# Daniel L. Levy

**Professor of Molecular Biology**

University of Wyoming
Department of Molecular Biology
1000 E. University Avenue
Laramie, WY 82071

dlevy1@uwyo.edu
307-417-0354 (office)

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## EDUCATION

PhD **University of California, San Francisco**
Biochemistry, Tetrad Program in Biological Sciences, 2006

Thesis: Mechanisms of telomere length sensing and telomere length regulation in *Saccharomyces cerevisiae*

Committee: Elizabeth H. Blackburn (Advisor), David O. Morgan, Joachim J. Li

BS **California Institute of Technology**
Biology and Chemistry, Honors, 2000

## ACADEMIC EXPERIENCE

**Professor** (2021 – present)
**Associate Professor** (2016 – 2021)
**Assistant Professor** (2011 – 2016)
Department of Molecular Biology
University of Wyoming
Research: Size control of the nucleus and other organelles
http://www.uwyo.edu/levy_lab/

**American Cancer Society Postdoctoral Fellow** (2009 – 2011)
**Postdoctoral Associate** (2007 – 2008)
Department of Molecular and Cell Biology
University of California, Berkeley
Advisor: Rebecca Heald, PhD
Research: Nuclear size regulation in *Xenopus* egg extracts and early embryos

**Howard Hughes Medical Institute Predoctoral Fellow** (2000 – 2006)
Department of Biochemistry and Biophysics
University of California, San Francisco
Advisor: Elizabeth H. Blackburn, PhD
Research: Mechanisms of telomere length sensing and telomere length regulation in *Saccharomyces cerevisiae*

**Beckman Scholar Research Fellow** (1998 – 1999)
**Undergraduate Researcher** (1997 – 2000)
Division of Biology
California Institute of Technology
Advisor: Judith L. Campbell, PhD
Research: Role of *Saccharomyces cerevisiae* DNA polymerase ε in DNA replication, cell cycle regulation, and DNA damage repair

**Student Science Technician** (1995 – 1997)
Ecosystem Science and Technology Branch
NASA-Ames Research Center
Advisor: Joseph W. Skiles, PhD
Research: Alfalfa and soybean responses to solar ultraviolet-B radiation

## RESEARCH FUNDING

Active funding received while at UWyo:
NIH Maximizing Investigators' Research Award (MIRA, R35GM134885); **PI Levy**
"Mechanisms of nuclear morphology regulation"
$1,820,700 total over five years (5/1/24 – 12/31/28)
INBRE PP-2 award to support Priscilla Phan ($70,000 for 2025-2027)

Completed funded received while at UWyo:
NIH Maximizing Investigators' Research Award (MIRA, R35GM134885); **PI Levy**
"Mechanisms of nuclear size regulation"
$1,485,280 total over five years (1/1/20 – 4/30/24)
NSF MODULUS (DMS-2052640); PIs Jay Gatlin and Alan Lindsay, **co-PI Levy**
"Collaborative Research: MODULUS: Data-driven discovery for mechanisms of nuclear dynamics and scaling"
$375,829 total over three years (9/1/21 – 8/31/24)
NASA EPSCoR R3 (22-2022 R3-0086); PIs McBride and Oakey, **co-PI Levy**
"Appendix C.1.2 – Topic 2: On-chip tissue models for experimental carcinogenesis under controlled radiation exposure"
$99,436 total over one (9/1/22 – 8/31/24)
NIH R01 (R01GM113028); **PI Levy**, co-investigators Jay Gatlin and John Oakey
"Integration of *Xenopus* Extract and Microfluidics to Study Organelle Size Scaling"
$1,331,420 total over five years (3/1/15 – 1/31/20)
American Cancer Society Research Scholar Grant (RSG-15-035-01-DDC); **PI Levy**
"Regulation of Nuclear Size in *Xenopus* Embryos and Cancer Cells"
$792,000 total over five years (7/1/15 – 6/30/20)
Highlighted in a UWyo press release (http://www.uwyo.edu/uw/news/2015/12/uw-scientist-receives-grant-for-cancer-research.html), an interview with Wyoming Public Radio (http://wyomingpublicmedia.org/post/uw-researcher-prepares-tackle-cancer), and an article in Research Wyoming (February 2016)
NIH R15 (R15GM106318); **PI Levy**
"Mechanisms of Steady-State Nuclear Size Regulation in *Xenopus*"

$310,582 total over three years (9/1/13 - 8/31/17)

NSF (CHE1413696); PI Krisztina Varga, **co-PI Levy**
"Structural-Functional Characterization of a Hyperactive Antifreeze Protein"
$550,000 total over three years (8/1/14 - 7/31/17)

UW Top-Tier Science Initiative Faculty Innovation Seed Grant Program; **PIs Levy and Oakey**
"Nuclear size in 3D cancer cell migration"
$52,395 total over two years (7/1/19 – 5/31/21)

UWyo Engineering Initiative Research Center; Center Director John Oakey; Center Members Carl Frick, Jay Gatlin, **Dan Levy**, Dongmei Li
"Multiscale Biomaterials Research Center"
$300,000 total over two years (7/1/18 – 6/30/20)

UWyo Agricultural Experiment Station Competitive Grants Program; **PI Levy**
"Regulation of Nuclear Size in Cancer Cells"
$74,244 over three years (1/1/13 - 9/30/15)

UWyo $250K Grant Initiative; PI Krisztina Varga, **co-PI Levy**
"Structural Studies of an Antifreeze Protein and its Application in Cryopreservation"
$25,000 total (7/1/14 - 6/30/15)

INBRE Pilot Project Award; **PI Levy**
"Organelle size scaling in living sea urchin embryos"
$70,000 total (5/1/20 - 4/30/22)

INBRE graduate assistantship for Haritha Prabha ($64,328 for 2022-2024)

INBRE graduate assistantship for Chase Wesley ($64,328 for 2019-2021)

INBRE graduate assistantship for Pan Chen ($21,060 for 2016-2017; $26,200 for 2018-2019)

INBRE graduate assistantship for Lidija Vukovic ($21,060 for 2013-2014; $18,121 for 2015)

Wyoming INBRE Sequencing Grant ($10,000; November 2016 – April 2017)

Wyoming INBRE Equipment Grant ($14,000; March 2017)

INBRE Pilot Project Award; **co-PI Levy**, co-PI Gatlin
"Mechanistic Links Between Organelle Scaling and Developmental Progression"
$35,000 total (5/1/14 - 8/31/15)

UWyo AES Global Perspectives ($4000 for 2016-2017)

EPSCoR WWISE Travel Awards for Edens and Vukovic
$2540 for December 2013; $1000 for December 2014

University of Washington Medical Student Research Training Program (MSRTP) to support a summer 2016 internship for Amanda Johnson to work in my lab ($2250)

Wyoming Research Scholars Program (WRSP) mini-grant to support Katherine Nelson (2016)

Funding received before starting at UWyo:

American Cancer Society Postdoctoral Fellowship (2009 – 2011)

NIH NRSA Postdoctoral Fellowship (2008, awarded and withdrawn)

Howard Hughes Medical Institute Predoctoral Fellowship (2000 – 2005)

Beckman Scholar Fellowship, Arnold and Mabel Beckman Foundation (1998 – 1999)

## PUBLICATIONS

Peer-reviewed research articles published while at UWyo:

24. Sengupta, S., Sami, A.B., Gatlin, J.C., **Levy, D.L.** (2025). Proteasome inhibition induces microtubule-dependent changes in nuclear morphology. *iScience*, 28(1):111550.

23. Funk, O.H., **Levy, D.L.***, Fay, D.S.* (2025). Epidermal cell fusion promotes the transition from an embryonic to a larval transcriptome in *C. elegans*. *Development*, 152(24):dev205089. *Corresponding authors
Highlighted as a "Research Highlight": Fuse it or lose it: cell fusion drives developmental progression. *Development*, 152(24):e152_e2405.
Shortlisted for the *Development* 2025 Outstanding Paper Prize (https://journals.biologists.com/dev/collection/56718/Outstanding-Paper-Prize-2025).
22. Chen, P., Mishra, S., Prabha, H., Sengupta, S., **Levy, D.L.** (2024). Nuclear growth and import can be uncoupled. *Molecular Biology of the Cell*, 35(1):ar1.
21. Wesley, C.C., North, D.V., **Levy, D.L.** (2024). Protein kinase C activity modulates nuclear Lamin A/C dynamics in HeLa cells. *Scientific Reports*, 14(1):6388.
20. Schibler, A.C., Jevtic, P., Pegoraro, G., **Levy, D.L.***, Misteli, T.* (2023). Identification of epigenetic modulators as determinants of nuclear size and shape. *eLife*, 12:e80653 (accepted for publication after peer review and revision). *Corresponding authors
19. Wesley, C.C., **Levy, D.L.** (2023). Differentiation-dependent changes in lamin B1 dynamics and lamin B receptor localization. *Molecular Biology of the Cell*, 34(2):ar10.
18. Mishra, S., **Levy, D.L.** (2022). Nuclear F-actin and lamin A antagonistically modulate nuclear shape. *Journal of Cell Science*, 135(13):jcs259692.
Highlighted on the cover of the July 2022 issue of *Journal of Cell Science*.
17. Jevtic, P., Elliott, K.W., Watkins, S.E., Sreter, J.A., Jovic, K., Lehner, I.B., Baures, P.W., Tsavalas, J.G., **Levy, D.L.***, Varga, K.* (2022). An insect antifreeze protein from *Anatolica polita* enhances the cryoprotection of *Xenopus laevis* eggs and embryos. *Journal of Experimental Biology*, 225(4):jeb243662. doi: 10.1242/jeb.243662. *Corresponding authors.
16. Vukovic, L.D., Chen, P., Mishra, S., White, K.H, Gigley, J.P., **Levy, D.L.** (2021). Nuclear Transport Factor 2 (NTF2) suppresses WM983B metastatic melanoma by modifying cell migration, metastasis, and gene expression. *Scientific Reports*, 11:23586. https://doi.org/10.1038/s41598-021-02803-0.
15. Mukherjee, R.N., Sallé, J., Dmitrieff, S., Nelson, K.M., Oakey, J. Minc, N.*, **Levy, D.L.*** (2020). The perinuclear ER scales nuclear size independently of cell size in early embryos. *Developmental Cell*, 54(3):395-409. *Corresponding authors.
Highlighted as a "Preview" in *Developmental Cell*: Chen, H., Good, M.C. (2020). Nuclear sizER in early development. *Developmental Cell*, 54:297-298.
Two Faculty Opinions (F1000 Prime) recommendations: https://doi.org/10.3410/f.738038096.793575477 and https://doi.org/10.3410/f.738038096.793575611
14. Chen, P., Tomschik, M., Nelson, K.M., Oakey, J., Gatlin, J.C., **Levy, D.L.** (2019). Nucleoplasmin is a limiting component in the scaling of nuclear size with cytoplasmic volume. *Journal of Cell Biology*, 218(12):4063-4078.
13. Mukherjee, R.N., **Levy, D.L.** (2019). Rtn4a promotes exocytosis in mammalian cells. *Molecular Biology of the Cell*, 30(18):2349-2357.
12. Jevtic, P., Schibler, A.C., Wesley, C.C., Pegoraro, G., Misteli, T.*, **Levy, D.L.*** (2019). The nucleoporin ELYS regulates nuclear size by controlling NPC number and nuclear import capacity. *EMBO Reports*, e47283 (10.15252/embr.201847283). *Corresponding authors
11. Jevtic, P., Mukherjee, R.N., Chen, P., **Levy, D.L.** (2019). Altering the levels of nuclear import factors in early *Xenopus laevis* embryos affects later development. *PLoS One*, 14(4):e0215740.

