



## Tuesday, January 4, 2022

<b>Session 2:</b>	<b>Travel Award Winners</b>
12:20 p.m. - 12:30 p.m. <i>Indian Wells IJK</i>	<b>Hydrostatic Pressurization Activates an Inflammatory Resolving Macrophage through Cytoskeletal Related Pathways</b> <i>Kevin Burt, Travel Award Winner</i>
12:30 p.m. - 12:40 p.m. <i>Indian Wells IJK</i>	<b>High-Throughput Salivary Gland Tissue Chip For The Discovery Of Novel Radioprotective Drugs</b> <i>Lindsay Piraino, Travel Award Winner</i>
12:40 p.m. - 12:50 p.m. <i>Indian Wells IJK</i>	<b>Myosin-Independent Mechanotransmission For Sensing Stiffness Of Extracellular Matrix</b> <i>Nikhil Mittal, Travel Award Winner</i>
12:50 p.m. - 1:00 p.m. <i>Indian Wells IJK</i>	<b>Multicellular Human Cardiac Organoids Transcriptomically Model Distinct Tissue-Level Features of Adult Myocardium</b> <i>Charles Kerr, Travel Award Winner</i>
1:00 p.m. - 1:10 p.m. <i>Indian Wells IJK</i>	<b>Smart Immune Repertoire Sequencing in Single Cells</b> <i>Michael Malone, Travel Award Winner</i>
1:30 p.m. - 3:00 p.m. <i>The Grove at Indian Wells</i>	<b>Invited Event; Lunch with Leaders</b>
5:00 p.m. - 6:00 p.m. <i>Indian Wells Ballroom LM</i>	<b>Evening Poster Session w/ Light Beverages</b>
6:00 p.m. <i>The Grove at Indian Wells</i>	<b>Opening Reception</b>

## Wednesday, January 5, 2022

<b>Session 3:</b>	<b>Molecular Actuators for Controlling Multicellular Systems</b>
7:30 a.m. - 8:00 a.m. <i>18th Terrace &amp; LM Foyer</i>	<b>Breakfast</b>
8:00 a.m. - 8:40 a.m. <i>Indian Wells IJK</i>	<b>Inner Workings of Channelrhodopsins and Brains</b> <i>Keynote: Karl Deisseroth, Stanford University &amp; HHMI</i>
8:40 a.m. - 9:00 a.m. <i>Indian Wells IJK</i>	<b>Exploiting Optogenetics to Study Force-Activated Cellular Machines</b> <i>Invited Speaker: Margaret Gardel, University of Chicago</i>
9:00 a.m. - 9:20 a.m. <i>Indian Wells IJK</i>	<b>Mammalian Cell Design Using Synthetic Biology</b> <i>Invited Speaker: Wilson Wong, Boston University</i>
9:20 a.m. - 9:30 a.m. <i>Indian Wells IJK</i>	<b>Control of the Activity of CAR-T Cells within Tumors via Focused Ultrasound</b> <i>Yiqian (Shirley) Wu, Travel Award Winner</i>
9:30 a.m. - 9:40 a.m. <i>Indian Wells IJK</i>	<b>Directed Evolution and Phylogenetic Discovery of Acoustic Reporter Genes for In Vivo Imaging of Gene Expression in Mice</b> <i>Robert Hurt, Travel Award Winner</i>
9:40 a.m. - 9:50 a.m. <i>Indian Wells IJK</i>	<b>A Mechanochemical Switch for Supracellular Migration</b> <i>T. Curtis Shoyer, Jr., Travel Award Winner</i>
9:50 a.m. - 10:00 a.m. <i>Indian Wells IJK</i>	<b>Crosstalk Between CD11b and Piezo1 Mediates Macrophage Responses to Mechanical Cues</b> <i>Hamza Atcha, Travel Award Winner</i>
10:10 a.m. - 10:40 a.m. <i>Indian Wells Ballroom LM</i>	<b>Poster Session w/ Coffee</b>



