CURRICULUM VITAE

NAME: JAMES DEGREGORI, PHD.

CITIZENSHIP: United States

DATE AND PLACE OF BIRTH: December 29, 1965, Cleveland, Ohio

PROFESSIONAL POSITION: Professor of
-Biochemistry and Molecular Genetics
-Department of Pediatrics (Section of Hematology and Oncology)
-Department of Immunology and Microbiology
-Department of Medicine (Section of Hematology)
University of Colorado School of Medicine

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EDUCATION:

B.A. 1987	University of Texas, Austin, TX (Microbiology)
Ph.D. 1993	Massachusetts Institute of Technology, Cambridge, MA (Biology)

PROFESSIONAL EXPERIENCE/APPOINTMENTS:

1984: Summer Research Intern, M.D. Anderson Hospital, Houston, TX. NMR analysis of tumor cells (Advisor: James Frazer).

1985-1987: Undergraduate Research Assistant, Department of Microbiology, University of Texas, Austin, TX. Transformation by the REV-T retrovirus (Advisor: Henry Bose).

1987-1993: Graduate Student, Department of Biology, Massachusetts Institute of Technology, Cambridge, MA. Retroviral gene traps as insertional mutagens in mice (Advisor: H. Earl Ruley).

1993-1997: Postdoctoral Fellow, Department of Genetics, Howard Hughes Medical Institute, Duke University Medical Center. Role of E2F in cell cycle control (Mentor: Joseph R. Nevins).

1997-2003: Assistant Professor, Departments of Biochemistry and Molecular Genetics, Pediatrics, and Integrated Department of Immunology (since 2000) at the University of Colorado School of Medicine

2003-2008: Associate Professor with tenure.

2008-present: Professor (Primary in Biochemistry and Molecular Genetics, and Secondary in Immunology, in Pediatrics and in Medicine).

2005-2013: Director, Program in Molecular Biology.

2014-2015: Associate Director, Program in Molecular Biology.

2010-2018: Co-leader, Molecular Oncology Program, University of Colorado Cancer Center

2013-2017: Associate Director for Basic Research, University of Colorado Cancer Center.

2017-present: Deputy Director, University of Colorado Cancer Center.

2016-present: Courtenay C. and Lucy Patten Davis Endowed Chair in Lung Cancer Research.

2016-2019: Visiting Adjunct Professor, University of Vermont.

HONORS/AWARDS

1984-1987: Jesse Jones Scholarship
1984-1987: University of Texas Dean's Scholar
1985: Institute for Hispanic Culture Scholarship
1985-1987: Natural Science Foundation Scholarship
1986: Texas Ex's Scholarship
1987: Graduated Summa Cum Laude with Highest Honors from the University of Texas
1993-1996: NIH Individual National Research Service Award.
1996-1997: Howard Hughes Medical Institute Research Fellowship.
1997-1999: V Foundation Scholar
1997: HHMI Research Resources Program for Med Schools New Faculty Start-Up Award.
2000- 2005: Leukemia and Lymphoma Society Scholar.
2006 Dean's Mentoring Award
2016: Courtenay C. and Lucy Patten Davis Endowed Chair in Lung Cancer Research
2017: Leukemia and Lymphoma Society Robert de Villiers Spiral of Life Award

SELECTED SERVICE (external)

2020-2023: Member, AACR Special Conferences Committee
2021-2024: Member, AACR Cancer Evolution Working Group Steering Committee
2022-present: Member, Executive Subcommittee, AACR Aging, Stress, and Cancer Task Force
2022-present: Co-Chair, Steering Committee, NCI/NIA Onco-Aging Consortium
2022-present: President, International Society for Evolution, Ecology, and Cancer (ISEEC)
2025-2026: ESMO Congress 2026: Scientific Committee member

EDITORIAL

2013-2018: Associate Editor, Molecular Cancer Research (AACR)
2019-present: Editor-in-Chief, Aging and Cancer (Wiley)

2021-present: Associate Editor, Evolution, Medicine & Public Health (Oxford)
2021-2022: Associate Editor, Aging Cell (Wiley)

OTHER POSITIONS:

Scientific Advisory Committee, Mitotherapeutix

External Advisory Board member, University of Alabama O'Neal Comprehensive Cancer Center (2020 to present)

External Advisory Board member, Moffitt Cancer Center (2020 to present)

Scientific Advisory Board member, Samuel Waxman Cancer Research Foundation (2023 to present)

Internal Advisory Board member, Colorado Head&Neck Cancer SPORE (2022 to present)

Internal Advisory Board member, Colorado Neurooncology SPORE *planning* (2023 to present)

PATENTS

Adenoviral Mediated Gene Transfer into Lymphocytes.
U.S. Patent No. 6,245,966 B1. Issued June 12, 2001.

Use of Tyrosine Kinase Inhibitor in Cancer Treatment
US Patent No. US10076520B2; Issued September 18, 2018

PROFESSIONAL SOCIETY MEMBERSHIPS

American Association for the Advancement of Science
American Association for Cancer Research
Colorado Cancer Center
UCD SOM Program in Molecular Biology
University of Colorado Medical Scientist Training Program
UCD SOM Biomedical Sciences Program
International Society for Evolution, Ecology and Cancer
Society for the Study of Evolution
New York Academy of Sciences, Professional Member

PUBLICATIONS

Publications as graduate student and postdoctoral fellow:

<u>Peer Reviewed Research Papers (prior to independence):</u>

1. Reddy, S., **J. DeGregori**, H. von Melchner and H. E. Ruley. (1990) Use of a retrovirus promoter-trap vector to induce *lacZ* gene fusions in mammalian cells. J. Virol. 65: 1507-1515.

2. Ragozzino, M., A. Kuo., **J. DeGregori**, N. Kohl and H. E. Ruley. (1991) Mechanisms of Oncogene Cooperation: Activation and Inactivation of a Growth Antagonist. Environmental Health Perspectives 93: 97-103.

3. von Melchner, H.*, **J. DeGregori***, H. Rayburn, S. Reddy, C. Friedel and H.E. Ruley. (1992) Selective disruption of genes expressed in totipotent embryonal stem cells. Genes and Development 6, 919-927. *contributed equally.

