

## **Kunkel elected to American Academy of Arts and Sciences**

*By Eddy Ball*

This fall, NIH distinguished lead researcher Thomas Kunkel, Ph.D., will join fellow members in the 2014 class of the [American Academy of Arts and Sciences](https://www.amacad.org/default.aspx), (<https://www.amacad.org/default.aspx>) at an induction ceremony Oct. 10-11 in Cambridge, Massachusetts.

Kunkel is one of seven new members of the group's Cellular and Developmental Biology, Microbiology, and Immunology Section. At NIEHS, he joins the late Scientific Director and Nobel Laureate Martin Rodbell, Ph.D., who became a member in 1993.

In their award letter to Kunkel, Chair of the Board Don Randel, Ph.D., and Chair of the Academy Council Diane Wood, J.D., congratulated Kunkel on his election. "This award signifies the high regard in which you are held by leaders in your field and members throughout the nation."

### **Linked Video**

#### **[Watch as Kunkel describes his research at NIEHS \(03:32\)](#)**

"This honor is truly a milestone in Tom's outstanding career," said NIEHS and NTP Director Linda Birnbaum, Ph.D. "It also says a great deal about the quality of scientific research at NIEHS, and I think it's more than fair to say that we all feel privileged to be his colleagues."

### **A driving force in molecular genetics and structural biology**

Kunkel leads the [DNA Replication Fidelity Group](#) within the Laboratory of Structural Biology (LSB) and Laboratory of Molecular Genetics. During his 16-year tenure as the head of LSB, Kunkel oversaw the lab as it grew to include resource facilities to help provide further insight into how environmental exposures impact human health. LSB uses an integrated approach to investigate macromolecular structures at the atomic level, by combining biochemical and genetic approaches in conjunction with the lab's core research facilities.

Kunkel came to NIEHS in 1982. Over his more than three decades of research on DNA replication, he has published nearly 340 papers in peer-reviewed journals, mentored an impressive group of accomplished scientists, and received a number of prestigious awards for his research. He has also served on several committees, including the Tenure Track Advisory Committee.

In addition to honors from professional organizations, Kunkel was selected as NIEHS Scientist

### **Cultivating every art and science**

Members elected to the Academy are a select group of today's innovative thinkers in every field and profession, including more than 250 Nobel and Pulitzer Prize winners. Founded in 1780 by John Adams and James Bowdoin, the Academy's list of members reads like a Who's Who of American and world history. They range from Benjamin Franklin, Thomas Jefferson, and Charles Darwin to John Kennedy, Jonas Salk, and Nelson Mandela.

Kunkel is among a small group of current NIH researchers honored by election to the Academy and one of just three elected this year.

Other contemporary members include Duke University Nobel Laureate Robert Lefkowitz, M.D., Sir Paul McCartney, and Hillary Rodham Clinton. NIEHS grantee Michael Kasten, M.D., Ph.D., executive director of the Duke Cancer Center, is also a part of the class of 2014.

of the Year in 2005, and won Paper of the Year in 2004, 2007, 2008, and 2009. When the NIH celebrated scientific discoveries made at the NIH over the previous two decades, among the 20 most cited papers by NIH investigators were two authored by him. Papers from Kunkel's group are routinely recognized as NIEHS papers of the month and papers of the year by the NIEHS Office of the Scientific Director.

Among Kunkel's many honors include his selection as chair of several Gordon Research Conferences, an Environmental Mutagen Society Award for Basic Research, and the Mutation Research Award. He received an honorary doctoral degree from Umea University in 2007 for his identification of the DNA polymerase that replicates the leading strand of the eukaryotic nuclear genome.

In 2011, Kunkel was promoted to the rank of Distinguished Investigator, one of the highest honors the NIH awards to its scientists and one that only an estimated two to three percent of NIH scientists ever achieve during their careers (see [story](#)). He has developed several novel experimental approaches for investigating DNA replication and is considered one of the world's leading experts in the field.



*In addition to his accomplishments as a scientist, Kunkel has been a respected mentor of trainees over a career at NIEHS spanning 32 years. Under his leadership, LSB became one of the first labs implementing the dual mentoring program, to help postdoctoral fellows become more competitive in a changing job market. (Photo courtesy of Steve McCaw)*



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