# UTEC

**Co-Founders for Innovation**


2018.11.29 ver

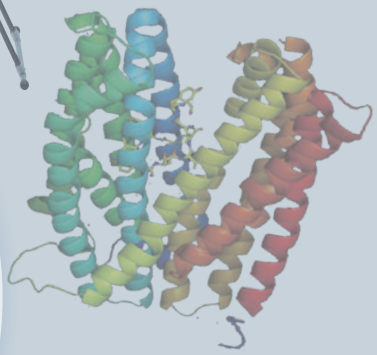

Science/Technologyを軸に、資本・人材・英知を還流させ、
世界・人類の課題を解決するためのフロンティアを開拓する

*We pioneer frontiers to solve global issues of humankind, by bringing capital, talent and knowledge, around science and technology*

郷治 友孝

Tomotaka Gōji

# Investment Strategy



## Cutting-edge Science & Technology

- Identifying science and technology with real-world impact, originating from universities, research institutes, corporations, and governments.
- Rolling up technologies across organizations.

## Strong Team

- Focus on building strong management capabilities that propel businesses built around technology.
- Commitment to create strong R&D, operations and management.

## Global Markets and Issues of Humankind

- Target global markets from inception.
- Solutions for global issues faced by humankind.

## Track Record (Selected)

| | | | |
|---|---|---|---|
| tella<br>March, 2009<br>Listed on JASDAQ NEO | Morphc<br>July, 2011<br>Listed on TSE Mothers | PeptiDream<br>June, 2013 Listed on TSE Mothers<br>December, 2015 Listed on TSE 1st section | GLM<br>September, 2017<br>Acquired by<br>O LUXE HOLDINGS LIMITED |
| Cirius Technologies<br>August, 2010<br>Acquired by Yahoo | Naked Technology<br>September, 2011<br>Acquired by mixi, Inc | PHYZIOS<br>February, 2013<br>Acquired by Google | popln<br>May, 2015<br>Acquired by Baidu Japan Inc. |

# Company Overview

Since 2004, UTEC has established 4 funds amounting to a size approx. 54.3 billion JPY.

- **Founded** April 1, 2004
- **GP** The University of Tokyo Edge Capital Co., Ltd.
  The University of Tokyo Edge Capital Partners Co., Ltd

## UTEC 4 Limited Partnership

**Established** ..... January 17, 2018
**General Partners** ..... UTEC, UTEC Partners LLP
**Fund size** ..... About 24.2 billion yen
**Number of Portfolio Companies** ..... 18 companies

## UTEC 3 Limited Partnership

**Established** ..... October 15, 2013
**General Partners** ..... UTEC, UTEC 3 Partners LLP
**Fund size** ..... About 14.6 billion yen
**Number of Portfolio Companies** ..... 31 Companies

## UTEC 2 Limited Partnership

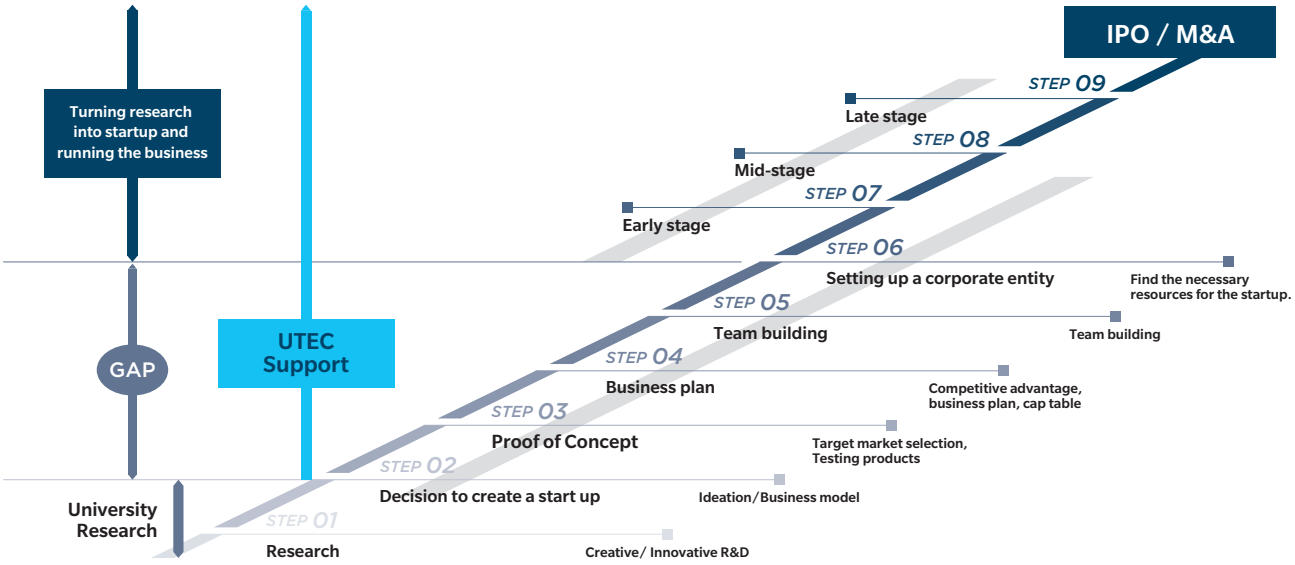
**Established** ..... July 31, 2009
**General Partners** ..... UTEC, UTEC Venture Partners, Inc.
**Fund size** ..... About 7.1 billion yen
**Number of Portfolio Companies** ..... 13 Companies

## UTEC 1 Exit Limited Partnership

**Established** ..... July 1, 2004
**General Partners** ..... UTEC
**Fund size** ..... About 8.3 billion yen
**Number of Portfolio Companies** ..... 34 Companies

# Startup Support Program

## Investment Flow



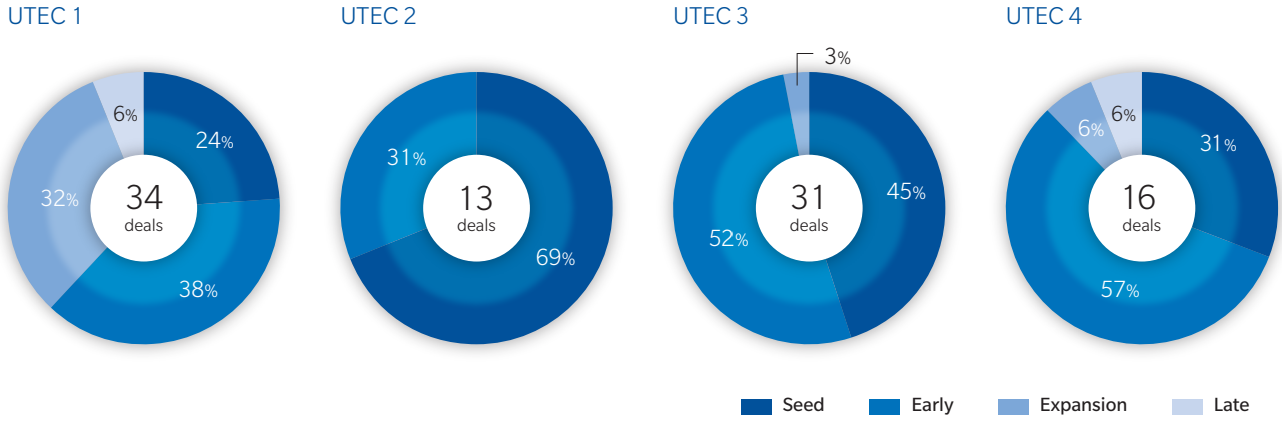

Startup
Support
Program

# Comprehensive Support for Seed / Early Stage Startups

UTEC invests in seed/early stage startups and provides hands-on support

## Initial investment Phase

deals / %



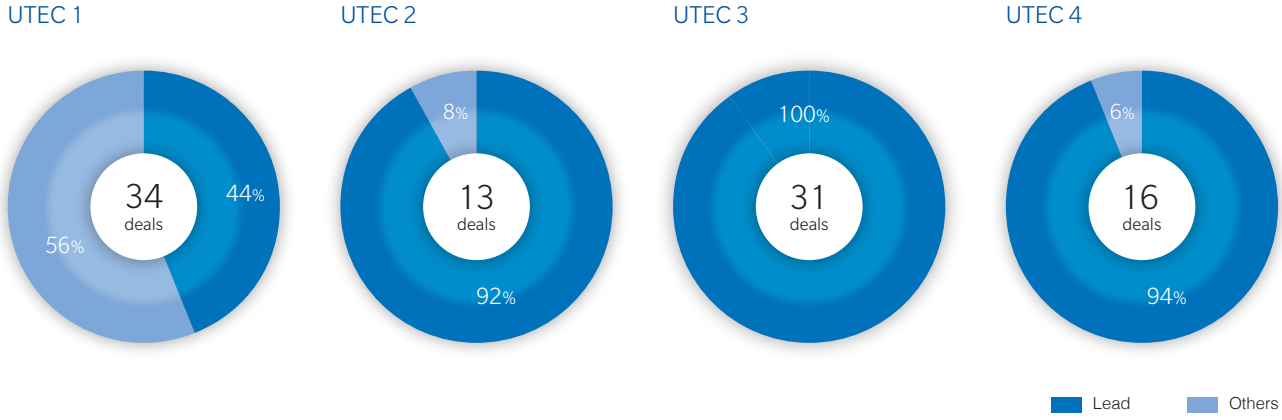

*1 For the definition of "Phase", refer to 2017 National VC Association Yearbook.
*2 As of November 2018. Simultaneous Parallel investments from multiple funds have been accounted in the respective fund. (FoF investments are not included.)

# Strong Commitment

As a lead investor, UTEC supports the portfolio companies with financing and management issues.

## Number of deals where UTEC is the lead investor

deals / %




*1 Data from the past financial include deals where UTEC is the lead investor and UTEC currently is the lead investor.
*2 As of November 2018. Simultaneous parallel investments from multiple funds have been accounted in the respective fund. (FoF investments are not included.)

