

2024

Organizers:

Harold MacGillavry
Carla Gomes da Silva
Frank Meye
Jeroen Pasterkamp

About

The summer school will teach and train students in recent advances in neural circuit development and plasticity from an interdisciplinary perspective.

Registration

Deadline: 01 May 2024

www.utrechtsummerschool.nl

Registration fee:
€ 750 Course + course materials
+ housing

€ 500 Course + course materials

Schedule

Morning: lectures

(3x 1 hour)

Afternoon: workshops given
by the morning speakers

Location

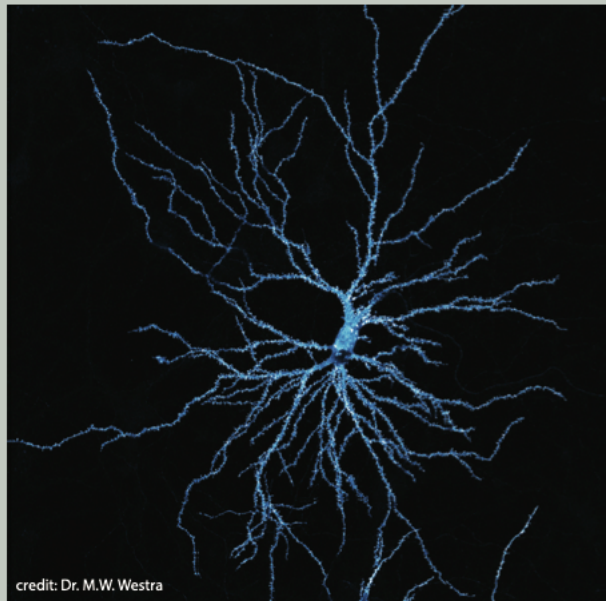
Utrecht, The Netherlands



University Medical Center
Utrecht

Neural Circuit Development and Plasticity

8 July 2024 - 12 July 2024



July 8 **Basic principles of neuronal development and function**
Lectures by the organizers

July 9 **Axon development and disease**
Franck Polleux (US)
Giampietro Schiavo (UK)
Dietmar Schmucker (DE)

July 10 **Synapse structure and function**
Andreas Reiner (DE)
Cécile Charrier (FR)
Seth Grant (UK)

July 11 **Neural circuit formation**
Renata Batista-Brito (US)
Mercedes Paredes (US)
Graziella Di Cristo (CA)

July 12 **Neural circuit plasticity and function**
Michael Krashes (US)
Daniela Cota (FR)
Ana Oliveira (DE)



info: www.utrechtsummerschool.nl

Summerschool 2024: “Neural circuit development and plasticity”

<http://www.utrechtsummerschool.nl/courses/life-sciences/neural-circuit-development-and-plasticity>

Goal and topic of the summerschool Neural Circuit Development and Plasticity

Our summerschool is aimed at advanced master students and starting PhD students with the goal to teach them on recent advances in neural circuit development and plasticity from an interdisciplinary perspective. This will be achieved in three ways: first a series of lectures covering the basic principles of axonal and synaptic development and plasticity, second, by a series of lectures by renowned international speakers to provide knowledge to the participants and third, participants work on assignments that require extensive discussion between the lecturers, staff and participants. The topics will range from early developmental events required for neural circuit development to aspects of synaptic plasticity. More specifically, among others the following topics will be addressed: axonal growth and guidance, synapse formation, synaptic transmission, neural plasticity, membrane trafficking and transport, regeneration and degenerative disease.

Our main goal of this summerschool is to inspire young scientist at an early stage of their career by providing them with new insights, provocative thoughts and a networks of peers. Participants of this summer school will be informed on the latest developments in the field of neural circuit development and plasticity (lectures), but will also learn how experienced experts in the field address problems, formulate research questions and design experiments (workshop). Lectures will include both basic research and preclinical examples. The topics will be addressed from different angles (molecular, cellular and systems), levels (from single neurons to the level of neuronal networks in vivo) and approaches (imaging, biochemistry, mouse genetics, electrophysiology).

