

SCOPE OF WORK -- SOFTWARE FOR BIOINFORMATICS WGS DATA ANALYSIS

REQUEST DATE: November 2, 2019

(1) BACKGROUND/STATEMENT OF NEED

CDC-Thailand under the Division of Global Health Protection (DGHP), Laboratory branch has conducted a research project from pathogenic bacterial isolates. The research project requires Illumina Next Generation Sequencing (NGS) instrument to identify bacterial that cannot identify by routine biochemistry method and look for antibiotic resistance genes for known pathogens. In order to work on Bioinformatics NGS data analysis on the same platform with CDC/HQ and all US and International PulseNet networks. The software will enhance a capability of combining database and analytical platform to be performed in single workflow regardless of what organism the lab is working on.

(2) OBJECTIVE(S)

The objective is to purchase a software license for laboratory research project to perform Whole Genome Sequencing (WGS) data analysis in order to identify bacterial that cannot be identified by routine biochemistry method. Software license is required to be installed in the high throughput computer to analyze the NGS data which will be generated from existing Illumina Next Generation Sequencing (NGS) instrument at DGHP Laboratory.

(3) REQUIREMENTS : 1 software license including :

- (a) Product must be able to perform WGS for data analysis which including following modules;*
 - *Fingerprint data*
 - *Character data*
 - *Sequence data*
 - *Tree & Network inference (Clustering)*
 - *Classifiers & Identification*
 - *Genome Analysis Tools*
 - *Credit to analysis 3000 credits*
- (b) Product must be a perpetual standalone license software*
- (c) Product must be compatible with Illumina Next Generation Sequencing (NGS) instrument*
- (d) Product must be shipped by air shipping to;*
American Embassy Bangkok
120-122 Wireless Road, Pathumwan,
Bangkok 10330 Thailand
Attn: CDC/DGHP Laboratory

(e) Vendor must be able to provide technical assistance and support for the software installation and configuration.

(4) OTHER ADDITIONAL INFORMATION

- *Vendor must be authorized to provide product in Thailand.*
- *Vendor must be able to deliver in good conditions and meet delivery date requirements.*
- *Payment will be made after delivery with 30 days credit.*
- *Vendor must be able to provide technical assistance and support for the software installation and configuration.*