



Jacob L. Steenwyk

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PROFESSIONAL POSITIONS

Since 2022 Postdoctoral Scholar, Laboratory of Dr. Nicole King, University of California, Berkeley

Since 2022 Berkeley Science Fellow, University of California, Berkeley

Since 2020 Founder and Chief Officer, The SciArt Shop

ADVISOR POSITIONS

Since 2023 Advisor, ForensisGroup, Inc.

Since 2022 Scientific Consultant, Latch AI Inc.

Since 2022 Scientific Advisor, WittGen Biotechnologies

EDUCATION

| | | | |
|-----------------------|------------------------------------|------------------|-----------|
| Vanderbilt University | Biological Sciences | Ph.D., GPA: 3.97 | 2016–2022 |
| Clark University | Biochemistry and Molecular Biology | M.S., GPA: 3.98 | 2015–2016 |
| Clark University | Biochemistry and Molecular Biology | B.A., GPA: 3.84 | 2011–2015 |

AWARDS

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| 2023 | LSRF Award, Life Sciences Research Foundation |
| 2022 | Fifty 50 Community Fellow, Fifty Years Industries, LLC |
| 2022 | Berkeley Science Fellow, Berkeley Postdoctoral Entrepreneurship Program, University of California, Berkeley |
| 2022 | Graduate Student Excellence Award Finalist, Society for Molecular Biology and Evolution |
| 2022 | Hanna H. Gray Fellows Finalist, Howard Hughes Medical Institute |
| 2022 | Edward Ferguson Jr. Graduate Award, Graduate School, Vanderbilt University |
| 2022 | James F. Crow Early Career Researcher Award Finalist, Genetics Society of America |
| 2022 | Harold M. Weintraub Graduate Student Award, Fred Hutchinson Cancer Research Center |
| 2021 | Sandler Fellows Finalist, University of California, San Francisco |
| 2021 | Honorable mention, Next Generation Faculty Symposium, Stanford.Berkeley.UCSF |
| 2021 | Presentation award, Canadian Fungal Research Network and Great Lakes Mycology Conference |
| 2021 | Graduate Research Excellence Award in Biological Sciences, Vanderbilt University |
| 2021 | Smriti Bardhan Scholarship, Vanderbilt University |
| 2021 | Registration award, Science Talk '21 |
| 2020 | Favorite Artist Award, Catalyst: A Virtual Sci-Art Exhibition |
| 2020 | Oral presentation award, SACNAS – The National Diversity in STEM Virtual Conference |
| 2020 | Registration scholarship, SACNAS – The National Diversity in STEM Virtual Conference |
| 2020 | Best Talk Honorable Mention, Canadian Fungal Research Network Meeting |
| 2020 | Trainee-of-the-Year, Vanderbilt Institute for Infection, Immunology and Inflammation |
| 2019 | Gilliam Predoctoral Fellowship, Howard Hughes Medical Institute |
| 2019 | Ann Bernard Martin Award for Excellence in Graduate Research, Vanderbilt University |
| 2019 | Ruth L. Kirschstein National Research Service Award, National Institutes of Health |

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| 2019 | Ford Foundation Predoctoral Fellowship, Ford Foundation |
| 2019 | Graduate student travel grant, Vanderbilt University |
| 2019 | Curb Center Fellow, ArtLab, Vanderbilt University |
| 2018 | GENETICS Peer Review Training Program, Genetics Society of America |
| 2018 | Best poster award, Cellular and Molecular Fungal Biology, Gordon Research Seminar |
| 2018 | Best poster award, Cellular and Molecular Fungal Biology, Gordon Research Conference |
| 2018 | Best poster award, Department of Biological Sciences, Vanderbilt University |
| 2018 | T-shirt design contest winner, Department of Biological Sciences, Vanderbilt University |
| 2017 | Graduate student travel grant, Vanderbilt University |
| 2016 | Graduate student council travel awards, Clark University |
| 2015 | Summa cum laude, Clark University |
| 2014 | Bridging the gaps scholar, University of Southern California Keck School of Medicine |
| 2013 | Global environmental microbiology scholar, Center for dark energy biosphere investigations, University of Southern California |
| 2011 | Jonas Clark Scholar, Clark University |

