

Rui Yi, Ph.D.
Professor
Department of Molecular, Cellular, and Developmental Biology
University of Colorado, Boulder
Boulder, CO, USA
Ph. 303-735-4886
Fax. 303-492-7744
yir@colorado.edu

I. Personal History and Professional Experience

A. Educational Background

1995.9. - 1999.7. Peking University, Beijing, China

B.Sc.

Department of Cell Biology and Genetics, School of Life Sciences

1999.9. - 2004.5. Duke University Medical Center, Durham, NC

Ph.D.

Advisor: Dr. Bryan Cullen

Department of Molecular Genetics and Microbiology

Field of study: nuclear export of pre-microRNA and the biogenesis pathway of microRNA in mammalian cells; functions of RNA and protein nuclear export factors.

B. List of Academic Positions

2004.5. - 2008.8. Rockefeller University, New York, NY

Postdoctoral Fellow

Advisor: Dr. Elaine Fuchs

Field of study: microRNA-mediated regulatory networks in skin development and skin stem cells

2008.8. - 2015.7. University of Colorado, Boulder, CO

Assistant Professor

Department of Molecular, Cellular and Developmental Biology

Field of study: small RNA pathways in mammalian stem cells and cancer; epigenetic and transcriptional control of mammalian stem cells

2015.8. - 2019.7. University of Colorado, Boulder, CO

Associate Professor

Department of Molecular, Cellular and Developmental Biology

Field of study: small RNA pathways in mammalian stem cells and cancer; epigenetic and transcriptional control of mammalian stem cells

2019.8. -

University of Colorado, Boulder, CO

Professor

Department of Molecular, Cellular and Developmental Biology

Field of study: small RNA pathways in mammalian stem cells and cancer; maintenance of tissue stem cells; epigenetic and transcriptional regulation of mammalian tissue development and stem cells

C. Honors, Recognitions, and Outstanding Achievements

2007 NIH K99/R00 Pathway to Independence Award

2013 American Cancer Society Research Scholar

2016 Keynote speaker, North American Hair Research Society Meeting

2017 NIAMS STAR Award

2017 Provost's Faculty Achievement Award

D. Invited Lectures and Conference Presentations

1. Single cell RNA-seq and chromatin analysis of developing skin and skin stem cells. (Invited Speaker) The 68th Annual Montagna Symposium on the Biology of Skin. Gleneden Beach, OR, USA, 2019.
2. Single cell analysis of transcriptome and open chromatin reveals distinct regulatory networks in embryonic skin and adult epithelial stem cells. (Invited Speaker) The Society of Investigative Dermatology Translational Science Symposium. Chicago, IL, USA, 2019.
3. MicroRNA functions in hair follicle stem cells. (Invited Speaker). Keystone Symposia: Small Regulatory RNAs. Daejeon, South Korea, 2019.
4. Tumor suppressor and oncogenic roles of microRNAs in epithelial cancer. (Invited Speaker). 12th International Skin Carcinogenesis Conference. Austin, MN, USA, 2016.
5. Regulation of hair follicle stem cells. (Keynote Speaker). North American Hair Research Society Meeting/Annual Meeting for the Society of Investigative Dermatology. Phoenix, AZ, USA, 2016.
6. Dynamic regulation of skin stem cells. (Keynote speaker and Session chair). International Symposium in Epigenetic Regulation of Skin Regeneration, Ageing and Disease. Bradford UK, 2016.
7. Adaptive control of stem cell quiescence in hair follicle. (Session chair). The 64th Annual Montagna Symposium on the Biology of Skin. Gleneden Beach, OR, USA, 2015.

