Sung-Hou Kim (082015)

Appointments

Professor of Graduate Studies, Department of Chemistry, University of California, Berkeley, CA (2010 – present)
Professor Emeritus, Department of Chemistry, University of California, Berkeley, CA (2010 – present)
Distinguished Professor, Department of Biomedical Sciences, WCU Program, Yonsei University Graduate School, Seoul, Korea (2010 – 2013)
Director, Berkeley Structural Genomics Center, Lawrence Berkeley National Laboratory, Berkeley, CA (2000-2008)
Head, Structural Biology Department, Physical Biosciences Division of Lawrence Berkeley National Laboratory, University of California, Berkeley, CA (1997- 2007)
Director, Laboratory of Chemical Biodynamics (Melvin Calvin Laboratory), University of California, Berkeley, CA (1989- 2007)
Director, Structural Biology Division, Lawrence Berkeley National Laboratory, Berkeley, CA (1989-1997)
Faculty Senior Scientist, Structural Biology Division, Lawrence Berkeley Laboratory, University of California, Berkeley, CA (1979-)
Professor, Department of Chemistry, University of California, Berkeley, CA (1978-)
Associate Professor, Department of Biochemistry, Duke University School of Medicine, Durham, NC (1974-1978)
Assistant Professor, Department of Biochemistry, Duke University School of Medicine, Durham, NC (1972-1973)
Senior Research Scientist, Department of Biology, Massachusetts Institute of Technology, Cambridge, MA (1970-1972)
Research Associate, Department of Biology, Massachusetts Institute of Technology, Cambridge, MA (1966-1970)
Research Assistant, Departments of Chemistry and Crystallography, University of Pittsburgh, Pittsburgh, PA (1963-1966)
Lecturer, Department of Chemistry, Kun-Kook University, Seoul, Korea (1960-1962)
Teaching Assistant, Department of Chemistry, Seoul National University, Seoul, Korea (1960-1962)

Education and Research Training

B.S. Chemistry, Seoul National University, Seoul, Korea (1960)
M.S. Physical Chemistry, Seoul National University, Seoul, Korea (1962)
Ph.D. Physical Chemistry, Department of Chemistry and Department of Crystallography, University of Pittsburgh, Pittsburgh, PA (1966): X-ray crystallographic studies on carbohydrate compounds in Prof. G. A. Jeffrey's laboratory
Postdoctoral Fellow, Research Associate, Biophysics, Department of Biology, Massachusetts Institute of Technology, Cambridge, MA (1966-1970): X-ray crystallographic studies on transfer RNA, abnormal base-pairs, and base-mutagen complexes in Prof. Alex Rich's laboratory

Website: http://chem.berkeley.edu/faculty/kim/index.html (update needed)

Awards and Honors (selected)

Fulbright Fellow, Fulbright Foundation, U.S.A. (1962)
Sidhu Award, Pittsburgh Diffraction Conference (1970)
NIH Research Career Development Award (1976-1979)
Exchange Professor, Beijing University, Beijing, China (1982)

Miller Research Professor, University of California, Berkeley, CA (1983-1984)
Presidential Service Merit Award, Republic of Korea (1985)
Guggenheim Fellow, J.S. Guggenheim Foundation, New York (1985-86)
Visiting Professor, University of Paris, Paris, France (1986)
Fellow, Foundation for Promotion of Cancer Research, National Cancer Center, Tokyo, Japan (1987)
Ernest O. Lawrence Award, United States Department of Energy (1987)
Princess Takamatsu Award, Princess Takamatsu Cancer Foundation, Tokyo, Japan (1989)
The First Korean Overseas Compatriot's Prize in Science, Korean Broadcasting System, Seoul, Korea (1993)
The Ho-Am Prize in Science, Samsung Foundation, Seoul, Korea (1994)
Fellow, The American Academy of Arts and Sciences (1994)
Member, The U.S. National Academy of Sciences (1994)
Fellow, The Korean Academy of Science and Technology (1995)
Miller Research Professor, University of California, Berkeley (1996)
Founding Fellow, Korean Association for the Advancement of Sciences (1998)
First KAST Prize in Science, Korea Academy of Science and Technology (KAST), Seoul, Korea (2000)
Outstanding Korean Medical Scientist Award, Korean Medical Association, Seoul, Korea (2002)
Outstanding Performance Award, Lawrence Berkeley National Laboratory, Berkeley, CA (2004)
Honorary member of the National Academy of Sciences of Republic of Korea (2004)
Legacy Laureate Award, University of Pittsburgh, Pittsburgh, PA (2005)
The Pride of Alumni Award, 60-th Anniversary of Seoul National Univ., Seoul, Korea (2006)
Department of Chemistry Alumni Award, Univ. of Pittsburgh, Pittsburgh, PA (2008)
KASBP Achievement Award, Korean American Society in Biotech and Pharmaceuticals (2011)
Distinguished Lecture Award, New England Bioscience Society, Boston, MA (2012)
The 225th Anniversary Medallion of the founding of University of Pittsburgh, awarded by the Chancellor of Univ. of Pittsburgh, Pittsburgh, PA, (2014)
Alexander Rich Medal, Department of Biology, Massachusetts Institute of Technology, Cambridge, MA (2014)

