**CURRICULUM VITAE**

**Jessica Finlay-Schultz, Ph.D.**

Research Assistant Professor

Department of Pathology

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**Education**

2002 B.A, Biochemistry; B.A., Molecular, Cellular, and Developmental Biology; History Minor; University of Colorado, Boulder, CO

2010 Ph.D., Biochemistry and Molecular Genetics, University of Colorado Denver, Anschutz Medical Campus, Aurora, CO (Advisor: Sherry Leonard, Ph.D.)

2011-2017 Postdoctoral Fellow, Department of Pathology, University of Colorado Denver, Anschutz Medical Campus, Aurora, CO (Advisor: Carol A. Sartorius, Ph.D.)

**Academic Appointments**

2017-2019 Research Instructor, Department of Pathology, University of Colorado Denver, Anschutz Medical Campus. Aurora, CO

2019-2022 Senior Research Instructor, Department of Pathology, University of Colorado Denver, Anschutz Medical Campus. Aurora, CO

2022-present Research Assistant Professor, Department of Pathology, University of Colorado Denver, Anschutz Medical Campus. Aurora, CO

**Major Research Areas of Interest**

My research focuses on using patient tumor-derived xenografts (PDX) from clinical breast cancer samples as *in vivo* models for analysis of primary tumor growth and proliferation. These models have been used to examine hormone receptor-mediated gene expression and characterize the function of multiple progesterone-regulated genes in what appears to be a tumor-specific mechanism. In addition, we can investigate the effects of endocrine- and chemotherapies on gene expression and tumor growth. Since much of the current research in breast cancer has been performed using cultured breast cancer cell lines developed decades ago, research on human breast cancer tumors and development of new cell lines are needed to bridge the gap to individualized treatment.

 Specifically, my interest is in the use of PDX and cell line models to identify mechanisms behind tumor-specific differential growth response to progestins. While estrogen receptor (ER) and progesterone receptor (PR) crosstalk affects cell proliferation in breast cancer cell lines, in our PDX models I have discovered an interaction between PR and RNA polymerase III. This interaction leads to a decrease in tRNA expression in response to progestins that may subsequently affect global protein synthesis and reduce breast tumor growth. With my collaborators I am currently developing techniques for global tRNA sequencing and measurement of protein synthesis in solid tumors. I also spearhead next generation sequencing applications for steroid receptors (ER, PR, AR, GR) in breast cancer cell line and solid tumor models. These include single cell RNA-seq, ChIP-seq, Cut&Run, and ATAC-seq methods.

**Current Research Projects**

1. In-depth analysis of the interaction between PR and RNA polymerase III and the role of tRNA transcription and protein synthesis in progestin-mediated tumor growth patterns.
2. Development of new tRNA sequencing techniques to study the mechanisms identified in Project 1.
3. Maintenance and characterization of PDX models to study estrogen and progestin growth effects and endocrine resistance.
4. Hormone receptor positive metastatic tumor models

**Honors and Awards**

2009 Department of Psychiatry Poster Session, Outstanding Graduate Student Poster

2011 University of Colorado Anschutz Medical Campus Nominee for VFW Fellowship

2012 Travel award and oral presentation at ENDO 2012

2013-2015 Department of Pathology travel awards to attend Gordon Research Conferences

2014-2015 University of Colorado Cancer Center travel awards to attend Gordon Research Conferences

2016 AACR Scholar-in-Training Award to attend the San Antonio Breast Cancer Symposium

2016 Department of Pathology travel award to attend the San Antonio Breast Cancer Symposium

2017 Department of Pathology travel award to attend Gordon Research Conference

2018 Travel award for oral presentation at Fusion Conference on Nuclear Receptors

2019 Travel award to attend Gordon Research Conference, Department of Pathology

**Professional Memberships and Service**

2009-present Member, American Association for the Advancement of Science (AAAS)

2010-present Member, The American Society for Biochemistry and Molecular Biology (ASBMB)

2011-present Affiliate Member, National Postdoctoral Association (NPA)

2012-present Member, The Endocrine Society

2012-present Member, American Association for Cancer Research (AACR)