8. MicroRNAs and their roles in mammalian skin stem cells. (Invited Speaker). Non-coding RNAs and RNAi – Global Technology Community Conferences. San Diego, CA, USA, 2014.
9. Genetic analysis of microRNA functions in squamous cell carcinoma. (Invited Speaker). Mouse models of skin cancer. Montpellier, France, 2014.
10. Dynamic regulation of skin development by microRNAs. (Invited Speaker). Gordon Research Conferences: Epithelial Differentiation & Keratinization. Lucca, Italy, 2013.
11. MicroRNAs functions in skin regeneration. (Invited speaker). The 6th Annual Translational to Clinical (T2C) Regenerative Medicine Wound Care Conference. The Ohio State University, Columbus, Ohio, 2013.
12. MicroRNA-205 controls self-renewal of skin stem cells. (Selected Speaker). Regulatory & non-coding RNAs. Cold Spring Harbor Laboratory Meetings. Long Island, NY, 2012.
13. MicroRNAs control self-renewal of skin stem cells. (Invited Speaker) International Symposium in Epigenetic control of skin development and regeneration, Bradford UK, 2012.
14. MicroRNAs and their roles in skin stem cells. (Invited Speaker). The 9th Biannual Conference of Chinese Biological Investigator Society. Zhang Jia Jie, Hunan Province, China, 2011.
15. MicroRNAs and their roles in skin stem cells. (Invited Speaker). Gordon Research Conferences: Epithelial Differentiation & Keratinization. Mount Snow, VT, USA, 2011.
16. MicroRNAs' functions in squamous cell carcinoma. (Invited Speaker). The 9th International Skin Carcinogenesis Conference. University Park, PA, USA, 2010.
17. MicroRNA-mediated regulation in epidermal stem cells. (Invited Speaker). The 58th Annual Montagna Symposium on the Biology of Skin. Gleneden Beach, OR, USA, 2009.

Invited Lectures at Universities/Research Institutes

18. Mechanisms and functions of stem cell quiescence control: new insights from single cell analysis and live imaging. Northwestern University, Chicago, 2019.
19. Regulation of skin stem cells: the initiation and long-term maintenance. University of Northern Colorado, Colorado, 2018.
20. Regulation of skin stem cells: the initiation and long-term maintenance. Peking University Health Science Center, Beijing, 2018.

21. Regulation of skin stem cells: the initiation and long-term maintenance. Tsinghua University, Beijing, 2018.
22. Regulation of skin stem cells: the initiation and long-term maintenance. Peking University, Beijing, 2018.
23. Regulation of skin stem cells: the initiation and long-term maintenance. National Institute of Biological Sciences, Beijing, 2018.
24. Regulation of skin stem cells: the initiation and long-term maintenance. Institute of Zoology, Chinese Academy of Sciences, Beijing, 2018.
25. Regulation of skin stem cells: the initiation and long-term maintenance. Institute of Biophysics, Chinese Academy of Sciences, Beijing, 2018.
26. Single cell analyses of epidermal cell fate specification. University of Colorado, Denver, Denver, CO, 2017.
27. Epigenetic and transcriptional regulation of cellular fate specification in the skin. University of Michigan, Ann Arbor, MI, 2017.
28. Dynamic regulation of skin stem cells by microRNAs and transcriptional regulatory network. Department of Molecular Biology and Genetics, Cornell University, Ithaca, NY, 2016.
29. Epigenetic and transcriptional control of cellular fate specification and stem cell maintenance. Regenerative Medicine Program, Ottawa Hospital Research Institute, Ottawa, Canada, 2016.
30. Epigenetic and transcriptional control of cellular fate specification and stem cell maintenance. Department of Biological Chemistry, UC Irvine, Irvine, CA, 2016.
31. Dynamic regulation of cellular fate specification and stem cell maintenance. Department of Molecular Genetics and Microbiology, Duke University, Durham, NC, 2016.
32. Adaptive control of quiescent stem cells. School of Life Sciences, Peking University, Beijing, China, 2015.
33. MicroRNAs and their functions in mammalian epithelial tissues. Department of Developmental and Regenerative Biology, Mount Sinai Hospital, New York, NY, 2014.
34. Quantitative analysis of microRNA functions in mammalian epithelial tissues. Cell and Molecular Biology Graduate Program, Colorado State University, Fort Collins, CO, 2013.