Professional Organizations

American Society for Biochemistry and Molecular Biology
American Chemical Society
Biophysical Society
American Crystallographic Association
American Association for the Advancement of Science
Korean Scientists and Engineers in America
The Protein Society

Public Services and Advisory Appointments

National Institute of Health Public Advisory Group Member, Biophysics and Biophysical Chemistry, Study Section A (1976-1980)
Editorial Board Member, *Journal of Biological Chemistry* (1979-1983)
Editorial Board Member, *Nucleic Acid Research* (1983-1986)
Co-Chairman, Nucleic Acids Gordon Research Conference (1983)
Scientific Planning Committee, National Foundation for Cancer Research (1983- ?)
Chairman, Task Force for Crystallography Curriculum Planning Committee, U.S.A. National Committee for Crystallography (1983-1985)
Member, Board of Directors, Korean Community Center of the East Bay, Oakland, CA (1983-1991)

Council Member, Korean Scientists and Engineers Association in America (1988-1991)
Editorial Board Member, *Annual Review of Biophysics and Biomolecular Structure* (1989-1993)
Editorial Board Member, *Current Opinion in Biotechnology* (1988-)
Chairman, Advisory Committee, Center for Korean Studies, Institute of East Asian Studies, UC Berkeley (1989-1997)
National Institute of Health Public Advisory Group Member, Molecular and Cellular Biophysics Study Section (1989-1990)
Co-Chairman, Gordon Research Conference, Diffraction Method in Molecular Biology (1990)
Member, U.S. National Committee for Crystallography, National Research Council, National Academy of Sciences (1990-1991)
Editorial Board Member, *Nucleic Acids Research* (1992-1997)
Steering Committee, Structural Biology Synchrotron Users Organization (1992- 1996)
Scientific Advisory Committee of the Cancer Research Fund of the Damon Runyon-Walter Winchell Foundation (1993-1994)
Advisory Board, *Molecules and Cells*, Seoul, Korea (1993-)
Advisory Committee Member, National Science Foundation of Korea (1993-)
Board of Scientific Councilors, National Center for Biotechnology Information, National Institutes of Health (1993-1994)
Advisory Director, Structural Biology Center, Korea Institute of Science and Technology (1994-2001)
Scientific Review Board, Howard Hughes Medical Institute (1995-1999)
Editorial Board Member, *Nucleic Acid Sciences* (1996-)
Member, Board of Directors, Korean Academy of Science and Technology (1998-1997)
Member, Nominating Committee for Foreign Academy Members, U.S. National Academy of Sciences (1998-2010)
Charter Member, Protein Data Bank Advisory Board, Protein Data Bank (2000-2005)
Associate Editor, Journal of Structural and Functional Genomics (1999-2005)
Member, Editorial Board, Journal of Bacteriology (2001-2002)
Member, Editorial Board, Journal of Applied and Environmental Microbiology (2001-2002)
Member, Board of Directors, Korean Human Proteome Organization (2001-)
Member, Protein Research Group Research Review Committee, RIKEN, Japan (2001-2003)
Member, Executive Committee, Center for Korean Studies, Univ. of California, Berkeley (2001-2005)
Member, International Advisory Committee, Northwest Structural Genomics Center, UK (2002-2004)
Presidential Advisory Professor, Yonsei University, Seoul, Korea (2004 - 2008)
Member, Advisory Editorial Board, Molecular Systems Biology, EMBO (2004 -)
Member, The Prime Minister's Committee on the Advancement of Medical Industry, Korea (2005 - 2008)
Scientific Advisor, Steering Committee, The Protein Structure Initiative II, U.S. National Institutes of Health (2006 -)
Member, Scientific Advisory Board, Center for structures of membrane proteins, Univ. of California, San Francisco, San Francisco, CA (2006 – 2007)
Member, the Advisory Board, Korean National Cancer Center, Seoul, Korea (2006 -)
Advisor and Visiting Distinguished Scientist, Daegu Gyeongbuk Institute of Science and Technology, Daegu, Korea (2007 -2009)
Distinguished Professor, Department of Biomedical Sciences, WCU Program, Yonsei University Graduate School, Seoul, Korea (2010 – 2014)
Member, Special Advisory Board for the Advanced Pharmaceuticals, Korea Food and Drug Administration, Korea (2011 – 2014)

