

Pending:

- 1, NIAID R21 proposal 07/01/2017 – 06/30/2019
Genome mining of *Actinokineospora* spp., targeted identification of natural products and biosynthetic pathways
Role: PI
- 2, NIEHS/NSF P01 Proposal 4/1/2018 – 3/31/2023
Center for Oceans and Human Health: Addressing the impacts of climate change on the health of Florida coastal ecosystems and communities
Role: Co-I

PRESENTATIONS

- 2, **Invited talk.** Targeting new marine natural products by the activation of cryptic gene clusters. 2016 Florida Annual Meeting and Exposition (FAME), Tampa, FL, 05/05/2016-05/07/2016.
- 1, Identifying the biosynthesis of a potent cytotoxic agent Lasonolide A. 2016 Marine Natural Products, the Gordon Research Conference, Ventura, CA, 03/06/2016-03/11/2016.

PUBLICATIONS (*: corresponding author)

- 24, **Guojun Wang***, Nolan Barrett and Peter McCarthy (2017) Draft genome sequence of a deep-sea *Alteromonas* sp. V450 isolated from marine sponge *Leiodermatium* sp. **Genome Announcements** **5** (5): e01508-16.
- 23, **Guojun Wang***, Jing Chen, Haining Zhu, and Jürgen Rohr* (2017) One-pot total synthesis of presteffimycinone, an early intermediate of the anthracycline antibiotic steffimycin biosynthesis. **Organic Letters** **19** (3): 540–543.
- 22, **Guojun Wang**, Masami Izawa, Xiaoge Yang, Dongbo Xu, Yukinori Tanaka, and Kozo Ochi. (2017) Identification of a novel lincomycin resistance mutation linked with activation of antibiotic production in *Streptomyces coelicolor* A3(2). **Antimicrobial Agents and Chemotherapy** **61** (2): e02247-16.
- 21, **Guojun Wang**, Ting Zhang, Haifeng Huang, Shurong Hou, Xiabin Chen, Fang Zheng and Chang-Guo Zhan. (2016) Plant expression of cocaine hydrolase-Fc fusion protein for treatment of cocaine abuse. **BMC Biotechnology** **16**: 72, **DOI**: 10.1186/s12896-016-0302-9.
- 20, David Jackson, Xia Yu, **Guojun Wang**, Avinash Patel, Jesus Barajas, Eita Sasaki, Mikko Metsä-Ketala, Jürgen Rohr, Shiou-Chuan (Sheryl) Tsai (2016) Insights into complex oxidation during BE-7585A biosynthesis: structural determination and analysis of the polyketide monooxygenase BexE.

- (9): 2811-2815.
- 17, Shanteri Singh, Jianjun Zhang, Tyler D. Huber, Manjula Sunkara, Katherine Hurley, Randa D. Goff, **Guojun Wang**, Wen Zhang, Chunming Liu, Jürgen Rohr, Steven G. Van Lanen, Andrew J. Morris, Jon S. Thorson. (2014) Facile strategies for the synthesis and utilization of *S*-adenosyl-L-methionine analogs. *Angewandte Chemie International Edition* **53** (15): 3965-3969.
 - 16, Yosi Nindita, Tomoya Nishikawa, Kenji Arakawa, **Guojun Wang**, Kozo Ochi, Zhongjun Qin, Haruyasu Kinashi. (2013) Chromosomal circularization of the model *Streptomyces* species, *Streptomyces coelicolor* A3(2). *FEMS Microbiology Letters* **347** (2): 149-155.
 - 15, **Guojun Wang**, Pallab Pahari, Madan K. Kharel, Jing Chen, Haining Zhu, Steven G. Van Lanen and Jürgen Rohr (2012) Cooperation of two bifunctional enzymes in the biosynthesis and attachment of deoxysugars of the antitumor antibiotic mithramycin. *Angewandte Chemie International Edition* **51** (42): 10638–10642.
 - 14, Nidhi Tibrewal, Pallab Pahari, **Guojun Wang**, Madan K. Kharel, Caleb Morris, Theresa Downey, Jon S. Thorson, and Jürgen Rohr (2012) Elucidation of the key C-C bond cleavage during the biosynthesis of antitumor antibiotics gilvocacin and jadomycin. *Journal of the American Chemical Society* **134** (44):18181-18184.
 - 13, Madan K. Kharel, Pallab Pahari, Khaled A. Shaaban, **Guojun Wang**, and Jürgen Rohr (2012) Elucidation of post-PKS redox reactions involved in the biosynthesis of landomycins. *Organic Biomolecular Chemistry* **10** (21): 4256-4265.
 - 12, **Guojun Wang**, Madan K. Kharel, Pallab Pahari, and Jürgen Rohr (2011) Investigating mithramycin deoxysugar biosynthesis: large scale enzymatic preparation of TDP-D-olivose. *ChemBioChem*. **12** (17): 2568-2571.
 - 11, **Guojun Wang**, Yukinori Tanaka, and Kozo Ochi. (2010) The G243D Mutation (*afsB* mutation) in the principal sigma factor ω^{HrdB} alters intracellular ppGpp level and antibiotic production in *Streptomyces coelicolor* A3(2). *Microbiology* **156** (8): 2384-2392.
 - 10, **Guojun Wang**, Takashi Inaoka, Susumu Okamoto, and Kozo Ochi. (2009) A novel insertion mutation (92::G) in ribosomal S12 protein results in paromomycin resistance and antibiotic overproduction in *Streptomyces coelicolor* A3(2). *Antimicrobial Agents and Chemotherapy* **53** (3): 1019-1026.
 - 9, Takashi Inaoka, **Guojun Wang**, and Kozo Ochi (2009) ScoC regulates bacilysin production at the transcription level in *Bacillus subtilis*. *Journal of Bacteriology* **191** (23): 7367-7371.
 - 8, Adelfia Tala, **Guojun Wang**, Martina Zemanova, Susumu Okamoto, Kozo Ochi, and Pietro Alifano (2009) Activation of dor93eg5.1(i)6.r(9(s)768i Tc()T09h)-5.13i9.201 Tmnd 78.8()-37.2(T)69.582017-7

production in bacteria by cumulative drug-resistance mutations. *Applied and Environmental Microbiology* **74** (9): 2834-2840.

- 5, Hongbo Ling, **Guojun Wang**, Jin-E Li, and Huarong Tan. (2008) *sanN* encoding a dehydrogenase is essential for nikkomycin biosynthesis in *Streptomyces ansochromogenes*. *Journal of Microbiology Biotechnology* **18** (3), 397–403.
- 4, Hongbo Ling, **Guojun Wang**, Yuqing Tian, Gang Liu, and Huarong Tan. (2007) SanM catalyzes the formation of 4-pyridyl-2-oxo-4-hydroxyisovalerate in nikkomycin biosynthesis by interacting with SanN. *Biochemical and Biophysical Research Communications* **361**