TEN HIGHLIGHTED FIRST-AUTHOR PUBLICATIONS

Evolutionary and Functional Genomics

1. Steenwyk, J.L., M.A. Phillips, F. Yang, S.S. Date, T. Graham, J. Berman, C.T. Hittinger, & A. Rokas (2022). An orthologous gene coevolution network provides insight into eukaryotic cellular and genomic structure and function. *Science Advances*. DOI: 10.1126/sciadv.abn0105
2. Steenwyk, J.L.*, A.L. Lind*, L.N.A. Ries, T.F. dos Reis, L.P. Silva, F. Almeida, R.W. Bastos, T.F. de Campos Fraga da Silva, V.L.D. Bonato, A.M. Pessoni, F. Rodrigues, H.A. Raja, S.L. Knowles, N.H. Oberlies, K. Lagrou, G.H. Goldman^, A. Rokas^ (2020). Pathogenic allodiploid hybrids of *Aspergillus* fungi. *Equal contributors; ^Corresponding authors. *Current Biology*. PMID: 32502407; PMCID: PMC7343619; DOI: 10.1016/j.cub.2020.04.071
3. Steenwyk, J.L., D. Ofulente, J. Kominek, X.-X. Shen, X. Zhou, A.L. LaBella, N.P. Bradley, B.F. Eichman, N. Čadež, D. Libkind, J. DeVirgilio, A.B. Hulfachor, C.P. Kurtzman, C.T. Hittinger^, & A. Rokas^ (2019). Extensive loss of cell cycle and DNA repair genes in an ancient lineage of bipolar budding yeasts. ^Corresponding authors. *PLOS Biology*. PMID: 31112549; PMCID: PMC6528967; DOI: 10.1371/journal.pbio.3000255
4. Steenwyk, J.L., X.-X. Shen, A.L. Lind, G.H. Goldman, & A. Rokas (2019). A robust phylogenomic timetree for biotechnologically and medically important fungi in the genera *Aspergillus* and *Penicillium*. *mBio*. PMID: 31289177; PMCID: PMC6747717; DOI: 10.1128/mBio.00925-19
5. Steenwyk, J.L., M.E. Mead*, S.L. Knowles*, H.A. Raja, C.D. Roberts, O. Bader, J. houbraeken, G.H. Goldman, N.H. Oberlies, & A. Rokas (2020). Biosynthetic gene clusters, secondary metabolite profiles, and cards of virulence in the closest nonpathogenic relatives of *Aspergillus fumigatus*. *Equal contributors. *Genetics*. PMID: 32817009; PMCID: PMC7536862; DOI: 10.1534/genetics.120.303549

Software Engineering

1. Steenwyk, J.L.^, D.C. Goltz, T.J. Buida III, Y. Li, X.-X. Shen, & A. Rokas^ (2022). OrthoSNAP: a tree splitting and pruning algorithm for retrieving single-copy orthologs from gene family trees. ^Corresponding authors. *PLOS Biology*. DOI: 10.1371/journal.pbio.3001827
2. Steenwyk, J.L.^, T.J. Buida III, Y. Li, X.-X. Shen, & A. Rokas^ (2020). ClipKIT: a multiple sequence alignment-trimming software for accurate phylogenomic inference. ^Corresponding

authors. *PLOS Biology*. PMID: 33264284; PMCID: PMC7735675; DOI: 10.1371/journal.pbio.3001007

