

**236th Business Plan Presentations Held on April 19, 2022****SHINYOKOHAMA-3CHOME-DAIHOI****1. CoreTissue BioEngineering Inc. President Dr. Yoji Jokura** <https://www.coretissue.com/?lang=en>

Established in November 2016 Capital stock:USD\$ 100,000

CoreTissue BioEngineering aspires to medical care for the execution of reconstructive surgery without taking tissue from other spots on the patient's own body. Under this vision, it is developing transplantation-use grafting (medical devices) utilizing decellularized living tissue. Its lead pipeline is artificial ligaments for reconstruction of anterior cruciate ligaments. Many patients requiring ligament reconstruction have no choice but to undergo the conventional procedure, which entails extraction and processing of pieces of tissue from the patient's own healthy hamstring tendon or patellar tendon, and their transplantation in the knee. This procedure imposes a heavy burden on the patient's body. Besides the development of these artificial ligaments, it is pursuing that of medical devices adapted to the reconstruction of the musculoskeletal system using its platform.

【Re-Cap】 CoreTissue BioEngineering is a venture company that originated in Waseda University. The recovery rate for athletes who undergo anterior cruciate ligament (ACL) surgery is reportedly around 65 percent after about three years. The ACL reconstruction market is forecast to reach about 250 billion yen in Japan and the United States taken together. Dr. Jokura said that he wanted his company to work closely with athletes and help them achieve their best performance, and also to revolutionize the related medical care. In his presentation, he showed a video on his company's technology and its clinical application that was easy even for participants without specialized knowledge to comprehend, and therefore deepened their understanding.

**2. TOMOMI RESEARCH Inc. President Dr. Tomomi Sato, Presenter Dr. SeongHun Choe**

<https://www.tomomi-research.com/>(Japanese)

Established in May 2011 Capital stock:USD\$ 30,000

Taking aim at automating inspection of external appearance in the manufacturing industry, Tomomi Research developed illumination and image processing technology capable of detecting even shallow scratches on glossy products.

In fiscal 2021, it commercialized and began selling a table-top external appearance inspection system applying artificial intelligence. The system has a lower learning cost thanks to its original AI, and is also suitable for high-diversity, small-lot production. The company is capable of providing everything from component design to the software and hardware matching the particular products, by itself. Going forward, Tomomi Research intends to develop types for in-line use (including automated models) and portable types that could inspect products anywhere. At present, it is receiving inquiries from manufacturers of not only metal products but also resin products, textiles, leather goods, and steel products. It is expanding the scope of its business to encompass automobiles, semiconductors, and pharmaceuticals.

【Re-Cap】 Tomomi Research was founded by two persons with doctoral degrees in engineering (Dr. Sato, its president, and Dr. Choe). It developed an AI external appearance inspection device that "replaces the five senses" and combines illumination technology, image processing, and abnormality detection using AI. The use of this device offers various advantages; it reduces detection failures to zero because it makes the targets of detection visible, and the application of AI eliminates variation in judgments. Furthermore, it enables access to products that have thus far not been amenable to automated inspection, and can also handle high-diversity, small-lot production by means of AI.

**3. Synqroa Co.,Ltd. President Ms. Kaori Ayabe** <https://www.synqroa.co.jp/en/>

Established in April 2011 Capital stock:USD\$ 600,000

Synqroa's patented PHASERAY Technology is a landmark illumination device. Its light distribution control consisting of a special polarizing plate and medical illumination technology makes it possible to remove all sorts of object shadows and glare. It delivers images that do not require digital processing and are effective for AI learning in automation of inspections for quality. The company's products are used for detection of foreign substances in the pharmaceutical and food product industries; scratches, burrs, and uneven painting in the auto industry; and soldering defects, cracks, scratches, and oxidation or corrosion in the semiconductor industry.

At present, Synqroa has received orders for customized automated illumination devices from three major automakers, leading food product manufacturers, and other companies. In a new project, it is producing a prototype device for building into smartphones, so ordinary consumers could readily take sharp photos of products at flea markets etc. For the future, it is going to promote application not only in industrial fields but also in the areas of AI medical services and endoscopy.

【Re-Cap】 Illumination technology in the industrial field has thus far not exhibited significant innovation or advancement, due to the obstacles presented by light-derived halation and shadow. Under these circumstances, Synqroa has set about innovating illumination, and is planning to enter the fields of mobile business and medical illumination going forward. Once this technology is built into smartphones, it will be available for everyday use and become a familiar feature. The medical illumination market is forecast to amount to about 500 billion yen worldwide. Ms. Ayabe said that the company was considering IPO further down the road.



《Impressions》 The companies which made presentations this time were bringing about innovations in different fields and striving to create new markets. We are looking forward to their future activities.

We have recently received a number of requests from companies wishing to present at the conference, if you are interested in presenting, we would appreciate it if you contact us as soon as possible.