



**INTERNATIONAL GENETIC  
EPIDEMIOLOGY SOCIETY**

# 2022 Annual Meeting

## MEETING AGENDA

September 7-9, 2022

Paris, France



### Special Programming

#### IGES Education Workshop:

Genetic studies using large biobanks:

How to get started, what's available, and future opportunities

September 7, 2022 8am-1pm

### SYMPOSIUM

Francoise Clerget-Darpoux: Celebrating a life  
dedicated to genetic epidemiology, society and family

September 7, 2022 3pm-5pm



## IGES 2022 Annual Meeting Agenda

### Wednesday, September 7

8:30am-6:00pm	Registration	Foyer
8:00am-1:00pm	<b>Education Workshop:</b> <i>Separate registration required</i> <b>Genetic studies using large biobanks: How to get started, what's available, and future opportunities</b>	Temple Faubourg
	<b>Chairs:</b> Sarah Buxbaum, Celia Greenwood • <b>Virtual chairs:</b> Celia Greenwood, Martina Müller-Nurasyid	
8:00am-8:30am	Epidemiology and architecture of large genetic biobanks	Celia Greenwood
8:30am-9:00am	Sequencing in the general population in the framework of the French genomic medicine initiative: the POPGEN project	Emmanuelle Genin
9:00am-9:30am	Demonstrating the potential of pooled analysis of All of US (AoU) and UKBiobank genomic data	Melissa Basford
9:40am-10:30am	Biobank studies in Finland	Jaakko Kaprio
10:30am-11:00am	Q&A, and break	
11:00am-12:30pm	Epidemiology and architecture of large genetic biobanks: hands-on illustrations	Tianyuan Lu
12:30pm-1:00pm	Overview of All of Us research program's resources and data access model	Kayla Marginean and Melissa Basford
3:00pm-5:00pm	<b>Special Symposium</b> <b>Françoise Clerget-Darpoux: Celebrating a life dedicated to genetic epidemiology, society and family</b> Join us as we honor and celebrate the scientific contributions to genetic epidemiology by Françoise Clerget-Darpoux.	Temple Faubourg
3:00pm	Welcome	
3:05pm-3:35pm	The woman who called out the Emperor's Wardrobe: Françoise Clerget-Darpoux and the common sense application of mathematics to human genetics	Mary-Claire King
3:35pm-4:05pm	From genetic to genomic epidemiology of complex diseases: Where are we? Where to go?	Florence Demenais
4:05-4:30	Is it worth looking to the past?	Françoise Clerget-Darpoux
4:30-5:00	Rise and development of genetic epidemiology in France	Catherine Bonaïti and former colleagues
5:00pm 7:00pm	<b>Welcome Reception</b> Open to all attendees!	Foyer

### Thursday, September 8

8:00am-6:00pm	Registration	Foyer
8:30am-9:00am	Welcome Presidential Address	Heike Bickeböllner David Balding
9:00am-10:00pm	<b>Session 1: Williams Award Session</b> <b>Chairs:</b> Heike Bickeböllner and Herve Perdry • <b>Virtual chair:</b> Andrew Morris	Temple Faubourg
	Presentation	Abstract Author
9:00am-9:15am	Contribution of rare coding variants to complex trait heritability	125 Nazia Pathan <sup>^</sup>
9:15am-9:30am	Disentangling the aetiological pathways between body mass index and site-specific cancer risk using tissue-partitioned Mendelian randomization	90 Genevieve Leyden <sup>^</sup>
9:30am-9:45am	Linear regression on martingale residuals enables fast and accurate recurrent event analysis for genome-wide association studies	66 Jasper Hof <sup>^</sup>
9:45am-10:00am	A test of covariance matrix to detect predictors of the gut microbiome variability	20 Christophe Boetto <sup>^</sup>
10:00am-10:30am	<b>Break</b>	

