**CURRICULUM VITAE**

**Sudarshan Anand, Ph.D.**

Associate Professor, Department of Cell, Developmental & Cancer Biology

Department of Radiation Medicine

Investigator, Knight Cancer Institute

|  |  |
| --- | --- |
| Oregon Health & Sciences University  Knight Cancer Research Building Rm 3004  Portland, OR 97201 | Voice: (503)-494-8043  Fax: (503)-595-4253  Email: anands@ohsu.edu |

**I. Education:**

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| --- | --- | --- | --- |
| 1996-2001 | Birla Institute of Technology and Science, India | M. Sc *(Hons)*  B.Pharm *(Hons)* | Biological Sciences with Pharmacy dual degree |
| 2003-2007 | Johns Hopkins University, Baltimore, MD  (Transferred from Mayo Clinic with Mentor) | Ph.D. | Immunology (Laboratory of Dr. Lieping Chen) |
| 2007-2013 | University of California, San Diego | Postdoctoral | Pathology (Laboratory of Dr. David Cheresh) |

**II. Principal Positions Held:**

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| 2001-2002 | University of Maryland, College Park | Teaching Assistant | Mol. & Cell Biology |
| 2013-2014 | University of California, San Diego | Assistant Research Scientist | Pathology |
| 2014-2019 | Oregon Health & Science University | Assistant Professor | Cell Developmental & Cancer Biology,  Radiation Medicine  Knight Cancer Institute |
| 2019-present | Oregon Health & Science University | Associate Professor |

III. HONORS AND AWARDS:

1999 Summer Undergraduate Research Fellowship, JNCASR, Bangalore, India

2004 Travel award, International Immunology meeting, Montreal, FOCIS

2009 Postdoctoral Fellowship, American Heart Association

2012 K99/R00 Pathway to Independence Award, NIH/NHLBI

2015 Barbara Ann Miller Breast Cancer Research Award, Knight Cancer Institute, OHSU

2016 New Inventor of the Year, Technology Transfer & Business Development, OHSU

2019 Betty Hise Leadership Training Award, Knight Cancer Institute, OHSU

**IV. RESEARCH AND CREATIVE ACTIVITIES:**

**Research Program:**

The overall goal of the Anand lab is to understand how non-coding RNAs shape tumor responses to therapies such as radiation that work by inducing DNA damage. We focus on the cells in the tumor microenvironment in breast and colorectal cancers, particularly, the tumor blood vessels and immune cells to elucidate their contributions to the tumor progression and treatment responses. Using a combination of preclinical mouse models, human patient samples and cell culture models, we strive to address knowledge gaps, develop therapeutic strategies and identify biomarkers for patient stratification.

**A. RESEARCH AWARDS AND GRANTS:**

**CURRENT**

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| **R01 HL137779-01A1** (PI: Anand, S; OHSU) | 09/01/2018 – 06/30/2022 |
| **Source**: NIH/NHLBI |  |

**Title:** MicroRNA regulation of endothelial DNA damage and angiogenesis

Goals: This project seeks to determine the functional significance of a group of microRNAs and their target genes in endothelial DNA damage repair and angiogenesis.

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| **R01 HL143803** (PI: Anand, S; OHSU) | 07/20/2018 – 04/30/2022 |
| **Source**: NIH/NHLBI |  |
| Title: MicroRNA regulation of endothelial DNA repair to enhance anti-tumor immunity  Goals: This proposal will establish a new paradigm to provoke potent anti-tumor immunity using miR-mediated disruption of DNA repair, which enhances `danger signals' in the tumor microenvironment | |

**PENDING**

**BCRP BC200425** (PI: Anand, S; OHSU) 12/01/2020-11/30/2023

**Source:** Dept of Defense

Title: Targeting the nucleic acid sensor RIG1 to drive a better immune response to breast cancer

Goals: This is a partnering PI grant with Dr. Michael Cohen at OHSU with the overall goal of driving anti-tumor responses in breast cancer by targeting the RIG-1 pathway in combination with inhibition of PARP enzymes.

**PRCRP** **CA200333** (PI: Anand, S; OHSU) 04/01/2021-03/30/2024

**Source:** Dept of Defense

Title: Reprogramming the immune microenvironment of colorectal cancers by activating the nucleic acid sensor RIG-I

Goals: This is an Idea grant with the overall goal of driving anti-tumor responses in colorectal cancer by targeting the RIG-1 pathway in combination with inhibition of inhibitory immune checkpoints NKG2A and LAG3 in preclinical models.