## Academia Network

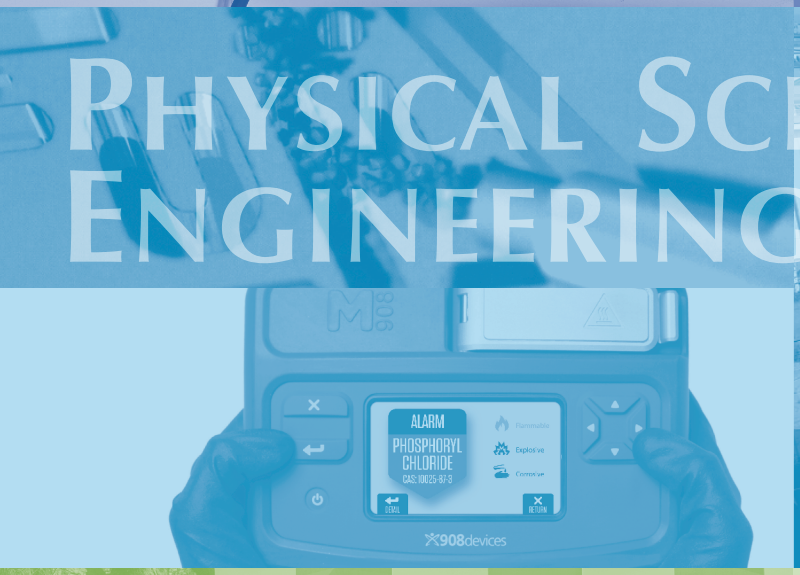
Starting with UTokyo, UTEC partners with universities, research institutes, and corporations in Japan and around the globe, to identify and polish innovative ideas and research.

# Life Science & Healthcare

# IT



# Physical Science & Engineering




# Fund

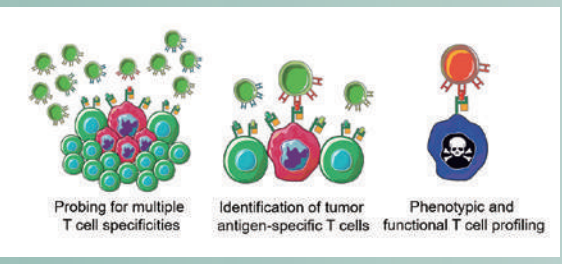

**200+**
FOUNDERS/ALUMNI

**75+**
ACTIVE COMPANIES

BLE EXITS


Update the Future wit
Infinite Possibilities o
Deep Learning

# Portfolio Companies




Immunological insights provided by immunoSCAPE

Map of immune response landscape

## immunoSCAPE PTE. LTD.

### Enabling immunotherapy through high-dimensional immune profiling

**Q 1** immunoSCAPE was founded in December 2016 with licensed technology developed and studied by the lab of Dr Evan Newell at Singapore Immunology Network in A*STAR,

**Q 2** immunoSCAPE employs cutting-edge technologies and mass cytometry to measure alterations of immune cells, and in particular T cell specificity, for biomarker and target identification, offering valuable insights on efficacy & safety of immunotherapies in R&D and clinical phase.

**Q 3** UTEC is instrumental in academic collaborations, business development and team-building strategy.

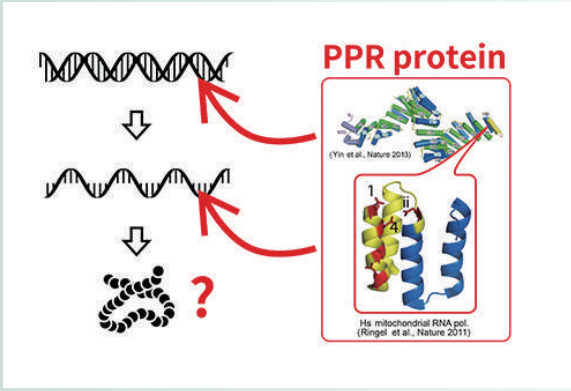
## EditForce Inc.

### Developing novel drugs, agricultural seeds and new materials through DNA/RNA manipulation.

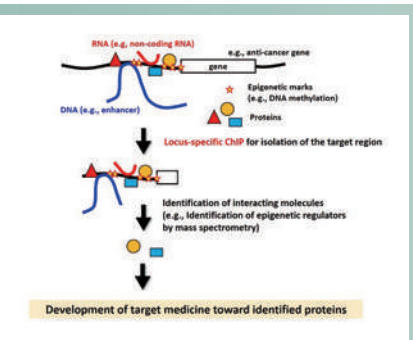
**Q 1** EditForce was founded based on the PPR genome editing technique invented by Takahiro Nakamura, Associate Professor at Kyushu University. Editforce is revolutionizing the genome editing industry, which has been dominated by prior technologies overseas such as ZFN, TALEN, and CRISPR, to commercialize with the PPR manipulation tools that originated from Japan.

**Q 2** PPR technology has the ability to recognize both DNA and RNA. It is the world's first editing tool that can edit both DNA and RNA.

**Q 3** UTEC has introduced management executives to the company and is also helping the founders with business planning, partnerships and IPO strategies




DNA/RNA modification by PPR




Locus-specific_ChIP

Epigeneron is the 1st resident company at Bayer Colaborator Kobe.

## Epigeneron, Inc

### Development of innovative drugs to realize a society that all mankind is free from the pain of diseases.

**Q 1** Dr. Hodaka Fujii, the President and CEO of Epigeneron, Inc. and a Professor of Hirosaki University Graduate School of Medicine, and his colleagues have developed locus-specific ChIP technology which enables biochemical analysis of specific genomic regions. By using this technology, Epigeneron focuses on development of drugs against intractable diseases caused by abnormal functions of the genome.

**Q 2** Novel innovative technologies and solutions such as locus-specific ChIP methods.
+ The ability to overcome problems not only focusing on the hot topics but also having perspectives of the further future.

**Q 3** UTEC helps Epigeneron in planning patent strategy and introducing business supporters which improved Epigeneron's business foundation. UTEC is expected to provide comprehensive support including financing and advice for building and updating business models and so forth.

Questions

Q 1 Origin

Q 2 Strength

Q 3 UTEC Support

# Elixirgen Therapeutics, Inc

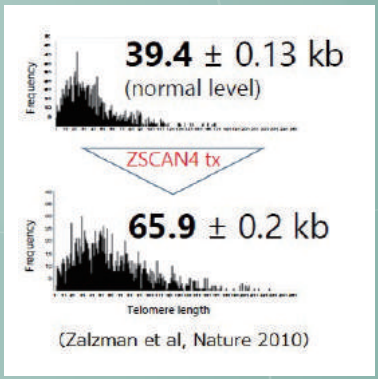
elixirgen therapeutics

## Revolutionary cures for rare diseases using ZSCAN4 cell therapy

**Q 1** Elixirgen Therapeutics was founded in 2017 by Dr. Minoru Ko, currently a professor at Keio University and formerly a Section Chief at the NIH, with the aim of applying his discoveries in stem cell biology to cure diseases.

**Q 2** The company is based on the discovery that the ZSCAN4 gene increases the genome stability of the stem cell and extends telomeres. The company developed the technology to introduce ZSCAN4 into cells such as hematopoietic stem cells in a way of RNA therapeutic agent which is safer and does not disturb the genome. They finished Pre-IND with U.S. FDA and now aim for early clinical trials of telomere disease including congenital keratosis incompetence

**Q 3** With the help of UTEC, Elixirgen Therapeutics will deliver its first therapy into clinical trials. Elixirgen will also be counting on UTEC's vast networks of companies, investors and human resources, and experience to advance its business at all stages of development.

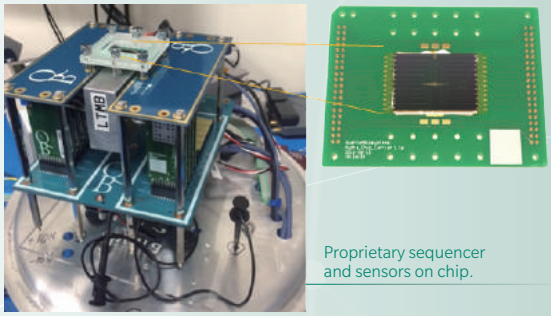



Example of telomere extension by ZSCAN4

# Quantum Biosystems Inc.

Quantum Biosystems

## Development and commercialization of single molecule DNA sequencer based on quantum mechanics



Proprietary sequencer and sensors on chip.

**Q 1** Quantum Biosystems was incorporated in January 2013, and is developing innovative DNA sequencers based on the research results of Osaka University professors, Tomoya Kawai and Masatomi Taniguchi.

**Q 2** Using Quantum Biosystems' technology, it is possible to carry out DNA analysis easily, with a higher accuracy rate at a remarkably lower cost when compared to the conventional technology. It also overcomes the limitations of existing technology like DNA modification in being able to capture new information.

**Q 3** Financial support as the lead investor in Series A and follow-up investment in Series B round. UTEC is also proactively supporting the management through an external director role by providing valuable insights and advice on making important business decisions.

# CREWT Medical Systems, Inc.

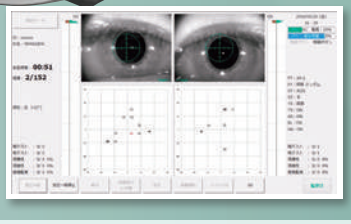
## Head mounting device to improve the quality of vision, based on cutting edge lens designing techniques

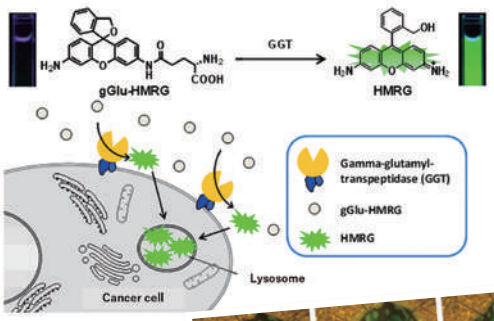
**Q 1** The founders worked on a business proposal based on their technology and presented to their former company, HOYA. After spinning out, Professor Aihara from the University of Tokyo Hospital (Dept. of Ophthalmology) joined their team as a consultant to help them with the implementation of their technology

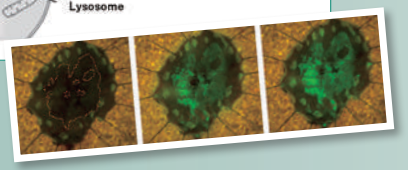
**Q 2** Building medical equipment and gadgets based on optical technology.

**Q 3** UTEC supports CREWT by actively helping the management team to increase the corporate value, brushing up the business plan, providing advice on fund raising and introducing specialists.

Head mounted device "imo®"





Detection of cancer cells using gGlu-HMRG fluorescence

Human ESD (Endoscopic Submucosal Dissection) cancer samples at each reaction state with EP-HMRG (before spraying EP-HMRG (left), after 5 min (middle) and after 10 min (right))

## GORYO Chemical, Inc

五稜化薬株式会社

### Development of fluorescent probes for quick diagnosis during cancer surgery

**Q 1** GORYO Chemical, Inc was established in 2010 in Sapporo, Hokkaido to develop fluorescent probes not only for research reagents and new drugs but also for medical use by using chemical biology.