## Wednesday, January 5, 2022

<b>Session 4:</b>	<b>Image Based Profiling of Multicellular Systems</b>
10:40 a.m. - 11:10 a.m. <i>Indian Wells IJK</i>	<b>Visualizing the Emergence and Exit from Pluripotency In Vivo in the Mammalian Embryo</b> <i>Integrated Session Speaker: Kat Hadjantonakis, Memorial Sloan Kettering Cancer Center</i>
11:10 a.m. - 11:40 a.m. <i>Indian Wells IJK</i>	<b>A Multiplexed Epitope Barcoding Strategy Enables Dynamic Cellular Phenotypic Screens</b> <i>Integrated Session Speaker: Markus Covert, Stanford University</i>
11:40 a.m. - 12:10 p.m. <i>Indian Wells IJK</i>	<b>Single Cell Biology in a Software 2.0 World</b> <i>Integrated Session Speaker: David Van Valen, Caltech</i>
12:10 p.m. - 12:40 p.m. <i>Indian Wells IJK</i>	<b>Democratization of Stem Cell Data and Tools Towards Increasing Reproducibility in Science</b> <i>Allen Institute: Graham Johnson</i>
12:40 p.m. - 12:50 p.m. <i>Indian Wells IJK</i>	<b>Rap1 Controls Adhesion and Cytoskeletal Rearrangements to Drive Rapid Wound Repair</b> <i>Katheryn Rothenberg, Travel Award Winner</i>
1:30 p.m. - 3:00 p.m. <i>The Grove at Indian Wells</i>	<b>Invited Event; Mentoring Lunch</b>
4:00 p.m. - 6:00 p.m. <i>Indian Wells IJK</i>	<b>Allen Institute "Hands-On" Workshop: Segmenter/Napari &amp; Simularium</b> <i>(Workshop led by Kim Metzler &amp; Blair Lyons)</i>
6:00 p.m. <i>The Cove</i>	<b>Gala Dinner: Shu Chien Achievement Award (Dr. Valerie M. Weaver) &amp; Christopher Jacobs Award for Excellence in Leadership (Dr. Lori A. Setton)</b>

## Thursday, January 6, 2022

<b>Session 5:</b>	<b>New Perspectives Arising from Human Organoid Systems</b>
7:30 a.m. - 8:00 a.m. <i>18th Terrace &amp; LM Foyer</i>	<b>Breakfast</b>
8:00 a.m. - 8:40 a.m. <i>Indian Wells IJK</i>	<b>Killing Cancer Stem Cells in Brain Cancer</b> <i>Keynote: Jeremy Rich, University of Pittsburgh</i>
8:40 a.m. - 9:00 a.m. <i>Indian Wells IJK</i>	<b>Modeling Tumor-Stromal Metabolic Crosstalk in Colorectal Cancer</b> <i>Invited Speaker: Stacey Finley, University of Southern California</i>
9:00 a.m. - 9:20 a.m. <i>Indian Wells IJK</i>	<b>Tissue Engineered Organoid Models for Exploring Microenvironmental and Phenotypic Heterogeneity</b> <i>Invited Speaker: Alison McGuigan, University of Toronto</i>
9:20 a.m. - 9:50 a.m. <i>Indian Wells IJK</i>	<b>Uncovering Mechanistic Rules that Drive Emergent Stem Cell Shape and Colony Dynamics through Agent-Based Modeling</b> <i>Allen Institute: Neda Bagheri &amp; Jessica S. Yu</i>
9:50 a.m. - 10:00 a.m. <i>Indian Wells IJK</i>	<b>Leukemia-on-a-Chip for Modeling and Decoding the Heterogeneous Mechanisms Underlying Chemotherapy Resistance</b> <i>Chao Ma, Travel Award Winner</i>
10:10 a.m. - 10:40 a.m. <i>Indian Wells Ballroom LM</i>	<b>Poster Session w/ Coffee</b>

