WASHINGTON, D.C. — The American Association for Cancer Research (AACR) will recognize Roger S. Lo, M.D., Ph.D., of the University of California, Los Angeles (UCLA), with the 33rd Annual AACR Award for Outstanding Achievement in Cancer Research at the AACR Annual Meeting 2013, held in Washington, D.C., April 6-10.

Lo is assistant professor in the department of medicine, division of dermatology at the David Geffen School of Medicine at UCLA, with a joint appointment in the department of medical and molecular pharmacology, and a member of the Signal Transduction and Therapeutic Program at UCLA’s Jonsson Comprehensive Cancer Center.

Lo’s lecture, “How Melanoma Escapes From BRAF Inhibition,” will take place at 4 p.m. ET on Tuesday, April 9, in Ballroom C in the Walter E. Washington Convention Center.

“I am extremely honored to be recognized by the AACR and by this particular award, especially given the notable figures in cancer research who have previously received this award,” said Lo. “I accept it on behalf of my research team at UCLA and my collaborators and mentors. The support I have received from my family and wife has been absolutely critical. This award also acknowledges the sacrifices made by cancer patients in the search for greater knowledge.”

Since 1979, the AACR Award for Outstanding Achievement in Cancer Research has honored an investigator younger than 40 to recognize his or her meritorious achievements within the field of cancer research. Award recipients are nominated by their peers and are selected by the AACR International Selection Committee. Final determination is then made by the AACR’s Executive Committee.

Lo is being recognized for his seminal contributions to the understanding of how cancers escape from molecularly targeted therapies known as BRAF inhibitors. His research into how BRAF-mutant melanomas, which account for more than half of all cases of melanoma, adapt to BRAF inhibition is directly applicable to patient cancer: It has accelerated the clinical development of combination therapies designed to prevent this occurring and may be relevant to other cancers in addition to melanoma.
In 2008, after observing the striking first responses of patients with BRAF-mutant melanoma to the BRAF inhibitor vemurafenib, Lo began to work on understanding acquired resistance to BRAF inhibitor-based therapy before any patient had even relapsed. In addition to uncovering several molecular mechanisms by which BRAF-mutant melanomas escape the anticancer effects of BRAF inhibitors such as vemurafenib, he helped determine why the development of nonmelanoma squamous cell carcinoma is a side effect of these therapies.

Lo found that one of the most frequent ways in which melanomas become resistant to BRAF inhibitors is that they reactivate the MAPK signaling pathway and that MAPK pathway activation is commonly responsible for the development of nonmelanoma squamous cell carcinoma in patients being treated with BRAF inhibitors. These data provided the major scientific rationale for using a BRAF inhibitor in combination with an inhibitor of the MAPK pathway component MEK. Three phase III trials testing the combination of a BRAF inhibitor and a MEK inhibitor in patients with BRAF-mutant melanoma are currently under way. This combination therapy also appears to reduce the adverse events associated with treatment with just a BRAF inhibitor.

A second pathway Lo identified as responsible for melanomas escaping monotherapy with a BRAF inhibitor suggested that combining a BRAF inhibitor with either a PI3K inhibitor or an AKT inhibitor could be clinically effective. A clinical trial testing this idea using the BRAF inhibitor dabrafenib in combination with an AKT inhibitor has been designed and is in the early stages of implementation.

Lo received his medical degree from Cornell University Medical College in New York, N.Y., and his doctorate from the tri-institutional program at Cornell University Medical College, Rockefeller University and the Sloan-Kettering Institute. He completed an internship in medicine and a residency in dermatology at UCLA. Lo is also a Stand Up To Cancer 2011 Innovative Research Grant awardee and has been elected to the American Society for Clinical Investigation.

Press registration for the AACR Annual Meeting 2013 is free to qualified journalists and public information officers: www.aacr.org/PressRegistration.

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About the American Association for Cancer Research
Founded in 1907, the American Association for Cancer Research (AACR) is the world’s first and largest professional organization dedicated to advancing cancer research and its mission to prevent and cure cancer. AACR membership includes more than 34,000 laboratory, translational and clinical researchers; population scientists; other health care professionals; and cancer advocates residing in more than 90 countries. The AACR marshals the full spectrum of expertise of the cancer community to accelerate progress in the prevention, biology, diagnosis and treatment of cancer by annually convening more than 20 conferences and educational workshops, the largest of which is the AACR Annual Meeting with more than 17,000 attendees.
In addition, the AACR publishes eight peer-reviewed scientific journals and a magazine for cancer survivors, patients and their caregivers. The AACR funds meritorious research directly as well as in cooperation with numerous cancer organizations. As the scientific partner of Stand Up To Cancer, the AACR provides expert peer review, grants administration and scientific oversight of team science and individual grants in cancer research that have the potential for near-term patient benefit. The AACR actively communicates with legislators and policymakers about the value of cancer research and related biomedical science in saving lives from cancer. For more information about the AACR, visit www.AACR.org.