

## FUNCTIONAL DIVERSITY OF INTERACTING RECEPTORS

THURSDAY (May 26th)

### MAJOR ASPECTS

Chairperson: Leo Abood

(Time includes 5 minutes for discussion)

- 8:30-9:00 Receptor concepts  
M. Raftery (Univ. of Minnesota)
- 9:00-9:30 Ion-gated channels  
Leo Abood (Univ. of Rochester)
- 9:30-10:00 G-protein coupled receptors  
Arthur Brown (Baylor Univ.)
- 10:00-10:15 Coffee Break
- 10:15-10:45 Distribution of the nACh receptor  
P. Clarke (McGill Univ.)
- 10:45-11:15 Effects of modifying the structure on function  
L. Role (Columbia P&S)
- 11:15-11:45 Heterogeneity of presynaptic nACh receptors  
E.S. Vizi (Univ. of Budapest)
- 11:45-12:00 General Discussion
- 12:00-1:30 Lunch

### NICOTINIC RECEPTORS

Chairperson: Dr. Bianca Conti-Tronconi (Univ. of Minnesota)

- 1:30-2:00 Role of different receptor forms in behavior  
Edward Hawrot (Brown Univ.)
- 2:00-2:30 DNA regulation of receptor formation  
J. Patrick (Baylor Univ.)
- 2:30-3:00 Correlation of molecular structure and function  
Dr. Bianca Conti-Tronconi (Univ. of Minnesota)
- 3:00-3:15 Coffee Break
- 3:15-3:45 Modelling the nACh receptor  
V. Cockcroft (Univ. of Cambridge)
- 3:45-4:15 Organization of the nACh system  
H.C. Fibiger (Univ. of Brit. Columbia)
- 4:15-4:45 Diversity determined by ligand binding  
R. Lukas (Univ. of Arizona)
- 4:45-6:00 Poster Session

FRIDAY (May 27th)

**RECEPTOR INTERACTIONS**

**Chairperson:** Abel Lajtha (Nathan S. Kline Inst.)

- 8:30-9:00 nACh receptor subtypes  
Jan Lindstrom (Univ. of Pennsylvania)
- 9:00-9:30 Nicotinic amino acidergic interactions  
A. Lajtha (Nathan S. Kline Inst.)
- 9:30-10:00 Cholinergic/nicotinic effect on GABA receptors
- 10:00-10:30 Human brain cholinergic pathways  
M.-Marsel Mesulam (Harvard Univ.)
- 10:30-10:45 **Coffee Break**

**MUSCARINIC RECEPTORS:**

**Chairperson:** A. Donny Strosberg (Univ. of Paris)

- 10:45-11:15 Dysfunctional states of receptors
- 11:15-11:45 Expression and functional aspects of muscarinic receptor subtypes  
Neil Nathanson (Univ. of Washington)
- 11:45-12:00 General Discussion
- 12:00-1:30 **Lunch**
- 1:30-2:00 Effects of nicotine on the DA hypothalamic/pituitary systems  
K. Fuxe (Karolinska Inst.)
- 2:00-2:30 Immunotherapy in myasthenia gravis  
Lawrence Steinman (Stanford Univ.)
- 2:30-3:00 Muscarinic receptor interactions  
Joseph Coyle (Harvard Univ.)
- 3:30-3:45 **Coffee Break**

**CATECHOLAMINE RECEPTOR DIVERSITY:**

**Chairperson:** Phil Seaman (Univ. of Toronto)

- 3:45-4:15 Dopamine receptor interactions  
Phil Seaman (Univ. of Toronto)
- 4:15-4:45 Adrenoceptor interactions  
R. Lefkowitz (Duke Univ.)
- 4:45-5:15 Mechanisms of receptor interactions  
Lennart A. Ransnas (Sahlgren's Hospital)
- 5:15-5:45 B-Adrenergic subtypes: The biotechnology of G-protein coupled receptors  
A.D. Strosberg (Univ. of Paris)
- 5:45-6:15 G Mechanisms of receptor interactions  
Henry R. Bourne (Univ. California-San Francisco)
- 5:30-7:00 Posters
- 7:00 Banquet
- After dinner speaker: George Koob (Scripps) or Bruce McEwen (Rockefeller Univ.)

**SATURDAY (May 28th)**

**NEUROPEPTIDE RECEPTOR DIVERSITY:**

**Chairperson:** Victor Hruby (Univ. of Arizona)

- 8:30-9:00 Distribution of neuropeptide receptors  
T. Hokfelt (Karolinska Inst.)
- 9:00-9:30 Multiple receptors of substance P  
Susan Leeman (Boston Univ.)
- 9:30-10:00 Opioid receptor subtypes and addiction  
Gavil Pasternak (Sloan-Kettering Inst.)
- 10:00-10:15 **Coffee Break**
- 10:15-10:45 Molecular organization, Efficacy, Agonists and antagonists  
V. Hruby (Univ. of Arizona)
- 10:45-11:15 Chronic changes in neuropeptide receptors  
Abba Kastin (Tulane Univ.)
- 11:15-11:45 Peptidergic modulation of dopamine neurons  
Charles Nemeroff (Emory Univ.)
- 11:45-12:00 Melanocortin receptors  
Roger Cone (Univ. of Oregon)
- 12:00-1:30 **Lunch**

**EAA RECEPTOR DIVERSITY:**

**Chairperson:** Brian Meldrum (Inst. of Psychiatry)

- 1:30-2:00 EAA receptor functions in health and in neurological diseases.  
Brian Meldrum (Inst. of Psychiatry)
- 2:00-2:30 A family of glutamate receptor genes  
S. Heineman (Salk Inst.)
- 2:30-3:00 Synaptic plasticity among EAA type receptors  
Peter Seeburg (Univ. of Heidelberg)
- 3:00-3:30 EAA receptor changes in neurologic disorders  
Ann Young (Harvard Univ.)
- 3:30-4:00 Family of metabotropic glutamate receptors  
Shigetada Nakanishi (Kyoto Univ.)

**INHIBITORY TRANSMITTER RECEPTOR INTERACTIONS:**

**Chairperson:** Eric Barnard (Royal Free Hosp. School of Med.)

- 4:00-4:30 Structure and distribution of the multiple GABA<sub>A</sub> receptor subunits  
William Wisden (Cambridge Univ.)
- 4:30-5:00 Structure/function relationships in the multiple GABA<sub>A</sub> receptors  
Eric Barnard (Royal Free Hosp.)
- 5:00-5:30 GABA receptor antagonists and their clinical applications  
Alessandro Guidotti (Fidia, Georgetown Inst.)
- 5:30-5:45 **General Discussion**

**ADJOURNMENT**