Member, Special Advisory Board for the Advanced Biopharmaceuticals, the Ministry of Food and Drug Safety, Korea (2015 – present)
Distinguished KAIST Visiting Professor, Korean Advanced Institute of Science and Technology, Daejon, Korea (one month each of 2015, 2016)

Reviewer for several scientific journals

Founding Member of Companies

Serra Pharmacuticals, Inc. (Drug discovery) San Francisco CA (1990)
Seren Agricorp/United Agricorp, Inc. (Improved agricultural products), Berkeley, CA (1993)
Crystalgenomics, Inc. (Drug discovery), Daejon, Korea (1999)
Plexxikon, Inc. (Drug discovery), Berkeley, CA (2001)

Consultant or Scientific Advisory Board Member to

Lucky Biotech Co., Emeryville CA (Currently LG Chemical Ltd., Daejon, Korea); 1985-1995
G.D. Searle, Skokie, IL ; 1983? - 1985?
Nutrasweet Co. Skokie, IL ;1985?-1987
Merck Sharp and Dohme Research Laboratories, West Point, PA,; 1987-1990
Hoffman-LaRoche Inc., Nutley, NJ, as "Consulting Lecturer"; 1988-1989
Hitachi Software Engineering Co., Ltd, Yokohama, Japan; 1988-1989
Burroughs Wellcome Co., Research Triangle Park, NC, as "Consulting Lecturer"; 1989-1990
Serra Pharmaceuticals, San Francisco, CA (Acquired by KaroBio of Sweden); 1992-1996
Asahi Chemical Industries, Ltd., Shizuoka, Japan; 1994-1997
Chungam Biotech Research Center, Seoul, Korea; 1995-1996
Kumho Group, Seoul, Korea; 1995-1998
LG Chemical Ltd., Taejon, Korea; 1996-1998;1998-2000
CV Therapeutics Inc., Palo Alto, CA; 1994-1999
Sugen , Inc., South San Francisco, CA; 1997-1999
Scios, Inc., Mountain View, CA, Consultant; 1998-2000
Procter and Gamble Pharmaceuticals, Inc., Maso, OH; 1998-1999
Iconix Pharmaceuticals, Mountain View, CA, (Scientific Advisory Board); 1998-1999
Structural Genomix, San Diego, CA, (Scientific Advisory Board); 1999-2000
Crystal Genomics, Taejon, Korea; 2000-2000
Macrogen, Inc., Seoul, Korea; 2000-2003
Plexxikon, Inc., Berkeley, CA, Chairman of Scientific Advisory Board; 2001- 2011
Daiichi Pharmaceutical Co. Ltd.,Tokyo, Japan; 2001-2003
ProteinExpress, Co. Ltd, Chiba, Japan; 2001-2003
Samyang Genex Corp., Daejon, Korea; 2002-2003
Phage Biotechnology Corp., Tustin, CA. (Scientific Advisory Board); 2004-2009
Biopolymed, Inc., Seoul, Korea; 2004-2009
HanAll Biopharma Co. LTD, Daejon, Korea; 2013 – present
Eone Diagnomics Genome Center, Inchon, Korea; 2014 - present

Scientific publications

~350 published papers in scientific journals as of 2014.

