Kick-off event of the capacity development of commercialization of research

9th June 2021
Today’s topic

1. Insights of commercialization of research through university start-ups

2. About this initiative

3. About us

4. How to apply for this initiative
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The roles of University researches

What is the roles of university research?

- Providing higher education and human resource supply
- Contribution to solve issues in society through research activities
- Contribution to solve issues in society through business (university start-up)
How do universities do it?

**Education & human resource supply**

**Contribution to solve issues in society through research activities**

**Research activities**
- Writing a paper
- Acquiring a patent

**Non-business activity**
- Publishing a paper, academic conference etc.

**Contribution to solve issues in society through businesses**

**Proof of Concept**

**Business (University start-ups)**
What this initiative will provide

Education & human resource supply

Contribution to solve issues in society through research activities

Research activities

Non-business activity

Support to promote this flow

Proof of Concept

Business (University start-ups)
How start-ups create their business?

Business model and technology used for a business are needed to be determined based on a specific issues in the society.

Steps to build a business model

Steps to start a business

Research activities

Proof of Concept

Business (University start-ups)

You have to start the step for commercialization after determination of the above.
How start-ups create their business?

Practically, we determine businesses in consideration of both issues and technology.

You have to start the step for commercialization after determination of the above.

Research activities

Proof of Concept

Business (University start-ups)
Reference: Spiber

Spiber Ltd.

A Japanese university born start-up

Producing chemical fiber alternative materials through bio-process of microorganism

Launched a mass production factory in Thailand in 2021
Reference: Spiber

Fermentation process

Establish bio-process

Chemical fiber alternative product

Free from fossil fuel dependent society

Research activities

Proof of Concept

Business (University start-up)

Research in Keio University

Built prototype facility through grant from a national institute

Built production facility through fundraise from a private enterprise

Details to be given in the lecture series in our initiative
Investment to Africa

You need to be ready to follow this trend.
Our support through this initiative

Assisting based on our business and technology developing experiences.
Our support through this initiative

Assisting based on our experiences as a bio-tech start-up.

Research activities

Proof of Concept

Creation of a pitch deck to raise fund

Business (University start-up)

Details to be given in the lecture series in our initiative
What is a pitch deck?

A brief presentation

Present your business plan, products, services and growth traction etc.

Whenever you source financing, you use it.

You may use this not only for sourcing finance, but also for recruitment and building networks etc.

Target could be client, investor and judge of a contest.
Example: Airbnb

**Welcome**

**AirBed&B Breakfast**
Book rooms with locals, rather than hotels.

**Problem**

*Price* is an important concern for customers booking travel online.

*Hotels* leave you disconnected from the city and its culture.

*No easy way exists* to book a room with a local or become a host.

**Solution**

A web platform where users can rent out their space to host travelers to:

- **SAVE MONEY**
- **MAKE MONEY**
- **SHARE CULTURE**

**Market Validation**

630,000
on temporary housing site
2ouchnaffing.com

17,000
temporary housing listings on SFG & N.Y. Craigslist from 07/09 – 07/16

**Market Size**

1.9 Billion+
Total Available Market

532M
Budget & Online Trips

10.6M
Trips W/A&B&B

**Product**

SEARCH BY City

REVIEW LISTINGS

BOOK IT!
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1. Lecture series and workshop  
Anyone who is interested

Lecture 1: Case studies

Lecture 2: Innovation eco-system

Lecture 3 and workshop: Pitch deck

Submission of components of a pitch deck*

One-on-one feedback

2. Hands-on Assistance  
Selected teams

Development of and brushing up a pitch deck

Conducting market research

Conducting meeting with potential clients

Assistance on the above activities

Advise on technology development

*1 submission from 1 ACE/RSIF

Support described here may be changed depends on number of participants, progress and etc.
What will be presented in lecture series?

Case studies

Learn from local start-ups

Research activities  Proof of Concept  Business (University start-up)

Pathways for commercialization

Innovation eco-system

Learn from famous start-ups

Issues in Society  Values  Products, services  Markets

Key elements of pitch deck

https://www.oi.kyoto-u.ac.jp/about/model/

Cases of universities in USA and Japan and Africa
Support B: Incubation centers

Support on incubation centers

Outreach incubation centers through ACE/RSIF which need further assistance

Survey to identify necessary assistance

Deciding detailed assistance

Technical assistance to incubation centers

Need help from ACE/RSIF

Communicate with incubation centers directly

Please provide us with contacts of the incubation center in your university/institute.
## Event summary*

