



Megan Mayerle

Associate Director and Chief Operating Officer, School of Medicine - CMGM

Bio

INSTITUTE AFFILIATIONS

- Member (Staff), Cardiovascular Institute

EDUCATION AND CERTIFICATIONS

- Postdoc, University of California, San Francisco , Genetics and Molecular Biology (2018)
- PhD, Johns Hopkins University , Biology (2012)
- BS, Marquette University , Biology and English Literature (2000)

Publications

PUBLICATIONS

- **The Promise of AI in Biomedical Research: Applications to the Study of a Gerozyme** *Science for Sustainability and Wellbeing in the Anthropocene: Opportunities, Challenges, and AI*
Mayerle, M., Blau, H. M.
Pontifical Academy of Sciences.2025: 134-150
- **Christine Guthrie (1945-2022): a tribute from her trainees.** *RNA (New York, N.Y.)*
Mayerle, M., Madhani, H. D., Maeder, C.
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- **Prp8 impacts cryptic but not alternative splicing frequency** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Mayerle, M., Yitiz, S., Soulette, C., Rogel, L. E., Ramirez, A., Ragle, J., Katzman, S., Guthrie, C., Zahler, A. M.
2019; 116 (6): 2193–99
- **Stanford Cardiovascular Institute.** *Circulation research*
Wu, J. C., Woo, Y. J., Mayerle, M. n., Harrington, R. A., Quertermous, T. n.
2019; 124 (10): 1420–24
- **Prp8 positioning of U5 snRNA is linked to 5' splice site recognition.** *RNA (New York, N.Y.)*
MacRae, A. J., Mayerle, M., Hrabeta-Robinson, E., Chalkley, R. J., Guthrie, C., Burlingame, A. L., Jurica, M. S.
2018; 24 (6): 769-777
- **Structural toggle in the RNaseH domain of Prp8 helps balance splicing fidelity and catalytic efficiency** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Mayerle, M., Raghavan, M., Ledoux, S., Price, A., Stepankiw, N., Hadjivassiliou, H., Moehle, E. A., Mendoza, S. D., Pleiss, J. A., Guthrie, C., Abelson, J.
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- **Genetics and biochemistry remain essential in the structural era of the spliceosome.** *Methods (San Diego, Calif.)*

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- **Prp8 retinitis pigmentosa mutants cause defects in the transition between the catalytic steps of splicing** *RNA*
Mayerle, M., Guthrie, C.
2016; 22 (5): 793-809
- **A new communication hub in the RNA world** *NATURE STRUCTURAL & MOLECULAR BIOLOGY*
Mayerle, M., Guthrie, C.
2016; 23 (3): 189-190
- **Protein-guided RNA dynamics during early ribosome assembly** *NATURE*
Kim, H., Abeyvirigunawardena, S. C., Chen, K., Mayerle, M., Ragunathan, K., Luthey-Schulten, Z., Ha, T., Woodson, S. A.
2014; 506 (7488): 334-?
- **Specific contacts between protein S4 and ribosomal RNA are required at multiple stages of ribosome assembly** *RNA*
Mayerle, M., Woodson, S. A.
2013; 19 (4): 574-585
- **Assembly of the Five-Way Junction in the Ribosomal Small Subunit Using Hybrid MD-Go Simulations** *JOURNAL OF PHYSICAL CHEMISTRY B*
Chen, K., Eargle, J., Lai, J., Kim, H., Abeyvirigunawardena, S., Mayerle, M., Woodson, S., Ha, T., Luthey-Schulten, Z.
2012; 116 (23): 6819-6831
- **Slow Formation of Stable Complexes during Coincubation of Minimal rRNA and Ribosomal Protein S4** *JOURNAL OF MOLECULAR BIOLOGY*
Mayerle, M., Bellur, D. L., Woodson, S. A.
2011; 412 (3): 453-465