

Report on MIRAI2.0

MIRAI 2.0 Japanese-Swedish Joint Kick-off / Scientific Webinar

October 7-8, 2020 (Online)

Co-hosted by Nagoya University and the University of Gothenburg



Table of Contents

Backg	round		3
	History and I	Previous Activities in MIRAI Project (2017-2019)	3
	MIRAI2.0 – 2	Member Universities	3
	MIRAI 2.0 -	Organizational Structure	4
	Vision of MII	RAI 2.0	4
MIRA	I 2.0 Japanes	e-Swedish Joint Kick-off / Scientific Webinar	5
	Number of pa	articipants	5
	MIRAI2.0 ki	ck-off website	5
	MIRAI2.0 Ki	ck-off Webinar (October 7)	5
	MIRAI2.0 CO	OVID-19 Webinar (October 8)	6
	Participants		7-9
	COVID-19 W	ebinar Evaluation	10
Apper	ndix		
	Appendix 1	MIRAI2.0 Webinar Program	11-15
	Appendix 2	MIRAI2.0 Kick-off Website	16-30
	Appendix 3	GA Meeting for MIRAI2.0 members	31-42
	Appendix 4	Evaluation	43-44

Background

MIRAI 2.0 - Connecting Swedish and Japanese Universities through Research, Education and Innovation

History and Previous Activities in MIRAI Project (2017-2019):

Seven Swedish and eight Japanese Universities joined together in the *MIRAI Project*. Research seminars, workshops, short courses for Ph. D and Post-Docs, and researcher mobility were implemented to strengthen collaboration between Sweden and Japan. Several new contacts have been established, existing contact deepened, and joint research proposals were submitted.

At the MIRAI meetings in Tokyo in October 2018, all present universities expressed a strong interest in continuing their collaboration beyond the *MIRAI Project*. Furthermore, the partners agreed to expand the number of participating universities by inviting other Swedish and Japanese higher education institutions to join. The importance of the collaborations between Swedish and Japanese institutions was also highlighted in the Joint Statement on 'Strengthening of Japan-Sweden Science and Technology Cooperation' signed during the MIRAI seminar in Tokyo, Japan, in October 2018.

MIRAI 2.0 aims to develop further and expand the collaboration activities started in the *MIRAI Project* in a new context, to meet what the society today expects of research universities.

MIRAI2.0- Member Universities

In Sweden: In Japan:

Jönköping UniversityHiroshima UniversityKarlstad UniversityHokkaido UniversityLinköping UniversityKyushu University

Linnaeus University Nagoya University*

Luleå University Sophia University

Lund University The University of Tokyo

Örebro University

Stockholm School of Economics

Waseda University

Waseda University

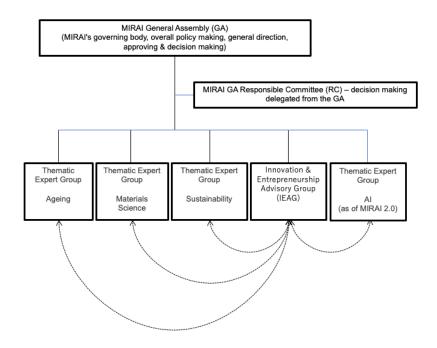
University of Gothenburg*

Umeå University

Uppsala University

^{*}The University of Gothenburg and Nagoya University are the coordinating universities in Sweden and Japan, respectively.

MIRAI 2.0 – Organizational Structure



Vision of MIRAI 2.0

From our experiences in the *MIRAI Project*, the core thematic areas and emphasize innovation by including the Entrepreneurship aspects will continue and be one of the highlights of the *MIRAI2.0* activities. Furthermore, *MIRAI2.0* will bring in potential new themes, such as AI and Social Science related topics. The United Nations' Sustainable Development Goals (SDGs)¹ will be integrated into all the *MIRAI2.0* thematic areas.

In *MIRAI2.0*, the Innovation & Entrepreneurship Advisory Group (IEAG) will be aligned with the other thematic areas; Ageing, Materials Science, Sustainability, AI, and other potential new thematic areas. Not only will the IEAG operate as an individual research group, but it will also work closely with all the thematic areas and connect the *MIRAI2.0* researchers to industries, public authorities, and academia.

We aim to encourage the Swedish and Japanese researchers to understand innovation systems and entrepreneurship in both countries by linking them to industries and public authorities. Promoting innovation and entrepreneurship in education and research is *MIRAI2.0*'s top priority. Our mission is to cultivate the minds of young researchers and bring in best practices to further collaborative research.

¹ United Nations website: https://www.un.org/sustainabledevelopment/sustainable-development-goals/

MIRAI2.0 Japanese-Swedish Joint Kick-off / Scientific Webinar

In commemoration of launching the second phase of MIRAI (*MIRAI2.0*), the first joint activity was co-hosted by Nagoya University and the University of Gothenburg during October 7-8, 2020 (9 am-12 pm Swedish time and 4 pm-6 pm Japanese time). This online event attracted more than 220 researchers, vice-chancellors, deans, and representatives from government organizations, funding agencies, and research facilities in Sweden and Japan as a total (please see number of participants below). This event was supported by MEXT and The Embassy of Sweden in Tokyo, Japan (see Appendix 1 for the full program).

Number of participants

October 7	120 (Japan 57, Sweden 59, Others 4)
October 8	109 (Japan 62, Sweden 46, Others 1)

MIRAI2.0 kick-off website

Two weeks prior to the event, a *MIRAI2.0* kick-off website² was launched where congratulatory messages/video messages were shared by the government officials, ambassadors, and representatives from Sweden and Japan (JSPS, JST, STINT, VINNOVA, and VR). Prof. Hiroaki Suga of the University of Tokyo and founder of Pepti Dream Inc. delivered a keynote speech. Introductions of researches who have participated in the *MIRAI Project* in their respective fields were presented (Appendix 2 (Hardcopy PDF of the website).

MIRAI2.0 Kick-off Webinar (October 7)

Following the General Assembly Meeting for the *MIRAI2.0* members (Appendix 3), the webinar was chaired by Kazuhito Kawakita, Vice President of Nagoya University. MIRAI2.0 members welcomed Prof. Hiroaki Suga live, who gave a summary of the keynote speech and participated in the Q&A session. Subsequently, researchers from the *MIRAI Project* in the fields of Ageing, Materials Science, Sustainability, and Innovation-Entrepreneurship were engaged in the panel discussions of their achievements. The three-hour session was closed by Kohei Miyazono, Executive Vice President of The University of Tokyo.

This joint-event became possible due to the COVID-19 pandemic that brought Sweden and Japan working closely together as ever.

² MIRAI2.0 kick-off website https://mirai2020sejp.wixsite.com/kickoff

MIRAI2.0 COVID-19 Webinar (October 8)

MIRAI2.0 COVID-19 Webinar was opened by Prof. Eva Wiberg, Vice-Chancellor at the University of Gothenburg. The webinar was divided into two sessions covering medical as well as policy and management perspectives on COVID-19. Eight speakers, four from Sweden and four from Japan, were given 10 minutes each to present their research on COVID-19. A 30-minute panel discussion at the end of each session allowed the speakers to comment on each other's presentations and to answer questions from the audience. The webinar was led by two moderators who introduced the speakers and managed the panel discussion.

Dr. Natalie Konomi Kyushu University moderated Session 1, where Prof. Hidetoshi Tahara, Prof. Sofi Fristedt, Prof. Tetsuya Yagi, and Prof. Jan Lötvall presented the latest research on COVID-19 from a medical perspective including, vaccines, testing, and implications for the elderly. Prof Jan Pettersson, The University of Gothenburg moderated Session 2, where Prof. Malin Rönnblom and Prof. Shunsuke Managi presented research on social and economic aspects of COVID-19. Prof. Hans Adolfsson, Vice-Chancellor at Umeå University, and Prof. Aiji Tanaka, President at Waseda University, talked about how the pandemic has affected academic and the transformation of universities post COVID-19.

Prof Atsushi Yokota, Executive and Vice President, Hokkaido University, closed the three-hour webinar with a summary and final remarks.

A majority of the presentations were compiled and shared with the webinar participants afterward.

A complete list of the speakers follows on the next page.

