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Northeast Regional Life Sciences Core Directors

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Mid-Atlantic Directors and Staff of Scientific Cores

Philadelphia PA
2019

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The Northeast and Mid-Atlantic ABRF Chapters

NERLSCD and MAD SSCi

Joint Annual Meeting

November 6 - 8, 2019
Philadelphia, PA

Exploring New Technologies to Drive Advances in Basic, Clinical and Translational Research

Penn
University of Pennsylvania

NERLSCD
Northeast Regional Life Sciences Core Directors

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Welcome to Philadelphia PA

2019

Dear Attendee,

We would like to welcome you to the 2019 joint Mid-Atlantic and Northeast ABRF chapter meeting here in Philadelphia. The meeting theme of "Exploring New Technologies to Drive Advances in Basic, Clinical and Translational Research" has allowed us to put together a diverse and well-rounded agenda that we hope you find to be informative and engaging.

Our agenda includes an opening reception at the historic and venerable Franklin Institute, three keynote talks, multiple breakout sessions, a poster session, and core laboratory tours. As always, our goals are to provide a forum for discussion for core facility staff that address our unique challenges.

A meeting of this scale is not possible without enormous efforts and we are very grateful to our joint organizing committee, and in particular, Luellen Fletcher and David Needleman who are hosting the meeting, and the University of Pennsylvania. The meeting also would not be possible without our academic and corporate sponsors who provide the lions' share of the funding and allow us to keep registration costs very low. In particular, we are thankful to our Platinum and Platinum+ sponsors and hope you have taken advantage of their co-located user group meetings on Wednesday and attend their sponsor plenary sessions.

We look forward to spending time with our ABRF colleagues from the Mid- Atlantic and Northeast region and points beyond. If you have any questions, please do not hesitate to reach out to us.

Sincerely,
Stuart Levine, President, Northeast Regional Life Sciences Core Directors (NERLSCD)
Kevin Gerrish, President, Mid-Atlantic Directors & Staff of Scientific Cores (MADSSCi)

ABRF Chapters

Philadelphia PA 2019

NERLSCD Northeast Regional Life Sciences Core Directors

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Luellen Fletcher – University of Pennsylvania (Host)
David Needleman – Delaware Valley University (Host)
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The Franklin Institute Science Museum, located just a couple blocks from the conference hotel, is named after the American scientist and statesman Benjamin Franklin, and houses the Benjamin Franklin National Memorial. Founded in 1824, the Franklin Institute is one of the oldest and premier centers of science education and development in the country. Today, the Institute continues its dedication to public education and creating a passion for science by offering new and exciting access to science and technology in ways that would dazzle and delight its namesake.

Program Guide

Please visit the website for session abstracts and speaker biographies:
https://nerlscd.abrf.org/nerlscd-madssci-2019-detailed-program/

Pre-Conference Workshops and Activities

Pre-Conference Workshops	
9:00 am - 4:00 pm	Cytek Biosciences User Group Ballroom D
1:30 pm - 5:00 pm	Agilent User Group Meetings Salon Rooms 5 and 6 Genomics 1:30 - 2:40 pm iLab 3:00 - 5:00 pm
2:30 pm - 3:45 pm	New England BioLabs User Group Salon rooms 3 and 4

4:00 pm On-site registration and check-in	
	Registration table open, Foyer outside Ballrooms C and D
2:00 pm - 4:00 pm	Historic Philadelphia Walking Tour (from hotel lobby): Includes the President's House, Liberty Bell, Independence Hall, Betsy Ross House, and Christ Church
4:30 pm - 5:30 pm	NYCAN Core Administrators Meeting Terrace Lounge, off lobby, hotel main floor
5:00 pm - 6:00 pm	Illumina Pre-Conference Get-together Salon rooms 3 and 4

Opening Remarks and Social at the Franklin Institute 222 North 20th Street	
6:30 pm - 8:30 pm	Registration continues at Franklin Institute Explore open exhibits: The Brain, Electricity, and Changing Earth Enjoy drinks and small plates Opening Remarks: Andrew Chitty, Ph.D., Oregon Health and Science University, ABRF President

Breakfast and Registration	
7:30 am - 8:30 am	Breakfast in Liberty Ballrooms C and D
	Registration Desk opens at 8:00 am (Foyer outside Ballrooms C and D)