**R21 CA13118964** (Co-PI: Anand, S; PI: Tsikitis, L OHSU) 04/01/2021-03/30/2023

**Source:** NIH/NCI

Title: Immune microenvironment differences across age groups in colorectal carcinoma

Goals: This is an exploratory grant for the NCI provocative questions RFA with my longtime collaborator Dr. Liana Tsikitis at OHSU with the overall goal of identifying the immune microenvironment differences in younger vs older patients.

**PRCRP CA200146** (Co-I: Anand, S; PI: Tsikitis, L OHSU) 04/01/2021-03/30/2024

**Source:** Dept of Defense

Title: Immune microenvironment differences among Early and Late Onset Colorectal cancer patients

Goals: This is an Idea grant with my longtime collaborator Dr. Liana Tsikitis at OHSU with the overall goal of identifying the immune microenvironment differences in younger vs older patients.

**PREVIOUS**

**R56 HL137779-01** 09/1/2017 – 08/31/2018

**Source:** NIH/NHLBI

**Title:** A microRNA-target Network in Endothelial DNA Damage and Angiogenesis

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**2017-Innovative Research Grant** (PI: Anand, S; OHSU) 01/01/2017-12/31/2018

**Source:** American Heart Association

**Title:** Manipulating endothelial DNA repair to regulate angiogenesis

**2017-Pilot Project Grant** (PI: Anand, S; OHSU) 08/01/2017-03/31/2019

**Source:** OHSU-OSU Horizon Initiative Cancer Prevention and Control

**Title:** Targeting DNA repair as an adjuvant strategy for cancer vaccines

**2018-Hillcrest-03** (PI: Anand, S; OHSU) 01/01/2018-12/31/2018

**Source:** Knight Cancer Institute/Hillcrest Committee

**Title:** Targeting Endoplasmic Reticulum stress to enhance the tumor immune microenvironment

**2015-Dive-Knight-01** (PI: Anand, S; OHSU) 01/01/2016 – 12/31/2016

**Source:** Knight Cancer Institute

**Title:** Reprogramming the tumor microenvironment in breast cancer using microRNAs

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| **K99-R00 HL1129062** (PI: Anand, S; UCSD) | 06/01/2012-07/31/2017 |
| **Source**: NIH/NHLBI |
| **Title**: MicroRNA regulation of cell survival in angiogenesis and vessel maturation | |

B. PEER-REVIEWED PUBLICATIONS: *(chronological order, oldest to most recent)*

***Published:*** *Total citations:* ***>1900*** *(Data from* [*Google Scholar*](http://scholar.google.com/citations?hl=en&user=2UjiMzIAAAAJ) *as of April, 2020)*

([1-25](#_ENREF_1))

1. **Anand S**, Chen L. 2004. Control of autoimmune diseases by the B7-CD28 family molecules. *Curr Pharm Des* 10: 121-8

2. **Anand S**, Wang P, Yoshimura K, Choi IH, Hilliard A, Chen YH, Wang CR, Schulick R, Flies AS, Flies DB, Zhu G, Xu Y, Pardoll DM, Chen L, Tamada K. 2006. Essential role of TNF family molecule LIGHT as a cytokine in the pathogenesis of hepatitis. *J Clin Invest* 116: 1045-51

* *Faculty of 1000 "Recommended" rating*

3. Xu Y, Flies AS, Flies DB, Zhu G, **Anand S**, Flies SJ, Xu H, Anders RA, Hancock WW, Chen L, Tamada K. 2007. Selective targeting of the LIGHT-HVEM costimulatory system for the treatment of graft-versus-host disease. *Blood* 109: 4097-104

4. Zhu G, Augustine MM, Azuma T, Luo L, Yao S, **Anand S**, Rietz AC, Huang J, Xu H, Flies AS, Flies SJ, Tamada K, Colonna M, van Deursen JM, Chen L. 2009. B7-H4-deficient mice display augmented neutrophil-mediated innate immunity. *Blood* 113: 1759-67

* *Faculty of 1000 "Recommended" rating*

5. **Anand S**, Majeti BK, Acevedo LM, Murphy EA, Mukthavaram R, Scheppke L, Huang M, Shields DJ, Lindquist JN, Lapinski PE, King PD, Weis SM, Cheresh DA. 2010. MicroRNA-132-mediated loss of p120RasGAP activates the endothelium to facilitate pathological angiogenesis. *Nat Med* 16: 909-14

* *Faculty of 1000 "Recommended" rating*
* *News and Views commentary and cover highlight*
* *500+ citations*