Participants (speakers/moderators)

	Name	Title	University / Institution
1	Aiji Tanaka	President	Waseda University
2	Andreas Göthenberg	Executive Director	The Swedish Foundation for International Cooperation in Research and Higher Education, STINT
3	Björn-Ola Linnér	Professor	Linköping University
4	Branko Aleksic	Associate Professor	Nagoya University
5	Eva Wiberg	Vice-Chancellor	University of Gothenburg
6	Gábor Méhes	Doctor	Linköping University
7	Glenn Sandström	Associate Professor	Umeå University
8	Guangwei Huang	Professor	Sophia University
9	Hamaguchi Michinari	President	Japan Science and Technology Agency, JST
10	Hans Adolfsson	Vice-Chancellor	Umeå University
11	Haruko Noguchi	Professor	Waseda University
12	Hideki Kasuya	Vice-Presidential Advisor	Nagoya University
13	Hidetoshi Tahara	Professor	Hiroshima University
14	Hiroaki Suga	Professor	The University of Tokyo
15	Jan Lötvall	Professor	University of Gothenburg
16	Joakim Appelquist	Deputy Director General	Sweden's Innovation Agency, VINNOVA
17	Kazuhito Kawakita	Vice President	Nagoya University
18	Kohei Miyazono	Executive Vice President	The University of Tokyo
19	Malin Graffner Nordberg	Doctor	Uppsala University
20	Malin Rönnblom	Professor	Karlstad University
21	Marie Löwegren	Doctor	Lund University
22	Michael Jacob	Science and Innovation Counsellor	The Embassy of Sweden in Tokyo, Japan
23	Mikiko Shimaoka	Professor	Waseda University
24	Mojgan Padyab	Associate Professor	Umeå University
25	Naoto Kobayashi	Professor Emeritus	Waseda University
26	Natalie Konomi	Associate Professor	Kyushu University
27	H.E. Mr. Pereric Högberg	Ambassador	The Embassy of Sweden in Tokyo, Japan
28	Rong Fu	Assistant Professor	Waseda University
29	Seiichi Matsuo	President	Nagoya University
30	Shunsuke Managi	Professor	Kyushu University

31	H.E. Mr. Shigeyuki	Ambassador	The Embassy of Japan in Sweden
	Hiroki		
32	Sofi Fristedt	Doctor	Jönköping University
33	Stefan Engström	State Secretary	Ministry of Education and Research of Sweden
34	Susumu Kajiwara	Deputy Director-General,	Ministry of Education, Culture, Sports, Science
		Science and Technology	and Technology, MEXT
		Policy Bureau	
35	Susumu Satomi	President	Japan Society for the Promotion of Science,
			JSPS
36	Sven Stafström	Director General	Swedish Research Council, VR
37	Tetsuya Yagi	Professor	Nagoya University
38	Tomohiro Shiraki	Associate Professor	Kyushu University

(photos of participants)



Aiji Tanaka



Andreas Göthenberg



Björn-Ola Linnér



Branko Aleksic



Eva Wiberg



Gábor Méhes



Glenn Sandström



Guangwei Huang



Hamaguchi Michinari



Hans Adolfsson



Haruko Noguchi



Hideki Kasuya



Hidetoshi Tahara



Hiroaki Suga



Jan Lötvall



Joakim Appelquist



Kazuhito Kawakita



Kohei Miyazono



Malin Graffner Nordberg



Malin Rönnblom



Marie Löwegren



Michael Jacob



Mikiko Shimaoka



Mojgan Padyab



Naoto Kobayashi



Natalie Konomi



H.E. Mr. Pereric Högberg



Rong Fu



Seiichi Matsuo



Shunsuke Managi



H.E. Mr. Shigeyuki Hiroki



Sofi Fristedt



Stefan Engström



Susumu Kajiwara



Susumu Satomi



Sven Stafström



Tetsuya Yagi



Tomohiro Shiraki

Evaluation

A short survey was sent to registered participants in the COVID-19 webinar. Seven participants responded to the survey (Appendix 4). However, since this was an online event, many participants had already provided feedback using the chat function during the webinar. Respondents of the survey found the webinar interesting and were positive about attending similar MIRAI 2.0 events in the future. Comments were made that the webinar was professionally organized and of high quality. Points to improve were the need of having more short breaks and that in order to attract a bigger audience to future events, the full program must be made available at an earlier stage.

The speakers and moderators of the webinar were also asked to share feedback on how they experience the event. They thought that the webinar was well organized and appreciated the preparations and technical guidance provided in advance. Suggestions for future digital events was to find ways of increasing interaction both between presenters and with the audience. Even though the presenters did receive many questions in the chat from the audience, it was perceived as largely one-way communication thus, increased focus on the discussion was suggested for future events.



11:55 - 12:00 18:55- 19:00

MIRAI 2.0 Japanese-Swedish Joint Kick-off / Scientific Webinar

https://mirai2020sejp.wixsite.com/kickoff October 7-8, 2020

**7 1			\sim	4 7		
$-M/\Omega$	nacc	O 17	11	oto.	har '	/
Wed	III CSU	la y ,	\mathbf{v}	LLU,	UCI 1	

Sweden	Japan	
9:00 - 10:20	16:00 - 17:20	General Assembly Meeting (MIRAI 2.0 members only) Break(20min.)
10:40 - 11:10	17:40 - 18:10	Master of Ceremony Kazuhito Kawakita, Vice President, Nagoya University Keynote Lecture (Q&A corner) "From Basic Science to Innovation - From genetic code reprogramming to peptide therapeutics" Hiroaki Suga, Professor, The University of Tokyo Break (5min.)
11:15 - 11:55	18:15 - 18:55	MIRAI Project (1.0) Speakers (Q&A corner) • Innovation-Entrepreneurship • Naoto Kobayashi, Professor, Waseda University • Mikiko Shimaoka, Professor, Waseda University • Marie Löwegren, Doctor, Lund University • Malin Graffner Nordberg, Doctor, Uppsala University • Materials Science • Tomohiro Shiraki, Associate Professor, Kyushu University • Gábor Méhes, Doctor, Linköping University • Sustainability • Huang Guangwei, Professor, Sophia University • Björn-Ola Linnér, Professor, Linköping University • Ageing • Rong Fu, Assistant Professor, Waseda University • Mojgan Padyab, Associate Professor, Umeå University • Haruko Noguchi, Professor, Waseda University • Glenn Sandström, Associate Professor, Umeå University Moderators: Hideki Kasuya, professor, Nagoya University

Thursday, October 8

Closing Address by Kohei Miyazono, Executive Vice President, The University of Tokyo

		Thursday, October 6
Sweden	Japan	COVID-19 Webinar
9:00 - 10:30	16:00 - 17:30	Opening Speech by Eva Wiberg, Vice Chancellor, The University of Gothenburg
		1st half: Medical Perspectives From Sweden and Japan Hidetoshi Tahara, Professor, Hiroshima University Tetsuya Yagi, Professor, Nagoya University Sofi Fristedt, Doctor, Jönköping University/Lund University Jan Lötvall, Professor, University of Gothenburg
10:30 - 12:00	17:30 - 19:00	2nd half: Policy and Management Perspectives from Sweden and Japan Shunsuke Managi, Professor, Kyushu University Aiji Tanaka, President, Waseda University Malin Rönnblom, Professor, Karlstad University Hans Adolfsson, Vice- Chancellor, Umeå University
		Moderators: <i>Natalie Konomi</i> , Doctor, Kyushu University Jan Pettersson, Professor, The University of Gothenburg
		Closing Remarks by Atsushi Yokota, Executive and Vice President, Hokkaido University



MIRAI 2.0 Japanese-Swedish Joint Kick-off / Scientific Webinar

https://mirai2020sejp.wixsite.com/kickoff

Pre-recorded (website launch: September 23, 2020)

Vision of MIRAI 2.0	Hideki Kasuya Vice-Presidential Advisor, Nagoya University
	Eva Wiberg Vice-Chancellor, University of Gothenburg
Opening: Greetings from Presidents of MIRAI 2.0	Seiichi Matsuo President, Nagoya University
Coordinating Universities	Eva Wiberg Vice-Chancellor, University of Gothenburg
Congratulatory Messages from Government	Susumu Kajiwara Deputy Director-General, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology, MEXT
	Stefan Engström State Secretary, Ministry of Education and Research of Sweden
	H.E. Mr. Shigeyuki Hiroki Ambassador, The Embassy of Japan in Sweden
	H.E. Mr. Pereric Högberg Ambassador, The Embassy of Sweden in Tokyo, Japan
	Michael Jacob Science and Innovation Counsellor, The Embassy of Sweden in Tokyo, Japan
Congratulatory Messages from	Susumu Satomi President, Japan Society for the Promotion of Science, JSPS
Funding Agencies	Michinari Hamaguchi President, Japan Science and Technology Agency, JST
	Andreas Gothenberg Executive Director, The Swedish Foundation for International Cooperation in Research and Higher Education, STINT
	Joakim Appelquist Deputy Director General, Sweden's Innovation Agency, VINNOVA
	Sven Stafström Director General, Swedish Research Council, VR
Keynote Lecture	"From Basic Science to Innovation - From genetic code reprogramming to peptide therapeutics" Hiroaki Suga Professor, The University of Tokyo
MIRAI Project(1.0)	
Success Stories (Innovation-Enterpreneurship)	Naoto Kobayashi, Professor, Waseda University Mikiko Shimaoka, Professor, Waseda University Marie Löwegren, Doctor, Lund University Malin Graffner Nordberg, Doctor, Uppsala University
(Material Sciences)	Tomohiro Shiraki, Associate Professor, Kyushu University Gábor Méhes, Doctor, Linköping University
(Sustainability)	Huang Guangwei, Professor, Sophia University Björn-Ola Linnér, Professor, Linköping University
(Ageing)	Rong Fu, Assistant Professor, Waseda University Mojgan Padyab, Associate Professor, Umeå University Haruko Noguchi, Professor, Waseda University Glenn Sandström, Associate Professor, Umeå University



