# Information and Call for Collaborative Research Partners for FY2021 With the Collaborative Research Network for Asian Children with Developmental Disorders Under MEXT Policy Initiative

*The Collaborative Research Network for Asian Children with Developmental Disorders* is a unique initiative among national universities in Japan. It is an education research network set up by several national universities that have come together to promote mental health in children, with a scientific focus. This is a project initiative of the Japanese Government's Ministry of Education, Culture, Sports, Science and Technology (MEXT). Participating universities and centers are Osaka University United Graduate School of Child Development, Osaka University, Kanazawa University, Hamamatsu University School of Medicine, Chiba University and University of Fukui ("UGSCD"), Molecular Research Center for Children's Mental Development, United Graduate School of Child Development, University, Research Center for Child Mental Development, Kanazawa University, Research Center for Child Mental Development, Hamamatsu University School of Medicine, Chiba University, Research Center for Child Mental Development, Hamamatsu University School of Medicine, Chiba University, Research Center for Child Mental Development, Hamamatsu University School of Medicine, Research Center for Child Mental Development, Hamamatsu University School of Medicine, Research Center for Child Mental Development, Hamamatsu University, Research Center for Child Mental Development, Hirosaki University Graduate School of Medicine.

The project goes beyond the bounds of the six academic institutions named above. The Network is to play a key role as a hub for collaborative research aimed at promoting the mental health of children, with participation from other Japanese and non-Japanese institutions, international researchers and research centers around the globe. The Network aims to respond to the requests and needs of Japanese as well as international researchers.

To this end, the Network is calling for research partners who will work in collaborative research with the five universities that comprise UGSCD and the Research Center for Child Mental Development, Hirosaki University Graduate School of Medicine. The collaboration will utilize the resources and facilities that have been acquired and created at these centers and research support and funding will be made available. Potential research partners from far and wide are invited to apply to undertake collaborative research.

#### General Information for Applicants

#### 1. Research Topic

The research topic for application should be relevant to clinical/ interventional/ basic researches on child mental development conducted at UGSCD, the research centers of Network member institutions (The center at Osaka University will be Molecular Research Center for Children's Mental Development, United Graduate School of Child Development, Osaka University, and the center at Chiba University will be Research Center for Child Mental Development, Chiba University), and the Research Center for Child Mental Development, Hirosaki University Graduate School of Medicine.

# (1) Planned collaborative project

Collaborative projects which will utilize the resources and facilities that have been acquired and created at Osaka University UGSCD and 6 centers of the participating universities in Japan. The collaborative research theme and the collaborator(s) from the 6 universities in the Network in 2021 will be selected from the list below. For the details of each research topic and researcher, please refer to the websites of UGSCD and 6 centers.

# List of research topics

### Theme 1 Brain and behavioral phenotypes in children and adolescents

(Topics) Neurogenesis; Molecular mechanisms of mental development/disorders; Genomics / epigenomics / other omics studies; Neuropathology; Neuropharmacology; Phenotypes and symptomatology of normal/abnormal mental development, etc.

(Collaborative researchers from the Network in 2021)

SATO Makoto (Professor, Osaka U), KATAYAMA Taiichi (Professor. Osaka U), YOKOYAMA Shigeru (Professor, Kanazawa U), MATSUZAKI Hideo (Professor, Fukui U), NAKAMURA Kazuhiko (Professor, Hirosaki U), TACHIBANA Masaya (Assoc. Professor, Osaka U), OKA Yuichiro (Assoc. Professor, Osaka U), YOSHIMURA Takeshi (Assoc. Professor, Osaka U), XIE Min-Jue (Assist. Professor, U Fukui), MIYOSHI Ko (Assist. Professor, Osaka U), HAYATA-TAKANO Atsuko (Assist. Professor, Osaka U), XIE Min-Jue (Assist. Professor, U Fukui)

# Theme 2 Mental development and support for development

(Topics) Parenting support and interventions; Regional childcare / school support; Child abuse; Birth cohort study; Cognitive behavioral therapy; Language and communication, etc. (Collaborative researchers from the Network in 2021)

TOMODA Akemi (Professor, U Fukui), SHIMIZU Eiji (Professor, Chiba U), MOHRI Ikuko (Assoc. Professor, Osaka U), FUJINO Haruo (Assoc. Professor, Osaka U), TAKAHASHI Michio (Assoc. Professor, Hirosaki U), ADACHI Masaki (Assoc. Professor, Hirosaki U), NISHIMURA Tomoko (Lecturer, Hamamatsu U Sch Med), URAO Yuko (Lecture, Chiba U), YAMAMOTO Tomoka (Assist. Professor, Osaka U), YOSHIZAKI Arika (Assist. Professor, Osaka U), ISHII Atsuko (Assist. Professor, Osaka U), TANAKA Sanae (Assist. Professor, Osaka U), KUNO Masaru (Assist. Professor, Chiba U)

