

Magnus Kjærgaard
Lektor

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Positions

2021-present: Associate professor, Dept. of Molecular Biology and Genetics
2016-2021: Team Leader, DANDRITE
2016-2020: Assistant professor, Dept. of Molecular Biology and Genetics
2016-2019: AIAS COFUND Research Fellow
2014-2016: postdoc, Dept. of Molecular Biology and Genetics and iNANO, Aarhus University
2011-2014: postdoc, Dept. of Chemistry, Cambridge University
2010-2011: postdoc, Dept. of Biology, University of Copenhagen

Education & training

2010: Ph.D. in Biochemistry, University of Copenhagen
2009: Visiting Ph.D. student, The Scripps Research Institute
2007: M.Sc. in Biochemistry, University of Copenhagen
2005-6: Visiting student, University of California, San Diego

Scientific Summary

Research interests: • Structure and function of flexible proteins from the post-synaptic density and their role in synaptic plasticity. • Intrinsically disordered proteins - sequence-function relationships, biotechnological applications • Membraneless organelles - role in biology and biotechnological applications
• Techniques: NMR spectroscopy, single molecule FRET, protein biophysics.

Bibliometrics: <https://scholar.google.com/citations?user=Sj12rHAAAAAJ&hl=en&oi=ao>

Research Funding

Novo Nordisk Foundation, Lundbeck Foundation, Villum Foundation, Carlsberg Foundation, Danish National Research Foundation "Center of Excellence" PROMEMO, Innovation Fund Denmark, Independent Research Fund Denmark (FTP/FNU)

Publikationer

Entering the Next Phase: Predicting Biological Effects of Biomolecular Condensates

Davis, M. C., André, A. A. M. & Kjærgaard, M., 1 nov. 2024, I: *Journal of Molecular Biology*. 436, 21, 168645.

Molecular properties and diagnostic potential of monoclonal antibodies targeting cytotoxic α -synuclein oligomers

Nielsen, J., Lauritsen, J., Pedersen, J. N., Nowak, J. S., Bendtsen, M. K., Kleijwegt, G., Lusser, K., Pitarch, L. C., Moreno, J. V., Schneider, M. M., Krainer, G., Goksøyr, L., Khalifé, P., Kaalund, S. S., Aznar, S., Kjærgaard, M., Sereikaité, V., Strømgaard, K., Knowles, T. P. J. & Nielsen, M. A. & 3 flere, Sander, A. F., Romero-Ramos, M. & Otzen, D. E., jun. 2024, I: *npj Parkinson's Disease*. 10, 1, 139.

Design of functional intrinsically disordered proteins

Garg, A., González-Foutel, N. S., Gielnik, M. B. & Kjærgaard, M., mar. 2024, I: *Protein Engineering, Design and Selection*. 37, gzae004.

Enhanced hexamerization of insulin via assembly pathway rerouting revealed by single particle studies

Bohr, F., Bohr, S. S. R., Mishra, N. K., González-Foutel, N. S., Pinholt, H. D., Wu, S., Nielsen, E. M., Zhang, M., Kjærgaard, M., Jensen, K. J. & Hatzakis, N. S., dec. 2023, I: *Communications Biology*. 6, 1, 178.

A Semester-Long Learning Path Teaching Computational Skills via Molecular Graphics in PyMOL

Kjærgaard, M., Rasmussen, L. S., Vinther, J. N., Andersen, K. R., Andersen, E. S., Lorentzen, E., Thirup, S. S., Otzen, D. & Brodersen, D. E., dec. 2022, I: *The Biophysicist*. 3, 2, s. 106–114 9 s.