



# **Program**

3<sup>rd</sup> International Conference on

# CELLS EXPERIMENTAL BIOLOGY

April 18-20, 2022 | Hybrid

# **In-Person**

Our Points by Sheraton Boston- Newton 320 Washington St, Newton, MA 02458, USA

# Virtual

**②** Eastern Time (US & Canada)

Write to us organizer@cebconference.com

https://cellexpbiol.unitedscientificgroup.org/

# All session times are Eastern Time (US & Canada)

# Monday, April 18 (Fully Virtual)

05.55-06.00

**Opening Remarks** 

06.00-08.35

Cellular and Molecular Neurobiology

08.40-11.40

**Keynote Session** 

11.50-19.40

Parallel Session - 1

Biochemistry and Molecular Biology

11.40-20.20

Parallel Session - 2

Cell Signaling & Cancer Biology

# Tuesday, April 19 (In-person & Virtual)

08.10-08.20

**Opening Remarks** 

08.20-10.25

Biochemistry and Molecular Biology

10.45-11.45

**Keynote Session** 

11.45-14.40

Cell Signaling & Cancer Biology

14.40-17.00

Cell and Gene Therapy

17.00-17.30

**Poster Presentations** 

# Wednesday, April 20 (In-person & Virtual)

08.20-11.15

Cellular and Molecular Neurobiology

11.30-12.30

Cell and Developmental Biology

12.30-14.40

Experimental Biology and Disease Physiology

14.40-15.55 and 18.00-19.40

Cell and Developmental Biology

15.55-18.00

Experimental Biology and Disease Physiology

19.40-20.00

**Poster Presentations** 

# Day-2 | April 19, 2022

10.25-10.45 Coffee Chats

13.05-13.40 Lunch

17.30-18.30 Drinks and Networking

Day-3 | April 20, 2022

11.15-11.30 Coffee Chats

13.05-14.00 Lunch

Virtual In-person

# **Important Information**

All speakers registered for CEB-2022 will receive a panelist Zoom webinar email (dated April 8, 2022) which will contain a link to join the meeting. A reminder will be sent to all speakers 1 hour and 1 day before the conference start time. If not, please email to - organizer@cebconference.com

During the conference days (April 18-20), please open the email & "Click Here to Join" link to join the live sessions in main meeting room.

Please note that your panelist link is unique to you and should not be shared with anyone else.

A separate meeting link will be sent to all the speakers for Parallel Session-2 on Day-1 (i.e., Cell Signaling and Cancer Biology). This link will be active from 11.30-20.30 Eastern time on April 18th. Thank you.

05:55-06.00: Opening Remarks

Day 1, Time: 06.00-08.35 Chair: Martin Berghoff (06.00-08.35)

# 06.00-06.20 Virtual



**Fuminori Tsuruta, Ph.D.** Faculty of Life and Environmental Sciences, University of Tsukuba, Japan

Propagation of Neuronal Micronuclei Regulates Microglial Diversity

# 06.20-06.35 Virtual



Jungjoo Park, Ph.D. Korea Advanced Institute of Science and Technology, South Korea

Microglial MERTK Eliminates Phosphatidylserine-Displaying Inhibitory Post-synapses

# 06.35-06.55 Virtual



Ranjithkumar Rajendran, Ph.D. Experimental Neurology, Department of Neurology, Justus-Liebig University, Germany

Role of FGF/FGFR Signalling in a Disease Model of Multiple Sclerosis

# 06.55-07.15 Virtual



Mária Bagyánszki, Ph.D. Associate Professor, University of Szeged, Hungary

Intestinal Region-dependent Alterations of Toll-like Receptor 4 Expression in Myenteric Neurons of Type 1 Diabetic Rats

# 07.15-07.35 Virtual



Andrea Stoccoro, Ph.D. Research Fellow, Department of Translational Research and Department of New Surgical and Medical Technologies, University of Pisa, Italy

Role of Mitochondrial Epigenetic Mechanisms in Neurodegenerative Diseases

# 07.35-07.55 Virtual



Wanli Smith, M.D., Ph.D. Associate Professor, Director of Cellular Neurobiology Laboratory, Department of Psychiatry, Johns Hopkins University School of Medicine, Baltimore, MD

Inhibition of LRRK2 GTP Binding Activity Reduces Neuroinflammation

#### 07.55-08.15 Virtual



**David Van Vactor, Ph.D.**Professor of Cell Biology, Director, Biological

Professor of Cell Biology, Director, Biological and Biomedical Sciences (BBS) Graduate Program, Harvard Medical School, Boston, MA The Regulation of Synaptic Morphogenesis and Plasticity by microRNAs

# 08.15-08.35 Virtual



David Klyne, Ph.D.

Research Fellow, NHMRC Centre of Clinical Research Excellence in Spinal Pain, Injury and Health, School of Health and Rehabilitation Sciences, The University of Queensland, Australia

Toward an Understanding of How Sleep and Physical Activity Influence Pain

8.35-8.40 Break

# Day 1, Time: 08.40-11.40 Chair: Mogens H. Jensen (9.40-11.40)

# 08.40-09.10 Virtual



Dietmar W. Hutmacher, Ph.D.

