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Personal Information

Citizenship: Denmark

Born: January 6, 1976 (Aarhus, Denmark)

Education

Mar 2006: Ph.D. at the Drug Research Academy, Danish University of Pharmaceutical Sciences, Denmark.

2002-2005: Ph.D. studentship at the Drug Research Academy, Danish University of Pharmaceutical Sciences, Denmark. Title of thesis: "Studies on the Molecular Pharmacology of Recombinant NMDA Receptors". Main supervisor prof. Hans Bräuner-Osborne, Department of Medicinal Chemistry, Danish University of Pharmaceutical Sciences, Denmark.

2002: M.Sc. in Molecular Biology. Title of thesis: "Direct Interaction between Distinct Neurotransmitter Systems". Main supervisor associate prof. Jan Egebjerg, Department of Molecular Biology, University of Aarhus, Denmark.

1998: B.Sc in Chemistry, University of Aarhus, Denmark.

1995: Admission to the Chemistry-Molecular Biology study program, University of Aarhus, Denmark.

Job Experience

Nov 2007-: Postdoctoral research in the laboratory of Prof. Stephen F. Traynelis, Department of Pharmacology, Emory University School of Medicine, Atlanta, USA.

Aug-Oct 2007: Postdoctoral research in the laboratory of Prof. Hans Bräuner-Osborne, Department of Medicinal Chemistry, Faculty of Pharmaceutical Sciences, University of Copenhagen, Denmark.

Aug 2006-Jul 2007: Postdoctoral research in the laboratory of Prof. Stephen F. Traynelis, Department of Pharmacology, Emory University School of Medicine, Atlanta, USA.

Jan-Jul 2006: Postdoctoral research in Department of Molecular Biology, H. Lundbeck A/S, Denmark.

Oct-Dec 2005: Research assistant in the laboratory of Prof. Hans Bräuner-Osborne, Department of Medicinal Chemistry, Danish University of Pharmaceutical Sciences, Denmark.

Jun-Aug 2002: Research assistant in the laboratory of associate prof. Jan Egebjerg, Department of Molecular Biology, University of Aarhus, Denmark.

Awards, Grants, and Fellowships

2008: Research Grant, Foundation of 17-12-1981, Denmark.

2007-2010: Postdoctoral Fellowship, Lundbeck Foundation, Denmark.

2007-2008: Postdoctoral Fellowship, Villum Kann Rasmussen Foundation, Denmark.

2006-2007: Alfred Benzon Research Fellowship, Alfred Benzon Foundation, Denmark.

2002-2005: Ph.D. Studentship at Drug Research Academy, Danish University of Pharmaceutical Sciences, Denmark.

Journal Publications

15. **Azetidine 2,3-Dicarboxylic Acids: Stereocontrolled Synthesis and Pharmacological Characterization at NMDA Receptors.**

Sivaprakasama M, Hansen KB, David O, Nielsen B, Traynelis SF, Clausen RP, Couty F, and Bunch L.

Org Biomol Chem (2008). Manuscript in preparation.

14. ***Xenopus* oocyte electrophysiology in GPCR drug discovery.**
Hansen KB and Bräuner-Osborne H.
Methods Mol Biol (2009). Manuscript submitted.
13. **FLIPR[®] assays of intracellular calcium in GPCR drug discovery.**
Hansen KB and Bräuner-Osborne H.
Methods Mol Biol (2009). Manuscript submitted.
12. **N-Hydroxypyrazol glycine derivatives as selective N-methyl-D-aspartic acid receptor ligands.**
Clausen RP, Christensen C, Hansen KB, Greenwood J, Jørgensen L, Micale N, Nielsen B, Egebjerg J, Bräuner-Osborne H, Traynelis SF, and Kristensen JL.
J Med Chem (2008). Manuscript accepted.
11. **Pharmacological characterization of ligands at recombinant NMDA receptor subtypes by electrophysiological recordings and intracellular calcium measurements.**
Hansen KB, Bräuner-Osborne H, and Egebjerg J.
Comb Chem High Throughput Screen (2008). 11(4):304-015.
10. **The ionotropic glutamate-like receptor delta2 binds D-serine and glycine.**
Naur P, Hansen KB, Kristensen AS, Dravid SM, Pickering DS, Olsen L, Vestergaard B, Egebjerg J, Gajhede M, Traynelis SF, and Kastrup JS.
Proc Natl Acad Sci U S A (2007). 104(35):14116-14121.
9. **Subunit-specific agonist activity for glutamate analogs at NR2A, NR2B, NR2C, and NR2D N-methyl-D-aspartate glutamate receptors.**
Erreger K, Geballe MT, Kristensen AS, Chen PE, Hansen KB, Lee CJ, Yuan H, Le P, Lyuboslavsky P, Micale N, Jørgensen L, Clausen RP, Wyllie DJ, Snyder JP, and Traynelis SF.
Mol Pharmacol (2007). 72(4):907-920.
8. **Structural aspects of AMPA receptor activation, desensitization, and deactivation**
Hansen KB, Yuan H, and Traynelis SF.
Curr Opin Neurobiol (2007). 17(3):281-288.
7. **Synthesis and pharmacology of glutamate receptor ligands: New isothiazole analogues of ibotenic acid.**
Jørgensen CG, Clausen RP, Hansen KB, Bräuner-Osborne H, Nielsen B, Metzler B, Kehler J, Krogsgaard-Larsen P, and Madsen U.
Org Biomol Chem (2007). 5:463-471.
6. **Pharmacological characterization of mouse GPRC6A, an L- α -amino-acid receptor modulated by divalent cations.**
Christiansen B, Hansen KB, Wellendorph P, and Bräuner-Osborne H.
Br J Pharmacol (2007). 150:798-807.
5. **Synthesis, binding affinity at glutamic acid receptors, neuroprotective effects, and molecular modeling investigation of novel dihydroisoxazole amino acids.**
Conti P, De Amici M., Grazioso G, Roda G, Pinto A, Hansen KB, Nielsen B, Madsen U, Bräuner-Osborne H, Egebjerg J, Vestri V, Pellegrini-Giampietro DE, Sibille P, Acher FC, and De Micheli C.
J Med Chem (2005). 48:6315-6325.
4. **Tweaking agonist efficacy at N-Methyl-D-aspartate receptors by site-directed mutagenesis.**

