### **Curriculum Vitae**

Ryunosuke "Ryan" Goto, M.D.

Chief Resident, Nagano Children's Hospital

Resident Physician, Department of Pediatrics at the University of Tokyo Hospital

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I am a Chief Resident in Pediatrics at Nagano Children's Hospital and the University of Tokyo Hospital. After receiving primary and secondary education in the United Kingdom and the United States, I received my M.D. from the University of Tokyo in 2019. Much of my research has focused on the relationship between the socioeconomic environment and mental health. In particular, I am interested in leveraging causal inference and machine learning tools to advance precision psychiatry. My work has been published in *The Lancet*, *JAMA Pediatrics*, and *Pediatrics*, among other journals.

### Education M.D., Faculty of Medicine, The University of Tokyo, Tokyo, Japan

04/2013 - 03/2019

#### Monta Vista High School, Cupertino, CA, USA

08/2008 - 06/2012

### **Work Experience**

### Nagano Children's Hospital

Resident Physician, Pediatrics

10/2021 -

Served as Chief Resident from 04/2023

#### The University of Tokyo Hospital

Resident Physician, Pediatrics 04/2019 –

#### **IBM Research**

*Research Intern* 02/2019 - 03/2019

Explored possible applications of automated connected speech analysis in the detection of pragmatic language impairment in individuals with autistic spectrum disorder

## **United Nations Relief and Works Agency for Palestine Refugees in the Near East**

Intern

07/2017 - 09/2017

Quality improvement and research on the dissemination and implementation of an electronic maternal and child health handbook application, e-MCH Handbook For more information on the e-MCH Handbook:

http://libopac.jica.go.jp/images/report/1000036631\_02.pdf

# Ongoing and past research

### Degree visibility in a social network experiment

The University of Tokyo; Stanford University; University of California, Los Angeles 05/2023-

Social network experiment for prevention of social isolation

The University of Tokyo; University of California, Los Angeles 08/2022-

### Adolescents of Ukraine During the 2022 Russian Invasion (AUDRI) Project

The University of Tokyo; Norwegian University of Science and Technology; Taras Shevchenko National University of Kyiv 07/2022-

I receive generous funding from the Chernobyl-Fukushima Medical Fund and The Japan Foundation for Pediatric Research for this project.

# Machine learning detects heterogeneous effects of Medicaid coverage on depression

The University of Tokyo; Kyoto University; The University of Chicago; Stanford University; University of California, Los Angeles 05/2021 - 08/2023

### Heterogeneous effects of antidepressants on suicide

The University of Tokyo; Norwegian University of Science and Technology 03/2021-

#### Social determinants of child and adolescent health

The University of Tokyo; Kyoto University; National Center for Child Health and Development; University of California, Los Angeles; Norwegian University of Science and Technology 08/2020 -

# Detection of pragmatic language impairment in individuals with autism spectrum disorder with automated connected speech analysis

*IBM Research* 02/2019 - 03/2019

# Clinical characteristics of tics and Tourette syndrome in children and adolescents

*The University of Tokyo* 06/2017 – 01/2022

#### Digitization of the maternal and child health handbook

The University of Tokyo; United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) 04/2017 – 02/2020

### Rehabilitation using transcranial magnetic stimulation (TMS) in stroke patients

*The University of Tokyo* 04/2016 - 06/2017

# Electrophysiological characterization of the lateral perforant path - CA3 synapse in mouse hippocampus

The University of Tokyo 12/2014 - 06/2016

### **Publications** Peer-reviewed publications

**Ryunosuke Goto,** Kosuke Inoue, Itsuki Osawa, Katherine Baicker, Scott L. Fleming, Yusuke Tsugawa. Machine learning detects heterogeneous effects of Medicaid coverage on depression. *American Journal of Epidemiology* (in press).

**Ryunosuke Goto,** Ichiro Kawachi, Naoki Kondo, Kosuke Inoue. Contribution of vaccinations to reducing socioeconomic disparities in COVID-19 deaths across US counties. *Annals of Epidemiology* (in press).

**Ryunosuke Goto,** Irina Pinchuk, Oleksiy Kolodezhny, Nataliia Pimenova, Norbert Skokauskas. Study protocol: Adolescents of Ukraine During the Russian Invasion (AUDRI) cohort. *BMC Public Health*. 2023 Jul 12;23:1342.

Irina Pinchuk\*, **Ryunosuke Goto**\*, Oleksiy Kolodezhny, Nataliia Pimenova, Norbert Skokauskas. Dynamics of hospitalizations and staffing of Ukraine's mental health services during the Russian invasion. *International Journal of Mental Health Systems*. 2023 Jun 24;17(1):20. (\*joint first authors)

**Ryunosuke Goto\***, Irina Pinchuk\*, Oleksiy Kolodezhny, Nataliia Pimenova, Norbert Skokauskas. Mental health services in Ukraine during the early phases of the 2022 Russian invasion. *British Journal of Psychiatry*. 2022 Dec 2;222(2):82-87. (\*joint first authors)

**Ryunosuke Goto,** Aurelie Piedvache, Mayumi Hangai, Yui Yamaoka, Mariko Sampei, Naomi Sawada, Yusuke Okubo, Kyoko Tanaka, Naho Morisaki, Mariko Hosozawa. Time trends in emotional well-being and self-esteem in children and adolescents during the COVID-19 pandemic. *Child and Adolescent Psychiatry and Mental Health*. 2022 Nov 23;16:89.

