

Serina L. Robinson

1. PERSONAL INFORMATION

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OrcID: [0000-0001-6947-7913](https://orcid.org/0000-0001-6947-7913); **Google Scholar:** [0bXdVF8AAAAJ&hl](https://scholar.google.com/citations?user=0bXdVF8AAAAJ&hl)

Languages: English: native, Norwegian: C1, German: B2

2. OVERVIEW

- Research areas: metagenome-guided discovery of microbial enzymes and pathways, machine learning, pollutant biotransformation including per- and polyfluoroalkyl substances (PFAS).
- Collaborative researcher working across disciplines including environmental biochemistry, microbiology and microbial ecology, computational biology and cheminformatics.

3. PROFESSIONAL EXPERIENCE

Sept 2021 – Present | **Group leader**

Department of Environmental Microbiology
Swiss Federal Institute of Aquatic Science and Technology (Eawag)
Dübendorf, CH

Aug 2020 – Aug 2021 | **ETH Postdoctoral research fellow**

Advisor: Prof. Dr. Jörn Piel, Institute of Microbiology
Eidgenössische Technische Hochschule (ETH) Zürich, Zürich, CH

Jun 2020 – Jul 2020 | **Postdoctoral researcher**, Advisor: Prof. Dr. Larry Wackett

University of Minnesota – Twin Cities, Minneapolis, MN, USA

Jan 2019 – July 2019 | **National Science Foundation Ph.D. research fellow abroad**

Dept. of Bioinformatics, Advisor: Prof. Dr. Marnix Medema
Wageningen University & Research, Wageningen, the Netherlands

Aug 2015 – Aug 2016 | **Fulbright research fellow**, Advisor: Prof. Dr. Mette M. Svenning

UiT: the Arctic University of Norway, Tromsø, Norway

Aug 2013 – May 2015 | **EPA GRO research Fellow**, Advisor: Dr. Carlie A. Lalone,

U.S. Environ. Protection Agency Mid-continent Ecology Div., Duluth, USA

4. EDUCATION

Sept 2016 – May 2020 | **Ph.D., Microbiology**, defended May 27, 2020, Advisor: Prof. Dr. Larry Wackett, University of Minnesota – Twin Cities, Minneapolis, MN, USA

Sept 2018 – April 2020 | **M.Sc., Bioinformatics and Computational Biology (dual degree with Ph.D.)** University of Minnesota – Twin Cities, Minneapolis, USA

Sept 2011 – May 2015 | **B.A., Chemistry, B.A. Norwegian**, *summa cum laude*

Saint Olaf College, Northfield, MN, USA

5. TEACHING & EDUCATIONAL ACTIVITIES

- Yearly, fall semesters: 752-4001-00L *Microbiology*, ETHZ, core D-USYS/D-HEST course
- Yearly, spring semesters: 701-0220-00L *Practical Course in Microbiology*, ETHZ, D-USYS
- February 2025: Workshop organizer for SCNAT Rigi course: 'Microbiome meets metabolism'
- June 2023: PEAK course lecturer, 'Transformationsprozesse von Spurenstoffen' (in German)

- June 2023: 'Applied Meta'omics' metagenomics workshop leader and lecturer, ETHZ
- Oct 2021: Lorentz Center scientific workshop co-organizer and leader, Leiden, NL
- March 2021: P GL Bio I *Microbiology Practicum* (D-BIOL), lab group leader, ETHZ
- Sept 2017 – Dec 2018: MicB 3301 *Biology of Microorganisms*, lab instructor, U of MN, USA
- Jan 2014 – May 2015: CSCI 125 *Computer Science for Scientists*, co-lecturer, designed new curriculum and group projects, St. Olaf College, Northfield, MN, USA

Supervision of thesis projects (since starting independent position in 2021):