Welcome & Opening Keynote: Liberty Ballroom D	
8:30 am - 8:40 am	***Welcome*** **Louis J. Soslowsky, Ph.D., Fairhill Professor Orthopaedic Surgery, Associate Dean for Research Integration, Perelman School of Medicine, University of Pennsylvania**
8:40 am - 9:40 am	**Keynote Lecture** **Monica Guzman, Ph.D., Weill Cornell Medical College** "***Tailoring Therapeutic Approaches for Selective Targeting of Leukemia Stem Cells***"
9:40 am - 9:55 am	Cytek Biosciences Platinum Plus Plenary
9:55 am - 10:15 am	Morning break with vendors

Morning Concurrent Sessions	
10:15 am - 11:30 am	Concurrent Session 1:"***Emerging Techniques in Translational Genomics"*** Freedom Ballroom G This session will focus on two emerging technologies in translational genomics: circulating cell free DNA and microbiome analyses. Kevin Gerrish, Ph.D., National Institute of Environmental Health Sciences Samantha Sevilla Chill, M.S., National Cancer Institute
	Concurrent Session 2: "***Trending Topics in Flow Cytometry"*** Freedom Ballroom F Best practices involving compensation/reference controls (beads vs cells), new software tool for scatter and fluorescence calibration for standardized reporting, and tips for cell sorting when nucleic acids are the actual targets. Kathleen Daniels, SCYM (ASCP), CM Evan Jellison, Ph.D., University of Connecticut Joshua Welsh, Ph.D., National Cancer Institute

Daily Program
Thursday, November 7

Morning Concurrent Sessions Continued

10:15 am - 11:30 am	Concurrent Session 3: ***"Bioinformatics: Understanding Complexity in Single Cell Transcriptomics"*** Freedom Ballroom E Ilya Korsunsky, Ph.D., Harvard University Richard McEachin, Ph.D., Adviata Bioinformatics David Van Dijk, Ph.D., Yale University
	Concurrent Session 4: "***Administration: Websites and Social Media: What works for your core facility?"*** Freedom Ballroom H Lisa MacDowell, MBA, Children's Hospital of Philadelphia Susanna Perkins, M.S., University of Massachusetts

Lunch

11:40 am - 1:00 pm	Lunch in Liberty Ballrooms C and D

Concurrent Sessions: Technology 101's

Always wanted to learn the basics of another technology but never had time? These 101 sessions are designed to introduce you to the foundations of a technology other than your own area of expertise.

1:00 pm - 2:00 pm	Concurrent Session 1***: "Genomics 101"*** Freedom Ballroom G This session is designed to explain to non-genomics people what happens in the wide variety of genomics core facilities at academic institutions. Roxann Ashworth, M.H.S., Johns Hopkins University Deborah Hollingshead, M.S., University of Pittsburgh
	Concurrent Session 2: "***Flow Cytometry 101"*** Freedom Ballroom F Peter Lopez, Ph.D., New York University Julie Nelson, M.S., University of Georgia

	Concurrent Sessions: Technology 101's Cont.d
1:00 pm - 2:00 pm	Concurrent Session 3: "***Mass Spectrometry 101"*** Freedom Ballroom E An overview of mass spectrometry applications and logistics in core facilities Jace Jones, Ph.D., University of Maryland Yan Wang, Ph.D., National Institutes of Health
	Concurrent Session 4: "***Imaging 101"*** Freedom Ballroom H Melina Jaramillo Garcia, McGill University Elke Küster-Schöck, CHU Sainte-Justine/Université de Montréal Andrea Stout, Ph.D., University of Pennsylvania
	Concurrent Sessions
2:00 pm - 3:25 pm	Concurrent Session 1: "***Genomic Technologies: Best Practices for Core Centers"*** Freedom Ballroom G Jennifer Holbrook, Nemours Children's Health System Christian H. Lytle, Dartmouth College Peter Schweitzer, Ph.D., Cornell University Scott Tighe, University of Vermont
	Concurrent Session 2: ***"Translational Medicine in Flow Cytometry"*** Freedom Ballroom F Erica Carpenter, Ph.D., University of Pennsylvania Beatriz Carreno, Ph.D., University of Pennsylvania
	Concurrent Session 3: "***Image Analysis: Deconvolution "Seeing" through the Blur"*** Freedom Ballroom E Richard Cole, Ph.D., State University of New York
	Concurrent Session 4: ***"Core Administration Best Practices: Tools to Resolve Challenges in Core Administration (Business Plans, Advisory Boards, and Costing)"*** Freedom Ballroom H Mark Drinker, M.S., Wistar Institute Cancer Center Matthew Huesser, M.B.A., Sidney Kimmel Cancer Center at Jefferson Jiju Matthew, MBA, University of Pennsylvania