MIRAI 2.0 COVID-19 webinar, October 8 - Program

Time JP/SE	MIRAI 2.0 Covid-19 webinar – Program
16:00/09:00	Welcome and introduction to the webinar (5 min) Opening speech by Prof. Eva Wiberg, Vice Chancellor, The University of Gothenburg
16:05/09:05	Session 1 – COVID-19 medical perspectives from Sweden and Japan
	Introduction to medical-related session, <i>Dr Natalie Konomi, Associate Professor, Faculty of Engineering, Kyushu University</i> (Moderator)
16:10/09:10	Prof. Hidetoshi Tahara, Hiroshima University - <i>COVID-19 research at Hiroshima University</i> (10 min)
	Dr. Sofi Fristedt, Jönköping University/Lund University - <i>Suddenly at risk – Older adults' experiences of everyday life during COVID-</i> 19 (10 min)
	Break (5 min)
16:35/09:35	Prof. Tetsuya Yagi, Nagoya University - Overview of COVID-19 in Japan and Nagoya City (10 min)
	Prof Jan Lötvall, University of Gothenburg - A bioinspired exosome-like COVID-19 vaccine developed from engineered bacterial membranes (10 min)
	Break (5 min)
17:00/10:00	Panel discussion & Q&A session (25 min)
	With all 4 speakers from Session 1, led by <i>Dr Natalie Konomi, Associate Professor, Faculty of Engineering, Kyushu University</i> (Moderator)

17:25/10:25	Break (10 min)
17:35/10:35	Session 2 – COVID-19 Policy and management perspectives from Sweden and Japan
	Introduction to management/policy-related session, <i>Prof Jan Pettersson, Director of Gothenburg Centre for Sustainable</i> Development, The University of Gothenburg (Moderator)
17:40/10:40	Prof. Malin Rönnblom, Karlstad University - COVID-19 and Sweden's exceptionalism. A spotlight on the cracks in the social fabric of the mature welfare state (10 min)
	Prof. Shunsuke Managi, Kyushu University <i>- COVID-19 from a Japanese policy and economic perspective</i> (10 min)
	Break (5 min)
18:05/11:05	Prof. Hans Adolfsson, Vice-Chancellor, Umeå University - <i>COVID-19 and Academia - How the pandemic affected Swedish HEI</i> (10 min)
	Prof. Aiji Tanaka, President, Waseda University - <i>Toward the Post-COVID-19 Society - A Challenge of Waseda University</i> (10 min)
	Break (5 min)
18:30/11:30	Panel discussion & Q&A session (25 min)
	With all speakers from Session 2, led by <i>Prof Jan Pettersson, Director of Gothenburg Centre for Sustainable Development, The</i> University of Gothenburg (Moderator)
18:55/11:55	Closing remarks (5 min) Closing remarks by Prof Atsushi Yokota, Executive and Vice President, Hokkaido University



MIRAI 2.0 Kick-off

MIRAI 2.0 Japanese-Swedish Joint Kick-off / Scientific Webinar

October 7-8, 2020

Connecting Swedish and Japanese universities through Research, education and innovation



https://mirai2020sejp.wixsite.com/kickoff





Please REGISTER from the website (above)





Opening Speeches / Messages

Seiichi Matsuo, President, Nagoya University

Eva Wiberg, Vice-Chancellor, University of Gothenburg

Susumu Kajiwara, Deputy Director-General, Science and Technology Policy Bureau, MEXT

Stefan Engström, State Secretary, Ministry of Education and Research of Sweden

H.E. Mr. Shigeyuki Hiroki, Ambassador, The Embassy of Japan in Sweden

H.E. Mr. Pereric Högberg, Ambassador, The Embassy of Sweden in Tokyo, Japan

Michael Jacob, Science and Innovation Counsellor, The Embassy of Sweden in Tokyo, Japan

Susumu Satomi, President, JSPS

Michinari Hamaguchi, President, JST

Andreas Göthenberg, Executive Director, The Swedish Foundation for International Cooperation in Research and Higher Education, STINT

Joakim Appelquist, Deputy Director General, Sweden's Innovation Agency, VINNOVA **Sven Stafström**, Director General, Swedish Research Council, VR



Keynote Lecture



From Basic Science to Innovation -From genetic code reprogramming to peptide therapeutics

Hiroaki Suga

Professor, The University of Tokyo



MIRAI (1.0) Success Stories

Collaborative Research Outcomes

Thematic Areas:

- · Innovation-Entrepreneurship
- Materials Science
- Sustainability
- Ageing

Appendix 1

MIRAI2.0 Member universities





Live Event (October 7)

17:40-18:10 (Japan Standard Time) **Keynote Lecture Q&A corner**

Professor Hiroaki Suga

18:15-18:55

MIRAI Project (1.0) Speakers Q&A Corner

- * Innovation-Entrepreneurship
- * Materials Science
- * Sustainability
- * Ageing

18:55-19:00 Closing Address



Live Event (October 8)

COVID-19 Webinar

16:00-17:30

Medical Perspectives From Sweden and Japan

17:30-19:00

Policy and Management Perspectives from Sweden and Japan



MIRAI 2.0 Kick-off

October 7-8, 2020

MIRAI 2.0 Japanese-Swedish Joint Kick-off / Scientific Webinar co-hosted by Nagoya University and University of Gothenburg

Supported by MEXT and The Embassy of Sweden in Tokyo, Japan

Thanks to everyone who participated in the digital Kick-off for MIRAI 2.0 and contributed to the success of the event. In total, more than 200 online participants participated over the course of the two days.

We hope to see you again during Research and Innovation Week, June 7-11, Gothenburg, Sweden. Visit our website http://www.mirai.nu/ for more information about MIRAI 2.0 and upcoming events.

HOME(simplified)

Keynote

Success Stories

COVID-19 Webinar

Recister.

About this website and the event

This event (Japanese-Swedish Joint Kick-off / Scientific Webinar) consists of three parts:

This website (pre-recorded contents)

Viewers can watch the pre-recorded Keynote Lecture and the MIRAI Project (1.0) Success Stories on this website and submit questions via the question form on this site.

Live Session (on October 7, 2020)

A live Q&A Session to the Keynote Lecture (Q&A corner) and MIRAI Project (1.0) Speakers (Q&A corner) will be held on October 7 where speakers and moderators will have live discussions based on the questions received by YOU, our audience.



Master of Ceremony:

Kazuhito Kawakita Vice President, Nagoya University

COVID-19 Webinar (on October 8, 2020)

There are no pre-recorded lectures for this. All lectures are live. Please register to join the webinar from the bottom of this webpage.

This event is supported by MEXT, and the Swedish Embassy in Tokyo.

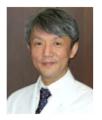
program

poster





Vision of MIRAI 2.0



Hideki Kasuya Vice-Presidential Advisor, Nagoya University



Eva Wiberg Vice-Chancellor, University of Gothenburg



MIRAI 2.0 is an academic alliance among 19 Universities in Sweden and Japan, aiming to promote long-term research collaboration between the two countries. MIRAI 2.0 (2020-2022) builds on the former MIRAI Project (2017-2019), developing and expanding the activities of the Project further. The vision of MIRAI 2.0 is presented by the two coordinating universities; Nagoya University and the University of Gothenburg.

Background of MIRAI:

MIRAI is an academic consortium that was initiated based on the discussion at the "Japan-Sweden University Presidents' Summit" in October of 2015, to strengthen academic exchanges and research collaboration between Sweden and Japan.