4. **DeGregori, J**., A. Russ, H. von Melchner, H. Rayburn, P. Priyaranjan, N.A. Jenkins, N.G. Copeland and H.E. Ruley. (1994) A murine homolog of the yeast RNA1 gene is required for postimplantation development. Genes and Development 8, 265-276.

5. Kowalik, T.F., **J. DeGregori**, J. Schwarz and J.R. Nevins. (1995) E2F1 overexpression in quiescent fibroblasts leads to induction of cellular DNA synthesis and apoptosis. J. Virol. 69, 2491-2500.

6. **DeGregori, J**., T.F. Kowalik and J.R. Nevins. (1995) Cellular targets for activation by the E2F1 transcription factor include DNA synthesis and G1/S regulatory genes. Mol. Cell. Biol. 15, 4215-4224.

7. Ohtani, K., **J. DeGregori** and J.R. Nevins. (1995) Regulation of the cyclin E gene by the E2F1 transcription factor: a central role for E2F in G1 regulation. Proc. Natl. Acad. Sci. USA, 92, 12146-12150.

8. **DeGregori, J**.*, G. Leone*, K. Ohtani, A. Miron and J.R. Nevins. (1995) E2F1 accumulation bypasses a G1 arrest resulting from the inhibition of G1 cyclin-dependent kinase activity. Genes & Development, 9, 2873-2887. *contributed equally.

9. Khleif, S. N., **J. DeGregori**, C.L. Yee, G.A. Otterson, F.J. Kay, J.R. Nevins and P.M. Howley. (1996) Inhibition of cyclin D-CDK4/CDK6 activity is associated with an E2F1 mediated induction of cyclin kinase inhibitor activity. Proc. Natl. Acad. Sci. USA 93, 4350-4354.

10. Smith, E., G. Leone, **J. DeGregori**, L. Jakoi and J.R. Nevins. (1996). The accumulation of an E2F-p130 transcriptional repressor distinguishes a G0 from a G1 cell state. Mol. Cell. Biol., 16, 6965-6976.

11. Ohtani, K., **J. DeGregori**, G. Leone, D.R. Herendeen, T.J. Kelly and J.R. Nevins. (1996). Expression of the HsOrc1 gene, a human ORC homolog, is regulated by cell proliferation via the E2F transcription factor. Mol. Cell. Biol., 16, 6977-6984.

12. **DeGregori, J**., G. Leone, A. Miron, L. Jakoi and J.R. Nevins. (1997). Distinct roles for E2F proteins in cell growth control and apoptosis. Proc. Natl. Acad. Sci. USA 94, 7245-7250.

13. Leone, G.*, **J. DeGregori***, R. Sears, L. Jakoi and J.R. Nevins. (1997). Myc and ras collaborate to allow the accumulation of cyclin E/cdk2 and E2F activities, leading to the induction of S phase. Nature, 387, 422-425. *contributed equally.

14. Kowalik, T.F., **J. DeGregori**, G. Leone, and J.R. Nevins. (1998). E2F1-specific induction of apoptosis and p53 accumulation is modulated by mdm2. Cell, Growth and Differentiation 9, 113-118.

15. Yan, Z., **J. DeGregori**, R. Shohet, G. Leone, B. Stillman, J. R. Nevins, and R. S. Williams. (1998). Cdc6 is regulated by E2F, and is essential and limiting for DNA replication in mammalian cells. Proc. Natl. Acad. Sci. USA 95, 3603-3608.

16. Leone, G.*, **J. DeGregori***, Z. Yan, L. Jakoi, S. Ishida, R. S. Williams and J.R. Nevins. (1998). E2F3 Activity is regulated during the cell cycle and is required for the induction of S phase. Genes & Development, 12, 2120-2130. *contributed equally.

17. Sears, R., G. Leone, **J. DeGregori** and J.R. Nevins. (1999). Ras enhances Myc protein stability. Molecular Cell, 3, 169-179.

18. Leone, G., **J. DeGregori**, L. Jakoi, J. Cook and J.R. Nevins. (1999). Collaborative role for E2F transcriptional activity and G1 cdk activity in the induction of S phase. Proc. Natl. Acad. Sci. USA 96, 6626-6631.

19. Williamson, D.J., S. Banik-Maiti, **J. DeGregori**., and H.E. Ruley. (2000) hnRNP C is required for post-implantation mouse development but is dispensable forcell viability. Mol. Cell. Biol. 20, 4094-4105.

20. Cook, J.G., C.H. Park, T. Burke, G. Leone, **J. DeGregori**, A. Engel and J.R. Nevins. (2002) Analysis of Cdc6 function in the assembly of mammalian prereplication complexes. Proc. Natl. Acad. Sci. USA 99, 1347-52.

21. Roshon, M., **J.V. DeGregori**, and H.E. Ruley. (2003). Gene trap mutagenesis of hnRNP A2/B1: a cryptic 3' splice site in the neomycin resistance gene allows continued expression of the disrupted cellular gene. BMC Genomics 4:2.

Book Chapters/Reviews (prior to independence):

22. Melchner, H., W. Chang, **J. DeGregori**, H. Rayburn, S. Reddy and H. E. Ruley. (1993) Genome Analysis Using Promoter Trap Retroviruses. Genome Research in Molecular Medicine and Virology. (pgs. 219-230) Kenneth W. Adolph Ed., Academic Press, San Diego,

CA.

23. Chen, J., **J. DeGregori**, G. Hicks, M. Roshon, C. Scherer, E. Shi and H. E. Ruley. (1994) Gene Trap Retroviruses. Molecular Virology Techniques. (pgs. 123-140) Kenneth W. Adolph Ed., Academic Press, San Diego, CA.

24. Nevins, J.R., **J. DeGregori**, L. Jakoi, and G. Leone. (1997). Functional analysis of E2F. Meth. Enzymol. 283, 205-219.

25. Nevins, J.R., G. Leone, **J. DeGregori**, and L. Jakoi. (1997). Role of the Rb/E2F pathway in cell growth control. J. Cell. Physiol. 173, 233-6.

Publications as UC SOM faculty member:

Peer Reviewed Research Papers:

26. Leon, R.P., T. Hedlund, S.J. Meech, S. Li, J. Schaack, S.P. Hunger, R.C. Duke and **J. DeGregori**. (1998). Adenoviral mediated gene transfer in lymphocytes. Proc. Natl. Acad. Sci. USA 95, 13159-13164.

