## JAPAN TECHNOLOGY GROUP ACCESS TO INNOVATION NORTH AMERICA - ASIA - EUROPE

### **Request for Proposal**

# Seeking drug discovery project for accelerate hit generation of small molecule

A midsize Japanese pharmaceutical company having an R&D with a consistent manufacturing capability is seeking **drug discovery project** for accelerating hit generation of small molecules. This company is part of a conglomerate enterprise which covers materials, home medical care and IT, and globally conducts business activities through an overarching view of the healthcare industry to provide an integrated solution for future social issues.

The purpose of this proposal request is to improve drug-discovery technology through collaborative projects and create original pharmaceutical products by utilizing an open innovation approach, moreover enhance their business model of pharmaceutical business over fundamental technology advancement.

The company is offers a wide range of opportunities including collaborative research/development, out-licensing of asset/technology and possible funding opportunity in order to maximize results creation and advance fundamental technologies.

#### **Projects:**

The company is seeking <u>drug discovery project</u> for collaborations in the area of <u>Protein Interaction (PPI)</u>. They would like to identify and evaluate <u>research projects</u> in hit to lead stage utilizing the following fundamental technologies.

#### Special interest areas:

- 1. Al (Artificial Intelligence), Big Data analytics
  - -Technology applicable in the future to designing a compound that targets PPI (Protein-Protein Interaction) interface or prediction of targetable PPI, etc.
- 2. DEL (DNA-Encoded Chemical Libraries)
- 3. Cryo-EM (Cryo-electron microscopy)
- 4. De novo design of peptide/mini-protein
  - To design peptide or mini-protein using in silico approach to improve efficiency of wet synthetic process, etc.
- 5. FBDD (Fragment-Based Drug Discovery/Design)
- 6. Multiple DDSs (Drug Delivery Systems)
  - -Nanoparticle to transfer middle-molecular compound and higher, such as peptide or miniprotein into the cell.
  - -Other DDS technologies.
- 7. SMI-seq/IDUP (Single-Molecular-Interaction sequencing/Interaction Determination using Unpurified Proteins)
  - -Technology that enables improvement of drug discovery productivity by screening compounds that bond to more than one kind of protein at once by using DNA barcodes.
  - -The company also anticipates technology that can accelerate drug discovery research by being combined with DEL (DNA-Encoded Chemical Libraries

#### Modality:

- Low-molecular compound
- peptide
- mini-protein

Note: \*Cancer shall not be eligible as a target disease.

\*Proposal for only technology without project shall be lowered the priority of evaluation.



#### Items to be submitted:

- Overview of the project implemented or planned (status, plan, etc.)
- Overview of the technology (features, competitive advantage, etc.)
- Overview of the organization and prior results
- Desired collaboration type (if any)
- Other

#### Evaluation items (but not necessarily cover all the items for the initial evaluation):

The client will evaluate all responses with the following criteria.

- Proposed project/organization overview, performance
- · Feasibility of achieving the target specifications
- Economic potential of concept
- Possibilities of ownership (exclusive right, priority right, etc.)
- Related experiences

#### **Notes:**

- By submitting a proposal, you declare that the proposal does not and will not contain any kind of confidential information.
- Your Proposal should be an executive summary in English (free format, within 5 pages, including figures and tables).

#### Application method, period, inquiry:

- Apply and make inquiries via the e-mail at myamamoto@japantechnologygroup.com
- Heading "Attention: Y18L011 Mitsu Yamamoto, Japan Technology Group"
- Closing date for application: <u>September 24, 2018</u>
- JTG will provide a feedback for all applicants by the end of November, 2018 by e-mail

