

CHARGE Houston Agenda

Cohorts for Heart and Aging Research in Genomic Epidemiology Investigator Meeting

Hosted by: University of Texas School of Public Health

Houston, Texas; January 29-31, 2020

Wednesday, January 29th: Multi-omics Workshop

10:00 – 5:00	Registration Desk Open	Ballroom Foyer (floor 3)
12:00 - 5:00	<i>One breakout room (without A/V) is available for working group meetings if needed (see registration desk for details)</i>	
12:00 – 5:00	Multi-omics Workshop	Austin (floor 3)
	Session α : Methodology	
12:00 – 12:05	Welcome Co-conveners/Moderators: Steve Rich, Sudha Seshadri	
12:10 – 12:30	Mapping non-coding genetic associations to target genes John Stamatoyannopoulos (University of Washington; Altius Institute for Biomedical Sciences)	
12:40 – 1:00	RNA-seq over time and space: harmonization, imputation into multiple cell types, and integration with other omics data Francois Aguet (Broad Institute)	
1:10 – 1:30	Translating and validating metabolomic profiles across cohorts Robert Gerszten (Beth Israel Deaconess Medical Center)	
1:40 – 2:00	Are all proteomics data created equal? Laura Raffield (University of North Carolina-Chapel Hill)	
2:00 – 2:30	Refreshment Break	Ballroom Foyer
	Session β : Applications <i>Moderators: Leslie Lange, Carlos Cruchaga</i>	
2:30 – 2:50	Using multi-omics data to colocalize variation related to pulmonary traits Silva Kasela (Columbia University; New York Genome Center)	
3:00 – 3:20	Integrative multi-omics modeling of thrombotic phenotypes in ethnically diverse populations Heather Wheeler (Loyola University, Chicago)	
3:30 – 3:50	New awakening from multi-omics analysis of sleep data Tamar Sofer (Harvard University)	
4:00 – 4:20	The Analysis Commons and multi-omics analysis pipelines/workflows Jen Brody (University of Washington)	
4:30 – 5:00	Discussion & Future Opportunities	
	Evening Activities	
5:15 – 7:15	Social Activity: Public Art and Ice Skating at Discovery Green Park	Meet in hotel lobby at 5:00 pm
7:15 - 10:00	Dinner / Drinks at MKT BAR Restaurant	
7:15 – 9:30	RSC Dinner Meeting (by invitation)	The Grove Restaurant

Thursday, January 30th

7:30 – 5:00	Registration Desk Open	Ballroom Foyer
7:30 – 9:00	Breakfast buffet & coffee service	Ballroom Foyer

Sessions A: Working Group Meetings			
	Whitney (floor 2)	Fairfield (floor 3)	Highland (floor 2)
8:00 - 8:50	Gene-Lifestyle	Genetic Risk Assessment	8:00 – 9:20 Renal CHARGE CKDGEN/Cogent/MVP
9:00 - 9:50 am	Mendelian-Randomization	Pulmonary	
10:00 - 11:00	Refreshments Break	Ballroom Foyer	9:30 – 10:50 am Neurology: Dementia; MRI/Stroke
10:00 - 10:50	Adiposity	Hemostasis	
11:00 - 11:50	Diabetes	CHD/Subclinical Atherosclerosis	Thyroid
12:00 – 1:00	Lunch Buffet	Ballroom Foyer	

