



PROGRAM FOR THE CONFERENCE

Developing Brains

Nobel Forum, Karolinska Institutet
Stockholm, Sweden
October 8, 2025



**Karolinska
Institutet**

Foreword

The pioneering work of Santiago Ramon y Cajal and Camillo Golgi in the late 1800s opened the way to the understanding of the complexity of the brain and led to the award of the Nobel Prize in Physiology or Medicine in 1906. Since then, many other discoveries on how the brain structures work have been awarded the Nobel Prize in Physiology or Medicine.

Nevertheless, many overarching questions regarding how these brain structures arise and function remain unanswered. For instance, how can a single cell give rise to complex structures such as the central nervous system (brain/spinal cord) and peripheral and enteric nervous systems, which include the brain in the gut?

The 12th edition of the KI Conference “Developing Brains” will gather international and national leading scientists with expertise in these areas at the Nobel Forum at Karolinska Institutet. These scientists will give lectures and discuss the latest advances in our knowledge of how brain structures develop.

Warm welcome to this year’s edition of The Developing Brains!

*Gonçalo Castelo-Branco, Jens Hjerling-Leffler,
Ulrika Marklund and François Lallemend*

PROGRAMME

ORGANIZERS & CHAIRS

Gonçalo Castelo-Branco

Jens Hjerling-Leffler

Ulrika Marklund

François Lallemend

October 8th, 2025

Nobel Forum, Karolinska Institutet

09.00 – 09.10 WELCOMING ADDRESS

Chair: *Jens Hjerling-Leffler*

09.10 – 10.00 HUMAN-SPECIFIC AND ACTIVITY-DEPENDENT
REGULATIONS OF SYNAPSES
Cécile Charrier, Ecole Normale Supérieure, Paris, FR

10.00 – 10.30 BREAK

10.30 – 11.20 ASSEMBLY OF CORTICAL NEURONS IN A DYNAMIC CIRCUIT
Beatriz Rico, King's College London, UK

11.20 – 12.10 BRIDGING THE SCALES: Leveraging in vitro models to identify
the neurobiological and behavioral consequences of synaptic
aberrations in schizophrenia
Michael Ziller, University of Muenster, DE

12.10–13.10 LUNCH

Chair: *Ulrika Marklund*

- 13.10 – 14.00 DEVELOPMENT OF ORGAN CONNECTIONS: BRIDGING
THE BRAIN-PANCREAS GAP
Isabel Espinosa-Medina, HHMI Janelia Research Campus, US
- 14.00 – 14.50 A PRIMARY ROLE FOR ACTIVE PROTEIN DEGRADATION ON
THE TEMPO OF MOUSE AND HUMAN SPINAL CORD PROGENITORS
Teresa Rayon, Babraham Institute, Cambridge, UK
- 14.50 – 15.20 BREAK

Chair: *Francois Lallemend & Gonçalo Castelo-Branco*

- 15.20 – 16.10 ADVANCING SINGLE-CELL AND SPATIAL GENOMICS TO DISSECT
BRAIN AGING
Junyue Cao, Rockefeller University, US
- 16.10 – 17.00 DEVELOPMENT AND EVOLUTION OF VISUAL SYSTEM CONNECTIVITY
Alain Chédotal, Institut de la Vision, Paris, FR
- 17.00 – 17.50 WRAPPING THE BRAIN: How myelin is generated across space
and time
Dwight Bergles, Johns Hopkins University, US
- 17.50 – 18.00 CONCLUDING REMARKS



“Human-specific and activity-dependent regulations of synapses”

CÉCILE CHARRIER

ENS Paris, France

Cécile Charrier is INSERM Director of Research at the Institute of Biology of the Ecole Normale Supérieure (IBENS) in Paris, where she heads the team “Development and Plasticity of Synapses”. She received her PhD from University Pierre and Marie Curie in Paris, and conducted her postdoctoral studies at the Scripps Research Institute in California. Her lab investigates the molecular and cellular mechanisms underlying the development and plasticity of cortical circuits, with a particular emphasis on their regulation by human-specific genes and molecular pathways linked to human evolution. Her research aims to understand how human synapses differ from those of other species, and how the specificities of human neuron cell biology impact the pathophysiology of neuropsychiatric disorders. Cécile is the recipient of an ERC Starting Grant (2018) and an ERC Consolidator Grant (2024), she is an EMBO young investigator and she was awarded the Irène Joliot Curie prize for young woman in Science from the French Academy of Science and the Ministry for Research and Higher Education in 2021.