<table>
<thead>
<tr>
<th>Theme &amp; Schedule</th>
<th>Party associates</th>
<th>Participating party</th>
<th>Responsibility of participating party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kick-off event (9\textsuperscript{th} and 16\textsuperscript{th} Jun 2021)</td>
<td>ACE/RSIF</td>
<td>Anyone interested (All at once)</td>
<td>-</td>
</tr>
<tr>
<td>Support A-1 Series of lecture and workshop (Jul-Aug 2021)</td>
<td>ACE/RSIF</td>
<td>Anyone interested (All at once)</td>
<td>● Participate in all lectures, workshops and feedback ● Develop components for a pitch deck ● Participate in the post-lecture and workshop survey</td>
</tr>
<tr>
<td>Support A-2 Hands-on assistance for commercialization (Sep 2021 – Mar 2022)</td>
<td>ACE/RSIF</td>
<td>2 selected teams (Individual)</td>
<td>● Improve a pitch deck ● Conduct market research ● Conduct meetings with potential clients</td>
</tr>
<tr>
<td>Support B Consultation for incubation centers (Sep 2021 – Apr 2022)</td>
<td>Incubation centers</td>
<td>Incubation centers (Individual)</td>
<td>● Incubation centers respond to survey ● Participate in technical assistance sessions.</td>
</tr>
<tr>
<td>Knowledge sharing session (May 2022)</td>
<td>ACE/RSIF Incubation centers</td>
<td>Anyone interested (All at once)</td>
<td>● Present the results (selected teams/centers)</td>
</tr>
</tbody>
</table>

*Could be changed depending on situation*
## Estimated Timeline

*Estimated timeline could be changed depending on the situation.*

<table>
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<th>2021</th>
<th>2022</th>
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<tr>
<td>Jun</td>
<td>July</td>
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<tr>
<td>Kick-off</td>
<td></td>
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<tr>
<td>Support A</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>a. Lecture series and workshop</td>
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<tr>
<td>2</td>
<td>b. Feedback session</td>
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<tr>
<td>2</td>
<td>Hands-on assistance (2 research teams)</td>
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<tr>
<td>Support B</td>
<td></td>
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<tr>
<td>Support on incubation centers</td>
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<tr>
<td>Knowledge sharing</td>
<td></td>
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</table>

* Please note: The timeline is estimated and may change depending on the situation.
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We are bio-technology oriented company who has strength in cultivation of organisms.
USD 110million have been applied to develop technology. Mainly through joint research with private enterprises.

Developing business with over 160 members
40 PhD. holders

10 business entities in 4 countries
Japan, Malaysia, Singapore, Brunei
Our businesses aiming at solving issues in society

**Bio-production management system**
- Solution for fossil fuel dependent society

**Microalgae food production**
- Solution for protein crisis

**Sustainable Agriculture with high value-added products**
- Development and promotion of sustainable agriculture

**Sustainable plantation with water treatment system**
- Development and promotion of sustainable agriculture
Project team

Tomohiro Fujita Ph.D. (Bioscience)
Supervisor
Founder/ CEO of Chitose Laboratory Corporation
Member of Bioeconomy Strategy Council CABINET, SECRETARIAT
Member of Japan Association of Bioindustries Executives
Professor, Kyoto University
Global Future Council on Japan.
Expertise: Biology, Bioeconomy, Lifescience, Biotech industry, bio-related business development

Kengo Fukui
Project Manager
Expertise: Bio-related business development, Biotechnology, Food tech industry, Finance

Ryo Iko
Deputy Project Manager
Expertise: bio-related Business development, project management

Nurezan Mohamed Ph.D. (Neuroscience)
Associate
Expertise: Neuroscience, Molecular Science

Aiko Hayashi
Ph.D. (Biological Science)
Associate
Expertise: Toxicology, Microbiology

Zhaleh K. Nezhad
Ph.D. (Medical Sciences-Clinical Cell Therapy)
French Language Facilitator
Expertise: Medical Science, Pharmaceutical, Microbiology
Team members (2)

Expert team

Ken Kasahara
Ph.D. (Pharmacy)
Expert in Agriculture, Environmental Science, Microbiology

Takanori Hoshino
Ph.D. (Agricultural & Biosystems Engineering)
Expert in Environmental engineering, Mass cultivation of microalgae

Hirotaka Chida
Ph.D. (Bioresource Sciences)
Expert in Bioenergy, Mass cultivation of microalgae

Hideki Tohda
Ph.D. (Biotechnology & Life Sciences)
Expert in Microbiology, Bioengineering, Biotechnology

Yugo Hirai
Ph.D. (Life Science)
Expert in Life Science, Pharmaceutical
AAIC group
Asia and Africa Investment and Consulting

Support for business growth through investment
- Investment advisory
- Fund establishment tailored to objective
- Fund management
  - Africa Healthcare Master Fund
- Acceleration and incubation for startup ecosystem
  - JICA Uganda project
  - Rakuten Innovation Project

Support for business growth by consulting
- Feasibility studies
- Strategic alignment support
- Business alliance/M&A advisory
- Strategic implementation support
- Business matching support
- Support for entering the Japanese market

Support for business growth by Human Resources
- Hands-on support for management
- Management outsourcing and dispatch
- Recruiting support in Asian region
- HRM support

“Full-range support in emerging/new markets”
Africa Healthcare Master Fund invests 25 operating companies in Africa in healthcare industry