6. Murphy EA, Shields DJ, Stoletov K, Dneprovskaia E, McElroy M, Greenberg JI, Lindquist J, Acevedo LM, Anand S, Majeti BK, Tsigelny I, Saldanha A, Walsh B, Hoffman RM, Bouvet M, Klemke RL, Vogt PK, Arnold L, Wrasidlo W, Cheresh DA. 2010. Disruption of angiogenesis and tumor growth with an orally active drug that stabilizes the inactive state of PDGFRbeta/B-RAF. *Proc Natl Acad Sci U S A* 107: 4299-304

7. Park JJ, Omiya R, Matsumura Y, Sakoda Y, Kuramasu A, Augustine MM, Yao S, Tsushima F, Narazaki H, **Anand S**, Liu Y, Strome SE, Chen L, Tamada K. 2010. B7-H1/CD80 interaction is required for the induction and maintenance of peripheral T-cell tolerance. *Blood* 116: 1291-8

* *Faculty of 1000 "Recommended" rating*

8. **Anand S**, Cheresh DA. 2011. Emerging Role of Micro-RNAs in the Regulation of Angiogenesis. *Genes Cancer* 2: 1134-8

9. **Anand S**, Cheresh DA. 2011. MicroRNA-mediated regulation of the angiogenic switch. *Curr Opin Hematol* 18: 171-6

10. Mielgo A, Seguin L, Huang M, Camargo MF, **Anand S**, Franovic A, Weis SM, Advani SJ, Murphy EA, Cheresh DA. 2011. A MEK-independent role for CRAF in mitosis and tumor progression. *Nat Med* 17: 1641-5

11. Sakoda Y\*, **Anand S\***, Zhao Y, Park JJ, Liu Y, Kuramasu A, van Rooijen N, Chen L, Strome SE, Hancock WW, Chen L, Tamada K. 2011. Herpesvirus entry mediator regulates hypoxia-inducible factor-1alpha and erythropoiesis in mice. *J Clin Invest* 121: 4810-9 *\* Equal Contribution*

12. Huang M, **Anand S**, Murphy EA, Desgrosellier JS, Stupack DG, Shattil SJ, Schlaepfer DD, Cheresh DA. 2012. EGFR-dependent pancreatic carcinoma cell metastasis through Rap1 activation. *Oncogene* 31: 2783-93

13. Lau SK, Shields DJ, Murphy EA, Desgrosellier JS, Anand S, Huang M, Kato S, Lim ST, Weis SM, Stupack DG, Schlaepfer DD, Cheresh DA. 2012. EGFR-mediated carcinoma cell metastasis mediated by integrin alphavbeta5 depends on activation of c-Src and cleavage of MUC1. *PLoS One* 7: e36753

14. Park JJ\*, **Anand S\***, Zhao Y\*, Matsumura Y, Sakoda Y, Kuramasu A, Strome SE, Chen L, Tamada K. 2012. Expression of anti-HVEM single-chain antibody on tumor cells induces tumor-specific immunity with long-term memory. *Cancer Immunol Immunother* 61: 203-14 *\* Equal Contribution*

15. **Anand S**. 2013. A brief primer on microRNAs and their roles in angiogenesis. *Vasc Cell* 5: 2

16. Westenskow PD, Kurihara T, Aguilar E, Scheppke EL, Moreno SK, Wittgrove C, Marchetti V, Michael IP, **Anand S**, Nagy A, Cheresh D, Friedlander M. 2013. Ras pathway inhibition prevents neovascularization by repressing endothelial cell sprouting. *J Clin Invest* 123: 4900-8

17. Anand S, Coussens LM. 2014. Manipulating microRNAs to regulate macrophage polarization in gliomas. *J Natl Cancer Inst* 106

18. Seguin L, Kato S, Franovic A, Camargo MF, Lesperance J, Elliott KC, Yebra M, Mielgo A, Lowy AM, Husain H, Cascone T, Diao L, Wang J, Wistuba, II, Heymach JV, Lippman SM, Desgrosellier JS, **Anand S**, Weis SM, Cheresh DA. 2014. An integrin beta-KRAS-RalB complex drives tumour stemness and resistance to EGFR inhibition. *Nat Cell Biol*

19. Advani SJ, Camargo MF, Seguin L, Mielgo A, **Anand S**, Hicks AM, Aguilera J, Franovic A, Weis SM, Cheresh DA. 2015. Kinase-independent role for CRAF-driving tumour radioresistance via CHK2. *Nat Commun* 6: 8154

