





# PISANU BUPHAMALAI

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 [izebuphamalai](#)

 [pbuphamalai@cemm.at](mailto:pbuphamalai@cemm.at)

 +43-681-2034-4611

CONTACT	Campus Vienna Biocenter, VBC5, Dr.Bohr-Gasse 9 1.104, A-1030 Vienna, AUSTRIA	
EDUCATION	<b>Medizinische Universität Wien</b> , Vienna, AT <span style="float: right;"><b>2016 – Present</b></span> <i>PhD Student in Natural Sciences - Major Focus: Network Medicine</i>	
	<b>KTH Royal Institute of Technology</b> , Stockholm, SE & <b>Aalto University</b> , Helsinki, FI <span style="float: right;"><b>2014 – 2016</b></span> <i>Erasmus Mundus Master's Degree in Computational Systems Biology (euSYSBIO)</i>	
	<b>Mahidol University</b> , Bangkok, TH <span style="float: right;"><b>2009 – 2013</b></span> <i>B.Sc. in Physics, First Class Honours, Distinction</i>	
HONOURS AND SCHOLARSHIPS	<b>Winning team, CytoData2019</b> , DKFZ, DE <span style="float: right;"><b>2019</b></span> <i>Won the competition for drug target prediction based on cellular morphology</i>	
	<b>The Lindau Nobel Laureate Meetings</b> , Lindau, DE <span style="float: right;"><b>2019</b></span> <i>Selected to participate the prestigious annual meeting</i>	
	<b>Outstanding Poster Presentation Award</b> , European Molecular Biology Organization <span style="float: right;"><b>2018</b></span> <i>Awarded at the EMBO conference on network biology, EMBL, DE Heidelberg</i>	
	<b>Erasmus Mundus Master's Scholarship</b> , European Commission <span style="float: right;"><b>2014</b></span> <i>Awarded full scholarship for master's studies</i>	
RESEARCH EXPERIENCES	<b>CeMM - Research Center for Molecular Medicine of the Austrian Academy of Sciences</b> , Vienna, AT <span style="float: right;"><b>Sep 2016 – Present</b></span> Predoctoral Fellow Project: Network-based approaches for biomedical data integration and disease gene prioritisation Supervisor: Dr. Jörg Menche	
	<b>Joint Research Center for Computational Biomedicine</b> , RWTH-Aachen University and Aachen University Hospital, Aachen, DE <span style="float: right;"><b>Feb 2016 – Jul 2016</b></span> Masters research student Project: Statistical analysis of membrane transporters towards drug sensitivity and resistance Supervisors: Prof. Julio Saez-Rodriguez and Dr. Marc Brehme	
	<b>Probabilistic Machine Learning Group</b> , Department of Computer Science, Aalto University, Helsinki, FI <span style="float: right;"><b>May - Jul 2015</b></span> Summer intern Project: Group Factor Analysis (GFA) hyperparameter tuning for capturing latent variables from a mixture of continuous and discrete datasets Supervisors: Prof. Samuel Kaski and Dr. Pekka Marttinen	
	<b>Computational Regulatory Genomics Group</b> , Faculty of Medicine, Imperial College London, UK <span style="float: right;"><b>Jun – Nov 2012</b></span> Undergraduate research student Project: Genome-wide analysis of chromatin interaction – insights into long-range gene regulation Supervisors: Dr. Boris Lenhard and Dr. Nathan Harmston	
	<b>Department of Biochemistry</b> , Faculty of Science, Mahidol University <span style="float: right;"><b>2011–2012</b></span> Undergraduate research trainee Project: Statistical analysis of gene regulation in <i>Burkholderia pseudomallei</i> using microarray data Supervisors: Dr. Varodom Charoensawan and Prof. Sumalee Tungpradubkul	

