

iLAC Co., Ltd.
Robotic Biology Institute Inc.
Crecon Genomics Inc.

Establishment of TGMC, an Innovative Genome Analysis Service Provider - Providing epigenetics analysis solutions utilizing advanced technologies -

1: Overview

Three companies, NGS Sequencing Provider iLAC (President & CEO Takaaki Sato), Robotic Biology Institute (RBI) (President & CEO Kenji Matsukuma), and Crecon Genomics (CG) (President & CEO Toshiaki Ito), have formed an organization, The Tsukuba Genome Information Manufacturing Consortium (TGMC) in order to jointly provide cutting-edge genome analysis services. Amid a push by the Japanese government to utilize and promote whole genome information in the medical field and in accordance with the latest domestic and international research, TGMC aims to contribute to the early detection, prevention, and treatment of diseases such as cancer based on personal genome information. By combining the expertise and technologies of each company, TGMC will contribute valuable resources and act to ease the logistical barriers to complex genome analysis that is essential for genomics based cancer treatment.

2: Background

Recent advances in genome research have led to an increasing number of opportunities to utilize genomic information to determine drug efficacy and treatment strategies for various diseases.

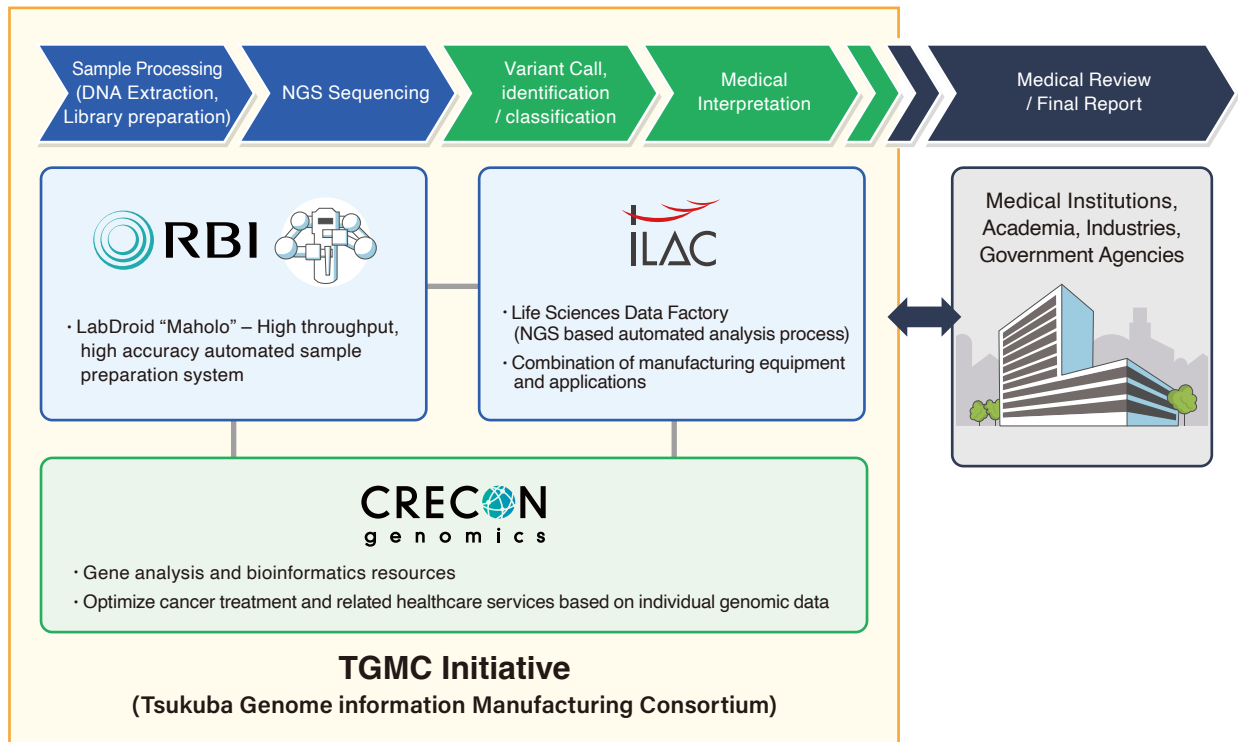
In addition to the study of gene mutations (changes in the sequences of bases that make up a gene), epigenetics (the process of turning genes on and off) is also emerging as field which can contribute to a more accurate diagnostic process and to the elucidation of new treatment strategies.

However, highly accurate epigenetic analysis requires complex and time consuming experimental operations, in turn increasing the burden on the technicians who conduct the experiments and leading to potential quality control concerns.

TGMC will seamlessly integrate iLAC' s NGS (Next Generation Sequencing) resources, RBI' s LabDroid "Maholo" , a general-purpose, high throughput, high accuracy humanoid robot utilized in medical diagnostic testing, and the high level of bioinformatics expertise and data analysis capabilities of CG in order to dramatically improve the efficiency and accuracy of the entire process from sample collection, to analysis, and data interpretation.

We expect that the establishment of TGMC will contribute greatly to medical facilities which provide genomics based cancer services as well as research projects in this field. TGMC itself also aims to contribute to the development of genomics based cancer medicine and to research projects by providing gene and epigenetics analysis solutions developed by TGMC as well as contracted analysis services.

Analysis Pipeline



3: Company Information

【About iLAC】

Company name iLAC Co., Ltd.

Representative Takaaki Sato, President & CEO

Founded August 15th, 2012

iLAC, in aiming to promote and realize true "Precision Medicine", provides high-throughput genome analysis, expression analysis, and genome structural analysis for multiple sample types leading to the most accurate selection of treatment for each individual.

iLAC also provides an omics analysis network including proteome and metabolome analysis, and have established a system to evaluate a variety of pathological conditions using multidimensional markers. By utilizing accurate and extensive high-value-added databases we hope to contribute to the discovery of new therapeutic targets, the realization of health and longevity in an aging society, and to decreasing medical costs in the future.

URL : <http://www.i-lac.co.jp/>

【About RBI】

Company name Robotic Biology Institute Inc.

Representative Kenji Matsukuma, President & CEO

Founded June 22nd, 2015

RBI has developed a general-purpose humanoid robot, LabDroid “Maholo”, to accelerate research in the life sciences field. Maholo has dual arms with the same degree of freedom as those of humans, allowing it to repeatedly reproduce the techniques of skilled human operators, optimize techniques, and perform highly accurate preanalytical processing. By working together with LabDroid “Maholo”, researchers can streamline the enormous cost and time required for cutting-edge research and increase their intellectual productivity.

URL: <https://rbi.co.jp/>

【About CG】

Company name Crecon Genomics Inc.

Representative Toshiaki Ito, President & CEO

Founded April 12th 2023

Established by Crecon Research & Consulting, a company with over 65 years of experience in building databases centered on pharmaceutical sales and distribution, Crecon Genomics (CG), is a start-up company that aims to establish and disseminate new diagnostic methods utilizing the latest technologies in preventative medicine and DNA analysis technology. CG aims to contribute to disease prevention, selection of treatment, and development of therapeutic drugs based on individual genomic information. As the importance and societal significance of cancer prevention increases, our company aims to establish and disseminate new diagnostic methods in cooperation with domestic and international, research institutes, medical institutions, and partner companies to achieve the vision of *more accurate, faster, treatment that can reach more people*.

URL : <https://crecon-genomics.co.jp/>

Contact Information

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