

# PHARMACOLOGICAL REVIEWS

A Publication of the American Society for Pharmacology and Experimental Therapeutics

July 2021

Volume 73, Number 3

## Review Articles

- ☐ The Emerging Role of the Innate Immune Response in Idiosyncratic Drug Reactions 861  
*Samantha Christine Sernoskie, Alison Jee, and Jack Paul Uetrecht*
- Unlocking G-Quadruplexes as Antiviral Targets 897  
*Ardavan Abiri, Marc Lavigne, Masoud Rezaei, Sanaz Nikzad, Peyman Zare, Jean-Louis Mergny, and Hamid-Reza Rahimi*
- Endothelial Dysfunction in Atherosclerotic Cardiovascular Diseases and Beyond: From Mechanism to Pharmacotherapies 924  
*Suowen Xu, Iqra Ilyas, Peter J. Little, Hong Li, Danielle Kamato, Xueying Zheng, Sihui Luo, Zhuoming Li, Peiqing Liu, Jihong Han, Ian C. Harding, Eno E. Ebong, Scott J. Cameron, Alastair G. Stewart, and Jianping Weng*
- Pharmacological Inhibition of the Nod-Like Receptor Family Pyrin Domain Containing 3 Inflammasome with MCC950 968  
*Sarah E. Corcoran, Reena Halai, and Matthew A. Cooper*
- New Aspects of Diabetes Research and Therapeutic Development 1001  
*Leslie S. Satin, Scott A. Soleimanpour, and Emily M. Walker*
- ☐ The Molecular Biology of Phosphodiesterase 4 Enzymes as Pharmacological Targets: An Interplay of Isoforms, Conformational States, and Inhibitors 1016  
*Dean Paes, Melissa Schepers, Ben Rombaut, Daniel van den Hove, Tim Vanmierlo, and Jos Prickaerts*
- Animal Models of Drug Relapse and Craving after Voluntary Abstinence: A Review 1050  
*Ida Fredriksson, Marco Venniro, David J. Reiner, Jonathan J. Chow, Jennifer M. Bossert, and Yavin Shaham*
- Aiding and Abetting Anhedonia: Impact of Inflammation on the Brain and Pharmacological Implications 1084  
*Michael J. Lucido, Mandy Bekhbat, David R. Goldsmith, Michael T. Treadway, Ebrahim Haroon, Jennifer C. Felger, and Andrew H. Miller*
- Therapeutic Targeting of  $\alpha 7$  Nicotinic Acetylcholine Receptors 1118  
*Roger L. Papke, and Nicole A. Horenstein*
- Aldo-Keto Reductases and Cancer Drug Resistance 1150  
*Trevor M. Penning, Sravan Jonnalagadda, Paul C. Trippier, and Tea Lanišnik Rižner*

About the cover: Four main potential applications of G4s in antiviral research. See the article by Abiri et al. ([dx.doi.org/10.1124/pharmrev.120.000230](https://doi.org/10.1124/pharmrev.120.000230)).