2019-present Affiliate Member, University of Colorado Cancer Center

2011-2012 Recorder, 2012 Postdoctoral Research Day Planning Committee

2012-2013 Chair, 2013 Postdoctoral Research Day Planning Committee

2012-2013 Treasurer, University of Colorado Denver Postdoctoral Association

2013-2015 Vice-President, University of Colorado Denver Postdoctoral Association

2015-2016 President, University of Colorado Denver Postdoctoral Association

2015 Chair, Gordon Research Seminar, Mammary Gland Biology, June 2015

2017 Chair, Gordon Research Seminar, Mammary Gland Biology, June 2017

2019-present Member, Department of Pathology Equipment Committee

2020-2021 Covid coordinator, RC1-South 5th floor

2020 Member, search committee for University of Colorado Cancer Center Cell Technologies Shared Resources PRA

2014-2017 Chair, Young Hands in Science Outreach Program

2014 Founder, University of Colorado “Silver Buffs” Marching Band Alumni Association

2014-2020 Chair, University of Colorado “Silver Buffs” Marching Band Alumni Association Board

2014-2021 Member, University of Colorado “Silver Buffs” Marching Band Alumni Association Board

2022-present Treasurer, University of Colorado “Silver Buffs” Marching Band Alumni Association Board

**Review and referee work**

**Ad hoc reviewer, conferences**

2019-present ENDO conference abstract reviewer

**Ad hoc reviewer, manuscripts**

2022 October Endocrine-Related Cancer

2022 July International Journal of Molecular Sciences

2022 June BMC Medical Genomics

2022 May Endocrine-Related Cancer

2021 October Gene

2020 December International Journal of Molecular Sciences

2020 February Endocrinology

2019 September Computational and Structural Biotechnology Journal

2019 March Nucleic Acids Research

**Peer Reviewed Publications**

1. McGinn O, Riley D, **Finlay-Schultz J**, Paul KV, Kabos P, Sartorius CA. *Cytokeratins 5 and 17 maintain an aggressive epithelial state in basal-like breast cancer.* Mol Cancer Res. **2022** Sep 2;20(9):1443-1455. PMID: 35639459.