10. Dilsaver, M.R., Chen, P., Thompson, T.A., Reusser, T., Mukherjee, R.N., Oakey, J., **Levy, D.L.** (2018). Emerin induces nuclear breakage in *Xenopus* extract and early embryos. *Molecular Biology of the Cell*, 29(26):3155-3167.
9. Milunovic-Jevtic, A., Jevtic, P., **Levy, D.L.**, Gatlin, J.C. (2018). In vivo mitotic spindle scaling can be modulated by changing the levels of a single protein: the microtubule polymerase XMAP215. *Molecular Biology of the Cell*, 29(11):1311-1317.
8. Edens, L.J., Dilsaver, M.R., **Levy, D.L.** (2017). PKC-mediated phosphorylation of nuclear lamins at a single serine residue regulates interphase nuclear size in *Xenopus* and mammalian cells. *Molecular Biology of the Cell*, 28(10):1389-1399.
7. Jevtic, P., **Levy, D.L.** (2017). Both nuclear size and DNA amount contribute to midblastula transition timing in *Xenopus laevis*. *Scientific Reports*, 7(1):7908.
6. Nelson, K., Debroy, D., McBride, R., **Levy, D.**, Gatlin, J., Li, D., Oakey, J. (2017). Hydrogel-based Janus structures for asymmetrical aster nucleation. *ISA Biomedical Sciences Instrumentation*, 512:193.
5. Vukovic, L.D., Jevtic, P., Zhang, Z., Stohr B.A., **Levy, D.L.** (2016). Nuclear size is sensitive to NTF2 protein levels in a manner dependent on Ran binding. *Journal of Cell Science*, 129:1115-1127.
4. Edens, L.J., **Levy, D.L.** (2016). A cell-free assay using *Xenopus laevis* embryo extracts to study mechanisms of nuclear size regulation. *Journal of Visualized Experiments*, 114:e54173, doi:10.3791/54173.
3. Jevtic, P., **Levy, D.L.** (2015). Nuclear size scaling during *Xenopus* early development contributes to midblastula transition timing. *Current Biology*, 25:45-52.
   Highlighted as a UWyo press release (http://www.uwyo.edu/uw/news/2014/12/uw-study-of-cells-during-frog-development-may-aid-future-cancer-patients.html) and in the UWyo Branding Iron (http://www.uwbrandingiron.com/2014/12/09/frog-cells-could-assist-cancer-research/).
2. Jevtic, P., Edens, L.J., Li, X., Nguyen, T., Chen, P., **Levy, D.L.** (2015). Concentration-dependent effects of nuclear lamins on nuclear size in *Xenopus* and mammalian cells. *Journal of Biological Chemistry*, 290(46):27557-71.
   Highlighted by UWyo Extension (http://www.uwyo.edu/uw/news/2015/12/uw-scientists-cellular-studies-using-frog-eggs-has-cancer-connection.html) and the Ag College (http://www.uwyo.edu/uwag/publications/agnews/agnews-16-winter.pdf).
1. Edens, L.J., **Levy, D.L.** (2014). cPKC regulates interphase nuclear size during *Xenopus* development. *Journal of Cell Biology*, 206(4):473-83.
   Highlighted as a *JCB* biobyte podcast:
   http://www.uwyo.edu/levy_lab/_files/images/biobytes_aug_18_2014.mp3
   Highlighted as a "Research Highlight" in *Nature Reviews Molecular Cell Biology*:
   Du Toit, A. (2014). Honey, I shrunk the nucleus. *Nature Reviews Molecular Cell Biology*, 15(10):633.

Manuscripts under review or in preparation:

Peer-reviewed review articles and protocols published while at UWyo:

19. Prabha, H., Phan, P., **Levy, D.L.** (2026). Getting nuclear size just right: emerging mechanisms regulating nuclear scaling and morphology. *Journal of Cell Science*, 139(12):jcs264825.
18. Sengupta, S., Prabha, H., **Levy, D.L.** (2025). How the chromatin landscape influences nuclear morphology. *Frontiers in Cell and Developmental Biology*, 13:1634252.

17. Sengupta, S., Zhang, Z., **Levy, D.L.** (2025). Ultrastructural visualization of the nuclear envelope in HeLa cells. *Methods in Molecular Biology*, 2958:35-43.
16. Xie, J., **Levy, D.L.**, Minc, N., Sallé, J. (2024). Manipulation of embryonic cleavage geometry using magnetic tweezers. *Methods in Molecular Biology*, 2740:125-140.
15. Lele, T.P., **Levy, D.L.**, Mishra, K. (2023). Editorial: Nuclear morphology in development and disease. *Frontiers in Cell and Developmental Biology*, 11:1267645.
14. Chen, P., **Levy, D.L.** (2023). Regulation of organelle size and organization during development. *Seminars in Cell and Developmental Biology*, 133:53-64.
13. Mishra, S., **Levy, D.L.** (2022). Visualizing nuclear pore complexes in *Xenopus* egg extracts. *Methods in Molecular Biology*, 2502:395-405.
12. Gatlin, J.C., **Levy, D.L.** (2021). Concepts: Organelle Scaling. Encyclopedia of Biochemistry 3rd Edition, Volume 5, 107-112, Elsevier Inc. doi:10.1016/B978-0-12-819460-7.00304-2.
11. **Levy, D.L.** (2020). Cell biology: Tubulin contributes to spindle size scaling. *Current Biology*, 30(11):R637-R639.
10. Wesley, C.C., Mishra, S., **Levy, D.L.** (2020). Organelle size scaling over embryonic development. *WIREs Developmental Biology*, 9(5):e376. https://doi.org/10.1002/wdev.376.
9. Hatch, E.M., **Levy, D.L.** (2020). ASCB Annual Meeting Highlight: Nucleus Structure and Dynamics. *Molecular Biology of the Cell*, 31(6):397.
8. Chen, P., **Levy, D.L.** (2018). Nucleus assembly and import in *Xenopus laevis* egg extract. Cold Spring Harb Protoc. doi:10.1101/pdb.prot097196.
7. Jevtic, P., **Levy, D.L.** (2018). Elucidating nuclear size control in the *Xenopus* model system. *Veterinarski Glasnik*, 72(1):1-13.
6. Jevtic, P., **Levy, D.L.** (2017). More cytoplasm, more problems. *Developmental Cell*, 41(3):221-223.
5. Mukherjee, R.N., Chen, P., **Levy, D.L.** (2016). Recent advances in understanding nuclear size and shape. *Nucleus*, 7(2):167-186.
4. Jevtic, P., Milunovic-Jevtic, A., Dilsaver, M.R., Gatlin, J.C., **Levy, D.L.** (2016). Use of *Xenopus* cell-free extracts to study size regulation of subcellular structures. *International Journal of Developmental Biology*, 60:277-288.
3. Jevtic, P., Edens, L.J., Vukovic, L.D., **Levy, D.L.** (2014). Sizing and shaping the nucleus: mechanisms and significance. *Current Opinion in Cell Biology*, 28:16-27.
2. Edens, L.J., White, K.H., Jevtic, P., Li, X., **Levy, D.L.** (2013). Nuclear size regulation: from single cells to development and disease. *Trends in Cell Biology*, 23(4):151-9. Highlighted on the cover of the April 2013 issue of *Trends in Cell Biology*.
1. **Levy, D.L.**, Heald, R. (2012). Mechanisms of intracellular scaling. *Annual Review of Cell and Developmental Biology*, 28:113-35.

Editor-reviewed book chapters published while at UWyo:

6. Sengupta, S.*, **Levy, D.L.*** (2024). Organelle communication with the nucleus. In: Kloc, M., Kubiak, J.Z., Halasa, M. (eds) *Intercellular and Interorganellar Transfer and Communication in Biology and Medicine, Results and Problems in Cell Differentiation*, 73:3-23. Springer. *Corresponding authors
5. Vukovic, L.D., Jevtic, P., Edens, L.J., **Levy, D.L.** (2016). New insights into mechanisms and functions of nuclear size regulation. *International Review of Cell and Molecular Biology*, 322:1-59.
4. **Levy, D.L.**, Heald, R. (2015). Biological scaling problems and solutions in Amphibians. In: Heald, Hariharan, and Wake (eds) *Size Control in Biology: From Organelles to*

*Organisms*, Cold Spring Harbor Perspectives in Biology, Cold Spring Harbor Laboratory Press, 73-88. doi: 10.1101/cshperspect.a019166.

3. Edens, L.J., **Levy, D.L.** (2014). Size scaling of subcellular organelles and structures in *X. laevis* and *X. tropicalis*. In: Kloc and Kubiak (eds) *Xenopus Development*, John Wiley & Sons, Inc., Hoboken, New Jersey, 325-345.
2. Jevtic, P., **Levy, D.L.** (2014). Mechanisms of nuclear size regulation in model systems and cancer. *Advances in Experimental Medicine and Biology*, 773:537-69.
1. Williams, T.L., **Levy, D.L.** (2013). Assaying cooperativity of protein-DNA interactions using agarose gel electrophoresis. *Methods in Molecular Biology*, 1054:253-65.