Selected publications:

Fossati M, Pizzarelli R, Schmidt ER, Kupferman JV, Stroebel D, Polleux F, **Charrier C** (2016) SRGAP2 and its human-specific paralog co-regulate the development of excitatory and inhibitory synapses. *Neuron* 91(2):356–69

Fossati M, Assendorp N, Gemin O, Colasse S, Dingli F, Arras G, Loew D and **Charrier C** (2019) Trans-synaptic signaling via the glutamate receptor delta-1 mediates inhibitory synapse formation in cortical pyramidal neurons. *Neuron* 104(6):1081–1094.e7.

Gemin O*, Serna P*, Zamith J, Assendorp N, Fossati M, Rostaing P, Triller A and **Charrier C** (2021) Unique properties of dually innervated dendritic spines in pyramidal neurons of the somatosensory cortex uncovered by 3D correlative light and electron microscopy. *Plos Biology* 19(8): e3001375.

Assendorp N, Fossati M, Libé-Philippot B, Christopoulou E, Depp M, Rapone R, Dingli F, Loew D, Vanderhaeghen P, **Charrier C** (2024) CTNND2 moderates the pace of synaptic maturation and links human evolution to synaptic neoteny. *Cell Reports* 43(10):114797. doi: 10.1016/j.celrep.2024.114797.

Homepage:

<https://www.ibens.bio.ens.psl.eu/spip.php?rubrique93>



“Assembly of cortical neurons in a dynamic circuit”

BEATRIZ RICO

King's College London, UK

Beatriz Rico is a Professor of Developmental Neurobiology at King's College London. She received her PhD at the University Autónoma of Madrid and did her postdoctoral research at the University of California at San Francisco. In 2005, she became an Assistant Professor at the CSIC in the Institute of Neuroscience in Alicante (Spain). In 2014, she was recruited for a professorship position at King's College London.

Rico's lab is interested in understanding how neuronal connections are established and organised in functional networks. To address this question, her lab is focused on three main questions: 1) How are the mammalian cortical networks built? 2) How do they respond to activity? 3) How do alterations in the development of these circuits lead to neurodevelopmental disorders? The European Molecular Biology Organisation has recognised her work with an EMBO YIP 2010, EMBO member 2021, and she has been granted an ERC-Consolidator grant, an ERC Advanced grant, a Wellcome Investigator Award, and Wellcome Discovery.

Selected publications:

Jezequel J, Condomitti F, Kroon T, Hamid H, Sanalidou S, Garces T, Maeso P, Balia M, Hu Z, Sahara S., **Rico B** (2025). Cadherins orchestrate specific patterns of perisomatic inhibition onto distinct pyramidal cell populations. *Nature Communications*, 16(1):4481.

Bernard C, Exposito-Alonso D, Selten M, Sanalidou S, Hanusz-Godoy A, Aguilera A, Hamid F., **Rico B***, Marín O* (2022). Cortical wiring by synapse-specific control of local protein synthesis *Science*, 378:873. *Joint senior authors.

Favuzzi E#, Deogracias R#, Marques-Smith A, Maeso P, Exposito-Alonso D, Kroon T., Baglia M., Fernandez- Maraver E, **Rico B** (2019). Distinct molecular programs regulate synapse specificity in cortical inhibitory circuits, *Science*, 263:413. #Co-authors. Faculty 1000: exceptional.

Homepage:

<https://devneuro.org.uk/rico/>



“Bridging the scales – Leveraging in vitro models to identify the neurobiological and behavioral consequences of synaptic aberrations in schizophrenia”

MICHAEL ZILLER

University of Muenster, Germany

Michael trained in physics and bioinformatics at the University of Tuebingen, Germany. He subsequently pursued his PhD studies in Epigenomics and Stem Cell Biology at Harvard University and the Broad Institute of Harvard and MIT, US, graduating 2014. In 2016, he established the lab of Functional Genomics in Psychiatry at the Max-Planck-Institute of Psychiatry, Munich, which he moved to the University of Muenster, Germany where he was appointed full professor in 2020. Michael is an expert in functional genomics and induced pluripotent stem cell technology, leading a mixed lab of wet and dry lab researchers. His lab pursues a translational research program, combining statistical genetics, functional genomics, personalized in vitro models, and dynamic causal modeling to decode the molecular and cellular mechanisms contributing to psychiatric disorders.