## Thursday, January 6, 2022

<b>Session 6:</b>	<b>Responsive Biomaterials for Controlling Stem Cells</b>
10:40 a.m. - 11:20 a.m. <i>Indian Wells IJK</i>	<b>Adaptable Networks for High Resolution Imaging and Studying Mechanotransduction</b> <i>Keynote: Kristi Anseth, University of Colorado Boulder</i>
11:20 a.m. - 11:40 a.m. <i>Indian Wells IJK</i>	<b>Improving Cardiovascular “Diseases-in-a-Dish” with Active Materials</b> <i>Invited Speaker: Adam Engler, University of California, San Diego</i>
11:40 a.m. - 12:00 p.m. <i>Indian Wells IJK</i>	<b>Bioengineered Platforms for Mechanistic Understandings and Therapeutic Interventions</b> <i>Invited Speaker: Shyni Varghese, Duke University</i>
12:00 p.m. - 12:10 p.m. <i>Indian Wells IJK</i>	<b>Extracellular Presentation of Noncanonical Wnt5a Motif Promotes the Mechanotransduction and Activation of Cytotoxic CD8+ T-Cell</b> <i>Rui Li, Travel Award Winner</i>
12:10 p.m. - 12:20 p.m. <i>Indian Wells IJK</i>	<b>Cell Adhesion is an In Vivo Predictive Marker of Metastatic Potential</b> <i>Katherine Birmingham, Travel Award Winner</i>
12:20 p.m. - 12:30 p.m. <i>Indian Wells IJK</i>	<b>Methacrylamide-Functionalized Gelatin Hydrogel Models of the Endometrium and Trophoblast Motility</b> <i>Samanta Zambuto, Travel Award Winner</i>
12:30 p.m. - 12:40 p.m. <i>Indian Wells IJK</i>	<b>Cell Chirality of Micropatterned Endometrial Microvascular Endothelial Cells</b> <i>Ishita Jain, Travel Award Winner</i>
12:40 p.m. - 12:50 p.m. <i>Indian Wells IJK</i>	<b>Dual Peptide Functionalized Alginate Hydrogels to Modulate Nucleus Pulposus Cell Phenotype</b> <i>Xiaohong Tan, Travel Award Winner</i>
2:00 p.m. - 3:00 p.m. <i>Indian Wells IJK</i>	<b>Workshop on Funding Opportunities</b>
5:00 p.m. - 6:00 p.m. <i>Indian Wells Ballroom LM</i>	<b>Evening Poster Session w/ Light Beverages</b>

## Friday, January 7, 2022

<b>Session 7:</b>	<b>Stem Cell Decision Making in Multicellular Systems</b>
7:30 a.m. - 8:00 a.m. <i>18th Terrace &amp; LM Foyer</i>	<b>Breakfast</b>
8:00 a.m. - 8:40 a.m. <i>Indian Wells IJK</i>	<b>Engineering Tissue Function through Adhesions and Forces</b> <i>Keynote: Christopher Chen, Boston University</i>
8:40 a.m. - 9:00 a.m. <i>Indian Wells IJK</i>	<b>Fueling Cell Movement: the Intersection of Migration and Metabolism</b> <i>Invited Speaker: Cynthia Reinhart-King, Vanderbilt University</i>
9:00 a.m. - 9:20 a.m. <i>Indian Wells IJK</i>	<b>Tissue-Engineered Platforms to Study Sexual Dimorphism in Valvular Disease</b> <i>Invited Speaker: Kristyn Masters, University of Madison - Madison</i>
9:20 a.m. - 9:40 a.m. <i>Indian Wells IJK</i>	<b>Substrate Stiffness Modulates Endothelial Phenotypic Change</b> <i>Selected Abstract: Ngan Huang, Stanford University</i>
9:40 a.m. - 9:50 a.m. <i>Indian Wells IJK</i>	<b>Enhances Tumor Immunotherapy using Engineered Artificial Immune Cells</b> <i>Mahdi Hasani, Travel Award Winner</i>
9:50 a.m. - 10:00 a.m. <i>Indian Wells IJK</i>	<b>Dissecting Endothelial Cell-Muscle Stem Cell Communication in Skeletal Muscle Regeneration through In Vivo Single-Cell Transcriptomics and In Vitro Models</b> <i>Emily Laurillard, Travel Award Winner</i>