1. Ward AV, Matthews SB, Fettig LM, Riley D, **Finlay-Schultz J**, Paul KV, Jackman M, Kabos P, MacLean PS, Sartorius CA. *Estrogens and progestins cooperatively shift breast cancer cell metabolism.* Cancers (Basel). **2022** Mar 31;14(7). PMID: 35406548.
2. Hickey TE, Selth LA, Chia KM, Laven-Law G, Milioli HH, Roden D, Jindal S, Hui M, **Finlay-Schultz J**, Ebrahimie E, Birrell SN, Stelloo S, Iggo R, Alexandrou S, Caldon CE, Abdel-Fatah TM, Ellis IO, Zwart W, Palmieri C, Sartorius CA, Swarbrick A, Lim E, Carroll JS, Tilley WD. *The androgen receptor is a tumor suppressor in estrogen receptor-positive breast cancer*. Nat Med. **2021** Feb;27(2):310-320. PMID: 33462444.
3. Wahdan-Alaswad RS, Edgerton SM, Salem H, Kim H, Tan AC, **Finlay-Schultz J**, Wellberg E, Sartorius CA, Jacobsen BM, Haugen BR, Liu B, Thor AD. *Exogenous Thyroid Hormone is Associated with Shortened Survival and Upregulation of High Risk Gene Expression Profiles in Steroid Receptor Positive Breast Cancers.* Clin Cancer Res. **2021** Jan 15;27(2):585-597. PMID: 33097494.
4. **Finlay-Schultz J**, Jacobsen BM, Riley D, Paul KV, Turner S, Ferreira-Gonzalez A, Harrell JC, Kabos P, Sartorius CA. *New generation breast cancer cell lines developed from patient-derived xenografts.* Breast Cancer Res. **2020**; 22(1):68. PMID: 32576280.
5. Brechbuhl HM, Barrett AS, Kopin E, Hagen JC, Han AL, Gillen AE, **Finlay-Schultz J**, Cittelly DM, Owens P, Horwitz KB, Sartorius CA, Hansen KC, Kabos P. *Fibroblast subtypes define a metastatic matrisome in breast cancer.* JCI Insight. **2020**; 5(4):e130751. PMID: 32045383.
6. McGinn O, Ward AV, Fettig LM, Riley D, Ivie J, Paul KV, Kabos P, **Finlay-Schultz J**, Sartorius CA. *Cytokeratin 5 alters β-catenin dynamics in breast cancer cells*. Oncogene. **2020**; 39(12):2478-2492.PMID: 31988452.
7. Riemondy KA, Ransom M, Alderman C, Gillen AE, Fu R, **Finlay-Schultz J**, Kirkpatrick GD, Di Paola J, Kabos P, Sartorius CA, et al. *Recovery and analysis of transcriptome subsets from pooled single-cell RNA-seq libraries.* Nucleic Acids Res. **2019**; 47(4):e20. PMID: 30496484.
8. **Finlay-Schultz J**, Gillen AE, Brechbuhl HM, Ivie JJ, Matthews SM, Jacobsen BM, Bentley DL, Kabos P, Sartorius CA. *Progesterone receptor suppression of breast cancer growth through dual modulation of estrogen receptor and RNA polymerase III.* Cancer Research. **2017**; 77(18):4934-4946. PMID: 28729413.
9. Fettig LM, McGinn O, **Finlay-Schultz J**, LaBarbera DV, Nordeen SK, Sartorius CA. *Crosstalk between progesterone receptors and retinoic acid receptors in regulation of cytokeratin 5 positive breast cancer cells.* Oncogene. **2017**; 36(44):6074-6084. PMID: 28692043.
10. Hanna C, Kwok L, **Finlay-Schultz J**, Sartorius CA, Cittelly DM. *Labeling of Breast Cancer Patient-derived Xenografts with Traceable Reporters for Tumor Growth and Metastasis Studies.* J Vis Exp. **2016**; (117). PMID: 27929464.
11. Brechbuhl HM, **Finlay-Schultz J**, Yamamoto T, Gillen A, Cittelly DM, Tan AC, Sams SB, Pillai M, Elias A, Robinson WA, Sartorius CA, Kabos P. *Fibroblast subtypes regulate responsiveness of luminal breast cancer to estrogen.* Clin Cancer Res. Epub **2016**; 23(7):1710-1721. PMID: 27702820.
12. Wellberg EA, Johnson S, **Finlay-Schultz J**, Lewis AS, Terrell KL, Sartorius CA, Abel ED, Muller WJ, Anderson SM. *The glucose transporter GLUT1 is required for ErbB2-induced mammary tumorigenesis.* Breast Cancer Res. **2016,** 18(1):131. PMID: 27998284.
13. Corr BR, **Finlay-Schultz J**, Rosen RB, Qamar L, Post MD, Behbakht K, Spillman MA, Sartorius CA. *Cytokeratin 5-Positive Cells Represent a Therapy Resistant Subpopulation in Epithelial Ovarian Cancer.* Int J Gynecol Cancer. **2015**; 25(9):1565-73. PMID: 26495758.
14. **Finlay-Schultz J** and Sartorius CA. *Steroid Hormones, Steroid Receptors, and Breast Cancer Stem Cells.* J Mammary Gland Biol Neoplasia. **2015**; 20(1-2):39-50. PMID: 26265122.
15. **Finlay-Schultz J**, Cittelly DM, Hendricks P, Patel P, Kabos P, Jacobsen BM, Richer JK, Sartorius CA. *Progesterone downregulation of miR-141 contributes to expansion of stem-like breast cancer cells through maintenance of progesterone receptor and Stat5a.* Oncogene. **2015**; 34(28):3676-87. PMID: 25241899.
16. Cittelly DM, **Finlay-Schultz J**, Howe EN, Spoelstra N, Axlund SD, Hendricks P, Jacobsen BM, Sartorius CA, Richer JK. *Progestin-mediated suppression of miR-29 potentiates de-dedifferentiation of breast cancer cells through upregulation of KLF4.* Oncogene. **2013**; 32(20):2555-64*.* PMID: 22751119.
17. Kabos P, **Finlay-Schultz J**, Li C, Kline E, Finlayson C, Wisell J, Edgerton SM, Harrell JC, Elias A, Sartorius CA. *Patient-derived luminal breast cancer xenografts retain hormone receptor heterogeneity and help define unique estrogen dependent gene signatures.* Breast Cancer Res Treat. **2012**; 135(2):415-432. PMID: 22821401.
18. Canastar A, Logel J, Graw S, **Finlay-Schultz J**, Osborne C, Palionyte M, Drebing C, Plehaty M, Wilson L, Eyeson R, Leonard S. *Promoter Methylation and Tissue-Specific Transcription of the α7 Nicotinic Receptor Gene, CHRNA7*. J Mol Neurosci. **2012**; 47(2):389-400. PMID: 22052086.
19. **Finlay-Schultz J**, Canastar A, Short M, El Gazzar M, Coughlan C, Leonard S. *Transcriptional Repression of the α7 Nicotinic Acetylcholine Receptor Subunit Gene (CHRNA7) by Activating Protein-2α (AP-2α)*. J Biol Chem. **2011**; 286(49):42123-32. PMID: 21979958.
20. Stephens SH, Logel J, Barton A, Franks A, **Schultz J**, Short M, Dickenson J, James B, Fingerlin TE, Wagner B, Hodgkinson C, Graw S, Ross RG, Freedman R, Leonard S. *Association of the 5'-upstream regulatory region of the alpha7 nicotinic acetylcholine receptor subunit gene (CHRNA7) with schizophrenia.* Schizophr Res. **2009**; 109(1-3):102-12. PMID: 19181484.

