



# NEURO GLOBAL Seminar

Date & Time

**May 21, 2025 (Wed) 15:00~16:30**

Speaker

(Including Q&A)

**Michisuke Yuzaki**

Specially Appointed Professor,  
Human Biology-Microbiome-Quantum Research  
Center (Bio2Q), Keio University



Title

**Let's learn about synapses and make synapses!**

Venue

Conference Room 1, School of Medicine Building 6 1F, Seiryō Campus

[MAP] [https://www.tohoku.ac.jp/map/en/?f=SR\\_B08](https://www.tohoku.ac.jp/map/en/?f=SR_B08)

Format Hybrid (On-site & Online)

Registration Please send contact NGP Office ([neuroglobal@grp.tohoku.ac.jp](mailto:neuroglobal@grp.tohoku.ac.jp))

Related Website <https://www.yuzaki-lab.org/?lang=en>

●Neuro Globalプログラム生 (Neuro Global Program Students)

【脳科学セミナーシリーズEx】 【先進脳科学セミナーシリーズEx】

【Brain Science Seminar Series Ex】/【Advanced brain science seminar series Ex】 1 point

●医学系研究科(Graduate School of Medicine)

【医学履修課程】国際交流セミナー(アドバンスド講義科目) 出席1回分

【Medical Science Doctoral Course】 International Interchange Seminar (Advanced Lecture course) 1 attendance

●生命科学研究科(Graduate School of Life Sciences)

【単位認定セミナー】 【イノベーションセミナー(留学生対象)】 2ポイント

【Credit-granted seminar】 【Innovation seminar (For international students)】 2 points

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NEURO GLOBAL  
Tohoku University



# NEURO GLOBAL Seminar

## Title

Let's learn about synapses and make synapses!

## Abstract

The neural circuits that make up our brain are formed by approximately 100 billion neurons, each interconnected through synapses. Synapse formation is not solely dictated by genetic information but is also continuously shaped both functionally and morphologically throughout life by environmental factors, experiences, and learning. Recent research has shown that neuropsychiatric disorders such as depression and schizophrenia, neurodevelopmental disorders such as autism spectrum disorder, and neurodegenerative diseases such as Alzheimer's disease are all classified as “synaptopathies,” characterized by synaptic dysfunction. How, then, are synapses formed and modified? In this seminar, I will provide an overview of the approaches used to address this question. Focusing on the complement C1q family of synaptic organizers discovered in our laboratory, I will discuss how understanding synapse-forming molecules can enhance our insights into synaptopathies and contribute to their treatment.