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THE PROTEIN SOCIETY ANNOUNCES ITS 2019 AWARD RECIPIENTS

CANYON COUNTRY, CA – The Protein Society, the premiere international society dedicated to supporting protein research, announces the winners of the 2019 Protein Society Awards, which will be conferred at its 33rd Annual Symposium (June 30 – July 3, in Seattle Washington). Plenary talks from the award recipients are scheduled throughout the 3.5-day event.

The Carl Brändén Award, sponsored by Rigaku Corporation, honors an outstanding protein scientist who has also made exceptional contributions in the areas of education and/or service to the field. The 2019 recipient of this award is Professor **Minoru Kanehisa** (Kyoto University). Professor Kanehisa is one of the world leaders in the bioinformatics field. The KEGG (Kyoto Encyclopedia of Genes and Genomes) database, which he established in 1995 and continues to develop, provides a very original and useful data resource not only in the protein science field, but also in much wider fields of general biology and medicine. KEGG integrates information on biological systems from the organismal-level, to the cell-level, to the molecular level and includes genomic, chemical, and human health data both for understanding biological systems and practical applications in society. Professor Kanehisa will receive his award and be recognized at the 2020 World Conference on Protein Science in Sapporo, Japan, a joint symposium organized by The Protein Society, the PSSJ (Protein Science Society of Japan), and Asia Pacific Protein Association (APPA).

The Christian B. Anfinsen Award, sponsored by The Protein Society, recognizes technological achievement or significant methodological advances in the field of protein science. The recipient of this award in 2019 is **Professor Anthony Kossiakoff** (University of Chicago). Professor Kossiakoff's achievements have had broad and sustained impact through the development of innovative technologies and major discoveries in the field of protein structure and function. Areas in which he has made significant advances in protein science include: pioneering the use of neutron--crystallography to understand protein structure, dynamics, catalysis and chemistry; determination of the first cytokine--receptor complex: a structural paradigm for the cytokine family and signaling; allostery in protein-protein interfaces; and development of crystallization chaperones for challenging biomolecules.

The Dorothy Crowfoot Hodgkin Award, sponsored by Genentech, is granted in recognition of exceptional contributions in protein science which profoundly influence our understanding of biology. The 2019 recipient is **Professor Hao Wu** (Harvard University). The selection of Professor Wu was driven by two interconnecting threads: the remarkable achievements she has made in changing how we view the molecular mechanism of signal

transduction and recent work from her laboratory that has illuminated inflammasome assembly and the resulting pyroptotic cell death. The signalosome concept that Professor Wu pioneered established the importance of oligomeric, cooperatively assembled protein complexes for immune receptor signaling and by extension, for intracellular signaling more generally.

The Emil Thomas Kaiser Award, sponsored by The Protein Society, recognizes a recent, highly-significant contribution to the application of chemistry in the study of proteins. The 2019 recipient is **Professor Shahriar Mobashery** (University of Notre Dame). Professor Mobashery has made numerous contributions to the discovery of new antibiotics, antibiotic mechanisms of action, mechanisms of antibiotic resistance, and studies of cell-wall biosynthesis, recycling and regulation. He has authored >370 scientific publications and his work has been cited >19,000 times to date. Professor Mobashery is recognized with the Emil Thomas Kaiser Award for his applications of outstanding creative chemistry to the understanding of protein science, specifically his recent, seminal work on cell-wall biosynthesis, recycling and regulation is noted.

The Hans Neurath Award, sponsored by The Hans Neurath Foundation, honors individuals who have made a recent contribution of exceptional merit to basic protein research. In 2019, the Hans Neurath Awardee is **Professor Dave Thirumalai** (University of Texas at Austin). Professor Thirumalai has been a pioneer in advancing our understanding of biomolecular actions, particularly protein and RNA folding, and the basis for how molecular motors convert energy to motion. Professor Thirumalai, one of the top theorists in delineating the principles of protein and RNA folding, is unique in driving and interpreting experiments, and collaborating with experimentalist colleagues. He was the first to quantify the heterogeneity and bumpiness of protein folding landscapes, through the definition of a glass temperature and its ratio with the folding temperature.

The Stein & Moore Award, sponsored by The Protein Society, is named for Nobel laureates Dr. William Stein and Dr. Stanford Moore. The award is given to recognize eminent leaders in protein science who have made sustained high impact research contributions to the field. The 2019 recipient is **Professor Dame Carol Robinson** (University of Oxford). Professor Robinson's research focuses on applications of mass spectrometry to the study of proteins and their interactions. Early in her career she modified instrumentation to transmit folded proteins, molecular chaperones and other dynamic macromolecular assemblies. Subsequently, she has concentrated on membrane protein complexes, their modulation through lipid and drug binding, and their study from native membrane environments. Overall, Professor Robinson's sustained and focused effort has resulted not only in new insights into protein structure and function but has also established a new field - that of structural biology in the gas phase.

The Protein Science Young Investigator Award, named for the academic journal of the Society, recognizes a scientist within the first 8 years of an independent career who has made an important contribution to the study of proteins. The 2019 recipient is **Professor Gabriel Lander** (Scripps Research Institute). Professor Lander is recognized as one of the most prolific scientists of his generation in developing and applying methods of cryo-

electron microscopy (cryo-EM). to provide groundbreaking structural and mechanistic insights into a variety of complex macromolecular machines. His outstanding body of work as an independent faculty, combined with his unparalleled expertise and enthusiasm for tackling difficult biological questions have propelled him to the forefront of structural biology.

Delegates, exhibitors, sponsors and the press can learn more about the 33rd Annual Symposium at The Protein Society website <http://www.proteinsociety.org/page/annual-symposium> or by calling (844) 377-6834.

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The Protein Society is the leading international Society devoted to furthering research and development in protein science. Founded in 1986, the purpose of the Society is to provide international forums to facilitate communication, cooperation, and collaboration regarding all aspects of the study of proteins. In support of these goals, the Society publishes *Protein Science*, the premier journal in the field, hosts an annual international symposium, and facilitates the education of early-career protein scientists across all lines of discipline. The Protein Society members represent a wide spectrum of academic, industry, governmental, and non-profit institutions from more than 50 countries around the world. Media inquiries can be directed to Raluca Cadar, Executive Director at 844.377.6834.