- External PhD Dissertation Committee Member:
 - Pilar Natalia Rodilla Ramírez, EPFL (Feb 2025), Advisor: Prof. Dr. Christof Holliger
 - Jamille Viray, UNIL (8 month evaluation, Jan 2025), Advisor: Prof. Dr. Philipp Engel
 - Lucas van der Maas, DTU (Jun 2024), Advisor: Dr. Sheila Ingemann Jensen
 - Asimena Gavrilidou, Wageningen Univ. (May 2023), Advisor: Prof. Dr. Detmer Sipkema
- 3 PhDs (degrees in progress from ETH): Thierry Marti, Victoria Poltorak, Milo Schärer
- 5 MSc students:
 - Diana Schweizer, MSc from FHNW and Eawag (in progress, expected Aug 2025), "Development of a biosensor for rapid detection and quantification of selected short-chain PFAS in water"
 - Nicolas Pfeiffer, MSc, ETHZ and Eawag (Feb 2023): "Searching for potential trifluoroacetic acid (TFA) precursors"
 - Mustafa Attrah, MSc, IHE-Delft and Eawag (Apr 2023): "Micropollutants in aquatic ecosystems and their potential to alter antibiotic resistance genes abundance and mobility"
 - Sophie Kuhn, MSc, ETHZ and Eawag (March 2024): "Interactions between xenobiotics and human microbiota with a focus on the fluorinated anticancer drug, capecitabine"
 - Ben Henry, MSc, ETHZ and Eawag (Aug 2024): "Flutamide: evidence for the reduction of a fluorinated nitroaromatic prodrug and its environmental relevance"
- 2 BSc students:
 - Diana Schweizer, BSc, FHNW and Eawag (Aug 2023): "Biochemical characterization and substrate specificity of microbial paracetamol amidase homologs"
 - Isabelle Teufer, BSc, ETHZ and Eawag (Sept 2024): "Bacterial biodegradation of the fluorinated cancer drug capecitabine"

6. SELECTED ORAL PRESENTATIONS

- Upcoming October 2026, Invited keynote speaker, Ecotoxicologic conference 5th International Conference in Microbial Ecotoxicology, Thessaloniki, GR
- October 2025, Invited speaker, ENAC, EPFL, Lausanne, CH
- Aug 2025, Invited speaker, Swiss Society of Microbiology, Interlaken, CH
- Jun 2025, Oral presentation, Bundesamt für Umwelt BAFU, Bern, CH
- Jun 2025: Invited speaker, SNE Chemical Biology meeting, Champéry, CH
- Jan 2025, Invited conference session convener, session chair, and speaker, Society for Industrial Microbiology and Biotechnology NP Meeting, San Diego, CA, USA
- Nov 2024, Invited speaker, Swiss Society of Toxicology Annual Meeting, Basel, CH
- June 2024 Invited speaker, Institute of Biology, University of Leiden, Leiden, NL
- June 2024 Invited speaker, Microbial Secondary Metabolites in Microbiomes Symposium, (Major international symposium), Helsingør, DK
- May 2024 Invited speaker, 4th Synthetic Biology of Natural Products Meeting (Major international symposium), Yucatan, MX
- May 2024 Invited speaker, UK-Switzerland Synthetic Biology & Climate, Swiss Embassy, UK
- April 2024 Invited speaker, ETH Zürich departmental seminars (D-USYS/D-HEST), Zürich, CH
- Jan 2024, Invited speaker, Swiss Microbiomes Forum, ETH Zürich, CH

- Jan 2024 Invited online speaker, Oregon State University, Corvallis, OR, USA
- Sept 2023 Invited speaker, ETH Zürich Genetic Diversity Center Symposium, Zürich, CH
- August 2023 Invited speaker, Swiss-UK Synthetic Biology Symposium. UNIL, CH
- August 2023 Invited speaker, Society for Industrial Microbiology and Biotechnology Annual Meeting (SIMB, Major international symposium), Minneapolis, MN, USA
- Dec 2022 Invited speaker, University of Applied Sciences (FHNW), Muttensz, CH
- August 2022 Speaker, International Society for Microbiology Ecology Conference, EPFL, CH
- May 2022 Invited Speaker, EPFL Environmental Engineering Seminar Series, Lausanne, CH
- April 2022 Speaker, Life Sciences Switzerland (LS²) Annual Meeting, UZH, CH
- February 2020 Nominated best talk from Gordon Research Seminar, invited speaking slot at the Gordon Research Conference in Marine Natural Products, Ventura, CA, USA
- May 2019 Selected talk, Novo Nordisk Bioscience Conference, Hillerød, DK