Professor and Chair in Regenerative Medicine, Director ARC Centre in Additive Biomanufacturing, Queensland University of Technology, Australia

Tissue Engineering of Humanized Rodent Models for Cancer Research

# 09.10-09.40 Virtual



Mogens H. Jensen, Ph.D.

Professor of Complex Systems and Biophysics, Former President, Royal Danish Academy of Science and Letters, The Niels Bohr Institute, The University of Copenhagen, Denmark

**Chaotic Dynamics of Transcription Factors in Gene Regulation** 

# 09.40-10.10 Virtual



Nathan Nelson, Ph.D.

Professor, Department of Biochemistry and Molecular Biology, The George S. Wise Faculty of Life Sciences, Tel Aviv University, Israel A Requiem for Crystal Structures of Large Photosynthetic Membrane Complexes and the New Era of Cryo-EM

# 10.10-10.40 Virtual



Kenneth M. Yamada, M.D., Ph.D.

NIH Distinguished Investigator Chief, Cell Biology Section, NIDCR NIH, Bethesda, MD Dynamic Cell Interactions with Extracellular Matrix in Cell Migration, Invasion, and Morphogenesis

# 10.40-11.10 Virtual



James R. Lupski, M.D., Ph.D.

The Cullen Endowed Chair of Genetics and Genomics, Member, Human Genome Sequencing Center (HGSC), Baylor College of Medicine, Houston, TX

Biology in Balance: Human Diploid Genome Integrity, Gene Dosage & Genomic Medicine

#### 11.10-11.40 Virtual



Michael Snyder, Ph.D.

Director, Center for Genomics and Personalized Medicine, Professor of Genetics, Stanford School of Medicine, Stanford University, CA

Big Data and Health

# **Parallel Session 1**

Day 1, Time: 11.50-19.40

Chairs: Jun Huang (11.50-13.50) Remi Peyronnet (13.50-15.40) Ling Yang (15.50-17.50) Wanli Smith (17.50-19.40)

# 11.50-12.10 Virtual



**Yaron Vinik, Ph.D.**Department of Molecular Cell Biology,
Weizmann Institute of Science, Israel

Predicting Breast Cancer Progression, Recurrence and Treatment Response by Proteomic Analysis of Circulating Extracellular Vesicles

# 12.10-12.30 Virtual



Nina Reuven, Ph.D. Department of Molecular Genetics, Weizmann Institute of Science, Israel

Scarless CRISPR/Cas9 Edited Cells Based on Co-editing Selection

### 12.30-12.50 Virtual



**Doron Lancet, Ph.D.**Professor, Department of Molecular Genetics
Weizmann Institute of Science, Israel

Life Originated with Micellar Lipid-based Epigenetic Inheritance

# 12.50-13.10 Virtual



Phillip Andrews, Ph.D. Laboratory Director, Avalon Laboratories Inc., Canada

Role of Histone Acetyltransferase Complexes in Promoting C-myc-Pygo2 Complex Formation

# 13.10-13.30 Virtual



Joachim E. Schultz, Ph.D. Professor, Pharmazeutisches Institut der Universitat Tübingen, Germany

New Modes of Regulation of Mammalian Adenylyl Cyclases

# 13.30-13.50 Virtual



Remi Peyronnet, Ph.D.
Institute for Experimental Cardiovascular
Medicine, University Heart Center Freiburg ·
Bad Krozingen, and Faculty of Medicine,
University of Freiburg, Germany

Piezo1 Channels Regulate Atrial Fibroblast Mechanics and Matrix Stiffness Sensing

# 13.50-14.05 Virtual



Mirjam Arnold
Max Planck Institute for Molecular Genetics,
Otto Warburg Laboratory, Germany

Uncovering the Roles of BET Family Proteins in Transcription Regulation

# 14.05-14.20 Virtual



Roman Sidorov, Ph.D.
Institute of Ecology and Genetics of
Microorganisms, Perm Federal Research
Center, the Ural Branch of Russian Academy
of Sciences, Russian Federation

Erogorgiaene Analog Inhibits (p)ppGpp Synthetases Preventing Persister Formation in Mycobacteria

# 14.20-14.40 Virtual



**EB - 2022** FINAL PROGRAM

Natalie Krahn, Ph.D. Department of Molecular Biophysics and Biochemistry, Yale University, New Haven, CT

Versatile and Tunable Selenocysteine Reporters Using an Intein-Based Design

Day-1, April 18

Federica Morani, Ph.D. Genetics, Department of Biology, University of Pisa, Italy

Identification of Overexpressed Genes in Malignant Pleural Mesothelioma as Potential Targets for Novel Therapies

# 15.00-15.20 Virtual



Marcel Zamocky, Ph.D. Department of Chemistry, University of Natural Resources and Life Sciences, Vienna, Austria; Institute of Molecular Biology, Slovak Academy of Sciences, Bratislava, Slovakia

Uncovering the Peculiar Evolution of Thyroid Peroxidases and their Ancestors from Non-Vertebrates Towards Mammals with **Consequences for Thyroid Hormone Biosynthesis** 

# 15.20-15.40 Virtual



Heinrich K. Wasner, Ph.D. BioReg Biopharm, Technology Innovation Laboratory, University of Illinois at Chicago, IL

The Natural Cyclic AMP Antagonist, Prostaglandylinositol Cyclic Phosphate: Isolation, Chemical Structure, Biosynthesis and Way of Action