### IGES Annual Meeting Day 1

## Thursday, September 8

10:30am-12:00pm	<b>Session 2: Neel Awards Session</b> Chairs: Marie-Pierre Dubé and Mohamad Saad • Virtual chair: Andrew Morris			<b>Temple Faubourg</b>
	Presentation	Abstract		Author
10:30am-11:00am	<b>Keynote Presentation:</b> <b>Challenges and opportunities in the analysis of more than a million genomes from diverse populations</b>			<b>Timothy Thornton</b>
11:00am-11:15am	Bridging the diversity gap: analytical and study design considerations for improving the accuracy of trans-ancestry genetic risk prediction	19		Ozvan Bocher*
11:15am-11:30am	Trait selection strategy in multi-trait GWAS: boosting SNPs discoverability	158		Yuka Suzuki*
11:30am-11:45am	Isoform-level transcriptome-wide association studies uncover novel mechanisms underlying genetic associations with complex traits	17		Arjun Bhattacharya*
11:45pm-12:00pm	Using human genetics to evaluate the causal role of circulating inflammatory markers in risk of adult cancer	187		James Yarmolinsky*
12:00pm-1:30pm	<b>Lunch</b>			<b>Restaurant and Terrace</b>
1:30pm-3:00pm	<b>Session 3: Statistics Modelling</b> Chairs: Myriam Brossard and Anne-Louise Leutenegger • Virtual chair: Xiaofeng Zhu			<b>Temple Faubourg</b>
	Presentation	Abstract		Author
1:30pm-2:00pm	<b>Keynote Presentation:</b> <b>Delicacies underlying standard linear models</b>			<b>Hugues Aschard</b>
2:00pm-2:15pm	Reimagining gene-environment interaction analysis for human complex traits	101		Qiongshi Lu
2:15pm-2:30pm	Fast-REML enables analysis of biobank-sized datasets and provides a more detailed understanding of complex traits	153		Doug Speed
2:30pm-2:45pm	Improved risk prediction using functionally calibrated polygenic risk scores	177		Xuexia Wang
2:45pm-3:00pm	Approaches to estimate bidirectional causal effects using Mendelian randomization	195		Rajesh Talluri
<b>3:00pm - 3:15 pm</b>	<b>Poster Highlights 1</b> Chair: Stella Aslibekyan			<b>Temple Faubourg</b>
	Poster	Abstract		Author
	Meta-regression of cross-sectional GWAS studies to estimate trajectories of genetic effects	121		Panagiota Pagoni
	PLn test: a novel method for detecting pairwise pure interaction effect in single nucleotide polymorphism (SNP) data	156		Xuexia Wang
	DeLIVR: A deep learning approach to testing for non-linear causal effects in transcriptome-wide association studies	122		Wei Pan
	Polygenic risk scores based on penalized generalized linear mixed models	154		Julien St-Pierre
	PRS: a misled interpretation of genetic variation used for complex disease risk prediction	52		Anthony Herzig
<b>3:15pm-4:45pm</b>	<b>Poster Session 1: See page 5</b>			<b>Canal - St. Martin</b>
4:45pm-6:00pm	<b>Session 4: Biobanks / PGS</b> Chairs: Genevieve Wojcik and Tianyuan Lu • Virtual chair: Xiaofeng Zhu			<b>Temple Faubourg</b>
	Presentation	Abstract		Author
4:45pm-5:00pm	Evaluating the biomedical relevance of identity by descent genetic communities in the biobank at the Colorado Center for Personalized Medicine	148		Jonathan Shortt
5:00pm-5:15pm	Using simulated casual data to characterize biases and identify best practices in electronic health record research	22		Lindsay Breidenbach
5:15pm-5:30pm	Polygenic scores are correlated with year-of-birth in large biobanks	36		Lea Davis
5:30pm-5:45pm	Phenome-wide PGS portability in the Colorado Center for Personalized Medicine biobank suggests overlooked challenges in diverse populations	95		Audrey Hendricks
5:45pm-6:00pm	Polyexposure risk score offers greater predictive performance for chronic obstructive pulmonary disease than polygenic risk score and smoking alone	62		Yixuan He
7:30pm-9:30pm	<b>IGES Annual Banquet</b>			<b>Terrace</b>