PUBLICATIONS	<p>Nagy, V, Hollstein, R, Pai, TP, Herde, MK, <u>Buphamalai P</u>, Moeseneder, P,..., Penninger, J. <b>HACE1 deficiency leads to structural and functional neurodevelopmental defects.</b> <i>Neurology Genetics</i>, 5(3), (2019) e330.</p> <p>Sdelci, S, Rendeiro, AF, ... <u>Buphamalai P</u> ... Kubucek, S. <b>MTHFD1 interaction with BRD4 links folate metabolism to transcriptional regulation.</b> <i>Nature genetics</i>, 51(6), (2019):990-998.</p> <p>Caldera M*, <u>Buphamalai P*</u>, Müller F, Menche J. <b>Interactome-Based Approaches to Human Disease.</b> <i>Current Opinion in Systems Biology</i> 3 (June 2017): 8894.</p> <p>Chutoam P, Charoensawan V, Wongtrakoongate C, Kum-Arth A, <u>Buphamalai P</u>, and Tungpradabkul S. <b>RpoS and oxidative stress conditions regulate succinyl-CoA: 3-ketoacid-coenzyme A transferase (SCOT) expression in <i>Burkholderia pseudomallei</i>.</b> <i>Microbiology and immunology</i>, 57(9):605–615, (2013).</p>	
BOOK CHAPTERS	<p><u>Buphamalai P*</u>, Caldera M*, Müller F, Menche J. <b>Analyzing Network Data in Biology and Medicine</b>, Chapter 10: Network Medicine. <i>Cambridge University Press</i>, 2019.</p>	
CONFERENCES / PRESENTATIONS	<p><b>NetSci2020: Conference on network sciences</b>, Rome, IT (virtual)</p> <p><b>Genomics of rare diseases</b>, Cambridge, UK, (virtual)</p> <p><b>Cold Spring Harbor Laboratory Meeting on Network Biology</b>, NY, USA</p> <p><b>German Bioinformatics Conference (GBC)</b>, Vienna, AT</p> <p><b>EMBO Workshop</b>, Heidelberg, DE</p> <p>Integrating Systems Biology: From Networks to Mechanisms to Models</p> <p><b>ISMB 2017</b>, Prague, CZ</p> <p>The International Conference on Intelligent Systems for Molecular Biology</p> <p><b>Lake Como Summer School of Advanced Studies</b>, Como, IT</p> <p>Complex Networks, Theories and Applications</p>	<p><b>Sep 2020</b></p> <p><b>Mar 2020</b></p> <p><b>Mar 2019</b></p> <p><b>Sep 2018</b></p> <p><b>Apr 2018</b></p> <p><b>Jul 2017</b></p> <p><b>May 2017</b></p>
OTHER COURSES/ QUALIFICATIONS	<p><b>Coursera</b></p> <ul style="list-style-type: none"> <li>• <i>Computing for Data Analysis</i> by John Hopkins University (Accomplished with distinction)</li> </ul>	
OTHER WORKING EXPERIENCES	<p><b>CeMM &amp; Institute Curie Joint Young Scientists Retreat</b>, Bratislava, SK</p> <p><i>Organiser</i></p> <p><b>Prompt International Institute</b>, Bangkok, TH</p> <p><i>Part-time tutor for GCSE, A-Level, and IB diploma in physics and mathematics</i></p> <p><b>The 42<sup>th</sup> International Physics Olympiad (42<sup>th</sup> IPhO)</b>, Bangkok, TH</p> <p><i>Liaison officer for the Israeli national candidates</i></p> <p><b>The Faculty of Science Students Association</b>, Mahidol University, TH</p> <p><i>Assistant Vice President of External Affairs (2011 – 2012)</i></p>	<p><b>Sep 2018</b></p> <p><b>Jan 2013 – Jun 2014</b></p> <p><b>Jul 2011</b></p> <p><b>2009 – 2012</b></p>
FORMAL LANGUAGES	<p>R ● ● ● ● ●</p> <p>Python ● ● ● ● ○</p> <p>Typesettings: L<sup>A</sup>T<sub>E</sub>X, Markdown</p>	<p>MATLAB ● ● ● ○ ○</p> <p>Bash ● ● ● ○ ○</p>
NATURAL LANGUAGES	<p>Thai ● ● ● ● ● (native)</p> <p>English ● ● ● ● ○ (proficient)</p>	<p>German ● ● ● ○ ○ (intermediate)</p> <p>Swedish ● ○ ○ ○ ○ (basic)</p>
OTHER ACTIVITIES	<p>Stargazing, Hiking, Skiing, Cycling, Climbing, Swimming, Cooking, Piano</p>	