# 15.40-15.50 Break

# 15.50-16.10 Virtual



Juan Fuxman Bass, Ph.D. Assistant Professor, Boston University, Biology Department, Boston, MA

Widespread Mutation of ETS Binding Sites in Cancer

#### 16.10-16.30 Virtual



Xiang-Dong "David" Zhang, Ph.D. Assistant Professor, Department of Biology SUNY Buffalo State, Buffalo, NY

Polymeric SUMO-2/3 Chain Modification Regulates Chromosome Alignment to the Metaphase Plate During Mitosis in Mammalian Cells

# 6.30-16.50 Virtual



Ivan T. Rebustini, Ph.D. Staff Scientist, Section on Protein Structure

and Function, Laboratory of Retinal Cell and Molecular Biology, National Eye Institute, NEI-NIH, Bethesda, MD

Pigment Epithelium-derived Factor Induces CRX Alterations in the Mouse Retina

# 16.50-17.10 Virtual



Pinelopi P. Kapitsinou, M.D.

Associate Professor of Medicine, Division of Nephrology, Feinberg School of Medicine, Northwestern University, Chicago, IL

Hypoxic Preconditioning Protects Against Acute Kidney Injury Through Tryptophan Metabolism

# 17.10-17.30 Virtual



Carlo Vascotto, Ph.D.

Assistant Professor, Department of Medicine, University of Udine, Italy

New Role of Apurinic/apyrimidinic Endonuclease 1 Protein in the Degradation of Dysfunctional Abasic mRNA in Mitochondria

#### 17.30-17.50 Virtual



Seung-Hyun Ro, Ph.D.

Assistant Professor, Department of Biochemistry, University of Nebraska-Lincoln, NE

Arsenic Toxicity on Metabolism and Autophagy in Brown Adipose Tissue

# 17.50-18.10 Virtual



Sidney Hecht, Ph.D.

Director, Biodesign Center for BioEnergetics, Professor, School of Molecular Sciences, Arizona State University, Tempe, AZ

Expansion of the Genetic Code Through the Use of Modified Ribosomes

# 18.10-18.25 Virtual



**Xing Liu, Ph.D.** *Boston University, MA* 

Systematic Study of Host Network Perturbations by Human Virus Transcriptional Regulators

# 18.25-18.40 Virtual



**Jian Li, Ph.D.**Aging and Metabolism Research Program,
Oklahoma Medical Research Foundation,
Oklahoma City, OK

Regulation of Germline Proteostasis by HSF1 and Insulin/IGF-1 Signaling in Gametogenesis and Reproductive Aging

# 18.40-18.55 Virtual



**Dimitra Apostolidou**Department of Mechanical Engineering and Materials Science, Duke University, Durham, NC

Folding and Misfolding of Highly-Luminescent Protein NanoLuc

# 18.55-19.10 Virtual



Thuy Nguyen, Ph.D. Animal Metabolomics Lab, Department of Animal Science, Chonnam National University, Republic of Korea

Impairment of ULK1 Sulfhydration-Mediated Lipophagy by SREBP-1c in Hepatic Steatosis

# 19.10-19.25 Virtual



Xiaofan Wei, M.S.
Department of Biomedical Science & Engineering, GIST Gwangju Institute of Science & Technology, South Korea

PEX16 Maintains Peroxisome Abundance via Pexophagy Regulation

# 19.25-19.40 Virtual



**Jiakuo Yu, Ph.D.**Professor and Director at Peking University
Third Hospital, China

The Research and Application Prospects of Sports Injury Therapy Based on Peripheral Blood-Derived Mesenchymal Stem Cells

**End of Parallel Session -1** 

# **Parallel Session 2**

Chairs: Sebastian Oltean (11.40-14.40) Zhen Lu (15.50-17.50)

Jianming Xu (18.00-20.20)

# 11.40-12.00 Virtual

Day 1, Time: 11.40-20.20



Manuela Sollazzot, Ph.D.

Department of Pharmacy and Biotechnology
(FABIT), University of Bologna, Italy

Potential Survival Responses Triggered by Respiratory Complex I Inhibition in Ovarian Cancer Models

# 12.00-12.20 Virtual



Monica De Luise, Ph.D.
Department of Medical and Surgical Sciences
(DIMEC); Center for Applied Biomedical
Research (CRBA), University of Bologna, Italy

Altered Proteome S-glutathionylation in Cancer Caused by Loss of Glutaredoxin-2 Leads to Mitochondrial Dysfunction and Conversion to More Indolent Oncocytoma

### 12.20-12.40 Virtual



Karin Pfisterer, Ph.D. Senior Scientist, Department of Dermatology, Medical University of Vienna, Austria

The Extracellular Matrix in Skin Inflammation and Cancer

# 12.40-13.00 Virtual



**Mirela Sedic, Ph.D.**Centre for Applied Bioanthropology, Institute for Anthropological Research, Croatia

The Sphingosine Kinase 2 Inhibitor ABC294640 Restores the Sensitivity of BRAFV600E Mutant Colon Cancer Cells to Vemurafenib by Reducing AKT-Mediated Expression of Nucleophosmin and Translationally-Controlled Tumour Protein

# 13.00-13.20 Virtual



Simona Fontana, Ph.D.