		<b>Foyer</b>	
8:00am-5:00pm	Registration, Help desk		
8:30am-9:00am	<b>Best Paper Presentation</b> The Robert Elston award presentation for the best paper in Genetic Epidemiology in 2021	<b>Temple Faubourg</b>	
9:00am-10:00am	<b>Session 5: Cancer</b> Chairs: John Witte and Silke Szymczak • Virtual chair: Suzanne Leal		
	Presentation	Abstract	Author
9:00am-9:15am	Multi-tissue transcriptome-wide association study identifies 12 novel candidate genes associated with the immune traits in cancer	113	Pooja Middha
9:15am-9:30am	Predicting cancer risk from germline next-generation sequencing data using a novel context-based variant aggregation approach	57	Zoe Guan
9:30am-9:45am	Development of a breast cancer risk prediction model with carrier status, a polygenic risk score, and epidemiologic risk score	84	Peter Kraft
9:45pm-10:00am	Evidence of novel susceptibility variants for prostate cancer and a polygenic risk score that improves prediction of aggressive disease for men of African ancestry	29	Fei Chen
10:00am-10:15am	<b>Break</b>		
10:15am-11:45am	<b>Session 6: OMICs</b> Chairs: Denise Daley and Hae Kyung Im • Virtual chair: Suzanne Leal		
	Presentation	Abstract	Author
10:15am-10:45am	<b>Keynote Presentation:</b> <b>Multi-omics integrative analysis with Taiwan biobank data</b>		<b>Kate Hsiao</b>
10:45am-11:00am	Statistical challenges in multi-omics integration	141	Paola Sebastiani
11:00am-11:15am	Immunogenetics of healthy aging at the single cell level	46	Marie-Julie Favé
11:15am-11:30am	Network analysis of multi-omics data identifies shared genes and pathways underlying the risk of allergic diseases and ige production	42	Pradeep Eranti
11:30am-11:45am	LUCID, an integrative clustering model for multi omics data	194	David Conti
<b>11:45am-12:00pm</b>	<b>Poster Highlights 2</b> Chair: Thomas Winkler	<b>Temple Faubourg</b>	
	Poster	Abstract	Author
	Genomic shared segments enable identification of at-risk patients in biobanks	30	Hung-Hsin Chen
	RetroFun-RVS: a family-based retrospective association test integrating functional annotations	104	Alexandre Bureau
	Genotype imputation quality prediction using machine learning	136	Khalid Kunji
	A signature of platelet reactivity in CBC scattergrams identifies genes with thrombotic disease associations	173	Hippolyte Verdier
	Using a population-specific reference panel improves genotype imputation accuracy in individuals of African ancestry	108	Richard Mayanja
12:00pm-1:00pm	<b>Lunch</b>	<b>Restaurant and Terrace</b>	
<b>1:00pm-2:30pm</b>	<b>Poster Session 2: See page 6</b>	<b>Canal - St. Martin</b>	
2:30pm-4:00pm	<b>Session 7: Complex Traits Genetics</b> Chairs: Linda Kachuri and Saurabh Ghosh • Virtual chair: Amke Caliebe		
	Presentation	Abstract	Author
2:30pm-3:00pm	<b>Keynote Presentation:</b> <b>Genetic association studies in the biobank era</b>		<b>Andy Wood</b>
3:00pm-3:15pm	The individual and global impact of copy number variants on complex human traits	8	Chiara Auwerx
3:15pm-3:30pm	Investigating genetic inheritability of RNA alternative splicing in alcohol use disorder	92	Yunlong Liu
3:30pm-3:45pm	Random glucose GWAS trans-ethnic meta-analysis provides insights into diabetes pathophysiology, complications, and treatment stratification	76	Vasiliki Lagou
3:45pm-4:00pm	SDPRX: A statistical method for cross-population prediction of complex traits	193	Hongyu Zhao
4:15pm-5:30pm	<b>IGES Business Meeting and Awards</b>	<b>Terrace</b>	

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**Meetings and Additional Events:**  
This page will be updated as new information arises.

**Wednesday, September 7**

1:45pm-2:45pm

**Board of Directors Meeting**

Voltaire Room

**Thursday, September 8**

12:00pm-1:30pm

**IGES ELSI Committee Meeting**

TBA

Committee members can pick up lunch at the restaurant and bring to the meeting room.

12:45pm-1:30pm

**Young Investigators Committee Mentoring Lunch**

Terrace

12:45pm-1:30pm

**Communications Committee Meeting**

TBA

12:45pm-1:30pm

**Scientific Programming Committee**

TBA

Committee members can pick up lunch at the restaurant and bring to the meeting room.

**Friday, September 9**

6:00pm-7:30pm

**The Young Investigators Committee (YIC)**

Madame Pervenche

**Social hour is open to all.** Location: Madame Pervenche, 9 Rue Greneta 75003 Paris (10 min walk, or 5 min with Metro 3 from the hotel). A group will be meeting in the hotel lobby from 5:30pm and leave at 5:45pm.