## Friday, January 7, 2022

10:10 a.m. - 10:40 a.m.  
Indian Wells Ballroom LM

**Poster Session w/ Coffee**

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**Session 8: Multi-scale Immunoengineering**

10:40 a.m. - 11:00 a.m.  
Indian Wells IJK

**Mimicking Somatic Hypermutation and Antibody Evolution in Yeast**  
Integrated Session Speaker: Chang Liu, University of California, Irvine

11:00 a.m. - 11:20 a.m.  
Indian Wells IJK

**Engineering Next-Generation CAR-T Cells for Cancer Immunotherapy**  
Integrated Session Speaker: Yvonne Chen, University of California, Los Angeles

11:20 a.m. - 11:40 a.m.  
Indian Wells IJK

**Multiscale Engineering of Organoids for Infectious Disease and Cancer**  
Integrated Session Speaker: Ankur Singh, Georgia Tech

11:40 a.m. - 12:00 p.m.  
Indian Wells IJK

**Rapid Prototyping of Multivalent And Multi-Specific Drugs To Overcome The Limited Selectivity Of IL-2 Toward Regulatory T Cells**  
Selected Abstract: Aaron Meyer, University of California, Los Angeles

12:00 p.m. - 12:10 p.m.  
Indian Wells IJK

**Closing Remark, Awards, and Survey**

## Session Chairs

### Tuesday, January 4, 2022

Session 1: Peter Yingxiao Wang

Session 2: Shelly Peyton and Yi-Xian Qin

### Wednesday, January 5, 2022

Session 3: Brenton Hoffman

Session 4: Guohao Dai

### Thursday, January 5, 2022

Session 5: Stephanie Fraley

Session 6: Song Li

### Friday, January 7, 2022

Session 7: Ben Cosgrove

Session 8: Jenny Jiang

# POSTER PRESENTERS

Poster #	Authors	Title
1	John Viola, Catherine Porter, Ananya Gupta, Mariia Alibekova-Long, Louis Prahl and Alex Hughes	In vivo study and synthetic engineering of mechanical rules for kidney tubule morphogenesis
2	Marie Payne, Eric Heinrichs, Melissa Rupert, Nathan Cai, Bennett Novitch and Neil Lin	Flow Culture Improves Neural Differentiation in Forebrain Organoids
3	Yingchao Su, Yufeng Zheng, Yadong Wang and Donghui Zhu	Improved Mechanical Property and In Vivo Biocompatibility of Zinc Implants
4	Maya Rowell and Stephanie Fraley	Development of a fluidic model system for studying cancer vasculogenic mimicry
5	William Leineweber and Stephanie Fraley	Iron regulates collective cancer cell migration
6	Vikrant Sharma and Xue Han	A Learned Lossless Compression System based on Lossy FLIF
7	Sabrina Chen and Nancy Hollingsworth	Negative charges at T168, S169, and/or S170 of ECM11 promote meiotic progression and synapsis in meiotic <i>Saccharomyces cerevisiae</i> cells
8	Arne Hofemeier, Till Muenker, Tamara Limon, Fabian Herkenrath, Penney Gilbert and Timo Betz	'Forcing' changes in health and disease: New access into bioengineered skeletal muscle mechanics
9	Shahab Chizari, Laura Campisi, Ivan Marazzi and Ning Jiang	Single-Cell Multiomics Highlights Clonally Expanded CD8 T cells in Amyotrophic Lateral Sclerosis 4
10	Karl Barber, Ellen Shrock and Stephen Elledge	CRISPR-based peptide library display and DNA-templated peptide microarray self-assembly for quantitative protein binding assays
11	Michele Dill, Ruth Davenport, Brad Barbazuk and Chelsey Simmons	Assessment of altered fibroblast mechanotransduction in the Spiny Mouse using RNA-Seq
12	Jessica King, Anne Lietzke, Scott Soleimanpour and Lonnie Shea	Metabolic maturation of human pluripotent stem cell (hPSC) derived beta-cells
13	Raghu Vamsi Kondapaneni and Dr. Shreyas S Rao	A Biomimetic Hyaluronic Acid Hydrogel Induces Tumor Mass Dormancy in Brain Metastatic Breast Cancer Cell Clusters
14	Alex Whitehead and Adam Engler	iPSC-Derived Cardiac Fibroblasts Demonstrate Genotype-dependent Stress Responses Mirroring Post-Infarction Inflammation
15	Apratim Bajpai, Ngoc Luu, Lina Park, Muhammad Faayez Qureshi, Rui Li and Weiqiang Chen	Investigating the Mechanisms of Aging-Associated Decline in Vascular Cell Mechanosensation Using a Novel Ultrasound-Tweezers System