7. AWARDS, GRANTS, FELLOWSHIPS, AND SCHOLARSHIPS

- 2025 ERC Starting Grant (solo-PI)
- 2025 American Chemical Society Environmental Au Rising Stars Award
- 2024 Horizon Europe Grant (EU RIA HORIZON-CL6-2024-CircBio-01-10 grant, co-PI)
- 2024 Uniscientia/World Food Systems Center grant (co-PIs, N. Bokulich, S. Sturla, ETHZ)
- 2024 ETH Research Domain Open Research Data (ORD) Program Grant (solo-PI)
- 2023 ETH Research Grant recipient (co-PIs, N. Bokulich, S. Sturla, ETHZ)
- 2022 Swiss National Science Foundation Ambizione (solo-PI)
- 2022 Helmut Horten Foundation New Investigator Grant (solo-PI)
- 2022 Pierre Mercier Foundation funding (solo-PI)
- 2021 JGI Community Science Program (CSP) Functional Genomics Award
- 2021 ETH Zürich Postdoctoral Fellowship Award
- 2020 Dr. Marvin and Hadassah Bacaner Award for outstanding PhD research
- 2020 Beatrice Z. Milne and Theodore Brandenburg Award for outstanding PhD thesis
- 2019 National Academy of Sciences Cozzarelli Prize for outstanding paper (PNAS)
- 2016 U.S. Fulbright Fellowship
- 2016 National Science Foundation Graduate Research Fellowship (NSF GRFP)
- 2015 Arnold and Mabel Beckman Foundation Research Scholarship
- 2014 Environmental Protection Agency Greater Research Opportunities Fellow

8. DISSEMINATION & PUBLIC OUTREACH

- 2025: Working group, Eawag-Empa PFAS stakeholder / public education event (in German)
- 2025: Co-designer, Eawag-Empa PFAS educational flyer
- 2025: "Nano" on 3sat/SRF1 documentary interview: '[PFAS biodegradation](#)'
- 2024: Eawag 'Open Door Day' for scientific outreach
- 2021: American Society for Microbiology blog post contributor on [undergraduate research](#)

9. PROFESSIONAL ACTIVITIES

- 2024 – Present: PI member of the World Food System Center (WFSC), ETHZ
- 2023 – Present: PI member, Microbiology and Immunology (MIM) Graduate Program, ETHZ
- Regular peer review of articles including for *Nature*, *Nature Communications*, *Cell Press*, *ES&T*
- Grant review including: DFG, EMBL EIPOD-LinC, ETH Applied Research Partnership, JGI CSP
- Associate journal editor: *Federation of European Microbiology Societies (FEMS) Microbes*
- 2022 – 2023 memberships: Society for Industrial Microbiology and Biotechnology (SIMB), Life Sciences Switzerland (LS²) member, International Society for Microbial Ecology (ISME)
- Seminar organization committee for Environmental Microbiology & Eawag seminar series

SELECTED PUBLICATIONS AND PATENTS

#denotes corresponding or co-corresponding authorship

Selected peer-reviewed publications:

Publications since starting independent position September 2021:

1. Probst, S. I., Felder, F. D., Poltorak, V., Mewalal, R., Blaby, I. K., & **#Robinson, S. L.** (2025). Enzymatic carbon–fluorine bond cleavage by human gut microbes. *Proceedings of the National Academy of Sciences*, 122(24), e2504122122.
2. Blin, K., Loureiro, C., Louwen, N. L., Navarro-Muñoz, J. C., Gerstmans, H., **Robinson, S. L.**, ... & Zdouc, M. M. (2025). Strategies for community-sourced biocuration in bioinformatics: a case study on MIBiG 4.0. *Briefings in Bioinformatics*, 26(6), bbaf659.
3. Cavallaro, A., Probst, S., Duft, T., Rieder, M., El Fateh, O.A., Stricker, J., Gabrielli, M., **Robinson, S.L.**, Hammes, F., (2024). Variable inhibition of different *Legionella* species by antagonistic bacteria. *Appl. Env. Microb.*, 91 (10), e01164-25.
4. Feng, M., Varliero, G., Perez-Mon, C., **Robinson, S.L.**, Weihong, Q., Stierli, B., Frey, B. (2025) Permafrost thawing by soil transplantation alters the functional genetic potential of the alpine permafrost microbiome. *Geoderma*. doi: 10.1016/j.geoderma.2025.117339.
5. Zünd, J.N., Mujezinovic, D., Reichlin, M., Plüss, S., ... **Robinson, S.L.**, Lacroix, C., Pugin, B. (2025) Novel cross-feeding human gut microbes metabolizing tryptophan to indole-3-propionate are promoted by pectin fiber. *Gut Microbes*. 17(1), 2501195. doi: [10.1080/19490976.2025.2501195](https://doi.org/10.1080/19490976.2025.2501195)
6. Zdouc, M. M., Blin, K., ...**Robinson, S.L.**... [community science paper, 100+ authors]...Weber, T., Medema, M.H. (2025). MIBiG 4.0: advancing biosynthetic gene cluster curation through global collaboration. *Nucleic acids research*, 53(D1), D678-D690. doi: [10.1093/nar/gkae1115](https://doi.org/10.1093/nar/gkae1115)
7. Marti, T.D., Schweizer, D., Yu, Y., ... Probst, S.I., **#Robinson, S.L.** (2024). Machine learning reveals signatures of promiscuous microbial amidases for micropollutant biotransformations. *ACS Environmental Au*. 5(1), 114-127. doi: [10.1021/acsenvironau.4c00066](https://doi.org/10.1021/acsenvironau.4c00066)
8. Attrah, M., Schärer, M., Esposito, M., Gionchetta, G., Bürgmann, H., Lens, P., Fenner, K.F., van de Vossenberg, J., **#Robinson, S.L.** (2024) Disentangling abiotic and biotic effects of treated wastewater on stream biofilm resistomes enables discovery of a new planctomycete beta-lactamase. *Microbiome*. 12, 164. doi: [10.1186/s40168-024-01879-w](https://doi.org/10.1186/s40168-024-01879-w).
9. **#Wackett, L.P.** and **#Robinson, S.L.**, (2024) A prescription for engineering PFAS biodegradation. *Biochemical Journal*, 481(23), 1757. doi: [10.1042/BCJ20240283](https://doi.org/10.1042/BCJ20240283)
10. Seller-Brison, C., Brison, A., Yu, Y., **Robinson, S.L.** and Fenner, K., (2024) Adaptation towards catabolic biodegradation of trace organic contaminants in activated sludge. *Water Research*, p.122431. doi: [10.1016/j.watres.2024.122431](https://doi.org/10.1016/j.watres.2024.122431).
11. Feng, M., **Robinson, S.L.**, Qi, W., Edwards, A., Stierli, B., van der Heijden, M., Frey, B. and Varliero, G., (2024) Microbial genetic potential differs among cryospheric habitats of the Damma glacier. *Microbial Genomics*, 10(10), p.001301. doi: [10.1099/mgen.0.001301](https://doi.org/10.1099/mgen.0.001301).