35. MicroRNAs' functions in the maintenance of skin stem cells. Department of Biology Sciences, Denver University, Denver, CO, 2011
36. MicroRNAs and their roles in mammalian skin development and stem cells. Molecular Biology Program Annual Mini-Symposium. University of Colorado at Denver. Denver, CO, 2011.
37. MicroRNA-mediated regulation in mammalian skin. Lung Cell Biology Research Forum, National Jewish Health. Denver, CO, 2010.
38. A miRNA-mediated regulatory network in the differentiation of epidermal stem cells. Gates Center for Regenerative Medicine and Stem Cell Biology Seminar Series, University of Colorado at Denver. Denver, CO 2010.

E. Grants Received

Current Grants:

R01AR059697 07/01/2010-03/30/2021
NIH/NIAMS
Title: MicroRNA-mediated regulation in mammalian skin
Role: PI
Direct cost/yr: \$255,962

R01AR059697-07S1 07/20/2017-03/31/2019
Supplements to Advance Research (STAR)
NIH/NIAMS
Title: MicroRNA-mediated regulation in mammalian skin
Role: PI
Direct cost: \$298,473

R01AR071435 07/01/2017-06/30/2022
NIH/NIAMS
Title: Transcriptional control of skin stem cells and their niche
Role: PI
Direct cost/yr: \$220,000

R01AR066703 07/01/2014-12/31/2024
NIH/NIAMS
Title: Genetic analysis of microRNA functions in skin stem cells in vivo.
Role: PI
Direct cost/yr: \$301,547

Completed Grants:

Linda Crnic Institute for Down Syndrome Grant 04/01/2013-08/31/2019
Title: Tissue specific analysis of transcriptional and translational landscape in Down syndrome models

Role: PI
Direct cost: \$200,000

124718-RSG-13-197-01-DDC 07/01/2013-06/30/2017
American Cancer Society
Title: Investigate cellular context-specific functions of microRNAs in the skin
Role: PI
Direct cost: \$600,000

5P30AR057212-05 07/01/2013-06/30/2014
NIH/NIAMS
Title: Investigating microRNA-203's role in the initiation of squamous cell carcinomas.
Role: PI
Direct cost: \$23,750

R00AR054704 01/20/2009-12/31/2011
NIH/NIAMS
Title: Elucidating the functions of microRNA in skin development and skin stem cells
Role: PI
Total cost: \$745,829

Butcher Seed Grant 2010-2012
Title: A chemical genetics approach to study epigenetic regulation in mammalian skin
Role: PI (co-PI)
Direct cost: \$50,000

ACS IRG#57-001-50 01/01/2010 – 12/31/2010
American Cancer Society
Title: Investigate microRNAs' functions in squamous cell carcinoma
Role: PI
Total cost: \$30,000

Grants for trainees:

Li Wang, B.Sc.
NIH T32 Cell Signaling Training Fellowship (07/2010-06/2013)

Jerome E. Lee, Ph.D.
American Cancer Society Postdoctoral Fellowship (07/2013-06/2016)

Alfonso Garrido-Lecca, Ph.D.
Anna and John J. Sie Foundation Postdoctoral Fellowship (05/2014-04/2016)
NIH T32 Postdoctoral Training Fellowship (10/2016-9/2019)

Jaimee E Hoefert, B.Sc.
NIH T32 Molecular Biology Training Fellowship (07/2012-06/2013)
NIH Predoctoral fellowship (F31) (07/2014-06/2017)

Glen Bjerke, Ph.D.
American Cancer Society Postdoctoral Fellowship (07/2016-06/2019)

NIH LHNC T32 Postdoctoral Training Fellowship (01/2020-)

Kevin Choi, B.Sc. M.S.