27. Zhu, J., D. DeRyckere, F. Li, Y. Wan and **J. DeGregori**. (1999). A role for E2F1 in the induction of ARF, p53 and apoptosis during thymic negative selection. Cell, Growth and Differentiation. 10, 829-838.

28. Schwertfeger, K.L., S. Hunter, L.E. Heasley, V. Levresse, R.P. Leon, **J. DeGregori**., and S.M. Anderson. (2000) Prolactin simulates activation of c-jun N-terminal kinase (JNK). Molecular Endocrinology 14, 1592-1602.

29. Wan, Y., L. Leon, R. Marks, C. Cham, J. Schaack, T. Gajewski and **J. DeGregori**. (2000). Transgenic expression of CAR on T cells facilitates adenoviral mediated gene delivery ex vivo and in vivo. Proc. Natl. Acad. Sci. USA 97, 13784-13789.

30. Cripe, T. P., Dunphy, E. J., Holub, A. D., Saini, A., Vasi, N. H., Mahller, Y. Y., Collins, M. H., Snyder, J. D., Krasnykh, V., Curiel, D. T., T.J. Wickham, **J. DeGregori**, J.M. Bergelson, and M.A. Currier.. (2001). Fiber knob modifications overcome low, heterogeneous expression of the coxsackievirus-adenovirus receptor that limits adenovirus gene transfer and oncolysis for human rhabdomyosarcoma cells. Cancer Res *61*, 2953-2960.

31. Zhu, J.W., S. J. Field, L. Gore, M. Thompson, H. Yang, Y. Fujiwara, R. D. Cardiff, M. Greenberg, S. H. Orkin, and **J. DeGregori**. (2001). E2F1 and E2F2 Determine Thresholds for Antigen-Induced T-Cell Proliferation and Suppress Tumorigenesis. Mol. Cell. Biol. 21 8547-8564.

32. Orlicky, D. J., **J. DeGregori**, and J. Schaack. 2001. Construction of stable coxsackievirus and adenovirus receptor- expressing 3T3-L1 cells. J Lipid Res 42:910-5.

33. Angus, S.P., A.F. Fribourg, M.P. Markey, S.L. Williams, H.F. Horn, **J. DeGregori**, T.F. Kowalik, K. Fukasawa, and E.S. Knudsen (2002). Active Rb elicits late G1/S inhibition. Experimental Cell Research, 276, 201-213.

34. Bhattacharya, D, E.C. Logue, S. Bakkour, **J. DeGregori**, and W.C. Sha (2002). Identification of gene function by cyclical packaging rescue of retroviral cDNA libraries. Proc. Natl. Acad. Sci. USA 99, 8838-8843.

35. Dellavalle, R. P., P. Walsh, A. Marchbank, T. E. Grayson, L. J. Su, E. R. Parker, **J. DeGregori**, K. Penheiter, M. Aszterbaum, E. H. Epstein Jr, and L. A. Lee. 2002. CUSP/p63 expression in basal cell carcinoma. Exp Dermatol 11:203-208.

36. Marchbank A, Su LJ, Walsh P, **DeGregori J**, Penheiter K, Grayson TB, Dellavalle RP, Lee LA (2003)**.** The CUSP DeltaNp63alpha isoform of human p63 is downregulated by solar-simulated ultraviolet radiation. J Dermatol Sci. 32:71-4.

37. Wan, Y.Y. and **J. DeGregori** (2003). The survival of antigen stimulated T cells requires NFκB mediated inhibition of p73 expression. Immunity 18, 331-342.

38. Li, F.X., J.W. Zhu, C. Hogan and **J. DeGregori** (2003). Defective gene expression, S phase progression and maturation during hematopoiesis in E2F1/E2F2 mutant mice. Mol. Cell. Biol, 23, 3607-3622.

39. DeRyckere, D., D. Mann and **J. DeGregori** (2003). The regulation of gene expression during thymic negative selection. J. Immunology, 171, 802-811.

40. Li, F.X., J.Z. Zhu, J.S. Tessem, J. Beilke, M. Varella-Garcia, J. Jensen, C.J. Hogan and **J. DeGregori** (2003). The development of diabetes in E2F1/E2F2 mutant mice reveals important roles for bone marrow derived cells in preventing islet destruction. Proc. Natl. Acad. Sci. USA 100, 12935-12940.

41. Chau, B. N., T-T. Chen, Y.Y. Wan, **J. DeGregori** and J.Y.J. Wang (2004). TNF-□-Induced Apoptosis Requires p73 and c-ABL Activation Downstream of RB Degradation. Mol. Cell. Biol., 24, 4438-4447.

42. Yamashita, M., M. Ukai-Tadenuma, T. Miyamoto, K. Sugaya, H. Hosokawa, A. Hasegawa, M. Kimura, M. Taniguchi, **J**. **DeGregori**, and T. Nakayama. (2004). Essential role of GATA3 for the maintenance of Th2 cytokine production and chromatin remodeling at the Th2 cytokine gene loci. J. Biol. Chem. 279:26983-90.

43. Miyamoto, T. T. Kaneko, M. Yamashita, Y. Tenda, M. Inami, A. Suzuki, S. Ishii, M. Kimura, K. Hashimoto, H. Shimada, H. Yahata, T. Ochiai, I. Saito, **J. DeGregori** and T. Nakayama.

(2005). Prolonged skin allograft survival by IL-10 gene-introduced CD4 T cell administration. Int Immunol. 17:759-68.

44. DeRyckere, D. and **J. DeGregori** (2005). E2F1 and E2F2 are differentially required for homeostasis-driven and antigen-induced T cell proliferation *in vivo.* J Immunology, 175:647-55.

45. Pappa A., D. Brown, Y. Koutalos, **J. DeGregori**, C. White, V. Vasiliou (2005). Human aldehyde dehydrogenase 3A1 (ALDH3A1) inhibits proliferation and promotes survival of human corneal epithelial cells. J. Biol. Chem. 280:27998-8006.

46. Bilousova G., A. Marusyk, C. Porter, R. Cardiff and **J. DeGregori** (2005). Impaired DNA replication in progenitor cell pools promotes leukemogenesis. PLoS Biology, 3(12):e401.

