

Curriculum Vitae for Jesper Søndergaard Pedersen

Birth date: January 8th 1974
Current position: Carlsberg Postdoctoral Fellow
Place of work: Department of Biochemistry, Molecular Biology and Cell Biology
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Education

- Feb2002-Aug2006 PhD degree from department of Life Science, Aalborg University.
Supervisor: Professor Daniel Otzen (www.proteins.dk).
Thesis title: *In Vitro* Studies of Amyloid-Like Protein Fibrils using Glucagon as Model System.
Funding: Novo Nordisk A/S & Aalborg University
- Sep1998-Jun2001 cand.scient. (M.Sc.) degree from department of Molecular and Structural Biology, Aarhus University.
Supervisors: Professor Brian F.C. Clark (bfcc@mb.au.dk) and Assistant Professor Peter Kristensen (pk@mb.au.dk).
Thesis Title: Directed Evolution of Thermostable Enzymes Using Phage Display.
- Aug1994-1998 Bachelor degree in immunochemistry at Department of Chemistry, Aarhus University, Denmark.
- Aug1990-Jun1993 Matematisk studentereksamen, Silkeborg Amtsgymnasium.

Appointments

- May2008-present Carlsberg postdoctoral fellow at the Morimoto Laboratory at Northwestern University.
- Jul2005-Apr2008 Research Scientist at ilochip A/S (Thomsen Bioscience) in Nørresundby, Denmark. ilochip is developing an integrated lab-on-chip system for detection/identification of biological particles from air-samples. (www.ilochip.com)
- Jul2001-Feb2002 Research assistant at Aarhus University.
Research areas: Selection of phage-antibodies against angiogenesis inhibitors.
- Sep1993-Jun1994 Service in the Danish Army, Jyske Ingeniør Regiment, Randers.
- 1991-1992 Programmed the graphics software "InterPaint for Commodore 64" for InterActiVision A/S (Nørreskov Bakke 14, 8600 Silkeborg)

Honors/Awards

- 2008-2009 Carlsberg Foundation Fellowship
- 2000 Novo Nordisk Scholar stipend in Pharmaceutical sciences

List of publications

1. Oliveira, C. L., Behrens, M. A., Pedersen, J. S., Erlacher, K., Otzen, D. E., and Pedersen, J. S. (2009) SAXS Study of Glucagon Fibrillation: From Monomers to Fibers, *Journal of molecular biology In Press, Accepted Manuscript, Available online 22 January 2009*.
2. Pedersen, J. S., and Otzen, D. E. (2008) Amyloid a state in many guises: Survival of the fittest fibril fold, *Protein Sci* 17, 2-10.
3. Christensen, P. A., Pedersen, J. S., Christiansen, G., and Otzen, D. E. (2008) Spectroscopic evidence for the existence of an obligate pre-fibrillar oligomer during glucagon fibrillation, *FEBS letters* 582, 1341-1345.
4. Pedersen, J. S., Flink, J. M., Dikov, D., and Otzen, D. E. (2006) Sulfates dramatically stabilize a salt dependent type of glucagon fibrils, *Biophysical journal* 90, 4181-4194.
5. Pedersen, J. S., Dikov, D., and Otzen, D. E. (2006) N- and C-terminal hydrophobic patches are involved in fibrillation of glucagon, *Biochemistry* 45, 14503-14512.
6. Pedersen, J. S., Dikov, D., Flink, J. L., Hjuler, H. A., Christiansen, G., and Otzen, D. E. (2006) The changing face of glucagon fibrillation: Structural polymorphism and conformational imprinting., *Journal of molecular biology* 355, 501-523.
7. Heegaard, N. H., Jørgensen, T. J. D., Rozlosnik, N., Corlin, D. B., Pedersen, J. S., Tempesta, A. G., Roepstorff, P., Bauer, R., and Nissen, M. H. (2005) Unfolding, Aggregation, and Seeded Amyloid Formation of Lysine-58-Cleaved Beta-2-Microglobulin, *Biochemistry In press*.
8. Pedersen, J. S., Christensen, G., and Otzen, D. E. (2004) Modulation of S6 fibrillation by unfolding rates and gatekeeper residues, *Journal of molecular biology* 341, 575-588.
9. Pedersen, J. S., Otzen, D. E., and Kristensen, P. (2002) Directed evolution of barnase stability using proteolytic selection, *Journal of molecular biology* 323, 115-123.
10. Jensen, K. B., Larsen, M., Pedersen, J. S., Christensen, P. A., Alvarez-Vallina, L., Goletz, S., Clark, B. F., and Kristensen, P. (2002) Functional improvement of antibody fragments using a novel phage coat protein III fusion system, *Biochemical and biophysical research communications* 298, 566-573.