

## Sittinan Chanarat, Dr. rer. nat.

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**Birth place:** Chiang Mai, Thailand.  
**Languages:** Thai, Japanese, English, German

### RESEARCH & WORK EXPERIENCE

- Since May 2017 **Department of Biochemistry, Faculty of Science, Mahidol University, Bangkok, Thailand**  
Associate Professor (Oct 2020-present)  
Lecturer (May 2017-Oct 2020)
- 2012-2017 **Max-Planck Institute of Biochemistry, Munich, Germany**  
Postdoctoral Researcher  
Mentor: Prof. Dr. Stefan Jentsch
- 2011 **Gene Center, University of Munich, Munich, Germany**  
Postdoctoral Researcher  
Mentor: Prof. Dr. Katja Str a ser

### EDUCATION

- 2007-2011 **Gene Center, University of Munich, Munich, Germany**  
Dr. rer. nat. (Biochemistry)  
Supervisor: Prof. Dr. Katja Str a ser
- 2005-2006 **Department of Medical Genetics, University of T bingen, T bingen, Germany**  
Marie Curie Early Stage Research Fellow  
Supervisor: Prof. Dr. Olaf Rie 
- 2003-2005 **Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Tokyo, Japan**  
M. Eng. (Biological Information)  
Supervisor: Prof. Dr. Hiroshi Handa
- 1999-2003 **School of Bioscience and Biotechnology, Tokyo Institute of Technology, Tokyo, Japan**  
B. Eng. (Bioengineering)  
Supervisor: Prof. Dr. Hiroshi Handa
- 1998-1999 **Tokyo University of Foreign Studies, Tokyo, Japan**  
Certificate of Japanese Language Proficiency

### RESEARCH INTERESTS

- Gene Expression Regulation
- Ubiquitin and Ubiquitin-Like Proteins
- Oxidative Stress Response
- Protein Engineering
- Bacteriophage-Host Interaction and Phage Endolysin

### EXPERTISES

Biochemistry, Molecular Biology, Cell Biology, Yeast Genetics, Protein Engineering

### ACADEMIC HONORS AND AWARDS

- 2011 Recipient, R mer Prize for Outstanding Doctoral Thesis Research
- 2005-2007 Marie Curie Early Stage Training Fellowship
- 2005 Thai Government Scholarship (*declined*)
- 2005 Honjo International Scholarship (*declined*)
- 2003-2004 Japanese Government (Monbukagakusho) Scholarship (*extended*)
- 1998-2002 Japanese Government (Monbukagakusho) Scholarship

## PUBLICATIONS

**Chanarat, S.** UBL5/Hub1: An Atypical Ubiquitin-Like Protein with a Typical Role as a Stress-Responsive Regulator. *IJMS* 22, 9384 (2021).

**Chanarat S†** & Svasti J. Stress-induced upregulation of the ubiquitin-relative Hub1 modulates pre-mRNA splicing and facilitates cadmium tolerance in *Saccharomyces cerevisiae*. *BBA - Molecular Cell Research* (2020) †Corresponding author

Juntachai W, Chaichompoo A, **Chanarat S.** Ambient pH regulates secretion of lipases in *Malassezia furfur*. *Microbiology* (2019)

**Chanarat S†**, Mishra SK†. Emerging Roles of Ubiquitin-like Proteins in Pre-mRNA Splicing. *Trends Biochem Sci* 43(11): 896-907 (2018)  
†Co-corresponding authors

Karaduman R\*†, **Chanarat S\*†**, Pfander B†, Jentsch S. Error-Prone Splicing Controlled by the Ubiquitin Relative Hub1. *Molecular Cell* 67(3): 423-432 (2017)  
\*Co-first authors †Co-corresponding authors

**Chanarat S**, Burkert-Kautzsch C, Meinel DM and Sträßer K. Prp19C and TREX: Interacting to Promote Transcription Elongation and mRNA Export. *Transcription* 3(1): 8-12 (2012)

**Chanarat S**, Seizl M and Sträßer K. The Prp19 Complex is a Novel Transcription Elongation Factor Required for TREX Occupancy at Transcribed Genes. *Genes and Development* 25(11): 1147-58 (2011)

Clausing E, Mayer A\*, **Chanarat S\***, Müller B, Germann SM, Cramer P, Lisby M, and Sträßer K. The Transcription Elongation Factor Bur1/Bur2 Interacts with Replication Protein A to Maintain Genome Stability. *J Biol Chem* 285(53): 41665-41674 (2010)  
\*these authors contributed equally to this paper

Nuber S, Franck T, Wolburg H, Schumann U, **Chanarat S**, Teismann P, Schulz JB, Luft AR, Jürgen Tomiuk J, Wilbertz J, Bornemann A, Krüger R and Riess O. Overexpression of the Alpha-Synuclein Interacting Protein Synphilin-1 Leads to Behavioural and Neuropathological Alterations in Transgenic Mice. *Neurogenetics* 11(1):107-20 (2010)

Grundmann K, Reischmann B, Vanhoutte G, Hübener J, Teismann P, Hauser TK, Bonin M, Wilbertz J, Horn S, Nguyen HP, Kuhn M, **Chanarat S**, Wolburg H, Van der Linden A, Riess O. Overexpression of Human Wildtype TorsinA Causes a Neurological Phenotype in a Transgenic Mouse Model. *Neurobiol Dis* 27(2):190-206 (2007)

Yamaguchi Y, Mura T, **Chanarat S**, Okamoto S, Chen Y, Handa H. Hepatitis Delta Antigen Binds to the RNA Polymerase II Clamp and Modulates Transcriptional Fidelity. *Genes Cells* 12(7): 863-75 (2007)

Narita T, Yamaguchi Y, Yano K, Sugimoto S, **Chanarat S**, Wada T, Kim DK, Hasegawa J, Omori M, Inukai N, Endoh M, Yamada T, Handa H. Human Transcription Elongation Factor NELF: Identification of Novel Subunits and Reconstitution of the Functionally Active Complex. *Mol Cell Biol* 23(6):1863- 73 (2003)

## ACADEMIC AND PROFESSIONAL TRAININGS

- 2016 **Advanced Training Course for Project Leaders and Biosafety Officers for Acquiring Competence According to §15 Genetic Engineering Safety Ordinance**  
Max-Planck Institute of Biochemistry, Munich, Germany
- 2012 **Advanced Method Course on Mass-Spectrometry-Based Proteomics**  
Max-Planck Institute of Biochemistry, Munich, Germany
- 2008 **EMBO Young Investigator PhD Course**  
EMBL Heidelberg, Germany
- 2006 **Marie Curie Early Stage Research Training Program**  
Technical University of Munich, Germany
- 2006 **International Summer School on Molecular Imaging**  
EMBL Heidelberg, Germany