16	Suzanne Stasiak, Ryan Jamieson and Harikrishnan Parameswaran	A gap junction independent mechanism for intercellular communication using Calcium waves
17	Gisselle Gonzalez, Aileena C. Nelson, Alexander J. Whitehead, Ritwik Vatsyayan, Shadi Dayeh and Adam J. Engler	Conductive Electrospun Polymer Platforms for Stem Cell-Derived Cardiomyocyte Maturation
18	Kerry Lane, Anna Kim, Erica Castillo, Gabriela Torres, Orlando Chirikian and Beth Pruitt	Scaling up lift-off protein patterning on hydrogels
19	Jaimie Mayner, Elena Demeester, Evan Masutani, Aditya Kumar, Pranjali Beri, Valentina Lo Sardo and Adam Engler	Heterogeneous Expression of Alternatively Spliced lncRNA mediates Vascular Smooth Cell Phenotype Plasticity

Poster #	Authors	Title
20	Katherine Birmingham	Cell Adhesion is an In Vivo Predictive Marker of Metastatic Potential
21	Arpan Roy, Jarod Beights, Samuel Hackman, Sabrina Nilufar and Farhan Chowdhury	Effects of Cytoskeletal Prestress on Innate Immunity Against Viral infection
22	Paul Gehret, Soheila Ali Akbari Ghavimi, Alexandra Dumas and Riccardo Gottardi	A Novel Approach to Meniscal Engineering: the Re-population and Maturation of Channel-laden Decellularized Meniscus
23	Robert Hurt, Marjorie Buss, Mengtong Duan, Katie Wong, Daniel Sawyer, Margaret Swift, Przemysław Dutka, David Mittelstein, Zhiyang Jin, Mohamad Abedi, Ramya Deshpande and Mikhail G. Shapiro	Directed evolution and phylogenetic discovery of acoustic reporter genes for in vivo imaging of gene expression in mice
24	Juncen Zhou and Donghui Zhu	In Vivo Studies of Additive Manufactured Bioabsorbable Magnesium Scaffolds in a Rabbit Femur Model
25	Manasvita Vashisth and Dennis Discher	Scaling concepts in 'omics: nuclear lamin-B scales with tumor growth and often predicts poor prognosis, unlike fibrosis
26	Jesse Rogers, Brian Aguado, Kelsey Watts, Kristi Anseth and Will Richardson	Integrating Data-Based and Mechanistic Network Models for Personalized Cardiac Drug Screens
27	Vijaykumar Meli, Andrew Rowley, Wendy Liu and Szu-Wen Wang	Substrate Stiffness and Collagen Receptor Engagement in Macrophage Immunomodulation
28	Benjamin Yeoman, Pranjali Beri, Parag Katira and Adam Engler	Adhesion strength and contractility enable metastatic cells to become adurotactic
29	Praveen Krishna Veerasubramanian, Hanjuan Shao, Vijaykumar Meli, Andrew Phan, Thuy Luu, Wendy Liu and Timothy Downing	Cell shape impacts epigenetic priming in macrophages through Src
30	Solaleh Miar, Rena Bizios, Joo L Ong, Gregory Dion and Teja Guda	Coculture for Upper Airway Modeling: Understanding Basement Membrane Regulation
31	Orlando Chirikian, Jeffrey Pham, Zachary Singh, Christopher Muray, Max Z. Wilson and Beth L. Pruitt	Optogenetic manipulation of Yes Associated Protein (YAP) to study mechanisms of Hypertrophic Cardiomyopathy
32	Miguel Contreras, William Bachman, Rex Hafenstine and David Long	Predicting Subcellular Morphology of Endothelial Cell Clusters Using Deep Learning
33	Xuexiang Zhanag, Mohammad Mahdi Hasani-Sadrabadi and Song Li	Immunomodulatory Microneedle Patch for Periodontal Tissue Regeneration
34	Ziliang Huang, Yiqian Wu, Molly Allen, Yijia Pan, Phillip Kyriakakis, Shaoying Lu, Ya-Ju Chang, Xin Wang, Shu Chien and Yingxiao Wang	Engineering light-controllable CAR T cells for cancer immunotherapy
35	Yin-Ting Yeh and Mauricio Terrones	Carbon Nanotube Platform for Viral Sample Enrichment
36	Jia Hao, Bowen Wang, Rong Lu and Keyue Shen	Membrane-bound Factors Synergistically Regulate HSC Protrusion and Anchorage
37	Hydari Masuma Begum, Chelsea Mariano, Hao Zhou and Keyue Shen	E-cadherin Regulates Mitochondrial Membrane Potential in Cancer Cells