3:25 pm - 3:45 pm	Afternoon Break with Vendors
	Keynote Lecture and Plenary Talk in Ballroom D
3:45 pm - 4:45 pm	**Keynote Lecture** **Mark E. Curran, Ph.D., Vice President for Systems Pharmacology and Biomarkers, Janssen Research and Development** "***Challenges in Pharmaceutical Development: Incorporating Big Data and Personalized Medicine***"
4:45 pm - 5:00 pm	Platinum Plus Vendor Plenary 2: New England BioLabs
	Poster Session and Vendor Show
5:00 pm - 6:30 pm	Poster session and Vendor showcase Refreshments and Drinks

Dinner groups / Dinner on your own

10:00 pm	After hours - join us for continued networking at the Hotel 201 Lounge



Breakfast	
8:00 am - 9:00 am	Breakfast in Ballrooms C and D

Keynote Lecture & Plenary Talks: Liberty Ballroom D	
8:45 am - 9:00 am	Illumina Platinum Plus Plenary ***"Pairing the DRAGEN™ with the NovaSeq™ 6000 to Overcome Data Analysis Challenges in your Core"***
9:00 am - 10:00 am	**Keynote Lecture** **Carl June, MD, University of Pennsylvania** **Aaron Rappoport, MD**, **University of Maryland** "***Translational Medicine across the Mason-Dixon Line***"
10:00 am - 10:15 am	Agilent Platinum Plus Plenary
10:15 am - 10:45 am	Morning break and vendor showcase

Morning Concurrent Sessions	
10:45 am - 12 noon	Concurrent Session 1: ***"Integrating Genomics and Flow: DNA+RNA+ Protein = Integrated Molecular Diagnostics"*** Freedom Ballroom G Joseph M. Breier, Ph.D., NanoString Technologies Reze Nejati, MD, Fox Chase Cancer Center Nina Luning Prak, MD, Ph.D., University of Pennsylvania
	Concurrent Session 2: ***Mass Spectrometry: Rapid Tissue Imaging, Protein Digestion, Cysteine Adducts Identification*** Freedom Ballroom F Kristine Glunde, Ph.D., Johns Hopkins University Raghothama Chaerkady, Ph.D., AstraZeneca Joshua Smith, Ph.D., Johns Hopkins University

Concurrent Sessions Continued

10:45 am - 12 noon	Concurrent Session 3: ***"Microscopy: Enhancing Reproducibility of Microscopy Data Through Quality Control and Data Management***" Freedom Ballroom E Michelle Itano, Ph.D., University of North Carolina Chapel Hill Caterina Strambio-De-Castillia, Ph.D., University of Massachusetts Jason Swedlow, Ph.D., University of Dundee Jay Copeland, M.S., Harvard University
	Concurrent Session 4: "***Data Management and Analysis Cores and Making Research FAIR Compliant"*** Freedom Ballroom H Stuart Levine, Ph.D., Massachusetts Institute of Technology Cathy Wu, Ph.D., University of Delaware Practical measures in creating and maintaining Data Management and Analysis Cores, and ensuring data maintains FAIR compliance (Findable, Accessible, Interoperable, and Reproducible). This session will be well suited for Bioinformaticists as well as Administrators and will be of interest to any lab creating 'omic scale data.