Active participation of students

We can maximally accommodate 40 attendants. Students from all over the world can apply and will be selected by the organizers based on the suitability of their background and excellence. The summerschool aims at the level of advanced master/starting PhD student level with basic neuroscience and molecular biology knowledge. In the afternoon sessions, workshops are organized in which students will engage in discussions with the speakers, are challenged to come up with a research proposal, or further deepen their knowledge on relevant techniques. They will learn how experienced experts in the field address problems, formulate research questions and design experiments. The combination of high-quality lectures and lively scientific interactions was highly appreciated by participants and speakers in the previous years.

Location

All lectures and workshops will take place in the Boothzaal in the University Library at Utrecht Science Park (Heidelberglaan 3, Utrecht).

Program

Monday July 8

Lectures by the organizers 'Basic principles of neuronal development and function'

09:00 – 09:15 hr	General introduction and welcome
09:15 – 10:00 hr	Harold MacGillavry
10:00 – 10:45 hr	Student presentations (group 1)
10:45 – 11:00 hr	Coffee
11:00 – 11:45 hr	Carla Gomes da Silva
11:45 – 12:30 hr	Student presentations (group 2)
12:30 – 14:00 hr	Lunch with speakers
14:00 – 14:45 hr	Jeroen Pasterkamp
14:45 – 15:30 hr	Student presentations (group 3)
15:30 – 16:15 hr	Frank Meye
16:30 – 21:00 hr	welcome BBQ (in 'the Basket')

Tuesday July 9: Axon development and disease

Organizer: Jeroen Pasterkamp

09:00 hr	Introduction of the topic/speakers by the organizer
09:00 – 10:00 hr	Frank Polleux (US)
10:00 – 10:30 hr	Coffee
10:30 – 11:30 hr	Giampietro Schiavo (UK)
11:30 – 12:30 hr	Dietmar Schmucker (DE)
12:30 – 14:00 hr	Lunch with speakers
14:00 – 17:00 hr	Workshop: <i>Career Choices</i>

Wednesday July 10: Synapse structure and function

Organizer: Harold MacGillavry

09:00 hr	Introduction of the topic/speakers by the organizer
09:00 – 10:00 hr	Andreas Reiner (DE)
10:00 – 10:30 hr	Coffee
10:30 – 11:30 hr	Cécile Charrier (FR)
11:30 – 12:30 hr	Seth Grant (UK)
12:30 – 14:00 hr	Lunch with speakers
14:00 – 17:00 hr	Workshop: <i>Lab Tours</i>

Thursday July 11: Neural circuit formation

Organizer: Carla Gomes da Silva

09:00 hr	Introduction of the topic/speakers by the organizer
09:00 – 10:00 hr	Renata Batista-Brito (US)
10:00 – 10:30 hr	Coffee
10:30 – 11:30 hr	Mercedes Paredes (US)
11:30 – 12:30 hr	Graziella Di Cristo (CA)
12:30 – 14:00 hr	Lunch with speakers
14:00 – 17:00 hr	Workshop: <i>New Neuroscience Techniques</i>

Friday July 12: Neural circuit plasticity and function

Organizer: Frank Meye

09:00 hr	Introduction of the topic/speakers by the organizer
09:00 – 10:00 hr	Michael Krashes (US)
10:00 – 10:30 hr	Coffee
10:30 – 11:30 hr	Daniela Cota (FR)
11:30 – 12:30 hr	Ana Oliveira (DE)
12:30 – 14:00 hr	Lunch with speakers
14:00 – 17:00 hr	Workshop: <i>Research Proposal</i>
17:00 – 19:00 hr	Farewell drinks

Organizers

Dr. Harold MacGillavry	Utrecht University	h.d.macgillavry@uu.nl
Prof. dr. Jeroen Pasterkamp	UMC Utrecht	r.j.pasterkamp@umcutrecht.nl
Dr. Carla Gomes da Silva	UMC Utrecht	c.s.gomesdasilva@umcutrecht.nl
Dr. Frank Meye	UMC Utrecht	f.j.meye-2@umcutrecht.nl