NIH T32 Cell Signaling Training Fellowship (07/2019-)

F. Review Panels

European Research Council, EU;

The Israel Science Foundation, Israel;

Medical Research Council, UK;

Wellcome Trust, UK;

Research Grants Council, Hong Kong;

NIH Study Sections:

ad hoc member:

ACTS (Feb 2016, Jun 2016, Jun 2017);

DEV2 (Sep 2016, Oct 2017, May 2018);

ZRG1 CB-F (March 2016, Jul 2016, Oct 2017, Jun 2018);

ZAG1-ZIJ-U (Aug 2018, Aug 2019);

MOSS special panel (Mar 2019)

Standing member:

DEV2 2018-2022

II. Publications and Creative Works

University of Colorado, Boulder (2008 – present)

1. Jingjing Wang, Jerome E. Lee, Kent Riemondy, Yang Yu, Steven M. Marquez, Eric C. Lai and **Rui Yi**. XPO5 promotes primary miRNA processing independently of RanGTP. *Nature Communications* (in revision)
2. Glen A. Bjerke and **Rui Yi** (2020) Integrated analysis of directly captured microRNA targets reveals the impact of microRNAs on mammalian transcriptome. *RNA* (in press)
3. Xiying Fan, Glen A. Bjerke, Kent Riemondy, Li Wang and **Rui Yi** (2019) A basal-enriched microRNA is required for prostate tumorigenesis in a Pten knockout mouse model. *Molecular Carcinogenesis* 58: 2241-2253 (Cover article).
4. Siddharth Shukla, Glen A. Bjerke, Denis Muhrad, **Rui Yi** and Roy Parker (2019) The RNase PARN controls the levels of specific miRNAs that contribute to p53 regulation. *Molecular Cell* 73: 1204-1216.
5. Dongmei Wang* and **Rui Yi*** (2019) Is it time to take R(epressive) out of PRC1? *Genes & Development* 33: 4-5.

6. Xiying Fan, Dongmei Wang, Jeremy Evan Burgmaier, Yudong Teng, Rose-Anne Romano, Satrajit Sinha and **Rui Yi*** (2018) Single cell and open chromatin analysis reveals molecular origin of epidermal cells of the skin. *Developmental Cell* 47: 21-37 (Cover article).
7. Jaimee E. Hoefert, Glen A. Bjerke, Dongmei Wang and **Rui Yi*** (2018) The microRNA-200 family coordinately regulates cell adhesion and proliferation in hair morphogenesis. *Journal of Cell Biology* 217: 2185-2204 (Cover article).
8. **Rui Yi*** (2018) The skin(ny) on regenerating the largest organ to save a patient's life. *Cell Stem Cell* 22: 14-15.
9. **Rui Yi*** (2017) Mechanisms of quiescent hair follicle stem cell regulation. *Stem Cells* 35: 2323-2330.
10. Mathilde Latil, Dany Nassar, Benjamin Beck, Soufiane Boumahdi, Li Wang, Audrey Brisebarre, Christine Dubois, Erwin Nkusi, Sandrine Lenglez, Agnieszka Checinska, Alizée Vercauteren Drubbel, Michael Devos, Wim Declercq, **Rui Yi**, Cédric Blanpain (2017) Cell-type-specific chromatin states differentially prime squamous cell carcinoma tumor-initiating cells for epithelial to mesenchymal transition. *Cell Stem Cell* 20: 191-204.
11. Christopher G. Bennett, Kent Riemondy, Douglas A. Chapnick, Eric Bunker, Xuedong Liu, Scott Kuersten and **Rui Yi*** (2016) Genome-wide analysis of Musashi-2 targets reveals novel functions in governing epithelial cell migration. *Nucleic Acids Research* 44: 3788-3800.
12. Amelie Rezza, Zichen Wang, Rachel Sennett, Wenlian Qiao, Dongmei Wang, Nicholas Heitman, Ka Wai Mok, Carlos Clavel, **Rui Yi**, Peter Zandstra, Avi Ma'ayan and Michael Rendl (2016) Signaling networks between stem cell precursors, transit amplifying progenitors, and the niche in developing hair follicles. *Cell Reports* 14: 3001-3018.
13. Li Wang, Julie A. Siegenthaler, Robin D. Dowell and **Rui Yi*** (2016) Foxc1 reinforces quiescence in self-renewing hair follicle stem cells. *Science* 351: 613-617. (Cover article)
14. Kent Riemondy, Xiao-jing Wang, Enrique Torchia, Dennis R. Roop and **Rui Yi*** (2015) MicroRNA-203 represses selection and expansion of oncogenic HRas transformed tumor initiating cells. *eLife* 2015; 10.7554/eLife.07004.
15. Jerome E Lee and **Rui Yi*** (2014) Highly efficient ligation of small RNA molecules for microRNA quantitation by high-throughput sequencing. *Journal of Visualized Experiments*. 93: e52095.
16. Kent Riemondy, Jaimee E Hoefert and **Rui Yi*** (2014) Not miR-ly micromanagers: the functions and regulatory networks of miRNAs in mammalian skin. *Wiley Interdiscip Rev RNA* 5: 849-865.
17. Li Wang and **Rui Yi*** (2014) 3'UTRs take a long shot in the brain. *Bioessays* 36: 39-45.