Lunch and Closing Remarks

12 noon - 1:00 pm	Lunch in Liberty Ballrooms C and D

Core Facility Tours

1:00 pm - 3:15 pm	Bus leaves Hotel 201 at 1:00 pm Tour 1: Cellular Immunotherapies Cores, Smilow Research Building, Penn Clinical Manufacturing Suite including Translational and Correlative Lab supporting Clinical Trials Tour 2: Wistar and Penn Cores Penn: Flow, Electron Microscopy, DNA Sequencing and Human Immunology Wistar: Flow, Genomics and Imaging Bus returns to hotel at 3:15 pm

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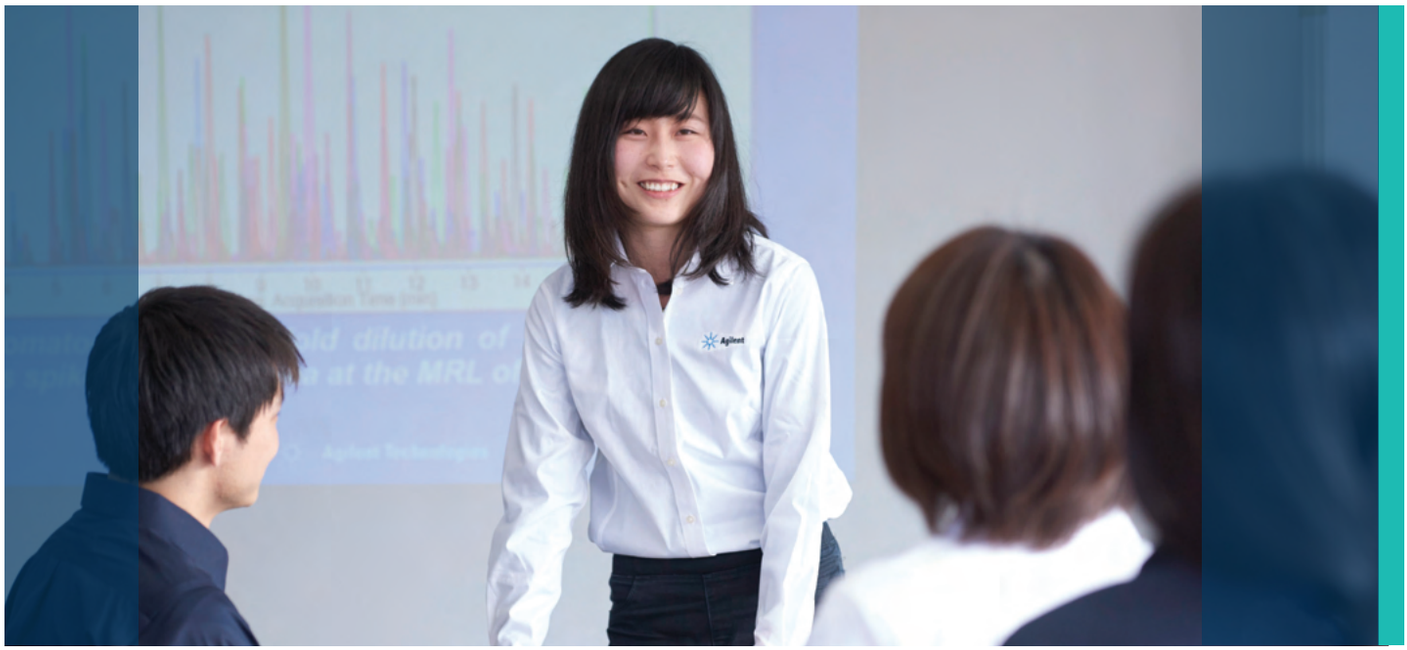