12. Yu Y., Trottman, N.F., Schaerer, M.R., Fenner, K., **#Robinson, S.L.**, (2024) Substrate promiscuity of xenobiotic-transforming hydrolases from stream biofilms impacted by treated wastewater. *Water Research*. 256, 121593. doi: [10.1016/j.watres.2024.121593](https://doi.org/10.1016/j.watres.2024.121593).
13. **#Robinson, S.L.** (2023) Structure-guided metagenome mining to tap microbial functional diversity. *Current Opinion in Microbiology*. doi: [10.1016/j.mib.2023.102382](https://doi.org/10.1016/j.mib.2023.102382).
14. Bopp, C.E., Bernet, N.M., Meyer, F., Khan, R., **Robinson, S.L.**, Kohler, H.P.E., Buller, R. and Hofstetter, T., (2023) Elucidating the Role of O₂ Uncoupling for the Adaptation of Bacterial Biodegradation Reactions Catalyzed by Rieske Oxygenases. *ACS Environmental Au*. doi: [10.1021/acsenvironau.4c00016](https://doi.org/10.1021/acsenvironau.4c00016).
15. Mullowney, M.W., Duncan, K.R., Elsayed, S.S., Garg, N., van der Hooft, J.J.,...van Westen, G.J.P., Hirsch, A.K., Linington, R.G., **#Robinson, S.L.**, Medema, M.H. (2023) Artificial intelligence for natural product drug discovery. *Nature Reviews Drug Discovery*. doi: [10.1038/s41573-023-00774-7](https://doi.org/10.1038/s41573-023-00774-7).
16. Feng, M., Varliero, G., Qi, W., Stierli, B., Edwards, A., Robinson, S., ... & Frey, B. (2023). Microbial dynamics in soils of the Damma glacier forefield show succession in the functional genetic potential. *Environmental Microbiology*, 25(12), 3116-3138. [10.1111/1462-2920.16497](https://doi.org/10.1111/1462-2920.16497)
17. Marti, T.D., Schärer, M.R., **#Robinson, S.L.** (2023) Microbial biocatalysis within us: the underexplored xenobiotic biotransformation potential of the urinary tract microbiota. *CHIMIA*, 77 (6), 424-431. doi: [10.2533/chimia.2023.424](https://doi.org/10.2533/chimia.2023.424).
18. Fraley, A., **Robinson, S.L.**, and Piel, J., (2023) The versatile natural product enzymology of marine microbial communities. *Aldrichimica ACTA*. 55(3), 55-75.
19. Terlouw, B. R., Blin, K., ...**Robinson S.L.**, ...Weber, T., Medema, M. H. (2023). MIBiG 3.0: a community-driven effort to annotate experimentally validated biosynthetic gene clusters. *Nucleic Acids Research*, 51(D1), D603-D610. doi:[10.1093/nar/gkac1049](https://doi.org/10.1093/nar/gkac1049).
20. Paoli, L., Ruscheweyh, H.J., Forneris, C.C., Hubrich, F., Kautsar, S., Bhushan, A., Lotti, A., ... **#Robinson, S.L.**, **#Piel, J.P.**, **#Sunagawa, S.** (2022) Biosynthetic potential of the global ocean microbiome. *Nature*, 1-8. doi: [10.1038/s41586-022-04862-3](https://doi.org/10.1038/s41586-022-04862-3). **#co-corresponding**.
21. Scott, T.A., Verest, M., Farnung, J., Forneris, C.C., **Robinson, S.L.**, Ji, X., Hubrich, F., Chepkirui, C., Richter, D.U., Huber, S., Rust, P., Streiff, A.B., Zhang, Q., Bode, J.W., Piel, J.P. (2022) Widespread microbial utilization of ribosomal β -amino acid-containing peptides and proteins. *Chem*, 8(10), 2659-2677. doi: [10.1016/j.chempr.2022.09.017](https://doi.org/10.1016/j.chempr.2022.09.017).
22. Hubrich, F., Bösch, N.M., Chepkirui, C., Morinaka, B.I., Rust, M., Gugger, M., **Robinson, S.L.**, Vagstad, A.L., Piel, J. (2022) Ribosomally derived lipopeptides containing distinct fatty acyl moieties. *Proceedings of the National Academy of Sciences (PNAS)*, 119(3).
23. Paoli, L. & **Robinson, S.L.**, (2022) A wealth of new biosynthetic pathways from the global ocean microbiome. *Nature*, doi: [10.1038/d41586-022-01545-x](https://doi.org/10.1038/d41586-022-01545-x).
24. Guo, F., McAuliffe, J.C., Bongiorno, C. Latone, J.A., Pepsin, M.J., Chow, M.S., Dhaliwal, R.S., Hoffmann, K.M., Brazil, B.T., Heng, M.H., **Robinson, S.L.**, Wackett, L.P., Whited, G.M. A procedure for removal of cyanuric acid in swimming pools using a cell-free