18. Andrew White, Joan Khuu, Christine Dang, Jeanny Hu, Kathy Tran, Anqi Liu, Sarah Gomez, Zhaojie Zhang, **Rui Yi**, Phil Scumpia, Melina Grigorian and William Lowry (2014) Stem cell quiescence acts as a tumor suppressor in squamous tumors. *Nature Cell Biology* 16: 99-107.
19. Zhaojie Zhang, Jerome E. Lee, Kent Riemondy, Emily M. Anderson and **Rui Yi*** (2013) High-efficiency RNA cloning enables accurate quantification of miRNA expression by deep sequencing. *Genome Biology* 14: R109.
20. Dongmei Wang, Zhaojie Zhang, Evan O'Loughlin, Li Wang, Xiying Fan, Eric C. Lai and **Rui Yi*** (2013) MicroRNA-205 controls neonatal expansion of skin stem cells by modulating the PI(3)K pathway. *Nature Cell Biology* 15: 1153-1163. (Cover article)
21. Sarah J. Jackson, Zhaojie Zhang, Dejiang Feng, Meaghan Flagg, Evan O'Loughlin, Dongmei Wang, Nicole Stokes, Elaine Fuchs and **Rui Yi*** (2013) Rapid and widespread suppression of self-renewal by microRNA-203 during epidermal differentiation. *Development* 140: 1882-1891.
22. Li Wang, Robin Dowell and **Rui Yi*** (2013) Genome-wide maps of polyadenylation reveal dynamic mRNA 3'end formation in mammalian cell lineages. *RNA* 19: 413-425.
23. Dongmei Wang, Zhaojie Zhang, Evan O'Loughlin, Thomas Lee, Stephane Houel, Dónal O'Carroll, Alexander Tarakhovsky, Natalie G. Ahn, and **Rui Yi*** (2012) Quantitative functions of Argonaute proteins in mammalian development. *Genes & Development* 26: 693-704.
24. **Rui Yi*** and Elaine Fuchs* (2012) A miR image of stem cells and their lineages. *Curr Top Dev Biol* 99: 175-199.
25. **Rui Yi*** and Elaine Fuchs* (2011) MicroRNAs and their roles in mammalian stem cells. *Journal of Cell Science* 124: 1775-1783.
26. **Rui Yi*** and Elaine Fuchs* (2010) MicroRNA-mediated control in the skin. *Cell Death & Differentiation* 17: 229-235.

