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Educational Background and Academic Positions

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|------------------------|---|
| Aug. 1992 – May 1996 | Bachelor of Arts, Summa Cum Laude
St. Olaf College, Northfield, MN
Major: Chemistry
Concentration: Molecular Biology |
| Aug. 1996 – Jan. 2001 | Ph.D. Chemistry
Department of Chemistry and Biochemistry
University of Colorado, Boulder, CO |
| June – Aug. 1998 | Summer Intern
Sangamo BioSciences, Boulder, CO
Part of the Graduate Interdisciplinary Biotechnology Program |
| Feb. 2001 – Dec. 2003 | Research Associate
Department of Chemistry and Biochemistry
University of Colorado, Boulder, CO |
| Jan. 2004 – April 2006 | Senior Research Associate
Department of Chemistry and Biochemistry
University of Colorado, Boulder, CO |
| May 2006 – June 2012 | Assistant Research Professor
Department of Chemistry and Biochemistry
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| July 2012 – May 2020 | Associate Research Professor
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| June 2020 – present | Research Professor
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Publications

(chronological order, the underlined DOI links to the article)

1. Nemecek Marshall, M., MacDonald, M., **Franzen, J.J.**, Wojciechowski, C.L., and Fall, R. (1995) Methanol emission from leaves. *Plant Phys.* 108:1359-1368.
2. Chakravarti, D., Mailander, P., **Franzen, J.**, Higginbotham, S., Cavalieri, E.L., and Rogan, E.G. (1998) Detection of dibenzo[*a,l*]pyrene-induced H-ras codon 61 mutant genes in preneoplastic SENCAR mouse skin using a new PCR-RFLP method. *Oncogene* 16:3203-3210.
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5. Ferguson, H.A., **Kugel, J.F.**, and Goodrich, J.A. (2001) Kinetic and mechanistic analysis of the RNA polymerase II transcription reaction at the human interleukin-2 promoter. *J. Mol. Biol.* 314:993-1006. [10.1006/jmbi.2000.5215](https://doi.org/10.1006/jmbi.2000.5215)
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9. Espinoza, C.A., Allen, T.A., Hieb, A. R., **Kugel, J.F.**, and Goodrich, J.A. (2004) B2 RNA binds directly to RNA polymerase II to repress transcript synthesis. *Nat. Struct. Mol. Biol.* 11: 822-829. [10.1038/nsmb812](https://doi.org/10.1038/nsmb812)
(References 8 and 9, which were published back-to-back were: Cover articles; Highlighted in News and Views: Wassarman, KM (2004) RNA regulators of transcription. *Nat. Struct. Mol. Biol.* 11:803-804.; and Highlighted in: Heinrichs, A. (2004) A non-starter. *Nat. Rev. Mol. Cell Biol.* 5:682.)
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11. Hieb, A.R., Baran, S., Goodrich, J.A., and **Kugel, J.F.** (2006) An 8 nt RNA triggers a rate-limiting shift of RNA polymerase II complexes into elongation. *EMBO J.* 25: 3100-3109. [10.1038/sj.emboj.7601197](https://doi.org/10.1038/sj.emboj.7601197)
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Principal Investigator: Jennifer F. Kugel

Co-investigator: James A. Goodrich

Title: Unraveling the biological roles of specific miRNAs, from experimental target identification through functional characterization

Classroom Teaching

Ongoing Advanced Topics in Signal Transduction and Cell Cycle Regulation
BCHM 5801, University of Colorado Boulder
Guest Lecturer

Ongoing Biochemistry Laboratory
BCHM 4761, University of Colorado Boulder
Designed and teach new experimental modules

Mentoring/Non-classroom teaching

Ongoing Advisor for Ph.D. students (19); undergraduate researchers (40); post-doctoral researchers (8); professional research assistants (14)

Select Professional Service

Ongoing Reviewer for NSF and NIH grant applications

Ongoing Reviewer for research manuscripts submitted to >26 different journals

Select Outreach

Ongoing Member of FabFems. An online resource for connecting girls with female mentors that work in STEM fields.

Ongoing Participate in a career days and one-on-one mentoring for middle school and high school students interested in biomedical research and careers.