Selected publications:

Raabe FJ, Hausrucking A, Gagliardi M, Ahmad R, Almeida V, Galinski S, Hoffmann A, Weigert L, Rummel CK, Murek V, Trastulla L, Jimenez-Barron L, Atella A, Maidl S, Menegaz D, Hauger B, Wagner EM, Gabellini N, Kauschat B, Riccardo S, Cesana M, Papiol S, Sportelli V, Rex-Haffner M, Stolte SJ, Wehr MC, Salcedo TO, Papazova I, Detera-Wadleigh S, McMahon FJ, Schmitt A, Falkai P, Hasan A, Cacchiarelli D, Dannlowski U, Nenadić I, Kircher T, Scheuss V, Eder M, Binder EB, Spengler D, Rossner MJ, **Ziller MJ**. Polygenic risk for schizophrenia converges on alternative polyadenylation as molecular mechanism underlying synaptic impairment. [Preprint] bioRxiv. 2024 Jan 13:2024.01.09.574815. PMID: 38260577

Trastulla L, Moser S, Jiménez-Barrón LT, Andlauer TFM, von Scheidt M, Budde M, Heilbronner U, Papiol S, Teumer A, Homuth G, Falkai P, Völzke H, Dörr M, Schulze TG, Gagneur J, Iorio F, Müller-Myhsok B, Schunkert H, **Ziller MJ**. Distinct genetic liability profiles define clinically relevant patient strata across common diseases. *Nature Communications*, 2024.

Rummel CK, Gagliardi M, Ahmad R, Herholt A, Jimenez-Barron L, Murek V, Weigert L, Hausrucking A, Maidl S, Hauger B, Raabe FJ, Fürle C, Trastulla L, Turecki G, Eder M, Rossner MJ, **Ziller MJ**. Massively parallel functional dissection of schizophrenia-associated noncoding genetic variants. *Cell*. 2023 Nov 9;186(23):5165–5182.e33.

Homepage:

<https://web.ukm.de/index.php?id=11809>



“Development of organ connections: bridging the Brain–Pancreas gap”

ISABEL ESPINOSA-MEDINA

HHMI Janelia Research Campus, US

Isabel Espinosa-Medina is a Group Leader of the 4DCP department at the HHMI Janelia Research Campus in Virginia (US). She studied Biology and Biochemistry at the Autonomía University of Madrid (Spain), where she later completed a master's in molecular Biomedicine. She obtained her PhD in Neurobiology from Ecole Normale Supérieure in Paris (France) studying the development of the autonomic nervous system. In 2017 she moved to Janelia Research Campus (US) as a postdoctoral researcher focusing on generating new tools for lineage tracing in vertebrates. During that time, she developed a CRISPR/Cas9 tool called TEMPO that allows spatio-temporal labeling and manipulation of subsequent cell generations in mouse and zebrafish samples.

Isabel started her own lab at Janelia Research Campus in 2022, where she combines her expertise in Developmental Neurobiology and genetic tool building to study the development of the Visceral Nervous system, using both mice and zebrafish as model systems. Her lab's main focus is to understand how the nervous system and the pancreas find each other and how they influence each other during development. Using different imaging technologies (light sheet, confocal and FIB-SEM) and genetic tools for temporal manipulation of cells in vivo, her group is studying the origins and timing of pancreatic innervation, the molecular mechanisms underlying these interconnections, and their functional impact on the developing endocrine pancreas

Selected publications:

I. Espinosa-Medina, Feliciano D, Belmonte-Mateos C, Linda Miyares R, Garcia-Marques J, Foster B, Lindo S, Pujades C, Koyama M, Lee T, 2023. TEMPO enables sequential genetic labeling and manipulation of vertebrate cell lineages. *Neuron*. 2023 Feb 01;111(3):345–361.e10. doi: 10.1016/j.neuron.2022.10.035

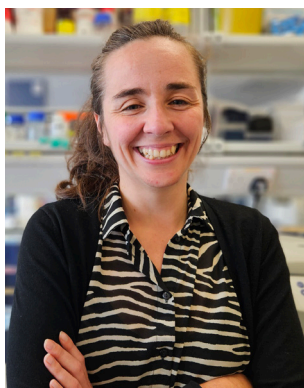
I. Espinosa-Medina, B. Jevans, F. Boismoreau, Z. Chettouh, H. Enomoto, T. Müller, C. Birchmeier, A. J. Burns, J.-F. Brunet. 2017. Dual origin of enteric neurons in vagal Schwann cell precursors and the sympathetic neural crest. *PNAS* 10/2017;114:11980–11985. doi: 10.1073/pnas.1710308114

