



FASEB

Federation of American Societies
for Experimental Biology

Science Research Conferences

www.faseb.org/src

Protein Kinases and Protein Phosphorylation

August 6 – August 11, 2017
Cambridge, United Kingdom

Organizers:

Kathryn M. Ferguson, Ph.D.
Yale University School of Medicine
New Haven, CT

Eric L. Weiss, Ph.D.
Northwestern University
Evanston, IL

Sunday, August, 6, 2017

Time	Title/Topic Event	
4:00 p.m. – 9:00 p.m.	Conference Registration	
6:00 p.m. – 7:00 p.m.	Welcome Reception	
7:00 p.m. – 8:00 p.m.	DINNER	
8:00 p.m. – 9:30 p.m.	Opening Scientific Session / Keynote Speaker Protein phosphorylation and cell signaling; histidine phosphorylation	Chairs: Kate Ferguson and Eric Weiss Tony Hunter, Ph.D. , The SALK Institute for Biological Studies.

Monday, August, 7, 2017

Time	Title/Topic Event	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
7:30 a.m. – 12:00 p.m.	Conference Registration	
9:00 a.m. – 12:15 p.m.	Session 1 Mechanisms of kinase control I	Chair: John Scott
9:00 a.m. – 9:25 a.m.	Guiding Signals Through Anchored Enzyme Complexes	John Scott, Ph.D. , University of Washington/HHMI
9:25 a.m. – 9:50 a.m.	Non-canonical pathways engage PKCε in the control of cell cycle checkpoints	Peter Parker, Ph.D. , Francis Crick Institute
9:50 a.m. – 10:05 a.m.	Molecular mechanisms underlying multifaceted allosteric regulation of Aurora A	Nicholas Levinson, Ph.D. , University of Minnesota

10:30 a.m. – 10:55 a.m.	Disordered CDK substrates act as multi-input signal processors to control the key decision points in the cell cycle	Mart Loog, Ph.D. , University of Tartu
10:55 a.m. – 11:20 a.m.	New lessons in regulation of receptor tyrosine kinases	Mark Lemmon, Ph.D. , Yale University School of Medicine
11:20 a.m. – 11:35 p.m.	The mechanism of TrkA activation	Kalina Hristova, Ph.D. , Johns Hopkins University.
11:35 p.m. – 11:50 p.m.	RET functions as a dual-specificity kinase that requires allosteric inputs from juxtamembrane elements	Ivan Plaza-Menacho, Ph.D. Centro Nacional de Investigaciones Oncológicas, CNIO
11:50 pm – 12:15 p.m.	Flash Talks Session 1	Chair: Eric Weiss
10:05 a.m. – 10:30 a.m.	<i>Yale Cancer Center and Yale Cancer Biology Institute (YCC/YCBI)</i> <i>Sponsored Coffee Break</i>	

12:15 p.m. – 1:30 p.m.	LUNCH and Meet the Speakers	
1:30 p.m. – 4:00 p.m.	Free time	
4:00 p.m. – 6:00 p.m.	Poster Session 1	
6:00 p.m. – 7:00 p.m.	Conference Registration	
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. – 9:10 p.m.	Session 2 Mechanisms of kinase control II	Chair: Natalie Ahn
7:00 p.m. – 7:25 p.m.	Lessons Learned from PKA: from Motifs to the Dynamic Assembly of Isoform-specific Macromolecular Switches	Susan Taylor, Ph.D. , University of California, San Diego
7:25 p.m. – 7:50 p.m.	Ligand Correlation by Hydrogen Exchange Mass Spectrometry Reveals Linkages in Conformational Mobility Between Distal Subdomains in the MAP Kinase, ERK2	Natalie Ahn, Ph.D. , University of Colorado
7:50 p.m. – 8:05 p.m.	Phosphorylation of secreted proteins by a family of atypical protein kinases	Vincent Tagliabracci, Ph.D. University of Texas Southwestern Medical Center
8:05 p.m. – 8:30 p.m.	Deciphering Mechanisms of Protein Kinase Substrate Targeting	Ben Turk, Ph.D. , Yale University
8:30 p.m. – 8:45 p.m.	Mechanisms for restraining cAMP-dependent protein kinase revealed by subunit quantitation and novel	Matthew Gold, Ph.D. , University College London

8:45 p.m. – 9:10 p.m.	crosslinking approaches Molecular logic of MAP kinase mediated signaling: from structures to systems	Attila Remenyi, Ph.D. , Hungarian Academy of Sciences
-----------------------	---	--