47. Shapiro, G., C. Van Peursem, D. Ornelles, J. Schaack, and **J. DeGregori** (2006) Recombinant adenoviral vectors can induce the expression of p73 via the E4-orf6/7 protein. J. Virology 80:5349-60.

48. Hoglinger, G., J. Breunig, C. Depboylu, C. Rouaux, P. Michel, D. Alvarez-Fischer, A. Boutillier, **J. DeGregori**, W. Oertel, P. Raki, E. Hirsch, S. Hunot. (2007) The pRb/E2F cell-cycle pathway mediates cell death in Parkinson's disease. Proc Natl Acad Sci USA. 104:3585-90.

49. Marusyk, A, L. Wheeler, C. Mathews and **J. DeGregori**. (2007) p53 mediates senescence-like arrest induced by chronic replicational stress. Mol. Cell. Biol. 27, 5336-5351.

50. Marusyk, A. and **J. DeGregori** (2007). Declining cellular fitness with age promotes cancer initiation by selecting for adaptive oncogenic mutations (Theory paper). BBA Reviews on Cancer 1785: 1-11.

51. Tessem, J.S., J.N. Jensen, H. Pelli, X-M. Dai, X-H. Zong, E.R. Stanley, J. Jensen, and **J. DeGregori** (2008)**.** Critical roles for macrophages in islet angiogenesis and maintenance during pancreatic degeneration. Diabetes, 57(6):1605-17.

52. Porter, C.P. and **J. DeGregori**. (2008) Interfering RNA-mediated purine analog resistance for *in vitro* and *in vivo* cell selection. Blood 112, 4466-4474.

53. Marusyk A, M. Casás-Selves, C. J. Henry, V. Zaberezhnyy, J. Klawitter, U. Christians and **J. DeGregori**. (2009) Irradiation alters selection for oncogenic mutations in hematopoietic progenitors. Cancer Research 69, 7262-7269.

54. Schlegel J, Redzic JS, Porter CC, Yurchenko V, Bukrinsky M, Armstrong GS, Zhang F, Isern NG, **DeGregori J**, Hodges R, Eisenmesser EZ. (2009) Solution characterization of the extracellular region of EMMPRIN/CD147 and its interaction with its enzyme ligand cyclophilin-A. J Mol Biol., 391(3):518-35.

55. Alvarez D. F., K. Helm, **J. DeGregori**, M. Roederer, S. Majka (2010). Publishing flow cytometry data. Am J Physiol Lung Cell Mol Physiol. 298:L127-30.

56. Marusyk A, C. Porter, V. Zaberezhnyy and **J. DeGregori** (2010). Irradiation selects for p53 deficient hematopoietic progenitors. PLoS Biology, 8:e1000324.

57. Le, O., F. Rodier, F. Fontaine, J-P. Coppe, J. Campisi, **J. DeGregori**, C. Laverdière, V. Kokta, E. Haddad and C. M. Beauséjour. Ionizing radiation-induced long-term expression of senescence markers in mice is independent of p53 and immune status. Aging Cell, 9, 398–409.

58. Gregory, M., T. Phang, P. Neviani, F. Alvarez-Calderon, V. Zaberezhnyy, R. Williams, T. O'Hare, C. Eide, B. Druker, D. Perrotti and **J. DeGregori**. Wnt/Ca^{2+}/NFAT signaling maintains survival of Ph^{+} leukemia cells upon inhibition of Bcr-Abl. Cancer Cell, 18, 74-87.

59. Bui, M.R., V. Hodson, T. King, D. Leopold, S. Dai, V. Fiolkoski, S. Oakes, R. Duke, D. Apelian, A. Franzusoff, and **J. DeGregori** (2010). Mutation Specific Control of BCR-ABL T315I Positive Leukemia with a Recombinant Yeast-Based Therapeutic Vaccine in a Murine Model. Vaccine, 28:6028-35.

60. Henry, C.J., A. Marusyk, B. Adane, V. Zaberezhnyy and **J. DeGregori** (2010). Declining lymphoid progenitor fitness promotes aging-associated leukemogenesis. Proc. Natl. Acad. Sci. USA, 107: 21713-21718.

61. Schaack, J., Bennett, M.L., Shapiro, G., **DeGregori, J**., McManaman, J.L, and Moorhead, J.W. (2011) Strong Foreign Promoters Contribute to Innate Inflammatory Responses Induced by Adenovirus Transducing Vectors. Virology, 28:6028-35.

62. Porter, C.C., D. Baturin, R. Choudhary and **J. DeGregori** (2011). The relative fitness of hematopoietic progenitors influences leukemia progression. Leukemia, 25:891-5.

63. **Porter, C.C**., J. Kim, S. Fosmire, C. M. Gearheart, A. van Linden, D. Baturin, V. Zaberezhnyy, P. R. Patel, D. Gao, A. C. Tan, and **J. DeGregori** (2011). Integrated genomic analyses identify WEE1 as a critical mediator of cell fate and novel therapeutic target in acute myeloid leukemia. Leukemia, 26:1266-76.

64. Bahmed K., C. Henry, M. Holliday, J. Redzic, M. Ciobanu, F. Zhang, C. Weekes, R. Sclafani, **J. DeGregori**, and E. Eisenmesser (2012). Extracellular cyclophilin-A stimulates ERK1/2 phosphorylation in a cell-dependent manner but broadly stimulates nuclear factor kappa B. Cancer Cell Int. 12:19.

65. Sullivan KD, Padilla-Just N, Henry RE, Porter CC, Kim J, Tentler JJ, Eckhardt SG, Tan AC, **DeGregori J**, Espinosa JM. (2012) ATM and MET kinases are synthetic lethal with nongenotoxic activation of p53. Nature Chem Biol, 8:646-54.

66. Casas-Selves M, Kim J, Zhang Z, Helfrich BA, Gao D, Porter CC, Scarborough HA, Bunn PA, Jr., Chan DC, Tan AC, **DeGregori J** (2012). Tankyrase and the canonical Wnt pathway protect lung cancer cells from EGFR inhibition. Cancer Res, 72:4154-64.