thermostable cyanuric acid hydrolase. (2022) *Journal of Industrial Microbiology and Biotechnology*, 49(2), kuab084. doi: [10.1093/jimb/kuab084](https://doi.org/10.1093/jimb/kuab084).

25. Mason-Jones, K.M., **Robinson, S.L.**, Veen, G.F., Manzoni, S.M., van der Putten, W.H. (2022) Microbial storage and its implications for soil ecology. 16, 617–629. *The ISME Journal*, doi: [10.1038/s41396-021-01110-w](https://doi.org/10.1038/s41396-021-01110-w).

26. **#Robinson, S.L.**, (2021) Artificial intelligence for microbial biotechnology: beyond the hype. *Microbial Biotechnology*, 15(1), 65-69. doi: [10.1111/1751-7915.13943](https://doi.org/10.1111/1751-7915.13943).

Publication record prior to starting at Eawag:

27. **#Robinson, S.L.**, Piel, J., Sunagawa, S. A. (2021) A roadmap for metagenomic enzyme discovery. *Natural Product Reports*, 38(11), 1994-2023. doi: [10.1039/D1NP00006C](https://doi.org/10.1039/D1NP00006C).
28. **Robinson, S.L.**, Biernath, T., Rosenthal, C., Young, D., Wackett, L.P., Martinez-Vaz, B.M. (2021) Development of the organonitrogen biodegradation database: teaching bioinformatics and collaborative skills to undergraduates. *Journal of Biology & Microbiology Education*, 22(1), ev22i1.2351. doi: [10.1128/jmbe.v22i1.2351](https://doi.org/10.1128/jmbe.v22i1.2351).
29. Tracanna, V., Ossowicki, A., Petrus, M.L.C., Overduin, S., Terlouw, B.R., George Lund, G., **Robinson, S.L.**, Warris, S., Schijlen, E.G.W.M., van Wezel, G.P., Raaijmakers, J.M., Garbeva, P. Medema, M.H. (2021) Dissecting disease-suppressive rhizosphere microbiomes by functional amplicon sequencing and 10X metagenomics. *mSystems*, 6(3), e01116-20. doi: [10.1128/mSystems.01116-20](https://doi.org/10.1128/mSystems.01116-20).
30. **#Robinson, S.L.**, Terlouw, B.R., Smith, M.D., Pidot, S.J., Stinear, T.P., Medema, M.H., Wackett, L.P. (2020) Global analysis of adenylate-forming enzymes reveals β -lactone biosynthesis pathway in pathogenic *Nocardia*. *Journal of Biological Chemistry*. 295(44), 14826-14839. doi: [10.1074/jbc.RA120.013528](https://doi.org/10.1074/jbc.RA120.013528).
31. Wackett, L.P. & **Robinson, S.L.** (2020) The ever-expanding limits of enzyme catalysis and biodegradation: polyaromatic, polychlorinated, polyfluorinated, and polymeric compounds. *Biochemical Journal*, 477(15), 2875–2891. doi: [10.1042/BCJ20190720](https://doi.org/10.1042/BCJ20190720).
32. **#Robinson, S.L.**, Smith, M.D., Richman, J.E., Aukema, K.G., Wackett, L.P. (2020) Machine learning-based prediction of activity and substrate scope for OleA enzymes in the thiolase superfamily. *Synthetic Biology*, 5(1), ysaa004. doi: [10.1093/synbio/ysaa004](https://doi.org/10.1093/synbio/ysaa004).
33. Smith M.D., **Robinson S.L.**, Molomjamts M.M., Wackett L.P. (2020) *In vivo* assay reveals microbial OleA thiolases initiating hydrocarbon and β -lactone biosynthesis. *mBio*, 11(2), e00111-20. doi: [10.1128/mBio.00111-20](https://doi.org/10.1128/mBio.00111-20).
34. **Robinson, S. L.**, Christenson, J.K. & Wackett, L.P. (2020) Biological production of β -lactones. U.S. Patent Application. 16/510,298, filed 13 February, 2020.
35. Aukema, K.G., Tassoulas, L.J., **Robinson, S. L.**, ... Wackett, L.P. (2020) Cyanuric acid biodegradation via biuret: physiology, taxonomy, and geospatial distribution. *Applied and Environmental Microbiology*, 86(2), e01964-19. doi: [10.1128/AEM.01964-19](https://doi.org/10.1128/AEM.01964-19).
36. Kautsar, S.A., Blin, K., Shaw, S., Navarro-Muñoz, J.C., Terlouw, B.R., van der Hooft, J.J., van Santen, J., Tracanna, V., Suarez Duran, H.G., Andreu, V.P., Selem-Mojica, N., Alanjary, M., **Robinson, S.L.**, Lund, G., Epstein, S.C., Sisto, A.C., Charkoudian, L.K., Collemare, J.,