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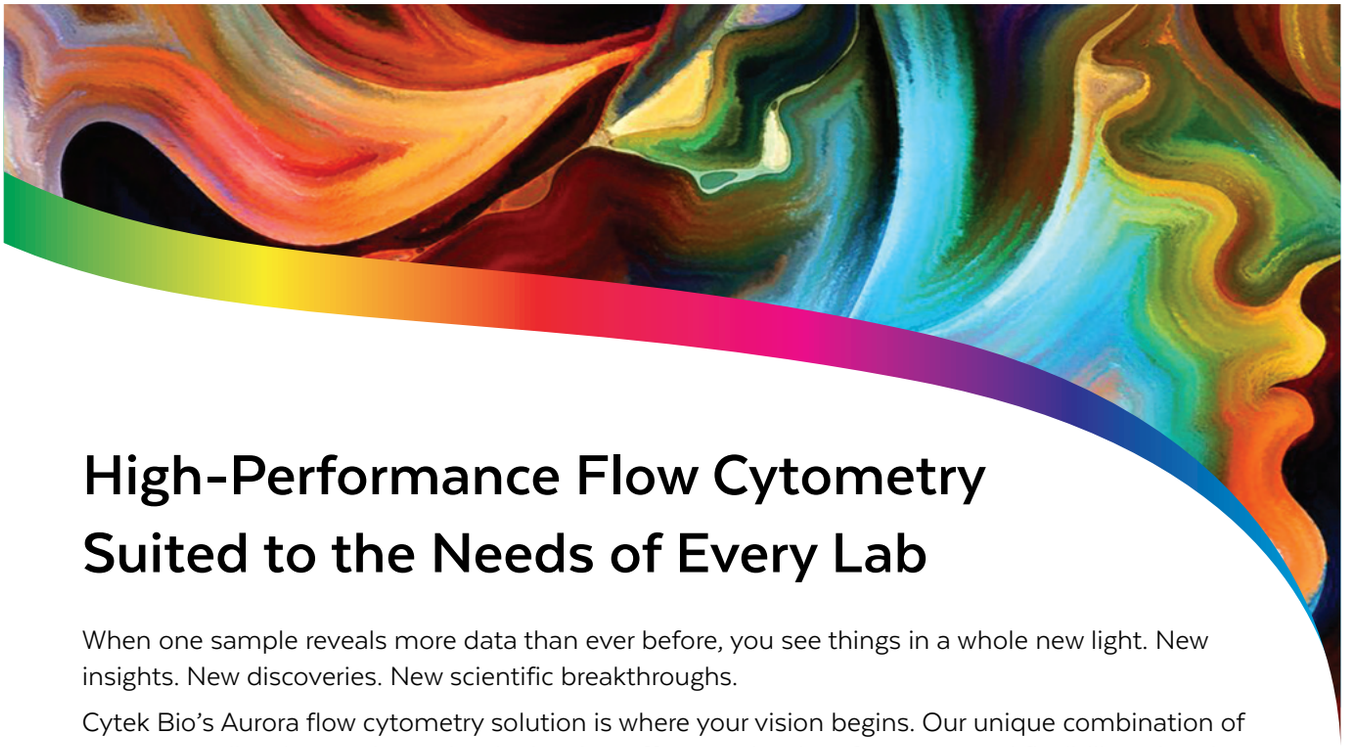

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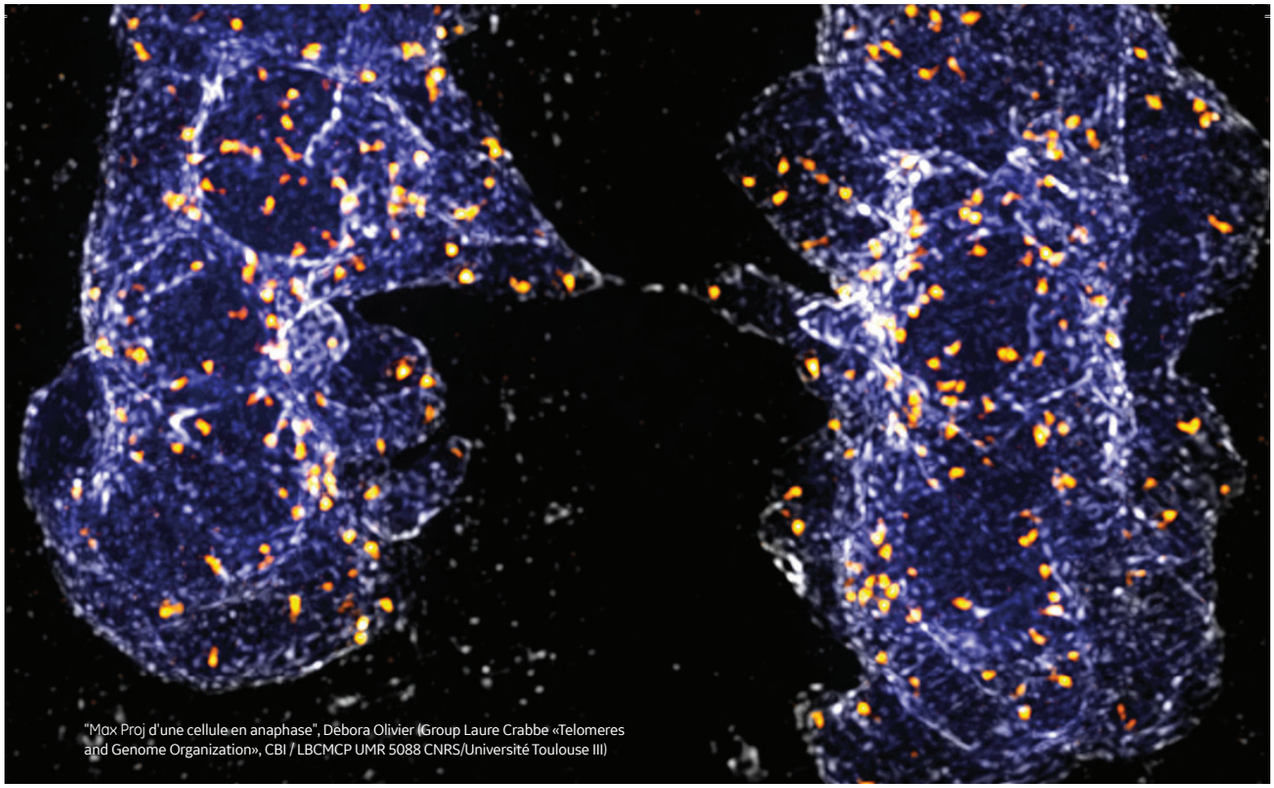