20. Wilson R, Espinosa-Diez C, Kanner N, Chatterjee N, Ruhl R, Hipfinger C, Advani SJ, Li J, Khan OF, Franovic A, Weis SM, Kumar S, Coussens LM, Anderson DG, Chen CC, Cheresh DA, **Anand S.** 2016. MicroRNA regulation of endothelial TREX1 reprograms the tumour microenvironment. *Nat Commun* 7: 13597

* *OHSU Paper of the Month in November 2016*
* *Finalist (Top 3 among ~1000 publications) for OHSU SoM Postdoc 2017 paper of the year*

21. Chatterjee N, Rana S, Espinosa-Diez C, **Anand S**. 2017. MicroRNAs in Cancer: challenges and opportunities in early detection, disease monitoring, and therapeutic agents. *Curr Pathobiol Rep* 5: 35-42

22. Kelley KA, Ruhl RA, Rana SR, Dewey E, Espinosa C, Thomas CRJ, Martindale RG, **Anand S\*,** Tsikitis VL\*. 2017. Understanding and Resetting Radiation Sensitivity in Rectal Cancer. *Annals of Surgery* 266: 610-6 *\* Shared senior authorship*

* *Winner, OHSU School of Medicine Resident Paper of the year*

23. Zarour LR, **Anand S,** Billingsley KG, Bisson WH, Cercek A, Clarke MF, Coussens LM, Gast CE, Geltzeiler CB, Hansen L, Kelley KA, Lopez CD, Rana SR, Ruhl R, Tsikitis VL, Vaccaro GM, Wong MH, Mayo SC. 2017. Colorectal Cancer Liver Metastasis: Evolving Paradigms and Future Directions. *Cell Mol Gastroenterol Hepatol* 3: 163-73

24. Espinosa-Diez C, Wilson R, Chatterjee N, Hudson C, Ruhl R, Hipfinger C, Helms E, Khan OF, Anderson DG, **Anand S.** 2018. MicroRNA regulation of the MRN complex impacts DNA damage, cellular senescence, and angiogenic signaling. *Cell Death & Disease* 9: 632

25. Ruhl R, Rana S, Kelley K, Espinosa-Diez C, Hudson C, Lanciault C, Thomas CR, Liana Tsikitis V\*, **Anand S\*.** 2018. microRNA-451a regulates colorectal cancer proliferation in response to radiation. *BMC Cancer* 18: 517 *\* Shared senior authorship*

26. Schmid MC, Khan SQ, Kaneda MM, Pathria P, Shepard R, Louis TL, **Anand S**, Woo G, Leem C, Faridi MH, Geraghty T, Rajagopalan A, Gupta S, Ahmed M, Vazquez-Padron RI, Cheresh DA, Gupta V, Varner JA. 2018. Integrin CD11b activation drives anti-tumor innate immunity. *Nature Communications* 9: 5379

27. Rana S, Espinosa-Diez C, Ruhl R, Chatterjee N, Hudson C, Fraile-Bethencourt E, Agarwal A, Khou S, Thomas CR, **Anand S**. 2020. Differential regulation of microRNA-15a by radiation affects angiogenesis and tumor growth via modulation of acid sphingomyelinase*. Scientific Reports.* 10(1):5581

28. Watson KM#, Gardner IH#, Byrne R, Ruhl RA, Lanciault C, Dewey E, **Anand S\*,** Tsikitis VL\*. 2020. Differential expression of PEG10 contributes to aggressive disease in early vs. late onset colorectal cancer. *Diseases of Colon & Rectum.* In press. #*Shared first authorship* *\* Shared senior authorship*

***Draft manuscripts in Preprint servers/Peer review:***

29. Chatterjee N, Espinosa-Diez C, **Anand S**. 2020. A miR-494 dependent feedback loop regulates ER stress. *bioRxiv*: #088856. Under revision *J Biol Chem*.

30. Gardner IH#, Siddarthan R#, Watson KM, Dewey E, Ruhl R, Guan X, Xia Z, Tsikitis V, **Anand S**. 2020. Innate immune genes distinguish the immune microenvironment of early onset colorectal cancer. *medRxiv*: #141143. Submitted. *J Clin Invest*.