Patents

U.S. Patent number 5,234,834 “Constructs for expression of monellin in plant cells”
Issued August 10, 1993. Fischer, Robert**;** Kim, Sung-Hou**;** Cho, Joong M.; Penarrubia, Lola; Giovannoni, James; Kim, Rosalind

U.S. Patent number 5,264,558 “Single-chain monellin analog as a low calorie protein sweetener”
Issued November 23, 1993. Kim, Sung-Hou**;** Cho, Joong M.

U.S. Patent number 5,478,923 “Class of low calorie protein sweeteners”
Issued December 26, 1995. Kim Sung-Hou; Cho,Joong M.

U.S. Patent number 5,487,983 “Expression systems for making single-chain monellin analogs”
Issued January 30, 1996. Kim, Sung-Hou; Cho, Joong M.

U.S. Patent number 5,670,339 “DNA encoding single-chain monellin”
Issued September 23, 1997. Kim, Sung-Hou; Cho, Joong Myung

U.S. Patent number 5,672,372 “Method for sweetening a food composition with single-chain monellin analogs”,
Issued September 30, 1997. Kim, Sung-Hou**;** Cho, Joong Myung

U.S. Patent number 5,739,409 “Endogenously sweetened transgenic plant products”
Issued April 14, 1998. Fischer, Robert; Kim, Sung-Hou; Cho, Joong Myung; Penarrubia, Lola; Giovannoni, James; Kim, Rosalind

U.S. Patent number 5,866,114 “Crystallization of M-CSFα”
Issued February 2, 1999 Pandit, Jayvardhan; Jancarik, Jarmila; Kim, Sung-Hou; Koths, Kirston; Halenbeck, Robert; Fear, Anna Lisa; Taylor, Eric; Yamamoto, Ralph; Bohm, Andrew

Canadian Patent number 2,087,960 (U.S. Patent number: 5,739,409) "Endogenously sweetened transgenic plant products" Issued January 18, 2000 Fischer, Robert; Kim, Sung-Hou; Cho, Joong Myung; Penarrubia, Lola; Giovannoni, James; Kim, Rosalind

U.S. Patent number 6,025,146 "Identification of M-CSF agonists and antagonists"
Issued February 15, 2000. Pandit, Jayvardhan; Jancarik, Jarmila; Kim, Sung-Hou; Koths, Kirston; Halenbeck, Robert; Fear, Anna Lisa; Taylor, Eric; Yamamoto, Ralph; Bohm, Andrew

European patent number 0668914 “Crystallization of M-CSFα”
Issued August 16, 2000 (Switzerland, Germany, France, U.K., Italy) Pandit, Jayvardhan; Jancarik, Jarmila; Kim, Sung-Hou; Koths, Kirston; Halenbeck, Robert; Fear, Anna, Lisa; Taylor, Eric; Yamamoto, Ralph; Bohm, Andrew;

U.S. Patent number 6,255,485 “Purine inhibitors of protein kinases, G proteins, and polymerses”
Issued July 3, 2001 Gray, Nathanael S.; Schultz, Peter; Kim, Sung-Hou; Meijer, Laurent

U.S. Patent number 6,294,341 “Method for detecting a substance having an activity to inhibit HIV infection using immunoassay and variant protein used for said method”
Issued September 25, 2001 Yu, Yeon Gyu; Kim, Sung-Hou; Ryu, Jae-Ryeon

U.S. Patent number 6,803,371 “Purine inhibitors of kinases, G proteins and polymerases”
Issued Oct. 12, 2004 Gray, Nathanael S.; Schultz, Peter; Kim, Sung-Hou; Meijer, Laurent

U.S. Patent number 8105983 “High throughput method for optimum solubility screening for homogeneity and crystallization of proteins”. Issued Jan 31, 2012. Kim, Sung-Hou; Kim, Rosalind; Jancarik, Jarmila.