**Ryunosuke Goto,** Yusuke Okubo, Norbert Skokauskas. Reasons and trends in youth's suicide rates during the COVID-19 pandemic. *The Lancet Regional Health – Western Pacific*. 2022 Oct 1;27:100567.

Irina Pinchuk\*, **Ryunosuke Goto**\*, Nataliia Pimenova, Oleksiy Kolodezhny, Anthony P. S. Guerrero, Norbert Skokauskas. Mental health of helpline staff in Ukraine during the 2022 Russian invasion. *European Psychiatry*. 2022 Aug 10; 65(1), E45. (\*joint first authors)

**Ryunosuke Goto,** Roch Nianogo, Yusuke Okubo, Kosuke Inoue. Evaluation of Obesity Trends Among US Adolescents by Socioeconomic Status, 1999-2018. *JAMA Pediatrics*. 2022 June 21;176(9):937–940.

**Ryunosuke Goto,** Natsumi Matsuda, Maiko Nonaka, Yu Hamamoto, Yosuke Eriguchi, Mayu Fujiwara, Akane Suzuki, Yukari Yokoyama, Yukiko Kano. The Gilles de la Tourette Syndrome-Quality of Life Scale (GTS-QOL): A Validation in Japanese Patients. *Frontiers in Psychiatry.* 2022 Jan 3;12:797037.

Yosuke Eriguchi, Xiaoxue Gu, Naoto Aoki, Maiko Nonaka, **Ryunosuke Goto**, Hitoshi Kuwabara, Yukiko Kano, Kiyoto Kasai. A 2-year longitudinal follow-up of quantitative assessment neck tics in Tourette's syndrome. *Plos One*. 2021 Dec 30;16(12):e0261560.

**Ryunosuke Goto,** Yoko Watanabe, Ako Yamazaki, Masatoshi Sugita, Satoru Takeda, Masao Nakabayashi, Yasuhide Nakamura. Can digital health technologies exacerbate the health gap? A clustering analysis of mothers' opinions toward digitizing the maternal and child health handbook. *SSM-Population Health.* 2021 Oct;16:100935.

**Ryunosuke Goto,** Thomas Frodl, Norbert Skokauskas. Armed conflict and early childhood development in 12 low- and middle-income countries. *Pediatrics*. 2021 Sep;148(3),e2021050332.

**Ryunosuke Goto,** Ryo Inuzuka, Takahiro Shindo, Yoshiyuki Namai, Yoichiro Oda, Yutaka Harita, Akira Oka. Relationship between post-IVIG IgG levels and clinical outcomes in Kawasaki disease patients: new insight into the mechanism of action of IVIG. *Clinical Rheumatology*. 2020 Dec;39: 3747-55.

Seif Nasir\*, **Ryunosuke Goto**\*, Akiko Kitamura, Sahar Alafeef, Ghada Ballout, Majed Hababeh, Junko Kiriya, Akihiro Seita, Masamine Jimba. Dissemination and implementation of the e-MCH Handbook, UNRWA's newly released maternal and child health mobile application: a cross-sectional study. *BMJ Open*. 2020;10:e034885. (\*joint first authors)

**Ryunosuke Goto**, Miyuki Fujio, Natsumi Matsuda, Mayu Fujiwara, Marina Nobuyoshi, Maiko Nonaka, Toshiaki Kono, Masaki Kojima, Norbert Skokauskas, Yukiko Kano. The effects of comorbid Tourette symptoms on distress caused by compulsive-like behavior in very young children: a cross-sectional study. *Child and Adolescent Psychiatry and Mental Health*. 2019 Jun 28;13:28.

### Other publications

**Ryunosuke Goto**, Yoko Watanabe, Yasuhide Nakamura. JAPAN: Digitization of MCH Handbook and the socioeconomic disparity in health. *Japan International Cooperation Agency Technical Brief*. Jun 2022.

https://www.jica.go.jp/activities/issues/health/mch\_handbook/ku57pq000028koi9-att/technical\_brief\_41.pdf.

**Ryunosuke Goto**, Anthony P. S. Guerrero, Mario Speranza, Daniel Fung, Campbell Paul, Norbert Skokauskas. War is a public health emergency. *The Lancet.* 2022 Apr 2; 399(1302):1302.

Akiko Kitamura, **Ryunosuke Goto**, Seif Nasir, Majed Hababeh, Ghada Ballout, Akihiro Seita. JORDAN: UNRWA's electric MCH Handbook application for Palestine Refugees. *Japan International Cooperation Agency Technical Brief*. August 2017. <a href="http://libopac.jica.go.jp/images/report/1000036631\_02.pdf">http://libopac.jica.go.jp/images/report/1000036631\_02.pdf</a>.