3. **Steenwyk, J.L.**[^], T.J. Buida III, A.L. LaBella, Y. Li, X.-X. Shen, & A. Rokas[^] (2021). PhyKIT: a UNIX shell toolkit for processing and analyzing phylogenomic data. [^]Corresponding authors. *Bioinformatics*. PMID: 33560364; PMCID: PMC8388027; DOI: 10.1093/bioinformatics/btab096
4. **Steenwyk, J.L.**[^], T.J. Buida III, C. Gonçalves, D.C. Goltz, G. Morales, M. Mead, A.L. LaBella, C.M. Chavez, J.E. Schmitz, M. Hadjifrangiskou, Y. Li, & A. Rokas[^] (2022). BioKIT: a versatile toolkit for processing and analyzing diverse types of sequence data. [^]Corresponding authors. *Genetics*. DOI: 10.1093/genetics/iyac079
5. **Steenwyk, J.L.** & A. Rokas (2021). orthofisher: a broadly applicable tool for automated gene identification and retrieval. *G3 Genes|Genomes|Genetics*. PMID: 34544141; PMCID: PMC8496211; DOI: 10.1093/g3journal/jkab250

FUNDING

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| Life Sciences Research Foundation | Principal investigator, 02/23-02/26, Investigating the molecular underpinnings of complex traits like multicellularity, \$231,000 |
| Howard Hughes Medical Institute | Principal investigator, 09/22, The evolution of pathways responsible for genome integrity in early animals and close relatives, Hanna H. Gray Finalist, \$10,000 |
| Howard Hughes Medical Institute | Principal co-investigator (shared with Antonis Rokas), 09/19-09/22, Examining the loss of diverse DNA repair genes and long-term hypermutation in a lineage of budding yeasts, Gilliam Fellowship, Individual Predoctoral Fellowship, \$150,000 |
| National Institutes of Health | Principal investigator, 08/19-08/22, Examining the loss of diverse DNA repair genes and long-term hypermutation in a lineage of budding yeasts, Ruth L. Kirschstein National Research Service Award, Individual Predoctoral Fellowship (Parent F31), \$88,128 (declined) |
| Ford Foundation Predoctoral Fellow | Principal investigator, 08/19-08/22, The consequences of aberrant cell cycle and DNA repair processes in budding yeast, Individual Predoctoral Fellowship, \$72,000 (declined) |
| Curb Center ArtLab Fellow | Principal investigator, 12/18-04/19, Bridging the gap between artist and scientist, ArtLab, Vanderbilt University, \$300 |

SOFTWARE

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- 1) ClipKIT: a multiple sequence alignment-trimming software for accurate phylogenomic inference. [Publication PDF](#); [Documentation](#); [Source code](#)
 - 2) PhyKIT: a UNIX shell toolkit for processing and analyzing phylogenomic data. [Publication PDF](#); [Documentation](#); [Source code](#)
 - 3) BioKIT: a versatile toolkit for processing and analyzing diverse types of sequence data. [Publication PDF](#); [Documentation](#); [Source code](#)
 - 4) OrthoSNAP: a tree splitting and pruning algorithm for retrieving single-copy orthologs from gene family trees. [Publication PDF](#); [Documentation](#); [Source code](#)
 - 5) orthofisher: a broadly applicable tool for automated gene identification and retrieval. [Publication PDF](#); [Documentation](#); [Source code](#)

- 6) LVBRs: a cloud-based suite of workflows for bulk RNA-seq quality control, analysis, and functional enrichment. [Publication PDF](#); [Documentation](#); [Source code](#)
- 7) treehouse: a user-friendly application to obtain subtrees from large phylogenies. [Publication PDF](#); [Documentation & source code](#)
- 8) ggpubfigs: an R package for creating color blind friendly figures with ggplot2. [Publication PDF](#); [Documentation & source code](#)

