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

   May, 2022- January, 2023 approximately once a month
   Wednesday, 15:00-17:00

5. Place

   Lectures will be delivered online using Zoom.

6. Prerequisites and styles

   There is no lecture course especially requested to have been finished in advance.
   All lectures will be given in English.

7. Contents

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

8. Course objectives

To acquire new knowledge and a wide range of information in physiological sciences

9. Schedule

The 1st: May 11, 2022

"Neural Basis of Social Interaction: A Functional Neuroimaging Approach"

Norihiro Sadato（Division of Cerebral Integration）

The 2nd: June 8, 2022

"Gene manipulation technology for analysis of brain function"

Kenta Kobayashi（Section of Viral Vector Development）

The 3rd: July 6, 2022

"Dynamic aspects of the structure and function of ion channels"

Yoshihiro Kubo（Division of Biophysics and Neurobiology）

The 4th: August 10, 2022

"Function and development of the visual cortex"

Yumiko Yoshimura（Division of Visual Information Processing）

The 5th: October 26, 2022

"Analysis of brain structure and function using ultra high field MRI"

Masaki Fukunaga （Division of Cerebral Integration）

The 6th: November 9, 2022

"Paracellular barrier function and epithelial homeostasis : From studies using
Drosophila gut as a model system"

Yasushi Izumi （Division of Cell Structure）

The 7th: December 7, 2022

"Protein structure and function, and structural analysis methods"

Kazuyoshi Murata （Division of Structural Biology）

The 8th: January 11, 2023
　　"Ion channels in sensory functions"
　　Makiko Kashio（Division of Cell Signaling）

10. Lecture materials and readings
　Not applicable.

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

　Students choose one of four lectures in the first (from May to August) and second semester (from October to January), respectively, and write an essay report summarizing the lecture content with about 600 English words. The deadline for each report is below.
　August 19th (Fri), 2022 for a report in the 1st semester
　February 3rd (Fri), 2023 for a report in the 2nd semester

　The grade is determined based on the quality of the submitted report, which is indicated by A (corresponding to score 80-100), B (70-79), C (60-69), or D (less than 60); A, B or C is 'passed.'