Postdoctoral publications (2004 – 2008)

27. **Rui Yi#**, H. Amalia Pasolli, Markus Landthaler, Markus Hafner, Tolulope Ojo, Robert Sheridan, Chris Sander, Dónal O'Carroll, Markus Stoffel, Thomas Tuschl and Elaine Fuchs (2009) DGCR8-dependent microRNA biogenesis is essential for skin development. *PNAS* 106: 498-502.
28. **Rui Yi#**, Matthew N. Poy, Markus Stoffel and Elaine Fuchs (2008) A skin microRNA promotes differentiation by repressing 'stemness'. *Nature* 452: 225-229.
29. **Rui Yi#**, Dónal O'Carroll, Hilda A Pasolli, Zhihong Zhang, Fred S Dietrich, Alexander Tarakhovsky and Elaine Fuchs (2006) Morphogenesis in skin is governed by discrete sets of differentially expressed microRNAs. *Nature Genetics* 38: 356-362.

Doctoral publications (1999 - 2004)

30. **Rui Yi#**, Brian P. Doehle, Yi Qin, Ian G. Macara and Bryan R. Cullen (2005) Overexpression of Exportin 5 enhances RNA interference mediated by short hairpin

RNAs and microRNAs. *RNA* 11: 220–226.

31. Yan Zeng, **Rui Yi** and Bryan R. Cullen (2005) Recognition and cleavage of primary microRNA precursors by the nuclear processing enzyme Drosha. *EMBO J.* 24: 138-148.
32. **Rui Yi**[#], Yi Qin, Ian G. Macara, and Bryan R. Cullen (2003) Exportin-5 mediates the nuclear export of pre-microRNAs and short hairpin RNAs. *Genes & Development* 17: 3011-3016.
33. Yan Zeng, **Rui Yi** and Bryan R. Cullen (2003) MicroRNAs and small interfering RNAs can inhibit mRNA expression by similar mechanisms. *PNAS* 100: 9779-9784.
34. **Rui Yi**[#], Hal P. Bogerd and Bryan R. Cullen (2002) Recruitment of the Crm1 nuclear export factor is sufficient to induce cytoplasmic expression of incompletely spliced human immunodeficiency virus mRNAs. *Journal of Virology* 76: 2036-2042.
35. **Rui Yi**[#], Hal P. Bogerd, Heather L. Wiegand and Bryan R. Cullen (2002) Both Ran and Importins have the ability to function as nuclear mRNA export factors. *RNA* 8: 180-187.

* designates corresponding author. # designates first author.

III. Instruction

1. Teaching

1.a. Courses

Course	Title	Date	Enrollment
MCDB4615	Biology of Stem Cells	Fall 2009	25
MCDB4615	Biology of Stem Cells	Fall 2010	27
MCDB4615	Biology of Stem Cells	Fall 2011	26
MCDB5220	Molecular Genetics	Spring 2013	14
MCDB4650	Developmental Biology	Spring 2013	74
MCDB4650	Developmental Biology	Fall 2013	64
MCDB4650	Developmental Biology	Fall 2014	42
MCDB4650	Developmental Biology	Fall 2015	92
MCDB4615	Biology of Stem Cells	Fall 2017	18
MCDB4615	Biology of Stem Cells	Fall 2018	25
MCDB4615	Biology of Stem Cells	Fall 2019	31

1.b. Guest Lectures

Course	Title (Topic)	Date
MCDB5230	Gene Expression (miRNA and post-transcriptional gene regulation)	Fall 2009
PHYS3000	Science & Public Policy (Stem Cells Research)	Spring 2010
MCDB5230	Gene Expression (miRNA and post-transcriptional gene regulation)	Fall 2010
PHYS3000	Science & Public Policy (Stem Cells Research)	Spring 2011

