AACR Prize for Translational Cancer Research is awarded to National Cancer Institute researchers Douglas R. Lowy, M.D., and John T. Schiller, Ph.D., for research leading to the development of the human papillomavirus vaccine. Lowy is chief of NCI's Laboratory of Cellular Oncology and head of NCI's Signaling and Oncogenesis Section. Schiller is senior investigator in NCI's Laboratory of Cellular Oncology and head of NCI's Neoplastic Disease Section.

Lowy and Schiller played an integral role in the development of the human papillomavirus vaccine against cervical cancer, performing fundamental research regarding the nature of the virus, animal studies, and a Phase I trial in humans. It was their demonstration that subunits of the outer shell of the HPV, the capsid proteins, were capable of inducing antibodies, which meant the capsid proteins could be used as both a serological test and a vaccine against HPV infection. Their ongoing research directly led to the first HPV vaccine, approved by the FDA in 2006, which has the potential to drastically reduce the incidence of cervical cancer.

The Landon/AACR Prizes in Cancer Research were launched in the summer of 2002 to promote and reward seminal contributions to our understanding of cancer through basic and translational cancer research. These distinguished scientific prizes are designed to bring heightened public attention to landmark achievements in the continuing effort to prevent and cure cancer through quality research.

# # #

Media Contact: Nancy Stringer, 619-543-6163, [nstringer@ucsd.edu](mailto:nstringer@ucsd.edu)

Greg Lester, AACR, 267-646-0554, [lester@aacr.org](mailto:lester@aacr.org)

---

## Related Specialties

[UCSD Moores Cancer Center](#) 

---

## Share This Article



---

## Related News

[UC San Diego Health Begins Treating Multiple Myeloma with CAR T-cell Therapy](#)  
6/3/2021

[Social Justice as Part of the Remedy for What Ails Us](#)  
6/3/2021

[Diet Plays Critical Role in NASH Progressing to Liver Cancer in Mouse Model](#)  
6/1/2021

[Noted Researcher and Scientific Leader Jack E. Dixon Retires](#)  
5/27/2021

[View All News >](#)

---

## Follow Us

 [Follow @ucsdhealth](#)