"Max Proj d'une cellule en anaphase", Débora Olivier (Group Laure Crabbe «Telomeres and Genome Organization», CBI / LBCMCP UMR 5088 CNRS/Université Toulouse III)

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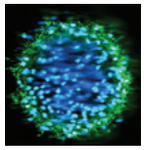

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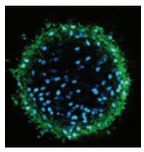

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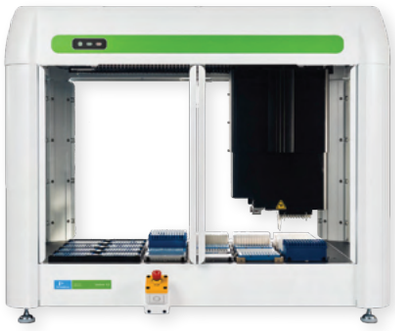

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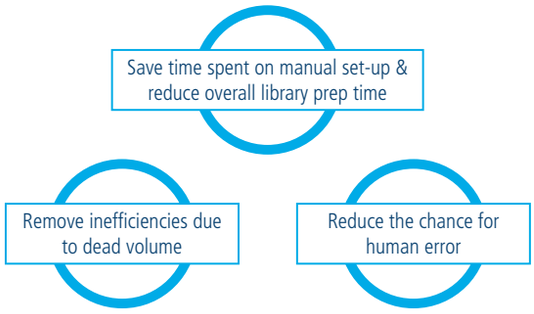

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The Center for Advanced Cellular Therapeutics Facility (CACT) of the Clinical Cell and Vaccine Production Facility (CVPF) is the newest manufacturing facility, opened in July 2016, and located on the ninth floor in the newly built South Tower building, adjacent to the Smilow Translational Research Center on the University of Pennsylvania's campus. The CVPF-CACT manufacturing space consists of cell processing cleanrooms and additional support rooms equipped for manufacturing cellular products for Phase I-II clinical studies. These facilities have been instrumental in launching new gene therapies, including the FDA approved Kymriah (tisagenlecleucel) for certain children, adolescents, and young adults with a form of acute lymphoblastic leukemia (ALL). It's the first gene therapy available in the United States.