INVITED TALKS

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| 2023 | Departmental Seminar, Plant Pathology and Environmental Microbiology, The Pennsylvania State University |
| 2023 | Mycological Society of America Annual Meeting |
| 2022 | Biology Department, Loras College |
| 2022 | Yeast Genetics Meeting, Genetics Society of America |
| 2022 | Hanna H. Gray Fellows Finalists Meeting, Howard Hughes Medical Institute |
| 2022 | Molecular mycology meeting, Technion - Israel Institute of Technology |
| 2022 | Evolution, Am. Soc. of Naturalists, Soc. for the Study of Evo., and the Soc. of Sys. Biologists, Cleveland, OH (declined due to scheduling conflict) |
| 2022 | James F. Crow Early Career Researcher Award Finalist, Genetics Society of America |
| 2022 | Department of Biological Sciences, George Washington University |
| 2022 | 31 st Fungal Genetics Conference at Asilomar, Pacific Grove, CA |
| 2021 | Artist-in-Residence program, Vanderbilt Institute for Infection, Immunology and Inflammation |
| 2021 | CanFunNet and Great Lakes Mycology Conference |
| 2021 | Sandler Fellows Finalists Seminar, University of California, San Francisco |
| 2021 | Department of Ecology, Evolution, and Organismal Biology, Iowa State University |
| 2021 | Medical Mycology Trainee Seminar Series, University of Utah (Link) |
| 2021 | Mycology Graduate Student Organization, University of Georgia |
| 2021 | MicroSeminar, International Society for Microbial Ecology (Link) |
| 2021 | Alliance for Diversity in Science and Engineering, Young Researchers Conference |
| 2021 | Andrew Murray Lab seminar, Harvard University, Cambridge |
| 2020 | Institute of Insect Sciences, Zhejiang University |
| 2020 | Evan Eichler Lab seminar, University of Washington, Seattle |
| 2020 | Genetics Society of America, Early Career Scientist Seminar Series |
| 2020 | Nicole King Lab seminar, University of California Berkeley |
| 2020 | The National Diversity in STEM Conference, SACNAS |
| 2020 | Canadian Fungal Research Network Meeting |
| 2020 | Trainee-of-the-year talk, Vanderbilt Institute for Infection, Immunology and Inflammation |
| 2020 | Day of Wond'ry, Vanderbilt University, Nashville, TN |
| 2019 | Genetics Society of America, Early Career Scientist Seminar Series |
| 2019 | Gordon Research Conference, Molecular Mechanisms in Evolution, Easton, MA |
| 2019 | Gordon Research Seminar, Molecular Mechanisms in Evolution, Easton, MA (declined) |
| 2019 | Focal Point, ArtLab, Vanderbilt University, Nashville, TN |
| 2019 | 30 th Fungal Genetics Conference at Asilomar, Pacific Grove, CA |
| 2019 | Phylogenomics and Evolution Group, North Carolina State University, Raleigh, NC |
| 2018 | ArtLab Seminar Series, Vanderbilt University, Nashville, TN |
| 2015 | TedXClarkUniversity, Clark University, Worcester, MA |

CONTRIBUTED TALKS

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| 2023 | Plant and Microbial Biology, Postdoc Seminar Series, University of California, Berkeley, Berkeley, CA |
| 2021 | Students' Mycology Colloquium, Mycological Society of America |
| 2020 | Evolution Seminar Series, Vanderbilt University (Link) |
| 2019 | DNA Damage and Response Journal Club, Vanderbilt University, Nashville, TN |
| 2019 | Research in Progress Seminar, Vanderbilt University, Nashville, TN |
| 2019 | Biological Sciences Annual Retreat, Vanderbilt University, Nashville, TN |
| 2019 | Science club at the library, Nashville Public Library, Nashville, TN |
| 2018 | Nashville Science Club, Jackalope Brewing Company, Nashville, TN |
| 2017 | Mycological Society of America, University of Georgia, Athens, GA |
| 2016 | Mycological Society of America, University of California Berkeley, Berkeley, CA |
| 2016 | Graduate Student Multidisciplinary Conference, Clark University, Worcester, MA |

ADVISING

Graduate Students

2023-Pres. Saelin Bjornson (co-advised with Heroen Verbruggen at University of Melbourne)