Peer-reviewed research articles published before starting at UWyo:

8. **Levy, D.L.**, Heald, R. (2010). Nuclear size is regulated by importin α and Ntf2 in *Xenopus*. *Cell*, 143(2):288-98.
   Highlighted as a *Cell* PaperFlick: http://www.youtube.com/watch?v=Jbi-nfIa15M
   Highlighted as a "News and Views" in *Nature*: Cohen-Fix, O. (2010). Cell biology: import and nuclear size. *Nature*, 468:513-16.
   Faculty Opinions (F1000 Prime) recommendation: https://doi.org/10.3410/f.6812956.6983054
7. Williams, T.L.*, **Levy, D.L.***, Maki-Yonekura, S., Yonekura, K., Blackburn, E.H. (2010). Characterization of the yeast telomere nucleoprotein core: Rap1 binds independently to each recognition site. *Journal of Biological Chemistry*, 285(46):35814-24. **co-first authors*
6. **Levy, D.L.**, Blackburn, E.H. (2004). Counting of Rif1p and Rif2p on *Saccharomyces cerevisiae* telomeres regulates telomere length. *Molecular and Cellular Biology*, 24(24):10857-67.
5. Edwards, S., Li, C.M., **Levy, D.L.**, Brown, J., Snow, P.M., Campbell, J.L. (2003). *Saccharomyces cerevisiae* DNA polymerase epsilon and polymerase sigma interact physically and functionally, suggesting a role for polymerase epsilon in sister chromatid cohesion. *Molecular and Cellular Biology*, 23(8), 2733-48.
4. Dua, R., **Levy, D.L.**, Li, C.M., Snow, P.M., Campbell, J.L. (2002). *In vivo* reconstitution of *Saccharomyces cerevisiae* DNA polymerase epsilon in insect cells. Purification and characterization. *Journal of Biological Chemistry*, 277(10), 7889-96.
3. Dua, R., Edwards, S., **Levy, D.L.**, Campbell, J.L. (2000). Subunit interactions within the *Saccharomyces cerevisiae* DNA polymerase epsilon (pol epsilon) complex. Demonstration of a dimeric pol epsilon. *Journal of Biological Chemistry*, 275(37), 28816-25.
2. Dua, R., **Levy, D.L.**, Campbell, J.L. (1999). Analysis of the essential functions of the C-terminal protein/protein interaction domain of *Saccharomyces cerevisiae* pol epsilon and its unexpected ability to support growth in the absence of the DNA polymerase domain. *Journal of Biological Chemistry*, 274(32), 22283-88.
1. Dua, R., **Levy, D.L.**, Campbell, J.L. (1998). Role of the putative zinc finger domain of *Saccharomyces cerevisiae* DNA polymerase epsilon in DNA replication and the S/M checkpoint pathway. *Journal of Biological Chemistry*, 273(45), 30046-55.

Other research articles:

1. **Levy, D.L.**, Skiles, J.W. (2000). Response of two legumes to two ultraviolet-B radiation regimes. *NASA Contractor Report CR209604*.

## PRESENTATIONS

(* = presenting author)

Invited talks while at UWyo:

19. **Levy, D.L.*** (May 2026). Nuclear size regulation in early development. 2026 Medical-Bio Convergence Symposium, Hallym University, South Korea. UWyo press release: https://www.uwyo.edu/news/2026/06/three-uw-researchers-university-spin-out-featured-at-symposium-in-south-korea.html
18. **Levy, D.L.*** (April 2022). INBRE pilot project: Organelle size scaling in living sea urchin embryos. Wyoming INBRE Spring Research Conference.
17. **Levy, D.L.*** (March 2022). INBRE pilot project: Organelle size scaling in living sea urchin embryos. INBRE chalk talk at UWyo.
16. **Levy, D.L.*** (March 2022). Nuclear size regulation in early development and cancer. WY INBRE Seminar Video Conference Series.
15. **Levy, D.L.*** (December 2020). INBRE pilot project: Organelle size scaling in living sea urchin embryos. INBRE chalk talk at UWyo. Also presented for the INBRE External Advisory Committee on May 12, 2021.
14. **Levy, D.L.*** (November 2020). Nuclear size regulation in early development and cancer. Promotion talk, Department of Molecular Biology at UWyo.
13. **Levy, D.L.*** (August 2018). Cytoplasmic volume and limiting nucleoplasmin scale nuclear size during *Xenopus laevis* development. 17th International *Xenopus* Conference in Seattle, WA.
12. **Levy, D.L.*** (October 2017). Nuclear size regulation in early *Xenopus* development and cancer. Séminaire de l'Institut, Institut Jacques Monod, Paris, France.
11. **Levy, D.L.*** (October 2017). Nuclear size regulation in early *Xenopus* development and cancer. Biophysics of the Nuclear Envelope, Institut Curie, Paris, France.
10. **Levy, D.L.*** (January 2017). Nuclear size regulation in early *Xenopus* development and cancer. Department of Biochemistry and Molecular Biology, SUNY Upstate Medical University.
9. **Levy, D.L.*** (January 2017). Nuclear size regulation in early *Xenopus* development and cancer. Department of Biology, Drexel University.
8. **Levy, D.L.*** (December 2016). Nuclear size regulation in early *Xenopus* development and cancer. Special interest subgroup on Cell Size, *American Society for Cell Biology Annual Meeting*, San Francisco, CA.
7. **Levy, D.L.*** (December 2016). Nuclear size regulation in early *Xenopus* development and cancer. Department of Biology, Brandeis University.
6. **Levy, D.L.*** (November 2016). Nuclear size regulation in early *Xenopus* development and cancer. Department of Molecular and Cell Biology, Boston University.
5. **Levy, D.L.*** (October 2016). Nuclear size regulation in early *Xenopus* development and cancer. Joint Seminars in Molecular Biology at the University of California, Davis.
4. **Levy, D.L.*** (November 2015). Nuclear size regulation in early *Xenopus* development and cancer. Tenure talk, Department of Molecular Biology at UWyo.
3. **Levy, D.L.*** (April 2015). Nuclear size regulation during early *Xenopus* development. Cell and Molecular Biology Seminar Series at Colorado State University, Fort Collins.
2. **Levy, D.L.*** (August 2014). Mechanisms and functions of nuclear size regulation in early *Xenopus* development. 15th International *Xenopus* Conference in Asilomar, CA.
1. **Levy, D.L.*** (September 2013). Nuclear size matters: How and why the size of the nucleus is regulated. Department of Animal Sciences at UWyo.

Invited talks before starting at UWyo:

3. **Levy, D.L.*** (February 2011). Nuclear scaling in *Xenopus*. Department of Cell Biology, Yale University.
2. **Levy, D.L.*** (January 2011). Nuclear scaling in *Xenopus*. Department of Physiology and Biophysics, University of Arkansas for Medical Sciences.
1. **Levy, D.L.*** (April 2011). Nuclear scaling in *Xenopus*. Department of Molecular Biology, University of Wyoming.

Selected for oral presentation while at UWyo:

10. Prabha, H.*, **Levy, D.L.** (June 2026). Regulation of nuclear morphology and integrity by VRK-1. Front Range Cytoskeleton Meeting, University of Colorado.
9. Sengupta, S.*, **Levy, D.L.** (December 2023). Regulation of nuclear morphology under conditions of cellular stress. *American Society for Cell Biology Annual Meeting*, Boston, MA.
8. Sengupta, S.*, **Levy, D.L.** (August 2023). Regulation of nuclear morphology under stress conditions in *Xenopus laevis* extracts. 19th International *Xenopus* Conference, Cambridge, MD.
7. Prabha, H.*, **Levy, D.L.** (2023). Small but mighty: why nuclear size and shape matter more than you think. NIH IDeA Western Regional Conference, New Mexico.
6. Sengupta, S.*, **Levy, D.L.** (July 2023). Regulation of nuclear morphology under stress conditions in *Xenopus laevis* extracts. Front Range Cytoskeleton Meeting, University of Colorado.
5. Wesley, C.*, **Levy, D.L.** (2021). Differentiation-dependent changes in Lamin B Receptor (LBR) localization influence lamin B1 dynamics and expression of differentiation markers. *American Society for Cell Biology Annual Meeting*, online.
4. Chen, P.*, Tomschik, M., Nelson, K.M., Oakey, J., Gatlin, J.C., **Levy, D.L.** (2019). Cytoplasmic volume and limiting nucleoplasmin scale nuclear size during *Xenopus laevis* development by altering chromatin organization. *American Society for Cell Biology Annual Meeting*, Washington DC.
3. Schibler, A.*, Jevtic, P., Pegoraro, G., **Levy, D.L.**, Misteli, T. (2019). Identification of regulators of nuclear shape. *American Society for Cell Biology Annual Meeting*, Washington DC.
2. Chen, P.*, Tomschik, M., Nelson, K.M., Oakey, J., Gatlin, J.C., **Levy, D.L.** (2019). Cytoplasmic volume and limiting nucleoplasmin scale nuclear size during *Xenopus laevis* development. *NIH IDeA Western Regional Conference*, Las Vegas, NV.
1. Mukherjee, R.N.*, Zhang, Z., **Levy, D.L.** (2018). The tubular ER shaping protein Reticulon 4a enhances exocytosis independently of its effect on ER morphology. *American Society for Cell Biology Annual Meeting*, San Diego, CA.

Selected for poster presentation while at UWyo:

57. Phan, P.*, **Levy, D.L.** (2026). Investigating the role of the LINC complex in nuclear morphology regulation using *Xenopus laevis* egg extracts. *National IDeA Symposium of Biomedical Research Excellence*, Rockville, MD.
56. Phan, P.*, **Levy, D.L.** (2026). Investigating the role of the LINC complex in nuclear morphology regulation using *Xenopus laevis* egg extracts. *INBRE Conference*, Laramie, WY.