Associate Professor of Applied Biology, Dept of Biomedicine, Neurosciences and Advanced Diagnostics (Bi.N.D), School of Medicine -University of Palermo, Italy

Protein Cargo of Salivary Small Extracellular Vesicles as Potential Functional Signature of Oral Squamous Cell Carcinoma

# 13.20-13.40 Virtual



Kathrin Renner, Ph.D. Internal Medicine III, University Hospital Regensburg, Germany

Glucose Metabolism, a Metabolic Checkpoint in the Tumor Microenvironment

# 13.40-14.00 Virtual



**Sang-Oh Yoon, Ph.D.** Assistant Professor, College of Medicine, University of Illinois at Chicago, IL

Inhibition of Mammalian Target of Rapamycin Induces Insulin-Like Growth Factor Receptor-Mediated Cell Survival Signaling Through Positive Control of Protein Synthesis

# 14.00-14.20 Virtual



**Zhen Lu, M.D.**Associate Professor, The University of Taxes MD Anderson Cancer Center, Houston, TX

SIK2 Inhibition Synergistically Enhances PARP Inhibitor Activity in Ovarian and Triple Negative Breast Cancers

# 14.20-14.40 Virtual



**EB - 2022** FINAL PROGRAM

Neil A. Bhowmick, Ph.D.
Professor, Department of Medicine, Director,
Cancer Biology Program, Cedars-Sinai
Medical Center, Los Angeles, CA

Targeting Circulating Tumor-derived Mitochondrial DNA Confers Chemotherapy Sensitivity

Day-1, April 18

# 14.50-15.10 Virtual



**John Di Guglielmo, Ph.D.**Associate Professor, Western University, Canada

The Role of Autophagy in TGFβ-dependent Tumorigenesis

# 15.10-15.30 Virtual



Andrei V. Bakin, Ph.D.

Associate Professor of Oncology, Department of Cancer Genetics and Genomics, Roswell Park Comprehensive Cancer Center, Buffalo, NY

New Therapeutic Strategies Targeting P53-deficient Cancer

### 15.30-15.50 Virtual



Devanand Sarkar, Ph.D.

Professor, Department of Human and Molecular Genetics, Associate Director of Training and Education, Massey Cancer Center, Virginia Commonwealth University, Richmond, VA

Co-amplified Genes Cooperate to Promote Cancer

# 15.50-16.10 Virtual



Thang Van Nguyen, Ph.D.

Assistant Research Professor, Center for Precision Medicine, Department of Medicine, University of Missouri, Columbia, MO USP15 Antagonizes CRL4CRBN-mediated Ubiquitylation of Glutamine Synthetase and Neo-substrates

# 16.10-16.30 Virtual



Colleen M. Cebulla, M.D., Ph.D.

Associate Professor, Department of Ophthalmology and Visual Sciences, Havener Eye Institute, The Ohio State University Wexner Medical Center, Columbus, OH

TMEM97 Ablation Aggravates Oxidant-induced Retinal Degeneration

# 16.30-16.50 Virtual



Leslie I. Gold, Ph.D.

Associate Professor, Departments of Medicine and Pathology, Division of Translational Medicine, New York University School of Medicine, New York, NY Stabilizing Nuclear p27kip1 with Small Molecule Inhibitors of the SCF-Skp2-Cks1 Ubiquitin E3 Ligase Complex as a Cytostatic Therapeutic Approach to Cancer

# 16.50-17.10 Virtual



Jianming Xu, Ph.D.

Gordon Cain Professor, Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX The Roles and Transcriptional Mechanisms of TWIST1regulated Genes in Cancer Cells

#### 17.10-17.30 Virtual



Anna M. Eiring, Ph.D.

Assistant Professor, Department of Molecular and Translational Medicine, Texas Tech University Health Sciences Center at El Paso, TX A Role for Proteasome 26S Subunit, Non-ATPase 3 (PSMD3), in Disease Progression and Drug Resistance of Myeloid Leukemia

17.30-18.00 Break

# 18.00-18.20 Virtual



**Benny Abraham Kaipparettu, Ph.D.**Associate Professor, Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX

Mitochondrial Energy Reprogramming in Triple Negative Breast Cancer

# 18.20-18.40 Virtual



Ginette Santiago-Sanchez, Ph.D. Laboratory of Tumor Immunology and Biology, Center for Cancer Research, NCI, NIH, Bethesda, MD

Targeting Lipocalin-2 in Inflammatory Breast Cancer Cells with Small Interference RNA and Small Molecule Inhibitors

# 18.40-18.55 Virtual



Theophilos Tzaridis, M.D.
Tumor Initiation & Maintenance Program,
Sanford Burnham Prebys Medical Discovery
Institute, La Jolla, CA

Extracellular Vesicles as Promising Liquid Biopsy Tools for Clinical Routine in Glioblastoma

# 18.55-19.15 Virtual



Xiaotao Li, Ph.D. Shanghai Key Laboratory of Regulatory Biology, Institute of Biomedical Sciences, School of Life Sciences, East China Normal University, China

The REG $\gamma$  Inhibitor NIP30 Increases Sensitivity to Chemotherapy in p53-deficient Tumor Cells