67. Singleton, K. R., Kim, J., Hinz, T. K., Marek, L. A., Casas-Selves, M., Hatheway, C., Tan, A. C., **DeGregori, J**., and Heasley, L. E. (2013). A Receptor Tyrosine Kinase Network Comprised of FGFRs, EGFR, ERBB2 and MET Drives Growth and Survival of Head and Neck Squamous Carcinoma Cell Lines. Molecular pharmacology, 83:882-93.

68. Spreafico, A., Tentler, J.J., Pitts, T.M., Tan, A.C., Gregory, M.A., Arcaroli, J.J., Klauck, P.J., McManus, M.C., Hansen, R.J., Kim, J., Micel, L.N., Selby, H.M., Newton, T.P., McPhillips, K.L., Gustafson, D.L., **DeGregori, J.V.**, Messersmith, W.A., Winn, R.A., Eckhardt, S.G. (2013). Rational Combination of a MEK Inhibitor, Selumetinib, and the Wnt/Calcium Pathway Modulator, Cyclosporin A, in Preclinical Models of Colorectal Cancer. Clinical Cancer Research *19*, 4149-4162.

69. Ostrow, S. L., Barshir, R., **DeGregori, J**., Yeger-Lotem, E., and Hershberg, R. (2014). Cancer evolution is associated with pervasive positive selection on globally expressed genes. PLoS Genetics 10, e1004239.

70. Wie SM, Adwan TS, **DeGregori J**, Anderson SM, and Reyland ME (2014). Inhibiting Tyrosine Phosphorylation of Protein Kinase Cδ (PKCδ) Protects the Salivary Gland from Radiation Damage. Oncogene, 289:10900-8.

71. Aghili L, Foo J, **DeGregori J**, De S. (2014) Patterns of somatically acquired amplifications and deletions in apparently normal tissues of ovarian cancer patients. Cell Reports, 7:1310-9.

72. Yang X, La Rosa FG, Genova EE, Huber K, Schaack J, **DeGregori J**, Serkova NJ, Li Y, Su LJ, Kessler E, Flaig TW. (2014) Simultaneous activation of Kras and inactivation of p53 induces soft tissue sarcoma and bladder urothelial hyperplasia. PLoS One. 2013 Sep 18;8:e74809.

73. Gardner, L.A., Klawitter, J., Gregory, M.A., Zaberezhnyy, V., Baturin, D., Pollyea, D.A., Takebe, N., Christians, U., Gore, L., **DeGregori, J**., and Porter, C.. (2014). Inhibition of calcineurin combined with dasatinib has direct and indirect anti-leukemia effects against BCR-ABL1(+) leukemia. American Journal of Hematology *89*, 896-903.

74. Rozhok, A.I., Salstrom, J.L., and **DeGregori, J**. (2014). Stochastic modeling indicates that aging and somatic evolution in the hematopoietic system are driven by non-cell-autonomous processes. Aging, 6(12):1033-48.

75. Alvarez-Calderon, F., Gregory, M.A., Pham-Danis, C., DeRyckere, D., Stevens, B.M., Zaberezhnyy, V., Hill, A.A., Gemta, L., Kumar, A., Kumar V, Wempe MF, Pollyea DA, Jordan CT, Serkova NJ, Graham DK and **DeGregori J**. (2015). Tyrosine kinase inhibition in

leukemia induces an altered metabolic state sensitive to mitochondrial perturbations. Clinical Cancer Research, 21(6):1360-72.

76. Fleenor, C.J., Rozhok, A.I., Zaberezhnyy, V., Mathew, D., Kim, J., Tan, A.C., Bernstein, I.D., and **DeGregori, J**. (2015). Contrasting Roles for C/EBPalpha and Notch in Irradiation-Induced Multipotent Hematopoietic Progenitor Cell Defects. Stem Cells, 33(4):1345-58.

77. Avasarala S, Van Scoyk M, Karuppusamy Rathinam MK, Zerayesus S, Zhao X, Zhang W, Pergande MR, Borgia JA, **DeGregori J**, Port JD, Winn RA, Bikkavilli RK. (2015) PRMT1 is a Novel Regulator of Epithelial-Mesenchymal-Transition in Non-Small Cell Lung Cancer. J Biol Chem. [Epub ahead of print] PMID: 25847239

78. Henry CJ, Sedjo RL, Rozhok A, Salstrom J, Ahnen D, Levin TR, D'Agostino R Jr, Haffner S, **DeGregori J**, Byers T. (2015). Lack of significant association between serum inflammatory cytokine profiles and the presence of colorectal adenoma. BMC Cancer, 15(1):1115.

79. Henry CJ, Casás-Selves M., Kim J, Zaberezhnyy V, Aghili L, Daniel AE, Jimenez L, Azam T, McNamee EN, Clambey ET, Klawitter J, Serkova NJ, Tan AC, Dinarello CA, and **DeGregori J**. (2015). Impairment of B-cell progenitor fitness by aging-associated inflammation promotes selection for adaptive oncogenic events. Journal of Clinical Investigations, 125(12):4666-80.

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RESEARCH GRANTS AND CONTRACTS (DIRECT COSTS)

Previous:

Title: Specific Role for E2F1 in Apoptosis.
Support period: August 1, 1997 to August 1, 1999. Amount: $100,000, direct only.
Supporting agency: **V Foundation for Cancer Research**.
15% Effort on project.
The major goals of this project are to define the underlying basis for transcriptional specificity among E2F family members and to characterize the role of E2F1 in lymphocyte apoptosis.
Principle Investigator: James DeGregori

Title: The role of E2F transcription factors and the mechanism of cyclin D1 overexpression in lung cancer cell proliferation.
Amount: $20,000.
5% Effort on project. Grant number: CA58-187.
Supporting agency: **Lung Cancer SPORE Development**, University of Colorado Cancer Center.
Support period: April 1, 1998 to April 1, 1999.
The goals of this project are characterize the deregulation of E2F and cyclin D activities in lung cancers.
Principle Investigators: Robert Sclafani and James DeGregori

HHMI Research Resources Program for Medical Schools New Faculty Start-Up Grant.
Amount: $100,000.
Grant number: MIH 76296 550.101.
Supporting agency: **Howard Hughes Medical Institute**.
Support period: January 1, 1998 to December 31, 1998.
Principle Investigator: James DeGregori
Project Number (Principal Investigator): James DeGregori

Source: **University of Colorado Cancer Center Seed Grants**
Title of Project (and/or Subproject): Role of E2F1 in Hematopoietic Malignancies
Dates of Approved/Proposed Project: 1/1/00 to 12/31/00
Annual Direct Costs / Percent Effort: $19,888 (5% effort)
The major goals of this project are to characterize the role of the E2F1 transcription factor in malignant progression in retroviral mouse models of erythroleukemia and T cell lymphoma.