Theme 3 Measurement of brain and mind in children and adolescents

(Topics) Brain studies using imaging techniques (e.g. MRI, MEG); Sleep studies; Eye gaze studies, Biomarkers of neurodevelopment and neurodevelopmental disorders; Psychometric studies; Artificial intelligence; ELSI (ethical, legal and social issues) in researches of child mental development, etc.

(Collaborative researchers from the Network in 2021)

TANIIKE Masako (Professor, Osaka U), TSUCHIYA Kenji (Professor, Hamamatsu U Sch Med), HIRANO Yoshiyuki (Professor, Chiba U), KAGITANI-SHIMONO Kuriko (Assoc. Professor, Osaka U), YOSHIMURA Yuko (Assoc. Professor, Kanazawa U), JUNG Minyoung (Assoc. Professor, U Fukui), IKEDA Takashi (Assist. Professor, Kanazawa U)

#### (2) General Collaborative Project

General Collaborative Project themes will be proposed freely by researchers outside the Network of Japan. The proposal should include at least one researcher (Prof/Assoc. prof. Asst. prof.) of UGSCD or the 6 universities participating the Network.

Please refer to the following websites for the research being undertaken at each institution and the belonging researchers.

#### Osaka University UGSCD

http://www.ugscd.osaka-u.ac.jp/

Molecular Research Center for Children's Mental Development, United Graduate School of Child Development, Osaka University

http://www.med.osaka-u.ac.jp/pub/kokoro/

Research Center for Child Mental Development, Kanazawa University http://kodomokokoro.w3.kanazawa-u.ac.jp/

Research Center for Child Mental Development, Hamamatsu University School of Medicine http://www.rccmd.org/

Research Center for Child Mental Development, Chiba University <u>http://www.m.chiba-u.ac.jp/class/rccmd/</u>

Research Center for Child Mental Development, University of Fukui <u>http://www.med.u-fukui.ac.jp/CDRC/welcome.html</u>

Research Center for Child Mental Development, Hirosaki University Graduate School of Medicine

http://www.med.hirosaki-u.ac.jp/~kodomono/

### 2. Eligibility

Teaching staff, researchers, graduate school students, physicians and co-medical professionals of universities and research institutions or healthcare institutions in Japan and other countries

#### 3. Research Timeframe

From the date of approval until March 31, 2022 (Possible extension into the following fiscal year upon reapplication)

### 4. Application Procedure

Use the application form available from the websites of Osaka University UGSCD and the

research centers listed above or the project webpage below.

http://www.ugscd.osaka-u.ac.jp/crnacdd/index.html

Applicants for this research support and funding should first liaise with the relevant prospective academic collaborator belonging to the respective Network member research institution, and discuss the theme, plan, and research expenses beforehand.

Please refer to the following webpage or the websites listed above for information on the research domain, faculty/staff members and details of ongoing research.

http://www.ugscd.osaka-u.ac.jp/en/

If the applicant has difficulties in finding relevant collaborator at the research institution of choice, or wishes to discuss the collaboration with the prospective academic collaborator, please e-mail the Application Contact given in Section 6.

Submit the completed application form by e-mail or by post to the Application Contact given in Section 6.

5. Application Deadline

No later than 17:00 hrs (JST) on Friday, May 14, 2021.

No later than 17:00 hrs (JST) on Friday, June 4, 2021.

6. Application Contact

Committee of Collaborative Research Promotion / Globalization

(Chair: TACHIBANA Masaya, Osaka Univ., Assoc. Professor) or Committee of Joint Resource Promotion

(Chair: TSUCHIYA Kenji, Hamamatsu Univ. School of Med., Professor) Collaborative Research Network for Asian Children with Developmental Disorders United Graduate School of Child Development, Osaka University

E-mail: kyodokenkyu@ugscd.osaka-u.ac.jp

Phone: +81-6-6879-3863

Address: 2-2, Yamadaoka, Suita-shi, Osaka 565-0871, Japan

7. Review of Research Proposal

Research proposals submitted will be reviewed under the criteria listed below. The successful application shall:

- (1) Further drive forward and enhance the developmental research undertaken at UGSCD and the six member university research centers.
- (2) Be highly practicable and have a clearly defined role to play in the ongoing work at the relevant research center.

