

IRTG 2251: ICSMD 6th Retreat

- **Date:** Tuesday 17th September 2024 – Saturday 21th September 2024
- **Venue:** Sience Gallery London, Great Maze Pond, London SE1 9GU


Tuesday, 17th September 2024 - Arrival in London

Wednesday, 18th September 2024 - International transCampus Roadshow
(*separate programme*)

“New Therapeutic Strategies in Apheresis, Cell & Gene Therapy in Diabetes, and Metabolic & Endocrine Diseases”

Thursday, 19th September 2024




08:15-08:45	Presentation drop-off for IRTG retreat
08:45-09:30	<p>Opening and update on IRTG 2251 Rocio Sancho (IRTG KCL spokesperson), Stefan R. Bornstein (IRTG TUD spokesperson) and Kaomei Guan (IRTG TUD deputy spokesperson)</p>
09:30-10:15	<p>Opening lecture “Breaking Barriers: Thailand's Journey Towards Universal Access to Diabetes Care in Type 1 Diabetes” (Taninee Sahakitrungruang, PhD/ School of Global Health, Faculty of Medicine, Chulalongkorn University)</p>
10:15-10:35	Break
10:35-12:50	<p>Students presentation session I: Stem cells in metabolic disorders Chairs: Susanne Kämmerer (TUD), Paul Taylor (KCL)</p> <p>1. James-Kaufman-Cook Role of succinate dehydrogenase (SDH) mutations in pituitary tumorigenesis and the metabolic regulation of pituitary stem cells Supervisors: Cynthia Andoniadou KCL, TBA TUD</p> <p>2. Diana Cozma Characterization of the interplay between metabolic disorders, the neuroendocrine stress system and COVID-19 Supervisors: Charlotte Steenblock & Stefan Bornstein TUD, Cynthia Andoniadou KCL</p> <p>3. Miriam Vazquez Segoviano</p>

	<p>Factors controlling the regenerative potential of the pituitary gland by studying the network that promote and maintain the stem cell fate Supervisors: Cynthia Andoniadou KCL, TBA TUD</p> <p>4. Maria Alejandra Ramirez Torres Maturation mechanisms of human pluripotent stem cell-derived pancreatic islets (SC-Islets) Supervisors: Anthony Gavalas TUD, Francesca Spagnoli KCL</p> <p>5. Maria Cristina Garrone Using patient derived induced-pluripotent stem cells to model Congenital Hyperinsulinism Supervisors: Rocio Sancho KCL, Anne Grapin-Botton TUD</p> <p>6. Olivia Sherwin The effects of stress on pituitary stem cells Supervisors: Cynthia Andoniadou KCL, Charlotte Steenblock & Stefan Bornstein TUD</p> <p>7. Panagiota Siatra Investigating the plasticity of stem and progenitor cells of the HPA axis during stress adaptation Supervisors: Charlotte Steenblock & Stefan Bornstein TUD, Cynthia Andoniadou KCL</p> <p>8. Anna Salkowa Cell fate decisions during human pancreatic b-cell development Supervisors: Francesca Spagnoli KCL, TBA TUD</p> <p>9. Jenny Gehlen Establishment of a synthetic PEG hydrogel system to study how biochemical and mechanical extracellular cues affect cell fate decisions in pancreatic organoids Supervisor: Rocio Sancho KCL, TBA TUD</p>
12:50-13:45	Lunch
	Students speaker election
13:45-16:00	<p>Students presentation session II: Beta cell function and pancreatic signaling Chairs: Henning Morawietz (TUD), Cynthia Andoniadou (KCL)</p> <p>1. Iván Tibor Herczeg Inter-organelle interactions in pancreatic islet function and regeneration Supervisors: Nikolay Ninov TUD, Timothy Pullen, Shanta Persaud KCL</p> <p>2. Dipanjana Dolui Systems biology approach to sex differences in the role of islets of Langerhans in metabolism and diabetes</p>