Project Number (Principal Investigator): 1 F32 CA81678-01 (Deborah DeRyckere)
Source: **NIH**
Title of Project (and/or Subproject): E2F1 Regulated Genes Required for Apoptosis
Dates of Approved/Proposed Project: June 1, 1999 to May 31, 2001
Annual Direct Costs: $36,700 (postdoctoral salary).

Project Number (Principal Investigator): (James DeGregori)
Source: **Diabetes Endocrinology Research Center, Barbara Davis**

Title of Project (and/or Subproject): Non-cell autonomous control of β islet cell maintenance.
Dates of Approved/Proposed Project: April 1, 2002 to March 31, 2003
Total Direct Costs / Percent Effort: $45,000. (15% effort).
The goal of this project is to characterize non-cell autonomous roles for E2F transcription factors in supporting pancreatic β islet maintenance, with an emphasis on roles for hematopoietic cells.

Project Number (Principal Investigator): 1PO1 DE12798-01A1 /David Quissell
Source: **NIH NICDR**
Title of Project (and/or Subproject): Molecular Mechanisms of Salivary Acinar Cell Apoptosis
Subproject: The Role of Cell Cycle Regulation in Acinar Cell Death
Dates of Approved/Proposed Project: 12/01/99-11/30/2004
Annual Direct Costs / Percent Effort: $113,211/5% effort
The major goals of this project are to characterize the role of cyclin E/cdk2 activation in DNA damage and Fas ligand mediated programmed cell death in secretory epithelial cells. The effects of p27kip1 loss on cellular susceptibility to diverse death stimuli will be assessed.
5% time and effort for J. DeGregori.

Project Number (Principal Investigator): RSG-01-082-01-LIB (James DeGregori)
Source: **American Cancer Society**
Title of Project (and/or Subproject): Redundant roles for E2F and p53 proteins in T cell fate and tumorigenesis.
Dates of Approved/Proposed Project: January 1, 2001 to December 31, 2004
Total Direct Costs / Percent Effort: $657,000. (15% effort). 2001: $161,609 ($130,487 direct)
The goal of this project is to characterize the role of the E2F1-ARF-p53 pathway in T cell apoptosis induced by antigen, chemotherapies or radiation therapies and in malignant progression.

Project Number (Principal Investigator): James DeGregori
Source: **Leukemia Society of America**
Title of Project (and/or Subproject): The Role of the E2F1-ARF-p53 Tumor Suppressor Pathway in T Cell Apoptosis
Dates of Approved/Proposed Project: July 1, 2000 to July 1, 2005
Annual Direct Costs / Percent Effort: $500,000 (Scholar Award; all for PI salary). (10% effort); $100,000/yr ($95,000 direct).
The goal of this project is to characterize the role of the E2F1-ARF-p53 pathway in T cell apoptosis during negative selection and in malignant progression in retroviral mouse models of erythroleukemia and T cell lymphoma

Project Number (Principal Investigator): R21 DK063299-01 (James DeGregori)
Source: **NIH/NIDDK**
Title of Project (and/or Subproject): Non-cell autonomous control of beta islet cell maintenance.
Dates of Approved/Proposed Project: July 1, 2003 to June 30, 2005
Requested Annual Direct Costs / Percent Effort: $75,000 /15% effort

The major goals of this project are to characterize the mechanism whereby wild-type bone marrow derived cells prevent β islet loss in E2F1-/-E2F2-/- mice and to identify the bone marrow derived cell types that contribute to islet maintenance and prevention of diabetes.

Project Number (Principal Investigator): RSG-01-082-01-LIB (James DeGregori)
Source: **American Cancer Society**
Title of Project (and/or Subproject): Poor Competition in Hematopoietic Progenitor Pools Favors Tumorigenesis.
Dates of Approved Project: July 1, 2005 to December 31, 2005 (Bridge Award)
Total Direct Costs / Percent Effort: $75,000. (15% effort).
The goal of this project are 1) Testing whether oncogene expression provides a competitive advantage to E2F mutant hematopoietic progenitors, contributing to enhanced tumorigenesis. 2) Testing whether dNTP restriction creates a poorly competitive blood progenitor pool that favors the competitive expansion and tumorigenicity of oncogene expressing cells. As this renewal grant was not renewed but received an "outstanding" score, a bridge award of $75,000 for six months was awarded.

Project Number (Principal Investigator): 1 RO1 CA77314-09 (James DeGregori)
Source: **NIH/NCI**
Title of Project (and/or Subproject): Specific Roles for E2F Family Members
Dates of Approved/Proposed Project: March 1, 2003 to February 28, 2008
Annual Direct Costs / Percent Effort: $170,888 direct for 2005-2006/35% effort
The major goals of this project are the isolation of additional E2F target genes, the characterization of the mechanism underlying transcriptional specificity among the E2F family, and the characterization of the role of E2Fs in hematopoiesis and T cell proliferation.

Project Number (Principal Investigator): 05B088 (James DeGregori)
Source: **AICR**
Title of Project: A mouse model to understand connections between dietary folate deficiency and leukemogenesis.
Dates of Proposed Project: January 31, 2006 to January 31, 2008
Annual Direct Costs / Percent Effort: $47,000 direct for 2006-2007/10% effort
Specific aims: Specific aims: 1) Analysis of the contributions of folate pathway deficiencies towards myeloid or lymphoid leukemogenesis. 2) Exploring the mechanisms underlying leukemia promotion by folate deficiency.