Thursday, January 30th - Congress Session


Session B0:	Congress Opening	Ballroom
1:00 – 1:05	Welcome Alanna Morrison (University of Texas School of Public Health)	
1:05 – 1:20	State of CHARGE Christopher J. O'Donnell (Center for Population Genomics, Boston VA Healthcare)	
Session B1: 1:20 – 2:50	Polygenic Risk Scores <i>Moderators: George Papanicolaou & Gina Peloso</i>	Ballroom
1:20 – 1:50	Keynote Presentation Why polygenic risk scores are poor predictors of disease Nicholas Wald (University College London)	
1:55 – 2:05	Clustered type 2 diabetes partitioned polygenic scores suggest subtypes and mechanisms through association with disease outcomes in CHARGE and UKBB 🌐 Daniel DiCorpo (Boston University School of Public Health) 🏆	
2:10 – 2:30	Polygenic risk scores for CAD: ready for prime time? Themistocles (Tim) L. Assimes (Stanford University)	
2:35 – 2:45	PRsMed: A polygenic risk score that accounts for mediating risk factors to predict type 2 diabetes in the Million Veteran Program 🌐 Marijana Vujkovic (Perelman School of Medicine, University of Pennsylvania)	
2:50 – 3:15	Refreshment Break (coffee and tea)	Ballroom Foyer
Session B2: 3:15 – 4:25	Novel Approaches <i>Moderators: Nora Franceschini & Han Chen</i>	Ballroom
3:15 – 3:35	Now that we have multi-omics data, what do we do with it? Thomas Lumley (University of Auckland)	
3:40 – 3:50	Leveraging multi-ethnic populations along with multiple handgrip measurements in association analyses with sequence data: the Trans-Omics for Precision Medicine (TOPMed) Program 🌐 Chloé Sarnowski (Boston University School of Public Health) 🏆	
3:55 – 4:05	Network analysis to identify proteomic markers for brain aging in healthy older adults 🌐 Meghan Short (Glenn Biggs Institute for Alzheimer's & Neurodegenerative Diseases, University of Texas Health Science Center at San Antonio) 🏆	
4:10 – 4:20	Non-genetic childhood factors of height are associated with cognitive function in Hispanic/Latinos adults. The Hispanic Community Health Study/Study of Latinos	

(HCHS/SOL) 

Carmen Isasi (Albert Einstein College of Medicine)

Thursday, January 30th - Poster Blitz and Reception

Session B3:	Poster Blitz: One-minute oral presentations	Ballroom
4:25 – 5:15	Moderator: Eric Boerwinkle	

Han Chen	FiMap: A Fast Identity by Descent Mapping Test for Biobank-Scale Cohorts
Michael Levin 	Genetics of Smoking and Risk of Atherosclerotic Cardiovascular Diseases: A Mendelian Randomization Study
Yue Shan 	Phenome-wide association of functional coding variants and cardiometabolic phenotypes in American Indians.
Jordi Merino 	Obesity mediates the adverse effects of reducing low-density lipoprotein cholesterol on type 2 diabetes risk
Jin Choul Chai 	Metabolomic profiling and diabetes risk in US Hispanics/Latinos: Hispanic Community Health Study / Study of Latinos
Magdalena Sevilla	Effect of fasting insulin derived SNP clusters on cardiometabolic outcomes
Merle Behr	Detecting epistasis with iterative random forest
William Young	Trans-ancestry GWAS of ~230,000 Individuals Identifies Over 150 Novel Loci Associated With QT, JT intervals and/or QRS duration
Dan Liu	The association between cardiometabolic risk factors and DNA methylation aging across adult lifespan in the Rhineland Study
Roby Joehanes	Molecular mechanisms of Vitamins C and E in Aging
Kenneth Westerman	Cloud-based workflows for large-scale gene-environment interaction analysis
Jennifer E Huffman	Multi-ethnic whole genome sequence analysis of fibrinogen, fibrin D-dimer, tissue plasminogen activator & plasminogen activator inhibitor 1 within the TOPMed program
Bridget Lin	Discovery of rare genetic variants from whole genome sequencing analyses of kidney function (eGFR) in 23,732 participants from multi-ethnic populations: the Trans-Omics for Precision Medicine (TOPMed) program
Jun Liu	A multi-omics study of circulating phospholipid markers of blood pressure
Jee-Young Moon	Milk Intake, Host LCT Genotype and Gut Bifidobacteria in relation to Obesity: Results from the Hispanic Community Health Study/Study of Latinos (HCHS/SOL)
Jessica Williams-Nguyen	Lower Gut Bacterial Diversity in Non-alcoholic Fatty Liver Disease: Results from the Hispanic Community Health Study/Study of Latinos (HCHS/SOL)
Xiaoyu Zhang 	Metabolomics insights into osteoporosis through association with bone mineral density
Christine Lary	Pharmacogenetic and MicroRNA Effects of Beta Blocker Association with Increased Bone Mineral Density in Humans
Yunju Yang	Epigenome-wide meta-analysis of cerebral white matter hyperintensities on MRI
Ruiqi Wang 	Circulating metabolites associated with brain MRI markers of Alzheimer's Disease
Laura Ibanez	Genetic influences on early neurological instability after acute ischemic stroke: GENISIS Results
Einat Granot-Hershkovitz	Admixture-mapping identifies genomic regions associated with neurocognitive function
Eeva Sliz	Serum triacylglycerol profiles of cortical thickness and surface area of the human brain
Mi Kyeong Lee	Genome-wide blood DNA methylation in relation to recent use of opioid medications
Bonnie Patchen	Genetically determined omega-3 polyunsaturated fatty acid levels and lung function: a Mendelian randomization analysis.
Thanh Hoang	Epigenome-wide Association Study of Adult Asthma in the Agricultural Lung Health Study
Zhi Yu 	Kidney Function and Blood Pressure: A Mendelian Randomization Study