MCDB5230	Gene Expression (miRNA and post-transcriptional gene regulation)	Fall 2011
MCDB5230	Gene Expression (miRNA and post-transcriptional gene regulation)	Fall 2012
MCDB5230	Gene Expression (miRNA and post-transcriptional gene regulation)	Fall 2013
CHEM5801	Advanced Topics in Signal Transduction and Cell Cycle Regulation (miRNA biology)	Spring 2014
MCDB5230	Gene Expression (miRNA and post-transcriptional gene regulation)	Fall 2014
MCDB5230	Gene Expression (miRNA and post-transcriptional gene regulation)	Fall 2015
MCDB5230	Gene Expression (miRNA biology and epithelial stem cell biology)	Fall 2018

2. Supervision of Postdoctoral Associates/Fellows

Feng, Dejiang, Ph.D. 2008 - 2010

Wang, Dongmei, Ph.D. 2009 – present, Adjunct Assistant Professor of MCDB

Fan, Xiyong, Ph.D. 2011 – 2018. Instructor, Dept. of Dermatology University of Colorado School of Medicine

Lee, Jerome E., Ph.D. 2012 - 2016. American Cancer Society Postdoctoral Fellow.

Garrido-Lecca, Alfonso, Ph.D. 2014 - present, Anna and John J. Sie Foundation Postdoctoral Fellow/NIH T32 Postdoctoral Fellow

Bjerke, Glen A., Ph.D. 2015 – present, American Cancer Society Postdoctoral Fellow.

Wang, Jingjing, Ph.D. 2016 – present

Li, Haimin, Ph.D. 2017 – present

3. Supervision of Graduate Students

Supervised graduate students with a thesis:

Zhang, Zhaojie, Ph.D. 2013, “Genomic Analysis of microRNAs in Mouse Skin: Quantification, Biogenesis, Target Recognition and Regulatory Functions”, now Investigator of Computational Biology at H3 Biomedicine.

Riemony, Kent, Ph.D. 2015, “Identification of novel microRNA targets and tumor suppressive functions of miR-203 in murine skin”, now postdoctoral fellow with Dr. Jay Hesselberth at University of Colorado School of Medicine.

Wang, Li, Ph.D. 2015, “Cell-intrinsic mechanisms governing stem cell quiescence and regulating cancer progression in mammalian skin”, now Computational Biologist at 10x Genomics.

Bennett, Christopher, Ph.D. 2016, “Investigating the molecular mechanisms and functions of the Musashi-2 RNA-binding protein”, now postdoctoral fellow with Dr. Daehwan Kim at UT Southwestern Medical Center.

Hoefert, Jaimee E., Ph.D. 2017, Ruth L. Kirschstein NRSA Individual Predoctoral Fellow. "Target and function of the microRNA-200 family in the developing skin and hair follicles", now postdoctoral fellow with Dr. Jay Rajagopal at MGH/Harvard Medical School.

Zhang, Chi, Ph.D. student, 2017- present

Das, Arpan, Ph.D. candidate, 2019 - present

Choi, Kevin, Ph.D. candidate, 2019 - present

Nguyen, Lily, MD/PhD candidate, 2019 - present

Member of graduate student thesis committee:

Hall, John K., Ph.D. 2010 (MCDB)

Webster, Kyle, M.S. 2010 (MCDB)

Bilak, Amber E., Ph.D. 2012 (MCDB)

Troy, Andy, Ph.D. 2012 (MCDB)

Couts, Kasey, Ph.D. 2012 (Biochem)

Adams, Dan, Ph.D. 2013 (MCDB)

Heimiller, Joseph K., Ph.D. 2013 (MCDB)

Farina, Nicolas, Ph.D. 2013 (MCDB)

Wang, Huan, Ph.D. 2013 (MCDB)

Bernet, Jennifer, Ph.D. 2013 (MCDB)

Guess, Martin, Ph.D. 2014 (MCDB)

Pulliam, Crystal, Ph.D. 2015 (MCDB)

Johnson, Verity, Ph.D. 2015 (MCDB)

Read, Tim, Ph.D. 2015 (MCDB)

Xi, Linghe, Ph.D. 2015 (MCDB)

Zabinsky, Rebecca, Ph.D. 2015 (MCDB)