Tuesday, August, 8, 2017

Time	Title/Topic Event	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
7:30 a.m. – 12:00 p.m.	Conference Registration	
9:00 a.m. – 12:00 p.m.	Session 3 Control of cell architecture, migration, and organization.	Chair: Jin Zhang
9:00 a.m. – 9:25 a.m.	Illuminating Biochemical Activity cellular of the Cell	Jin Zhang, Ph.D. , University of California, San Diego
9:25 a.m. – 9:50 a.m.	Roles of Rho GTPase-activated kinases in cell adhesion and migration	Anne Ridley, Ph.D. , King's College, London
9:50 a.m. – 10:05 a.m.	TRPV4 Regulates Cancer Cell Extravasation, Stiffness and Actin Cortex via AKT-E-cadherin pathway	Yoon Pin Lim, Ph.D. , National University of Singapore
10:30 a.m. – 10:55 a.m.	Role of conserved NDR kinase in the control of cell morphogenesis	Fulvia Verde, Ph.D. , University of Miami
10:55 a.m. – 11:20 a.m.	MARK3 regulates cell polarity through its substrate ARHGEF2	Rob Rottapel, M.D. , University of Toronto
11:20 a.m. – 11:35 p.m.	Fra-1 is a linear integrator of ERK activity	Taryn Gillies , University of California, Davis
11:35 pm – 12:00 p.m.	Flash Talks Session 2	Chair: Kathryn Ferguson
10:05 a.m. – 10:30 a.m.	<i>YCC/YCBI Sponsored Coffee Break and *Group Photo</i>	
12:00 p.m. – 1:15 p.m.	LUNCH and Meet the Speakers	
1:15 p.m. – 3:00 p.m.	Free time	
3:00 p.m. – 5:00 p.m.	Poster Session 2	
5:00 p.m. – 6:00 p.m.	Ask the Experts – Career advice from both sides of the pond	
6:00 p.m. – 7:00 p.m.	Conference Registration	
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. – 9:00 p.m.	Session 4 Protein phosphorylation and regulation of membrane trafficking.	Chair: Ann-Claude Gingras
7:00 p.m. – 7:25 p.m.	Using proximity biotinylation to map the human cell and understand the	Anne-Claude Gingras, Ph.D. , University of Toronto

7:25 p.m. – 7:50 p.m.	regulation of cell growth on endocytic organelles Analysis of Parkinson's LRRK2 protein kinase	Dario Alessi, Ph.D. , University of Dundee
7:50 p.m. – 8:05 p.m.	Allosteric activation and autoinhibition of Akt	Thomas Leonard, Ph.D. , Max F. Perutx Laboratories.
8:05 p.m. – 8:30 p.m.	TOR Complex 2-regulated protein kinase Fpk1 stimulates endocytosis via inhibition of Ark1/Prk1-related protein kinase Akl1 in <i>Saccharomyces cerevisiae</i> .	Jeremy Thorner, Ph.D. , University of California, Berkeley
8:30 p.m. – 8:45 p.m.	Identification of LTK as the first ER-resident receptor tyrosine kinase that regulates proteostasis	Hesso Farhan, Ph.D. , University of Oslo
8:45 p.m. – 9:00 p.m.	Using biophysics to dissect the role of the human MLKL pseudokinase domain in the formation of active oligomers and cell death.	Emma Petrie, Ph.D. , The Walter and Eliza Hall Institute

Wednesday, August 9, 2017

Time	Title/Topic Event	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
7:30 a.m. – 12:00 p.m.	Conference Registration	
9:00 a.m. – 12:00 p.m.	Session 5 <i>Kinases and malignancy</i>	Chair: Richard Marais
9:00 a.m. – 9:25 a.m.	The role of Lysyl Oxidase in Tumour Growth and Metastasis	Richard Marais, Ph.D. , Patterson Institute
9:25 a.m. – 9:50 a.m.	Regulation of EGFR signaling by protein palmitoylation in cancer	Eric Witze, Ph.D. , University of Pennsylvania
9:50 a.m. – 10:05 a.m.	Oncogenic Activation of PTK6 is Negatively Regulated by the Tumor Suppressor PTEN	Angela Tyner, Ph.D. , University of Illinois College of Medicine
10:30 a.m. – 10:55 a.m.	Molecular Mechanisms that Regulate Raf Kinase Signaling in Normal and Disease States	Debbie Morrison, Ph.D. , National Cancer Institute
10:55 a.m. – 11:10 a.m.	Crosstalk between NRF2 and HIPK2 shapes cytoprotective responses	Laureano de la Vega, Ph.D. , University of Dundee

