



# Oral Program

## Sunday, January 28, 2018

- 12:00-14:15 Registration | Promenade  
14:15-14:30 Welcome and Opening Remarks | Jasmine Room  
14:30-17:55 **Session 1: Reprogramming** | Jasmine Room  
Chairs: Angelo Azzi and Claes Wahlestedt
- 14:30-15:10 **Feodor Lynen Lecture**  
**[K01] The emerging role of pluripotent stem cells in translational studies of tissue repair: Emphasis on cardiac injury**  
J. Hare, *University of Miami Miller School of Medicine, USA*
- 15:10-15:25 **[SL01] Treatment of diabetes and obesity with engineered epidermal stem cells**  
X. Wu\*<sup>1</sup>, J. Yue<sup>1</sup>, X. Gou<sup>1</sup>, C. Li<sup>1</sup>, B. Wicksteed<sup>2</sup>, <sup>1</sup>*University of Chicago, USA*, <sup>2</sup>*University of Illinois at Chicago, USA*
- 15:25-16:00 **[INV01] Nudt21 controls cell fate by connecting alternative polyadenylation to chromatin signaling**  
K. Hochedlinger, *Harvard University, USA*
- 16:00-16:30 Coffee Break | Hibiscus Room/Promenade  
16:30-17:05 **[INV02] Interspecies organogenesis for generation of autologous, functional organs**  
H. Nakauchi, *Stanford University, USA & The University of Tokyo, Japan*
- 17:05-17:20 **[SL02] Viral vector mediated gene editing eliminates the C9ORF72 repeat expansion mutation from induced pluripotent stem cell derived neurons and cerebral brain organoids**  
N.S. Andrade<sup>1</sup>, R. Esanov<sup>1</sup>, G.T. Cabrera<sup>2</sup>, R.H. Brown<sup>2</sup>, M. Benatar<sup>1</sup>, C. Wahlestedt<sup>1</sup>, C. Mueller<sup>2</sup>, Z.R. Zeier\*<sup>1</sup>, <sup>1</sup>*University of Miami, USA*, <sup>2</sup>*University of Massachusetts, USA*
- 17:20-17:55 **[INV03] Specification and programming of human primordial germ cells**  
A. Surani, *Wellcome Trust Cambridge Research UK Gurdon Institute: University of Cambridge, UK*
- 17:55-19:00 Welcome Drinks Reception | Riverwalk Terrace

