

Bioinformatics Institute (BII)

Translational Research Division

Name	Designation	Project	Degree Awarded By
Dr Ng Siew Bee ngsb@bii.a-star.edu.sg	Senior Principal Investigator	Natural Product Biology Group Discovery and mode-of-action study of bioactive compounds, biosynthesis of secondary metabolites.	NTU
Dr Yoganathan Kanagasundaram yoganathank@bii.a-star.edu.sg	Principal Investigator	Natural Product Chemistry Group Metabolomics, Purification and structure elucidation of bioactive and novel compounds.	NTU / NUS
Dr Prakash Arumugam prakasha@bii.a-star.edu.sg	Principal Investigator	Chemical Genomics Group 1. Chemogenomic profiling in mammalian cells using Genomewide CRISPR/Cas9-based Knockout (GeCKO). 2. Mechanism of Target of Rapamycin Complex 1 (TORC1) Signalling. These projects will be jointly supervised by Dr Prakash Arumugam and Prof Chandra Varma.	NTU / NUS

Biomolecular Function Discovery Division

Name	Designation	Project	Degree Awarded By
Dr Birgit Eisenhaber birgite@bii.a-star.edu.sg	Principal Investigator	Gene Function Prediction / Annotator Group Discovery of biomolecular mechanisms with sequence analysis	NTU / NUS

		and data mapped onto genomes, analysis of omics clinical data, prediction of gene function from sequence.	
Dr Frank Eisenhaber franke@bii.a-star.edu.sg	Executive Director & Division Head	Gene Function Prediction / Annotator Group Discovery of biomolecular mechanisms with sequence analysis and data mapped onto genomes, analysis of omics clinical data, prediction of gene function from sequence.	NTU / NUS
Dr Sebastian Maurer-Stroh sebastianms@bii.a-star.edu.sg	Senior Principal Investigator, Adjunct Asst Prof at DBS (NUS)	Computational sequence and structure analysis to combat viral infectious diseases.	NUS

Biomolecular Modeling and Design Division

Name	Designation	Project	Degree Awarded By
Dr Chandra Verma chandra@bii.a-star.edu.sg	Senior Principal Investigator, Adjunct Professor DBS (NUS), Adjunct Professor SBS (NTU), Adjunct Principal Research Scientist (SERI)	Atomistic Simulations & Design in Biology Group Molecular modelling & simulations of biomolecular mechanisms; design of drugs, peptides, proteins, enzymes, antibodies in oncology; inflammation, antimicrobials. Machine learning/AI in drug design.	NTU / NUS
Dr Hao Fan fanh@bii.a-star.edu.sg	Principal Investigator, Adjunct Asst Prof at DBS (NUS), Ctr for	Structure-based Ligand Discovery & Design Group Ligand discovery for GPCRs, transporters, and kinases to help develop chemical probes and drugs for related diseases (e.g.	NUS

	Computational Biology in DUKE-NUS Medical School	cancer); Enzyme function annotation and redesign for synthetic biology; In-silico chemical toxicity prediction.	
Dr Peter Bond peterjb@bii.a-star.edu.sg	Principal Investigator, Adjunct Asst Prof at DBS (NUS)	Multiscale Simulation, Modelling & Design Group Multiscale modelling and simulation of biomolecules, towards novel therapeutic development. Focus on innate immune receptors, inflammatory pathways, and host-pathogen interactions.	NUS
Dr. Igor N. Berezovsky igor@bii.a-star.edu.sg	Principal Investigator, Adjunct Associate Professor DBS (NUS)	Physics & Evolution of Biological Macromolecules Group Allosteric regulation of protein function, evolution of protein function, chromatin structural dynamics and epigenetic regulation, protein thermostability.	NUS

Imaging Informatics Division

Name	Designation	Project	Degree Awarded By
Dr Chiam Keng Hwee chiamkh@bii.a-star.edu.sg	Senior Principal Investigator	Biophysical Modelling Group Biophysical modeling of durotaxis and metastasis of cancer cells.	NTU / NUS
Dr Lee Hwee Kuan leehk@bii.a-star.edu.sg	Senior Principal Investigator, Adjunct Asst Prof at NUS	Computer Vision & Pattern Discovery Group Artificial Intelligence for healthcare: theory and applications. Project involves close collaborations with hospitals.	NUS
Dr Loo Lit Hsin loolh@bii.a-star.edu.sg	Principal Investigator	Complex Cellular Phenotype Analysis Group In vitro cell-based models for predicting the toxicity of chemicals and drugs, high-throughput phenotypic profiling, and systems biology.	NUS