Project Number (Principal Investigator): P20-CA103680-03 (Bayer and Schwartz)
Source: **NIH (NCI and NIA)**
Title of Project: UCCC Program on Aging and Cancer
Pilot Project (PI: James DeGregori): Testing whether aged hematopoiesis increases the selective advantage conferred by expression of Bcr-Abl.
Dates of Project: Feb 1, 2006 to Jan 31, 2008
Annual Direct Costs / Percent Effort: $29,000 direct /10% effort
Specific aims: 1) To determine whether Bcr-Abl confers a stronger proliferative advantage in aged relative to young hematopoietic progenitor cells ex vivo. 2) To determine whether an aged

hematopoietic system promotes the competitive expansion of Bcr-Abl expressing stem/progenitor cells *in vivo*.

Project Number (Principal Investigator): CO-#253424-v2 (James DeGregori)
Source: **GlobeImmune**
Title of Project (and/or Subproject): TAME-based therapy for the prevention of Gleevec escape mutants in Bcr-Abl induced CML.
Dates of Approved/Proposed Project: 6/1/06 – 12/31/08
Requested Annual Direct Costs / Percent Effort: $62,660/7% effort
The goal of this study is to establish whether a yeast based vaccine against epitopes in the Bcr-Abl leukemic fusion protein specific for Gleevec escape mutants can prevent the development of resistance during Gleevec treatment of chronic myelogenous leukemia (CML).

Project Number: N/A (Mark Gregory and James DeGregori, Principal Investigator)
Source: **Cancer League of Colorado**
Title of Project: Targeting Wnt pathway components in combination with Bcr-Abl inhibition for the treatment of chronic myeloid leukemia
Dates of Approved Project: 7/1/07-6/30/08
Annual Direct Costs / Percent Effort: $29,680/50% effort
The major goals of this project are to determine if inhibition of the noncanonical Wnt pathway genes enhances CML cell killing by imatinib *in vitro* and *in vivo* utilizing shRNAs and chemical inhibitors.

Project Number: (Paul Bunn, Principal Investigator of Spore; J. DeGregori is PI of Pilot Project)
Source: **NIH Lung Cancer Spore to Cancer Center**
Title of Pilot Project: Genome-wide screen to identify therapeutic targets that synergize with gefitinib to treat NSCLC.
Dates of Approved Project: 08/01/2008 – 07/31/2009
Annual Direct Costs / Percent Effort: $45,866 direct for 2008-2009/0.6 calender months.
The major goal of the overall project is to establish a Specialized Program in Research Excellence (SPORE; 05/01/2008 – 04/30/2013) in Lung Cancer to expand our understanding of the biology of lung cancer, to find new methods of diagnosis, prevention and treatment and to serve as a regional, national and international resource for the study of lung cancer. The major goal of this 1 year Pilot Project to DeGregori is to perform an unbiased genome-wide RNAi screen to identify gene targets that, when inhibited, cooperate with the EGFR inhibitor gefitinib in killing NSCLC cells.

Project Number: (James DeGregori, Principal Investigator)
Source: **Milheim Foundation**
Title of Project: Identification of novel drug targets involved in splicing for treatment of Ph+ leukemias.
Dates of Approved Project: 07/01/2008 – 06/30/2009
Annual Direct Costs / Percent Effort: $10,000 direct for 2008-2009/0.5 calender months.
The major goal is to test whether targeting specific genes whose products normally control splicing can enhance the elimination CML and ALL cells and lead to complete eradication of the disease.

Project Number (Principal Investigator): 5T32 GM08730-07 (James DeGregori)

Source: **NIH**
Title of Project: Predoctoral Training in Molecular Biology.
Dates of Proposed Project: July 1, 2004 to June 3, 2009
Annual Direct Costs / Percent Effort: $168,640 direct for 2005-2006/9% effort
This is a training grant for Ph.D. pre-doctoral students. There are no research funds. The grant supports stipends of four students, and provides partial administrative support.

Project Number (Principal Investigator): RO1 CA109657 (James DeGregori)
Source: **NIH/NCI**
Title of Project: Poor competition in hematopoietic stem/progenitor pools favors tumorigenesis.
Dates of Approved/Proposed Project: 9/13/05 to 6/30/11
Annual Direct Costs / Percent Effort: $154,287 direct for 2006-2007/25% effort.
Goals: 1) We will test whether impaired proliferation of hematopoietic progenitors due to mutations in E2Fs or thymidylate synthase promotes the competitive expansion and tumorigenesis of Bcr-Abl or E2a-Hlf expressing progenitors. 2) We will test whether chemotherapeutic mediated dNTP restriction creates poorly competitive progenitor pools that favor the expansion and leukemogenicity of oncogene expressing cells.

Project Number: 1R21CA137262-01 (James DeGregori, Principal Investigator)
Source: **NIH/NCI**
Title of Project: Diet-Induced Adaptive Leukemogenesis: Bcr-Abl dependent upregulation of folate receptor and leukemic promotion during dietary folate deficiency.
Dates of Approved Project: Mar 1, 2009 to Feb 28, 2011
Annual Direct Costs / Percent Effort: $125,000 direct for 2009-20010/2 calender months.
Goals: 1) Exploring how Bcr-Abl upregulates folate receptor (FR) expression and promotes adaptation to reduced dietary folate. 2) Determine the importance of folate receptor upregulation and other effector functions for enhanced Bcr-Abl dependent leukemogenesis during folate deficiency. 3) Characterize how a low folate diet and/or Bcr-Abl expression alters gene expression profiles in B cell progenitors.

P50 CA058187 (Bunn) 10/01/10 – 9/30/11 0.6 calendar
NIH/NCI $25,000
SPORE in Lung Cancer Pilot Project: Development of novel high-throughput approaches to validate and screen for genes and pathways whose inhibition potentiates gefitinib efficacy for NSCLC
Goals: to develop high throughput methods to identify genes and pathways whose inhibition potentiates gefitinib action *in vitro* and *in vivo*, which will be critical for facilitating a more timely focus on targets with greater clinical potential.

108692 (DeGregori) 10/1/2008 – 9/30/2011 3.0 Calendar
Leukemia Lymphoma Society $178,119
Development of Mechanism Based Combination Therapies for Bcr-Abl+ leukemias
The goal of this study is to further analyze Wnt/calcium pathway components to determine the mechanism of synergy with imatinib in killing leukemia cells both *in vitro* and in a mouse model of human Bcr-Abl^{+} leukemias.