## Thursday, September 8

3:15pm-4:45pm Poster Session 1					
Poster	Presenter	Poster	Presenter	Poster	Presenter
1	Brahim Aboulmaouahib	39	Matteo Di Scipio	71	Yon Ho Jee
2	Ky'Era Actkins	43	Aida Eslami	72	Aubrey Jensen
3	Oluyomi Adesoji	44	Grahame Evans	73	Lin Jiang
4	Paola Arguello Pascualli	45	Patrick Evans	74	Yue Jiao
5	Ana Arruda	47	Alba Fernández-Sanlés	75	Heejin Jin
6	Mikko Arvas	48	Sidonie Foulon	77	Irma Karabegovic
7	Antoine Auvergne	49	Cesaire Fouodo	78	Tanya Karagiannis
9	Harold Bae	50	Arthur Frouin	79	Racha Kerek
10	James Baker	51	Victoria Garfield	80	Racha Kerek
11	Takiy Berrandou	52	Anthony Herzig	82	Sebastian Koch
12	Ciarrah-Jane Barry	53	Andrea Georgiou	83	Mine Koprulu
18	Tim Bigdeli	54	Darius Ghasmi meskandeh	85	Allison Lake
21	Joseph Breeyear	55	Jinko Graham	86	Eva Lancaster
23	Myriam Brossard	56	Celia Greenwood	88	Marc-André Legault
24	Markus Brugger	58	Harold Bae	89	Tanya Karagiannis
25	Shelley Bull	59	Elena Gusareva	91	Paola Sebastiani
26	Sarah Buxbaum	60	Chung Shing Rex Ha	94	Lei Sun
27	Lirong Cao	61	Georg Hahn	97	Alvin Lirio
28	Andy Chen	63	Josephine Henry	100	Xiaofeng Zhu
31	Geetha Chittoor	64	Esther Herrera-Luis	121	Panagiota Pagoni
32	Clement Conil	65	Anthony Herzig	122	Wei Pan
33	Andrei-Emil Constantinescu	67	Richard Howey	154	Julien St-Pierre
34	David Conti	68	Jianchang Hu	156	Xuexia Wang
37	Trishna Desai	69	Sijia Huo		
38	Tatiana Dessy	70	Andrii Lakovliev		

## Friday, September 9

1:00pm-2:30pm Poster Session 2					
Poster	Presenter	Poster	Presenter	Poster	Presenter
14	Halima Bensmail	130	Dillon Pruett	167	Deniz Turkmen
30	Hung-Hsin Chen	131	Igor Pupko	168	Helena Urquijo
98	Peter Kraft	132	Mohan Rakesh	169	Marina Vabistsevits
102	Tianyuan Lu	133	Debashree Ray	170	Fränzel van Duijnhoven
103	Betzaida Maldonado	135	Ghislain Rocheleau	171	Denise Delay
104	Alexandre Bureau	136	Khalid Kunji	172	Lourdes Velo Suarez
105	Gaelle Marenne	137	Aude Saint Pierre	173	Hippolyte Verdier
106	Daniela Mariosa	138	Rebecca Sale	174	Björn-Hergen vonHolt
107	Katie Marker	139	Chloe Sarnowski	175	Geng Wang
109	Nancy McBride	140	Alexandra Scalici	176	Ting-Chen Wang
110	Brad McNeney	144	Natasha Sharapova	178	Xuexia Wang
111	Joeri Meijssen	145	Arunabh Sharma	179	Bernadette Wendel
112	Federico Melograna	146	David Conti	180	Thomas Willis
114	Joshua Millstein	147	Apurba Shil	181	Thomas Winkler
115	Fernanda Morales Berstein	149	Kritika Singh	182	Genevieve Wojcik
116	Jessica Murphy	150	Madeleine Smith	183	Alexa Woodward
117	Jovia Nierenberg	151	Karl Smith-Byrne	184	Chao Xing
118	Tom Norris	155	Hayley Stoneman	189	Kristia Yiangou
119	Denise O' Mahony	157	Yan Sun	190	Xiaopu Zhang
120	Marie-Sophie Ogloblinsky	160	Fasil Tekola-Ayele	196	Ziang Zhang
123	Naim Panjwani	161	Seth Temple		
124	Andrew Paterson	164	Maarit Tiirikainen		
127	Roseann Peterson	165	Eva Tosco-Herrera		
128	Jacqueline Piekos	166	Lucie Troubat		



**INTERNATIONAL GENETIC  
EPIDEMIOLOGY SOCIETY**

**IGES 2023 Annual Meeting**

November 5-7

Loews Vanderbilt Hotel  
Nashville, Tennessee, USA

**LOEWS**  
HOTELS



<https://iges.memberclicks.net>

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