Undergraduates

2022-Pres. Charu Balamurugan

2019-2022 Qianhui (Olivia) Zheng

2018-2021 Megan A. Phillips

WORKSHOP TEACHING

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|-------------|---|
| 2023 | Instructor, Workshop on Phylogenomics, Evolution and Genomics, Český Krumlov, Czech Republic |
| 2019 | Organizer and instructor, Values-based leadership, Vanderbilt University, Nashville, TN |
| 2019 | Founder and instructor, 'A beginner's guide to making figures in R', Vanderbilt University, Nashville, TN |
| 2019 | Instructor, Workshop on Phylogenomics, Evolution and Genomics, Český Krumlov, Czech Republic |
| 2019 | Instructor, Workshop on Genomics, Evolution and Genomics, Český Krumlov, Czech Republic |

TEACHING EXPERIENCE

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|------------------|---|
| 2020 | Guest lecture, Science Communication Tools and Techniques, Vanderbilt University, Nashville, TN |
| 2017-2019 | Teaching Assistant, Introductory Biology Lab, Vanderbilt University, Nashville, TN |
| 2016 | Teaching Assistant, Introduction to Biostatistics, Clark University, Worcester, MA |
| 2014-2015 | Teaching Assistant, Cell Biology, Clark University, Worcester, MA |

POSTER PRESENTATIONS

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| 2022 | Decoding the Genome, Howard Hughes Medical Institute |
| 2021 | Gilliam Fellows Meeting, Howard Hughes Medical Institute |
| 2021 | Biology of Genomes, Cold Spring Harbor Laboratories |
| 2021 | Science Talk '21, Science Talk |
| 2020 | Gilliam Fellows Meeting, Howard Hughes Medical Institute |
| 2020 | Vanderbilt Institute for Infection, Immunology and Inflammation Annual Symposium, Virtual Conference |
| 2020 | The Allied Genetics Conference, Virtual Conference |
| 2019 | Investigators Science Meeting, Howard Hughes Medical Institute, Bethesda, MD |

2019 Gilliam Fellows Annual Meeting, Howard Hughes Medical Institute, Bethesda, MD
2019 Molecular Mechanisms in Evolution, Gordon Research Conference, Easton, MA
2019 Molecular Mechanisms in Evolution, Gordon Research Seminar, Easton, MA
2019 30th Fungal Genetics Conference at Asilomar, Pacific Grove, CA
2019 Asperfest pre-meeting at 30th Fungal Genetics Conference at Asilomar, Pacific Grove, CA
2018 Cellular and Molecular Fungal Biology, Gordon Research Conference, Holderness, NH
2018 Cellular and Molecular Fungal Biology, Gordon Research Seminar, Holderness, NH
2018 Department of Biological Sciences Annual Retreat, Vanderbilt University, Nashville, TN
2015 Bumpus Symposium, Clark University, Worcester, MA
2015 Traina Scholars Presentation, Clark University, Worcester, MA
2015 Summer Research Presentation, Clark University, Worcester, MA

RESEARCH EXPERIENCE

2022-Pres. Nicole King Lab at University of California, Berkeley, and Howard Hughes Medical Institute, Berkeley, CA. Post-doctoral Research. The evolution of animal genome function.
2016-2022 Antonis Rokas Lab at Vanderbilt University, Nashville, TN. Doctoral Research. Evolution of medically and technologically significant fungi.
2015-2016 John Gibbons Lab at Clark University, Worcester, MA. Undergraduate and Master's Research. Copy number variation in the human pathogen, *Cryptococcus gattii*.
2015-2016 Robert Drewell Lab at Clark University, Worcester, MA. Undergraduate and Master's Research. Genome-wide methylation patterns in the social amoeba, *Dictyostelium discoideum*.
2014 Ite A. Laird-Offringa Lab at University of Southern California, Los Angeles, CA. Bridging the Gaps Summer Scholar. Mapping the autoimmune triggering epitope of *ELAVL4* in small cell lung cancer.
2013 John Heidelberg and Eric Webb Labs at University of Southern California, Los Angeles, CA. Global Environmental Microbiology Summer Scholar. Fresh and marine water microbial diversity.