MIRAI Project was adopted as a pilot project of the Swedish Foundation for International Cooperation in Research and Higher Education (STINT) and was launched in 2017 as a three-year project. From 2017-2019 seven Swedish and eight Japanese Universities joined together in the MIRAI Project; 'Connecting Swedish and Japanese universities through research, education and innovation'.

MIRAI 2.0 Members

Member universities agreed to expand the number of participating universities by inviting other Swedish and Japanese higher education institutions to join. Currently there are 8 universities from Japan and 11 universities from Sweden participating in MIRAI 2.0.

Japan

Hiroshima University
Hokkaido University
Kyushu University
Nagoya University
Sophia University
The University of Tokyo
Tohoku University
Waseda University

Sweden

Jönköping University
Karlstad University
Linköping University
Linnaeus University
Luleå University of Technology
Lund University
Örebro University
Stockholm School of Economics
*
Umeå University
University of Gothenburg
Uppsala University



^{*} associate member

Opening: Greetings from MIRAI 2.0 Coordinating Universities



Seiichi Matsuo President, Nagoya University





Eva Wiberg Vice-Chancellor, University of Gothenburg



Congratulatory Messages from Government



Susumu Kajiwara Deputy Director-General, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology, MEXT





Stefan Engström State Secretary, Ministry of Education and Research of Sweden

Congratulatory message from the Ministry of Education and Research of Sweden

Japan and Sweden has a long history of collaboration within many fields. In 2018 we celebrated 150 years of diplomatic relations between our countries and signed a joint statement on deepening research and innovation collaboration. The statement reflects the initiatives taken by research agencies and universities on both sides in recent years. The MIRAI project is highlighted as an important strategic initiative that promotes collaboration between Sweden and Japan in Research, Education and Innovation.

As world-leading research nations Japan and Sweden have a joint responsibility and dedication to address global societal challenges. International collaboration in Science, Technology and Innovation is of increasing importance. This is, in light of the current pandemic, more evident than ever.

The MIRAI 2.0 Kick-off is cause for optimism and celebration. It marks a new stage in advancing the academic collaboration between our countries that will strengthen our ability to tackle common challenges together.

On behalf of the Ministry of Education and Research of Sweden I would like to congratulate all universities, research- and innovation agencies involved in the project to the official launch of MIRAI 2.0. We wish you great success in your important work!



H.E. Mr. Shigeyuki Hiroki Ambassador, The Embassy of Japan in Sweden





H.E. Mr. Pereric Högberg Ambassador, The Embassy of Sweden in Tokyo, Japan





Michael Jacob Science and Innovation Counsellor, The Embassy of Sweden in Tokyo, Japan

Congratulatory Messages from Funding Agencies



Susumu Satomi President, Japan Society for the Promotion of Science, JSPS

Congratulatory Message from JSPS

We at the Japan Society for the Promotion of Science offer our heartiest congratulations to all involved in this kickoff event for MIRAI 2.0.

Launched in 2017, the MIRAI Project has, we are pleased to say, achieved its objectives of initiating a variety of activities whose implementation has accrued to expanded scientific exchange between Sweden and Japan. These include joint research and programs to advance the development of and exchange between young researchers. Both JSPS and our Stockholm Office were privileged to participate in the planning and implementation of the 2018 and 2019 MIRAI Seminars. As they were coupled with the 150th anniversary of diplomatic relations between Sweden and Japan, they've left us with both a deep impression and warm recollection.

JSPS offers a range of programs that give Japanese researchers and their counterparts in other countries opportunities to build and expand networks. Among such countries, an exceptionally rich level of research collaboration exists between Sweden and Japan. At the same time, we are working to strengthen even further scientific exchange between the two countries through the activities of our Stockholm Office.

With the MIRAI Project continuing into its fourth year, we again congratulate all who have work hard to launch MIRAI 2.0 and look forward to it going even further in advancing scientific exchange and cooperation between Sweden and Japan. As MIRAI 2.0 brings more member universities into the MIRAI Project, we look forward to it taking yet another step in advancing exchange between our countries while being a platform for promoting vibrant international joint research and fostering excellent young researchers.

In concluding this congratulatory message, we look forward to the unfolding success of MIRAI 2.0 and wish all involved success in their important endeavours.



Hamaguchi Michinari President, Japan Science and Technology Agency, JST

Congratulations on upscaling the MIRAI project to MIRAI 2.0!

MIRAI is a unique and effective platform for the top research universities from Japan and Sweden to strengthen their collaborations.

Sweden is relatively small in terms of scale, but very special in its Science, Technology and Innovation capacity, and is always ranked highly according to most STI indicators.

Japan and Sweden have many common challenges to address together, such as sustainable growth and our rapidly aging societies. The Japan Science and Technology Agency (JST) has actively supported research collaboration and exchange between both countries in order to tackle these shared challenges. Our commitment to the MIRAI project reflects how much we value this collaboration.

I look forward to seeing how MIRAI 2.0 will pick up and expand upon the important work of MIRAI. The transition marks not only the next stage in Japan-Sweden research cooperation, but also a new era of joint STI progress.



Andreas Göthenberg Executive Director The Swedish Foundation for International Cooperation in Research and Higher Education, STINT





Joakim Appelquist Deputy Director General, Sweden's Innovation Agency, VINNOVA





Sven Stafström Director General, Swedish Research Council, VR

Congratulations on the new and upgraded MIRAI 2.0

The Swedish Research Council have followed the MIRAI-project with great interest over the years. It was therefore with great pleasure we received the news about the continuation of the initiative through the birth of MIRAI 2.0.

The Swedish Research Council (VR) is confident that there will be many interesting research and innovation collaborations between Japan and Sweden spurring from the MIRAI project in the coming years. Our two countries not only face similar societal challenges but also share a long tradition of strong investment in research and innovation and a belief that science and innovation can help humanity build a better future.

There are many interesting areas suitable for scientific collaborations between our countries and where there is a lot to be gained by expanding our knowledge together. Many areas successfully covered within the MIRAI collaboration; from facing the challenges of an aging society, to the development of research infrastructures like the European Spallation Source (ESS) and the Japan Proton Accelerator Research Complex (J-PARC).

Our two countries also share the belief that international collaboration is vital to achieve excellent and innovative research. It is often during networking, collaborating and sharing experience with each other that new and fruitful ideas are born. By acting as hub for researchers MIRAI have through the years effectively contributed to facilitating those exchanges of thoughts between our two countries.

Collaboration is also a way for us funders to strengthening our efforts of supporting excellent research. Which is why VR is a committed member of the Intsam Japan working group, a collaboration between Swedish funding agencies with the aim to strengthen international collaboration with Japan within research and innovation.

Through the Intsam collaboration, VR last year initiated the SAKURA mobility program together with ESS and J-PARC.

In addition to bilateral initiatives such as MIRAI, global collaborations are vital tools for addressing societal challenges. VR is the host of the European Joint Programming Initiative on antimicrobial resistance platform (JPIAMR), a platform to curb antibiotic resistance were Japan is a participating member. Also within the new EU Framework Programme Horizon Europe, that starts 2021, international participation will continue to be an important element. It is therefore with great anticipation we are looking forward to this new and even stronger MIRAI 2.0 and the continuation of your efforts. We will follow the development with great interest and look forward to seeing your joint research activities grow and flourish even further. We are convinced that you will continue on your set journey to bringing a brighter future for both our countries.

I wish you all a very successful and fruitful kick off.

Kind Regards,

Sven Stafström,Director General
Swedish Research Council

Keynote Lecture

Join us at the Live Q&A Corner! 2020.10.7 10:40 - 11:10 (SE time) 17:40 - 18:10 (JP time)

Register for the live event



From Basic Science to Innovation - From genetic code reprogramming to peptide therapeutics

Hiroaki Suga

Professor, The University of Tokyo

Biography:

Hiroaki Suga is a Professor of the Department of Chemistry, Graduate School of Science in the University of Tokyo. He received Ph.D. at MIT (1994) followed by post-doctoral fellow in MGH (1997). He was Assistant and tenured Associate Professor in the State University of New York at Buffalo (1997-2003) and Professor in the Research Center for Advanced Science and Technology in the University of Tokyo (2003-2010). Since 2010, he has the present position. He is the recipient of Akabori Memorial Award 2014, Max-Bergmann Medal 2016, Nagoya Medal Silver 2017, Vincent du Vigneaud Award 2019, Bohlmann Lecture 2019, MIT T.Y. Shen Lecture 2020, ETHZ Prelog Lecture 2020, and The Research Award of the Alexander von Humboldt Foundation 2020. He is also a founder of PeptiDream and MiraBiologics in Japan.