55. Prabha, H.*, **Levy, D.L.** (2026). Regulation of nuclear morphology and integrity by vaccinia-related kinase-1. *Cold Spring Harbor Laboratory conference on Genome Organization and Nuclear Function*, Cold Spring Harbor, NY.
54. Phan, P.*, **Levy, D.L.** (2024). Investigating the role of the LINC complex in nuclear morphology regulation using *Xenopus laevis* egg extracts. *American Society for Cell Biology Annual Meeting*, San Diego, CA.
53. Prabha, H.*, **Levy, D.L.** (2023). Role of VRK1 in nuclear morphology and size regulation in *Xenopus laevis* extracts. *American Society for Cell Biology Annual Meeting*, Boston, MA.
52. Prabha, H.*, **Levy, D.L.** (2023). Role of VRK1 in nuclear morphology and size regulation in *Xenopus laevis* extracts. 19th International *Xenopus* Conference, Cambridge, MD.
51. Prabha, H.*, **Levy, D.L.** (2023). Role of VRK1 in nuclear morphology and size regulation in *Xenopus laevis* extracts. NIH IDeA Western Regional Conference, New Mexico.
50. Prabha, H.*, **Levy, D.L.** (2023). Role of VRK1 in nuclear morphology and size regulation in *Xenopus laevis* extracts. *JCS2023: Imaging Cell Dynamics*, Lisbon, Portugal.
49. Prabha, H.*, **Levy, D.L.** (2022). Role of VRK1 in nuclear size regulation in *Xenopus laevis*. *American Society for Cell Biology Annual Meeting*, Washington DC.
48. Sengupta, S.*, **Levy, D.L.** (2022). Regulation of nuclear morphology under stress conditions in *Xenopus* extract. *American Society for Cell Biology Annual Meeting*, Washington DC.
47. Mishra, S.*, **Levy, D.L.** (2022). Nuclear F-actin and Lamin A antagonistically regulate nuclear shape. *American Society for Cell Biology Annual Meeting*, Washington DC.
46. Mishra, S.*, **Levy, D.L.** (2021). Nuclear F-actin and Lamin A dependent regulation of nuclear shape. *American Society for Cell Biology Annual Meeting*, online.
45. Wesley, C.*, **Levy, D.L.** (2020). Lamin B1 dynamics are differentially sensitive to levels of specific nuclear envelope proteins in iPS and germ layer cells. *American Society for Cell Biology Annual Meeting*, online.
44. Mishra, S.*, **Levy, D.L.** (2020). F-actin and lamin A dependent regulation of nuclear shape in *Xenopus* egg extracts. *American Society for Cell Biology Annual Meeting*, online.
43. Chen, P.*, Liu, J., Oakey, J., **Levy, D.L.** (2020). Chromatin organization regulates nuclear size in *Xenopus laevis* egg extract. *American Society for Cell Biology Annual Meeting*, online.
42. Sallé, J.*, Mukherjee, R.N., Nelson, K.M., Dmitrieff, S., Oakey, J., Minc, N, **Levy, D.L.** (2019). Uncoupling nuclear size and cell size during early development: Perinuclear endoplasmic reticulum as a local limiting factor for nuclear growth. *American Society for Cell Biology Annual Meeting*, Washington DC.
41. Wesley, C.*, **Levy, D.L.** (2019). Protein kinase C activity alters lamin B1 dynamics differently in induced pluripotent stem cells and germ layer cells. *American Society for Cell Biology Annual Meeting*, Washington DC.
40. Mishra, S.*, **Levy, D.L.** (2019). Formin-mediated regulation of nuclear morphology in actin-intact *Xenopus* extracts. *American Society for Cell Biology Annual Meeting*, Washington DC.
39. Vukovic, L.D.*, **Levy, D.L.** (2018). Increased NTF2 levels in melanoma cell lines affect nuclear size and gene expression. *American Society for Cell Biology Annual Meeting*, San Diego, CA.
38. Mishra, S.*, Oakey, J., **Levy, D.L.** (2018). Nuclear morphology in actin-intact *Xenopus* extract. *American Society for Cell Biology Annual Meeting*, San Diego, CA.
37. Wesley, C.*, **Levy, D.L.** (2018). Nuclear lamin protein localization and dynamics in differentiating human iPS cells. *American Society for Cell Biology Annual Meeting*, San Diego, CA.

36. Chen, P.*, Tomschik, M., Nelson, K.M., Oakey, J., Gatlin, J.C., **Levy, D.L.** (2018). Cytoplasmic volume and limiting nucleoplasmin scale nuclear size during *Xenopus laevis* development. *American Society for Cell Biology Annual Meeting*, San Diego, CA.
35. Chen, P.*, Nelson, K.M., Tomschik, M., Gatlin, J.C., Oakey, J., **Levy, D.L.** (2018). Investigating nuclear size scaling using microfluidic encapsulation of *Xenopus laevis* embryonic cytoplasm. *17th International Xenopus Conference*, Seattle, WA.
34. Vukovic, L.D.*, Stohr, B.A., **Levy, D.L.** (2018). Increased NTF2 levels in melanoma cell lines affect nuclear size and cancer cell characteristics. *American Association for Cancer Research Annual Meeting*, Chicago, IL.
33. Elliott, K.*, Jevtic, P., **Levy, D.L.**, Varga, K. (2018). Characterization of the antifreeze protein ApAFP752. *59th Experimental Nuclear Magnetic Resonance Conference*, Orlando, FL.
32. Wesley, C.*, **Levy, D.L.** (2017). Quantification of nuclear morphology changes during induced pluripotent stem cell differentiation. *American Society for Cell Biology Annual Meeting*, Philadelphia, PA.
31. Chen, P.*, Nelson, K.M., Tomschik, M., Gatlin, J.C., Oakey, J., **Levy, D.L.** (2017). Biochemical fractionation of *Xenopus* extract to identify components limiting for nuclear growth. *American Society for Cell Biology Annual Meeting*, Philadelphia, PA.
30. Vukovic, L.D.*, Stohr, B.A., **Levy, D.L.** (2017). Altering NTF2 levels in melanoma cell lines affects cancer cell characteristics. *American Society for Cell Biology Annual Meeting*, Philadelphia, PA.
29. Mukherjee, R.N.*, **Levy, D.L.** (2017). Tubular ER shaping protein reticulon 4A/NogoA influences protein trafficking through the secretory pathway. *American Society for Cell Biology Annual Meeting*, Philadelphia, PA.
28. Johnson, A.L.*, Mukherjee, R.N., **Levy, D.L.** (2017). Reticulons influence endoplasmic reticulum morphology and nuclear size in *Xenopus* and HeLa cells. Medical Student Research Training Program Meeting (Seattle, WA) and Western Student and Resident Medical Research Forum (Carmel, CA).
27. Vukovic, L.D.*, Stohr, B.A., **Levy, D.L.** (2017). Altering nuclear size in melanoma cell lines affects cancer cell characteristics. *American Association for Cancer Research Annual Meeting*, Washington DC.
26. Elliott, K.*, Follett, S., Jevtic, P., **Levy, D.L.**, Varga, K. (2017). Characterization of the antifreeze protein ApAFP752. *58th Experimental Nuclear Magnetic Resonance Conference*, Asilomar, CA.
25. Edens, L.J.*, **Levy, D.L.** (2016). PKC-mediated phosphorylation of nuclear lamins at a single serine residue influences nuclear size. *American Society for Cell Biology Annual Meeting*, San Francisco, CA.
24. Chen, P.*, Nelson, K.M., Oakey, J., **Levy, D.L.** (2016). Using microfluidic encapsulation of *Xenopus laevis* embryonic cytoplasm to identify nuclear size scaling mechanisms. *American Society for Cell Biology Annual Meeting*, San Francisco, CA.
23. Jevtic, P.*, Schibler, A.C., Pegoraro, G., Misteli, T., **Levy, D.L.** (2016). Identification of nuclear sizing factors by high-throughput imaging-based siRNA screening. *American Society for Cell Biology Annual Meeting*, San Francisco, CA.
22. Mukherjee, R.N.*, Nelson, K., Oakey, J., **Levy, D.L.** (2016). The morphology of the endoplasmic reticulum is influenced by cytoplasmic volume in *Xenopus laevis*. *American Society for Cell Biology Annual Meeting*, San Francisco, CA.
21. Vukovic, L.D.*, Stohr, B.A., **Levy, D.L.** (2016). Altering nuclear size in melanoma cell lines affects cancer cell characteristics. *American Society for Cell Biology Annual Meeting*, San Francisco, CA.

20. Dilsaver, M.*, **Levy, D.L.** (2016). Emerin induces nuclear rupture in *Xenopus* egg extract. *American Society for Cell Biology Annual Meeting*, San Francisco, CA.
19. Vukovic, L.D.*, Stohr, B.A., **Levy, D.L.** (2016). NTF2 regulates nuclear size in mammalian cells and may contribute to altered nuclear size in melanoma. *American Association for Cancer Research Annual Meeting*, New Orleans, LA.
18. Nelson, K.*, **Levy, D.L.**, Oakey, J. (2016). Inertial focusing to separate *Xenopus laevis* embryo nuclei for droplet encapsulation. *MicroTAS 2016: The 20th International Conference on Miniaturized Systems for Chemistry and Life Sciences*, Dublin, Ireland.
17. Chen, P.*, Nelson, K., Oakey, J., **Levy, D.L**. (2015). Cytoplasmic volume contributes to nuclear scaling during *Xenopus laevis* embryogenesis. *American Society for Cell Biology Annual Meeting*, San Diego, CA.
16. Mukherjee, R.*, Nelson, K., Oakey, J., **Levy, D.L**. (2015). Endoplasmic reticulum size and morphology are regulated by cytoplasmic volume. *American Society for Cell Biology Annual Meeting*, San Diego, CA.
15. Edens, L.J.*, **Levy, D.L.** (2015). A PKC Beta signaling pathway contributes to nuclear size regulation during *Xenopus* development and in mammalian tissue culture cells. *American Society for Cell Biology Annual Meeting*, San Diego, CA.
14. Vukovic, L.D.*, Stohr, B.A., **Levy, D.L.** (2015). NTF2 regulates nuclear size in mammalian cells and may contribute to altered nuclear size in melanomas. *American Society for Cell Biology Annual Meeting*, San Diego, CA.
13. Jevtic, P.*, **Levy, D.L.** (2015). Concentration dependent effects of nuclear lamins and NTF2 on nuclear size. *American Society for Cell Biology Annual Meeting*, San Diego, CA.
12. Follett, S.*, Elliott, K.W., Jevtic, P., **Levy, D.L.**, Varga, K. (2015) Characterization of the antifreeze protein ApAFP752. *56th Experimental Nuclear Magnetic Resonance Conference*, Asilomar, CA.
11. Edens, L.J.*, **Levy, D.L.** (2014). A novel nuclear re-sizing activity: cPKC is a regulator of nuclear size in *Xenopus* development. *American Society for Cell Biology Annual Meeting*, Philadelphia, PA.
10. Jevtic, P.*, **Levy, D.L.** (2014). Nuclear size scaling during *Xenopus* early development contributes to the regulation of midblastula transition timing. *American Society for Cell Biology Annual Meeting*, Philadelphia, PA.
9. Vukovic, L.*, **Levy, D.L.** (2014). Molecular determinants of nuclear size in melanoma cancer cells. *American Society for Cell Biology Annual Meeting*, Philadelphia, PA.
8. Elliott, K.W.*, Nordyke, C.T., Jevtic, P., Sharpe, J.J., **Levy, D.L.**, Varga, K. (2014) Structural and functional studies of antifreeze protein ApAFP752. *Northwest Regional Meeting of the American Chemical Society*, Missoula, Montana.
7. Edens, L.J.*, **Levy, D.L.** (2013). Altered conventional protein kinase C activity functions in interphase nuclear size regulation during *Xenopus laevis* early development. *American Society for Cell Biology Annual Meeting*, New Orleans, LA. Also presented as a poster at the 2013 Front Range Cytoskeleton Meeting at UWyo in May 2013.
6. Vukovic, L.*, **Levy, D.L.** (2013). Molecular determinants of nuclear size and the nucleocytoplasmic ratio in cancer cells. *American Society for Cell Biology Annual Meeting*, New Orleans, LA.
5. Jevtic, P.*, **Levy, D.L.** (2013). Nuclear size regulates midblastula transition timing. *American Society for Cell Biology Annual Meeting*, New Orleans, LA.
4. Edens, L.J.*, **Levy, D.L.** (2012). A novel role for protein kinase C in nuclear size regulation. *American Society for Cell Biology Annual Meeting*, San Francisco, CA.
3. Jevtic, P.*, **Levy, D.L.** (2012). The impact of nuclear size on *Xenopus* early development. *American Society for Cell Biology Annual Meeting*, San Francisco, CA.