11:10 a.m. – 11:25 a.m.	Differential regulation of PKD isoforms in oxidative stress conditions via tyrosine phosphorylation in the P+1 loop: insights in kinase function	Mathias Cobbaut, Ph.D. , University of Leuven
11:25 a.m. – 11:50 a.m.	Met Receptor Tyrosine Kinase; Feedback Inhibition, Rewiring and Mechanisms of Resistance	Morag Park, Ph.D. , McGill University
10:05 a.m. – 10:30 a.m.	<i>YCC/YCBI Sponsored Coffee Break</i>	
11:50 p.m. – 12:15 p.m.	Business Meeting	
12:15 p.m. – 1:15 p.m.	LUNCH and Meet the Speakers	
1:30 p.m. – 5:30 p.m.	Group Activity (optional)	
6:00 p.m. – 7:00 p.m.	Conference Registration	
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. – 9:10 p.m.	Session 6 <i>Kinases in metabolism and metabolic disease.</i>	Chair: Eric Weiss
7:00 p.m. – 7:25 p.m.	mTORC1 and S6K1, new links to cancer metabolism	John Blenis, Ph.D. , Weill Cornell Medical College
7:25 p.m. – 7:50 p.m.	Metabolic Vulnerabilities in the PI3K/AKT Signaling Pathway	Alex Toker, Ph.D. , Harvard Medical School
7:50 p.m. – 8:05 p.m.	Phosphoproteomic identification of an ERK5-PIN1-KLF2 module that controls Embryonic Stem Cell pluripotency	Greg Findlay, Ph.D. , University of Dundee
8:05 p.m. – 8:30 p.m.	Biophysical and cellular analysis of Tribbles 2 (TRIB2) pseudokinase ligands.	Patrick Eyers, Ph.D. , University of Liverpool
8:30 p.m. – 8:45 p.m.	Identification of Proximal Interacting Partners of Glycogen Synthase Kinase-3 Isoforms	Kevin Cormier, Ph.D. , Lunenfeld Tanenbaum Research Institute
8:45 p.m. – 9:10 p.m.	Skeletal muscle-specific deletion of MKP-1 reveals a p38 MAPK/JNK/Akt signaling node that regulates obesity-induced insulin resistance	Anton Bennet, Ph.D. , Yale University

Thursday, August, 10, 2017

<u>Time a.m. – Time p.m.</u>	<u>Title/Topic Event</u>	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
7:30 a.m. – 12:00 p.m.	Conference Registration	
9:00 a.m. – 12:00 p.m.	Session 7 <i>Kinases and phosphatases as therapeutic targets</i>	Chair: Shiva Malek
9:00 a.m. – 9:25 a.m.	Leveraging conformation specific kinase inhibitors to treat RAF and RAS mutant tumors	Shiva Malek, Ph.D., Genentech
9:25 a.m. – 9:50 a.m.	The Protein Kinome in Regulation of Mitosis, the DNA Damage Response, and Cancer	Mike Yaffe, M.D., Ph.D., Massachusetts Institute of Technology
9:50 a.m. – 10:05 a.m.	Comparative coupling identifies functional sites driving the regulation of protein kinases	Pau Creixell, Ph.D., Massachusetts Institute of Technology
10:30 a.m. – 10:55 a.m.	Complex Cellular and Molecular Interplay Cause Pathological Cardiac Hypertrophy in RAF1-mutant Noonan Syndrome	Ben Neel, M.D., Ph.D., NYU Langone School of Medicine
10:55 a.m. – 11:20 a.m.	Selective targeting of kinase catalytic and non-catalytic function	Stefan Knapp, Ph.D., Goethe University
11:20 a.m. – 11:35 p.m.	Raf kinase inhibitors activate ERK1/2 in cardiomyocytes, promoting cardiac hypertrophy in vitro and in the context of angiotensin II induced hypertension in mice in vivo	Angela Clerk, Ph.D., University of Reading
11:35 p.m. – 12:00 p.m.	Decoding the functions of kinases and phosphatases with bioinformatics - from a billion years of evolution to modern cancer genome sequencing.	Gerard Manning, Ph.D., Genentech
10:05 a.m. – 10:30 a.m.	<i>YCC/YCBI Sponsored Coffee Break</i>	
12:00 p.m. – 1:00 p.m.	LUNCH and Meet the Speakers	
1:00 p.m. – 4:00 p.m.	Free time	
4:00 p.m. – 5:00 p.m.	Poster Viewing (optional)	
5:00 p.m. – 6:00 p.m.	Ask the Experts – Panel session on trainee selected topics.	
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. – 9:00 p.m.	Session 8 <i>Kinases and phosphatases linked to immunity and inflammation.</i>	Chair: Kathryn Ferguson

7:00 p.m. – 7:25 p.m.	Novel twists to the activation of the MyD88 signaling network	Philip Cohen, Ph.D. , University of Dundee
7:25 p.m. – 7:40 p.m.	SIK2 and SIK3 kinase activity regulates the polarisation of macrophages	Nicola Darling, Ph.D. , University of Dundee
7:40 p.m. – 8:05 p.m.	Specificity in Tyrosine Kinase Signaling	John Kuriyan, Ph.D. , University of California, Berkeley
8:05 p.m. – 8:20 p.m.	A Phosphosite within the SH2 Domain Of Lck Regulates Its Activation By CD45	Adam Courtney, Ph.D. , University of California, San Francisco
8:20 p.m. – 8:45 p.m.	Cancer cell polarization and immune evasion in the niche; co-regulation by the multitasking Focal Adhesion Kinase.	Margaret Frame, Ph.D. , University of Edinburgh
9:00 p.m. – onwards	Social interactions	

Friday, August, 11, 2017

<u>Time a.m. – Time p.m.</u>	<u>Title/Topic Event</u>	
7:30 a.m. – 9:00 a.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
7:30 a.m. – 9:00 a.m.	Conference Registration	
9:00 a.m.	Boxed Snacks to Go and DEPARTURES	

END OF CONFERENCE

For additional information contact:
 FASEB Science Research Conferences
 9650 Rockville Pike
 Bethesda, MD 20814

www.faseb.org/src