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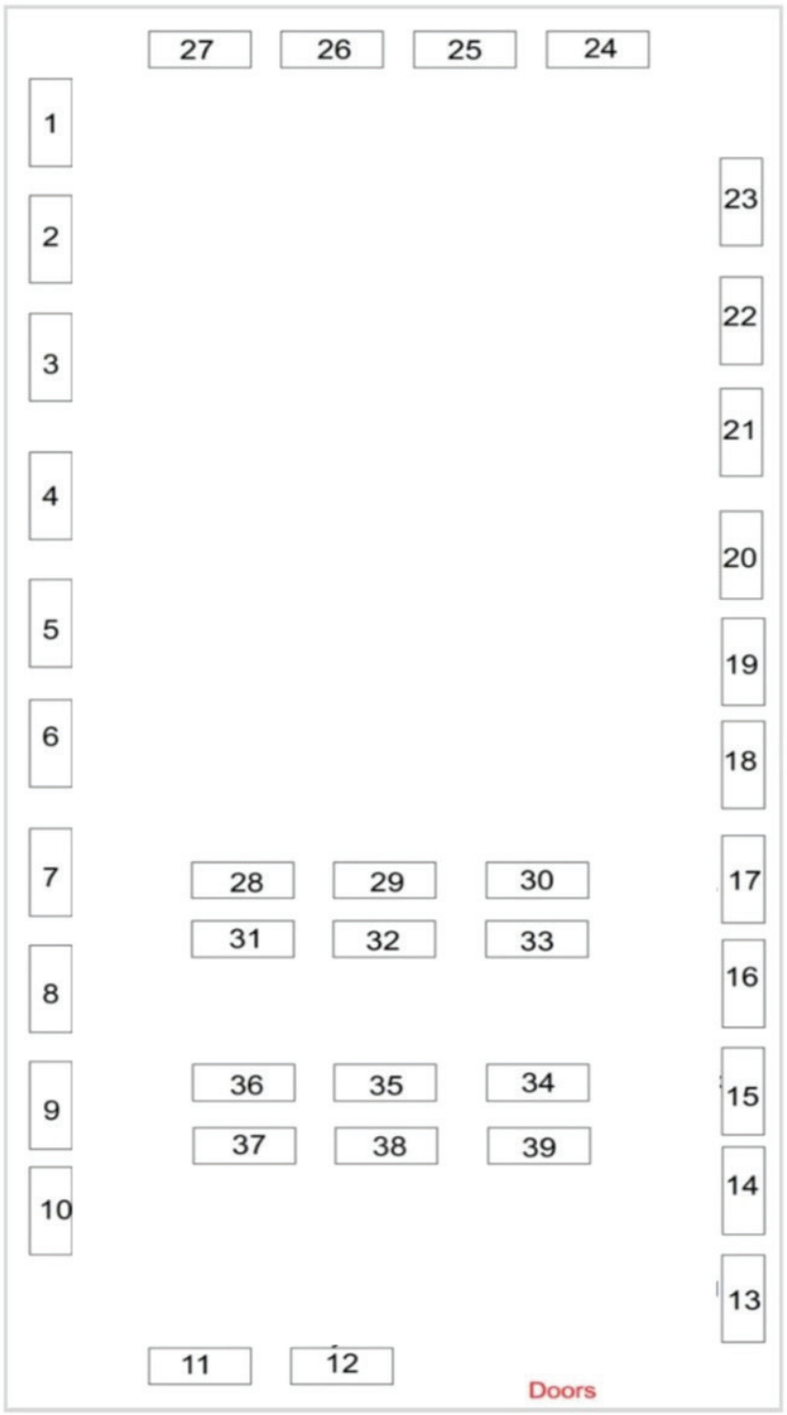
Vendor Hall Layout

Table #	Vendor
27	ABRF
14	Advaita Bioinformatics
28	BioLegend
1	BMG LabTech
24	Cell Microsystems
17	CORIS Life Sciences Monitoring
36	Covaris
12	Cytek Biosciences
2	De Novo Software
21	Eclipse BioInnovations
32	Eppendorf
38	Fluidigm
9	GE Healthcare
11	Illumina
29	Integra Biosciences
7	Integrated DNA Technologies
34	Lexogen
15	Luminex Corporation
33	Macherey-Nagel
4	NanoCellect Biomedical
13	New England Biolabs
22	Oxford Nanopore Technologies
26	Partek
16	PerkinElmer
30	Promega Corporation
10	Qiagen
6	Refeyn Ltd
37	Roche Sequencing & Life Sciences
3	SeqWell
23	StemCell Technologies
25	Stratocore
31	Swift Biosciences
5	Takara
18	Tecan
8	ThermoFisher Scientific
20	TTP LabTech
35	Twist Bioscience
19	Zymo Research
39	Agilent



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