2. Li, X.*, **Levy, D.L.** (2012). Expression of different nuclear lamins during *Xenopus laevis* development may contribute to nuclear scaling. *American Society for Cell Biology Annual Meeting*, San Francisco, CA. Also presented as a poster at the 2013 Front Range Cytoskeleton Meeting at UWyo in May 2013.
1. **Levy, D.L.***, Heald, R. (2011). Investigating the mechanism and function of nuclear size regulation during *Xenopus laevis* development. *American Society for Cell Biology Annual Meeting*, Denver, Colorado.

Selected for oral presentation before starting at UWyo:
6. **Levy, D.L.***, Heald, R. (2010). Interspecies and developmental nuclear scaling in *Xenopus*. *American Society for Cell Biology Annual Meeting*, Minisymposium on "Nuclear Cell Biology," Philadelphia, Pennsylvania.
5. **Levy, D.L.***, Heald, R. (2008). Nuclear scaling in *Xenopus* egg extracts and early embryos. *Dynamic Organization of Nuclear Function*, Cold Spring Harbor, New York.
4. **Levy, D.L.***, Williams, T.L., Blackburn, E.H. (2005). Characterization of the yeast telomere core: Rap1 binding to DNA arrays of consensus Rap1 binding sites. *FASEB Conference on "Chromatin and Transcription,"* Snowmass, Colorado.
3. **Levy, D.L.***, Blackburn, E.H. (2004). Telomere length regulation by *Saccharomyces cerevisiae* Rif1 and Rif2. *HHMI Meeting of Predoctoral and Physician Postdoctoral Fellows*, Chevy Chase, Maryland.
2. **Levy, D.L.***, Blackburn, E.H. (2003). Telomere length regulation by *S. cerevisiae* Rif1 and Rif2. *Telomeres and Telomerase*, Cold Spring Harbor, New York.
1. **Levy, D.L.***, Dua, R., Campbell, J.L. (1999). Characterization of the putative zinc finger domain of *Saccharomyces cerevisiae* DNA polymerase epsilon. *National Conference on Undergraduate Research*, Rochester, New York.

Selected for poster presentation before starting at UWyo:
5. **Levy, D.L.***, Heald, R. (2010). Nuclear scaling is mediated by importin α and Ntf2 in *Xenopus*. *Nuclear Organization and Function*, Cold Spring Harbor Symposium LXXV, New York.
4. **Levy, D.L.***, Heald, R. (2008). Nuclear scaling in *Xenopus* egg extracts and embryos. *American Society for Cell Biology Annual Meeting*, San Francisco, California.
3. Williams, T.L.*, **Levy, D.L.***, Blackburn, E.H. (2004). Characterization of the telomere core: Rap1 binding to DNA arrays of consensus Rap1 sites. *AACR Conference on "Role of Telomeres and Telomerase in Cancer,"* San Francisco, California.
2. **Levy, D.L.***, Blackburn, E.H. (2002). Telomere length regulation by *Saccharomyces cerevisiae* Rif2. *FASEB Conference on "Yeast Chromosome Structure, Replication, and Segregation,"* Snowmass, Colorado.
1. **Levy, D.L.***, Dua, R., Campbell, J.L. (1999). Role of *Saccharomyces cerevisiae* DNA polymerase epsilon in DNA replication and cell cycle regulation. *Beckman Scholars Program Symposium*, Irvine, California.

## TEACHING EXPERIENCE

University of Wyoming 2026:
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 25 students

MOLB 5050: Advanced Student Seminar (2 credits), Spring Semester, 9 students; Fall Semester, 6 students
MOLB 5055: Molecular Monday (1 credit), Spring Semester, 18 students; Fall Semester, 16 students
MOLB 5520: MCLS Lab Rotations (3 credits), Spring Semester, 5 students; Fall Semester, 5 students
MOLB 5056: Current Topics in Cell Biology (2 credits), Summer Semester, 6 students
MOLB 4010: Undergraduate Laboratory Research, Fall Semester, Mairin Sims (2 credits)
Mentored graduate students Haritha Prabha and Priscilla Phan
Mentored undergraduate student Mairin Sims (Wyoming Research Scholar)

University of Wyoming 2025:
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 24 students
MOLB 5050: Advanced Student Seminar (2 credits), Fall Semester, 7 students
MOLB 5055: Molecular Monday (1 credit), Spring Semester, 21 students; Fall Semester, 21 students
MOLB 5520: MCLS Lab Rotations (3 credits), Spring Semester, 6 students; Fall Semester, 7 students
MOLB 5056: Current Topics in Cell Biology (2 credits), Summer Semester, 7 students
Mentored graduate students Haritha Prabha and Priscilla Phan
Mentored MCLS rotation students Sujina Maharjan and Shuvo Saha
Mentored undergraduate students Ella Reed (Wyoming Research Scholar), Veronica Hudson Hurtado (McNair Scholar), and Mairin Sims

University of Wyoming 2024:
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 24 students
MOLB 5055: Molecular Monday (1 credit), Spring Semester, 25 students; Fall Semester, 26 students
MOLB 5520: MCLS Lab Rotations (3 credits), Spring Semester, 7 students; Fall Semester, 6 students
MOLB 5056: Current Topics in Cell Biology (2 credits), Summer Semester, 7 students
Mentored graduate students Haritha Prabha and Priscilla Phan
Mentored undergraduate students Ella Reed (Wyoming Research Scholar), Liberty Cleveland

University of Wyoming 2023:
MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 49 students
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 11 students
MOLB 5055: Molecular Monday (1 credit), Fall Semester, 28 students
MOLB 5520: MCLS Lab Rotations (3 credits), Spring Semester, 6 students; Fall Semester, 7 students
MOLB 4010: Undergraduate Laboratory Research (1-3 credits), Fall Semester, Ella Reed (3 credits)
MOLB 5056: Current Topics in Cell Biology (2 credits), Summer Semester, 6 students
MOLB 5700: Beyond the Bench: Fundamental Skill Sets for Biomedical Researchers (3 credits), Spring Semester, co-taught one class with David Fay
Mentored graduate students Chase Wesley, Haritha Prabha, Priscilla Phan
Mentored undergraduate students Ella Reed (Wyoming Research Scholar), Liberty Cleveland

University of Wyoming 2022:

MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 51 students
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 21 students
MOLB 5520: MCLS Lab Rotations (3 credits), Spring Semester, 7 students; Fall Semester, 6 students
MOLB 4010: Undergraduate Laboratory Research (1-3 credits), Spring Semester, Quinton Brooks (3cr); Fall Semester, Haleigh Walthall (3cr)
MOLB 5056: Current Topics in Cell Biology (2 credits), Summer Semester, 7 students
MOLB 5700: Beyond the Bench: Fundamental Skill Sets for Biomedical Researchers (3 credits), Spring Semester, co-taught one class with David Fay
Mentored graduate students Chase Wesley, Sampada Mishra, Haritha Prabha, Priscilla Phan
Mentored undergraduate students Quinton Brooks, Sophia Glennie (Wyoming Research Scholar), Haleigh Walthall

University of Wyoming 2021:
MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 35 students
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 22 students
MOLB 5520: MCLS Lab Rotations (3 credits), Fall Semester, 8 students
MOLB 5056: Current Topics in Cell Biology (2 credits), Summer Semester, 7 students
MOLB 4010: Undergraduate Laboratory Research (1-3 credits), Spring Semester, Quinton Brooks (2cr); Fall Semester, Quinton Brooks (3cr)
Mentored graduate students Chase Wesley, Sampada Mishra, Haritha Prabha
Mentored MCLS rotation students Simon Rachou
Mentored undergraduate students Caitlin Loo, Dallin North, Quinton Brooks, Sophia Glennie (Wyoming Research Scholar)

University of Wyoming 2020:
MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 24 students
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 26 students
MOLB 5056: Current Topics in Cell Biology (2 credits), Summer Semester, 8 students
MOLB 4990: Topics in INBRE Biomedical Research (1 credit), Summer Semester, 10 students, David Fay was the primary instructor and I led two online discussions
HP 4976: Independent Study, Fall Semester, Seth Carter Eckhardt (3cr)
Mentored graduate students Pan Chen, Richik Mukherjee, Chase Wesley, Sampada Mishra
Mentored MCLS rotation students Alec Bond, Tyler Gonzalez
Mentored undergraduate students Seth Carter Eckhardt, Dallin North (received Fall 2020 UWyo INBRE Undergraduate Research Fellowship), Caitlin Loo, Josie Pomrenke