Hansen KB, Clausen RP, Bjerrum EJ, Bechmann C, Greenwood JR, Christensen C, Kristensen JL, Egebjerg J, and Bräuner-Osborne H.
Mol Pharmacol (2005). 68:1510-1523.

3. **Deorphanization of GPRC6A: a promiscuous L- α -amino acid receptor with preference for basic amino acids.**
Wellendorph P, Hansen KB, Balsgaard A, Greenwood JR, Egebjerg J, and Bräuner-Osborne H.
Mol Pharmacol (2005). 67:589-597.
2. **The respective N-hydroxypyrazole analogues of the classical glutamate receptor ligands ibotenic acid and (RS)-2-amino-2-(3-hydroxy-5-methyl-4-isoxazolyl)acetic acid.**
Clausen RP, Hansen KB, Cali P, Nielsen B, Greenwood JR, Begtrup M, Egebjerg J, and Bräuner-Osborne H.
Eur J Pharmacol (2004). 499:35-44.
1. **(S)-2-Amino-3-(3-hydroxy-7,8-dihydro-6H-cyclohepta[d]isoxazol-4-yl)propionic acid, a potent and selective agonist at the GluR5 subtype of ionotropic glutamate receptors. Synthesis, modeling, and molecular pharmacology.**
Brehm L, Greenwood JR, Hansen KB, Nielsen B, Egebjerg J, Stensbøl TB, Bräuner-Osborne H, Slok FA, Kronborg TT, and Krogsgaard-Larsen P.
J Med Chem (2003). 46:1350-1358.

Book Chapters

2. **Structure and Function Relationship of the NMDA Receptor.**
Yuan H, Geballe MT, Hansen KB, and Traynelis SF.
In “*Structural and Functional Organization of the Synapse*” edited by Ehlers MD and Hell JW, edn 1, Springer (2007), Manuscript in press.
1. **Structural Correlates of Ionotropic Glutamate Receptor Function.**
Kristensen A, Hansen KB, Wollmuth L, Egebjerg J, and Traynelis SF.
In “*The Glutamate Receptors*” edited by Gereau RW and Swanson GT, edn 1, Humana Press (2007), Chapter 6, 247-298.

Abstracts

8. **Definition of the escitalopram binding pocket in the human serotonin transporter.**
Andersen J, Hansen KB, Jensen AA, Bang-Andersen B, Egebjerg J, Strømgaard K, and Kristensen AS.
Soc Neurosci Abstr (2007). 33
7. **Subunit-specific binding and agonist activity of glutamate and SYM2081 at NR2A and NR2D containing N-methyl-D-aspartate glutamate receptors.**
Geballe M, Hansen KB, Erreger K, Lee CJ, Kristensen AS, Chen PE, Wyllie DJ, Snyder JP, and Traynelis SF.
Soc Neurosci Abstr (2007). 33
6. **The amino terminal domain of the NR2 subunit controls channel open probability of N-methyl-D-aspartate receptors.**
Yuan H, Hansen KB, and Traynelis SF.
Soc Neurosci Abstr (2007). 33
5. **Subunit-specific activation of N-methyl-D-aspartate (NMDA) receptor subtypes by analogs of N-hydroxypyrazole-5-glycine (NHP5G).**
Vance KM, Hansen KB, Micale N, Clausen RP, and Traynelis SF.
Soc Neurosci Abstr (2007). 33
4. **Modulation of GluR δ 2 function by extracellular calcium.**

Hansen KB, Levasseur NL, Kristensen AS, Naur P, Kastrup JS, and Traynelis SF.
Soc Neurosci Abstr (2007). 33

3. **Identification of ligands capable of modulating the activity of the orphan glutamate-like receptor GluR δ 2 Lurcher mutant.**

Levasseur NL, Hansen KB, Kristensen AS, Naur P, Kastrup JS, and Traynelis SF.
Soc Neurosci Abstr (2007). 33

2. **Functional interaction between the serotonin transporter and ionotropic glutamate receptors.**

Hansen KB and Egebjerg J.
Benzon Symposium No. 51 - Neurotransmitter Transporters: Basal Function and Drug Targets (2004).

1. **Molecular pharmacology and modeling of (S)-2-Amino-3-(3-hydroxy-7,8-dihydro-6H-cyclohepta[d]isoxazol-4-yl)propionic acid, a potent and selective agonist at the GluR5 subtype of ionotropic glutamate receptors.**

Hansen KB, Brehm L, Greenwood JR, Nielsen B, Egebjerg J, Stensbøl TB, and Bräuner-Osborne H.
PhysPharm2003 - a Scandinavian Congress of Physiology and Pharmacology (2003).