31. Espinosa-Diez C, Wilson R, Mukherjee R, Feltham M, Hudson C, Ruhl R, **Anand S**. 2018. DNA damage dependent hypomethylation regulates the pro-angiogenic LncRNA MEG9. *bioRxiv*: #442699

32. Yi Sun, Wei Chen, Robert Torphy, Sheng Yao, Gefeng Zhu, Emily Miller, Yuki Fujiwara, Li Bian, Linghua Zheng, **Sudarshan Anand**, Fan Gao, Weizhou Zhang, Sarah Ferrara, Andrew Goodspeed, Xiao-jing Wang, Barish Edil, Richard Schulick, Lieping Chen, and Yuwen Zhu. 2020. Blockade of the CD93/IGFBP7 pathway selectively normalizes tumor vasculature to facilitate immunotherapy. Under Review. *Sci Trans Med.*

C. PATENTS

1. **Anand, S.,** Advani S.J., Cheresh, D.A. # 61/547,934- Use of microRNAs and microRNA inhibitors to modulate blood vessel growth, patterning, tumor growth and malignant disease. Issued
2. **Anand, S.,** Seguin L., Cheresh, D.A. # 61/843,417- Compositions and methods for treating cancer and diseases and conditions responsive to cell growth inhibition. Issued and Licensed
3. **Anand, S.,** Espinosa-Diez, C. # 62/300,615 – Pharmaceutical compositions comprising microRNA. Pending
4. **Anand, S.,** Tsikitis V**.** # 62443129 - Compositions And Methods Used In Diagnosing And Treating Colorectal Cancer. Pending
5. **Anand, S**., Rana, S., Thomas C. MicroRNA inhibitors to enhance radiotherapy efficacy. Pending.
6. **Anand, S**., Rana, S. MicroRNA inhibitors to enhance vascular normalization. OHSU Tech ID: 2552. Pending.
7. **Anand, S**., Larson, C., Pass, I, Zeng, F. Screening and Discovery of small molecule inhibitors of DNA repair for immunooncology applications. Disclosed to OHSU.

**D. NON-PEER REVIEWED PUBLICATIONS, Editorials, Reviews:**

Selected Published Abstracts:

1. **Anand S**., Advani S.J. and Cheresh D.A. MicroRNA-103 induces DNA damage and radiosensitizes the tumor vasculature. *AACR Annual Meeting 2014.* San Diego, CA.
2. Wilson R., Kanner N., Espinosa-Diez C. and **Anand S.** Inhibition of angiogenesis by disruption of endothelial DNA repair. *14th International Tumor Microenvironment Meeting 2015*, Vancouver, Canada
3. Espinosa-Diez C., Wilson R., Kanner N., Ruhl R., Hipfinger C. and **Anand S.** Reprogramming the breast cancer microenvironment using microRNAs that target DNA repair. *AACR Annual Meeting 2016*. New Orleans, LA.
4. Wilson R., Espinosa-Diez C., Chatterjee N., Hipfinger C., Ruhl R., Kanner N. and **Anand S.** MicroRNA regulation of endothelial DNA repair inhibits angiogenesis. *Endothelial Phenotypes in health and disease. Gordon Research Conference*, Girona, Spain.

* *Oral presentation by Dr. Anand.*

1. Rana SR, Kelley K, Ruhl R, Thomas CR Jr, Tsikitis VL, **Anand S**: MicroRNA regulation of radiation sensitivity in colorectal cancers. *Proceedings of the 2017 Gastrointestinal Cancers Symposium*, San Francisco, Jan 19-21, 2017
2. Kelley K, Ruhl R, Rana S, Thomas CR Jr:, **Anand S\***, Tsikitis VL\*: MicroRNA 451 and 203 regulation of radiation sensitivity in rectal carcinomas. *12th Annual Academic Surgical Congress*, February 7-9, 2017, Las Vegas <http://academicsurgicalcongress.org/> \*Shared Senior authorship
3. Kelley K, Rana S, Ruhl R, Lanciault C, Thomas CR Jr., **Anand S\***, Tsikitis VL\*: Understanding and resetting radiosensitivity in rectal cancer*. World Congress of Surgery*, Basel, Switzerland, August 13-17, 2017. \*Shared Senior authorship
4. Rana S, Espinosa C, Thomas CR Jr, **Anand S**: Differential expression of microRNA between standard conventional dose versus ablative dose radiation in colorectal cancer. *Proc of the 99th Annual Meeting of the American Radium Society*, The Broadmoor, Colorado Springs, May 6-9, 2017
5. Kelley KA, Rana S, Ruhl R, Lanciault C, Hunter J, Thomas CR Jr, **Anand S\***, Tsikitis VL\*: Understanding and resetting radiosensitivity in rectal cancer. *137th Annual Meeting of the American Surgical Association*, Philadelphia, April 20-22, 2017 http://meeting.americansurgical.org/ \*Shared Senior authorship.

