### Syllabus

- 1. Course Title, Style and Credit
  - "Special lectures"
  - Lecture
  - 1 Credit
- 2. Appropriate grade level and Eligible Departments

All Departments

For Department of Physiological Sciences, D1, 2, 3

### 3. Lectures

Professors or Associate Professors in Department of Physiological Sciences , or Professors or Visiting Professors of NIPS

## 4. Time

Oral lectures : April, 2012~March, 2013 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 : Main Conference room of the Staff Hall, 2nd Floor The lectures will be delivered by the remote lecture system. However, calling the role is done in the room where the professors really give the lectures.

Prerequisites and Styles
No specific styles

Application: sign up for the classes

# 7. Contents

Learning the recent progress and cutting edge of various fields of physiological science

8. Course objectives

To acquire a wide range of knowledge of physiological science

9. Schedule

The 1<sup>st</sup>: April 18<sup>th</sup>, 2012

"Synapse maturation and autism: Role of synaptic cell adhesion molecules"

Katsuhiko Tabuchi (Dept. Physiological Sciences)

The 2<sup>nd</sup>: May 16<sup>th</sup>, 2012

"Cortical nonpyramidal cells - morphology and function -"

Yoshiyuki Kubota (Dept. Physiological Sciences)

The 3<sup>rd</sup>: June 20<sup>th</sup>, 2012

"Neural mechanisms of color and shitsukan perception"

Hidehiko Komatsu (Dept. Physiological Sciences)

The 4<sup>th</sup>: September 26<sup>th</sup>, 2012

"Restoration of lost function via Brain Computer Interface"

Yukio Nishimura (Dept. Physiological Sciences)

The 5<sup>th</sup>: October 17<sup>th</sup>, 2012

"Neural processing in human auditory pathway"

Hidehiko Okamoto (NIPS)

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The 6<sup>th</sup>: November 7<sup>th</sup>, 2012
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"Functional alteration of synapses and dynamic localization of receptors in learning"

Ryuichi Shigemoto (Dept. Physiological Sciences)

The 7<sup>th</sup>: December 12<sup>th</sup>, 2012

"FRET analysis of the activation processes of G protein coupled receptors"

Mitsuhiro Tateyama (Dept. Physiological Sciences)

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The 8<sup>th</sup>: January 30<sup>th</sup>, 2013
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"Molecular mechanisms for neocortical formation and organization"

Tetsuo Yamamori (NIPS, NIBB)

The 9<sup>th</sup>: February 20<sup>th</sup>, 2013

"Patch-clamp analysis of inhibitory neurotransmission"

Hitoshi Ishibashi (Dept. Physiological Sciences)

The 10<sup>th</sup>: March 13<sup>th</sup>, 2013

"Molecular mechanism for synaptic dysfunction of human epilepsy"

Yuko Fukata (Dept. Physiological Sciences)

- 10. Lecture materials and readings Not necessary
- 11. Grades

Students must attend the classes at least half of total classes to take a credit. For evaluation, more than 60 in a 100-point scale is judged successful.