I. Espinosa-Medina, O. Saha, F. Boismoreau, Z. Chettouh, F. Rossi, W. D. Richardson, J.-F. Brunet, 2016. The sacral autonomic outflow is sympathetic. *Science*. 11/2016;354:893–897. doi: 10.1126/science.aah5454

I. Espinosa-Medina, E. Outin, C. A. Picard, Z. Chettouh, S. Dymecki, G. G. Consalez, E. Coppola, J.-F. Brunet, 2014. Parasympathetic ganglia derive from Schwann cell precursors. *Science*. 06/2014;345:87–90. doi: 10.1126/science.1253286

Homepage:

<https://www.janelia.org/lab/espinosa-medina-lab>



“A primary role for active protein degradation on the tempo of mouse and human spinal cord progenitors”

TERESA RAYON

Barbraham Institute, Cambridge, UK

Teresa Rayon studied Biology at the Universidad Autónoma de Madrid and obtained her PhD in Biomedicine from the same university in Spain. She trained as a postdoctoral researcher at the Francis Crick Institute in London, where she investigated the spatiotemporal dynamics of human and mouse neural tube development (2016 – 2022).

Teresa Rayon joined the Babraham Institute in Cambridge in 2022 as a Tenure Track Group Leader, supported by an ERC Starting Grant. Her research group focuses on comparative models of development. Her primary interest is to understand the mechanisms that control biological timing during development, both across and within species, and how this knowledge can be harnessed to modulate timing in a precise and tunable manner.

Using integrative and comparative approaches, the group combines human and mouse stem cell models with in vivo embryos to investigate the regulatory mechanisms that determine species-specific timing. Their work employs genetic and pharmacological manipulations together with quantitative and temporally resolved techniques such as flow cytometry, live imaging, and genome-wide analyses to study how protein turnover and metabolic processes influence developmental dynamics. By examining how timing mechanisms are regulated and have been modulated during evolution, the group aims to uncover fundamental principles of developmental pacing. The identification of these mechanisms, and their translation into stem cell models, may have important implications for human assisted reproduction, regenerative medicine, and aging, enabling the generation of clinically relevant cell types more efficiently or the potential extension of lifespan.

Selected publications:

Nakanoh, S. ‡, Stamatakis S. ‡, Garcia-Perez LB., Azzi C., Carr H.L., Pokhilko A, Yu A., Howell S, Skehel M., Oxley D., Andrews S., Briscoe J. *, **Rayon T.*** (2024). Protein degradation shapes developmental tempo in mouse and human neural progenitors. *co-corresponding author, ‡equal contribution. bioRxiv <https://doi.org/10.1101/2024.08.01.604391>.

Azzi C., **Rayon T.** (2024). Timing mechanisms: insights from comparative neural differentiation systems. *Curr Opin Genet Dev.* Apr 21:86:102197. doi: 10.1016/j.gde.2024.102197.

Rayon, T.*, Stamatakis, D.‡, Perez-Carrasco, R.‡, Garcia-Perez, L., Barrington, C., Melchionda, M., Exelby, K., Lazaro, J., Tybulewicz, V., Fisher, E. M. C. and Briscoe, J.* (2020). Species-specific developmental timing is associated with global differences in protein stability in mouse and human. *Science* 369, eaba7667. *co-corresponding author, ‡equal contribution

Homepage:

<https://www.babraham.ac.uk/our-research/epigenetics/teresa-rayon>



“Advancing single-cell and spatial genomics to dissect brain aging”

JUNYUE CAO

Rockefeller University, US

Dr. Junyue Cao received his Ph.D. from University of Washington in 2019. In August 2020, he started his independent lab as an Assistant Professor and Head of the Laboratory for Single Cell Genomics at The Rockefeller University. His lab focus on investigating how a cell population in our body maintains homeostasis and how it is disrupted in aging through developing novel single-cell and spatial genomic techniques. Dr. Cao has been awarded the NIH Director’s New Innovator Award, William Ackman and Neri Oxman Innovator Award, Sagol Network GerOmic Award for Junior Faculty, MRA Young Investigator Award, Science & SciLifeLab Grand Prize for Young Scientists, the Verne Chapman Young Scientist Award, and Irma T. Hirschl/Monique Weill-Caulier Trust Research Award, and Hevolution/AFAR Young Investigator Award.