SERVICE

2023-Pres. Representative for Early Career Scientists, Allied Program Committee, The Allied Genetics Conference 2024
2023-Pres. Chair of Alumni Affairs, The Evolutionary Studies Initiative at Vanderbilt, Vanderbilt University, Nashville, TN
2020-Pres. Founder and Chief Officer, SciArt with Purpose, <https://jlsteenwyk.com/sciart.html>
2022 Panelist at the Diversity, Equity, and Inclusion Discussion, Yeast Genetics Conference, Genetics Society of America
2022 Scientist-Artist: Embracing Duality, ArtLab, Vanderbilt University
2019-2022 Member, Steering Committee, Early Career Leadership Program, Genetics Society of America
2019-2022 Inclusion Coordinator, The Evolutionary Studies Initiative at Vanderbilt, Vanderbilt University, Nashville, TN
2019-2022 Graphic Illustrator, The Evolutionary Studies Initiative at Vanderbilt, Vanderbilt University, Nashville, TN
2017-2022 Educational outreach booth design and execution, MEGAMicrobe, Nashville, TN
2017-2022 Member of the Dean of Graduate Student's survey quantitative analysis subgroup, Graduate Diversity and Inclusion Committee, Vanderbilt University, Nashville, TN

2017-2022 Judge, Middle Tennessee Science and Engineering Fair, Belmont University, Nashville, TN
2019-2021 Co-chair, Communication and Outreach Subcommittee, Genetics Society of America
2018-2021 Volunteer Deputy, American Society of Microbiology Vanderbilt University Chapter, Nashville, TN
2017-2021 Communications chair, Inclusivity in Biosciences Association, Vanderbilt University, Nashville, TN
2020 Panelist at the Communication and Outreach Workshop, The Allied Genetics Conference, Genetics Society of America
2019-2020 President, Inclusivity in Biosciences Association, Vanderbilt University, Nashville, TN
2019-2020 Co-chair, MEGAMicrobe, Vanderbilt Institute for Infections, Immunology and Inflammation, Nashville, TN
2018-2019 Vice President, Inclusivity in Biosciences Association, Vanderbilt University, Nashville, TN
2013-2019 Administrator and Owner, Molecular Biology and Biochemistry for Researchers and Students Group, LinkedIn
2019 Peer review workshop leader, 30th Fungal Genetics Conference at Asilomar, Pacific Grove, CA
2018-2019 Vice President, Graduate Student Association, Department of Biological Sciences, Vanderbilt University, Nashville, TN
2018-2019 Vice co-chair, MEGAMicrobe, Vanderbilt Institute for Infections, Immunology and Inflammation, Nashville, TN
2017-2018 Secretary, Graduate Student Association, Department of Biological Sciences, Vanderbilt University, Nashville, TN
2017-2018 Scientific consultant, Little Harpeth Brewing, Nashville, TN
2017 Vanderbilt Student Volunteers for Science, Volunteer Science Teacher, West End Middle School, Nashville, TN
2014-2015 Undergraduate Subcommittee for Department of Chemistry, Biochemistry and Molecular Biology Faculty Search Committee, Clark University, Worcester, MA
2014-2015 Science Education Outreach Blogger, C-DEBI Sci-Curious Blog

SOCIETIES

Genetics Society of America, Society of Systematic Biologists, American Society for Microbiology, Mycological Society of America, Society for the Advancement of Chicanos/Hispanics and Native Americans in Science

MANUSCRIPT REVIEWER

Nature Communications; Molecular Biology and Evolution; Systematic Biology; Methods in Ecology and Evolution; Genome Biology and Evolution; Genetics; Microbial Genomics; G3 Genes|Genomes|Genetics; FEMS Yeast Research; Fungal Biology and Biotechnology; and others