# 19.15-19.35 Virtual



**Jessica Buck, Ph.D.**Telethon Kids Cancer Centre, Telethon Kids Institute, Australia

Sensitization of Pediatric Brain Cancer to Radiotherapy by Inhibition of the DNA Damage Response Pathway

# 19.35-19.50 Virtual



Danna Yeerken, Ph.D. Key Laboratory of Carcinogenesis and Translational Research, Laboratory of Molecular Oncology, Peking University Cancer Hospital & Institute, P. R. China

Nlp Promotes Autophagy Through Facilitating the Interaction of Rab7 and FYCO1

# 19.50-20.05 Virtual



**Rulu Pan** School of Basic Medical Sciences, Wenzhou Medical University, P. R. China

Epigenetic Induction of Lipocalin 2 Expression Drives Acquired Resistance to 5-fluorouracil in Colorectal Cancer Through Integrin beta3/SRC Pathway

## 20.05-20.20 Virtual



**Bhavya Thakur** Department of Biomedical Engineering Indian Institute of Technology Ropar, India

Imidazo[1,2-a]pyridine Derivatives as Novel Anti-cancer Agent Against Non-small Cell Lung Cancer by Activating NOX Mediated Oxidative Stress

**End of Parallel Session -2** 

# 08.10-08.20: Opening Remarks

Day 2, Time: 08.20-10.25 Chair: Luigi Puglielli (08.20-10.25)

# 08.20-08.40 In-Person



Philip Penketh, Ph.D.
Professor Emeritus, Department of
Pharmacology, Yale University, New Haven, CT

Presumptive Phosphologic Circuits in DNA Repair and Rapid Cellular Data Processing

# 08.40-09.00 In-Person



Ling Yang, Ph.D.
Assistant Professor, Department of Medical Genetics and Molecular Biochemistry,
Lewis Katz School of Medicine at Temple
University, Philadelphia, PA

Regulation of Energy Metabolism by Long Non-coding RNAs in the Liver

# 09.00-09.20 In-Person



Stéphane Sebille, Ph.D.
Associate Professor, Lipotoxicity and
Channelopathies, Laboratory of Physiopathology
and Regulation of Ionic Channels, University of
Poitiers, France

Polyunsaturated Phospholipids Increase Cell Resilience to Mechanical Constraints

# 09.20-09.40 In-Person



Anthony D. Ho, M.D., Ph.D. Professor & Chair Emeritus, Dept. of Medicine V, Heidelberg University, Germany

Functional Decline, Senescence of Hematopoietic Stem Cell Compartment and Elevated Central Carbon Metabolism

# 09.40-09.55 In-Person



Karl Barber, Ph.D Elledge Laboratory, Division of Genetics, Brigham & Women's Hospital, Harvard Medical School, Boston, MA

CRISPR-based Peptide Library Display and DNA-templated Peptide Microarray Self-assembly for Quantitative Protein Binding Assays

# 09.55-10.10 In-Person



**Sheyda Najafi**Department of Pharmaceutical Sciences,
College of Pharmacy and Health Sciences, St.
John's University, Queens, NY

Small Molecule, Novel Benzimidazole Derivatives Closely Mimic the Biochemical and Functional Activity of BMPs

# 10.10-10.25 In-Person



Nan Jiang, Ph.D.
Department of Biochemistry and
Molecular Biology, Michigan State University,
East Lansing, MI

Synergy between the Anthocyanin and tasiRNA Pathways Expose Hidden Features of Arabidopsis Carbon Metabolism

■ 10.25-10.45 Coffee Chats ■

# Day 2, Time: 10.45-11.45 Chair: Luigi Puglielli (10.45-11.45)

# 10.45-11.15 In-Person



Jenny Hinshaw, Ph.D.

MICEF Director, Laboratory of Cell and
Molecular Biology, National Institute of
Diabetes and Digestive and Kidney Diseases,
NIH, Bethesda, MD

Dynamins Mediating Membrane Fission and Fusion

# 11.15-11.45 Virtual



Rama Natarajan, Ph.D., FAHA, FASN Chair, Department of Diabetes Complications and Metabolism, Deputy Director, Arthur Riggs Diabetes & Metabolism Res. Institute, Beckman Res. Institute of City of Hope, Duarte, CA

**Epigenetics and Noncoding RNAs in Diabetic Complications and Metabolic Memory** 

Day 2, Time: 11.45-14.40 Chair: Stéphane Sebille (11.45-13.05)

# 11.45-12.05 Virtual



M. Cecilia Caino, Ph.D. Assistant Professor, Department of Pharmacology, University of Colorado Anschutz, Aurora, CO

Mitochondria Engages the Integrated Stress Response to Sustain Prostate Cancer Growth

# 12.05-12.25 In-Person



Ramiro Iglesias-Bartolome, Ph.D. NIH Stadtman Investigator, LCMB, Center for Cancer Research NCI, NIH, Bethesda, MD

