iNTRODB, the world’s first integrated database system for drug discovery in neglected tropical diseases, receives the Minister of Health, Labour and Welfare Award of the 11th annual Merit Awards for Industry-Academia-Government Collaboration

- The database is honored for accelerating worldwide research efforts to develop drugs effective for the treatment of NTDs and improve access to health care in developing countries-

Tokyo, Japan, August 19, 2013 – Tokyo Institute of Technology (Tokyo Tech), the University of Tokyo, and Astellas Pharma Inc. (Tokyo: 4503, "Astellas") announced on August 19 that the iNTRODB (Integrated Neglected Tropical disease Database), the world's first integrated database developed to assist with the drug discovery research for neglected tropical diseases (NTDs) has received the Minister of Health, Labour and Welfare Award of the 11th annual Merit Awards for Industry-Academia-Government Collaboration* granted by the Cabinet Office of Japan.

The outline of the award is as follows:

**Award Title:** The Minister of Health, Labour and Welfare Award of the 11th annual Merit Awards for Industry-Academia-Government Collaboration

**Project Title:** Development of drug research database for neglected tropical diseases (NTDs)**

**Winners:**
- Professor Yutaka Akiyama, Department of Computer Science, Graduate School of Information Science and Engineering, Tokyo Institute of Technology
- Professor Kiyoshi Kita, School of International Health, Graduate School of Medicine, the University of Tokyo
- Tropical Diseases Research Team, Astellas Pharma Inc.

**Reason for award:** Professor Yutaka Akiyama and his team at Tokyo Tech, Professor Kiyoshi Kita and his team at the University of Tokyo, and Astellas’ Tropical Diseases Research Team collaborated to develop the iNTRODB, an integrated database containing detailed information about causative organisms of NTDs, to support drug research for the treatment of these diseases. The iNTRODB has supported researchers who are studying to discover and develop effective drugs for NTDs and has accelerated its research. The efforts made by the three parties are a great example of the close collaboration of industry, academia, government, and international non-profit sector to solve global challenges.

The iNTRODB is the world's first integrated database that assists researchers to discover new drugs for the treatment of NTDs, and has been built on the basis of the supercomputers and expertise in information technology at Tokyo Tech, the genetic and biological data and knowledge about protozoa at the University of Tokyo, and the knowledge and expertise on drug discovery and research at Astellas. The iNTRODB contains genomic data on trypanosomatid protozoa that cause NTDs (about 27,000 entries), data on protein structures (about 7,000 entries), and data on related compounds (about 1,000,000 entries). The database has been carefully designed to serve researchers who wish to access adequate information to determine whether a candidate target protein or candidate drug compound is suitable for further investigation. It is open to all researchers in the world to encourage the research community to create effective therapies for patients with NTDs due to protozoa as soon as possible.

The iNTRODB was created as a part of the collaborative research project for new drug treatment for NTDs by 6 institutes in Japan i.e., Tokyo Tech, the University of Tokyo, Astellas, Nagasaki University, the National Institute of Advanced Industrial Science and Technology (AIST), and the High Energy Accelerator Research Organization (KEK), as well as the Drugs for Neglected Diseases Initiative (DNDi), a non-profit drug research and development organization. There are still many diseases with significant unmet medical needs in the world, and NTDs are among such diseases. NTDs are significant public health problems around the globe, and international approaches have been implemented to treat NTDs. The collaborative research project for NTDs in Japan has targeted to find new drug candidates for leishmaniasis (estimated patient number: 12 million patients), Chagas' disease (8-9 million patients) and human African trypanosomiasis (300,000 patients) for which no effective treatments are available yet.

* Merit Awards for Industry-Academia-Government Collaboration
The Merit Awards for Industry-Academia-Government Collaboration were established in 2003 by the Cabinet Office of Japan to honor each year best practices in collaborative activities by university, public research institutions and companies that promoted progressive approaches and made significant results, and encourage contributions to the industry-academia-government collaborative activities in Japan. The Minister of Health, Labour and Welfare Award of the Merit Awards for Industry-Academia-Government Collaboration has recognized significant achievements and contributions to the pharmaceutical and medical device industry.

**Neglected Tropical Diseases (NTDs)**
NTDs are a group of tropical infections caused by virus, bacteria or parasites that are especially endemic in...
low-income populations in developing countries. It is estimated that more than 1 billion people are affected by the 17 NTDs currently targeted by the World Health Organization (WHO)**. As most people who are affected by NTDs cannot afford proper treatment or drugs, NTDs are a significant public health concern that affects economic productivity and causes poverty in affected nations.

***The 17 NTDs listed by the WHO are Buruli ulcer, Chagas disease (American trypanosomiasis), cysticercosis, dengue/severe dengue, dracunculiasis (guinea-worm disease), echinococcosis, foodborne trematode infections, human African trypanosomiasis, leishmaniasis, leprosy, lymphatic filariasis, onchocerciasis, rabies, schistosomiasis, soil transmitted helminthiasis, trachoma, endemic treponematoses (including yaws)

**Tokyo Institute of Technology (Tokyo Tech)**
Tokyo Institute of Technology is the Japan's largest national university of science and technology with an over 130 years of history, and has produced graduates who have excelled in engineering and technology. Tokyo Tech has three schools, i.e., Schools of Science, Engineering, and Bioscience & Biotechnology, six graduate schools, i.e., Graduate Schools of Science & Engineering, Bioscience & Biotechnology, Interdisciplinary Science & Engineering, Information Science & Engineering, Decision Science & Technology, and Innovation Management, and five research institutes. For further information about Tokyo Tech please visit the university website at http://www.titech.ac.jp/english/index.html.

**The University of Tokyo**
The University of Tokyo was established by merging Tokyo Kaisei School and Tokyo Medical School in April 1877 as the first national university in Japan. As a leading research university, the University of Tokyo offers undergraduate and graduate courses in the Humanities, Social Sciences and Sciences, and provides students in Japan and around the world with a rich and varied academic environment that ensures opportunities for both intellectual development and the acquisition of professional knowledge and skills. For detailed information about the University of Tokyo please visit the university website at http://www.u-tokyo.ac.jp/en/

**Astellas Pharma Inc.**
Astellas' raison d'être is to contribute toward improving the health of people around the world through the provision of innovative and reliable pharmaceutical products. Astellas has approximately 17,000 employees worldwide. The organization is committed to becoming a global category leader in urology, immunology (including transplantation) and infectious diseases, oncology, neuroscience, diabetic complications, and kidney diseases. Astellas is committed to improving access to healthcare in developing countries through its partnership initiatives called "Access to Health". As part of these initiatives, Astellas is committed to undertake an initiative of drug discovery for patients infected with and suffering from NTDs in the world by utilizing its know-how and assets of drug discovery research.

For more information on Astellas Pharma Inc., please visit the company website at http://www.astellas.com/en/.

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