Selected publications:

Sziraki, A.,* Lu, Z.,* Lee, J.,* Banyai, G., Anderson, S., Abdulraouf, A., Metzner, E., Liao, A., Epstein, A., Xu, Z., Zhang, Z., Gan, L., Nelson, P. T., Zhou, W.#, **Cao, J.#** A global view of aging and Alzheimer’s pathogenesis-associated cell population dynamics and molecular signatures in human and mouse brains *Nature Genetics* (2023) 55, 2104–2116 doi:10.1038/s41588-023-01572-y

Lu, Z.,* Zhang, M.,* Lee, J., Sziraki, A., Anderson, S., Zhang, Z., Xu, Z., Jiang, W., Ge, S., Nelson, P., Zhou, W.#, **Cao, J.#**. Tracking cell-type-specific temporal dynamics in human and mouse brains.

Cell (2023) 186, 4345–4364.e24 doi: 10.1016/j.cell.2023.08.042

Zhang, Z., Schaefer, C., Jiang, W., Lu, Z., Lee, J., Sziraki, A., Abdulraouf, A., Wick, B., Haeussler, M., Li, Z., Molla, G., Satija, R., Zhou, W.#., & **Cao, J.#**. (2025).

“A Panoramic View of Cell Population Dynamics in Mammalian Aging.” *Science* (2025) DOI: 10.1126/science.adn3949

Homepage:

<https://www.rockefeller.edu/our-scientists/heads-of-laboratories/8704-junyue-cao/>



“Development and evolution of visual system connectivity”

ALAIN CHÉDOTAL

Institut de la Vision, Paris, France

Alain Chédotal, is Professor of Medicine at Lyon University and Hospital. He is group leader at the Vision institute in Paris and MeLis laboratory in Lyon. He received his PhD degree from Pierre & Marie Curie University in Paris and did a postdoc at UC Berkeley. He was recruited at Inserm in 1997 and started his own research team at the Salpêtrière Hospital in Paris in 2000. His lab studies nervous system development and evolution and has pioneered the use of tissue-clearing methods and light sheet microscopy to study human embryogenesis. He is the coordinator of HUDECA a state-of-the-art Inserm interdisciplinary program whose goal is to build an atlas of embryonic and fetal human cells and to structure human embryology research in France. He is also involved in various Human Cell Atlas (HCA)-related initiatives.

Selected publications:

Blain, R., Couly, G., Shotar, E., Blévin, J., Toupin, M., Favre, A., Abjagh, A., Inoue, M., Hernández-Garzón, E., Clarençon, F., Chalmel, F., Mazaud-Guittot, S., Giacobini, P., Gitton, Y. and **A. Chédotal** (2023) A tridimensional atlas of the developing human head. *Cell* 186 : 5910–5924.

Vigouroux RJ, Duroure K, Vougny J, Albadri S, Kozulin P, Herrera E, Nguyen-Ba-Charvet K, Braasch I, Suárez R, Del Bene F and **Chédotal A.** (2021) Bilateral visual projections exist in non-teleost bony fish and predate the emergence of tetrapods. *Science* 372 :150–156.

Dominici C., Moreno-Bravo, J.A., Roig Puiggros, S., Rappeneau, Q., Rama, N., Vieugue, P., Bernet, A., Mehlen, P. and **Chédotal A.** (2017) Floor plate-derived Netrin-1 is dispensable for commissural axon guidance. *Nature* 544:350–354.

Homepage:

<https://www.institut-vision.org/chercheurs/alain-chedotal>



"Wrapping the brain: how myelin is generated across space and time"

DWIGHT E. BERGLES

Johns Hopkins University School of Medicine
Kavli Neuroscience Discovery Institute

Dr. Bergles is the Diana Sylvestre, M.D. and Charles J. Homcy, M.D. Endowed Professor of Neuroscience in the Solomon H. Snyder Department of Neuroscience at Johns Hopkins University, and holds joint appointments in the Department of Biomedical Engineering and Otolaryngology-Head and Neck Surgery. He is currently Director of the Kavli Neuroscience Discovery Institute and the Neuroscience Imaging Center at JHU.

