



SCHEDULE NEUROBIOLOGY 2020

Time: 2020–11–02 – 2020–12–02

Lecture halls: Thymine & Uracil, Dept. Mol Biol. build. 6K, Top floor
(See map) A103 (Astrid Fagraeus) and E04 build. 6A, Hospital area.

Labs: White and Blue labs (W&B labs)
(See map) Red and Green labs (R & G labs)

Course literature: "Neuroscience" Purves, Augustine, Fitzpatrick et al (Editors) Sinauer, 6th edition, 2018 (or older editions). There are a few copies at the libraries (general as well as medical library). There are also copies that can only be read at the library.

Web pages films : Susan Greenfield's "Brain Story"
<http://www.infocobuild.com/books-and-films/science/brain-story-bbc.html>
David Egelman's "The Brain"
<https://ihavenotv.com/how-do-i-decide-the-brain-with-david-eagleman>

Course requirements:

1. All lab work incl. reports, practical exercises and computer labs are mandatory. Attendance to lectures is strongly recommended. In case of absence on mandatory exercises due to sickness, inform SB without delay. To be marked (examined) during the course 2020, lab reports need to be submitted to the assistants not later than November 27, January 12 and February 23.
2. Information in lectures, labs and assigned reading. Course literature is "Neuroscience" Purves, Augustine, Fitzpatrick et al (Editors) Sinauer, (6th edition but older editions works fine too). There are a few copies at the libraries (general as well as medical library). There are also copies that can only be read at the library. Watching films and answering "film questions" is not a course requirement but will provide a deeper understanding of the brain, which is strongly recommended.

Examinations:

Written examination is 2020–12–02 13:00–17:00 **Note – before monday November 23** you have to register online at UmU student web that you are going to take the exam. For the resit examination, which is tentatively booked to January 23, you need to register 11 days in advance.

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Course administrator: Ingela Nilsson (IN) ingela.nilsson@umu.se; Phone: 090-786 7333

Teaching assistant: Anna Gharibyan (AG) anna.gharibyan@umu.se;

Lecturers:
Staffan Bohm (SB) Molecular biology
Anna Berghard (AB) Molecular biology
Paolo Medini (PM) Molecular biology
Mattias Alenius (MA) Molecular biology
Simon Tuck (ST) UCCM

WEEK 45

2/11 Monday

12:00 – 15:00
15:00 – 16:00

Roll call & Introduction (**Chp. 1, 27**)
Film “All in the mind”

SB A103/Astrid F

3/11 Tuesday

09:00 – 12:00

Neuron & Neuroanatom (**Chp. 1, 21 bladder, appendix. 1**) AB Zoom
Meeting ID: 618 7395 1834, Passcode: 160953
Film: “First among equals”

The Web

4/11 Wednesday

08:00 – 10:30
10:30 – 13:00

Lab: Gross neuroanatomy
Group A
Group B

AG R & G LAB

BRING LABCOAT for your own protection!

14:00 – 16:00

Intro. electrophysiology & fMRI/PET (**Chp. 1-3**)
Meeting ID: 651 3599 5441

SB Zoom

5/11 Thursday

12:00 – 15:00
15:00 – 16:00

Neural circuit formation (**Chp. 22, 23**)
Film: David Eagleman “Reality”

SB E04

6/11 Friday

09:00 – 12:00

Sensory coding, olfaction, somatosensory (**Chp. 9, 15**) SB
Meeting ID: 646 7199 6147

Group A Thymine
& Uracil
Group B Zoom

14:00 – 15:00

Discussion week 45, Films etc.
Meeting ID: 682 5030 1671

SB Zoom

WEEK 46

9/11 Monday

09:00 – 09:30
09:45 – 11:30
11:30 – 13:15

Quiz
Lab: Neurohistology
Group B
Group A
Film: David Eagleman “Who am I”

SB W & B LAB
AG W & B LAB

The Web

10/11 Tuesday

08:30 – 11:30
12:30 – 13:00
13:00 – 16:00
16:00 – 18:00

Nervous system D. melanogaster (**Chp. 23**)
Meeting ID: 672 1307 2316

MA Zoom

Labintro Group A Drosophila nervous system
Film David Eagleman “How do I decide”
Lab: Drosophila axonal guidance

AG Zoom
The Web
AG W & B LAB

Group B
Group A

11/11 Wednesday

Lab: Drosophila nervous system AG W & B LAB
 Fluorescence microscopy for 1 hour, 4 students per time point
 08:00, 09:00, 10:00, 11:00, 12:00, 13:00, 14:00, 15:00

12/11 Thursday

09:00 – 12:00 Visual system 1 (**Chp. 11, 12**) SB Group B Thymine & Uracil
 Meeting ID: 676 0304 7204 SB Group A Zoom
 13:00 – 15:00 Visual system 2, (**Chp. 11, 15**) SB Group A Thymine & Uracil
 Meeting ID: 676 0304 7204 SB Group B Zoom
 Film "Mind's eye The Web

13/11 Friday

09:00 – 12:00 Auditory system & Pain (**Chp. 10, 13**) AB Zoom
 13:00 – 14:00 Discussion week 46, Films etc. SB Zoom
 Meeting ID: 630 9496 3415

WEEK 47**16/11 Monday**

09:00 – 10:30 Nervous system C. elegans ST Zoom
 12:00 – 17:00 Lab: C.elegans mutants AG W & B LAB
hand in answers same day

17/11 Tuesday

9:00 – 12:00 Neur. excitability/Synaptic transmiss. (**Chp. 1-5**) PM Zoom

18/11 Wednesday

09:00 – 13:00 Group 1, Computer lab Neurons in Action AB SB Thymine & Uracil
 13:00 – 17:00 Group 2 Computer lab Neurons in Action
hand in answers same day

19/11 Thursday

09:00 – 12:00 Neuroplasticity 1 (**Chp. 8, 24, 31**) SB Group B Thymine & Uracil
 SB Group A Zoom
 Film "Growing the mind" The Web

20/11 Friday

09:00 – 12:00 Neuroplasticity 2 (**Chp. 8, 24, 31**) SB Group A Thymine & Uracil
 SB Group B Zoom
 13:00 – 14:00 Discussion week 47, Films etc. SB Zoom

WEEK 48**23/11 Monday**

09:00 – 12:00	Lower/upper motor neurons (Chp. 16, 17) David Eagleman “Who is in control”	PM Zoom The Web
24/11 Tuesday		
09:00 – 12:00	Modulatory motor systems (Chp. 18, 19)	PM Zoom
25/11 Wednesday		
09:00 – 12:00	Association cortices (Chp. 26)	SB Group B Thymine & Uracil SB Group A Zoom
26/11 Thursday		
09:00 – 11:00	Emotions (Chp. 29) Film "In the heat of the moment"	SB Zoom The Web
12:00 – 13:00	Discussion week 48, Films etc.	SB Zoom
27/11 Friday	Own study	

WEEK 49

30/11 Monday	Own study 13:00 – 14:00 possibility for questions	AB SB Zoom
1/12 Tuesday	Own study 13:00 – 14:00 possibility for questions	AB SB A103/Astrid F
2/12 Wednesday	Written exam 13:00–17:00	Östra Paviljongen
23/1 Saturday (tentatively)	Resit written exam	Östra Paviljongen

Map:

