



日本・デンマーク 国際シンポジウム

# NOT EASY TO USE BIOBANK WHAT IS THE BARRIER? & BIGDATA?

## バイオバンク/ビッグデータの 更なる利活用に向けて

日時 2020年2月12日(水) 13:30-18:10

・プレシンポジウムセッション 13:00-

・情報交換会 18:20-19:30

会場 **東京**

ヒルサイドプラザ(代官山ヒルサイドテラス内)

<http://hillsideterrace.com/access/>



| 言語 | 日本語・英語(同時通訳を用意する予定です)

| 主催 | 東北大学 東北メディカル・メガバンク機構

| 後援 | デンマーク大使館

| スピーカー協力 | 電通、モニターデロイト、ちとせ研究所

申込方法

お名前、ご所属、連絡先を明記の上、下記メールでお申し込み下さい。

✉ [event@pr.megabank.tohoku.ac.jp](mailto:event@pr.megabank.tohoku.ac.jp)

詳細はこちら

<https://www.megabank.tohoku.ac.jp/news/37063>



多くの人々の協力を長期に得て行うコホート調査やバイオバンクが、各国で大規模に構築され、そこで生み出されるビッグデータが、新たな医療や産業を牽引することが期待されています。また、バイオバンクで生み出されるデータが、その他のビッグデータ、すなわち診療データ・公的データなどと結びつくことでその価値がさらに高まることも期待されています。

しかしながら、診療によって蓄積されたデータ、研究によって集められたデータ、公的機関によるデータなどを、正確に、効率よく、そして、個人情報の保護などに配慮しながら統合して、多様な分野にわたる産業界等による有効な利活用を促すことは決して容易ではありません。国民全体が参加するバイオバンクの構築などが進むデンマークの先進的な事例や、両国におけるバイオバンクの産業利用とその課題の紹介をもとに、バイオバンクによるビッグデータの更なる利活用の未来像を探るシンポジウムを開催します。

### プログラム

12:30 開場

13:00 プレシンポジウムセッション  
デンマークのご紹介

13:30 シンポジウム開始

13:40 第一部

日本のバイオバンク、生体試料活用研究、  
デンマークに学ぶ大規模なデータ利活用  
演者:

山本 雅之(東北大学)

山本 万里(農業・食品産業技術総合研究機構)

Lisbeth NIELSEN (デンマーク保健省局長)

Bartłomiej WILKOWSKI(デンマーク国立バイオバンク)

荻島 創一(東北大学) ほか

16:05 第二部

バイオバンクの産業利用とその課題  
演者:

Kaare CHRISTENSEN (デンマーク加齢研究センター)

寛澤 篤(東北大学)

Jes HERBERT (デンマーク工科大学)

笠原 堅(ちとせ研究所) ほか

18:10 閉会

18:20- 同会場で情報交換会を行います。(19:30まで)

本シンポジウムは、厚生労働省科学研究費「次世代バイオデータ基盤の構築に向けたデータ連携の概念実証」により行っています。



# NOT EASY TO USE BIOBANK & BIGDATA?

~ WHAT IS THE BARRIER? ~

12 February, 2020

6 February, 2020

## How can we collaborate to improve the system?

With the support of the Cabinet Office of Japan, Tohoku Medical Megabank Organization is pleased to organize this symposium to discuss how to facilitate the usage of biobanks and health related big data with Denmark, one of the leaders within the field who has a long history in creating the platform to promote researches to improve health and QOL of humans from these precious resources.

Today, increasing medical expenses are one of the critical issues to be solved in many modernized countries due to aging society. As more and more complex data analysis is made possible using super computers, life science big data can provide us with more information on the mechanism of diseases and how life is maintained etc., the merger of statistics, biochemistry, ICT and various life science fields thus gain strong attention from multi-sectors by both the academia and industries to develop personalized medicine and improve QOL of humans worldwide.

Prominent speakers from both countries will present the history and their efforts on how Japan and Denmark have been creating the platform giving researchers access to bio samples, linked with various electronic records and registries.

Regulation covering data protection and privacy concerns often are issues when it comes to usage of healthcare data. We will also discuss how samples and data usage can be facilitated to promote research yet protecting the privacy of the owners of the samples and data. Interesting cases on how biobanks and linked data have been creating values not only to the medical field but also to our personal life-style and non-medical areas.

We hope this symposium provides an opportunity for key players and talents from various fields to create new relationship, share ideas and understand mutual needs to improve the platform to make for innovative healthcare including personalized medicine, improvement of safety and QOL of patients, faster and efficient product development, reduction of medical cost and much much more!

We look very much forward to your participation.

