

Sean A. Reed

ASSOCIATE

Patents and
Innovations
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FOCUS AREAS

Intellectual Property
Life Sciences
Patents and Innovations

EXPERIENCE

Dr. Sean Reed is an associate in the San Diego office of Wilson Sonsini Goodrich & Rosati, where he is a member of the patents and innovations practice. His practice is focused on intellectual property matters related to chemistry, chemical biology, and pharmaceuticals.

Prior to joining the firm, Sean was an NIH postdoctoral research fellow at the Scripps Research Institute, where he gained significant experience in the synthetic biology field. His work focused on the incorporation of unnatural amino acids into thiopeptide antibiotics and the creation of reduced amino acid organisms. Previously, he completed his doctoral degree at the University of Illinois, where his dissertation focused on the development and application of new carbon-hydrogen bond activation reactions to streamline the synthesis of pharmaceutical intermediates and diversify natural product scaffolds.

CREDENTIALS

Education

- J.D., University of San Diego School of Law, 2022
- Ph.D., Chemistry, University of Illinois at Urbana-Champaign, 2012
- B.S., Chemistry and Psychology, Iowa State University, 2005

Associations and Memberships

- Member, San Diego Intellectual Property Law Association

Admissions

- State Bar of California
- U.S. Patent and Trademark Office

INSIGHTS

Select Publications

- Co-author with A. Mehta, H. Li, L. Supekova, T. Javahishvili, and P. Schultz, "Replacement of 2'-deoxycytidine by 2'-deoxycytidine Analogs in the E. coli Genome," 138(43) *Journal of the American Chemical Society* 14230-3, 2016
- Co-author with A. Mehta, H. Li, L. Supekova, T. Javahishvili, and P. Schultz, "Replacement of Nucleosides by a Modified Base in the E. coli Genome," 138(23) *Journal of the American Chemical Society* 7272-5, 2016
- Co-author with X. Luo, C. Zambaldo, T. Liu, Y. Zhang, W. Xuan, C. Wang, P. Yang, R.E. Wang, T. Javahishvili, P. Schultz, and T. Young, "Recombinant Thiopeptides Containing Noncanonical Amino Acids," 113(13) *Proceedings of the National Academy of Sciences* 3615-20, 2016
- Co-author with T. Liu, Y. Wang, X. Luo, J. Li, H. Xiao, T. Young, and P. Schultz, "Enhancing Protein Stability with Extended Disulfide Bonds," 113(21) *Proceedings of the National Academy of Sciences*

5910-5, 2016

- Co-author with H. Xiao, F. Nasertorabi, S.H. Choi, G. Han, R. Stevens, and P. Schultz, "Exploring the potential impact of an expanded genetic code on protein function," 112(22) *Proceedings of the National Academy of Sciences* 6961-6, 2015
- Coauthor with H. Xiao, F. Peters, P.Y. Yang, J. Chittuluru, and P. Schultz, "Genetic incorporation of histidine derivatives using an engineered pyrrolysyl-tRNA synthetase," 9(5) *ACS Chemical Biology* 1092-6, 2014
- Co-author with M. Bigi and M. White, "Directed metal(oxo) aliphatic C—H hydroxylation: Overriding substrate bias," 134(23) *Journal of the American Chemical Society* 9721-6, 2012
- Co-author with M. Bigi and M. White, "Diverting non-haem iron catalysed aliphatic C—H hydroxylations towards desaturations," 3 *Nature Chemistry* 216-22, 2011
- Co-author with A. Mazzotti and M. White, "A Catalytic, Brønsted Base Strategy for Intermolecular Allylic C—H Amination," 131(33) *Journal of the American Chemical Society* 11701-6, 2009
- Co-author with M. White, "Catalytic, Intermolecular Linear Allylic C—H Amination via Heterobimetallic Catalysis," 130(11) *Journal of the American Chemical Society* 3316-8, 2008

TECHNICAL FLUENCY

Biological Sciences and Biotechnology

- Bioconjugation
- Genomics
- Molecular biology
- PCR

Therapeutics and Drug Discovery

- Drug conjugates
- Peptide therapeutics
- RNA interference (RNAi)
- Small molecule synthesis
- Small molecules

Chemistry and Material Science

- Catalysis
- Chemical synthesis
- Chemistry
- Chemoenzymatic synthesis
- Organic chemistry
- Peptidomimetics
- Protein engineering

Genomics and Data Analysis

- Next-generation sequencing