YAP1/TAZ-TEAD Transcription in Skin Homeostasis and Cancer

# 12.25-12.45 In-Person



**Bing He, Ph.D.**Protein Section, Laboratory of Metabolism,
Center for Cancer Research, NCI, NIH,
Bethesda, MD

**Epigenetic Regulation of Cell Identity Through HMGN Proteins** 

# 12.45-13.05 In-Person



Kanita A. Chaudhry, Ph.D. Roswell Park Comprehensive Cancer Center, Buffalo, NY

The Aryl Hydrocarbon Receptor (AhR) Regulates Neuroblastoma Differentiation

# 13.05-13.40 Lunch and Networking

# 13.40-14.00 Virtual



**Sebastian Oltean, M.D., Ph.D.**Associate Professor in Experimental Medicine and Therapeutics, Institute of Biomedical & Clinical Sciences, University of Exeter Medical School, UK

Novel Compounds with Dual Action (Modulation of Alternative Splicing and Epithelial-Mesenchymal Transitions) as New Therapeutics in Prostate Cancer

# 14.00-14.20 Virtual



Anna Bianchi-Smiraglia, Ph.D. Assistant Professor, Department of Cell Stress Biology, Roswell Park Comprehensive Cancer Center, Buffalo, NY

**GTP Metabolic Enzymes in Control of Cancer Progression** 

# 14.20-14.40 Virtual



**Haitao Wen, Ph.D.**Associate Professor, Department of Microbial Infection and Immunity, Ohio State University College of Medicine, Columbus, OH

Ancient and Modern Role of Mitochondrial Calcium Signaling

Day 2, Time: 14.40-17.00 Chair: Susanna Rosi (14.40-17.00)

# 14.40-15.00 In-Person



Daniel Lu, Ph.D. Scientist – Genome Analysis Unit, Therapeutic Discovery, Amgen Global Research, South San Francisco, CA

Single-cell Transcriptomics Reveal the Impact of Phagocytosis for Myeloid Therapeutic Targeting

# 15.00-15.20 In-Person



Hing Wong, Ph.D. CEO & Founder, HCW Biologics Inc., Miramar, FL

Bifunctional Immunotherapeutic HCW9218 for Cancer and Inflammaging

# 15.20-15.40 In-Person



Anna Engler, Ph.D.
Pulmonary Drug Discovery Lab,
Pharmaceuticals, Research &
Development, Bayer US LLC, Boston, MA

*In Vitro* Injury Models of Human Alveolar Type-2 Organoid Cultures for Drug-Target Validation and Discovery

# 15.40-16.00 In-Person



Garrett R. Rettig, Ph.D. Integrated DNA Technologies, Inc., Coralville, IA

Improved Methods and Optimized Design for CRISPR Cas9 and Cas12a Homology-directed Repair

# 16.00-16.20 Virtual



Peter J. Turnbaugh, Ph.D. Professor, Department of Microbiology & Immunology, University of California, San Francisco, CA

Editing the Human Gut Microbiome to Improve Treatment Outcomes

# 16.20-16.40 Virtual



Xin Ye, Ph.D.
Senior Scientist, Department of Discovery
Oncology, Genentech Inc., South San
Francisco, CA

TraCe-seq Decodes Transcriptional Mechanisms Underlying Anti-cancer Drug Response Heterogeneity

# 16.40-17.00 Virtual



Madeleine Maker Cellular Immunotherapy Center, Department of Hematology and Hematopoietic Cell Transplantation, City of Hope, Duarte, CA

Targeting the  $TGF\beta$  Pathway to Enhance IL13Ra2-CAR T Cell Therapy for Glioblastoma

CEB-P1	Andrea Paquola Randall Centre for Cell and Molecular Biophysics, King's College London, UK	Identification of Lipids Bound to Membrane-associated Cytokinesis Proteins
CEB-P2	Arnaud Delafenetre University of Poitiers, France	Functional Characterization of Muscle Cells Derived from Healthy and DMD Human Induced Pluripotent Stem Cells
CEB-P3	Charles-Albert Chapotte-Baldacci University of Poitiers, France	Fine Tuning of Calcium Constitutive Entry by Optogenetically- Controlled Membrane Polarization: Impact on Cell Migration
CEB-P4	Rebecca Hirsch Department of Pathology and Laboratory Medicine, The University of North Carolina School of Medicine, Chapel Hill, NC	Developing Patient-specific CTNNB1 ( $\beta$ -catenin) Mutants for Defining the Role of CD73 in Endometrial Cancer Recurrence
CEB-P5	Anna Berenson Boston University, USA	Comprehensive Mapping of Heterodimer-DNA Binding Using a Novel Yeast-based Method
	Ananya Covindarajan	Behavioral Effects of Oxidant and Reduced Chemorepellents
CEB-P6	Ananya Govindarajan Senior at Pawling High School, New York, NY	on Mutant and Wild-Type Tetrahymena thermophila

# 17.30-18.30 Drinks and Networking

**End of Day-2** 

Day 3, Time: 08.20-11.15 Chair: Anthony D. Ho (08.20 - 11.15)

# 08.20-08.40 In-Person



Bo Zhao, Ph.D. Assistant Professor, Department of Otolaryngology Head & Neck Surgery, Indiana University School of Medicine, Indianapolis, IN

Functions of Glutaredoxin Domain-containing Proteins in **Hearing and Deafness** 

# 08.40-09.00 In-Person



Xianhua Piao, M.D., Ph.D. Benioff Professor in Children's Health, Director of the Newborn Brain Research Institute, Weill Institute for Neuroscience, University of California, San Francisco, CA

