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Ansættelse

Professor

Institut for Molekylærbiologi og Genetik - Proteinvidenskab
Aarhus Universitet
Aarhus C, Danmark
7 maj 2024 → present

Gruppenleder

Max Planck Institute of Biochemistry
Martinsried, Tyskland
1 jul. 2009 → 30 nov. 2016

Postdoc

Birkbeck College
Storbritannien
1 mar. 2007 → 30 jun. 2009

Postdoc

European Molecular Biology Laboratory (EMBL)
Tyskland
1 jul. 2004 → 28 feb. 2007

Kvalifikationer

Molekylærbiologi, PhD, Struktur af tre glykolytiske enzymer, European Molecular Biology Laboratory (EMBL)
3 jan. 2001 → 30 jun. 2004
Dimissionsdato: 20 aug. 2004

Kemi og molekylærbiologi, Kandidatgrad, Karakterisation af TFIIA-5S rRNA kompleks, Aarhus Universitet (AU)
1 jun. 2000 → 20 nov. 2001
Dimissionsdato: 20 nov. 2000

Videnskabeligt resume

Struktur og funktionsanalyse af cilier og intraflagellær transport

Publication metrics

- Publikationer: 59 publications i peer-reviewed videnskabelige tidsskrifter, 12 som første og 26 som sidste forfatter.
- H-index på 35, 4098 citationer total (source: Google scholar)
- 62 strukturer i 'protein data bank' (PDB).

De 10 vigtigste artikler er listet nedenfor (IF: 2016 journal impact factor).

- Wachter, S., Jung, J., Shafiq, S., Basquin, J., Fort, C., Bastin, P., and Lorentzen E., (2019) Association of the unusual GTPase IFT22 with the IFT complex is required for flagellum construction. EMBO J., 10.15252/embj.2018101251, IF: 9.8

- Taschner, M, Lorentzen, A, Mourao, A, Collins, T, Freke, GM, Moulding, D, Basquin, J, Jenkins, D and Lorentzen, E. (2018) Crystal structure of intraflagellar transport protein 80 reveals a homo-dimer required for ciliogenesis. *Elife*, DOI: 10.7554/eLife.33067, IF: 7,7
- Wang, Q., Michael Taschner, Kristina Ganzinger, Alethia Villasenor, Michael Heymann, Petra Schwille, c Esben Lorentzen*, Naoko Mizuno* (2018) Membrane association and remodeling by intraflagellar transport protein IFT172. *Nature communications*, doi: 10.1038/s41467-018-07037-9, IF: 12.4 (* co-corresponding authors)
- Taschner M., Weber K., Mourão A., Vetter M., Awasthi M., Stiegler M., Bhogaraju S, and Lorentzen E., (2016) Intraflagellar transport proteins 172, 80, 57, 54, 38, and 20 form a stable tubulin-binding IFT-B2 complex. *EMBO J* 35(7):773-90, IF: 9,8
- Vetter, M., Stehle, R., Basquin, C., and Lorentzen, E., (2015) Structure of Rab11-FIP3-Rabin8 reveals simultaneous binding of FIP3 and Rabin8 effectors to activated Rab11, *Nature Structural & Molecular Biology*, 22(9):695-702, IF: 12,6
- Mourão, A., Nager, A.R., Nachury, M.V., and Lorentzen, E., (2014) Structural basis for membrane targeting of the BBSome by ARL6, *Nature Structural & Molecular Biology*, 21(12):10035-1041, IF: 12,6
- Taschner, M., Kotsis, F., Braeuer, P., Kuehn, W.E., and Lorentzen, E., (2014) Crystal structures of IFT70/52 and IFT52/46 provide insight into intraflagellar transport B core complex assembly, *J Cell Biol.*, 207(2):269-282, IF: 9,8
- Bhogaraju S., Cajanek L., Fort C, Blisnick T., Weber K., Taschner M., Mizuno N., Lamla S., Bastin P., Nigg EA., Lorentzen, E., (2013) Molecular Basis of Tubulin Transport Within the Cilium by IFT74 and IFT81, *Science* 341(6149):1009-12, IF: 37,2
- Taschner, M., Vetter, M., and Lorentzen, E., (2012) Atomic resolution structure of human α -tubulin acetyltransferase bound to acetyl-CoA, *PNAS*, 109(48):19649-54, IF: 9,7
- Bhogaraju, S., Taschner, M., Morawetz, M., Basquin, C. and Lorentzen, E., (2011) Crystal structure of the intraflagellar transport complex 25/27, *EMBO J.*, 30(10):1907-18, IF: 9,8

Foredrag ved konferencer

- EMBO Young Scientists Forum, Prague, Czech Republic, 2019
- FASEB meeting 'Biology of Cilia & Flagella', Snowmass, CO, US, 2019
- Chair and talk at the Cilium conference, Copenhagen, Denmark, 2018
- Symposium "Cilia, Signaling, and Human Disease", ASCB, SF, US, 2016
- Stanford University School of Medicine, Stanford, CA, US, 2016
- Key note lecture, French cilium and centrosome meeting, Strasbourg, France, 2015
- EMBO conference on Microtubules, Heidelberg, Germany, 2014
- Jacques Monod Conference on cell cycle, Roscoff, France, 2014
- Gordon meeting on cilia, mucus and mucociliary interactions, Lucca, Italy, 2013
- Chair and talk at the FASEB meeting 'Biology of Cilia & Flagella', Niagara Falls, New York, US, 2013
- Retina Ciliopathies, Ft. Lauderdale, Florida, US, 2012
- FASEB conference on RNA quality control, Lucca, Italy, 2008
- RNA meeting, Berlin, Germany, 2008 RNA quality control Conference, Granada, Spain, 2008
- Molecular Microbiology Conference, Heidelberg, Germany, 2006
- Post-transcriptional control of gene expression, Snowmass, USA, 2006
- Structural biology of molecular recognition, Murnau, Germany, 2005
- RNA meeting, Banff, Canada, 2005 • Thermophiles meeting, University of Exeter, UK, 2003
- Enzymology and molecular biology of carbonyl metabolism, eleventh international symposium, Ystad, Sweden, 2002

Forskningsbevillinger og priser

45 million DKK er indbragt i forskningsbevillinger, se nedenfor:
 2020-2024: Marie Skłodowska-Curie International Training Network (300.000 Euro)
 2018: Interreg (cross border science and society) project grant (25.000 Euro).
 2016-2023: Novo Nordisk Young Investigator Award (2.7mill Euro, PI).
 2014-2017: Project grant from the German research council (300.000 Euro, PI).
 2012-2017: ERC starter grant (1.500.000 Euro, PI).
 2012: Elected EMBO Young Investigator (YIP).
 2009-2014: Emmy Noether grant from the German research council (1.400.000 Euro, PI).
 2007: Long term research fellowship from HFSP, EMBO and FEBS.
 2005: Research fellowship from Carlsberg Fondet.
 2001-2004: PhD fellowship at the European Molecular Biology Laboratories (EMBL).

Undervisning

Jeg underviser på kurserne 'Biomolekylær Strukturbestemmelse (BSB)' og 'Proteiner og deres interaktioner' på Aarhus Universitet.