* *Oral presentation by Dr. Kelley.*

1. Rana S, Kelley K, Ruhl R, Thomas CR Jr, Tsikitis L, **Anand S\***: MicroRNA regulation of radiation sensitivity in colorectal cancer. *AACR Annual Meeting 2017*.
2. Espinosa-Diez C., Wilson R., Chatterjee N., Hipfinger C., Ruhl R., Hudson C., Helms E., Kanner N and **Anand S.** A microRNA regulated incoherent feed-forward loop drives vascular senescence. *Keystone Symposia in RNA Approaches in Cardiovascular Disease.* 2017. Keystone, CO.

* *Oral presentation by Dr. Espinosa-Diez.*

1. Espinosa-Diez C., Wilson R., Chatterjee N., Hipfinger C., Ruhl R., Hudson C., Helms E., Kanner N and **Anand S.** Radiation-induced microRNA targets DNA repair complex and reprograms the tumor microenvironment.*EACR***-***Radiation Break-through: from DNA damage responses to precision cancer therapy*. 2018. Oxford, UK.

*\*Best poster Award and Travel Award to Dr. Espinosa-Diez.*

**V. PROFESSIONAL ACTIVITIES:**

**Ad hoc manuscript reviewing**

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| 2012 | Angiogenesis, Cancer Letters |
| 2013  2014  2015  2016- | Angiogenesis, Oncotargets & Therapy, Nature Methods, Vascular Cell  Oncotargets & Therapy, PNAS  Oncotargets & Therapy, Breast Cancer: Targets and Therapy  Oncotargets & Therapy, Nature Communications, Scientific Reports, Cancer Letters, Cell Death and Differentiation, Br J Cancer, Am. J. Pathol, Am. J. Physiology |

Other Professional Ad Hoc Service

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| 2013 | Heart Research UK | Grant Reviewer |
| 2014 | Technology Foundation STW, Netherlands | Grant Reviewer |
| 2015 | ScienceMatters Journal | Editorial Board |
| 2016, 2017 | American Heart Association | Abstract Reviewer |
| 2016 | Faculty Search, Department of Biology, University of Portland | Consultant |
| 2016- | Wellcome Trust - DBT Early Career Fellowship | Grant Reviewer |
| 2016- | Natural Sciences and Engineering Research Council of Canada (NSERC) | Grant Reviewer |
| 2017 | Circle of Giving | Grant reviewer |
| 2018 | NIH VCMB Study Section | Ad hoc reviewer |
| 2019 | Dept. Of Defense, Breast Cancer Research Program | Ad hoc reviewer |
| 2020 | NIH TME Study Section | Ad hoc reviewer |
| 2020 | Medical Research Council, UK | Ad hoc reviewer |

**V. UNIVERSITY AND PUBLIC SERVICE:**

University Service

Oregon Health and Sciences University

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| --- | --- |
| 2014-present | Faculty member, Graduate program in Molecular & Cellular Biosciences |
| 2014-present | Faculty member, OHSU Knight Cancer Institute, Program in Cancer Biology |
| 2014  2014- | Judge, Oral presentations, Cancer Biology, OHSU Research week  Member, Basic and Translational Sciences Seminar Speaker Selection Committee |

2015- Interviewer, Graduate Program in Molecular & Cellular Biosciences

2015- Faculty Evaluator, CDB/CanBio Graduate Student Seminar Series

2015- Member, Postdoctoral Affairs Advisory Committee

2015- Co-director, Knight Cancer Institute, Basic and Translational Sciences Seminar Series

2015- Panelist, Academic Job Search, Postdoctoral Appreciation week, OHSU

2015- Member, Admissions Committee, Graduate Program in Molecular & Cellular Biosciences

2016 Co-director, CDCB Summer Internship Program

2016 Panelist, Academic/Medical Center Career Panel, CDCB Summer Internship

2016-17 Director, Basic and Translational Sciences Seminar Series, Knight Cancer Institute

2017- Interviewer, MD/PhD program, OHSU

2019- Co-director, Cancer Biology Hub, Program in Biomedical Sciences, OHSU

2019- Admissions Committee Member, Program in Biomedical Sciences, OHSU

2019- Director, KnightWalks- A career development program for trainees, OHSU

2020- Steering Committee Member, Program in Biomedical Sciences, OHSU

2020- Associate Director and Steering Committee Member, NCI T32 Integrated training in quantitative and experimental cancer systems biology.