**Q 2** Goryo has platform technology of fluorescent dyes and diagnostics, that was initially developed by Urano Laboratory of the University of Tokyo. They also have the capability to produce these dyes efficiently.

**Q 3** Comprehensive hands-on support such as upgrading the business plans, financing support, introducing professional experts, etc. to realize the long-term growth prospects of the company

## SOCIUM Inc.

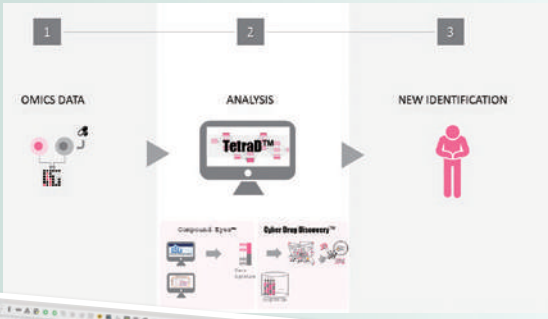
SOCIUM

### SOCIUM tackles the challenge of addressing the unmet needs of patients and contribute to human health.

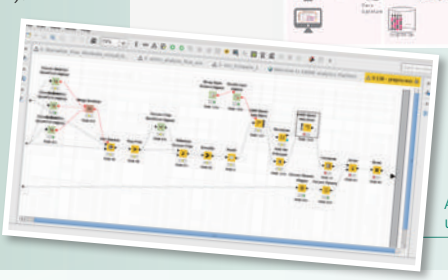
**Q 1** SOCIUM Inc. was established in 2017, with the aim of developing drug discovery and development platform based on unique gene expression omnibus analysis algorithm by Katsuhisa Horimoto in Advanced Industrial Science and Technology (AIST).

**Q 2** Compared to conventional analysis approaches, Socium's technology increases the success rate for drug discovery and development by extracting disease-related genes and pathways with high accuracy based on biological significance.

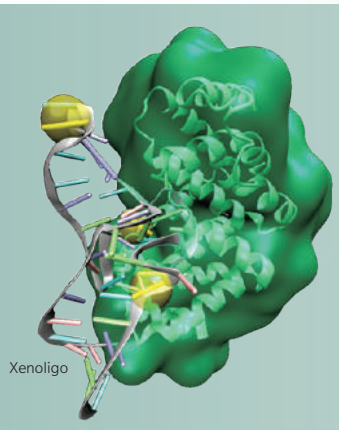
**Q 3** UTEC supports Socium in series A fund-raising, securing global business alliances and in recruiting management executives.




Service flow chart composed of several patents



Analysis based on our unique algorithm




Generation of Xenoligo molecules by SELEX

## TAGCyx Biotechnologies

TAGCyx Biotechnologies

### TAGCyx aims to mend the expensive healthcare economy, by providing highly effective and safe low-cost Nucleic acid pharmaceuticals.

**Q 1** With the aim of spreading "Artificial base-pairing technology" and putting it into practical use in a wide range of fields, Mr. Hirao Ichiro and others started TagCyx, in 2007. In 2016, they pivoted to drug discovery and development as their main business.

**Q 2** Nucleic acid drugs can be created efficiently by using their proprietary drug discovery search technology (Xenoligo™). High affinity and high selectivity of Xenoligo™ for target substances is one of the key strengths of their core technology.

**Q 3** Helping the company to mature into a global market leader in the field of drug discovery and pharmaceuticals.

Questions

| Q 1 | Q 2 | Q 3 |
|---|---|---|
| Origin | Strength | UTEC Support |

# Glytech, Inc.

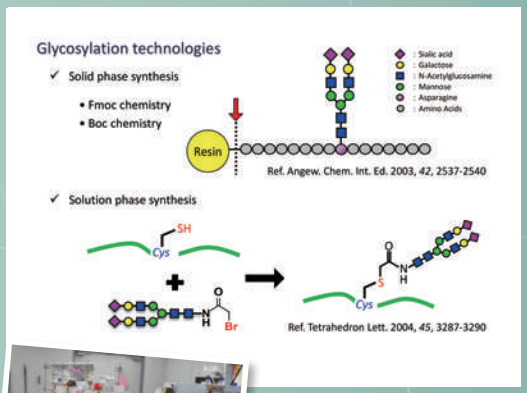
GlyTech, Inc.

## Developing exceptionally pure biopharmaceuticals by synthesizing and modifying the glycopeptide and glycoproteins.

**Q 1** Glytech was started with the goals of the practical use of mass preparation of highly pure sugar chains in human beings and demonstration of the capability of sugar chain to functionalize biomedical products. The technology is based on the research results from the founder's previous job at Otsuka Chemical Co., Ltd. and a collaborative research with Professor Yasuhiro Kajiwara of Osaka University.

**Q 2** Commercialized drug discovery screening system and drug substance through a precise and rapid chemical synthesis of biopharmaceutical drugs and compounds such as glycopeptide and glycoprotein.

**Q 3** UTEC leverages its strong network in life sciences ecosystem to introduce several partners and experts to Glytech. UTEC supported SeriesA fund-raising.




Attachment of Glycans to Peptides/Proteins Via Solid or Solution Phase Synthesis

Laboratory


AI supports doctors.

# TRICOG HEALTH PTE.LTD.

tricog
Technology Preserving Life

## Tricog offers an AI-driven tool to diagnose heart diseases at health centers, with a vision to achieve accessible, affordable healthcare for all.

**Q 1** Tricog was founded in 2015 by Dr. Charit Bhograj, an interventional cardiologist with over 15 years of experience. Dr. Charit started Tricog with Dr. Zainul Charbiwala, an electrical engineer and a PhD from UCLA, Dr. Udayan Dasgupta, an algorithm expert and Abhinav Gujjar, a software platform architect.

**Q 2** Tricog is one of the world's largest healthcare AI companies operational in over 1000 health-centers and 50 hospitals across 12 countries with 1.2 million diagnosed ECGs and over 35,000 identified criticals.

**Q 3** In addition to financial support and advisory, UTEC is actively helping Tricog by introducing Japanese medical equipment manufacturers for business expansion and hospitals/university labs for collaborative research.

Tricog communication can connect multiple devices.

Expand 8 countries mainly in Asia.

# Nohla Therapeutics Inc.

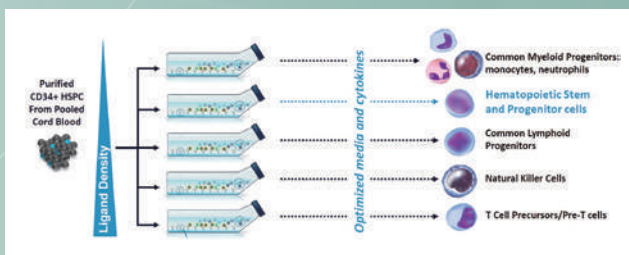
NOHLA THERAPEUTICS

## Leading the development of universal, off-the-shelf cellular immunotherapies for patients with hematologic malignancies and other critical diseases.

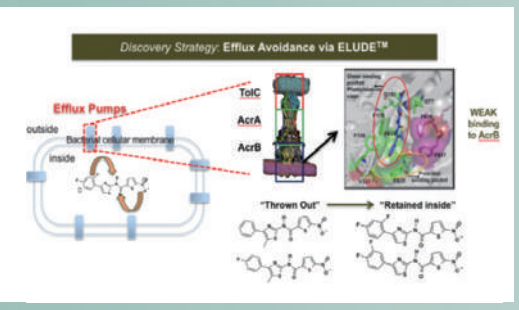
**Q 1** Nohla was founded in November 2015 with licensed technology developed and studied for over two decades by Irv Bernstein MD and Colleen Delaney, MD, MSc, at Fred Hutchinson Cancer Research Center

**Q 2** Nohla's proven platform generates universal, off-the shelf therapies that enable improved clinical outcomes across a number of disease indications with the initial focus on high-risk hematological malignancies.

**Q 3** Support for academic collaborations, business development objectives, and regulatory affairs especially in Japan.




Proprietary Notch technology platform




Proprietary ELUDE™ platform of Bugworks

# BUGWORKS RESEARCH, INC.

bugworks

## Development of Novel Class of Antibiotics exhibiting Broad Spectrum Activity against all-known classes of drug resistant bacteria.

**Q 1** Bugworks was started in 2014 by industry veterans Dr. Anand Anankumar, Dr. Santanu Datta and Dr. V Balasubramanian to tackle the issue of global Anti-Microbial Resistance (AMR). In July 2017, Bugworks became the first Asian company to win the prestigious Carb-X grant. The Bugworks Research lab in Bangalore, India has a team of several scientists and PhDs with a combined experience of over 200 years in drug discovery.

**Q 2** Using proprietary ELUDE™ platform, Bugworks has come up with a first-in-class antibiotic series with the following characteristics: Efflux Unbinding, Dual-target Mechanism attacking two enzymes relating to bacterial DNA structure (Gyrase and Typo IV) and Broad-spectrum utility effective on all known classes of drug resistant bacteria (NDM, KPC, ESBL, MRSA etc.)

**Q 3** UTEC supports Bugworks by providing opportunities to partner with Japanese pharmaceutical companies and collaborating with Professor Satoshi Murakami of Tokyo Institute of Technology, who clarified the crystal structure of multidrug release transporter AcrB as the company's Scientific Advisor.

# PharmaBio Corporation

PharmaBio

## Promotion of promising seeds both domestically and internationally, and contribution to the creation of effective new drug development opportunities

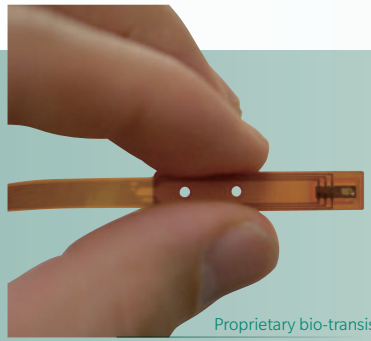
**Q 1** Two doctors; one lost his father due to side effect of chemotherapy, and the other experienced his own patient's death due to side effect of chemotherapy, with their will to disseminate regulatory approved cell based medicine in Japan, they launched with aim of establishing a cellular medicine development.

**Q 2** As Japan's first CDMO specialized in regenerative medical product, with GCTP-compliant development manufacturing support with low risk and cost burden, PharmaBio provides various services and products that enhance safety and quality on a "one-stop" basis.