University of Wyoming 2019:
MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 26 students
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 24 students
MOLB 5056: Current Topics in Cell Biology (2 credits), Spring Semester, 6 students
Mentored graduate students Pan Chen, Richik Mukherjee, Chase Wesley, Sampada Mishra
Mentored MCLS rotation students Sharmin Jyoti, Shalini Chakraborty
MOLB 4010: Undergraduate Laboratory Research (1-3 credits), Spring Semester, Seth Carter Eckhardt (1cr); Fall Semester, Seth Carter Eckhardt (1cr) and Dallin North (3cr)
Mentored undergraduate students Seth Carter Eckhardt, Bryanna Hackney, Dallin North, Caitlin Loo

University of Wyoming 2018:

MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 31 students
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 22 students
MOLB 5056: Current Topics in Cell Biology (2 credits), Spring Semester, 7 students
Gave a summer seminar for MOLB 4052/5052 titled "Nuclear size matters: how and why the size of the nucleus is regulated" (July 2018)
Mentored graduate students Lidija Vukovic, Pan Chen, Richik Mukherjee, Chase Wesley, Sampada Mishra
Mentored MCLS rotation students Sampada Mishra, Tasneem Muna
MOLB 4010: Undergraduate Laboratory Research (1 credit), Fall Semester, Seth Carter Eckhardt
Mentored undergraduate students Makala Knox, Seth Carter Eckhardt, Bryanna Hackney

University of Wyoming 2017:
MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 36 students
MOLB 5056: Current Topics in Cell Biology (2 credits), Spring Semester, 5 students
Mentored graduate students Lidija Vukovic, Pan Chen, Richik Mukherjee, Chase Wesley
Mentored MCLS rotation students Chase Wesley, Yasin Ahmed, Kankana Ghosh
MOLB 4010: Undergraduate Laboratory Research (1 credit), Spring Semester, Trey Thompson
Mentored undergraduate students Makala Knox and Trey Thompson

University of Wyoming 2016:
MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 39 students
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 23 students
Mentored graduate students Lisa Edens, Predrag Jevtic, Lidija Vukovic, Pan Chen, Richik Mukherjee
Mentored MCLS rotation students Sarina Bernazzani, Osmanjan Wupu, Alma Burwell
MOLB 4010: Undergraduate Laboratory Research (1-2 credits), Spring Semester, Katherine Nelson, Trey Thompson
MOLB 4010: Undergraduate Laboratory Research (1 credits), Fall Semester, Trey Thompson
Mentored medical student Amanda Johnson and undergraduate students Katherine Nelson, Trey Thompson, and Makala Knox

University of Wyoming 2015:
MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 45 students
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 28 students
Mentored graduate students Lisa Edens, Predrag Jevtic, Lidija Vukovic, Pan Chen, Richik Mukherjee
MOLB 4010: Undergraduate Laboratory Research (2 credits), Spring Semester, Amanda Johnson
MOLB 4010: Undergraduate Laboratory Research (1 credits), Fall Semester, Trey Thompson
Mentored undergraduate students Priscilla Phan, Amanda Johnson, Trey Thompson, Brian Dominguez

University of Wyoming 2014:
MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 42 students
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 21 students
Mentored graduate students Lisa Edens, Predrag Jevtic, Lidija Vukovic
Mentored MCLS rotation students Vera Troselj and Adam Suluburic
MOLB 4010: Undergraduate Laboratory Research (3 credits), Spring Semester, Thang Nguyen

MOLB 4010: Undergraduate Laboratory Research (2 credits), Fall Semester, Matthew Dilsaver
Mentored undergraduate students Rachel McPherson, Priscilla Phan, Amanda Johnson, Brian Dominguez

University of Wyoming 2013:
MOLB 4051/5051: Departmental Seminar (1 credit), Spring Semester, 44 students
MOLB 4052/5052: Summer Seminar (1 credit), Summer Semester, 45 students
MOLB 4670/5670: Advanced Molecular Cell Biology (3 credits), Fall Semester, 21 students
Mentored graduate students Lisa Edens, Predrag Jevtic, Xiaoyang Li, Lidija Vukovic
Mentored MCLS rotation students Kristopher Parker and Jitender Bisht
MOLB 4010: Undergraduate Laboratory Research (1 credit), Spring Semester, Tess Gerber
MOLB 4010: Undergraduate Laboratory Research (3 credits), Fall Semester, Thang Nguyen
Mentored undergraduate students Rachel McPherson and Priscilla Phan

University of Wyoming 2012:
MOLB 4990: Topics in Cell Biology (3 credits), Fall Semester, 10 students
GET Cell Biology Initiative for Teachers, assisted Dr. Naomi Ward
Mentored graduate students Lisa Edens, Predrag Jevtic, Xiaoyang Li
Mentored MCLS rotation students Paul Mooney, Josh Holmes, Haibi Wang
Mentored undergraduate students David Cortes, Tess Gerber, Amanda Johnson, Denise Pierre

University of Wyoming 2011:
Mentored MCLS rotation student Xianshi Tang and undergraduate Denise Pierre

University of California, Berkeley:
Mentored three rotation students (2007-2010)

University of California, San Francisco:
Graduate Student Instructor for "Biological Regulatory Mechanisms" (2002)
Mentored three undergraduate students and one rotation student (2002-2005)

California Institute of Technology:
Teaching Assistant for "Synthesis and Analysis of Organic and Inorganic Compounds" (1999-2000)

## AWARDS

Sabbatical in the laboratory of Dr. Nicolas Minc (Institut Jacques Monod, Paris, France) supported by a $4,000 Global Perspectives Grant Award from UWyo College of Agriculture and Natural Resources (Fall 2017)
Early Career Achievement Award, UWyo Agricultural Experiment Station (2015)
Video interview: https://www.youtube.com/watch?v=6yxEp73uDpM
Article: http://www.uwyo.edu/uwag/publications/agnews/agnews-15-fall.pdf
Lawrence Meeboer Agricultural Classroom Teaching Award (2015)
Article: http://www.uwyo.edu/uwag/publications/agnews/agnews-16-winter.pdf
American Cancer Society Research Scholar (2015)
Postdoctoral Fellowship, American Cancer Society, 2009-2011 (Advisor: Dr. Rebecca Heald)
Predoctoral Fellowship, Howard Hughes Medical Institute, 2000-2005 (Advisor: Dr. Elizabeth

Blackburn)
Jack E. Froehlich Memorial Award, Caltech (1999)
Beckman Scholarship for undergraduate research, Beckman Foundation (1998-1999)
Carnation Merit Award, full merit scholarship (1998 – 2000)
National Merit Scholarship, Eastman Kodak Company (1996)

## ACADEMIC SERVICE

Current graduate student advising (9), **Levy lab students in bold**:
**Haritha Prabha, PhD Advisor (MOLB)**
**Priscilla Phan, PhD Advisor (MOLB)**
Tyler Gonzalez, PhD Advisory Committee (MCLS)
Steven Florez, PhD Advisory Committtee (MCLS)
Jacob McDaniel, PhD Advisory Committee (MCLS)
Vindya Kumara, PhD Advisory Committee (MCLS)
Jarrod Reister, PhD Advisory Committee (MCLS)
Chaitra Udugere, PhD Advisory Committee (MCLS)
Oliver Trunschke, PhD Advisory Committee (MOLB)

Completed graduate student advising, **Levy lab graduates in bold**:
45. Shalini Chakraborty, PhD Advisory Committee (MCLS) – *graduated December 2025*
"Dissecting the neurodevelopmental and non-canonical roles of Abnormal spindle (Asp) in *Drosophila* models of microcephaly"
44. Patrick Sutton, PhD Advisory Committee (outside committee member, Patrick was in Dr. Chris Brownlee's lab at Stony Brook University) – *graduated December 2025*
"The role of palmitoylated importin alpha in mitotic spindle orientation and mitotic progression"
43. Zainab Almazaydeh, PhD Advisory Committee (MCLS) – moved to the University of Alabama with Dr. Gatlin August 2025
42. Seungmee Jung, PhD Advisory Committee (MOLB) – *graduated December 2024*
"Stress-inducible organelle dynamics in host-microbe interactions: insights and applications"
41. Yasin Ahmed, PhD Advisory Committee (MCLS) – *graduated December 2024*
"Phospho-regulation of polar asymmetry and proteolysis within PopZ microdomain in *Caulobacter crescentus*"
40. Alan Stenquist, PhD Advisory Committee (MCLS) – *graduated December 2024*
"The effect of miniaturized hydrogels on cell behavior"
39. Shaonil Binti, PhD Advisory Committee (MCLS) – *graduated May 2024*
"Genetic analysis of NIMA kinases"
38. Gabrielle Reimann, MS Advisory Committee (MOLB) – *graduated May 2024*
"Lipid kinases in *C. elegans* membrane trafficking"
37. Jing Liu, PhD Advisory Committee (MCLS) – *graduated December 2023*
"Micro- and nano-structured PEG hydrogels for biomedical applications"
36. Steve Denton, PhD Advisory Committee (MOLB) – *graduated August 2023*
"Nutritional iron in *Toxoplasma gondii* pathogenesis: parasite theft of host iron machinery and the requirement of iron in the host immune response"
35. Paige Osborn, MS Advisory Committee (Zoology and Physiology) – *graduated May 2023*
"A role for serotonin in the developing *Xenopus* tadpole visual system"