### Advanced Medical care
- Jumuia Hospitals
- Dialysis Center
- Jacaranda Health
- Maternity Hospital
- iSikCure
- Quick checkup

### Healthcare Technologies
- **Customer Engagement**
  - access-mobile
  - ROLOGY
  - Shezlong
- **Online appointment**
  - RecoMed
  - helium health
  - RelianceHMO
- **Online dental platform**
  - DentaCarts.com
- **Online pharmacy**
  - MyDAWA
  - IFA
- **Logistics platform**
  - Kobo
  - Sendy
  - GOZEM
- **Cross border mobile money**
  - CHIPPER
- **Pain Management Digital Device (DTx)**
  - SANA
- **Healthcare related software developer**
  - Allm

### Medical Services
- **Emergency Services**
  - flare
  - OBGYN, AI Enabler
- **Blood delivery**
  - LifeBank
  - VitalRay
- **Imaging diagnosis center**
  - Teleradiology platform
- **Super App**
  - OBGYN, AI Enabler
- **Community Water**
  - Jibu
- **FMCG**
  - Tena

### Health preservation & Public health/hygiene
- **Health Insurance Platform**
  - EMR provider
  - Microinsurance

Operating Countries of Portfolio Companies

Total Investments by Category: 25
- Clinical / Advanced Medical Care: 4
- Healthcare Technologies: 15
- Medical Services: 4
- Public Health/FMCG: 2

Source: AAIC

- USA (2) (Planned entry to Africa)
- Japan (1) (Planned entry to Africa)
- Egypt (3)
- Nigeria (6)
- Ghana (2)
- Togo (2)
- DR Congo (1)
- Benin (1)
- South Sudan (1)
- Tanzania (2)
- Rwanda (3)
- Uganda (4)
- Kenya (11)
- Zambia (1)
- South Africa (2)
- Burundi (1)

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Our team

Japan/Singapore

Shigeru Handa – Asia Africa Investment & Consulting Director/ Partner
Handa worked in Japan Bank for International Cooperation (now JICA) and managed development projects through concessional loans and social fund. At BCG, he provided strategic management advice to trading company, pharmaceutical company etc. He was a Director of HR and Marketing in launching a new convenience store format (Natural Lawson), targeting health conscious customers. At UNDP, he led the private sector development portfolio to support the government of Iraq to foster economic growth and diversification as well as stimulate job creation. He holds Master Degrees in Public Administration and Accounting from University of Southern California and Bachelor of Law from Kyoto University.

Nairobi, Kenya

Hiroki Ishida – AAIC Partners Africa, Director
Hiroki has professional experience of both corporate banking and management consulting. Prior to AAIC, he worked for Mitsubishi UFJ Trust and Banking Corporation and Accenture Japan Ltd. Currently, he is in charge of sourcing, due diligence and monitoring process for the Africa Healthcare Fund.
He also supports Japanese companies to start up their business in Africa and is based in Nairobi since 2015. He holds a Bachelor Degree in Managerial Accounting from Kobe University (2003), and an M.B.A from The Chinese University of Hong Kong (2012). He was part of Africa Business Idea Cup Judge (2016)

Lagos, Nigeria

Nobuhiko Ichimiya – AAIC Partners Nigeria Director
Nobuhiko was CFO of an E-commerce start-up company in Rwanda invested by Japanese IT company prior to joining AAIC. He was engaged in power infrastructure industry especially about IPP/IWPP for 7years as a Senior Manager- Commercial and Finance in Marubeni Power Asset Management in Abu Dhabi, UAE. He worked on the accounting, tax, commercial challenges of 10 projects in Middle East (UAE, Qatar, Turkey, Oman, Saudi Arabia and Tunisia). He took the board sheet of 5 companies. He worked as Financial and accounting coordinator in the Power and Infrastructure division in Taiwan, UAE, India, South East Asia.
He holds a Bachelor of Arts in Commerce from Waseda University.
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## How to apply for this initiative

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<tr>
<th>Responsible applicant</th>
<th>Support A : Lecture series and hands-on assistance</th>
<th>Support B : Consultation to incubation centers</th>
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</thead>
<tbody>
<tr>
<td>ACE/RSIF Center Leader</td>
<td>Person in charge of research commercialization (Engaging the same person throughout of the initiative is preferable)</td>
<td>Incubation center</td>
</tr>
<tr>
<td>Person in charge of research commercialization (Engaging the same person throughout the initiative is preferable)</td>
<td>Responsible person of the incubation center (Engaging the same person throughout the initiative is preferable)</td>
<td></td>
</tr>
<tr>
<td>Other conditions</td>
<td>The research shall be aiming at: • Commercialization • Solving issues in society</td>
<td>The incubation centers which need further assistance.</td>
</tr>
<tr>
<td>Required action</td>
<td>• Respond to survey</td>
<td>• Provide contacts of incubation centers</td>
</tr>
</tbody>
</table>
Any questions?

Please send via chat box below!

Contact:
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zhaleh.nezhad@chitose-bio.com