- (3) Have a global perspective and scope of application
- (4) Be pioneering or have the potential of benefiting/contributing to society at large
- (5) Fulfil the purpose and mission of the project initiative
- (6) Be ethically acceptable
  - \*Please refer to the webpage below for the purpose and mission of the project initiative. <u>http://www.ugscd.osaka-u.ac.jp/crnacdd/index.html</u>

### 8. Successful Applications

Adoption of roughly five applications in total is planned. Adoptive decisions will be made upon deliberation by the executive committee of the Network after reviewed by Collaborative Research Promotion/Globalization Subcommittee and Joint Resource Promotion Subcommittee. The successful applicants will be contacted directly by the Network.

#### 9. Expenses

Research expenses required for the collaborative research shall be paid for with project funding from the Network up to a maximum of 150,000 JPY per adopted project. The items which will be paid are travel expenses and purchase of materials for which the Network agree to pay beforehand.

10. Research Using Genome-Editing Techniques / Animals / Human Samples, Research with Intervention to Human and Analysis of Human Genome / Genes

If the adopted research plan includes genome-editing, animal experiments, use of human derived samples, intervention to human subjects, and human genome analysis at institute within the Network, review and approval from the relevant committee (IRB, IACUC, etc) of the Network institute are necessary. The recipient of this funding and the collaborator inside the network shall submit necessary application for approval to the relevant committee of the institutes where the network collaborator belongs, before the recipient starts applicable experiments or research.

#### 11. Presentation at Research Liaison Conference

The successful recipient of the research collaboration funding shall report on the progress and results of the research to the research liaison conference of the research centers for child development which is held every end-January. Detailed information will be given after application approval.

### 12. Collaborative Research Report

The principal investigator shall submit a summary of the research results for FY 2020. This

shall be a report covering 2 to 3 pages of A4 paper. The report should be submitted by April 30, 2022 to the UGSCD contact given in Section 6 above.

The copyright of the report, including the right of public transmission, shall be the property of the research centers of each university undertaking the project belonging to the Collaborative Research Network for Asian Children with Developmental Disorders (namely, Molecular Research Center for Children's Mental Development, United Graduate School of Child Development, Osaka University, Research Center for Child Mental Development, Kanazawa University, Research Center for Child Mental Development, Hamamatsu University School of Medicine, Research Center for Child Mental Development, Chiba University, Research Center for Child Mental Development, University, Research Center for Child Mental Development, University, Research Center for Child Mental Development, Hirosaki University Graduate School of Medicine).

\*Format and other instructions on compiling the report will be made available at a later date.

#### 12. Publication of Research Paper

If the findings of this collaborative research are to be published, the paper should carry the following sentence as acknowledgement: "This study was supported by the Collaborative Research Program of the Collaborative Research Network for Asian Children with Developmental Disorders: MEXT Policy Initiative FY2021, under joint research conducted through the initiative." Please submit a printed copy of the paper to the contact address given in Section 6.

### 13. Intellectual Property Rights

Regulations on Collaborative Research at Osaka University will apply to the handling of intellectual property rights.

http://www.osaka-u.ac.jp/jp/about/kitei/reiki honbun/u035RG00000471.html

### 14. Health and Safety Provision

After approval of the research project, if students are recruited to participate in the research, insurance must be taken out (e.g. Accidents and Disasters Insurance for Students in Education and Research). Experiments must be conducted under the supervision either of a member of the institution concerned who is of assistant professor position or higher, or a faculty member of UGSCD, research centers of member universities or the Research Center for Child Mental Development, Hirosaki University Graduate School of Medicine.

# 15. Reapplication for Research Funding

Even if funding has been received for collaborative research in one fiscal year, application

can be made for collaborative research funding in the following fiscal year. The application will be considered carefully alongside other applications. If your application is successful, funding for the collaborative research will continue for the new fiscal year.

### 16. Contact Us

Committee of Collaborative Research Promotion / Globalization (Chair: TACHIBANA Masaya, Osaka Univ.. Assoc. Professor) or Committee of Joint Resource Promotion (Chair: TSUCHIYA Kenji, Hamamatsu Univ. School of Med., Professor) Collaborative Research Network for Asian Children with Developmental Disorders United Graduate School of Child Development, Osaka University E-mail: kyodokenkyu@ugscd.osaka-u.ac.jp Phone: +81-6-6879-3863 Address: 2-2, Yamadaoka, Suita-shi, Osaka 565-0871, Japan