Shukla, Siddharth, Ph.D. 2016 (Biochem)

Wang, Xueyin, Ph.D. 2017 (Biochem)

Burke, Russell, Ph.D. 2018 (MCDB)

Brown, Tobin, Ph.D. 2018 (Bioengineering)

Kerr, Genevieve, Ph.D. 2019 (MCDB)

Yang, Chen (MCDB)

Vogler, Thomas, Ph.D. 2019 (MCDB)

Lee, Lindsey (MCDB)

Wang, Songyun (MCDB)

Yang, Qing (MCDB)

4. Supervision of Undergraduate Students

Shangraw, Emily, 2009-2011, Honors student graduated with Summa Cum Laude designation

Jackson, Sarah J., 2009-2011, Honors student graduated with Summa Cum Laude designation

Ha, Sarah, 2010-2013, Honors student graduated with Summa Cum Laude designation

Flagg, Meaghan, 2010-2013, Honors student graduated with Summa Cum Laude designation

Janiszewski, Lara, 2014-2015, Honors student graduated with Summa Cum Laude designation

Yan, Chloe, 2015-2016

Liu, Ziqi, 2014-2016

Burgmaier, Jeremy, 2016-2017, Honors student graduated with Summa Cum Laude designation

Gittleman, Brian, 2018

Baird, Samuel, 2018-present

Shelby, Isabella, 2019-present

Bassett, Helen, 2020-present

IV. Service (Professional/ Disciplinary, and University)

1. Professional Service:

Member International Society for Stem Cell Society Research (ISSCR)

Member The RNA Society

Member American Cancer Society

Member Society of Investigative Dermatology

Advisory Board Nebraska Stem Cell Research Advisory Committee

Standing Member for NIH Study section: DEV2 (2018-2022)

Ad hoc reviewer for Scientific Journals:

Cell press journals: *Cell*, *Cell Reports*, *Cell Stem Cell*, *Molecular Cell*, *Stem Cell Reports*, *Trends in Cell Biology*;

Nature and nature research journals: *Nature*, *Nature Communications*, *Nature Review Genetics*, *Neuropsychopharmacology Reviews*, *Cell Death and Differentiation*, *Oncogene*, *Scientific Reports*;

Science and AAAS journals: *Science*, *Science Advances*;

Other journals: *Development*, *eLife*, *EMBO Journal*, *EMBO Molecular Medicine*, *Experimental Dermatology*, *FASEB Journal*, *Genes & Development*, *Genome Biology*, *Genome Research*, *Human Molecular Genetics*, *Journal of Cell Biology*, *Journal of Clinical Investigation*, *Journal of Experimental Medicine*, *Journal of Investigative Dermatology*, *Journal of Molecular Biology*, *Molecular Biology of the Cell*, *Molecular Cancer Research*, , *PNAS*, *Plos Genetics*, *Plos One*, *RNA*, , *Stem Cells*, *Stem Cells Translational Medicine*,

Ad hoc reviewer for funding agency: *European Research Council, EU; The Israel Science Foundation, Israel; Medical Research Council, UK; Research Grants Council, Hong Kong, Wellcome Trust UK; NIH study sections (ACTS, DEV2, ZRG CB-F, ZAG1-ZIJ-U)*

2. University Service

2008 - present	Director of MCDB flow cytometry core facility
2009 - present	Member of Shared Facilities Committee
2009 - 2014	Member/chair of the Honors Committee
2010, 2011, 2015	Member of Junior Faculty Search Committee
2011	Member of Comprehensive Examination Committee
2014	Member of Big Grants Committee
2017 - present	Member of the MCDB 50 th Anniversary Celebration Committee
2017	Chair of Junior Faculty Search Committee
2018	Member of BioFrontiers Faculty Search Committee
2018 -	Teaching Evaluation Committee
2018 -	Graduate Admission Committee
2018 -	Committee for Graduate Student Affairs
2018 -	Mentors to junior faculty