## Monday, January 29, 2018

- 09:00-09:15 Welcome from the University of Miami Miller School of Medicine | Jasmine Room  
09:15-12:25 **Session 2: Differentiating Stem Cells** | Jasmine Room  
Chairs: Joshua Hare and Jonathan Saxe  
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- 09:15-09:55 **Lifetime Achievement Award**  
**[K02] The formation of stem cells from somatic cells by nuclear transfer to eggs**  
J.B. Gurdon, *The Wellcome Trust/Cancer Research UK Gurdon Institute: University of Cambridge, UK*
- 09:55-10:30 **[INV04] Generation of atrial and ventricular cardiomyocytes from human pluripotent stem cells**  
S. Protze, *McEwen Centre for Regenerative Medicine University Health Network, Canada*
- 10:30-11:00 Coffee Break | Hibiscus Room/Promenade  
11:00-11:35 **[INV05] Stem cell approaches to treat Age-Related Macular Degeneration**  
S. Temple, *Neural Stem Cell Institute, USA*
- 11:35-11:50 **[SL03] Designer culture substrates based on laminin E8 fragments for robust expansion and differentiation of human pluripotent stem cells**  
K. Sekiguchi, *Osaka University, Japan*
- 11:50-12:25 **[INV06] Mechanisms of quiescence, activation and differentiation in adult mesenchymal stem cells of the liver**  
C. Kordes, *Heinrich Heine Universität, Germany*
- 12:25-13:55 Lunch and Poster Session 1 | Hibiscus Room/Promenade  
12:45-13:45 **Workshop: An Army Marches on Its Metabolism in Vitro** | Jasmine Room  
A.D. Henn, *BioSpherix, Ltd., USA*  
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13:55-18:00	<b>Session 3: Hematopoietic Stem Cells</b>   Jasmine Room Chairs: Flavia Fontanesi and Antoni Barrientos
13:55-14:35	<b>Special Achievement Award</b> <b>[K03] Normal and neoplastic stem cells</b> I.L. Weissman, <i>Stanford University, USA</i>
14:35-14:50	<b>[SL04] Loss of ASXL1 in the bone marrow niche dysregulates hematopoietic stem cell fates through RNA polymerase II complex</b> P. Zhang*, Y. Guo, H. Yang, S. Chen, M. Xu, F-C. Yang, <i>University of Miami, USA</i>
14:50-15:30	<b>Special Achievement Award</b> <b>[K04] Stemness properties in AML: Are they relevant?</b> J. Dick, <i>Princess Margaret Cancer Centre &amp; University of Toronto, Canada</i>
15:30-16:15	Coffee Break and Poster Session 1   Hibiscus Room/Promenade
16:15-16:50	<b>[INV07] Nerves at the forefront of the aging HSC niche and cancer microenvironment</b> P.S. Frenette, <i>Albert Einstein College of Medicine, USA</i>
16:50-17:25	<b>[INV08] Building cancer in organoids</b> M. van de Wetering, <i>Hubrecht Institute, The Netherlands</i>
17:25-18:00	<b>[INV09] Bringing mesenchymal stem cells into the clinic</b> K. Le Blanc, <i>Karolinska Institutet, Sweden</i>
19:00-22:00	Conference Dinner (separate ticket required)   The Rusty Pelican
<b>Tuesday, January 30, 2018</b>	
09:00-12:05	<b>Session 4: Cancer Stem Cells</b>   Jasmine Room Chairs: Stephen Nimer and Angelo Azzi [09:00-09:40] Chairs: Kerry Burnstein and Angelo Azzi [09:40-12:05]
09:00-09:40	<b>IUBMB Award</b> <b>[K05] Perturbations in stem cell self-renewal pathways in degenerative disease and cancer</b> M.F. Clarke, <i>Stanford University, USA</i>
09:40-09:55	<b>[SL05] The role of melanocyte stem cell activation and translocation in melanoma development</b> H. Moon <sup>1</sup> , L.R. Donahue <sup>1</sup> , E. Choi <sup>1</sup> , P.O. Scumpia <sup>2</sup> , W.E. Lowry <sup>2</sup> , J.K. Grenier <sup>1</sup> , J. Zhu <sup>1</sup> , A.C. White <sup>*1</sup> , <sup>1</sup> <i>Cornell University, USA</i> , <sup>2</sup> <i>UCLA, USA</i>
09:55-10:30	<b>[INV10] Regulation of stem cell fate in mammalian epidermis'</b> F. Watt, <i>King's College London, UK</i>
10:30-11:00	Coffee Break   Hibiscus Room/Promenade
11:00-11:15	<b>[SL06] Lgr5-expressing chief cells drive epithelial regeneration and cancer in the oxyntic stomach</b> M. Leushacke <sup>*1</sup> , S. Tan <sup>1</sup> , A. Wong <sup>1</sup> , Y. Swathi <sup>1</sup> , A. Hajamohideen <sup>1</sup> , L. Tan <sup>1</sup> , J. Goh <sup>1</sup> , E. Wong <sup>1</sup> , K. Murakami <sup>2</sup> , N. Barker <sup>1,2</sup> , <sup>1</sup> <i>A*STAR Institute of Medical Biology, Singapore</i> , <sup>2</sup> <i>Kanazawa University, Japan</i> , <sup>3</sup> <i>The University of Edinburgh, UK</i>
11:15-11:50	<b>[INV11] Fat Cell: Cancer stem cell expansion and increased tumor metastasis</b> J.M. Slingerland, <i>Sylvester Comprehensive Cancer Center, USA</i>
11:50-12:05	<b>[SL07] KSHV tumorigenesis occurs by environmentally-induced epigenetic adaptation to viral oncogenic gene expression and signaling in pdgfra+ve mesenchymal cancer stem cells</b> J. Naipauer*, L. Cavallin, S. Rosario, C. Premer, V. Ponzinibbio, D. Salyakina, M. Abba, J. Hare, P. Goldschmidt-Clermont, E. Mesri et al, <i>University of Miami, USA</i>
12:05-13:35	Lunch and Poster Session 2   Hibiscus Room/Promenade
13:35-17:40	<b>Session 5: Cell Engineering</b>   Jasmine Room Chairs: Guy Howard and Marilyn Glassberg
13:35-14:10	<b>[INV12] Human organs on chips</b> D. Ingber, <i>Wyss Institute for Biologically Inspired Engineering at Harvard University &amp; Harvard Medical School &amp; Boston Children's Hospital, USA</i>
14:10-14:25	<b>[SL08] Modular tissue engineering of bone microenvironment for propagating circulating tumor cells</b> V. Mayo*, A. Agarwal, R. Cote, S. Rawal, D. Correa, A. Bowles, <i>University of Miami, USA</i>
14:25-14:40	<b>[SL09] Allogeneic mesenchymal stem cells in the treatment of deep second degree burns</b> A. Candanedo, L. Rodriguez-Menocal, W. Guzman, J. McBride, L. Pizano, N. Namias, O. Orozco, C.I. Schulman, E.V. Badiavas*, <i>University of Miami, USA</i>