Japanese translation of: Cohn SL. Preoperative Evaluation for Noncardiac Surgery. *Ann Intern Med.* 2016;165:JITC81-JITC96. http://annals.org/data/journals/aim/935916/aitc201612060\_japanese.pdf

## **Presentations and**

## **Oral Conference Presentations**

Talks

**Ryunosuke Goto**, Kosuke Inoue, Itsuki Osawa, Katherine Baicker, Scott L. Fleming, Yusuke Tsugawa. Machine Learning Detects Heterogeneous Effects of Medicaid on Depression: Oregon Health Insurance Experiment. **Society for Epidemiologic** 

**Research (SER) Annual Meeting (International Conference)**, Portland, OR, United States. June, 2023.

Ryunosuke Goto, Thomas Frodl, Norbert Skokauskas. Armed Conflict and Early Childhood Development in 12 Low- and Middle-Income Countries. American Academy of Pediatrics (AAP) National Conference and Exhibition (International Conference), Philadelphia, PA, United States (virtual). October, 2021.

Ryunosuke Goto, Miyuki Fujio, Natsumi Matsuda, Mayu Fujiwara, Norbert Skokauskas, Yukiko Kano. Effects of comorbid Tourette symptoms on distress by compulsive-like behavior in very young children. 24<sup>th</sup> World Congress of the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP) (International Conference), Singapore. December, 2020.

**Ryunosuke Goto**, Seif Nasir, Akiko Kitamura, Majed Hababeh, Ghada Ballout, Junko Kiriya, Akihiro Seita, Masamine Jimba. Dissemination and implementation of the e-MCH Handbook, the potential role of m-Health in improving health equity in a refugee setting: A cross-sectional study. **American Public Health Association** (**APHA**) **Annual Meeting (International Conference)**, San Diego, CA, United States. November, 2018.

### **Invited Talks**

Ryunosuke Goto, Akihiro Nishi. Social network analysis and network interventions in society, human development, and health research. *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) Social and Behavioral Sciences Branch Seminar Series. November 10, 2022.

**Ryunosuke Goto**. What changes can the electronic Maternal and Child Health Handbook bring to health care? An example from Jordan. **4**<sup>th</sup> **annual Maternal and Child Health Handbook Forum**, Tokyo, Japan. October 8, 2019. An overview on the electronic Maternal and Child Health Handbook in Jordan and Palestine refugees

**Ryunosuke Goto**. Social common capital and health: from a global perspective. **Nikkei SDGs Forum**, Tokyo, Japan. May 9, 2019.

A presentation on the electronic Maternal and Child Health Handbook in Jordan and how it contributed to health equity for Palestine refugees

### **Qualifications**

Pediatric Advanced Life Support (PALS)

07/2023

**TOEFL iBT 117/120** 

02/2023

United States Medical Licensing Examination (USMLE) Step 2 Clinical Skills 11/2018

### **Research Grants**

The Japan Foundation for Pediatric Research, Grant No. 22-001 2,000,000 yen (Approximately \$16,000) 2023-

# Chernobyl-Fukushima Medical Fund 500,000 yen (Approximately \$4,000)

2022-

# Honors and Awards

## Society for Epidemiologic Research Kenneth Rothman Travel Scholarship

06/2023

A scholarship for the 2023 Annual Meeting

# Ukrainian Psychiatric Association Dr. Stanislav Kostyuchenko Award 02/2023

Awarded to young researchers, doctors, or clinical psychologists who made significant contributions to psychiatric care in Ukraine

# The University of Tokyo Hospital Department of Pediatrics Research Award 11/2022

Awarded to the top researcher in the department

# Donald J. Cohen Fellowship Program for International Scholars in Child and Adolescent Mental Health

12/2020

Awarded by the the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP) to emerging leaders in child and adolescent mental health throughout the world

# The University of Tokyo Faculty of Medicine Dean's Award 01/2018

Awarded to the top three out of 100+ students in the Class of 2019, based on academic excellence

### The University of Tokyo Osamu Otsubo Fellowship

01/2018

A scholarship awarded to top students who aspire to receive medical education abroad

### The University of Tokyo Go Global Scholarship

Autumn 2017 and Spring 2018

A scholarship awarded to top students to study abroad

# Pigeon Foundation Scholarship for Aspiring Pediatricians, Obstetricians, and Gynecologists

04/2017 - 03/2019

A scholarship awarded to top medical students who aim to become pediatricians, obstetricians, or gynecologists

# U.S. Clinical Experience

## Neonatal Intensive Care Unit, Boston Children's Hospital (clinical clerkship)

05/2018 - 06/2018 (4 weeks)

### Pediatric Critical Care Unit, Children's Hospital of Philadelphia (observership)

04/2018 - 05/2018 (4 weeks)

## Pediatric Surgery, Children's Hospital of Philadelphia (clinical clerkship)

03/2018 - 04/2018 (4 weeks)