Submit a question for live Q&A corner

Abstract:

A recent invention of the genetic code reprogramming integrated with an in vitro display format, referred to as RaPID (Random non-standard Peptides Integrated Discovery) system, have enabled us to screen mass libraries (>1 trillion members) of non-standard peptides containing multiple non-proteinogenic amino acids, giving unique properties of peptides distinct from conventional peptides, e.g. greater proteolytic stability, higher affinity, and superior pharmacokinetics. This class of drug molecules has been rapidly growing evidenced by increasing interests from industrial sectors. This lecture discusses how the academic inventions have evolved to innovation accelerated by PeptiDream.

MIRAI Project (1.0) Success Stories

Join us at the Live Q&A Corner! 2020.10.7 11:15 - 11:55 (SE time) 18:15 - 18:55 (JP time)

Register for the live event

(Innovation - Enterpreneurship)

Innovation and Entrepreneurship: Success Story in Mirai 1.0



Mikiko Shimaoka Professor, Waseda University



Naoto Kobayashi Professor Emeritus, Waseda University



Malin Graffner Nordberg Marie Löwegren Doctor, Uppsala University



Doctor, Lund University



abstract:

Innovation and Entrepreneurship Taskforce was initiated in October, 2017 when the 1st MIRAI Seminar was held in Lund University.

Since then, three innovation and entrepreneurship workshops were held in October 2018 in Tokyo, June 2019 in Tokyo, and in November 2019 in Stockholm.

Through these activities, especially through mutual discussion and understanding, we have acquired various lessons, such as "share and learn from culture" where use of cultural aspects as an opportunity to understand and to develop each others systems, skills and processes has been recognized to be important, "Innovation Eco-system and Academia and Industry Collaboration" where different aspects on venture creation and technology transfer and their impact in Sweden and Japan were clearly found out, "Entrepreneurship Education" where knowledge and methodology for effective entrepreneurship education have been shared and discussed for the future collaboration and "Impact to SDGs" where value creation as part of research processes and formulation of how to contribute to impact have been thought to be

Joint workshops including NABC workshop together with other 3 working groups have been extremely important for integration of innovation and entrepreneurship in MIRAI 1.0.

Based on these lessons and additional academic research, we hope to extend fruitful activities in MIRAI 2.0.

(Materials Science)

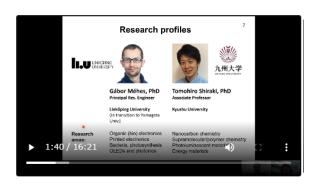
Our achievements on scientific collaboration & human networking



Gábor Méhes Doctor, Linköping University



Tomohiro Shiraki Associate Professor, Kyushu University



Submit a question for live Q&A corner

abstract:

We, Gábor Méhes (Linköping Univ.) and Tomohiro Shiraki (Kyushu Univ.), have started our collaboration thanks to the MIRAI Project (1.0). Our research target has been to develop smart bacterial-nanoparticle interfaces through chemical engineering to afford improved energy harvesting and creation of new interfaces for bioelectronic systems and devices. This collaboration has been realized by combination of bacterial electronics techniques of Linköping Univ. and nanotechnologies of Kyushu Univ. Our materials combined with microbial electrochemical systems (MESs) showed enhancement of electronic current generation in the metabolic process, which is promising for our goal relating also to UN Goal 7: "Ensure access to affordable, reliable, sustainable and modern energy for all". Not only limited to the scientific achievements, human networking is also strongly established by the supports of the MIRAI project and the Sweden - Japan 150 Anniversary Grants from the Swedish Foundation for International Cooperation in Research and Higher Education (STINT). Several research visits to each country provided opportunities to learn valuable experimental skills and cultures. In this talk we would like to exemplify how a new and rewarding collaboration can be successfully made between Japan and Sweden in the field of materials science, and hopefully motivate the birth of more such joint activities.

(Sustainability)

Pathways to Sustainability from Water Perspective -A Particular Focus on Wetlands-





Huang Guangwei Professor, Sophia University

Björn-Ola Linnér Professor, Linköping University



Submit a question for live Q&A corner

abstract:

Explain a joint study plan to explore pathways towards sustainability from water perspective with a particular focus on wetland conservation, restoration and wise use in Japan and Sweden.

Related information

 $\underline{\text{https://dept.sophia.ac.jp/is/risgenv/branding/en/index.html}}$

(Ageing)

The consequences of changing family behavior for the elderly: comparing Sweden and Japan



Rong Fu Assistant Professor, Waseda University



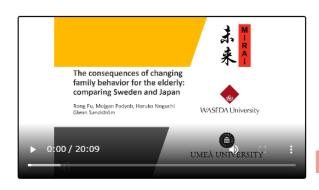
Mojgan Padyab Associate Professor, Umeå University



Haruko Noguchi Professor, Waseda University



Glenn Sandström Associate Professor, Umeå University



Submit a question for live Q&A corner

abstract:

The main goal of this study is to evaluate the demographic and socioeconomic characteristics of one-person households (OPHs) in Sweden and Japan over the last four decades. Over the time, there have been significant differences in living alone in both countries, with nearly two times higher proportion of individuals living alone in Sweden than in Japan. The largest differences in levels of OPHs between the countries are found in the retirement age span, where levels in Sweden are much higher than in Japan. Sweden being a forerunner in the growth of OPHs is regarded as a staunchly individualistic society with a weak family system and a high degree of gender role symmetry. Japan is, in many ways, a polar opposite being a strong family society where familial ties still play a much greater role in the economic and social security of the individual. The much lower growth in OPHs with increasing age in Japan is what we expect given the much higher share of elderly living with adult children at advanced ages in more feministic countries such as Japan compared to Sweden. Also, living alone in Japan seems to more strongly associate with living in an urban context than in Sweden.

COVID-19 Webinar

Register for the live event

2020.10.8 9:00 - 12:00 (SE time) 16:00 - 19:00 (JP time)

> 9:00 - 10:30 (SE time) 16:00 - 17:30 (JP time)

1st half: Medical Perspectives From Sweden and Japan



COVID-19 research at Hiroshima University

Hidetoshi Tahara Professor, Hiroshima University

Abstract

I would like to introduce the coronavirus initiative at Hiroshima University. For example, development of an automated system for the preprocessing of coronavirus test, "3D printable ventilator model" that does not require electricity and can be created using only graphic data, and the development of vaccines. Hiroshima university develop "Cov-PEACE project 2020" to manage coronavirus test in Hiroshima. We would like to expand these projects with scientists from around the world.



Suddenly at risk – Older adults' experiences of everyday life during COVID-19

Sofi Fristedt Doctor, Jönköping University

Abstract:

In a heartbeat, the conditions for day-to-day life changed for 15% (approximately 1.5 million) of the Swedish population - as the Public Health Agency of Sweden, declared that adults 70 years and older were recommended to limit all social contacts with family and friends to an absolute minimum, stop travelling by public transport and avoid shops and other public spaces. Part of this presentation, findings from a qualitative interview study focusing on older adults' everyday life and experiences of health and wellbeing in the light COVID-19 and adaptions to 70+ recommendations will be discussed. How older adults attitudes to digital technology, acceptance and use of technology in everyday life are affected by COVID-19 based on a national survey including 70-79 year old men (n=500) and women (n=500) will also be discussed.



Overview of COVID-19 in Japan and Nagoya City - Contact tracing and cluster-control strategy for COVID-19

Tetsuya Yagi Professor, Nagoya University

Abstract:

As of Sept. 19th, in total 78,176 infected cases and 1,499 death caused by COVID-19 are reported in Japan. In addition to wearing a mask, hand hygiene and social distancing as public measures, early identification of the cases, contact tracing and a cluster-control strategy were conducted as one of the important public health measures. These strategies were also adopted in the prevention measures in Nagoya University Hospital. I will try to give an overview and show examples of these preventive strategies against COVID-19, which may, in part, attribute to the low number of infected and death cases in Japan.



A bioinspired exosome-like COVID-19 vaccine developed from engineered bacterial membranes

Jan Lötvall Professor, University of Gothenburg

Abstract:

We have created a SARS-CoV-2 vaccine by engineering in components of the virus spike protein (S1) into bacterial membranes, and create exosome-like artificial bacterial vesicles (aBV) from those membranes. Bacterial membranes carry multiple immunoregulatory and pro-inflammatory molecules that influence inflammatory cells in multiple ways, and are for the current project used to create a vaccine-adjuvant combination. The aBV-S1 are produced by isolating the bacterial outer membrane, carry significant quantities of the S1 protein (western blot), and when injected s.c. in mice they produce a dose-dependent antibody response against the S1 protein. Importantly, the process of making the aBV vaccine detoxifies the membrane, which otherwise can cause severe inflammation and flu-like symptoms at the time of immunization. In summary, the aBV-S1 is a safe, exosome-like vaccine candidate suitable to create immunity against COVID-19.