**Q 3** Network support for ecosystem environment linking clinical trial process and seeds

Aseptic manipulation in Cell Processing Center

Vapor-phase Liquid nitrogen cryopreservation freezer



Proprietary bio-transistor sensor

**GluTear™**


Self-monitoring tear glucose device

# PROVIGATE Inc.

PROVIGATE
sustainnovation for healthy living

## Realize a society of Perception-Broadening by bio-sensors

**Q 1** The company is based on bio-transistor technology invented by University of Tokyo's Associate Professor, Toshiya Sakata, whose past track record includes the invention of core technologies for next generation sequencers. PROVIGATE was founded in order to realize perception-broadening sensors utilizing the bio-transistor for mobile, wearable, and implantable devices.

**Q 2** A highly experienced team with knowledge, experience and track record in the field of in-vitro diagnostic and medical devices from fundamental research to mass-production, regulatory affair and product launch and know-how related to the treatment of clinical specimen and control of non-specific adsorption and electrical noise.

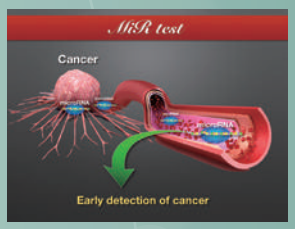
**Q 3** UTEC supports Provigate in planning business plans and product development plans as a promotor of START Project of the Ministry of Education, Culture, Sports, Science and Technology. We expect UTEC to support us through funding and pioneering alliances.

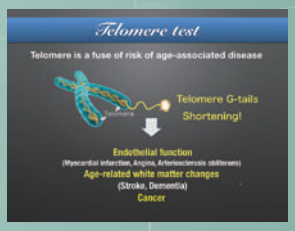
Questions

Q 1 Origin | Q 2 Strength | Q 3 UTEC Support

# MiRTeL CO., LTD.

## The forefront of Medical innovation: to prevent diseases, increase the life expectancy and reduce medical expenditure.

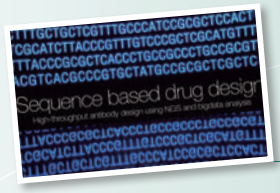

**Q 1** MiRTeL was established by Prof. Hidetoshi Tahara of Hiroshima University. Prof. Tahara realized the importance of practical applications of basic research when he was faced with the loss of his co-worker who died of juvenile gastric cancer. He developed the G tail length measurement technology for pre-symptomatic test. Furthermore, he endeavors to realize a society of health and longevity through early detection tests with micro RNA.

**Q 2** The first "pre-symptomatic test" in the world using the telomere G tail length measurement technology and "early detection of disease" through the detection of unique disease-specific microRNA in body fluids.

**Q 3** Supporting the company in business planning and strategies, funding, human resources management, intellectual property advisory, and license contract execution.

# MOLCURE Inc.

## High-functional antibody drug development platform based on next generation sequencing and bioinformatics


Proprietary antibody development platform : Abtracer.

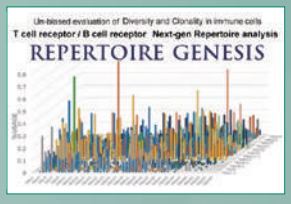
**Q 1** Ryu Ogawa, the founder of Molcure, was striving to become a scientist at Keio University when he lost his father to cancer. This motivated him to establish a startup that enables the quickest way to make drugs by making full use of scientific advancements to develop drug for cancer.

**Q 2** The company has developed a drug discovery platform that enables them to acquire highly-functional antibodies from antibody libraries which was unable to detect by the conventional methods by combining the conventional method for preparing antibodies with next generation sequencers and machine learning.

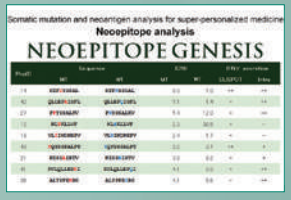
**Q 3** Multifaceted support such as accelerating the business through funding, introducing collaborators with high technology-related synergies, designing business strategies and introducing customers.

# Repertoire Genesis Inc.

## Genetic testing and drug discovery using next-generation immune-repertoire diversity profiling.




Un-biased evaluation od Diversity and Clonality in immune cells

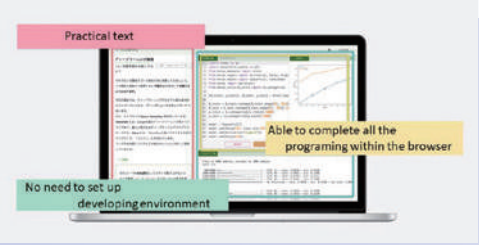



Somatic mutation and neoantigen analysis for super-personalized mediceine

**Q 1** Ryuji Suzuki (former Shionogi employee) developed bioinformatics software for fast and accurate repertoire analysis on immunity cell receptors (TCR/BCR) with his original unbiased gene amplification technology.

**Q 2** Repertoire Genesis has a unique technology to analyze immune repertoire accurately and comprehensively from both antigen and antibody factors. The company has dramatically improved the efficiency of development of therapeutic drugs and diagnostic agents acting on the immune system by monitoring immune response in-vivo in detail.
Their Analysis services are being used at numerous domestic and overseas research institutes and pharmaceutical companies including The University of Tokyo School of Medicine Hospital and The University of California San Diego. The company strives to further improve the accuracy of analysis by collaborative research.

**Q 3** In addition to capital investment, UTEC has nurtured the company by providing the infrastructure to accelerate commercialization of technology, and boosted the startup through introductions and connections to industry and academia.




Supports Jupyter Notebook


Registering page

Easy to start and use (specific runtime environment not necessary)

# Aidemy Inc.

## Become a catapult to produce a million artificial intelligence engineers.

**Q 1** CEO Akihiko Ishikawa majored in the field of applied machine learning at the University of Tokyo Engineering department. He realized the difficulty in acquiring artificial intelligence programming skills, thus developed Aidemy to lower the hurdles of learning AI as much as possible.

**Q 2** Aidemy has unique stream of contents to make AI programming easier to learn. In addition, they are also expanding the learning platform to include other advanced programming techniques like blockchain based on student's learning log

**Q 3** UTEC EIR program provided office infrastructure to Aidemy in the past. UTEC supports them in their business strategy formulation, Series A fundraising, and introduction of partners to expand Aidemy's business development.

# Institution for a Global Society Corporation

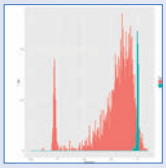
## Inspiring self-actualization through assessment and education.

**Q 1** The levels of creativity and competence of Japanese companies are dropping alarmingly. The reason behind this is the lack of scientific thought process and conventional HR management. IGS aims to solve this problem. The experience as a quantz analyst and management in the world's biggest investment company and the personal connection with researchers of the University of Tokyo was the starting point of establishing the company.

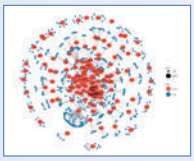
**Q 2** IGS Team is comprised of experts in Machine learning and NLP, who provide Japan's most advanced global education. IGS is one of the few companies operating in both HR and EdTech domains over the world.

**Q 3** UTEC supports IGS in advising the strategy of corporate sales, providing its wide network of connections with government entities, universities and corporates and foster collaborations and financial support.

e-spire : Online education platform supported by NLP.



Competency differences between applicants and prospectives.



Social-distribution by Grow.

DX Suite is promoting a digital revolution

# AI inside Inc.

## Realizing better society by making AI usable by everyone.

**Q 1** As Japan's productive age population decreases, AI can contribute to society via creating improvements in productivity in the digitization of text and image data, which is being performed in all fields of business.

**Q 2** A unique system to generate unlimited training data for OCR engines via image processing/DNN has allowed for world-leading recognition abilities that surpass even Google Vision. Everything from layout recognition to natural language processing is performed via AI. Free format, messy handwritten text, and design fonts can also be recognized with a high level of accuracy.

**Q 3** Support for acquisition of personnel and new technologies, assistance with improving business/product strategies

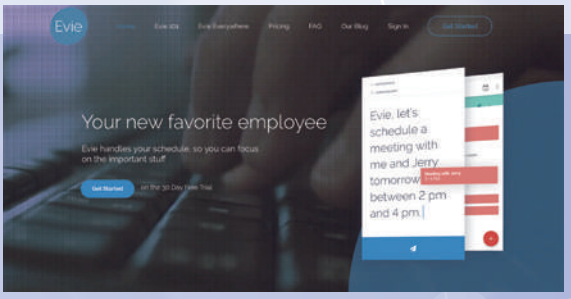

Highly accurate handwritten character recognition

Questions

Q 1 Origin | Q 2 Strength | Q 3 UTEC Support

# Evie.ai. (Forty Two Labs Private Ltd.)

## Evie is your A.I. assistant who helps manage your schedule and organize meetings



Evie.AI

**Q 1** They are on a mission to free people from having to juggle busywork while doing their real jobs.

**Q 2** Evie's initial task is to help her users manage their schedules and organize meetings.
Evie runs on state-of-the-art natural language processing technology and an engine that enables her to understand real-world concepts like time, locations, and human relationships.

**Q 3** Helping them with Global expansion, strengthen their technology by connecting them to various research facilities in University of Tokyo etc.

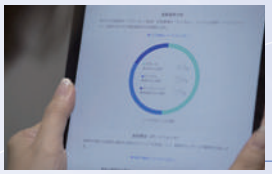

Team Evie

# MONEY DESIGN Co., Ltd

## Democratize financial services with the power of technology and create new relationships between people and money

お金のデザイン

THEO service homepage


231 (tried and trusted) highly customized private asset management plans for everyone

**Q 1** Japanese Yen is more volatile than before due to fluctuations in $-¥ exchange rate, inflation, etc. Since having all assets in Yen is no longer an optimal asset management method, Theo's asset management engine, which was developed in collaboration with Prof. Kato Yasuyuki of Kyoto University, can be used to provide tailor-made global diversification investment algorithms to retail investors. These algorithms are on par with the ones being used by high-end asset managers.

**Q 2** A strong, well-rounded core team composed of members from academia, investment management, financial industry and internet service industry.

**Q 3** Strengthen the legitimacy and creditworthiness of investment management policies and strategies of the company. Appropriate and timely business advice to the management team.

# CambrianRobotics Inc.

CAMBRIAN ROBOTICS

## Make Everything Online

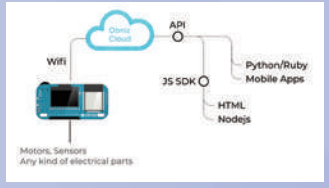
**Q 1** Conventional single board computeres had many technical hurdleds such as setting up the development environment, requirement of special development languages and knowledge of both software and hardware. We developed "Obniz" to realize the world which everyone could make anything they want online.