Poster #	Authors	Title
38	Elias Georgas, Muzhaozi Yuan, Ya Wang and Yi-Xian Qin	Remote Regulation of Ca <sup>2+</sup> Activities and Action Potential by Dynamic Magnetic Field Stimulated Superparamagnetic Iron Oxide Gold Core Shell Nanoparticles
39	Abigail Clevenger, Logan Crawford, Dillon Noltensmeyer, Hamed Babaei, Samuel Mabbott, Reza Avazmohammadi and Shreya Raghavan	Novel 3D Biomimetic Peristalsis Bioreactor Capable of Multi-Axial Strain and Shear
40	Melanie Peterson, Idael Ortiz, Raj Sawh-Martinez and Melanie Coathup	Effects of cosmic radiation exposure to bone regeneration mechanisms and P53 activation
41	Hratch Baghdassarian, Erick Armingol, Cameron Martino, Araceli Perez-Lopez, Rob Knight and Nathan Lewis	Context-aware deconvolution of cell-cell communication with Tensor-cell2cell
42	Jose Zamora and Kara McCloskey	Role of Mural Cell Signaling in Microvascular Dimensions and Stability
43	Stephanie Fraley, Kevin Chen, Kivilcim Ozturk and Hannah Carter	Identifying Regulators of Cancer Heterogeneity with Phenotypic Sorting and Single Cell Sequencing
44	Jeong Min Oh, Hydari Begum and Keyue Shen	A Microfluidic Hypoxia Assay for Characterizing Metabolic Phenotypes of Cancer Cells
45	Jiro Nagatomi and Naoya Sakamoto	Hydrostatic Pressure Sensing Mechanism by Aortic Endothelial Cells
46	William Leineweber and Stephanie Fraley	A Data-Driven Model Linking Cell-ECM Interactions Distinct Cell Migration Behaviors
47	Oanh-Vu Pham-Nguyen, Wei Mao, Jaekeun Park, Miso Lee, Wanho Cho, Hoai-Thuong D. Bui and Hyuksang Yoo	Hyaluronic acid decorated nanofibrils facilitating chondrogenic conversion of adipocyte derived stem cells
48	Yanxiang Deng and Rong Fan	Spatial Epigenome Sequencing at Tissue Scale and Cellular Level
49	Hao Zhou, Charles Bramlett, Irene Li, Jia Hao, Scott Fraser, Rong Lu and Keyue Shen	Endogenous optical biomarkers identify metabolic divergence and maintenance during asymmetric stem cell division
50	Junhu Zhou, Yundong Ren, Yuan Nie, Congran Jin and John Zhang	Multi-functional Silica Nanomaterials-based Extracellular Matrix for Dynamic Cell Culturing and Metabolic Profiling
51	Man-Ho Tang, Sural Ranamukhaarachchi, Allie Walker, Wouter-Jan Rappel and Stephanie Fraley	Simulating Collective Cell Migration via the Cellular Potts Model
52	Xiaojun Lian	Small-molecule-based Pancreatic Differentiation from Human Pluripotent Stem Cells
53	Antonina Maxey and Megan McCain	Effects of Matrix Stiffness on the Oxytocin Response of Engineered Uterine Muscle Tissue
54	Clayton Rische, Rebecca Krier-Burris, Jeremy O'Sullivan, Fanfan Du, Bruce Bochner and Evan Scott	Nanocarrier-mediated Inhibition of Anaphylaxis via Targeting Siglec-6 Receptors
55	Yuki Ueda, Satoshi Ii, Daniel Conway, Jiro Nagatomi and Naoya Sakamoto	Simultaneous Evaluation of Cellular Traction Force and Nuclear LINC complex Tension
56	Taimoor Qazi, Jingyu Wu, Daeyeon Lee, David Issadore and Jason Burdick	Anisotropic Rod-Shaped Particles Enhance Endogenous Cell and Vessel Invasion into Injectable Granular Hydrogels