Contact: Yumi MURAKAMI (Tohoku Medical Megabank, Tohoku University)  
Email: event\*\*pr.megabank.tohoku.ac.jp (Please change \*\* to @ when sending message)

Japan & Denmark STI SYMPOSIUM  
NOT EASY TO USE BIOBANK & BIGDATA?  
~ WHAT IS THE BARRIER? ~

Date

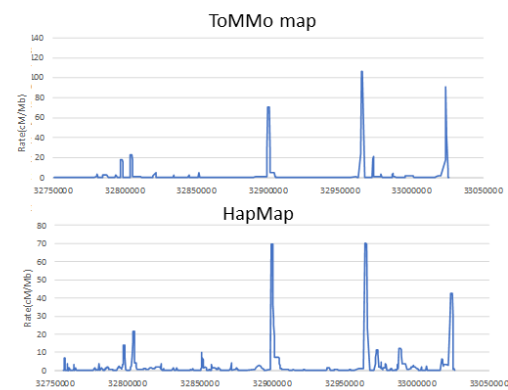
12 February, 2020  
13:00 – 19:30  
(Networking session: 18:20-19:30)

Venue

Hillside Plaza  
Sarugakucho 29-10 Shibuya-ku, TOKYO  
(Registration at B1 floor)

Language

Japanese/English (Simultaneous translation)



**Organized by**

**Tohoku University  
Tohoku Medical Megabank Organization**



**Supported by**

**Embassy of Denmark**



**Contributed speakers**



## Program

\*Speaker and Program may subject to change

TIME	TITLE	SPEAKER
12:30	Registration	
13:00	Pre-opening talk (20 min.) General info on Denmark -an entire cohort country-	Yumi MURAKAMI Tohoku Medical Megabank Organization, Tohoku University Ex-Senior Innovation Officer, Royal Danish Embassy Tokyo

## SYMPOSIUM : INTRODUCTION

Chairperson: Atsushi HOZAWA, MD, PhD  
Deputy Department Chair, Deputy Sector Director of Cohort Studies  
Tohoku Medical Megabank Organization, Tohoku University

13:30	Opening remarks PRISM: Public/Private R&D Investment Strategic Expansion Program	Koichi AKAISHI Vice Minister for Innovation Policy Cabinet Secretariat, Government of Japan or Hiroki MATSUO Director-General for Science, Technology and Innovation Policy Cabinet Office, Government of Japan
13:40	Welcome from Organizer & Introduction to Tohoku Medical Megabank	Masayuki YAMAMOTO, MD, PhD Executive Director Tohoku Medical Megabank Organization, Tohoku University

## PRESENTATIONS : (SPEECH & Q&A)

Chairperson: Fuji NAGAMI  
Professor  
Tohoku Medical Megabank Organization, Tohoku University

14:00	What are Japanese consumers looking for to be healthy? -Survey of 10000 Japanese-	Akiko YAMAUCHI Business Transformation Div, DX Business Strategy Dept Dentsu Inc.
14:15	Functional Foods-The new trends and regulations in Japan	Mari MAEDA-YAMAMOTO, PhD Director, Health Innovation Research, Food Research Institute National Agriculture and Food Research Organization

TIME	TITLE	SPEAKER
14:35	Centralized health data management system in Denmark	Lisbeth NIELSEN Director General Danish Health Data Authority, Danish Ministry of Health
15:10	The Danish Biobank Register - a national search system for rapid overview of pre-existing biological specimens	Bartlomiej WILKOWSKI, PhD Head of IT Danish National Biobank, Statens Serum Institut
15:45	Launch and management of Biobank cross-search system	Soichi OGISHIMA, PhD Professor, Informatics for Genomic Medicine Tohoku Medical Megabank Organization, Tohoku University
16:05	Break	
16:20	Survey on accessibility and usability of biobanks by Japanese industries	Ken KASAHARA, PhD Executive Officer, Head of Biomanufacturing Dep. Chitose Laboratory Corp.
16:35	Experiences from the Danish Twin and Oldest-Old Cohort Studies	Kaare CHRISTENSEN, MD, PhD, DMSc Head of The Danish Twin Registry & Danish Aging Research Center
17:10	Cohort Studies of Tohoku Medical Megabank Project and Examples of add-on cohort	Atsushi HOZAWA, MD, PhD Deputy Department Chair, Deputy Sector Director of Cohort Studies Tohoku Medical Megabank Organization, Tohoku University
17:30	Connecting dots - Leveraging international cases in Japanese context	Takeshi HAENO Associate Director Monitor Deloitte Japan
17:40	How big data are handled in academia-industry collaboration	Jes HERBERT General Counsel, Head of Legal and Contracts Technical University of Denmark
18:10	Closing remarks	Thomas Højlund CHRISTENSEN Minister-Counsellor (Commercial) Royal Danish Embassy Tokyo

Continues to Networking session

Same Venue

Networking session

TIME	TITLE	SPEAKER
18:20	Welcome speech	Izumi OKOSHI Dentsu Inc.
19:30	Closing speech	Fuji NAGAMI Tohoku Medical Megabank Organization, Tohoku University