**Q 2** "Obniz" is specialized to carry out all implementation and development via the cloud. This realized the reduction of development cost, increase of variety of capable development language, accompanying increase of available libraries, realization of complicated processing etc.

**Q 3** Advice on sales strategy, support for recruitment, introduction of corporate customers, support for legal affairs, etc. Partner who can receive broad support.

"Obniz" and the programming screen


Radio controlled car automated by Obniz



System diagram

## SEAOS, Inc.

SEAOS

IoT, robotics, and SaaS solutions for logistics, based on proprietary algorithms.


SaaS WMS

Inventory optimization system


Delivery management platform

**Q 1** The founder, Matsushima Akira, headed large scale global logistics projects at Accenture, a consulting firm. That coupled with his entrepreneurial streak at the right timing led to the founding of this company.

**Q 2** Healthcare, retail, manufacturing, etc. are logistics-intensive fields, which require a great deal of logistics support from strategy to fieldwork. SEAOS is a one stop shop for all the logistics help required by a company. The company has gained deep insights/understanding into the software and hardware used in the logistics industry, thus, makes highly efficient decisions on which technology is an optimum solution to a given problem.

**Q 3** Helping them expand overseas. Accelerating the development of their technology through Academia-Industry collaboration programs.

## Autonomous Control Systems Laboratory Ltd.

ACSL

"Aerial Industrial Revolution" by unmanned systems, utilizing drones

**Q 1** ACSL is a spin-out from Chiba University in Japan. ACSL utilizes the world's leading autonomous controls research and technologies developed (since 1998) by the laboratory of Professor Kenzo Nonami at Chiba University. ACSL is engaged in the R&D, manufacturing, sales and building solutions for industrial drone applications. With its proprietary technologies made and developed in Japan, ACSL aims to lead the new industrial revolution of the global skies.

**Q 2** ACSL's core technology lies in the auto-pilot mode of the drone and the cutting-edge platform for industrial drones. They pioneered cooperation with companies in several fields and built the most optimum drone solutions for various applications based on industry requirements.

**Q 3** Supporting their growth by introducing management staff, helping them with business development and operational strategy formulation etc. Connecting them to universities in and out of Japan for collaborative R&D.

Made in Japan Drone platform.


## Startbahn, Inc.

startbahn

The realization of a society where art is democratized, is accessible as a form of culture and as goods, and is treated with importance

startbahn.org, a unique service

An exhibit held by our company *[Parplume Exhibit]*


An example of the company's web design *[Todai Kawahara Research Laboratory]*

**Q 1** Startbahn founder Shii, a contemporary artist and a graduate of the University of Tokyo's Graduate School of Interdisciplinary Information Studies, is concerned about the lack of infrastructure in the field of art although technology has resulted in dynamic societal changes in other fields. Hence, he started the company with the aim of acting as a bridge between the fields of technology and art.

**Q 2** Startbahn has acquired related patents in Japan and the US, and there is little competition in the field. The team also has deep knowledge of the field it operates in, and is in a position that allows it to make proposals regarding active changes.

**Q 3** Although the company is committed to introducing blockchain technologies, the technology is not yet matured in both legal interpretation and trust at a worldwide level. UTEC's investment in Startbahn serves as a reassuring symbol from those perspectives.

Questions

| Q 1 | Q 2 | Q 3 |
|---|---|---|
| Origin | Strength | UTEC Support |

# ZenmuTech, Inc

## Provides next-generation security infrastructure and contributes to high security society with “secret distribution technology”

**Q 1** The founders envision to build a safe and stable ICT environment without compromising on the ease of use and convenience. They aim to build a security-free society by commercializing secret sharing technologies.

**Q 2** Top notch R&D by partnering with top universities like University of Tokyo, Tokyo University of Science, etc. Expertise in secret sharing technology.
Effective market penetration leveraging high touch sales and IT industry networks.

**Q 3** UTEC supports the company in management strategy, finance, recruitment, introducing people from the University of Tokyo and other academic networks.

Lixil accepts for PC solution.

# Tier IV, Inc.

## Tier IV crates high value mobility space time


Logiee_PV1


Milee_PV2


Minivan_PV3

**Q 1** Tier IV was founded in December 2015 by Dr. Shinpei Kato,currently an associate professor at the Graduate School of Information Science and Technology at The University of Tokyo, to develop a fully-autonomous self-driving platform based on the open source fully-autonomous self-driving software “Autoware” which he created while he was teaching at Nagoya University,

**Q 2** Tier IV provides fully autonomous self-driving platforms and services taking advantage of time and space released by automatic operation based on “AutoWare”. In December 2017, Tier IV became the first company to put a Level 4 self-driving vehicle on the public roads in Japan.

**Q 3** Building management team, formulating business strategy, supporting global expansion

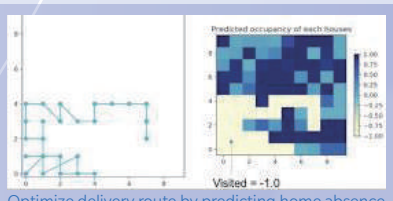
# Japan Data Science Consortium

## Enhance industry labor productivity by leveraging data and AI utilization

**Q 1** Managements developed a consortium in 2014, since they realized that Data utilization would transform corporate process and social structure based on P&G and McKinsey experience. Because of business expansion the consortium has been reorganized as a corporate.

**Q 2** Combination between technology from Koshizuka laboratory in The University of Tokyo III/GSII, IoT and data utilization and Tanaka laboratory in the University of Tokyo department of system innovation, AI and Blockchain and business insight from managements.

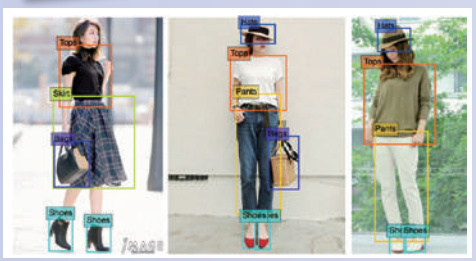
**Q 3** Business model realization support through strategy, operation and finance.



Optimize delivery route by predicting home absence

Automate picture reading and processing

Fashion trend analysis service



AI technology on image recognition

## Fashion Pocket Inc.

FASHION POCKET

### Innovate people's lifestyle and minimize excess inventory and disposal

**Q 1** Fashion Pocket was started in 2018 by a former business consultant with a vision to improve our lives with the power of artificial intelligence. While AI already showed significant presence in various industries, it has not been actively used in apparel and consumer fashion industries. Fashion Pocket applies its proprietary AI algorithms to apparel and retail field to enrich people's lifestyle and to establish a global AI company from Japan.

**Q 2** Fashion Pocket exclusive AI technologies focusing on image recognition. Fashion Pocket offers various AI analysis tools to clients in apparel industry such as fashion trend prediction, Merchandizing optimization, and In-store efficiency improvement.

**Q 3** Based on rich experiences through investment in multiple portfolio companies, UTEC has been actively supporting Fashion Pocket in global expansion, clarification of the company's competitive technological advantages and advice for growth.

## Finatext Ltd.

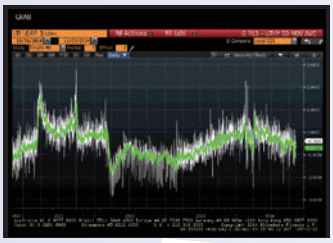
FINATEXT NOWCAST SMART+

### Create a world where people can get a real-time view of the economy

**Q 1** Finatext was established to develop and provide high-quality real-time information unlike anything before using big data analysis. Finatext's solutions were developed by utilizing the team's deep expertise in providing services for financial institutions and research results obtained under Professor Watanabe of The University of Tokyo.

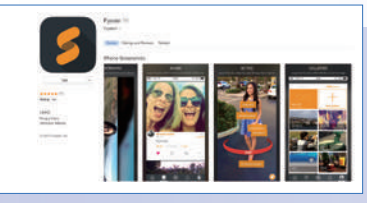
**Q 2** Based on deep knowledge and experience in finance, Finatext has the technological ability to analyze financial information and develop services in an easily understandable UI/UX in a very short period. Finatext utilizes economic statistical analysis technology using big data developed by Japan's top professionals working at the forefront of statistics and economics research at the Ministry of Internal Affairs and Communications, and the Bank of Japan.

**Q 3** Overall hands-on support for both management level and on-site level.



Nikkei CPI Now

President and CEO Ryota Hayashi and Co-founder Tsutomu Watanabe



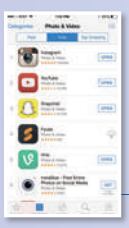
## Fyusion, Inc.

FYUSION

### Development of 3D image technology based on intelligent robotics and development of 3D spatial photograph application "Fyuse"

Fyuse selfie.

**Q 1** The company was founded in 2013 by Dr. Radu B. Rusu, a world renowned 3D and robotics scientist who previously led the 3D Perception efforts at Willow Garage. There, he created the Point Cloud Library (PCL) initiative, currently the world's largest open source effort in 3D point cloud processing. He also serves as a Board Director and President of Open Perception, the world's leading non-profit organization in 3D perception, which is also responsible for maintaining the BSD-licensed PCL project.



App store ranking in Pics/Video category.

**Q 2** Fyusion launched its mobile photo app Fyuse, currently available the iOS App Store. Built on top of Fyusion's underlying 3D platform, Fyuse allows users to create and share immersive Spatial Photographs, for personal use or on social networks. The company will continue to add features and capabilities to Fyuse to raise the bar of computer vision on mobile. This is just the first step in a long line of potential applications for the company's underlying technology. Fyusion is also licensing its patent-pending technologies and its 3D modeling platform to key players in the mobile and wearable devices sectors

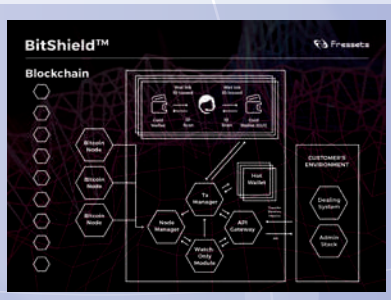
**Q 3** UTEC has been helping Fyusion since their founding and also led their Series A round. UTEC is also supporting the company's business expansion along with NEA (one of the largest VC in USA) and providing recruitment support.

Questions

Q 1 Origin | Q 2 Strength | Q 3 UTEC Support

# Fressets, Inc.

## Realizing a society where crypto currencies and blockchain-related technologies can be used in a safe and convenient manner




A diagram of EWM

Q 1 The company was established by Masahiko Hyuga who has a wealth of cryptocurrency service development experience beginning from its earliest days in 2014. He started the company with an aim to solve the vulnerabilities in wallet systems of cryptocurrency exchanges and to develop a leading product related to cryptocurrency and blockchain.