VI. TEACHING AND MENTORING:

**High School and Undergraduate Students Supervised or Mentored:**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2009-2010 | Arash Calafi | | Medical Student, UCSD | | Mentor | | Resident, UC Davis | |
| 2010-2011 | Geraldo Hernandez | | Sweetwater High School | | Mentor | | Undergraduate,  San Diego State University | |
| 2012 | Joyce Lee | | Del Norte High School | | Mentor | | Unknown | |
| 2013 | Yi Ding | | Zhejiang University, China | | Mentor | | M.S (Bioinformatics),  Harvard University | |
| 2015-2016 | Erin Helms | | Pacific University, Oregon | | Murdock Summer Research Scholarship  Mentor | | Graduate Student, PMCB program  OHSU | |
| 2015-2016 | Heidi Grompe | | University of Portland, OR | | CDCB Summer Internship Mentor | | Medical School | |
| 2015 | Christina Hipfinger | | University of Applied Sciences, Austria | | Mentor | | Graduate student, Austria, Won Marshall Fellowship for summer research | |
| 2016 | Ananya Koneti | | Westview High School, Portland, OR | | Mentor | | High School | |
| 2017 | Latroy Robinson | | Lewis & Clark College | | Mentor | | Murdock Summer Research Fellowship | |
| 2018-19 | Marlee Feltham  Rishima Mukherjee | | West Linn High School | | Mentor | | Won Regional Science Fair and selected for INTEL International Science Fair | |
| 2018 | Laura Polkinghorn | Willamette University | | Mentor | | Murdock Summer Research Fellowship | |
| 2018 | Sanjana Rasamsetti | Austin College | | Mentor | | CDCB Summer Internship | |
| 2019 | Mallorie Mitchem | Case Western Reserve University | | Mentor | | CDCB Summer Internship | |
| 2019- | Sophie Ong | Westview High School | | Mentor | | High School | |
| 2020 | Laasya Yenduri | Sunset High School | | Mentor | | High School | |

**Predoctoral Students Supervised or Mentored:**

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| --- | --- | --- | --- |
| 2014 | Farhad Mohamed | PMCB Graduate Program, OHSU | Lab Rotation Mentor |
| 2015 | Ben Doron | PMCB Graduate Program, OHSU | Member, Qualifying Exam Committee |
| 2015 | Dana Emerson | PMCB Graduate Program, OHSU | Lab Rotation Mentor |
| 2016- | Clayton Hudson | PMCB Graduate Program, OHSU | Dissertation Mentor  *Supported by NCI T32 Dermatology training grant 2019-2020* |
| 2017 | Moataz Reda | BME Graduate Program, OHSU | Dissertation Advisory Committee Member |
| 2017 | Keith Earley | PMCB Graduate Program, OHSU | Member, Qualifying Exam Committee |
| 2018 | Jason Kent | PMCB Graduate Program, OHSU | Member, Qualifying Exam Committee |
| 2018 | Hsin-Lin Yun | PMCB Graduate Program, OHSU | Member, Qualifying Exam Committee |
| 2019 | Isabel English | PMCB Graduate Program, OHSU | Member, Qualifying Exam Committee |
| 2019 | Erin Helms | PMCB Graduate Program, OHSU | Chair, Qualifying Exam Committee |
| 2019 | Patrick Flynn | PMCB Graduate Program, OHSU | Dissertation Advisory Committee |
| 2019 | Breanna Caruso | PMCB Graduate Program, OHSU | Member, Qualifying Exam Committee |
| 2019 | Erin Helms | PMCB Graduate Program, OHSU | Dissertation Advisory Committee |
| 2020 | Colin Coleman | PMCB Graduate Program, OHSU | Chair, Qualifying Exam Committee |
| 2020 | Adrian Baris | PMCB Graduate Program, OHSU | Dissertation Mentor  *Supported by NIGMS T32 Program in Enhanced Research Training 2020-2021* |
| 2020 | Breanna Maniaci | PMCB Graduate Program, OHSU | Member, Qualifying Exam Committee |
| 2020 | Gabriel Cohn | PMCB Graduate Program, OHSU | Member, Qualifying Exam Committee |