34. **Chase Wesley, PhD Advisor (MCLS) – *graduated May 2023***
**"Analysis of the impact of changes in lamin B1 dynamics and nuclear size on human iPSC differentiation" – Wesley is currently a postdoc in the lab of Dr. Kumar at the University of Colorado Anschutz Medical Campus**
33. **Sampada Mishra, PhD Advisor (MCLS) – *graduated December 2022***
**"Mechanisms of nuclear shape and size regulation" – Mishra is currently a postdoc in the lab of Dr. Beau Webber at the University of Minnesota**
32. Brett Ralston, MS Advisory Committee (Zoo/Phys) – *graduated December 2022*
"Peptidyl arginine deiminase's effects on miRNA processing in pituitary gonadotropes and lactotropes"
31. Abdullah Bashar Sami, PhD Advisory Committee (MCLS) – *graduated August 2022*
"Mechanisms of microtubule-based force generation"
30. Zachary Geisterfer, PhD Advisory Committee (MCLS) – *graduated December 2021*
"Characterization of microtubule dynamics in discrete volumes of *Xenopus laevis* cell-free extracts"
29. Taylor Sulerud, PhD Advisory Committee (MCLS) – *graduated May 2021*
"A microtubule-dependent pushing mechanism contributes to long distance aster motion"
28. Manasa Koratala, PhD Advisory Committee (Biomedical Sciences)
27. Zhongliang Jiang, PhD Advisory Committee (MCLS) – *graduated June 2020*
"Multiscale cell encapsulation for tissue engineering and regenerative medicine"
26. **Pan Chen, PhD Advisor (MCLS) – *graduated May 2020***
**"Cytoplasmic volume, limiting nucleoplasmin, and chromatin physical properties scale nuclear size during *Xenopus laevis* early development" – Chen is currently a postdoc at Ningbo University**
25. **Richik Nilay Mukherjee, PhD Advisor (MCLS) – *graduated May 2020***
**"Endoplasmic reticulum morphology: effects on nuclear size and exocytosis" – Mukherjee is currently a Medical Scientific Director for Merck's Thoracic Oncology Team**
24. Ben Noren, PhD Advisory Committee (Chemical Engineering) – *graduated May 2020*
"Spatiotemporal hydrogel patterning to control cell processes"
23. Coleman Young, PhD Advisory Committee (Zoology/Physiology) – *graduated May 2020*
"Citrullination in ovine uterine luminal epithelial cells"
22. Julian Poush, MA Advisory Committee (MOLB) - *graduated December 2019*
"Regulation of germ cell development by ARI1 family ubiquitin ligases in *C. elegans*"
21. Vera Troselj, PhD Advisory Committee (MCLS) – *graduated July 2019*
"The role of bacterial toxin systems in social integration and diversification of *Myxococcus xanthus*"
20. Jitender Bisht, PhD Advisory Committee (MCLS) – *graduated June 2019*
"Induction of normal spindle assembly competent M-phase and light-mediated cell cycle progression"
19. **Lidija Vukovic, PhD Advisor (MCLS) – *graduated December 2018***
**"NTF2 affects nuclear size, gene expression, and cancer cell characteristics in melanoma" – Vukovic was a postdoc in the Lauberth lab at UCSD, then a Research Associate at Ferrologix, and currently a Staff Scientist at Sanford Labs**
18. Lamia Khan, MS Advisory Committee (Zoology/Physiology) – *graduated December 2018*
"Understanding the role of peptidylarginine deiminases (PADs) in gonadotrope cells"
17. Daria Ivanova, PhD Advisory Committee (MOLB) – *graduated December 2018*
"Natural killer cells in primary and secondary *Toxoplasma gondii* infections"
16. Guangyuan Li, PhD Advisory Committee (Zoology/Physiology) – *graduated August 2018*

"The roles of peptidylarginine deiminase (PAD) enzymes in mammary glands and lactotrope cells"

15. Hannah Cunningham, PhD Advisory Committee (Animal Sciences) – *graduated May 2018*
"Maternal influence of the calf rumen microbiome and subsequent host performance"
14. Ana Milunovic-Jevtic, PhD Advisory Committee (MCLS) – *graduated May 2018*
"Cell-size dependent regulation of spindle morphometrics and microtubule dynamics"
13. Paul Mooney, PhD Advisory Committee (MCLS) – *graduated May 2017*
"Tau-based fluorescent protein fusions as tools to study spindle microtubules and spindle forces"
12. Shelby Follett, PhD Advisory Committee (Chemistry) – *graduated May 2017*
"Effects of DNA binding on the structure of bleomycin analogs and DNA hairpins examined by NMR spectroscopy"
11. **Lisa Edens, PhD Advisor (MCLS) – *graduated December 2016***
**"A novel nuclear size regulatory mechanism" – Edens was a postdoc in the lab of Dr. Yiqun Shellman at CU Anschutz**
10. Melissa Kelley, PhD Advisory Committee (MCLS) - *graduated August 2016*
"A regulatory genetic network in *Caenorhabditis elegans* contributes to epidermal structural integrity during development"
9. **Predrag Jevtic, PhD Advisor (MCLS) - *graduated May 2016***
**"Investigation of the mechanisms and functional significance of nuclear size regulation in *Xenopus laevis* extracts and early *X. laevis* embryos" – Jevtic was a postdoc in the lab of Dr. Michael Rape at UC Berkeley, and he is currently a faculty member in the Translational Research Institute at Cedars-Sinai Medical Center**
8. James Hazel, PhD Advisory Committee (MCLS) - *graduated May 2016*
"Cell-free cytoplasmic extracts and microfluidic droplet-generating technology as a platform to study subcellular size regulation"
7. Bingzhao Xia, PhD Advisory Committee (Chemical Engineering) - *graduated May 2016*
"Cellular response to photoencapsulation in microfluidic emulsion droplets"
6. Melinda Ellison, PhD Advisory Committee (Animal Sciences) - *graduated May 2016*
"Rumen microbial profiles associated with variation in feed efficiency of lambs"
5. Amy Abrams, MS Advisory Committee (Animal Sciences) - *graduated May 2016*
"Effect of high sulfate water intake on the rumen microbiome of growing lambs"
4. Ekaterina Yarunova Gottshall, PhD Advisory Committee (MCLS) - *graduated April 2015*
"Structure and function of endomembranes in *Gemmata obscuriglobus*"
3. Paige Fischer, MS Advisory Committee (Chemical Engineering) - *graduated April 2015*
"Molding of poly(ethylene glycol) diacrylate hydrogels: Applications in rare cell capture and optical patterning"
2. Xianshi Tang, MS Advisory Committee (MOLB) - *graduated August 2014*
"Engineering a near-infrared window light-regulated two-component system"
1. **Xiaoyang Li, MS Advisor (MOLB) - *graduated May 2013***
**"The impact of nuclear lamin proteins on nuclear size scaling" - Li worked as a lab technician for Dr. Zhengqing Hu at Wayne State University in Detroit and she is currently in a PhD program at the University of Hong Kong**

<u>MCLS rotation student advising:</u> 1. Xiaoyang Li, 2. Xianshi Tang, 3. Predrag Jevtic, 4. Lisa Edens, 5. Paul Mooney, 6. Josh Holmes, 7. Haibi Wang, 8. Lidija Vukovic, 9. Pan Chen, 10. Richik Mukherjee, 11. Kristopher Parker, 12. Adam Suluburic, 13. Sarina Bernazzani, 14. Osmanjan Wupu, 15. Alma Burwell, 16. Yasin Ahmed, 17. Kankana Ghosh, 18. Sampada Mishra, 19. Tasneem Muna, 20. Vera Troselj, 21. Chase Wesley, 22. Jitender Bisht, 23. Sharmin

Jyoti, 24. Shalini Chakraborty, 25. Alec Bond, 26. Tyler Gonzalez, 27. Simon Rachou, 28. Sujina Maharjan, 29. Shuvo Saha

Postdoctoral advising:
Dr. Leslie Bell (October 2011 – February 2012)
Dr. Predrag Jevtic (June 2016 – April 2018)
Dr. Lidija Vukovic (January – September 2019)
Dr. Pan Chen (May 2020 – March 2021)
Dr. Chase Wesley (May 2023 – October 2023)
Dr. Sourabh Sengupta (August 2021 – December 2024)
Dr. Owen Funk (February 2022 – March 2025; March 2026 - present), co-advised with Dr. David Fay; NIH Pathway to Independence Award (K99GM163004), PI Funk, "Cell fusion and gene expression in the *C. elegans* epidermis", $123,687 total (5/5/26 – 2/29/28); UWyo press release: https://www.uwyo.edu/news/2026/05/uw-molecular-biologist-wins-prestigious-national-institutes-of-health-grant.html

Research associate advising:
Joanna Zaino (May 2022 – December 2024)
Priscilla Phan (April 2016 – August 2022)
Matthew Dilsaver (February 2016 – July 2017)
Karen White (August 2011 – May 2019)

Honors College Senior Thesis faculty mentor for: 1. Seth Carter Eckhardt (2020), 2. Dallin North (2020)

Undergraduate lab researchers: 1. Denise Pierre, 2. Amanda Johnson, 3. David Cortes, 4. Tess Gerber, 5. Thang Nguyen, 6. Rachel McPherson, 7. Priscilla Phan, 8. Brian Dominguez, 9. Kristina Edwards, 10. Matthew Dilsaver, 11. Trey Thompson, 12. Katherine Nelson, 13. Makala Knox, 14. Seth Carter Eckhardt, 15. Bryanna Hackney, 16. Dallin North (received Fall 2020 UWyo INBRE Undergraduate Research Fellowship), 17. Caitlin Loo, 18. Josie Pomrenke, 19. Quinton Brooks, 20. Sophia Glennie (Wyoming Research Scholar), 21. Haleigh Walthall, 22. Ella Reed (Wyoming Research Scholar), 23. Liberty Cleveland, 24. Veronica Hudson Hurtado (McNair Scholar), 25. Mairin Sims (Wyoming Research Scholar)

Undergraduate advisees: 1. Kyle Biehl, 2. Kristina Edwards, 3. Hebatallah Eltoukhy, 4. Liam Guille, 5. Amanda Johnson, 6. Kellsey Kimmel, 7. Keenan Mattimoe, 8. Haley McKee, 9. Lauren Mugg, 10. Isabel Noyes, 11. Charlsey Saul, 12. Arianna Schabauer, 13. Arianna Tourtellot, 14. Trae Travitz, 15. Tarah Werner, 16. Andrew White, 17. Michael Wiebrand, 18. Nathan Johnson, 19. Nathan Killian, 20. Kaitlin Little, 21. Jacob Vann, 22. Marissa Morris, 23. Zlata Nesterova.

