Will Skinner, PhD

Biologist and Program Manager

Experienced reproductive biologist and contraceptive development project manager. Excellent communicator and facilitator. Passionate about rapidly scalable solutions that improve health outcomes and advance reproductive, social, economic, and environmental justice.

Contact

Website
willskinner.bio/contact

ORCID ID
0000-0002-2383-4003

Education

PhD: UC Berkeley, 2022
Endocrinology

BA: Harvard University, 2009
Organismic and Evolutionary Biology

Expertise

- Reproductive Biology
- Contraceptive Development
- Project and Team Management
- Statistics and Data Analysis
- Technical and Accessible Writing
- Grant Writing and Administration
- Advanced Microscopy
- Public Speaking

References

Dr. Polina Lishko
Professor, Washington University

Dr. Logan Nickels
Chief Research Officer,
Male Contraceptive Initiative

Professional Highlights

Contraceptive Development Biologist
Anther Therapeutics
2024 – Present

- Performed scientific due diligence and strategic consulting for drug development projects and fundraising.
- Successfully applied for NICHD funding to support lead optimization of a potential contraceptive compound.

Visiting Scientist
Male Contraceptive Initiative
2024 – Present

- Guided decision making for a $1.5 million/year research funding program.
- Performed project management, scientific due diligence and strategic consulting to guide in-house male contraceptive drug development projects.
- Successfully applied for NICHD funding to support lead optimization of a potential contraceptive compound.
- Coordinated an expert regulatory working group to develop best practices and recommend FDA guidelines for male contraceptive development.
- Supported scientific communication efforts, advocating for male contraception in technical and public media.

PhD Candidate, NSF Graduate Research Fellow
Lishko Lab, UC Berkeley Department of Molecular and Cell Biology
2018 – 2023

- Published four papers in top scientific journals on sperm metabolism, sperm-egg fusion, and sperm structural biology.
- Patented a novel mitochondrial approach for sperm-targeted contraception, which was licensed by a pharmaceutical company.
- Received several competitive fellowships and awards, including the **NSF Graduate Research Fellowship** and the Emerging Leaders in Contraceptive Technology Innovation Mentorship Program.
- Reviewed manuscripts and grant applications for multiple publications.

Selected Publications & Patents

- "The Contraceptive Product Pipeline: Where We Are and What We've Learned." **(2025, Gates VeriXiv)** E. Hoppes, A. Fratus, W. Skinner, *et al.*
- "Committee for Male Contraceptive Development and Regulatory Best Practices Draft Recommendations" **(2025, Male Contraceptive Initiative)** E. Gardner, W.Skinner, *et al.*
- "Mitochondrial uncouplers impair human sperm motility without altering ATP content." (**2023, Biology of Reproduction**) W. Skinner, *et al.*
- "De novo protein identification in mammalian sperm using in situ cryo-electron tomography and AlphaFold2 docking." (**2023, Cell**) Z. Chen, M. Shiozaki, K. Haas, W. Skinner, *et al.*
- "In situ cryo-electron tomography reveals the asymmetric architecture of mammalian sperm axonemes." (**2023, Nature Structural and Molecular Biology**) Z. Chen, G. Greenan, M. Shiozaki, Y. Liu, W. Skinner, *et al.*
- "Human sperm TMEM95 binds eggs and facilitates membrane fusion." (**2022, PNAS**) S. Tang, Y. Lu, W. Skinner, M. Sanyal, P. Lishko, M. Ikawa, P. Kim.
- "Nonhormonal Unisex Contraceptives" **US Patent** #20210369652 A1. (2021) P. Lishko, W. Skinner, L. Khasin, E. Tabarsi, A. Bertholet, Y. Kirichok.