

## Syllabus

### 1. Course Title, Style and Credit

“Special lectures”, Lecture, 1 Credit

### 2. Appropriate grade level and Eligible Departments

1, 2, 3 Students in Department of Physiological Sciences, and also open to students in all Departments.

### 3. Lectures

Lectures will be provided by Professors or Associate Professors in the Department of Physiological Sciences, or Professors or Visiting Professors of NIPS

### 4. Time

April, 2020- February, 2021 approximately once a month  
Wednesday, 15:00-17:00

### 5. Place

Yamate Area : Seminar room B of the Yamate 3rd Building, 9th Floor

Myodaiji Area : NIPS 1F, Lecture room

Lectures will be delivered by a remote lecture system.

However, calling the role will be done at the location where the lecture occurs.

### 6. Prerequisites and Styles

Application: sign up for the classes

Students enrolled must attend at the location where the lecture is given.

### 7. Contents

Lectures describing recent progress and cutting edge techniques in the physiological sciences.

## 8. Course objectives

To disseminate a wide range of knowledge of physiological science

## 9. Schedule

The 1st: May 20, 2020

“Neuron diversity and microcircuitry of neo-cortex”

Yoshiyuki Kubota (Division of Cerebral Circuitry)

(Yamate area: Seminar room B of the Yamate 3rd Building, 9th Floor)

The 2nd: June 10, 2020

“Advanced optical microscopic analysis of neural and physiological functions”

Tomomi Nemoto (Division of Biophotonics)

(Yamate area: Seminar room B of the Yamate 3rd Building, 9th Floor)

The 3rd: July 22, 2020

“Regulation paracellular transport in epithelia”

Mikio Furuse (Division of Cell Structure)

(Yamate area: Seminar room B of the Yamate 3rd Building, 9th Floor)

The 4th: August 5, 2020

“Understanding and application of early mammalian development”

Toshihiro Kobayashi (Section of Mammalian Transgenesis)

(Yamate area: Seminar room B of the Yamate 3rd Building, 9th Floor)

The 5th: October 21, 2020

“Brain energy sensing and behavioral regulation”

Yasuhiko Minokoshi (Division of Endocrinology and Metabolism)

(Myodaiji area: NIPS 1F, Lecture room)

The 6th: November 11, 2020

“Motor control and somatosensory inputs”

Saeka Tomatsu (Division of Behavioral Development)

(Myodaiji area: NIPS 1F, Lecture room)

The 7th: December 2, 2020

“Roles of trans-synaptic linkage by epilepsy-related ligand-receptor complex”

Yuko Fukata (Division of Membrane Physiology)

(Yamate area: Seminar room B of the Yamate 3rd Building, 9th Floor)

The 8th: January 13, 2021

“Experience-dependent development and plasticity of neuronal circuits”

Madoka Narushima (Division of Homeostatic Development)

(Myodaiji area: NIPS 1F, Lecture room)

#### 10. Lecture materials and readings

Not applicable.

#### 11. Grades

Students must attend at least half of the lectures to get credit.

Students choose two of the lectures and write an essay report related to each lecture content with around 600 words in English (two reports in total).

Students submit the essay report by the deadline specified later.

The grade is determined on the basis of the quality of the submitted report.

More than 60 in a 100-point scale is judged successful.