

## SLIGAR LAB PUBLICATIONS 2007

- 1 Alteration of P450 Distal Pocket Solvent Leads to Impaired Proton Delivery and Changes in Heme Geometry** Makris, TM, von Koenig, K., Schlichting, I, Sligar, SG. *Biochemistry* 2007, 46(49) 14129-14140.
- 2 Functional Assays of Membrane-Bound Proteins with SAMDI-TOF Mass Spectrometry.** Marin, VL, Bayburt, TH, Sligar, SG, Mrksich, M *Angew Chem Int Ed Engl.* 2007 46(46) 8796-8798.
- 3 Magic-Angle Spinning Solid-State NMR Spectroscopy of Nanodisc-Embedded Human CYP3A4.** Kijac, Aleksandra Z.; Li, Ying; Sligar, Stephen G.; Rienstra, Chad M. *Biochemistry* 2007, 46(48) 13696-13703.
- 4 Redox potential control by drug binding to cytochrome P 450 3A4.** Das, Aditi; Grinkova, Yelena V.; Sligar, Stephen G.. *Journal of the American Chemical Society* (2007), 129(45), 13778-13779.
- 5 The ferric-hydroperoxo complex of chloroperoxidase.** Denisov, Ilia G.; Dawson, John H.; Hager, Lowell P.; Sligar, Stephen G.. *Biochemical and Biophysical Research Communications* (2007), 363(4), 954-958.
- 6 Ligand Binding to Cytochrome P450 3A4 in Phospholipid Bilayer Nanodiscs: The Effect of Model Membranes.** Nath, Abhinav; Grinkova, Yelena V.; Sligar, Stephen G.; Atkins, William M. *Journal of Biological Chemistry* (2007), 282(39), 28309-28320.
- 7 Electron Transfer between Cytochrome P450cin and Its FMN-containing Redox Partner, Cindoxin.** Kimmich, Novelle; Das, Aditi; Sevrioukova, Irina; Meharena, Yergalem; Sligar, Stephen G.; Poulos, Thomas L. *Journal of Biological Chemistry* (2007), 282(37), 27006-27011.
- 8 The One-electron Autoxidation of Human Cytochrome P450 3A4.** Denisov, Ilia G.; Grinkova, Yelena V.; McLean, Mark A.; Sligar, Stephen G.. *Journal of Biological Chemistry* (2007), 282(37), 26865-26873.
- 9 Understanding Cooperativity in Human P450 Mediated Drug-Drug Interactions.** Sligar, Stephen G.; Denisov, Ilia G. *Drug Metabolism Reviews* (2007), 39(2-3), 567-579.
- 10 Assembly of Lipids and Proteins into Lipoprotein Particles.** Shih, Amy Y.; Arkhipov, Anton; Freddolino, Peter L.; Sligar, Stephen G.; Schulten, Klaus. *Journal of Physical Chemistry B* (2007), 111(38), 11095-11104.

**11 Allosteric Mechanisms in Cytochrome P450 3A4 Studied by High-Pressure Spectroscopy: Pivotal Role of Substrate-Induced Changes in the Accessibility and Degree of Hydration of the Heme Pocket.** Davydov, Dmitri R.; Baas, Bradley J.; Sligar, Stephen G.; Halpert, James R. *Biochemistry* (2007), 46(26), 7852-7864.

**12 Fluorescent probes for rapid screening of potential drug-drug interactions at the CYP3A4 level.** Chougnet, Antoinette; Grinkova, Yelena; Ricard, David; Sligar, Stephen; Woggon, Wolf-D. *ChemMedChem* (2007), 2(5), 717-724.

**13 Disassembly of Nanodiscs with Cholate.** Shih, Amy Y.; Freddolino, Peter L.; Sligar, Stephen G.; Schulten, Klaus. *Nano Letters* (2007), 7(6), 1692-1696.

**14 Detecting SNPs Using a Synthetic Nanopore.** Zhao, Q.; Sigalov, G.; Dimitrov, V.; Dorvel, B.; Mirsaidov, U.; Sligar, S.; Aksimentiev, A.; Timp, G. *Nano Letters* (2007), 7(6), 1680-1685.

**15 Transducin Activation by Nanoscale Lipid Bilayers Containing One and Two Rhodopsins.** Bayburt, Timothy H.; Leitz, Andrew J.; Xie, Guifu; Oprian, Daniel D.; Sligar, Stephen G.. *Journal of Biological Chemistry* (2007), 282(20), 14875-14881.

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**18 Cooperativity in Cytochrome P450 3A4: Linkages in Substrate Binding, Spin State, Uncoupling, and Product Formation.** Denisov, Ilia G.; Baas, Bradley J.; Grinkova, Yelena V.; Sligar, Stephen G.. *Journal of Biological Chemistry* (2007), 282(10), 7066-7076.

**19 The Local Phospholipid Environment Modulates the Activation of Blood Clotting.** Shaw, Andrew W.; Pureza, Vincent S.; Sligar, Stephen G.; Morrissey, James H. *Journal of Biological Chemistry* (2007), 282(9), 6556-6563.

**20 Cryoradiolytic reduction of heme proteins: Maximizing dose-dependent yield.** Denisov, Ilia G.; Victoria, Doreen C.; Sligar, Stephen G.. *Radiation Physics and Chemistry* (2007), 76(4), 714-721.

**21 Applications of Phospholipid Bilayer Nanodiscs in the Study of Membranes and Membrane Proteins.** Nath, Abhinav; Atkins, William M.; Sligar, Stephen G.. *Biochemistry* (2007), 46(8), 2059-2069.

**22 Diversities and similarities in P450 systems: an introduction.** Schuler, Mary A.; Sligar, Stephen G.. in: *Metal Ions in Life Sciences* (2007), 3(Ubiquitous Roles of Cytochrome P450 Proteins), 1-26. Publisher: John Wiley & Sons Ltd.