- 14:40-15:15 **[INV13] Modeling human tumorigenesis de novo reveals an unexpected program of changes**  
C. Eaves, Terry Fox Laboratory, BC Cancer Agency & University of British Columbia, Canada
- 15:15-16:00 Coffee Break and Poster Session 2 | Hibiscus Room/Promenade
- 16:00-16:35 **[INV14] Disease in a dish concept using iPS cells**  
J. Wu, Stanford School of Medicine, USA
- 16:35-16:50 **[SL10] The role of wnt-signaling and the epigenetic control of liver to pancreas transdifferentiation**  
S. Ferber<sup>\*1,2</sup>, I. Meivar-Levy<sup>1,2</sup>, H. Cohen<sup>1,2</sup>, H. Barash<sup>1,2</sup>, A. Har-Zahav<sup>1,2</sup>, <sup>1</sup>Sheba Medical Center, Israel, <sup>2</sup>Sackler Faculty of Medic, Israel
- 16:50-17:05 **[SL11] Benefits of young donor mesenchymal stem cells in the management of fibrotic lung disease**  
M.K. Glassberg\*, P. Catanuto, G. Rubio, S. Pereira-Simon, X. Xia, S. Elliot, University of Miami Miller School of Medicine, USA
- 17:05-17:40 **[INV15] Regenerative approaches to post-MI heart failure using engineered cardiac patch**  
J. Zhang, University of Alabama at Birmingham (UAB), USA
- 19:00-23:00 Student Party (invite only) | Frost Museum of Science
- Wednesday, January 31, 2018**
- 09:00-12:20 **Session 6: Stem Cell and Gene Therapy Clinical Trials** | Jasmine Room  
Chairs: Michal Toborek and Claes Wahlestedt
- 09:00-09:35 **[INV16] Mutant IDH1 downregulates ATM and alters DNA repair in AML stem cells**  
T. W. Mak, University of Toronto & Princess Margaret Cancer Centre & Ontario Cancer Institute, Canada
- 09:35-10:10 **[INV17] Advanced genetic engineering of hematopoiesis to treat inherited diseases and cancer**  
L. Naldini, IRCCS San Raffaele Scientific Institute & Vita-Salute San Raffaele University, Italy
- 10:10-10:20 Poster Prize Presentation
- 10:20-10:50 Coffee Break | Hibiscus Room/Promenade
- 10:50-11:25 **[INV18] Cell based therapies for Parkinson's disease - past, present and future**  
R.A. Barker, University of Cambridge, UK
- 11:25-11:40 **[SL12] Stem Cell Therapy for stroke: Optimal routes of delivery and therapeutic time-window**  
D. Yavagal, University of Miami Miller School of Medicine, USA
- 11:40-12:20 **UBMB Award**  
**[K06] Primary immunodeficiencies gene therapy**  
M. Cavazzana, Hospital Necker, France
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**WILEY**
- 12:20-12:30 Closing Remarks
- 12:30-13:30 Lunch | Hibiscus Room/Promenade
- 13:30-15:00 **Author Workshop: An Introduction to Scholarly Publishing** | Jasmine Room  
J. Saxe, Scientific Editor, Cell Stem Cell