<b>Poster #</b>	<b>Authors</b>	<b>Title</b>
57	Fanfan Du, Clayton Rische, Baofu Qiao and Evan Scott	Irreversible adsorption of bioactive proteins and targeted antibodies onto nanogel surfaces
58	Thomas Mumford, Diarmid Rae and Lukasz Bugaj	Visual detection of protein clusters using a phase-separation-based fluorescent reporter
59	Sural Ranamukhaarachchi, Allie Walker, Man-Ho Tang, Wouter-Jan Rappel and Stephanie Fraley	Biophysical Initial Conditions Determine Morphogenic Outcomes
60	Deborah Leckband, Brendan Sullivan, Vinh Vu and Adrian Kapustka	E-cadherin Force Transduction Activates EGFR at Cell-Cell Contacts
61	Deborah Leckband, Vinh Vu, Brendan Sullivan and Zainab Rahil	Cadherin Mechanoselectivity Gates Cell Adhesion and Signaling
62	Mary Tran, Lexi Crowell, Tunghin Tsai, Juan Yakisich, Biran Aufderheide and Tayloria Adams	Characterizing phenotype differences in prostate cancer cell using electrical impedance spectroscopy
63	David Gonzalez-Martinez, Lee Roth, Thomas Mumford, Asmin Tulpule, Trever Bivona and Lukasz Bugaj	Oncogenic protein condensates modulate cell signal perception and drug tolerance
64	Taimoor Qazi and Jason A. Burdick	Anisotropic Rod-Shaped Particles Enhance Endogenous Cell and Vessel Invasion into Injectable Granular Hydrogels
65	Zheng Cao, Jacob Ball, Ali Lateef and Elise Corbin	Biomimetic In vitro Device with Infarct Topography and Tunable Stiffness
66	William Benman, Erin Berlew, Hao Deng, Caitlyn Parker, Bomyi Lim, Arndt Siekmann, Brian Chow and Lukasz Bugaj	Light- and temperature-responsive probes of cell signaling
67	Xufeng Xue, Zhexuan Yan and Jianping Fu	A fully patterned human neural tube model

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