NEURO GLOBAL
Seminar

Speaker

Noboru HIROI, Ph.D.

Professor
Department of Pharmacology,
Department of Cellular and Integrative Physiology,
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Title

Deciphering neurodevelopmental disorders through copy number variations

Date

July 15, 2022 (Friday) 13:00-16:00 JST

Venue

Centennial Hall (Seiryo Auditorium 2F), Seiryo campus
MAP[B10] https://www.tohoku.ac.jp/map/en/?f=SR_B10

Format Hybrid (Onsite & Online)

Registration Refer to the message from the NGP office

Related websites

https://lsom.uthscsa.edu/pharmacology/team-member/noboruhiroi/

●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】セミナー2ポイント
【Brain Science Seminar Series Ex】/【Advanced brain science seminar series Ex】2 points
●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2回分
【Medical Science Doctoral Course】International Interchange Seminar (Advanced Lecture course) It will be counted as 2 attendances.
●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)】3ポイント付与します。
【Credit-granted seminar】【Innovation seminar (For international students)】3 points will be granted to the students who will attend this seminar.

東北大学 Neuro Global 国際共同大学院プログラム事務局
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NEURO GLOBAL
Tohoku University

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Deciphering neurodevelopmental disorders through copy number variations

Speaker

Noboru HIROI

Department of Pharmacology, Department of Cellular and Integrative Physiology, Department of Cell Systems and Anatomy, University of Texas Health Science Center at San Antonio

Abstract

Copy number variations (CNVs) are associated with high rates of neurodevelopmental disorders, including autism spectrum disorder, intellectual disability, and schizophrenia. Because CNVs include many genes, it is not possible to determine whether the entire set of genes within a CNV are responsible for these disorders in humans. My laboratory has used mouse and cell models to circumvent this limitation of human studies and to more fully understand the genetic, cellular and molecular mechanisms of CNV-linked disorders. In two seminars, we will discuss 1) the current research on CNV-linked neurodevelopmental disorders and their limitations and pitfalls and 2) molecular, cellular and developmental origins of neurodevelopmental disorders associated with 22q11.2 CNV.

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Seminar

References

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3.Neurobiological perspective of 22q11.2 deletion syndrome. Zinkstok JR, Boot E, Bassett AS, Hiroi N, Butcher NJ, Vingerhoets C, Vorstman JAS, van Amelsvoort TAMJ. Lancet Psychiatry. 2019 Nov;6(11):951-960. doi: 10.1016/S2215-0366(19)30076-8.

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5. Critical reappraisal of mechanistic links of copy number variants to dimensional constructs of neuropsychiatric disorders in mouse models. Hiroi N. Psychiatry Clin Neurosci. 2018 May;72(5):301-321. doi: 10.1111/pcn.12641.

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