Service to Department
Director, Molecular and Cellular Life Sciences (MCLS) PhD Program (May 2021 – May 2028)
Renewed MCLS Hatch proposal, WYO-691-27, Research in the Molecular and Cellular Life Sciences (10/1/26 – 9/30/2031)
Provided flyer and demonstration for MOLB Saddle Up and STEM Carnival (Fall 2026)
Co-Chair, MOLB search committee for a new assistant professor (2022-2023)
Chair, MCLS graduate admissions committee (January 2016 – May 2021)
Co-Chair, MCLS graduate admissions committee (January 2015 – December 2015)

Member, MCLS graduate admissions committee (October 2012 – December 2014)
Member, three MOLB search committees for new assistant professors (2015-2016, 2017-2018, 2018-2019)
MOLB website redesign team (Spring 2022)
Host, MOLB seminar speakers (Drs. Orna Cohen-Fix, Katharine Ullman, Lifeng Xu, Rebecca Heald, Bradley Stohr, Katherine Wilson, Kyle Roux, Maria-Enquist Newman, Larry Gerace, Jan Lammerding, Tom Misteli, Hironori Funabiki, Cliff Brangwynne, Sue Jaspersen, Bruce Budowle, Megan King, Ann Miller, Shirin Bahmanyar, Andrea Wills, Ben Montpetit, Needhi Bhalla, Fred Chang)
MOLB representative, College freshman orientation (June 26, 2012; June 18 and 25, 2013)
EPSCoR WWISE applications to support female seminar speakers for Spring 2014 MOLB seminar series - submitted six applications, received one to support Christina Payne ($1500, March 28, 2013)

Service to University

Member, UWyo Graduate Council, College of Agriculture and Natural Resources representative (2019-2022); reviewed 14, 11, and 13 Women in Graduate Education proposals in November 2019, December 2020, and October 2021, respectively; reviewed nominations for Outstanding Master's Thesis in March 2020; reviewed nominations for Outstanding Dissertation in March 2021; reviewed nominations for Outstanding Dissertation and Early Career Faculty Mentor Award in March 2022
Member, College of Agriculture and Natural Resources Tenure and Promotion Committee (2018 – 2020; 34 cases in 2018; 28 cases in 2019; 13 cases in 2020 – served as chair)
Member, College of Agriculture and Natural Resources Strategic Planning Committee (August 2016 – December 2017)
Member, Faculty Academic Standards, Rights, and Responsibilities Committee (2015 – 2018)
Reviewer, NSF Major Research Instrumentation pre-proposals, UWyo internal competition to select three pre-proposals to be submitted as full proposals to NSF (Nov. 2014, Nov. 2019)
AES Research Awards Selection Committee (December 2016)
Member, CASI and CIBR working groups for the UWyo Science Initiative (2015)
Participated in the formation of a new INBRE Thematic Research Group: "Biomedical Technologies for Chronic Disease Research." This group was developed for the INBRE 3 renewal and included John Oakey, Patrick Johnson, Dongmei Li, Jay Gatlin, and myself. As a part of this effort, Dr. Gatlin and I prepared a proposal ("Investigating the molecular mechanisms of spindle and nuclear scaling") and presented our project to the AAAS-Research Competitiveness Program panel (10/4/13) and to the Wyoming INBRE External Advisory Committee (4/9/13).
Faculty advisor, Spectrum, the LGBQT social club at UWyo (2012 – 2013)

Professional Service

External reviewer for a tenure and promotion case (July 2026)
Mentor, University of Washington Institute of Translational Health Sciences (ITHS) T32 Training Program application (2026)
Mentor, University of Wyoming T32 Training Program application (2026)
NIH Study Section Member, Maximizing Investigators' Research Award C (MRAC) Study Section (July 1, 2021 – June 30, 2025)
Associate Editor for *Frontiers in Cell and Developmental Biology*, Chromosome and Chromatin Biology, June 2025 – present

Associate Editor for *Frontiers in Cell and Developmental Biology*, Nuclear Organization and Dynamics Section, September 2022 – January 2025

Conference co-organizer, Interdisciplinary Conference on Nuclear Morphology and Dynamics, Kylemore Abbey, Ireland, August 7-11, 2023

Guest Editor for *Frontiers in Cell and Developmental Biology* ("Nuclear Morphology in Development and Disease" within the Nuclear Organization and Dynamics Section), November 2021 – September 2022

Reviewer for NIH early stage investigator R35 MIRA grant applications, Special Emphasis Panel ZRG1 CB-H (55), March 2021

Reviewer for NIH early stage investigator R35 MIRA grant applications, Special Emphasis Panel ZRG1 CB-T (55), March 2020

Co-chair for *American Society for Cell Biology* Minisymposium "Nucleus Structure and Dynamics" (December 2019, Washington DC)

Hosted Dr. Rachel Mueller (Colorado State University) in my lab for her Spring 2019 sabbatical

External reviewer for a tenure and promotion case (October 2019)

Mail reviewer for an NIH RM1 grant application, Special Emphasis Panel ZRG1 BCMB-C (40), June 2018

External review of the scientific program of an NIH Intramural Research Program Principal Investigator (February 2018)

Ad hoc reviewer for the journals *ACS Chemical Biology* (2021), *Biophysical Journal* (2013), *BMC Evolutionary Biology* (2013), *Cell* (2009), *Cell Reports* (2013, 2019, 2020), *Current Biology* (2019-2x, 2020, 2022, 2023), *Developmental Cell* (2014, 2015, 2017), *Frontiers in Oncology* (2012), *G3* (2021), *Journal of Cell Biology* (2010, 2017, 2019-2x, 2020-3x, 2025, 2026), *Journal of Cell Science* (2008, 2018, 2019, 2020, 2025-2x, 2026), *Journal of Visualized Experiments* (2015), *Molecular Biology of the Cell* (2017, 2020, 2026), *Nucleic Acids Research* (2020), *Nucleus* (2014, 2015, 2016, 2019, 2025, 2026), *Open Biology* (2019), *PNAS* (2020, 2026), *PLoS Biology* (2020), *PLoS One* (2020), *Scientific Reports* (2019), *Soft Matter* (2019), *Trends in Cell Biology* (2019)

Member, *American Society for Cell Biology* (2008 – present), *American Association for Cancer Research* (2004 – 2005; 2017 – 2018), *American Society for Biochemistry and Molecular Biology* (2015 – 2016), *Genetics Society of America* (2014, 2018), *American Chemical Society* (2001 – 2006), *Tau Beta Pi* (1999 – 2004), *Sigma Xi* (1999 – 2004)

*American Society for Cell Biology* Ambassador for UWyo (2017 – present)

Miscellaneous

Haritha Prabha received third place in the 3-minute Thesis Competition at the College level (April 2025)

Students selected to attend the Cold Spring Harbor Laboratory course on Cell and Developmental Biology of *Xenopus* (Predrag Jevtic in 2013, Pan Chen in 2016, Haritha Prabha in 2024)

Student selected to attend the Marine Biological Laboratory course on Analytical and Quantitative Light Microscopy (Joanna Zaino in 2024)

Postdoc selected for an internship for proteomics analysis through the IDeA National Resource for Quantitative Proteomics at University of Arkansas for Medical Sciences, Effect of cellular stress on nuclear size, shape, and function (Dr. Sourabh Sengupta in September 2022)

Postdoc selected to attend the INBRE-sponsored "Discovery Proteomics Workshop" (Dr. Sourabh Sengupta in April 2022)

MCLS marketing campaign planned with Julie Sheldon (October 2021)

Poster judge for University of New Hampshire Undergraduate Research Conference, Interdisciplinary Science and Engineering Symposium, Biology Section (April 28, 2021)
Richik Mukherjee selected for 6-month internship at Biogen (July – December 2019)
Student selected to attend the ASCB-KGI Biotech Course (Richik Mukherjee in 2018)
Research highlighted by the American Cancer Society's North Region Marketing Team in a one page "Researcher Profile" (2017)
Email correspondence with Dr. Robert Weinberg at MIT to advise on the role of nuclear size alterations in cancer, for his revised textbook "The Biology of Cancer" (December 2016)
Filmed short videos thanking various American Cancer Society (ACS) groups and attended an ACS gala dinner (2016)
Sent nuclei assembled in *Xenopus* egg extract to Dr. Chris Toseland to study nuclear mechanics in different sized nuclei (Feb. 2017)
Interviewed for the September 2015 issue of UWyo Magazine regarding the UWyo Science Initiative (http://online.publicationprinters.com/launch.aspx?eid=6d97f6a4-c808-4e23-891f-41f5a32346bf); a video tour of the lab was also filmed (https://www.youtube.com/watch?v=evBKcEG-UwU)
Reference letters for Zainab Almazaydeh, Kyle Biehl, Shaonil Binti, Jitender Bisht, Quinton Brooks, Pankaj Chaturvedi, Oscar Campos, Shalini Chakraborty, Bridget Decker, Tim Deibert, Stephen Denton, Matthew Dilsaver, Seth Carter Eckhardt, Lisa Edens, Erica Farris, Suman Ghosh, Daria Ivanova, Predrag Jevtic, Amanda Johnson, Utkarsh Kapoor, Makala Knox, Xiaoyang Li, Jing Liu, Rachel McPherson, Ana Milunovic-Jevtic, Nicolas Minc, Sampada Mishra, Paul Mooney, Richik Mukherjee, Katherine Nelson, Thang Nguyen, Dallin North, Priscilla Phan, Haritha Prabha, Ella Reed, Gabrielle Reimann, Abdullah Bashar Sami, Andria Schibler, Sourabh Sengupta, Mairin Sims, Nikhil Srivastava, Taylor Sulerud, Xianshi Tang, Vera Troselj, Lidija Vukovic, Chase Wesley, Sabrina Georgio Westover, Alex Wolff, Ekaterina Yarunova, Joanna Zaino
Provided a letter of support to Dr. Katharine Ullman at the University of Utah Huntsman Cancer Institute for her application to the American Cancer Society Post-Baccalaureate Fellows Program (October 2026)
Provided a letter of support for NSF proposal "Building a community to support quantitative cell biology" (PI Wallace Marshall at UCSF); the proposal was selected for funding and I am now part of this group whose goal is to coordinate "a series of small workshops and meetings, combined with student and personnel exchange programs, in order to encourage the further development of quantitative and physical approaches in cell biology" (https://www.linkedin.com/groups/6928602/)
Student selected to attend the Jackson Laboratory course on Experimental Models of Human Cancer (Lidija Vukovic in 2015)
Student selected to attend the UC Denver course on Induced Pluripotent Stem Cells (Lisa Edens in 2015)
Student selected to attend the Marine Biological Laboratory course on Advanced Imaging in *Xenopus* (Richik Mukherjee in 2015)
Student selected to attend the Marine Biological Laboratory course on *Xenopus* Bioinformatics (Lisa Edens in 2013)
Provided *Xenopus* embryos for Dr. Kara Pratt in Zoology and Physiology and Dr. Todd Schoborg in Molecular Biology
Provided lab tours and tadpoles to various elementary and high school classes
Provided tadpoles to Emily Poss and Anne Leonard for a display at the Wyoming State Fair (August 2016)

Provided information, images, and movies about my lab's research to Anne Leonard that were presented at the Wyoming State Fair (August 2019)

Provided a tour of my lab and department for Kaitlynn Glover, a legislative assistant to US senator John Barrasso (April 2019)

Provided *X. laevis* and *X. tropicalis* frogs to Rachel Mueller (Colorado State University) for TEM studies (November 2019, June 2021)

Manuscript and grant peer reviewing and editing