GPCR-dependent Microglia Function in Development and Disease

# 09.00-09.20 In-Person



Luigi Puglielli, M.D., Ph.D. Professor, Department of Medicine, Waisman Center, University of Wisconsin-Madison, Madison, WI

Lysine Acetylation Within the Lumen of the Endoplasmic Reticulum, Proteostasis, and Neurodevelopment

# 09.20-09.40 In-Person



Susanna Rosi, Ph.D. Lewis and Ruth Cozen Chair II, Weill  $Institute\ for\ Neurosciences,\ Departments\ of$ Physical Therapy Rehabilitation Science, Neurological Surgery, University of California San Francisco, CA

Targeting the Integrated Stress Response to Reverse Memory **Deficits** 

# 09.40-10.00 In-Person



Brigitte Ciapa, Ph.D. Paris-Saclay Institute of Neuroscience, CNRS, Université Paris-Sud, Université Paris-Saclay,

Expression of Presenilins: From the Sea Urchin Embryo to the Mouse Brain and Alzheimer's Disease

# 10.00-10.15 In-Person



Elias Adriaenssens, Ph.D. Department of Biomedical Sciences, University of Antwerp, Belgium

A Weakened Interface in the P182L Variant of HSP27 Associated with Severe Charcot-Marie-Tooth Neuropathy Causes Aberrant **Binding to Interacting Proteins** 

# 10.15-10.35 Virtual



Marco Trizzino, Ph.D. Assistant Professor, Department of Biochemistry and Molecular Biology, Thomas Jefferson University, Philadelphia,

Inability to Switch from ARID1A-BAF to ARID1B-BAF Impairs **Exit from Pluripotency and Commitment Towards Neural Crest** Formation in ARID1B-related Neurodevelopmental Disorders

# 10.35-10.55 Virtual



Kai-Christian Sonntag, M.D., Ph.D. Assistant Professor of Psychiatry (Neuroscience), McLean Hospital, Harvard Medical School, Belmont, MA

Developing the Induced Pluripotent Stem Cell (iPSC) Paradigm as a Personalized Medicine Approach for Late-onset Alzheimer's Disease

# 10.55-11.15 Virtual



Mollie K. Meffert, M.D., Ph.D. Associate Professor, Departments of Biological

Chemistry and Neuroscience, Center for Cell Dynamics, Johns Hopkins University School of Medicine, Baltimore, MD

Growth Regulatory miRNAs in Neurodevelopment and **Plasticity** 

Day-3, April 20

CEB - 2022 FINAL PROGRAM

# **Cell and Developmental Biology**

Day 3, Time: 11.30-13.05 Chair: Xianhua Piao (11.30-13.05)

# 11.30-11.50 In-Person



Hernando Lopez-Bertoni, Ph.D. Assistant Professor, Hugo W. Moser Research Institute at Kennedy Krieger, Department of Neurology, Johns Hopkins School of Medicine, Baltimore, MD

SOX2-mediated 5hmC dysregulation in GBM Stem Cells

# 11.50-12.10 In-Person



Sudhish Sharma, Ph.D.
Assistant Professor, Development Biology,
Division of Cardiovascular-Thoracic
Surgery, Ann & Robert H. Lurie Children's
Hospital of Chicago, IL

The Mechanism of Exosomes Mediated Restoration of Cardiac Function of Ischemic Myocardium

# 12.10-12.30 Virtual



ChangHwan Lee, Ph.D. Assistant Professor, Department of Biological Sciences, University at Albany, SUNY, Albany, NY

Quantitative Understanding of Notch-dependent Transcriptional Dynamics  $\mathit{In \ Vivo}$ 

# **Experimental Biology and Disease Physiology**

# 12.30-12.50 In-Person



Muriel Lizé, Ph.D. Associate Director, Head of In Vitro Respiratory Research, Boehringer Ingelheim, Germany

From Cilia Defects to Chronic Lung Diseases

# 12.50-13.05 In-Person



**Stanislovas Jankauskas** Albert Einstein College of Medicine, Department of Medicine, Division of Cardiology, NY

Inositol Trisphosphate Receptors (IP3Rs) Regulate Mitophagy and Apoptosis in Pancreatic Beta-Cells

# 13.05 - Lunch and Networking

Day 3, Time: 13.30-18.00 Chair: Linglin Xie (13.30-18.00)

#### 13.30-13.50 Virtual



**Zhen Bouman Chen, Ph.D.**Associate Professor, Department of Diabetes Complications and Metabolism, City of Hope, Duarte, CA

Enhancer LncRNAs Regulate Endothelial Function in Health and Disease

# 13.50-14.10 Virtual



Stephan Lehnart, Ph.D.