Alexander Teumer	Assessment of kidney function traits on DNA methylation by developing and applying an EWAS workflow
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5:15 – 7:00	Poster Reception Enjoy appetizers while reviewing posters.	Austin Room and Ballroom Foyer
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Group Dinner		
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7:15 – 9:30	Group Dinner (tickets sold separately) Irma's Southwest 1475 Texas Ave, Houston, TX 77002	
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Friday, January 31st : Congress Session

8:30– 4:30	Registration Desk Open	Ballroom Foyer
8:00 – 9:00	Breakfast buffet & coffee service	Ballroom Foyer
Session C1: 9:00 – 10:30	Genomics in Healthcare <i>Moderators: Lucia Hindorff & Alex Teumer</i>	Ballroom
9:00 – 9:20	Return of Results in a Hospital Setting André Uitterlinden (Erasmus Medical Center)	
9:25 – 9:35	The GOALL project and multiple polygenic risk prediction in the Rotterdam Study 🌟 Jeroen van Rooij (Erasmus Medical Center) 🏆	
9:40 – 10:00	Using genomics in clinical care: programs of the National Human Genome Research Institute Teri Manolio (NHGRI, NIH)	
10:05 – 10:25	Heartcare Test and return of results David Murdock (Baylor College of Medicine)	
10:30 – 10:40	Tiger Awards Ceremony Presented by Josh Bis and Alanna Morrison on behalf of the CHARGE Research Steering Committee	Ballroom
10:40 – 11:00	Refreshment Break	Ballroom Foyer
Session C2: 11:00 – 12:30	Multi-omics <i>Moderators: Sudha Seshadri & Steve Rich</i>	Ballroom
11:00 – 11:20	Large-scale proteomics in the population-based AGES study Valborg Guðmundsdóttir (Icelandic Heart Association, University of Iceland)	
11:25 – 11:35	Systematic Mendelian randomization and colocalization analyses of the plasma proteome and blood transcriptome to prioritize drug targets for complex disease 🌟 Jie Zheng (MRC Integrative Epidemiology Unit, Bristol) 🏆	
11:40 – 12:00	Genetics, metabolomics and cardiovascular disease Bing Yu (University of Texas School of Public Health)	
12:05 – 12:15	Genetics of gut microbiome composition 🌟 Robert Kraaij (Internal Medicine, Erasmus MC, Rotterdam) 🏆	
12:20 – 12:25	Closing remarks Alanna Morrison (University of Texas School of Public Health)	
12:25 - 12:30	Group Photo	Grand Staircase
12:30 – 1:30	Lunch Buffet	Ballroom Foyer

Session D: Working Group Meetings			
	Whitney (floor 2)	Fairfield (floor 3)	Highland (floor 2)
1:30 – 2:20	Microbiome	EKG	Neurology: Cognition
2:30 – 3:20	Analysis & Bioinformatics	Musculoskeletal	Neurology: MRI/Stroke
3:30 - 4:20	--	--	Metabolomics

– *Adjourn* –