SPEAKERS & CHAIRPERSON

**Koichi AKAISHI**

*Vice Minister for Innovation Policy  
Cabinet Secretariat, Government of Japan*

or

**Hiroki MATSUO**

*Director-General for Science, Technology and Innovation Policy  
Cabinet Office, Government of Japan*



**Masayuki YAMAMOTO, MD, PhD**

*Executive Director  
Tohoku Medical Megabank Organization, Tohoku University*



**Biography:**

- Tohoku University, Ph.D., Medicine, 1983
- Northwestern University, Postdoctoral Fellow, 1983
- Tohoku University, Associate Professor, 1991
- University of Tsukuba, Professor, 1995
- Tohoku University, Professor, 2007-
- Tohoku University Graduate School of Medicine, Dean, 2008-2012
- Tohoku University, Vice President, 2008-2012
- Tohoku University Education and Research Council, 2008-
- Tohoku University Distinguished Professor, 2011-2013, 2015-



*-Tohoku University Tohoku Medical Megabank Organization, Professor, 2012-  
-The Advanced Research Center for Innovations in Next-Generation Medicine, Center Director, 2018-*

## **Akiko YAMAUCHI**

*Business Transformation Division, DX Business Strategy Department  
Dentsu Inc.*



### **Biography:**

Akiko Yamauchi is a planner specializing in the healthcare/medical field.

In addition to disease educational ads for pharma companies, she develops new businesses in the healthcare field, formulates marketing strategies for corporate brands, prescription drugs, and OTC drugs, and develops communication strategies in the healthcare field such as corporate health projects.

## **Mari MAEDA-YAMAMOTO**

*Director, Health Innovation Research, Food Research Institute  
National Agriculture and Food Research Organization*



### **Biography:**

*1986- Researcher, Ministry of Agriculture, Forestry  
and Fisheries (MAFF), JPN*

*1992- Chief researcher, MAFF, JPN*

*2002- Leader of Laboratory of Functional Study of Tea, National Research Institute of Vegetables and  
Tea (NIVTS), NARO, JPN*

*2011- Senior scientist, Leader of Tea Quality and Functional Research Group, NIVTS, JPN*

*2012- Director of Food Function Research Division, Food Research Institute, NARO, JPN*

*2018- Director of Agri-Food Business Innovation Center*

*2019- Current position*

*2015.5- Professor (University of Tsukuba, PhD Program in Life Science Innovation)*

## **Lisbeth NIELSEN**

*Director General*

*Danish Health Data Authority, Danish Ministry of Health*



### **Biography:**

Lisbeth Nielsen's background is in both the public and the private sector. In her current role as Director General at the Danish Health Data Authority, information security has a high strategic priority in a highly digitized and interconnected health care system. Before that, Lisbeth Nielsen has worked as Chief Quality Officer at North Zealand Hospital, as Assistant Director at Danish regions and as head of Health Care Sales at IBM. She is a Master of Public Administration from the University of Roskilde.

The Danish Health Data Authority was established on 1 November 2015 and is a part of the Ministry of Health. The Danish Health Data Authority works to create coherent and systematic health data and digital solutions to benefit patients and practitioners as well as supporting general research and administrative tasks in the health care sector.

## Bartłomiej Wilkowski, PhD

*Head of IT*

*Danish National Biobank, Statens Serum Institut*



### Biography:

Bartłomiej Wilkowski, in his current position as Head of IT at the Danish National Biobank, manages an IT team which supports daily operation of automated freezers and robots in the biobank, IT development of the biobank's central LIMS system as well as operation and further expansion of the Danish Biobank Register. As one of the pillars of the Danish National Biobank, the Danish Biobank Register is a national web-based system that provides researchers with a quick and easy overview of more than 25 million biological samples available in various diagnostic, research and population-wide biobanks in Denmark. Bartłomiej is a lead IT architect and developer of the system. He has a Ph.D. degree in biomedical informatics (semantic text mining) from the Technical University of Denmark.

The Danish National Biobank was established in March 2012 funded through a large research grant from the Novo Nordisk Foundation, the Ministry of Science, Technology and Innovation, and the Lundbeck Foundation. The goal is to strengthen the Danish research infrastructure and thereby the conditions for Danish public health research and international research collaborations. The Danish National Biobank is a joint initiative between Statens Serum Institut, hospitals, universities and other public research institutions collecting or using biological material, and is operating under the Ministry of Health.

