

# PreM *cafe*

@ National Biobank of Thailand



Discover your perfect coffee match.  
Our precision medicine service provides  
personalized selections.



# OUR RECIPE



## Coffee



- Enrollment-Phenotips-Specimen Management System (SMS)
- NGS analysis : Human WGS,WES
- SNP Array analysis
- Variant Annotation and Prioritization Platform (V@PP)
- Thai variant database

## Tea



- Polygenic risk score prediction
- Prediction model development
- Adverse Drug Reaction (ADR)-HLA Typing

## Italian soda



- Whole genome sequencing: Bacteria, Virus, Fungi, Microbiome
- Gut Wellness Prediction
- Antimicrobial resistance analysis

## Smoothies



- Antipeptide Characterization
- Bioactive Compound Identification



# OUR BARISTA



## Dr. Chumpol Ngamphiw

Genome Data Bank team

### Expertise

- Proficient in bioinformatics and high-performance computing
- Expert in genome data analysis, genomic databases and IT platform development

### Project Involvement:

- HPC for Life sciences service.
- IT ecosystem for genomic medicine : Enrollment, Phenotips, Specimen Management System (SMS), Secure Data Environment (SDE), Variant Annotation and Prioritization Platform (V@PP), and Thai variant databases for Genomics Thailand project.
- Data analysis : WGS, WES and Long reads
- THIP : Thai Health Information Portal



"Ecosystem for Genomic Medicine"





# OUR BARISTA

“Bridging wet lab and dry lab”



## Dr. Rujipat Wasitthanasem

Business service team

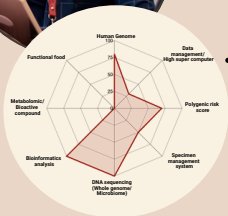
### Expertise

- Proficient in molecular biology laboratory techniques.
- Expertise in genetic sequencing and genomics of bacteria and viruses.



### Project Involvement:

- Developing a comprehensive database to manage public health surveillance data, including hepatitis virus in Phetchabun and pathogenic bacteria genomics.
- Providing gut health assessments based on Thai population data.



## Dr. Vorthunju Nakhonsri

Business service team

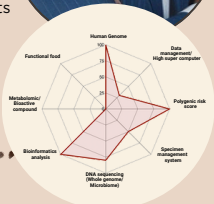
### Expertise

- Proficient in bioinformatics and high-performance computing for large-scale genomics.
- Expert in genetic data analysis and prediction model for research and diagnostic services

### Project Involvement:

- The Variant Annotation and Prioritization Platform (V@PP) for the Thai Genomics project.
- Thai Genome Reference database for querying the frequency of genetic variants in the Thai population.
- Cell-free DNA methylation analysis
- Polygenetic risk scores model for breast cancer, hypertension, and diabetes.

“Bridge bioinformatics and data science”





# OUR BARISTA

“Drug Developer”



## Dr. Nitipol Srimongkolpithak

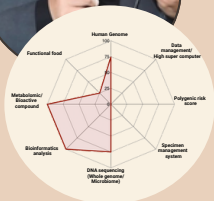
Frontier Biodesign and Biomolecular Engineering Research Team

### Expertise

- Active Pharmaceutical Ingredients (API)
- Drug synthesis, discovery, and development.
- Organic Synthesis

### Project Involvement:

- Developed drug-like analogs for anti-lung cancer and anti-SARS-CoV-2.
- Developed synthetic procedures for P218 and P218-OH in drug development.
- Investigated the roles of SCFAs, NHE3, and TRPV6 in enhancing intestinal calcium transport.



## Dr. Sittiruk Roytrakul

Functional Proteomics Technology

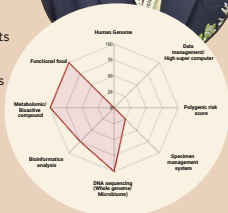
### Expertise

- Peptidomics
- Proteomics
- Metaproteomics
- Bioactive peptide discovery
- Molecular biology

### Project Involvement:

- Peptide barcode for
  - identification of microorganisms
  - diagnosis and prognosis of cancer and oral disease in human
  - diagnosis and prognosis of cancer, heart disease and polycystic kidney disease in pets
- Peptide and protein biomarker for
  - diagnosis and prognosis of cancer and alzheimer's disease in human
  - diagnosis and prognosis of cancer, heart disease and polycystic kidney disease in pets
- Molecular mechanism of
  - drug resistance in bacteria
  - antibacterial, anticancer and antiviral agents both in vitro and in vivo
- Metaproteome of gut resistome and gut microbiome associated with atopic dermatitis and chronic kidney disease

“From Molecules to Medicine”







## talk with CEO

**“Our mission is to empower precision medicine in Thailand by leveraging advanced technology to analyze genomic data, develop predictive models, and improve patient outcomes.”**

**Sissades Tongsim**

Director of National Biobank of Thailand

Scan me for more  
information





# OUR PARTNER



## Leading the Way in Precision Diagnostic:

Our genomic medicine service cutting-edge technology and a deep understanding of bioinformatics to bridge the gap between wet lab research and clinical applications.