Dr. Bergles received his bachelor's degree in Biology from Boston University in 1990 and PhD in Molecular and Cellular Physiology from Stanford University in 1995, where he trained with Stephen J Smith. He completed a postdoctoral fellowship with Craig Jahr at the Vollum Institute in Portland, Oregon, before joining the Hopkins faculty in 2000. The goal of his laboratory is to understand how interactions between glial cells and neurons influence nervous system development, synaptic function, and neurodegeneration in diseases such as multiple sclerosis (MS). He has analyzed neuron-glial cell interactions in a variety of physiological contexts, defining how astrocytes contribute to glutamate clearance from synapses, how glial cells in the cochlea initiate spontaneous activity in the developing auditory system, and how glial progenitors enable the continued production of oligodendrocytes and myelin in the adult CNS. His studies combine cell specific genetic manipulations in mice with high resolution electrophysiology and two photon, time-lapse imaging in the intact brain.

Selected publications:

Heo D, Kim AA, Neumann B, Doze VN, Xu YKT, Mironova YA, Goff LA, Franklin RJM, and **Bergles DE** (2025) Transcriptional profiles of murine oligodendrocyte precursor cells across the lifespan. *Nature Aging*. 5:675-690.

Lu TY, Hanumaihgari P, Hsu ET, Agarwal A, Kawaguchi R, Calabresi PA, and **Bergles DE** (2023) Norepinephrine modulates calcium dynamics in cortical oligodendrocyte precursor cells promoting proliferation during arousal in mice. *Nature Neuroscience*. 26:1739-1750. doi: 10.1038/s41593-023-01426-0.

Orthmann-Murphy J, Call CL, Molina-Castro GC, Hsieh YC, Rasband MN, Calabresi PA and **Bergles DE** (2020) Remyelination alters the pattern of myelin in the cerebral cortex. *eLife*. ePub, May 27, 2020. 9:e56621.

Homepage:

<https://bergleslab.com/>

SCIENTIFIC ORGANIZERS

GONÇALO CASTELO-BRANCO

Gonçalo is Professor of Glial Cell Biology at the Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden, and a member of the Nobel Assembly at the Karolinska Institutet. His research group is interested in the molecular mechanisms defining the epigenetic state of cells of the oligodendrocyte lineage, with the long-term goal of designing epigenetic based therapies to induce regeneration (remyelination) in demyelinating diseases, such as multiple sclerosis. His group focus on how interplay between transcription factors, non-coding RNAs and chromatin modifying enzymes contribute to the transition between epigenetic states within the oligodendrocyte lineage, using technologies such as single cell transcriptomics and epigenomics, among others.

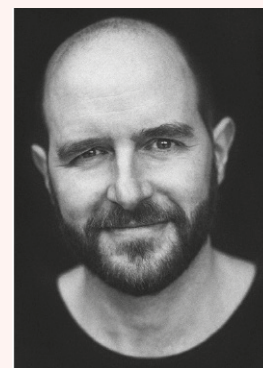
<https://ki.se/en/research/research-areas-centres-and-networks/research-groups/goncalo-castelo-branco-group>



JENS HJERLING-LEFFLER

Jens is Professor of Molecular Psychiatry at the Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden. His group's research is focused on how functional neuronal identity is regulated during postnatal and adolescent brain maturation and different brain states from a molecular and network point of view. The laboratory applies methods such as advanced mouse genetics, human genetics, single-cell transcriptomics and electrophysiology to analyze the role of distinct cell classes in normal behavior as well as to increase understanding of genetically complex disorders and traits including Schizophrenia.

hjerling-leffler-lab.org



ULRIKA MARKLUND

Ulrika is an Associate Professor at the Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden. Her research focuses on neuronal diversity in the enteric nervous system of the gastrointestinal tract. In particular she is interested in understanding the gene regulatory networks and signaling mechanisms that control the diversification of enteric neural stem cells into the many functionally distinct neuronal subtypes. Her ultimate goal is to recapitulate fate determination and circuitry formation in the purpose of disease modeling and cell-based therapy of bowel neuropathology.

marklundlab.org



FRANÇOIS LALLEMEND

François is Professor of Neurobiology of Sensory Systems at the Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden. His research group is interested in understanding the molecular principles underlying the neuronal specification and neural circuit formation in the peripheral nervous system. His group particularly focuses on the integration of sensory neurons into functional circuits involved in the control of motor behavior and in hearing process. Research in his lab concentrates both on early development aspects and circuit mapping and function in adult.

ki.se/en/neuro/lallemend-lab





Photo: Stefan Zimmerman

This conference is supported by Strategic Research Area in Stem Cells and Regenerative Medicine, and Frontier Courses in Neuroscience (Strategic Research Area in Neuroscience).

ki.se/en/research/education-in-neuroscience



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