## Soichi OGISHIMA, PhD

*Professor*

*Tohoku Medical Megabank Organization, Tohoku University*



### Biography:

- Faculty of Engineering, The University of Tokyo, B.Eng, 2000
- Graduate School of Tokyo Medical and Dental University, Ph.D. in Medicine
- Medical Research Institute, Tokyo Medical and Dental University, Assistant Professor



- BIOQUANT, Heidelberg University, Visiting Researcher
- Tohoku University Tohoku Medical Megabank Organization, Senior Assistant Professor, 2012
- Tohoku University Tohoku Medical Megabank Organization, Associate Professor, 2014-2018
- Tohoku University Tohoku Medical Megabank Organization, Professor, 2018-

## **Ken Kasahara, PhD**

*Executive Officer, Head of Biomanufacturing Dep.*

*Chitose Laboratory Corp.*

*Managing Director, Chief Technology Officer (CTO)*

*Flora Index Corp.*

*Steering Committee Vice-Chair, R&D Committee Chair*

*Japan Microbiome Consortium (JMBC)*



### **Biography:**

- The University of Tokyo, Ph.D., Pharmacy, 2007
- Chitose Laboratory Corp., 2007
- Flora Index Corp., Chief Technology Officer, 2016
- JMBC, R&D Committee Chair, 2017
- JMBC, Steering Committee Vice-Chair, 2018

### **Company Biography:**

Chitose Laboratory Corp. aims to change the current fossil fuel and chemosynthesis dependent society to a photosynthesis and biotechnology dependent society, as accumulating technology to create, cultivate and understand the potential of microorganisms such as microbes, cells, algae, flora, etc., for practical application.

Chitose Laboratory Corp. started their microbial related business in 2004

Chitose incorporated Flora Index Corp.in 2016

Chitose Joined JMBC in 2017

## **Kaare CHRISTENSEN, MD, PhD, DMSc**

*Professor, Head of Research Unit, Epidemiology, Biostatistics and Biodemography*

*University of Southern Denmark*

*Head of Registry, The Danish Twin Registry*

*Head of Centre, Danish Aging Research Center*



## Biography:

Dr. Christensen is Director of both the Danish Twin Registry and the Danish Aging Research Center at the University of Southern Denmark. He has for 25+ years been heading large-scale aging studies with a focus on twins and the oldest-old, taking advantage of the unique data resources in Denmark to shed light on the mechanisms of development and aging. Dr. Christensen has a longstanding interest in gender differences in health, aging and survival as well as in the relation between early life events and later life health outcomes. Dr. Christensen is engaged in interdisciplinary research combining methods from epidemiology, genetics, medicine, and demography. He has authored or co-authored more than 600 articles in peer-reviewed, international journals.

## Atsushi HOZAWA, MD, PhD

*Deputy Department Chair, Deputy Sector Director of Cohort Studies*

*Tohoku Medical Megabank Organization, Tohoku University*



## Biography:

- Tohoku University, M.D., Ph.D., Medicine
- Fellowships from Japan Society for the Promotion of Science, 2002-2005
- University of Minnesota, Visiting Research Associate, 2004-2006
- Shiga University of Medical Science, Project Assistant Professor, 2006-2008
- Tohoku University, Assistant Professor, 2008-2010
- Yamagata University, Assistant Professor, Lecturer, 2010-2012
- Tohoku University Tohoku Medical Megabank Organization, Professor, 2012-



## Takeshi HAENO

*Associate Director, Healthcare Strategy*

*Monitor Deloitte*

## Biography:

*Takeshi Haeno is an Associate Director at Monitor Deloitte Japan, where he focuses on addressing social issues related to healthcare. He has worked with Healthcare sector over 15 years and have worked with a variety of stakeholders in the sector, including the central government, local government, private sectors, and academia. On top of his in-depth understanding of Japanese health system, he has a wide international (US/Europe) experience including 5+ year experience in Novo Nordisk in Denmark, where he played an important part in global strategy development based on business insights. In 2019, he moderated a panel session in life science seminar which focused on Biobank Strategy hosted by Danish Embassy. He holds MBA and Master of Public Health, both from University of California, Berkeley, and was a visiting lecturer at University of Hyogo MBA (Healthcare Strategic Evaluation).*

Monitor  
**Deloitte.**



## Jes HERBERT

*General Counsel, Head of Legal and Contracts*

*Technical University of Denmark*



### **Biography:**

Jes Herbert, who has a master of law from Copenhagen University and an MBA from Copenhagen Business School, has a long career in the private sector before joining DTU, the Technical University of Denmark, as General Counsel in 2013. Before that, Jes Herbert has worked as lawyer, General Counsel, Public Affairs director and has held other leading positions in the AP Moller Maersk Group, TRYG, Nordea, IBM, and the Bring Group. DTU, the Technical University of Denmark, is among the leading Technical Universities in Europe. DTU has a long and solid track record as the business community's university, where DTU takes part in a wide range of collaborations with companies regarding strategic research collaborations, continuing education, student projects, conferences, etc.

The interaction between the university and the business community ensures that theory is put into practice and that research is based on real-world issues.