10:30 - 12:00 (SE time) 17:30 - 19:00 (JP time)

2nd half: Policy and Management Perspectives from Sweden and Japan



Covid19 and Sweden's exceptionalism - A spotlight on the cracks in the social fabric of the mature welfare state

Malin Rönnblom Professor, Karlstad University

Abstract

This presentation builds on a collaborative work between supervisors and PhD students in Political Science that took place during the spring, and where we used the Swedish strategy on COVID-19 as a crucial case when analyzing the long-term changes of the Swedish welfare state. We started off with the following question: Can the observable impact of COVID-19 in Sweden, especially among the elderly, be understood as the result of poor strategy, or is it better understood within the context of a prolonged reformation of the welfare state, guided by far-out neoliberalist principles rather than a classic welfare state ethos? The presentation will both address the potential answers of this questions, as well as the challenge of writing a paper together through meeting on Zoom.



COVID-19 from a Japanese policy and economic perspective

Shunsuke Managi Professor, Kyushu University

Abstract:

The rapid spread of COVID-19 motivated countries worldwide to mitigate mortality through many policy actions. We estimate the global mortality benefits of these actions. Implementing the actions would save more than 40 trillion USD globally. I discuss actions during COVID-19 have substantial impacts with Japan and Sweden comparison. Industry impact, air pollution and CO2 impacts are further analyzed and future directions are discussed.



Covid-19 and Academia - How the pandemic affected Swedish HEI

Hans Adolfsson Vice-Chancellor, Umeå University

Abstract:

The Covid-19 pandemic has hit the world with a strength that no one could foresee, and it has severely affected our society and our daily lives. In Sweden we saw a dramatic increase of infected citizens in the beginning of March, and actions to limit the spread of the virus were taken. On March 17, the Swedish government decided that high schools and universities should cancel their on-site educational activities from March 18 and move to e-learning for the rest of the semester. This presentation focus on the consequences of this decision and how the situation was handled by the Swedish HE sector when it comes to research and education.



Toward the Post-COVID-19 Society - A Challenge of Waseda University

Aiji Tanaka President, Waseda University

Abstract

Facing the COVID-19 pandemic, Waseda University established a guiding principle: "minimize maximum regret". We therefore kept all classes online during the spring semester. Based on this experience, we have a clearer vision for post-COVID education. We will offer various types of hybrid teaching, blending face-to-face with on-line learning. We will offer more learning commons where students can watch on-line classes or engage in discussions with fellow students. We will not need large class rooms with capacity of 300 to 600 students, as we will offer those lectures on-line. We will adapt campus architecture and planning accordingly.

Question Form

If you have any questions about the keynote lecture and each of MIRAI 1.0 Success Stories, please use the form below. On the day of the live event, the moderator may ask the performers questions based on these. Questions are handled anonymously.

The on-line event has ended

Register for the Live Event

Attention:

Separate registration is required for the live events on October 7th and October 8th.

Register Oct. 7

Register Oct. 8



MIRAI 2.0 Kick-off 2020

October 7, 2020 *ZOOM Virtual meeting* (as of October 5, 2020)

MIRAI2.0 General Assembly

Wednesday, Oct. 7 16:00-17:20 (JP) / 9:00-10:20 (SE)

Chair: Vice President Kazuhito Kawakita (Nagoya)

Shair. Vice i lesidell	t IXaZuiiitO	Kawakiia (Nagoya)	1
16:00- 09:00-	1	Welcome	Vice President Kazuhito Kawakita (Nagoya)
16:00-16:10 09:00-09:10	2	Introduction from all MIRAI2.0 representatives	MIRAI2.0 representatives
16:10-16:20 09:10-09:20	3	Secretariat Report	Nagoya
16:20-16:30 09:20-09:30	4	MIRAI Seminar 2019 Report Updates of MIRAI Research and Innovation Week 2021	Uppsala Gothenburg
16:30-16:35 09:30-09:35		Break	
16:35-17:15 09:35-10:15	5	Discussion • How can we implement Innovation & Entrepreneurship aspects into MIRAI2.0 activities? • New Academic topic (i.e. AI): Discussion and approval to bring into MIRAI2.0.	Co-chaired by Vice Chancellor Eva Wiberg (Gothenburg) and Vice Presidential Advisor Hideki Kasuya (Nagoya)
17:20 10:20	6	Closing	Vice Chancellor Eva Wiberg (Gothenburg)

Please note that the program is subject to change



MIRAI 2.0 General Assembly (GA) meeting, minutes October 7, 2020, ZOOM

Participants

See attached list of attendees.

Kazuhito Kawakita, Vice President, Nagoya University, welcomes the participants to the meeting. All MIRAI 2.0 General Assembly representatives present themselves.

Secretariat report

Dr. Branko Aleksic, MIRAI 2.0 Project Coordinator at Nagoya University, present updates on the MIRAI 2.0 project.

- New members have joined on both the Swedish and Japanese side, and the total number of participating universities has increased. Currently, eleven Swedish universities and eight Japanese universities are members of MIRAI 2.0
- Approved projects and joint publications within each subject, Ageing, Sustainability, and Material science resulting from collaborations within MIRAI (2017-2019) are presented.
- MIRAI 2.0 Organizational chart is presented. The General Assembly (GA) is the governing body within MIRAI 2.0, consisting of one representative per university and representatives from each Thematic Expert Groups (TEG) /Innovation and Entrepreneurship Advisory Group (IEAG). The GA is responsible for the general direction of the project and decision making of the partnership. The Responsible Committee (RC) is a working group appointed by the GA, consisting of three universities from each country and responsible for regular decision making. The organizational chart clarifies that the IEAG will be organized as an independent group closely linked to all the other TEGs.
- The activities and timeline for 2020-2021 are presented. Members of TEG/IEAG will be recruited in November-December 2020. A Research and Innovation week is planned for June 2021.

MIRAI Seminar 2019 Report

Miriam Tardell, MIRAI 2.0 Project Manager at Uppsala University, report on the third MIRAI seminar organized in Uppsala on November 11-14, 2019. The theme for the seminar was "Moving together towards a sustainable future".

- The event had more than 200 participants in Uppsala and Stockholm with high-level support from government representatives in Sweden and Japan.
- In addition to several interesting keynote lectures on sustainability, a discussion between young academics from Sweden and Japan was organized on the theme "young researchers as catalysts for innovation"
- The seminar resulted in new collaborations and several research proposals. One important outcome was the successful integration of Innovation and Entrepreneurship. The first time researchers from all subjects worked together in an NABC (need, approach, benefit, competition) workshop.



• The MIRAI 2.0 proposal was launched during the seminar in Uppsala.

Updates on MIRAI 2.0 Research and Innovation Week 2021

Eva Wiberg, Vice Chancellor, Gothenburg University, shares updates on MIRAI 2.0 Research and Innovation Week 2021. The University of Gothenburg will host it on June 7-11, 2021. Satellite events will be organized at other Swedish universities. Funding received from Vinnova will be used to organize a matchmaking event with industry and companies. Due to COVID-19, it is still not clear if a physical event will be possible. The Swedish MIRAI 2.0 member universities will meet in late October to discuss if Research and Innovation Week 2021 should be planned as a physical or virtual event.

Discussion

Co-chaired by Prof. Hideki Kasuya and Prof. Eva Wiberg.

How can we implement Innovation & Entrepreneurship aspects into MIRAI2.0 activities?

There has been a significant interest in Innovation and Entrepreneurship on the Swedish side. The benefits of organizing IEAG as an individual group are acknowledging, but the Swedish side also stresses the need to find good integration between IEAG and the TEGs.

Waseda University who were active within the Innovation task force in the previous MIRAI Project is suggesting three focus areas of IEAG in MIRAI 2.0 that could assist integration:

- Target group: Young researchers Fostering innovative/entrepreneurial mindset through organizing events such as NABC-workshop (in Uppsala 2019). In addition, perhaps bring in a "Sweden-Japan PhD student joint pitch" for new business or social innovation as an extension to the activities in MIRAI Project.
- 2) Target group: PI/Senior researchers Implementation of research to society: Trial for creating startups or social innovation by connecting promising ideas with university incubators or innovation offices.
- 3) Research on innovation ecosystem and knowledge sharing. Promoting research and joint publications on Sweden and Japan's innovation ecosystem and sharing the knowledge in both countries.