**Postdoctoral Trainees Mentored:**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2015-2019 | | Maria Cristina Espinosa | | Postdoctoral Fellow | Mentor | | Postdoc, Univ Pittsburgh | |
| 2015-2018 | | Shushan Rana | | Resident, Radiation Medicine | Research Mentor | | Fellow, Fred Hutchinson Cancer Center | |
| 2015-2019 | | Namita Chatterjee | | Postdoctoral Fellow | Mentor | | Scientist, PTC Therapeutics, NJ | |
| 2016-17 | | Katherine Kelly | | Resident, Surgery | Research Mentor | | Resident, OHSU | |
| 2017-18 | | Raphael Byrnes | | Resident, Surgery | Research Mentor | | Resident, OHSU | |
| 2018-19 | Raga Siddharthan | | Resident, Surgery | | Research Mentor | Resident, OHSU | |
| 2019-20 | Ivy Gardner | | Resident, Surgery | | Research Mentor | Resident, OHSU | |
| 2019-20 | Kate Watson | | Resident, Surgery | | Research Mentor | Resident, OHSU | |
| 2019- | Eugenia Fraile-Bethencourt | | Postdoctoral Fellow | | Mentor |  | |
| 2019- | Sokchea Khou | | Postdoctoral Fellow | | Mentor |  | |

**Formal Graduate School Teaching**

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| 2014 | CANB607 Cancer Biology Seminar Series | Moderated and evaluated year long journal club |
| 2015 | CANB607 Cancer Biology Seminar Series | Moderated and evaluated year long journal club |
| 2016 | MGEN 623 Genetic Basis of Human Disease | 1h lecture “MicroRNAs in Cancer |
|  | CONJ 665 Development, Differentiation & Disease | 90 min lecture “Epigenetics & Noncoding RNA” |
| 2017 | CONJ 665 Development, Differentiation & Disease  CELL/CANB 613 Tissue Biology | 90 min lecture “Epigenetics & Noncoding RNA”  90 min discussion moderator |
| 2018 | CONJ 665 Development, Differentiation & Disease | 90 min lecture |
|  | CELL/CANB 613 Tissue Biology | Discussion Moderator  2 90 min sessions |
|  | CELL 610 N04- The secret life of non-coding RNAs | Course director, Nanocourse |
| 2019-2020 | CONJ 665 Development, Differentiation & Disease | Director |
| 2020- | Integrated Cancer Biology Hub, Program in Biomedical Sciences (PBMS) | Co-director |

VII. invited presentations:

Symposia and Workshops: International

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| 2004 | International Immunology Meeting, Montreal, Canada |
| 2011 | ‘Building Better Blood Vessels’, ASN Annual meeting, Philadelphia, PA |
| 2012 | Smooth Muscle FASEB Summer Research Conference, Snowmass, CO |
| 2015 | Tumor Microenvironment Workshop, Vancouver, BC, CA |

2016 Endothelial phenotypes in development & disease, Gordon Conference, Girona, Spain

2018 Chemotherapy Induced Cardiovascular toxicity, Experimental Biology, San Diego, CA

2020 Angiogenesis Gordon Conference, Newport, RI

**Symposia and Workshops: National**

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| 2012 | NIH K Award Cardiovascular Investigator's Meeting, Bethesda, MD |
| 2012 | Topics and Advances in Internal Medicine, San Diego, CA |
| 2015 | Genomic Instability Mini Symposium, OHSU, Portland, OR |

2016 NIH/NHLBI K to R01 transition Meeting, Bethesda, MD

2017 NIH/NHLBI K to R01 transition Meeting, Bethesda, MD

**Invited Lectures/Seminars: International**

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| 2013 | Special Seminar, National Center for Biological Sciences, Bangalore, India |

2017 Fifth International Conference on Molecular Signaling: Basics to Applications, Chennai, India

**Invited Lectures/Seminars: National**

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| 2013 | Noon Scientific Lecture, Moores UCSD Cancer Center, La Jolla, CA |
| 2013 | Translational Immunology Seminar Series, Yale Cancer Center, New Haven, CT |
| 2015 | Biology Seminar Series, Lewis & Clark College, Portland, OR |
| 2018 | Pacific Northwest Tumor Microenvironment Meeting, Portland, OR |

2018 MedTech Alliance Showcase, Portland, OR

2018 Bridging the Gap: NCI Chemical Biology Consortium Symposium, San Francisco, CA

**Invited Lectures/Seminars: OHSU**

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| 2014 | CDB Faculty Lunch Seminar |
| 2014 | 8th Annual Rubinstein Research Day at Radiation Medicine |
| 2015 | MD/PhD Journal Club Seminar Series |
| 2015 | 9th Annual Rubinstein Research Day at Radiation Medicine |
| 2015  2016-  2016-  2016-  2017 | Non-coding RNA symposium  Knight Cancer Research Group Meeting  CDCB Faculty Lunch Seminar  Mouse Models of Human Cancer Group Meeting  OHSU-OSU Horizon Initiative Symposium |