Department of Cardiology & Pneur

Department of Cardiology & Pneumology, Heart Research Center Göttingen, University Medical Center Göttingen, Germany

Junctophilin Proteins in Cellular Function and Disease Physiology

# 14.10-14.30 Virtual



Konrad Urbanek, Ph.D. University of Naples Federico II, Naples, Italy

Glucocorticoid-Induced Leucine Zipper and the Failing Heart

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# 14.30-14.40 Virtual



Iris Car Centre for Applied Bioanthropology, Institute for Anthropological Research, Croatia

Integrated Proteomics and Bioinformatics Analysis Identifies Overexpression of Ezrin and Aberrant Regulation of Actin Cytoskeleton in Vemurafenib-resistant BRAFV600E Mutated Colon Cancer Cells

# Cell and Developmental Biology

# 14.40-15.00 Virtual



Neda Bagheri, Ph.D. Allen Institute for Cell Science, Seattle; Biology and Chemical Engineering, University of Washington, Seattle, WA

Agent-based Models Help Uncover Rules Driving Emergent Cell and Population Dynamics

# 15.00-15.20 Virtual



**Abdel Halim Harrath**, **Ph.D.**Professor, Fetal Programming of Diseases
Research Lab, College of Sciences, King
Saud University, Saudi Arabia

Role of Autophagy in Regulation of Cell Survival/Cell Death in Ovarian Cell Cytotoxicity

# 15.20-15.40 Virtual



Lara López-González, Ph.D. Department of Human Anatomy and Psychobiology, School of Medicine, University of Murcia, Spain

Tangential Intrahypothalamic Migration of the Mouse Ventral Premamillary Nucleus

# 15.40-15.55 Virtual



Olivier Theodoly, Ph.D. Research Director at CNRS, Head of Laboratory Adhesion & Inflammation, INSERM, Aix Marseille University, France

The Strange Cases of Lymphocytes Migration and Adhesion: Swimming and Reverse Haptotaxis

# **Experimental Biology and Disease Physiology**

# 15.55-16.15 Virtual



### **Seraina Domenig**

Laboratory of Regenerative and Movement Biology, Department of Health Sciences and Technology, Swiss Federal Institute of Technology (ETH) Zurich, Switzerland CRISPR/Cas9 Editing of Directly Reprogrammed Myogenic Progenitors Restores Dystrophin Expression in a Mouse Model of Muscular Dystrophy

# 16.15-16.35 Virtual



Linglin Xie, Ph.D. Department of Nutrition, Texas A&M University, College Station, TX

Macrophage Osr1-PPARγ Regulation Plays an Essential Role in Liver Inflammation of NASH

# 16.35 - 16.45 Break

# 16.45-17.05 Virtual



**Karen Usdin, Ph.D.**Chief, Gene Structure and Disease Section,
Deputy Chief, Laboratory of Cell and

Deputy Chief, Laboratory of Cell and Molecular Biology, NIDDK, National Institutes of Health, Bethesda MD DNA Repair Gone Bad: The Mechanism of Repeat Expansion in the Fragile X-related Disorders

# 17.05-17.20 Virtual



Matthew C. Madison, Ph.D. Division of Pulmonary, Allergy, and Critical Care Medicine, University of Alabama at Birmingham, AL

The Pathogenic Role of PMN Exosomes in Inflammatory Lung Disease

# 17.20-17.40 Virtual



**Jenny Gunton, Ph.D.** *Head. Centre for Diabetes* 

Head, Centre for Diabetes, Obesity and Endocrinology Research (CDOER), The University of Sydney, Australia

HIFs (Hypoxia Inducible Factors) and the Liver

# 17.40-18.00 Virtual



**Jui-Hsia Weng, Ph.D.** *Institute of Biological Chemistry, Academia Sinica, Taiwan* 

The Secret Life of your Old Friend: Drugging Intercellular Communication Against Inflammation

# **Cell and Developmental Biology**

Day 3, Time: 18.00-20.00 Chair: Lan Guan (18.00-20.00)

# 18.00-18.20 Virtual



Giselle Yeo, Ph.D.

Charles Perkins Centre, School of Life and Environmental Sciences, The University of Sydney, Australia Extracellular Matrix Modulation of Mesenchymal Stem Cell Behaviour

# 18.20-18.40 Virtual



Katrin J. Svensson, Ph.D. Assistant Professor, Department of Pathology, Stanford School of Medicine,

**Extracellular Regulators of Physiology and Metabolism** 

# 18.40-19.00 Virtual



Francesca Storici, Ph.D.

Stanford University, CA

GRA Distinguished Cancer Scientist, Professor, School of Biological Sciences, Georgia Institute of Technology, Atlanta, GA Features and Patterns of Ribonucleotides Embedded in Human Mitochondrial DNA

# 19.00-19.20 Virtual



Kurt Zimmerman, Ph.D.

Assistant Professor, Department of Internal Medicine, Division of Nephrology, University of Oklahoma Health Sciences Center, Oklahoma City, OK

A Single Cell Immune Atlas Reveals the Involvement of Adaptive Immune Cells in Injury Mediated Cyst Progression

#### 19.20-19.40 Virtual



Xiaoying Zhou, M.D., Ph.D.

Sean N. Parker Center for Allergy & Asthma Research, Division of Pulmonary, Allergy, and Critical Care Medicine, Stanford University, CA

Mass Cytometry Reveals Distinct Immune Cell Populations Associated with Food Allergy

# **Poster Presentations**

# 19.40-19.50 Virtual



**Stephanie Wojtowicz** *Western University, Canada* 

**Characterizing How DHPs Inhibit Transforming Growth Factor Beta Signalling** 

# 19.50-20.00 Virtual



**Charles Trelford**Western University, Canada

The Relationship Between  $TGF\beta$  and Autophagy in Non-small Cell Lung Cancer

**End of Day-3** 



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