ART SHOWS

2021 Science Talk '21, Science Talk
2020 Catalyst: A Virtual Sci-Art Exhibition, Michigan State University
2020 Day of Wond'ry, Vanderbilt University, Nashville, TN
2020 Fire-Exhibition, Kefi Collective at Vanderbilt University, Nashville, TN
2019 Biomedical Sciences Winter Show, Vanderbilt University, Nashville, TN
2019 Focal point, ArtLab, Vanderbilt University, Nashville, TN
2019 Connecting the Dots, ArtLab, Vanderbilt University, Nashville, TN
2018 ArtLab opening reception, ArtLab, Vanderbilt University, Nashville, TN
2018 The Intersection between Art and Science, ArtLab, Vanderbilt University, Nashville, TN

POPULAR SCIENCE ARTICLES

6. **Steenwyk, J.L.** & K. Giffin. The silver lining of bioinformatics. *Genes to Genomes*. September 12, 2022
5. Simopoulos, M.A.C., A.F. Cisneros, A.D. Mendoza, C. Bautista, **J.L. Steenwyk**, N. Ahmad. Hurdles and advances to making science gender-neutral, *ecrLife*. November 26, 2020
4. Mendoza, A.D., C. Bautista, E.A. Marnik, C.M.A. Simopoulos, & **J.L. Steenwyk**. Navigating fake news as a scientist, *ecrLife*. October 8, 2020
3. **Steenwyk, J.L.** & M. Jonika. How to get started in science communication, *ecrLife*. August 21, 2020
2. **Steenwyk, J.L.** & A. Rokas. A new hybrid fungus is found in hospitals and linked to lung disease, *The Conversation*. June 4, 2020
1. **Steenwyk, J.L.** & A. Rokas. An outlaw yeast thrives with genetic chaos – and could provide clues for understanding cancer growth, *The Conversation*. May 21, 2019

PUBLICATIONS (Trainees and I are in **bold** font.)

Preprints/Submitted

6. **Balamurugan, C., J.L. Steenwyk**, G.H. Goldman, & A. Rokas (2023). The evolution of the gliotoxin biosynthetic gene cluster in *Penicillium* fungi. bioRxiv. DOI: 10.1101/2023.01.17.524442.
5. **Steenwyk, J.L., C. Balamurugan**, H.A. Raja, C. Goncalves, N. Li, F. Martin, J. Berman, N.H. Oberlies, J.G. Gibbons, G.H. Goldman, D.M. Geiser, D.S. Hibbett, & A. Rokas (2022). Phylogenomics reveals extensive misidentification of fungal strains from the genus *Aspergillus*. bioRxiv. DOI: 10.1101/2022.11.22.517304
4. **Steenwyk, J.L.**, Y. Li, X. Zhou, X.-X. Shen, & A. Rokas (2022). Incongruence in the Tree of Life. Submitted, under revision, at *Nature Reviews Genetics*.
3. Le, H.G.B.H.^*, **J.L. Steenwyk***, N. Manske, M. Smolin, A. Abdulali, A. Kamat, R. Kanchana, K. Giffin, A. Andere, & K. Workman^ (2022). *Equal contributors; ^Corresponding authors. Latch Verified Bulk-RNA Seq toolkit: a cloud-based suite of workflows for bulk RNA-seq quality control, analysis, and functional enrichment. bioRxiv. DOI: 10.1101/2022.11.10.516016
2. **Zheng, Q., J.L. Steenwyk**^, & A. Rokas^ (2022). Lack of universal mutational biases in a fungal phylum. ^Corresponding authors. bioRxiv. DOI: 10.1101/2022.03.29.486229
1. **Steenwyk, J.**, J. St. Denis, J. Dresch, D. Larochelle, & R. Drewell (2017). Whole genome bisulfite sequencing reveals a sparse, but robust pattern of DNA methylation in the *Dictyostelium discoideum* genome. bioRxiv. DOI: 10.1101/166033