Q 2 In addition to performing crypto currency wallet system development for a variety of currencies, the team has a variety of capabilities and has amassed a large number of engineers with strong technical abilities. They have the potential to develop revolutionary products and services in the field of crypto currency and blockchains.

The company's employees include some of the world's leading blockchain engineers

Q 3 UTEC supports the company in recruitment of technical experts and managerial talent, coordination with universities, and introduction of corporations that could potentially become customers.


Global team.

# Mujin, Inc.

## Comprehensive manufacturer of Industrial intelligent robot controller

Q 1 Dr. Rosen (CTO), who has a doctorate from Carnegie Mellon and formerly a postdoctoral fellow at the University of Tokyo JSK, is the first person in the world to develop robot motion planning technology for industrial use. After he met Mr. Takino (CEO), he stepped up to develop intelligent robot controllers for industrial robots with huge demand.

Q 2 Dr. Rosen, who is also widely known as the founder of the open source robot motion planning software (OpenRAVAE) and Mr. Takino, who is familiar with the issues of manufacturing are the core assets of the company. Mujin develops and sells level-playing intelligent robot controller technology that combines world-class robot motion planning technology, advanced parallel distributed processing, and 3D recognition technology. Their services are widely used in the production site of automobile and logistics industries, enabling robotic automation, contributing to solving labor shortage problem and drastically improving productivity.

Q 3 Backing the company financially, UTEC also introduces valuable partners who work hands-on from company management to risk management

# Liquid, Inc.

## High-speed Biometric Authentication Service by using fingerprint, body and face recognition.

Q 1 Founder Yasuhiro Hisada graduated from Keio University School of Law and specialized in statistical mathematics. He then started technology development with appraisal techniques and computer vision in forensic statistics. Liquid is collaborating with Aoki lab at Keio University and conducting co-research.

Q 2 With Liquid's high-speed biometric technology and its large user base, the time taken to match one user has been shortened from 0.05-0.1 second to 0.0003 seconds. Liquid also provides e-KYC service for banks and fingerprint settlement service known as "Liquid Pay".

Q 3 UTEC supports Liquid in recruiting, business planning, sales strategies, finance and customer introduction. In addition, UTEC actively connects Liquid with large corporations and government agencies.

# Retrieva, Inc.

レトリバ

Retrieva provides business automation solutions by leveraging state-of-the-art natural language processing technology.

Answer Finder

VoC Analyzer

**Q 1** The founders realized the potential applications of NLP, machine learning and deep learning in several enterprise use-cases. Formerly, the team was part of Preferred Infrastructure and then spun-out to become an independent company. Mr. Kawahara, who was a manager in the Manufacturing Division of Preferred Infrastructure, and Mr. Nishitoba, an alumnus of The University of Tokyo Graduate School of Information Science and Technology, and four others founded the company.

**Q 2** Retrieva team has deep expertise in the fields of NLP, Machine Learning and Deep Learning. The team is also well-equipped in using the aforementioned technologies to solve the problems of enterprise customers and making the service user-friendly.

**Q 3** UTEC offers comprehensive pro-active support in strategy development, recruitment of top-notch talent, customer introductions, pioneering partners and future financing.

# Locix Inc.

LOCIX

Developing products and solutions based on its location-aware, visual, and ultra-low power wireless sensor platform


LOCIX Wireless Camera Product

**Q 1** Locix was founded to develop the ultimate wireless sensor products and services for smart home and commercial environments and derive substantial value for consumers and society in terms of safety, health, comfort, productivity, efficiency and savings. Company was founded by serial technology entrepreneur Vik Pavate and University of California, Berkeley, Professors Vivek Subramanian and Elad Alon. Locix's proprietary technology is based on the founder's research and professional experience in developing and commercializing ultra-low power wireless systems, sensors, semiconductors and consumer electronic devices.

**Q 2** Locix's proprietary technology platform leverages the advanced ultra-low power, wireless, advanced sensors, energy delivery technologies and data-science techniques enabling breakthrough wireless sensor products and services in terms of performance, scalability, flexibility, ease of use, and total cost of ownership.

**Q 3** UTEC has been involved with Locix from its inception and led Locix's Series A funding round with leading venture and strategic investors. UTEC team has contributed significantly in crystallizing the company strategy. Also, Locix has leveraged UTEC's extensive network to engage with leading service providers, system integrators, OEMs and suppliers.


Power to the people.


Kiosk image in Tanzania.

# WASSHA Inc.

WASSHA

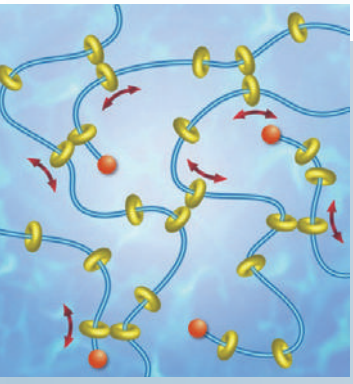
Power to the people by delivering electricity to off-grid areas.

**Q 1** CEO Satoshi Akita chose to start the service in Africa because of huge potential, strong social impact and flexible regulations. The company was incorporated in April 2013 in cooperation with the inventor of "digital grid" appointed professor Rikiya Abe of the University of Tokyo and CEO Akita.

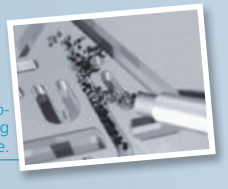
**Q 2** By partnering with kiosks in rural areas of Africa, the company managed to collect a detailed landscape of data on consumer coverage and consumption trends of millions of people. The management is based in Tanzania (Africa) close to the local community and that adds up as an operational advantage.

**Q 3** As the lead investor, UTEC advises the management and introduce potential partners as and when necessary.

MEMO



SRM structure.



Application: automatics polishing device.

## Advanced Softmaterials Inc.

asmi.jp

Provides new functional materials and products based on circular polymer materials, which is the world's first topological material concept to be produced on a large scale, which Won Nobel Prize in Chemistry in 2016.

**Q 1** "Slide ring material (SRM)" invented at The University of Tokyo, is a foundational technology that can revolutionize the world of polymers. The founders grasped the potential of the practical applications of this polymer and they started the company to realize various customer use-cases.

**Q 2** ASM is the world's only manufacturer of slide ring material with the world's first circular structure. ASM has exclusive license to the related patent from the University of Tokyo. Their technology enables combining factors that usually tend to be a trade-off to each other in conventional polymer materials.

**Q 3** UTEC has been actively involved in business planning even from prior to establishing the company. UTEC is also playing a pro-active lead investor role by helping ASM with financial support and management advice.

## Algal Bio Co., Ltd.

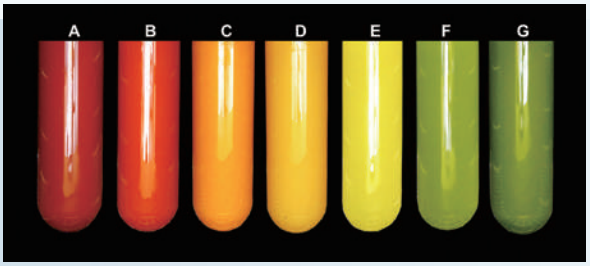
Algal Bio

Saving the world with plants and algae

**Q 1** Professor emeritus Shigeyuki Kawano's 20 year-long algal bio research formed the basis of the company.

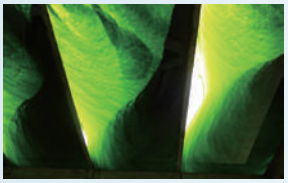
**Q 2** The company is in possession of several thousand algal strains based on its Intellectual Property in the fields of algal strain production, algal cultivation, and derivation of functional substances.

**Q 3** Algal Bio has been receiving commercialization support from UTEC since the earliest stages of research. UTEC has continued to provide broad-range management advice to increase the breadth and scope of the company's projects as a lead investor.




Chlorella has been cultivated to produce a variety of functional substances. Its color corresponds to carotenoids and long-chain fatty acids

A typical algal body (left) and a super oil-producing algal body (right)



Mass-cultivation using a thin-layer light bioreactor

A prototype that was developed with funding from UTEC

## Exergy Power Systems, Inc

Exergy Power Systems

The use of next-generation energy storage systems to allow for the simultaneous resolution of economic, environmental, safety, and security issues related to energy!

**Q 1** The company was established by Professor Atsushi Tsutsumi of Institute of Industrial Science, who was previously the head of the Collaborative Research Center for Energy Engineering at The University of Tokyo, in collaboration with graduates from The University of Tokyo and UTEC

**Q 2** The company has unique technology related to hydrogen cell batteries that allow for high output (MW) from small capacity cells (kWh). This enables the company to proactively pioneer new markets in Japan and overseas.

**Q 3** Exergy was established with UTEC as the founding investor. Despite the long period needed to liquidate investment, UTEC continues to provide managerial guidance and other forms of hands-on support to the company.

Questions

| Q 1 | Q 2 | Q 3 |
|---|---|---|
| Origin | Strength | UTEC Support |

# FCO Power, Inc.

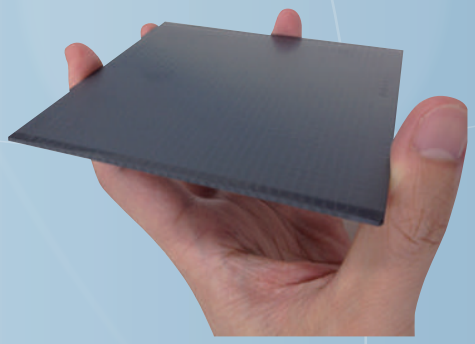
FCO POWER

## Next generation solid oxide fuel cell (SOFC) and printed fuel cell that enable efficient use of energy resources with low cost and small footprint.

**Q 1** FCO Power, formerly known as FCO Co., Ltd, has a collaborative research with Fine Ceramics Center (JFCC).

**Q 2** FCO Power has patented technology responsible for “cost reduction” and “high volume output density” of SOFC stacks.

**Q 3** UTEC has been supporting FCO power right from the beginning when they were still in their theoretical concept phase. UTEC continues to support them in a wide range of fields such as funding, organizational development, business planning, negotiation with affiliated companies, introduction of technical advisers, etc.



Printed Fuel Cell®

Using Coryneform bacteria to produce biofuels and green chemicals

Non-edible biomass such as barks, stems, leaves being used as raw materials

A development base for the global expansion of “Green Earth Research Center”

# Green Earth Institute Co.,Ltd.

Green Earth Institute

## Using Corynebacterium to solve the pressing issues of the world such as energy crisis, food crisis, and climate change.

