



Michael E. Phelps, Ph.D.

Norton Simon Professor;
Chair, Department of Molecular and Medical Pharmacology;
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**Focus of WMIC 2014 Plenary Talk:
PET: Time to go back to basics**

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Dr. Phelps is Norton Simon Professor; Chair, Department of Molecular and Medical Pharmacology; Director, Crump Institute for Molecular Imaging at UCLA.

Phelps earned B.S. degrees in chemistry and mathematics and a Ph.D. in chemistry. He invented the Positron Emission Tomography (PET) scanner with Edward Hoffman, the microPET scanner with Simon Cherry, a table-top PET scanner, Genisys, with Arion Chatziioannou and the EWOD microfluidic chip for synthesizing PET probes with Michael van Dam and CJ Kim.

With UCLA colleagues and students, Phelps developed in vivo PET assays ranging from metabolism, gene expression and DNA synthesis to enzyme and receptor assays, pharmacokinetics and pharmacodynamics. He has used these assays to study normal biological processes, the biological basis of cancer, neurological disorders, autoimmune-diseases and pharmacology of drug interactions and their translation to molecular imaging diagnostics in clinical research and patient care

At UCLA Phelps founded the Department of Molecular & Medical Pharmacology that includes PET/CT and nuclear medicine clinical services to integrate the biology of disease, in vivo and in vitro molecular diagnostics and molecular & cellular therapeutics, the Institute for Molecular Medicine and the Crump Institute for Molecular Imaging.

He has published 710 peer-reviewed articles, 120 book chapters and seven textbooks. Awards include the George von Hevesy Prize, chaired the 1983 Nobel Symposium, Stockholm; Enrico Fermi Presidential Award (President Clinton); Kettering Prize, General Motors Cancer Research Foundation; Keynote Address, 2007 Nobel Symposium, Stockholm, 2012 Gold Medal Award, WMIC and 2014 Gold Medal Award, American Roentgen Ray Society. Phelps is member of the National Academy of Sciences and Institute of Medicine. He is Board Chair, Norton Simon Foundation, and Board Member, Norton Simon Art Foundation.

Phelps was one of the three founders and member of the Board of Directors of CTI that was acquired by Siemens in 2005 and is a founder and Board Chair of Sofie Biosciences.