**Presentations**

* + - 1. **Jessica Finlay-Schultz**, Duncan S. Riley, Kiran V. Paul, David Bentley, Peter Kabos, Carol A. Sartorius. Progesterone receptor regulation of RNA polymerase III genes. Oral presentation at the Fusion 3rd Nuclear Receptors Conference, May 4-7, **2022**, Cancun, Mexico.
			2. **Jessica Finlay-Schultz**, Duncan S. Riley, David Bentley, Peter Kabos, Carol A. Sartorius. A novel progesterone receptor-RNA polymerase III association represses estrogen-dependent growth in breast tumor patient-derived xenografts. Oral presentation at the OddPols International Conference on Transcription Mechanism and Regulation, June 14-18, **2021**, virtual.
			3. **Jessica Finlay-Schultz**, Duncan S. Riley, Heather M. Brechbuhl, Britta M. Jacobsen, David Bentley, Peter Kabos, Carol A. Sartorius. A novel progesterone receptor-RNA polymerase III association represses estrogen-dependent growth in breast tumor patient-derived xenografts. Poster presentation at the Hormone Dependent Cancers Gordon Research Conference, August 4-9, **2019**, Newry, ME.
			4. Olivia McGinn, Lynsey M. Fettig, Ashley V. Ward, **Jessica Finlay-Schultz**, Carol A. Sartorius. *CK5 and Beta-catenin interact to promote breast cancer stem cell properties.* Poster and oral presentation at the Mammary Gland Biology Gordon Research Seminar and Conference, June 8-14, **2019**, Newry, ME.
			5. **Jessica Finlay-Schultz**. Progesterone regulation of tRNAs in estrogen receptor positive breast cancer. Oral presentation at the University of Colorado RNA Bioscience Initiative “An Evening with RNA”, December 11, 2018, Boulder, CO.
			6. Olivia McGinn, **Jessica Finlay-Schultz**, Lynsey Fettig, Carol A. Sartorius. *Cytokeratin 5/Beta-catenin interaction and crosstalk in maintaining breast cancer stem cells.* Poster and oral presentation at the Mammary Gland Biology Gordon Research Seminar and Conference, May 26-June 1 **2018**, Il Ciocco, Italy.
			7. **Jessica Finlay-Schultz**. *Progesterone receptor regulation of cancer cell translation.* Oral presentation given at the Fusion Conference on Nuclear Receptors, February 27-March 2, **2018**, Cancun, Mexico.
			8. Olivia McGinn, Lynsey Fettig, **Jessica Finlay-Schultz**, Monika Dzieciatkowska, Kirk Hansen, Carol A. Sartorius*. A functional role for the intermediate filament cytokeratin 5 in the maintenance of breast cancer stem cells.* Poster presentation at the Hormone Dependent Cancers Gordon Research Seminar and Conference, August 5-11 **2017**, Newry, ME.
			9. **Jessica Finlay-Schultz**, Austin E. Gillen, Heather M. Brechbuhl, Joshua J. Ivie, Shawna B. Matthews, David Bentley, Peter Kabos, Carol A. Sartorius. *Progesterone receptor suppression of breast cancer growth through dual modulation of estrogen receptor and RNA polymerase III.* Poster presentation at the Mammary Gland Biology Gordon Research Seminar and Conference, June 10-16, **2017**, Stowe, VT.
			10. **Jessica Finlay-Schultz**, Austin E. Gillen, Heather M. Brechbuhl, Joshua J. Ivie, David Bentley, Peter Kabos, Carol A. Sartorius. *A novel progesterone receptor (PR)-RNA polymerase III association represses estrogen-dependent growth in breast tumor patient-derived xenografts.* Poster presentation at the AACR San Antonio Breast Cancer Symposium, December 6-10, **2016**, San Antonio, TX.
			11. **Jessica Finlay-Schultz**, Austin E. Gillen, Heather M. Brechbuhl, Joshua J. Ivie, David Bentley, Peter Kabos, Carol A. Sartorius. *Progesterone receptor regulates breast cancer growth through the RNA Pol III transcriptome.* Poster presentation at the University of Colorado Denver Anschutz Medical Campus Cancer Biology Annual Retreat, October 21-22, **2016**, Denver, CO.
			12. **Jessica Finlay-Schultz**, Heather M. Brechbuhl, Shawna B. Matthews, Rachel B. Rosen, Austin E. Gillen, Britta M. Jacobsen, Peter Kabos, Carol A. Sartorius*. A prospective steroid receptor interactome that dictates progestin effects in ER+ breast cancer patient-derived xenografts (PDX).* Poster presentation at the University of Colorado Denver Anschutz Medical Campus Cancer Biology Annual Retreat, November 6-7, **2015**, Colorado Springs, CO.