Peer Review Published

54. Mead, M.E., P.A. de Castro, **J.L. Steenwyk**, J. Gangeux, M. Hoenigl, J. Prattes, R. Rautemaa-Richardson, H. Guegan, C.B. Moore, C. Lass-Flörl, F. Reizine, C. Valero, N. Van Rhijn, M.J. Bromley, A. Rokas, G.H. Goldman, & S. Gago (2023). COVID-19 Associated Pulmonary Aspergillosis isolates are genomically diverse but similar to each other in their responses to infection-relevant stresses. mSpectrum. DOI: 10.1128/spectrum.05128-22.
53. Sierra-Patev, S., B. Min, M. Naranjo-Ortiz, B. Looney, Z. Konkel, J.C. Slot, Y. Sakamoto, **J.L. Steenwyk**, A. Rokas, J. Carro, S. Camarero, P. Ferreira, G. Molpeceres, F.J. Ruiz-Dueñas, A.

Serrano, B. Henrissat, E. Drula, K.W. Hughes, J.L. Mata, N.K. Ishikawa, R. Vargas-Isla, S. Ushijima, C.A. Smith, S. Ahrendt, W. Andreopoulos, G. He, K. LaButti, A. Lipzen, V. Ng, R. Riley, L. Sandor, K. Barry, A.T. Martínez, Y. Xiao, J.G. Gibbons, K. Terashima, I.V. Grigoriev, & D. Hibbett (2023). A Global Phylogenomic Analysis of the Shiitake Genus *Lentinula*. Proceedings of the National Academy of Sciences of the United States of America (PNAS). DOI: 10.1073/pnas.2214076120.

52. **Steenwyk, J.L.**[^] & A. Rokas[^] (2023). The dawn of relaxed phylogenetics. [^]Corresponding authors. PLOS Biology. DOI: 10.1371/journal.pbio.3001998
51. Li, Y.[^], H Liu, **J.L. Steenwyk**, A.L. LaBella, M.C. Harrison, M. Groenewald, X. Zhou, X.-X. Shen, T. Zhao, C.T. Hittinger, & A. Rokas[^] (2022). [^]Corresponding authors. Contrasting modes of macro- and micro-synteny evolution in a eukaryotic subphylum. Current Biology. DOI: 10.1016/j.cub.2022.10.025
50. **Steenwyk, J.L.**[^], D.C. Goltz, T.J. Buida III, Y. Li, X.-X. Shen, & A. Rokas[^] (2021). OrthoSNAP: a tree splitting and pruning algorithm for retrieving single-copy orthologs from gene family trees. [^]Corresponding authors. PLOS Biology. PMID: 36228036 DOI: 10.1371/journal.pbio.3001827
49. Brown, A., M.E. Mead, **J.L. Steenwyk**, G.H. Goldman, & A. Rokas (2022). Extensive sequence divergence of non-coding regions between *Aspergillus fumigatus*, a major fungal pathogen of humans, and its relatives. Frontiers in Fungal Biology. DOI: 10.3389/ffunb.2022.802494
48. Horta, M.A., **J.L. Steenwyk**, M.E. Mead, L.H.B. dos Santos, S. Zhao, J.G. Gibbons, M. Marcet-Houben, T. Gabaldón, A. Rokas[^], & G.H. Goldman[^] (2022). Examination of genome-wide ortholog variation in clinical and environmental isolates of the fungal pathogen *Aspergillus fumigatus*. [^]Corresponding authors. mBio. PMID: 35766381; PMCID: PMC9426589; DOI: 10.1128/mbio.01519-22
47. **Steenwyk, J.L.**[^], T.J. Buida III, C. Gonçalves, D.C. Goltz, G. Morales, M. Mead, A.L. LaBella, C.M. Chavez, J.E. Schmitz, M. Hadjifrangiskou, Y. Li, & A. Rokas[^] (2022). BioKIT: a versatile toolkit for processing and analyzing diverse types of sequence data. [^]Corresponding authors. Genetics. PMID: 35536198; DOI: 10.1093/genetics/iyac079
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