



# Developing Brains

7th edition, online conference  
hosted at Karolinska Institutet, Stockholm, Sweden

September 1-3, 2020

## SPEAKERS:

**Claude Desplan**

New York University, USA

**Chinfei Chen**

Harvard Medical School, USA

**Sten Linnarsson**

Karolinska Institutet, Sweden

**Ethan Hughes**

University of Colorado School of Medicine, USA

**Michelle Southard-Smith**

Vanderbilt University Medical Center, USA

**Renata Batista-Brito**

Albert Einstein College of Medicine, USA

## SCIENTIFIC ORGANIZERS, KI:

**Gonçalo Castelo-Branco**

**Jens Hjerling-Leffler**

**Francois Lallemend**

**Ulrika Marklund**

For registration, please visit: <https://news.ki.se/developing-brains-2020>

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## FOREWORD

How can a single cell give rise to complex structures such as the central (brain/spinal cord) and peripheral (including the brain in the gut) nervous systems? This is the over-arching question in neural development; knowing how such intricate structures are assembled gives not only crucial knowledge about these nervous systems, but also important insight to the etiology of some of our most common diseases.

The 7th edition of the KI Conference "Developing Brains" gathers some of the leading scientists working on critical questions ranging from transcriptional heterogeneity of neural cell types, their specification, to myelination and creation of mature neural circuits.

Given the current Covid-19 pandemic, the conference will take place for the first time online. Lectures are scheduled for 1-3 September between 16.00-18.00 CET (Stockholm).

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

# PROGRAM

**1-3 SEPTEMBER 2020**

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## ORGANIZERS

Gonçalo Castelo-Branco  
Jens Hjerling-Leffler  
Ulrika Marklund  
Francois Lallemend

## SESSION I: Tuesday, 1st September (CET)

*CHAIR: Francois Lallemend, Karolinska Institutet, Stockholm, Sweden*

**16.00-16.05 Welcoming address and introduction**

**16.05-17.00 The generation of neural diversity**  
*Claude Desplan, New York University, USA*

**17.00-17.55 Developmental Plasticity of Thalamic Circuits**  
*Chinfei Chen, Harvard Medical School, USA*

## SESSION II: Wednesday, 2nd September (CET)

*CHAIR: Jens Hjerling-Leffler, Gonçalo Castelo-Branco, Karolinska Institutet, Stockholm, Sweden*

**16.00-16.05 Introduction**

**16.05-17.00 Developmental dysfunction of inhibition alters cortical processing**  
*Renata Batista-Brito, Albert Einstein College of Medicine, USA*

**17.00-17.55 Rethinking Remyelination: Motor learning and Surviving Oligodendrocytes**  
*Ethan Hughes, University of Colorado, USA*

## SESSION III: Thursday, 3rd September (CET)

*CHAIR: Ulrika Marklund, Jens Hjerling-Leffler, Karolinska Institutet, Stockholm, Sweden*

**16.00-16.05 Introduction**

**16.05-17.00 Neural Crest Lineages in Visceral Organ Innervation**  
*Michelle Southard-Smith, Vanderbilt University Medical Center, USA*

**17.00-17.55 Molecular architecture of the developing mouse brain**  
*Sten Linnarsson, Karolinska Institutet, Sweden*



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This conference is supported by the Ming Wai Lau Center for Reporative Medicine, Strategic Research Area in Stem Cells and Regenerative Medicine, and Frontier Courses in Neuroscience.

<http://ki.se/en/research/education-in-neuroscience>