- Linington, R., Weber, T., Medema, M.H. (2019) MIBiG 2.0: A repository for biosynthetic gene clusters of known function. *Nucleic Acids Research*, 48(D1), D454–D458. doi: [10.1093/nar/gkz882](https://doi.org/10.1093/nar/gkz882).
37. **Robinson, S.L.**, Christenson, J.K., Richman, J.E., Jenkins, D.J., Neres, J., Fonseca, D.R., Aldrich, C.C., Wackett, L.P. (2019) Mechanism of a standalone β -lactone synthetase: new continuous assay for a widespread ANL superfamily enzyme. *ChemBioChem*, 20, 1701-1711. doi: [10.1002/cbic.201800821](https://doi.org/10.1002/cbic.201800821).
38. Tveit, A.T., Hestnes A.G., **Robinson, S.L.**, Schintlmeister, A., Dedysh, S., Jehmlich, N., von Bergen, M., Herbold, C., Wagner, M., Richter A., Svenning M.M. (2019) Widespread soil bacterium that oxidizes atmospheric methane. *Proceedings of the National Academy of Sciences*, 116(17), 8515-8524. doi: [10.1073/pnas.1817812116](https://doi.org/10.1073/pnas.1817812116). *Won 2019 Cozzarelli Prize
39. **Robinson, S.L.** & Wackett, L.P. Rings of power: enzymatic routes to β -lactones. (2019) In *Comprehensive Natural Products III: Chemistry and Biology, Enzymes and Enzyme Mechanisms*. 4, 323 – 345. doi: [10.1016/B978-0-12-409547-2.14634-7](https://doi.org/10.1016/B978-0-12-409547-2.14634-7).
40. **Robinson, S.L.**, Christenson, J.K., Wackett, L.P. (2018) Biosynthesis and chemical diversity of β -lactone natural products. *Nat Prod Rep* 36(3), 458-475. doi: [10.1039/C8NP00052B](https://doi.org/10.1039/C8NP00052B).
41. **Robinson, S. L.**, Badalamenti, J. P., Dodge, A.G., Tassoulas, L.J., Wackett, L.P. (2018) Microbial biodegradation of biuret: defining biuret hydrolases within the isochorismatase superfamily. *Environmental Microbiology* 20(6), 2099-2111. doi: [10.1111/1462-2920.14094](https://doi.org/10.1111/1462-2920.14094).
42. **Robinson, S.L.** & Wackett, L.P. (2018) Diversity and taxonomy of aliphatic hydrocarbon producers. *Handbook of Hydrocarbon and Lipid Microbiology Series*, Springer-Nature, 1-20.
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