PERSPECTIVE
Paradoxical Stimulatory Effects of the “Standard” Histamine H4-Receptor Antagonist JNJ7777120: the H4 Receptor Joins the Club of 7 Transmembrane Domain Receptors Exhibiting Functional Selectivity
Roland Seifert, Erich H. Schneider, Stefan Dove, Irena Brunskole, Detlef Neumann, Andrea Strasser, and Armin Buschauer

ARTICLES
□ The High-Affinity cAMP-Specific Phosphodiesterase 8B Controls Steroidogenesis in the Mouse Adrenal Gland
Li-Chun Lisa Tsai, Masami Shimizu-Albergine, and Joseph A. Beavo

□ Molecular Determinants of Potent P2X2 Antagonism Identified by Functional Analysis, Mutagenesis, and Homology Docking
Christian Wolf, Christiane Rosefort, Ghada Fallah, Matthias U. Kassack, Alexandra Hamacher, Mandy Bodnar, Haihong Wang, Peter Illes, Achim Kless, Gregor Bahrenberg, Günther Schmalzing, and Ralf Hausmann

□ A State-Dependent Salt-Bridge Interaction Exists across the β/α Intersubunit Interface of the GABA_A Receptor
Kurt T. Laha and David A. Wagner

□ The Tricyclic Antidepressant Amitriptyline Inhibits d-Cyclin Transactivation and Induces Myeloma Cell Apoptosis by Inhibiting Histone Deacetylases: In Vitro and In Silico Evidence
Xinliang Mao, Tingjun Hou, Biyin Cao, Wenjie Wang, Zhihua Li, Suning Chen, Min Fei, Rose Hurren, Marcela Gronda, Depei Wu, Suzanne Trudel, and Aaron D. Schimmer

Why Does the Inner-Helix Mutation A413C Double the Stoichiometry of Kv1.3 Channel Block by Emopamil but Not by Verapamil?
Alexey Rossokhin, Tobias Dreker, Stephan Grissmer, and Boris S. Zhorov

Coupling to Polymeric Scaffolds Stabilizes Biofunctional Peptides for Intracellular Applications
Ivo R. Ruttekol, Aloka Chakrabarti, Martin Richter, Falk Duchardt, Heike Glauner, Wouter P. R. Verdurmen, Jörg Rademann, and Roland Brock

The □ symbols in the table of contents identify articles discussed in the Perspective.
Helix 8 of the M1 Muscarinic Acetylcholine Receptor: Scanning Mutagenesis Delineates a G Protein Recognition Site
Robert G. Kaye, José W. Saldanha, Zhi-Liang Lu, and Edward C. Hulme

A Novel Defensive Mechanism against Acetaminophen Toxicity in the Mouse Lateral Nasal Gland: Role of CYP2A5-Mediated Regulation of Testosterone Homeostasis and Salivary Androgen-Binding Protein Expression
Xin Zhou, Yuan Wei, Fang Xie, Christina M. Laukaitis, Robert C. Karn, Kerri Kluetzman, Jun Gu, Qing-Yu Zhang, Dean W. Roberts, and Xinxin Ding

Acute Disruption of Bone Marrow Hematopoiesis by Benzo(a)pyrene Is Selectively Reversed by Aryl Hydrocarbon Receptor-Mediated Processes

Novel Regulation of Nuclear Factor-YB by miR-485-3p Affects the Expression of DNA Topoisomerase IIα and Drug Responsiveness
Cheng-Fen Chen, Xiaolong He, Ahmet Dirim Arslan, Yin-Yuan Mo, William C. Reinhold, Yves Pommier, and William T. Beck

A Cation-π Interaction at a Phenylalanine Residue in the Glycine Receptor Binding Site Is Conserved for Different Agonists
Stephan A. Pless, Ariele P. Hanek, Kerry L. Price, Joseph W. Lynch, Henry A. Lester, Dennis A. Dougherty, and Sarah C. R. Lummis

Agonist-Biased Signaling at the Histamine H4 Receptor: JNJ7777120 Recruits β-Arrestin without Activating G Proteins
Elizabeth M. Rosethorne and Steven J. Charlton

Effects of the Allosteric Antagonist 1-(4-Chlorophenyl)-3-[3-(6-pyrrolidin-1-ylpyridin-2-yl)phenyl]urea (PSNCBAM-1) on CB1 Receptor Modulation in the Cerebellum
Xiaowei Wang, James G. Horswill, Benjamin J. Whalley, and Gary J. Stephens

Protein Kinase C-Mediated Phosphorylation of the μ-Opioid Receptor and Its Effects on Receptor Signaling
Bo Feng, Zhihua Li, and Jia Bei Wang

The Penultimate Arginine of the Carboxyl Terminus Determines Slow Desensitization in a P2X Receptor from the Cattle Tick Boophilus microplus
Selvan Bavan, Louise Farmer, Shire K. Singh, Volko A. Straub, Felix D. Guerrero, and Steven J. Ennion

Proinflammatory Stimuli Control N-Acylphosphatidylethanolamine-Specific Phospholipase D Expression in Macrophages
Chenggang Zhu, Carlos Solorzano, Saurabh Sahar, Natalia Realini, Ernest Fung, Paolo Sassone-Corsi, and Daniele Piomelli

ERRATUM
Correction to “Antipsychotic Drugs Regulate Hedgehog Signaling by Modulation of 7-Dehydrocholesterol Reductase Levels”

Supplemental material is available online at http://molpharm.aspetjournals.org.

About the cover: Model of the Kv1.3 mutant A10C with two emopamil molecules. See the article by Rossokhin et al. on page 681 of this issue.