			13. Shawna B. Matthews, **Jessica Finlay-Schultz**, Carol A. Sartorius. Poster. *In pursuit of metabolic regulation of cancer stem cells in luminal breast cancer.* Poster presentation at the University of Colorado Denver Anschutz Medical Campus Cancer Biology Annual Retreat, November 6-7, **2015**, Colorado Springs, CO.
			14. **Jessica Finlay-Schultz**, Heather M. Brechbuhl, Britta M. Jacobsen, Peter Kabos, Carol A. Sartorius. *A prospective steroid receptor interactome that dictates progestin effects in ER+ breast cancers.* Poster presentation at the Mammary Gland Biology Gordon Research Seminar and Gordon Research Conference, June 6-12, **2015**, Mount Snow, VT.
			15. Shawna B. Matthews, **Jessica Finlay-Schultz**, Carol A. Sartorius. *A role for redox in progesterone-induced expansion of breast cancer stem cells.* Poster presentation at the Endocrine Society Annual Meeting, March 31-April 4, **2015**, Boston, MA.
			16. **Jessica Finlay-Schultz**. *Tumor-specific actions of progestins in patient-derived breast cancer models.* Invited oral presentation given at the University of Colorado Denver Anschutz Medical Campus Cancer Biology Annual Retreat, September 19, **2014**, Snow Mountain Ranch, Winter Park, CO.
			17. **Jessica Finlay-Schultz**, Diana M. Cittelly, Peter Hendricks, Purvi Patel, Britta M. Jacobsen, Jennifer K. Richer, Carol A. Sartorius. *Progesterone downregulation of miR-141 facilitates expansion of stem-like breast cancer cells through progesterone receptor and Stat5a.* Poster presentation at the Mammary Gland Biology Gordon Research Seminar and Conference, June 7-13, **2014**, Lucca, Italy.
			18. **Jessica Finlay-Schultz**, Diana M. Cittelly, Peter Hendricks, Dawn M. Cochrane, Britta M. Jacobsen, Jennifer K. Richer, Carol A. Sartorius. *MicroRNA-141 downregulation by progesterone mediates dedifferentiation of hormone-dependent breast cancer cells*. Poster presentation at the Mammary Gland Biology Gordon Research Seminar and Gordon Research Conference, June 8-14, **2013**, Stowe, VT.
			19. **Jessica Finlay-Schultz**. *Dissecting the role of microRNA-141 in hormone-dependent breast cancer*. Oral presentation at the Endocrine Society Annual Meeting, June 5, **2012**, Houston, TX.
			20. **Jessica Finlay-Schultz**, Andrew Canastar, Margaret Short, Sherry Leonard. *Transcriptional repression of the alpha7 nicotinic acetylcholine receptor subunit gene (CHRNA7) by AP-2 alpha.* Poster presentation at the Society for Neuroscience Annual Meeting, November 14, **2010**, San Diego, CA.
			21. **Jessica AF Schultz**, Margaret Short, Sharon Graw, Andrew Canastar, Sherry Leonard. *Role of Sp1 and AP-2 in the transcriptional regulation of the CHRNA7 gene.* Poster presentation at the Nicotinic Acetylcholine Receptors as Therapeutic Targets Symposium, October 15, **2009**, Lincolnshire, IL and the Society for Neuroscience Annual Meeting, October 18, **2009**, Chicago, IL.
			22. **Jessica AF Schultz**, Sharon Graw, Margaret Short, Sherry Leonard. *Role of Sp1 and AP-2 in the transcriptional regulation of the CHRNA7 gene and the link to schizophrenia.* Poster presentation at the Psychiatry Departmental Poster Session, March 18, **2009**, Anschutz Medical Campus, Aurora, CO. **Recipient of award for Best Graduate Student Poster.**
			23. **Jessica AF Schultz**, Sharon Graw, Margaret Short, Sherry Leonard. *Role of Sp1 and AP-2 in the transcriptional regulation of the CHRNA7 gene and the link to schizophrenia.* Poster presentation at the Keystone Symposium on the Molecular Basis of Schizophrenia and Bipolar Disorder, March 6 - March 10, **2009**, Keystone, CO.
			24. **Jessica AF Schultz**, Andrew Canastar, Margaret Short, Sherry Leonard. *Transcriptional regulation of the CHRNA7 gene in control and schizophrenic subjects.* Poster presentation at the Keystone Symposium on Regulatory Mechanisms in Eukaryotic Transcription, February 3 - February 8, **2008**, Keystone, CO.
			25. **Jessica AF Schultz**, Mohamed El Gazzar, Margaret Short, Sherry Leonard. *Transcriptional regulation of the CHRNA7 gene in control and schizophrenic subjects.* Poster presentation at the Keystone Symposium on Regulation of Eukaryotic Transcription: From Chromatin to mRNA, April 21 - April 26, **2006**, Taos, NM.

