

PUBLICATIONS

Hirsch index, H = 26 (<http://quadsearch.csd.auth.gr/index.php?s=2&lan=1>). Total citations: ~2,250.

- 2011** 53 **Gomelsky, M.** and W.H. Hoff. 2011. Light helps bacteria make important lifestyle decisions. *Trends Microbiol* Jun 9. [Epub ahead of print]
- 52 He, M., Z. Ouyang, B. Troxell, H. Xu, A. Moh, J. Piesman, M.V. Norgard, **M. Gomelsky**, and X.F. Yang. 2011. Cyclic di-GMP is essential for the survival of the Lyme disease spirochete in ticks. *PLoS Pathogens* (in press)
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- 50 **Gomelsky, M.** 2011. cAMP, c-di-GMP, c-di-AMP and now cGMP: Bacteria use them all! MicroCommentary. *Mol Microbiol* 79:562-565.
- 49 Bobrov, A.G., O. Kirillina, D.A. Ryjenkov, C.M. Waters, P.A. Price, J.D. Fetherson, D. Mack, W.E. Goldman, **M. Gomelsky** and R.D. Perry. 2011. Systematic analysis of cyclic di-GMP signaling enzymes and their role in biofilm formation and virulence in *Yersinia pestis*. *Mol Microbiol* 79:533–551. (Faculty of 1000 Medicine: "Recommended")
- 48 Moskvina, O.V., D. Bolotin, A. Wang, P.S. Ivanov and **M. Gomelsky**. 2011. Rhodbase, a meta-analytical tool for reconstructing gene regulatory networks in a model photosynthetic bacterium. *BioSystems* 103:125-131.
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- 44 Fang, X. and **M. Gomelsky**. 2010. A post-translational, c-di-GMP-dependent mechanism regulating bacterial flagellar motility. *Mol Microbiol* 76:1295-1305. (Faculty of 1000 Biology: "Recommended")
- 43 Golomysova, A.N., **M. Gomelsky** and P.S. Ivanov. 2010. Mathematical modeling of bacterial metabolism. *Moscow University Physics Bulletin* 65:230-233.
- 2009** 42 **Gomelsky, M.** 2009. The core pathway: diguanylate cyclases, phosphodiesterases, and c-di-GMP-binding proteins. Chapter 4, pp. 37-56. *In The second messenger cyclic di-GMP*. (A. Wolfe and K. Visick, eds.) ASM Press, Washington, DC.
- 41 **Gomelsky, M.** 2009. C-di-GMP-binding CRP-like protein: a spectacular new role for a veteran signal transduction actor. Commentary. *J Bacteriol* 191:6785–6787.
- 40 Barends, T.R.M., E. Hartmann, J. Griese, T. Beitlich, N.V. Kirienko, D.A. Ryjenkov, J. Reinstein, R.L. Shoeman, **M. Gomelsky**[#] and I. Schlichting[#]. 2009. Structure and mechanism of a bacterial light-regulated cyclic nucleotide phosphodiesterase. *Nature* 459:1015-1018 ([#], corresponding authors). (Faculty of 1000 Biology: "Must read")

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- 38 Gomelsky, L., O.V. Moskvina, R. Stenzel, D. Jones, T.J. Donohue and **M. Gomelsky**. 2008. Hierarchical regulation of photosynthesis gene expression by oxygen-responsive PrrBA and AppA-PpsR systems of *Rhodobacter sphaeroides*. **J Bacteriol** 190:8106-8114.
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- 2007 36 Claret, L., S. Miquel, N. Vieille, D.A. Ryjenkov, **M. Gomelsky** and A. Darfeuille-Michaud. 2007. The flagellar sigma factor FlhA regulates adherence and invasion of Crohn disease-associated *Escherichia coli* via a c-di-GMP-dependent pathway. **J Biol Chem** 282:33275-33283. (Faculty of 1000 Biology: "Recommended")
- 35 Moskvina, O.V., S. Kaplan, M-A. Gilles-Gonzalez and **M. Gomelsky**. 2007. Novel heme-based oxygen sensor with a revealing evolutionary history. **J Biol Chem** 282:28740-28748. (Faculty of 1000 Biology: "Recommended")
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- 29 Jung, A., T. Domratheva, M. Tarutina, Q. Wu, W.-H. Ko, R.L. Shoeman, **M. Gomelsky**, K.H. Gardner and I. Schlichting. 2005. Structure of a bacterial BLUF photoreceptor: Insights into blue light-mediated signal transduction. **Proc Natl Acad Sci USA** 102:12350-12355.
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- 22 Pappas, C.T., J. Sram, O.V. Moskvina, P.S. Ivanov, R.C. Mackenzie, M. Choudhary, M.L. Land, F.W. Larimer, S. Kaplan and **M. Gomelsky**. 2004. Construction and validation of the genome-wide DNA microarray of *Rhodobacter sphaeroides* 2.4.1: Transcriptome flexibility at diverse growth modes. **J Bacteriol** 186:4748-4758.
- 21 Li, S.-Y., **M. Gomelsky**, J. Duan, Z. Zhang, L. Gomelsky, X. Zhang, P.N. Epstein and J. Ren. 2004. Overexpression of aldehyde dehydrogenase-2 (ALDH2) transgene prevents acetaldehyde-induced cell injury in human umbilical vein endothelial cells: Role of ERK and p38 MAP kinase. **J Biol Chem** 279:11244-11252.
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