



Povl Krogsgaard-Larsen

The Royal Danish School of Pharmacy
Department of Medicinal Chemistry
2, Universitetsparken, Copenhagen DK-2100
Denmark
tel: 45 35 30 62 47, fax:: 45 35 30 60 40
email: ano@dfh.dk

Povl Krogsgaard-Larsen is Professor of Medicinal Chemistry at the Royal Danish School of Medicine and Chairman of the research centers PharmaBiotec and Neuroscience.

Research Interest

The research interests of Professor Krogsgaard-Larsen are focused on the design, synthesis, structure elucidation and biological testing of novel potential drugs, in particular drugs for the treatment of neurodegenerative diseases, notably senile dementia.

In 1970-71 Povl Krogsgaard-Larsen established a research group in medicinal chemistry, which developed a drug design project in the GABA neurotransmitter field. In 1975 this group designed the first specific GABA uptake inhibitor, nipecotic acid, and subsequently a series of such compounds. During the period 1976-1979 PKL and his group, succeeded in the design of the first specific GABAA receptor agonist, isoguvacine, and a number of related specific GABAA agonist. THIP, a heterocyclic bioisostere of isoguvacine, was designed by Professor Krogsgaard-Larsen and optimised pharmaco-kinetically for clinical studies.

In 1972, Professor Krogsgaard-Larsen established research projects in the field of excitatory amino acid (EAA) neurotransmitters. Using the *Amanita muscaria* constituent, ibotenic acid, as a lead structure, a number of specific EAA receptor agonists have been designed and introduced in the international EAA research field. AMPA is a notable example, and this compound has given name to the AMPA subtype of EAA receptors. This group has succeeded in converting the agonist AMPA into the EAA antagonist AMOA and AMPA-related ligands capable of enhancing EAA receptor functions without activating the receptors directly.

In 1985-1986, Professor Krogsgaard-Larsen and his group designed novel ester bioisosteres in the acetylcholine receptor field.

Using this principle, a number of very potent subtype-selective muscarinic and nicotinic receptor agonists and partial agonists were designed.

Biography

Professor, born in 1941. Graduated from The Royal Danish School of Pharmacy (1967). Lic. pharm. (Ph.D.) from The Royal Danish School of Pharmacy (1970). Employed at the Royal Danish School of Pharmacy (1970-). Recipient of The H. C. Ørsted Award, (1967). Lektor (associate professor) at the Royal Danish School of Pharmacy (1970) Dr.pharm. (D.Sc.) from the Royal Danish School of Pharmacy, (1980). Recipient of the Hede Nielsen Research Award, (1981). Recipient of the Ole Romer Research Award, (1983). Professor (Medicinal chemistry) at the Royal Danish School of Pharmacy (1986).

Recipient of the Danish Pharmaceutical Society Research Award, (1987). Recipient of the Petersen Prize, Copenhagen, (1989).

Recipient of the Paul Ehrlich Prize, Grenoble, France, (1989). Recipient of the Astra Award, September (1991).

Doctor Honoris Causa, Louis Pasteur University, Strasbourg, (1992). F. Merz-Stiftungs Gastprofessor, Goethe University, Frankfurt: (1992). Recipient of the W. Th. Nauta Award Maastricht, The Netherlands (1996).

Recipient of the Danish Academy of Natural Sciences Industrial Research Award, Copenhagen Denmark, (1996).

Duties :

International Advisory Committee, Chemical Research Center, Hungarian Academy of Sciences; Chairman of The Biotechnological Drug Research Center, PharmaBiotec 1987-

Trustee of The Alfred Benzon Foundation 1991.

Chairman of the board of directors of the Carlsberg Laboratory 1996.

Memberships :

Member of the board of directors of the Carlsberg Foundation 1993.

Member of The Royal Danish Academy of Sciences and Letters 1986.

Member of The Danish Academy of Natural Sciences 1987.

Member of The Danish Academy of Technical Sciences 1987.

Member of The Danish Medical Research Council 1988.