**Teaching Responsibilities**

1. Teaching Assistant, Interdepartmental Graduate Core Courses (IDPT 7821/IDPT 7822/

IDPT 7823/IDPT 7824). Fall 2009. Course director: James Hagman, Ph.D.

1. Teaching Assistant, Interdepartmental Graduate Core Courses (IDPT 7821/IDPT 7822/

IDPT 7823/IDPT 7824). Fall 2010. Course director: Andrew Bradford, Ph.D.

1. Lecturer, Clinical Science Graduate Program, CLSC 7500, *Flow Cytometry and Fluorescent Activated Cell Sorting (FACS).* 2013-2015.

Course Director: John Tentler, Ph.D.

1. Panel Member, Graduate School Orientation Program. Responsible Conduct of Research and Mentor/Mentee Relationships. August 25-26, 2015.

Orientation Director: Inge Wefes, Ph.D.

1. Tutor, Techniques Tutorials Program. Mondays 3-5pm from September 4 through October 12, 2015.

Tutorial Director: Inge Wefes, Ph.D.

1. Lecturer, Cancer Biology Program, CANB 7610, *Hormone Receptors and Cancer*. 2016.

Course Director: Traci Lyons, Ph.D.

**Support**

**Current**

MetaVivor Foundation Sartorius (PI) Kabos, Brechbuhl (co-PIs) 6/16/2022-6/16/2023

Endocrine therapy driven reprogramming of circulating tumor cell-platelet interactions in driving late metastatic spread of ER+ breast cancer

$119,048 direct costs/year

Role: key personnel

NIH 1R01GM146373-01 Sartorius (lead PI) Kabos (MPI) 5/1/2022-4/30/2027

Hormone regulation of RNA polymerase III

$300,000 direct costs/year

Role: co-investigator

**Completed**

IRG-16-184-56 American Cancer Society Finlay-Schultz (PI) 1/1/2018-6/3/2019

*Progesterone Suppression of Breast Cancer Growth thought Regulation of tRNAs*

The goal of this project is to elucidate the mechanism by which progestins regulate tumor growth by modifying Pol III-mediated transcription and identify the downstream effects of the PR/Pol III interaction. This is an important advancement towards identifying tumors that may benefit from adjuvant progesterone treatment.

$30,000 direct costs/year

Role: PI

NIH F32 CA177081 National Cancer Institute Finlay-Schultz (PI) 1/22/2014-1/22/2017

*Tumor-specific actions of progestins in patient-derived breast cancer models*

The goal of this project is to elucidate the role of progestins in breast tumor cell growth, proliferation, and apoptosis, and to identify progestin-regulated gene signatures in multiple tumor xenografts.

$57,638 direct costs/year

Role: PI