**Q 1** GEI was established as Japan's first public foundation spin-off, in order to make practical use of innovative biorefinery technology using bacterias called Corynebacterium which was developed by Research Institute of Innovative Technology for the Earth(RITE).

**Q 2** Traditional fermentation process requires biomass, but GEI can produce bio-fuels and green chemicals at low cost from non-edible biomass such as stems, leaves, and debris. Furthermore, by leveraging a wide range of domestic and overseas networks created through business activities so far, GEI has established a brand new platform for the bio-refinery industry.

**Q 3** UTEC has been supporting GEI since the pre-conception stage and continues to offer comprehensive hands-on support on different aspects of business.

# 908 Devices Inc

908devices

## Creating elegant Analytical ‘tools’ from mass spectrometry

**Q 1** The company started to commercialize innovative chemical analysis tools utilizing high pressure mass spectrometry invented by Professor Michael Ramsey of the University of North Carolina. Professor Ramsey is also a visiting professor at The University of Tokyo Global COE Program Mechanical Systems Innovation International Center.

**Q 2** It is the only company in the world that has succeeded in developing, manufacturing and selling truly hand-held mass spectrometers. 908 Devices has a strong core team that can deliver the value of new analysis methods and maximize the applications of compact mass spectroscopy devices.

**Q 3** Helping them out in partnerships and market penetration in Japan and South East Asia.


M908 : World’s First Handheld Mass Spectrometer.

An EV that makes use of the company's BMS is tested.

Exhibit at the 2014 Beijing Motorshow

## NExT-e Solutions Inc.

### Supplying core modules for EVs in China, the world's largest automotive market!

**Q 1** The company went through UTEC's incubation program UTEC EIR and later produced a prototype through grant funding from NEDO. Subsequently, the team came together to start the company after initial investment from UTEC.

**Q 2** The company consists of a Japanese team and Chinese team. The Japanese team uses its practical experience and knowledge of technical fields such as batteries (chemistry), circuitry (electronics), and automotive (machinery) to develop its unique technologies. The Chinese sales team has members with experience of studying at the University of Tokyo, as well as working for Japanese corporations.

**Q 3** UTEC partnered with the company right at its pre-conception phase and also plays the role of a board director. The initial prototype was developed using grant funding and UTEC's initial investment. UTEC has been guiding the company to improve its management strategy and execution that enabled the company to brush up the business plan.

## FLOSFIA INC.

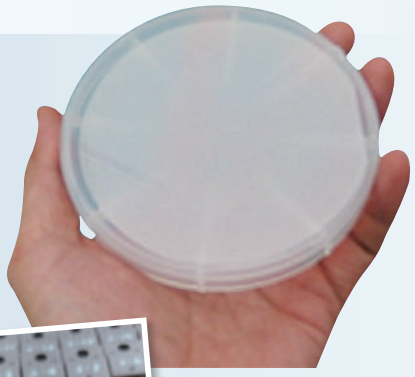
FLOSFIA

### Next Generation Power Devices from Gallium Oxide by MIST EPITAXY

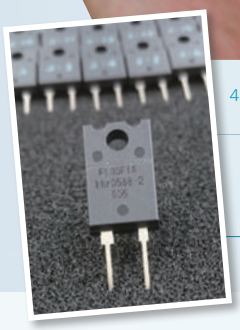
**Q 1** The founder of Flosfia discovered a new corundum crystal material by using the technology from Fujita Shizuo Laboratory of Kyoto University. He then joined hands with Kyoto University members to lead the commercialization of product.

**Q 2** Flosfia's core technology lies in Corundum type gallium oxide fabricated by the Mist CVD technology from Kyoto University. It allows them to make high performance and high-quality metal oxide films at a significantly lower cost through non-vacuum depositions. Gallium oxide is a material with an overwhelming potential as a power device, the company develops ahead of the world.

**Q 3** UTEC leveraged its experience of investing in several tech companies and mentored Flosfia by providing business acceleration. UTEC continues to advice and cooperates with the company on various aspects of research and development, team building, and capital policy.



4 inch gallium oxide single crystal wafer



Proprietary $\alpha$ -Ga2O3 SBD

Corporate firm (CEO Koike)

Paddy field sensor "Paddy Watch"

## Vegetalia, Inc.

vegetalia
Vegetation Science & Technology

### Next-generation food and agricultural business through IT

**Q 1** After being certified from the University of Tokyo EMP program, the founders discussed about various food, agricultural, health and environmental issues. The founders joined hands with experts from various fields in several universities, and started the company.

**Q 2** Vegetalia's proprietary products named Paddy Watch and Field Servers, allow farmers to monitor and manage their plants and agricultural lands by using sensors and ICT. The company has a strong executive team of finance professionals, lawyers, tax accountants, marketing experts and engineers. The CEO has the experience of listing his previous company on Tokyo Stock Exchange.

**Q 3** UTEC has supported the company by opening doors to research collaborations in universities, connections to government bodies, and providing advice on business planning and sales.

Questions

Q 1 Origin | Q 2 Strength | Q 3 UTEC Support

# Microwave Chemical Co., Ltd.

Microwave Chemical

## Revolutionize Chemical Industry by using a Novel Microwave Chemical Platform Technology.

**Q 1** Associate Professor Tsukahara of Osaka University aspired to innovative for the world from Japan. His strong zeal of starting a company in Japan that contributes to saving the environment formed the foundation of this startup.

**Q 2** The company's stellar team consists of various experts such as researchers and engineers in the fields of chemistry and physics. This team has developed a proprietary platform to utilize microwave technology.

**Q 3** UTEC was involved from the early stages of the company including funding their pilot. The company credits UTEC as one of the few investors who appreciated their technical capabilities and supported their plan of building the world's first microwave factory in a situation that most venture capitalists and bankers considered impossible for a start up to build its own factory.

World's first commercial-scale microwave chemical plant(3200 t/yr)


# Routrek Networks, Inc.

ROUTREK NETWORKS

## Development and sales of autonomous fertigation system for small- to midsized farmers

**Q 1** Agriculture in Japan and the world can be automated efficiently by using algorithms and IoT equipment. Based on the results of the crop cultivation research by Prof. Ozawa Seiji of Meiji University, agricultural equipment with AI replaced farmers' know-how, and remarkably reduced the amount of inputs (water, fertilizers, and labor)while increasing the yield.

**Q 2** Based on the reliable technical capabilities developed through the sales of M2M products, and by simultaneously acquiring agri-tech knowledge from Meiji University, the company is able to develop and sell reliable products in the field of agriculture. Penetrating target markets by partnering with overseas players

**Q 3** Guiding their business in the second business term, provision of know-how in overseas business, advising the management team and helping the IPO management structure.

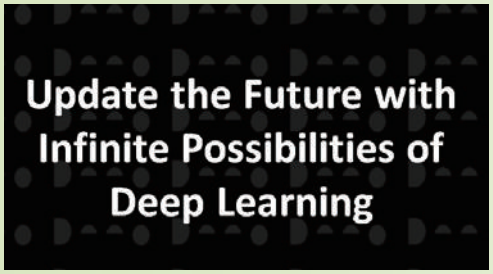
Automated fertigation system, priced at payback period of 12-24 months for average farmers

Increase in yield at 20-30% and more than 200% for experienced and new farmers, respectively (based on actual results)

UTEC Portfolio Companies

## Deep30 Limited Partnership

Updating the future together through the unlimited possibilities of deep learning




**Q1** Since coordination with hardware is so important for AI technologies, early-stage investment necessitates a higher risk than conventional investment for internet businesses. To enable this, an investor that can see the potential of realizing AI technologies, such as deep learning, is required.

**Q2** While acting as a bridge for industry-academia partnerships, Deep30 provides technological advice for societal implementation and back office support. It establishes integrated support structure that provides research development in the field of AI and, training for engineers.

**Q3** Guidance related to knowledge of business, legal, and financial affairs. required to establish and operate a VC fund. Introduction of potential customers and allies to the invested companies and follow-up funding.

## Blume Ventures – Fund III

Blume is India's foremost and most active tech-focused early stage VC firm.


Blume Numbers

**Q1** Founded in 2010 by Karthik Reddy and Sanjay Nath, Blume raised its first fund of $20 million in 2011, which was supplemented with an Opportunity Fund. It subsequently raised a $60 million Fund II in 2015 and a $80 million Fund III in 2018.

**Q2** Blume has pioneered the emergence of deep-tech ecosystem in India by investing in GreyOrange, Tricog, Locus, Stellapps, Carbon Clean Solutions, and many more innovation-heavy startups. Some of the key exits from Blume's portfolio include Taxiforsure (acquired by Olacabs), Zipdial (acquired by Twitter), Minjar (acquired by Nutanix) and E2E (partial exit with IPO listing on NSE Emerge).

**Q3** UTEC is Blume's largest LP from Japan and has partnered with Blume to launch an initiative called BUDHA (Blume UTEC Deep-tecH Accelerator) to invest in Indian startups working on deep science and technology, and empower them to emerge as winners in global markets.

# UTEC Portfolio Companies

MEMO

# TEAM

## Support from professionals with diverse backgrounds

### Partner

## TOMOTAKA GOJI

**President & Managing Partner**

Supervises fund operations and general venture investments

- Tomotaka ("Tommy") Goji is the Managing Partner of The University of Tokyo Edge Capital & The University of Tokyo Edge Capital Partners Co. Ltd. (UTEC), and the Managing Director of Japan Venture Capital Association. He co-founded UTEC in 2004 to focus on guiding its investments into seed/early stage startups, built the team, and raised four funds totaling over JPY 54 billion since its inception. 10 of portfolio companies were acquired and 9 went public.
- The funds are established on the premise of the Japanese law called "The Limited Partnership Act for Investment," which he authored in 1997-1998 at the Ministry of International Trade and Industry (now known as METI) of Japan.
- Tommy was selected to speak on panels in Davos, Switzerland for Japan's Prime Minister Office in February 2018, and in Geneva, Switzerland for United Nations UNCTAD World Investment Forum in October, 2018.

Tommy graduated from The University of Tokyo (UTokyo)'s Faculty of Law, and earned MBA at Stanford. He is currently a Ph.D. student at UTokyo's School of Engineering, researching on data science regarding academic start-ups.