Most universities support the idea of organizing IEAG as an individual group that should be linked/integrated with the other thematic areas to a greater extent than previously. Several universities supported the ideas presented by Waseda University. In addition, the following suggestions were raised:

- The constitution of the group (IEAG) should be related to the other themes.
- Companies/external actors that have already shown interest in MIRAI can be advisors and provide input to IEAG.
- Giving IEAG the responsibility to make an activity plan that shows how the different themes (TEGs) will be activated, considering the different activities presented here, including young and senior researchers and cooperation with society.



New Academic topic (i.e., AI): Discussion and approval to bring into MIRAI2.0.

Since AI has been discussed in MIRAI for a long time, it is now raised as a discussion point in this GAmeeting to decide to bring in AI as a new subject into MIRAI 2.0. How should we narrow down AI, as it is a comprehensive academic topic? Similar to IEAG, AI is a topic that is closely related to the other themes, and suggestions were made to integrate them into the existing TEGs.

Discussion:

Most universities on both the Swedish and Japanese sides express their interest in including AI as a new topic within MIRAI 2.0. Several universities point out that AI should be organized as an individual group but that integration/close connection to other themes is also needed. There is a consensus that AI is a broad topic and that the full scope cannot be covered within MIRAI 2.0. Further discussion is required to define or narrow down the topic.

Several suggestions were raised:

- Broader perspective focusing on AI as a changer of society: "the digital transformation"
- Ethical legal and social aspects
- AI-related to existing topics within MIRAI 2.0: Ageing, Sustainability, and Materials Science
- Al from a social sciences/humanities perspective
- Automation and machine learning
- Robotics and applied AI
- Collaboration with industry/companies
- Universities are contributing to AI-based solutions
- Interdisciplinary approach

Decision: MIRAI 2.0 GA members decides that AI should be brought in as a new topic within MIRAI 2.0. It should be organized as an independent group, but it should also be included/closely connected to thematic groups. The GA decides that the RC members will further discuss/narrow down the topic and present a proposal on which aspects of AI should be addressed within MIRAI 2.0.

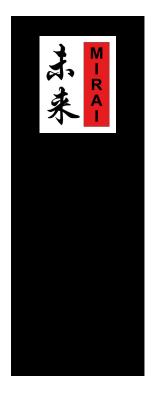
Closing

Prof. Eva Wiberg thanks everyone for attending and actively participating in the meeting.

MIRAI 2.0 GA attendees

7 October 2020

University	Name	7 October 2
	Shinji Kaneko	Vice President (Global Initiatives)
Hirochima University	Mitsuaki Yoshimori	Chief Manager, Global Strategy Group
Hiroshima University	Hiroaki Korekuni	Chief, Global Strategy Group
		· · · · · · · · · · · · · · · · · · ·
	Atsushi Yokota	Exectuive and Vice President
	Kazuki Sada	Professor, Faculty of Science
Hokkaido University	Fumiyo Kaneko	Director, Division of International Relations
,	Hitomi Sato	Deputy Director, Division of International Relations
	Akira Watanabe	Chief Administrative Officer, Division of International Relations
	Fumie Yamashita	Administrative Staff, Division of International Relations
	Toshiyuki Kono	Executive Vice President
Kyuchu University	Jun Matsuo	Director, International Strategy Division
Kyushu University	Saori Suenaga	Liaison Officer, International Strategy Division
	Yuta Matsuo	Senior Administrator, International Strategy Division
	Kazuhito Kawakita	Vice President (International Affairs, Planning,
		Evaluation, and Institutional Research)
	Hideki Kasuya	Vice Presidential Advisor (International) /Professor, Graduate School of Medicine
	Kazusa Shinohara	Director, Education and International Affairs Department
Nagoya University	Branko Aleksic	Associate Professor, Graduate School of Medicine
	Tetusya Nishio	Manager, International Affairs
	June Iwatsuki	Project Coordinator, Institute of International Education & Exchang
	Tetsuya Yamamoto	Assistant Project Coordinator, International Affairs
	Kazuhiro Ema	Vice President for Academic Research Affairs
	Chikara Mannen	Deputy Director, Center for Research Promotion and Support
Sophia University	Shunichi Horiuchi	MIRAI Project Manager
	Fumika Baba	MIRAI Project Manager
	Takehito Kamata	Project Postdoctoral Fellow Center for Global Education and Disco
	Toshiya Ueki	Executive Vice President
	Taeko Misumi	
		Specially Appointed Associate Professor/Coordinator
Tohoku University	Aya Saito	Director, International Strategy Division
	Satoru Senarita	Chief, Global Engagement Division
	Kaori Fukui	International Program Coordinator, Global Engagement Division
	Kohei Miyazono	Executive Vice President
The University of Tokyo	Shu Takagi	Professor
The charactery of ronge	Takehiko Kitamori	Project Professor
	Makiko Toyoki	Senior Staff
	Masahiko Gemma Naoto Kobayashi	Vice President Professor Emeritus
	Toru Asahi	Professor
	Takayuki Akimoto	Professor
Waseda University	Haruko Noguchi	Professor
•	Mikiko Shimaoka	Professor
	Yuzo Usami	Administrative Director
	Dai Suematsu	Project Manger
	Miki Yamaguchi	Project Manger
18 -1 8 -2 11 -22	Agneta Marell	President Chief Administrative Officer
Jönköping University	Jenny Dahlkild Marco Stevenazzi	Project Manager, International Office
	Thomas Blom	Pro-Vice-Chancellor
Karlstad University	Carina Eriksson	Advisor International Strategies
	Jorge Solis	Project Manager
Linköning University	Peter Värbrand	Professor, Vice President (Collaboration)
Linköping University	Helena Balogh	Project manager, Strategic Collaboration unit
Linnaeus University	Ann-Charlotte Larsson	Professor, Deputy Vice-chancellor responsible for the fields of Internationalisation and Innovation
	Charlotte Skoglund	Senior internationalisation officer, Regional Manager for Asia and South America
ıleå University of Technology	Birgitta Bergvall Kåreborn Petra Rantatalo	Vice-Chancellor Senior staff, International Affairs
	Viktor Öwall	Professor, Dean, Faculty of Engineering, LTH
Lund University	Henrik Hofvendahl	Project Coordinator, International Office
Özeleriti	Åke Strid	Pro Vice-Chancellor
Orebro University	Ida Andersson-Norrie	International Strategy Officer, Executive Office
	Eva Wiberg	Vice-Chancellor
ne University of Gothenburg	Linn Gabrielsson	Project Coordinator, International Centre
	Karin Wallin	Project Coordinator, International Centre
	I Croa Mook	Professor, Pro Dean Faculty of Social Sciences
	Greg Neely	D. Mr. Olassalla
Umeå University	Katrine Riklund	Pro-Vice Chancellor
Umeå University	Katrine Riklund Ingrid Svensson	Director, International Office
Umeå University	Katrine Riklund Ingrid Svensson Jenny Ahlinder Hagberg	Director, International Office Project Manager
Umeå University Uppsala University	Katrine Riklund Ingrid Svensson	Director, International Office



MIRAI Secretariat Report 2020



MIRAI2.0 Members

<u>Japan</u>

Hiroshima University
Hokkaido University
Kyushu University
Sophia University
The University of Tokyo*
Tohoku University
Waseda University*

Nagoya University**

* Responsible Committee **Coordinating Universities

<u>Sweden</u>

Jönköping University*
Karlstad University
Linköping University
Linnaeus University
Luleå University of Technology
Lund University
Örebro University
Stockholm School of Economics
Umeå University*
Uppsala University
University of Gothenburg**



Approved Projects/Publications <Ageing>

Type of result	Title of project	Project leader's university	Remarks
Project proposal	Ageism in health care systems: a cross- cultural comparison of perception between Sweden and Japan	Nagoya University Chalmers University of Technology	Scandinavia- Japan Sasakawa Foundation
Project proposal	Enhancing Immersion and Saving Physical Movement Space in VR using Encountered- type Haptic Feedback	Tohoku University Chalmers University of Technology	JSPS KAKENHI (Grants-in-Aid for Scientific Research) Fund for the Promotion of Joint International Research
Project proposals (2019-2021)	Building egressibility in an ageing society	Lund University Waseda University	Formas Funded project in Sweden
Joint publication	Demographic and socioeconomic determinants of living alone in Sweden and Japan	Waseda University Umeå University	