	<p>Supervisors: Stephan Speier TUD, Peter Jones KCL</p> <p>3. Anika Gronert Assessing the role of pyruvate carboxylase as a glucose sensor in insulin secreting cells Supervisors: Tiago Alves, Barbara Ludwig TUD, Shanta Persaud KCL</p> <p>4. Louis Hewitt Cell Signalling in the Self-organisation of Pancreatic Organoids Anne Grapin-Botton TUD, Rocio Sancho KCL</p> <p>5. Padmapriya Subramanian Immune-islet crosstalk in β-cell regeneration Supervisors: Nikolay Ninov TUD, Timothy Pullen, Shanta Persaud KCL</p> <p>6. Laura Dowling Identification of islet-derived signals involved in beta-cell plasticity and auto-immunity in T1D Supervisors: Nikolay Ninov TUD, Timothy Pullen, Shanta Persaud KCL</p> <p>7. Rui Wang The pancreas development regulation of Zinc transporter slc39a9 (zip9) in zebrafish Supervisors: Christer Hogstrand KCL, Ünal Coskun TUD</p> <p>8. Preethi Kesavan Dissecting the pro-proliferative role of the ICA512-STAT5 pathway in β-cells during pregnancy Supervisors: Michele Solimena TUD, Rocio Sancho & Anthony Hopkins KCL</p> <p>9. Lisa Joy Kaiser In utero treatment for Sickle Cell Disease using solid lipid nanoparticles Supervisor: Rocio Sancho KCL, TBA TUD</p>
16:00-16:30	<p>Break Group photograph</p>
16:30-17:45	<p>Key note lecture / Vision talk „From antifibrotic to antiviral therapy: Perspectives from academia and startup“ (Elisabeth Zeisberg, Dean of Transfer & Groupleader at University Medical Center Göttingen, Co-Founder & CEO of Avocet Bio GmbH)</p>
18:15-22:00	<p>Social Evening Venue: Tavolino Bar & Kitchen (2 More London Pl, London SE1 2RR, UK)</p>

Friday, 20th September 2024

08:45–09:30	<p style="text-align: center;">Research perspectives</p> <p style="text-align: center;">"Students' emotional experiences with climate change and how universities can help" (Chiara Hill-Harding, University of Glasgow)</p>
09:30-11:45	<p style="text-align: center;">Students presentation session III : Comorbidities Chairs: Nikolay Ninov (TUD), Geltrude Mingrone (KCL)</p> <ol style="list-style-type: none"> 1. Kevser Kocas Antiarrhythmic effects of CNP-mediated PDE2 stimulation in diabetic cardiomyopathy and chronic heart failure Supervisors: Susanne Kämmerer, Ali El-Armouche TUD, Barbara McGowan, Manuel Mayr KCL 2. Anindita Dhara Natriuretic peptide signaling within the crosstalk of cardiac and immune cells in cardiovascular and metabolic disease Supervisors: Susanne Kämmerer, Ali El-Armouche TUD, Barbara McGowan, Manuel Mayr KCL 3. Maria de Leyre Villar-Ballesteros Exercise prevents impact of gestational diabetes mellitus on fetal endothelial function Supervisors: Henning Morawietz TUD, Paul Taylor, Lucilla Poston KCL 4. Clara Hengst The LOX-1 receptor and endothelial dysfunction in the placenta of women with gestational diabetes mellitus Supervisors: Henning Morawietz TUD, Paul Taylor KCL 5. Karolin Flade NINJ1 separates metabolic cell death from DAMP release Supervisors: Andreas Linkermann TUD, Christer Hogstrand KCL 6. Natalie Bethe Estrogens control ferroptosis sensitivity Supervisors: Andreas Linkermann TUD, Christer Hogstrand KCL 7. Fatima Kanwal Baig Leptin and leptin receptor signaling in diabetic cardiomyopathy Supervisors: Kaomei Guan TUD, Cynthia Andoniadou, Geltrude Mingrone KCL 8. Irem Congur Leptin and leptin receptor signalling in diabetic cardiomyopathy Supervisors: Kaomei Guan TUD, Cynthia Andoniadou & Geltrude Mingrone KCL 9. Vanya Milanova Role of the leptin receptor in the regulation of metabolic flexibility in human

	cardiomyocytes Supervisors: Kaomei Guan TUD, Cynthia Andoniadou & Geltrude Mingrone KCL
11:45-12:00	Closing and Farewell for the IRTG PIs
12:00-13:00	Lunch
12:30-13:00	Steering Committee Meeting
13:00-15:00 	Student workshop I "Scientific publishing – expand your box" incl. Panel discussion Student chairs: Louis Hewitt, Laura Dowling, James-Kaufman-Cook Guests: TBA Rocio Sancho (Group Leader King's College London)
15:00-16:30 	Student workshop II "Career development after PhD- Experience exchange" Student chairs: Louis Hewitt, Laura Dowling, James-Kaufman-Cook Guests: Carolin Heller (Postdoc TU Dresden) Anna Strano, PhD (Postdoc TU Dresden) TBA
19:00 -22:00 	Students Night

Saturday, 21th September 2024 - Departure