## HIDEKI TSUJI

**Board Member**

Overcoming energy restrictions through innovation

- Hideki Tsuji focuses on investing in Japan-based open innovation that has a global impact.
- He helped expand the market for large-scale megawatt battery energy storage systems in North America and Europe to help the promote renewable energy after the Paris Agreement.
- He also helped expand EV-friendly core modules to China and Europe and commercialize next-generation technologies such as the next-gen SOFC-fueled cells in Japan and Europe.
- Prior to joining UTEC, he was a COO of an Internet software start-up. He supervised core intellectual property-focused strategic planning and business development, later acquired by Sony Corporation. Prior to that, he worked on environmental energy and innovative promotion policies including the Conference of Parties III (COP3) at the Ministry of International Trade and Industry.

Hideki graduated from the Faculty of Law at the University of Tokyo and worked at the Ministry of International Trade and Industry. He then joined Visionarts Inc. as a COO. Prior to joining UTEC in August 2006, he earned his Master's degrees from at University of Pennsylvania Law School, and London Business School.

## TED YAMAMOTO

**Board Member**

IT, robots, and global strategy

- Ted Yamamoto handles seed and early stage investments in the IT field while focusing on global strategy.
- He is an outside director of companies in which UTEC invests: Forty Two Labs Private Ltd. (Evie.ai), Locix Inc., Fyusion, Inc., and Mujin Inc. He also is an observer on the board of directors for Tier IV, Inc.
- He was an outside director for Autonomous Control Systems Laboratory Ltd. and Phyzios (investment terminated; acquired by Google in Feb 2013), and Naked Technology Inc.(investment terminated; acquired by Mixi in September 2011).

Ted joined Mitsui & Co., Ltd. in 1884. He left Mitsui Ventures after working in IT-related venture capital investment between Japan and the U.S. for 10 years. He joined UTEC in July 2008. He graduated from the Department of Physics at the University of Oxford.

asmi.jp
WASSHA
Green Earth Institute
vegetalia
Vegetation Science & Technology
お金のデザイン
startbahn
Aidemy
Fressets
30
FCO POWER
Exergy Power Systems
mujin
ACSL
FUSION
LOCIX
Evie
Tier IV
Intelligent Vehicle

## Keisuke Ide

IT, Life Science & Healthcare

- Keisuke Ide started his career in Silicon Valley as an engineer. He specialized in building business models and commercializing underlying technologies at a management consulting firm in Palo Alto called the McKenna Group.
- He returned to Japan after living in the U.S. for 15 years. He worked as a director of overseas business development at a semi-conductor design venture company, then entered the venture capital industry.
- His main projects include GLM (capital tie-up with O Luxe Holdings listed in the Shanghai stock exchange), DMP (Mothers: 3652), Phyzios (acquired by Google USA), and IID (Mothers: 6038).

Keisuke joined the venture capital industry after working in engineering, management strategy consulting, and at venture companies. Prior to joining UTEC in January 2015, he handled investment operations at Globis Capital Partners which has been a co-investor to UTEC. He earned BS from the Department of Engineering at Virginia University and MS from the Department of Engineering at Stanford.

## Maiko Katadae

Life Science & Healthcare, Medical Device

- Maiko Katadae focuses on the biotech and healthcare fields, taking charge of due diligence in life science technologies and investment operations for seed and early-stage venture enterprises.
- She invested in PeptiDream Inc. (listed in the TSE Mothers in June 2013 and the first section in December 2015) which utilizes special peptide manufacturing techniques to design new pharmaceutical drugs. She built management teams and was involved in business plans and development. She also served as an auditor.

Maiko graduated from the Department of Science at Ochanomizu University, completed the Master's program in Chemistry and PhD in Science at the Department of Biological Sciences, Graduate School of Science in the University of Tokyo. He was selected as one of the 100 Influential People of Japan in 2013 by the Nikkei Business Magazine and won the Semi-Grand Prize for Woman of the Year 2014 by Nikkei.

## Naonori Kurokawa

Physical Science & Engineering,
Life Science & Healthcare

- Naonori Kurokawa engages in seed and early-stage venture companies utilizing physical and chemical science technologies.
- He works with a wide range of startups including the University of Tokyo-based company and other domestic university-related companies. He also works with international deals.
- He is an outside director of companies in which UTEC invests: Microwave Chemical Co. Ltd., Flosfia Inc., Quantum Biosystems Inc., Molcure Inc., Provigate Inc. and immunoSCAPE Pte. Ltd.
- Prior to joining UTEC, he worked at a venture capital called ARCH Venture Partners which utilizes academic research from all over the U.S.

Naonori was a researcher at the Laboratory of Environmental Technology, Ricoh, Japan. He joined ARCH Venture Partners while studying abroad at the University of Chicago. He joined UTEC in August 2009. He earned his MBA from the University of Chicago and Ph.D. from School of Engineering at Osaka University.

ROUTREK NETWORKS
SEAOS
Algal Bio
AI inside
GlyTech, Inc.
CREWT
TAGCyx Biotechnologies
PharmaBic
SOCIUM
elixirgen therapeutics
Microwave Chemical
908devices
FLOSFIA
QB
MOLCURE
PROVIGATE sustainnovation for healthy living
immunoSCAPE
NOHLA THERAPEUTICS
CAMBRIAN ROBOTICS

# TEAM

## Partner

### ATSUSHI USAMI

Life Science & Healthcare, Medical, Agriculture

- Atsushi Usami focuses on seed/early-stage life science investments. He currently serves on the boards of Repertoire Genesis Inc., Goryo Chemical Inc., EditForce Inc., MiRTel Co., Ltd., Epigeneron Inc., and Bugworks Research Inc.
- He is a JST START promotor and a NEDO TCP mentor. He helps with commercialization and teaches seminar on industry-academia collaboration at colloquiums in the Graduate Program for Leader in Life Innovation at the University of Tokyo.
- Before joining UTEC, he worked as a strategy consultant at Mitsubishi Research Institute (MRI), serving pharmaceutical, medical device and other manufacturing companies across a range of areas including mid-to long-term management planning and new business development.

Atsushi studied pharmacology and neuroscience and received a Ph.D. in pharmaceutical sciences from the University of Tokyo and is a pharmacist. He worked as a consultant at MRI before joining UTEC in October 2013.

### NORIAKI SAKAMOTO

**Board Member**

IT, Life Science & Healthcare, Finance

- At METI, Nori Sakamoto was engaged in developing the acts for SME finance and home appliance recycling. After leaving METI, he joined his family business in apparel logistics, establishing and organizing businesses.
- At McKinsey & Company, he worked on projects for pharma, medical devices, auto, high-tech, consumer goods and retail companies in Japan, Southeast Asia, and Europe, supporting Marketing & Sales, Supply Chain Management, R&D and M&A strategy for 4+ years.
- He provided support for the 2014 MIC I-Challenge!, selection of the 2015 NEDO TCP winner and runner-up, and 2016 METI IoT Lab Selection Grand Prix as well as the grand prize in Entrepreneurship Challenge 2017.

Noriaki graduated from the Faculty of Economy from the University of Tokyo and entered METI. He left METI in 2008 and was appointed vice president of a logistics company. He earned MBA from Columbia University. He was an engagement manager at McKinsey & Company and then joined UTEC in August 2014.

## Associate

### YUHI KATAI

IT, Consumer

- At CyberAgent Inc., Yuhi Katai worked in IT matching service on algorithm analysis and rewriting as well as marketing. He was involved in CyberW as an acting chief executive and tried to make a new service to connect internet experience and real-world experience.

Yuhi graduated from the Faculty of Law at The University of Tokyo. After an internship at CyberAgent, Inc., he was involved in a startup as an acting chief executive and then joined UTEC.

GlyTech, Inc.
REPERTOIRE GENESIS
LIQUID
ZENMU TECH
CAMBRIAN ROBOTICS
Aidemy
五稜化薬株式会社
MiRTeL
WASSHA
igs institution for a global society
igs institution for a global society
D-30
E4TH EditForce
Epigeneron
レトリバ
Fressets
startbahn
FINATEXT
tricog
bugworks
FASHION POCKET
JDSC japan data science Consortium
BLUME VENTURES

## Venture Partner

### Kiran Mysore

Seed/early stage Investments in AI. Healthcare & IT

- Kiran Mysore was the head of India Operations at Deloitte Tohmatsu Venture Support (DTVS) Japan. He supported over 50 deep-tech Asian startups by connecting them with Japanese corporations and also worked closely with METI Japan, to lead a project called CEATEC IoT Acceleration for Asian startups.
- Prior to that, he co-founded a student-led social enterprise named 'Kriya'. Before coming to Japan, he led Business Analytics at Cleartrip, a tech-enabled travel startup in India.
- Kiran has been selected as one of the Young Global Leaders by Stanford ASES (USA), St. Gallen Symposium (Switzerland) and Yenching Academy (China).

Kiran graduated with a Master's in Technology Management from The University of Tokyo in 2016. At UTokyo, his specialization was Deep Learning and his research paper was published in PICMET 2017.

### Atsushi Shimada

Medical, Pharmaceuticals, Life Science & Healthcare

- Atsushi Shimada has more than 20 years experiences in business development and licensing in the pharmaceutical industry. He also has diverse experiences in intellectual property work as a Patent Attorney. As a business development executive, he has lead triple-digit-value deals locally and globally managing multi-discipline team.
- He worked for Takeda Pharmaceuticals USA and Japan as a director and Bayer Pharmaceuticals Japan where he lead in/out licensing, strategic pipeline development, and alliance management work, and was engaged in the M&A deals with Amgen Japan KK and Nycomed at Takeda Japan.

Atsushi started his career in IP Law Firm from 2001 then joined Takeda Pharmaceutical company Japan in 2006 where he spent three years from 2011 to 2014 in the international HQ of Takeda Pharmaceutical International in Illinois USA. He jointed UTEC in 2018 after working for Bayer Pharmaceuticals Japan from 2014 to 2018. He graduated from Osaka University (Engineering) and ie business school and is a registered patent attorney.

## HR Manager

### Hirofumi Oki

Human Resources

- Hirofumi Oki is an HR strategy manager for investments at UTEC and provides support in manager recruitment, organization HR design, recruitment strategies, branding, and other HR-related aspects of investment.
- He established a healthcare venture team and introduced managerial HR at his previous work in a British recruitment firm. He provided a wide range of HR for the healthcare field from business to research, factories, and production, also working as a career consultant.
- He provided recruitment support to startup companies from when he was a student and gained experience in recruitment, employment branding and organization HR design.

Hirofumi was involved in a start-up, specializing in organization and HR consultation while still a student. He joined UTEC as an HR manager after working in HR recruitment for web/IT industry and recruitment consultation for healthcare ventures.

tricog
bugworks
BLUME VENTURES
Epigeneron
Repertoire Genesis
SOCIUM
PharmaBic
NOHLA THERAPEUTICS
immunoSCAPE



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