Approved Projects/Publications < Materials Science>

*Mobility Grants for Internationalization

		www.	Grants for internationalization
Type of project	Title of project	Project leader's university	Remarks
Project proposal	150th Anniversary Grant	Linköping University Kyushu University	STINT
Project proposal	150th Anniversary Grant	Umeå University Sophia University	STINT
Project proposal (2021)	Development of lithium ion conducting materials based on aliphatic polyketones	Hokkaido University Sophia University Uppsala University	JSPS
Project proposal (2020-2022)	Winter+SPE – Weakly interacting host materials for cation-conducting solid polymer electrolytes	Uppsala University Sophia University Hokkaido University	STINT*
Project proposal (2018-2019)	Uncovering Novel Optical Function of Organic- Inorganic Hybrid Materials using Time-Resolved Spectroscopies	Sophia University Umeå University	JSPS
Joint publication (2020)	Polyketones as Host Materials for Solid Polymer Electrolytes	Hokkaido University Uppsala University Sophia University	Journal of Electrochemical Society

Approved Projects/Publications <Sustainability>

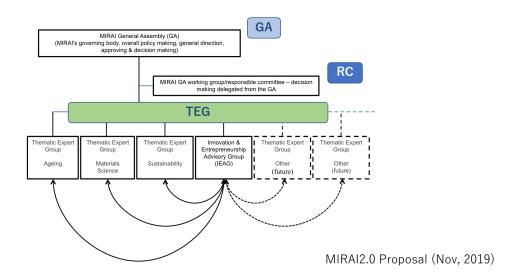
**Initiation Grants for Internationalization & Mobility Grants for Internationalization

Type of project	Title of project	Project leader's university	Remarks
Project proposal (STINT: 2019-2020, 2020-2022) (HAJF:2019-2020)	Mariculture Technical Innovations in Sweden (MARTINIS)	University of Gothenburg Lund University Hiroshima University	**STINT Helge Axelsson Johnson's Foundation
Project proposal (visiting researcher)	Exchange researchers between Hiroshima University and Lund University	Hiroshima University Lund University	JSPS
Project proposal (2020-2021)	Cross continental studies on effects of anthrophogenic disturbances on biodiversity, ecosystem functions and resilience capacity from land to sea	University of Gothenburg Umeå University Sophia University Hokkaido University	STINT
Project proposal (2019-2020)	Role of filamentous cyanobacteria in productivity and food web efficiency of marine ecosystem"(AQUACOSM – Project CYANOWEB)	Umeå University Tokyo Institute of Technology	AQUACOSM EU funded project

University-wide agreements

2017	Memorandum of Understanding and student exchange agreement	Waseda University and Umeå University
2017	Memorandum of Understanding on academic and educational cooperation	Hiroshima University and Lund University
2019	Memorandum of Understanding of academic and educational exchange	Hiroshima University and Uppsala University
2019	Memorandum of Understanding and student exchange agreement	Sophia University and University of Gothenburg
2019	Memorandum of Understanding and student exchange agreement	Sophia University and Umeå University

MIRAI2.0 Organizational Chart



MIRAI2.0 Organizational Titles

```
SC (Scientific Committee)
```

→ GA (General Assembly)

STC (Steering Committee)

→ RC (Responsible committee within GA)

SSC (Subject Scientific Committee)/ Innovation Task Force

→ TEG */ IEAG **

* Thematic Expert Group ** Innovation & Entrepreneurship Advisory Group

General Assembly (GA)

- The GA is responsible for the general direction as well as the decision making of the partnership
- The GA consists of **one representative per university**, the Vice-chancellor or the person the Vice-chancellor appoints to be their representative
- The GA also include representatives from each Thematic Expert Group (TEG) and the Innovation & Entrepreneurship Advisory Group (IEAG)

MIRAI2.0 Proposal (Nov. 2019)

Responsible Committee (RC)

The GA will appoint a working group with the responsibility of regularly decision making.

MIRAI2.0 Proposal (Nov, 2019)

MIRAI2.0 RC member universities

<JP side>

- 1. Nagoya University*
- 2. The University of Tokyo,
- 3. Waseda University

<SE side>

- 1. University of Gothenburg*
- 2. Umeå University
- 3. Jönköping University

*Coordinating universities

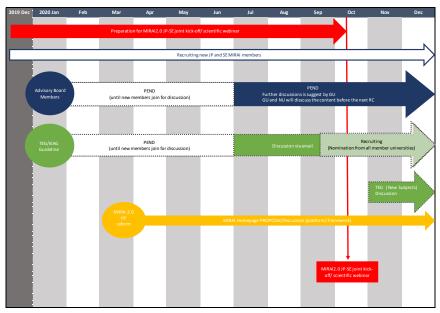
Activity Schedule

from MIRAI2.0 Proposal (Nov. 2019)

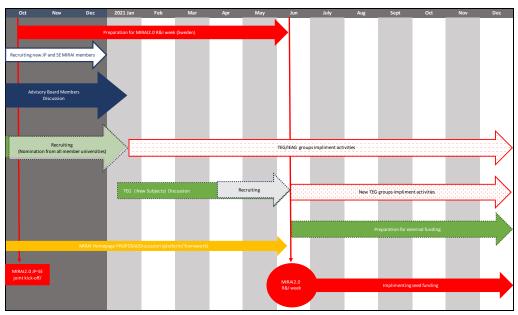
Activity Schedule

rictivity serieu		_																							_											
Activities	2020				2021							2022																								
Activities	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Kick-off meeting										J	JP																									
Research & Innovation week																		SE												JP						
Seed Funding for																																				
Collaboration in Research																																				
Short courses for PhD																																				
in Sweden and Japan																																				
Staff mobility Student Exchange							Erasmus+ICM																													

2020 Timeline



2021 Timeline

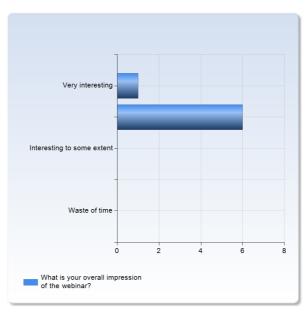


Survey MIRAI 2.0 COVID-19 webinar

Answer Count: 7

What is your overall impression of the webinar?

What is your overall impression of the webinar?	Number of Responses	Cumulated Responses
Waste of time	0 (0.0%)	0 (0.0%)
	0 (0.0%)	0 (0.0%)
Interesting to some extent	0 (0.0%)	0 (0.0%)
	6 (85.7%)	6 (85.7%)
Very interesting	1 (14.3%)	7 (100.0%)
Total	7 (100.0%)	7 (100.0%)



Mean Standard Deviation Coefficient of Variation Min Lower Quartile Median Upper Quartile Max

What is your overall impression of the webinar?	4.1	0.4	9.1 %	4.0	4.0	4.0	4.0	5.0

Comment

Very interesting to listen to researchers and their research about Covid-19. Especially since it was presented from different perspectives and countries.

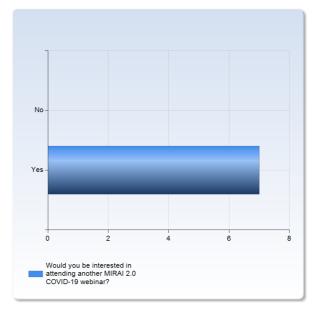
The webinar is very convenient in general, and especially in case of international communication.

Many thanks for your efforts!

very high quality which not nearly as many viewers got to make use of as we could have had

Would you be interested in attending another MIRAI 2.0 COVID-19 webinar?

Would you be interested in attending another MIRAI 2.0 COVID-19 webinar?	Number of Responses	Cumulated Responses
Yes	7 (100.0%)	7 (100.0%)
No	0 (0.0%)	7 (100.0%)
Total	7 (100.0%)	7 (100.0%)



	Mean	Standard Deviation	Coefficient of Variation	Min	Lower Quartile	Median	Upper Quartile	Max
Would you be interested in attending another MIRAI 2.0 COVID-19 webinar?	1.0	0.0	0.0 %	1.0	1.0	1.0	1.0	1.0

Do you have any suggestions how we could improve future digital scientific events in MIRAI 2.0?

Do you have any suggestions how we could improve future digital scientific events in MIRAI 2.0?

Not so much to watch in advance. You tend to forget about that...

Maybe 1 more stretch break. Some of the breaks were instead used to answer questions from the audience, which made it difficult to take a break since I wanted to hear the answers to those questions.

Not at the moment, since I thought it was performed very professionally.

Please continue these events. The points to be improved would become clear before long.

Essential: Plan programme and lock in speakers and WS-themes in the subject areas so that a complete programme can be sent to reseachers 3 months before the event. Most scientific conferences do this. It is a waste of hard work when the programme is complete so late that there is minimal time to notify and generate interest amongst those who would be the participants. In my opinion, we are already short of time to plan the RIW for June 2021 regardless of it being physical or digital.