P30 CA046934 (Theodorescu) 02/01/2006 to 01/31/2012 0 calendar months
NIH/NCI $50,000
Cancer Center Support Grant – Pilot project: Implementation and refinement of high throughput functional genomic screening (project dates: 10/01/10 – 9/30/11); co-supported by Golfers Against Cancer.
Goals: to develop high throughput methods to identify genes and pathways whose inhibition potentiates AML cell elimination upon FLT3 inhibition in vitro, in order to facilitate a more timely focus on targets with greater clinical potential.

SEML-8KURN3 (DeGregori) 04/01/2012 - 12/01/2012 0.1 calendar
AstraZeneca $ 50,000
Targeting CK2 to potentiate NSCLC killing by EGFR inhibition
The goal of these studies is to test whether combined inhibition of CK2 and EGFR, using AstraZeneca drugs gefitinib and AZ285, will potentiate the elimination of NSCLC in mouse models.

2510226 (DeGregori) 12/01/10-11/30/12
1.0 calendar
United Against Lung Cancer $50,000
Manipulating cytokine-dependent signaling to sensitize NSCLC cells to EGFR inhibition.
The proposed studies should lead to the characterization of a cytokine dependent pathway that maintains NSCLC survival during EGFR inhibition.

Not assigned (Porter) 2/25/2011-8/29/2012 0 Calendar
Leukemia Lymphoma Society $95,137
Therapy Acceleration Program Research Agreement: Exploiting Synergy in Chronic Myelogenous Leukemia: A Phase Ib Evaluation of Dasatinib plus Cyclosporine in patients with Bcr-Abl+ leukemia (ESCAPE1b)
The major goals of this clinical trial are document the safety, tolerability and pharmacokinetics of combining dasatinib and cyclosporine for patients with Bcr-Abl+ leukemia. *This grant supported the Phase 1b clinical trial. (*NCT01426334*)*

P50 CA058187 (Bunn) 07/30/2008 – 4/30/2013 1.2 calendar
NIH/NCI $189,372 for Project 2
SPORE in Lung Cancer (role for DeGregori; co-leader, Project 2): Improving outcomes from EGFR specific TKIs using rational combinations.
Goals: 1) Pre-clinically and clinically evaluate the roles for FGFRs in innate resistance to EGFR TKI including the development of biomarkers and conduct of a Phase 1/1b clinical trials, 2) Determine optimal biomarkers for and the clinical efficacy in a Phase I/Ib clinical trial of combining EGFR TKI with tankyrase inhibitors for treatment of NSCLC, and 3) Determine biomarkers and establish the pre-clinical efficacy of combining EGFR TKI with CK2 inhibitors for treatment of NSCLC.

R6159-12 (DeGregori) 10/1/2011 – 9/30/2013 2.15
Calendar
Leukemia Lymphoma Society $178,934
Continued development of rational combination therapies for Ph^+ leukemias
Proposed aims will 1) support our ongoing LLS-funded Phase I clinical trial by providing further insight into pharmacokinetic interactions of cyclosporine-A (CsA) and dasatinib, as well as impacts of the combination strategy on leukemia initiating cells, central nervous system (CNS) disease and immune function, and 2) provide pre-clinical evaluation of an unexpected but promising treatment strategy: inhibition of mitochondrial metabolism together with Bcr-Abl inhibition.

not assigned (DeGregori) 11/01/2012 – 10/31/2013 0.24
calendar
Golfers Against Cancer $49,000
Better maintenance of stem cell fitness to limit radiation-induced oncogenesis.
This seed grant will fund a high-throughput screen to identify initial compounds that can decrease Nrf2 activation and increase Notch-expressing stem cell maintenance in hematopoietic stem and progenitor cultures from previously irradiated mice.

6160-12 (DeGregori) 10/1/2011 – 9/30/2014 1.8
Calendar
Leukemia Lymphoma Society $ 179,483
Inhibiting ATM/ATR pathways to potentiate AML elimination by targeting FLT3
The ultimate goal of these studies will be the development of novel combination therapies to more effectively treat FLT3-dependent AML.

209227 (DeGregori) 08/01/2013 - 7/31/2015 (1 calendar)
AICR $74,918
Linking dietary folate, tissue fitness and cancer.
The goal for this proposal is to establish mechanistic links between diets either high or low in folates with hematopoietic progenitor cell fitness and leukemogenesis.

Not assigned (DeGregori) 05/01/2013 - 4/30/2015 0.42 calendar
Linda Crnic Institute $100,000
Defining how adaptive hematopoietic landscapes contribute to increased leukemogenesis in Down Syndrome individuals.
The goal of this project will be to determine whether deficiencies in blood cell production originate in the reduced function of blood stem cells. Furthermore, we will ask whether the increase in leukemias associated with Down Syndrome is actually caused by the stem cell defects.

I-14-83 CTSA Independent Faculty Award (DeGregori) 3/5/2015 - 3/5/2016 0.12 calendar
NIH (CTSA) $60,000
Analyzing changes in human hematopoietic mutational landscapes with age.
By deep sequencing of select genomic regions of blood cells of humans of different ages, we will determine the mutations present in blood stem cells, and we will query both cancer-causing and "neutral" regions of the genome, identifying mutations that might be present in even a single

contributing blood stem cell. We will use these data to obtain the first ever characterization of how patterns and rates of accumulation of mutations vary with age in populations of healthy stem cells.

5T32 GM08730-11 (DeGregori was PI; transferred to R. Sclafani in 2016)
07/01/2015 – 07/30/2020 0.5 Calendar
NIH $168,640
Predoctoral training in molecular biology
Supports the Molecular Biology Training Program (6 students/year).

R01CA157850 (DeGregori) 9/26/2011 - 7/31/2016
3 calendar
NIH (NCI) $207,000
Rationally designed targeted therapeutic approaches for NSCLC.
The goal for this proposal is to identify novel combination therapies for NSCLC using genome-wide shRNA screens.

1R21CA179501-01 (DeGregori) 12/152014 - 12/14/2016 1 calendar
NIH (NCI) $150,000
Nrf2-mediated impaired hematopoietic stem cell fitness following irradiation.
The goal is to determine how irradiation contributes to reduced hematopoietic stem cell fitness, leading to increased oncogenesis.

AWD-163425-JD (DeGregori) 07/01/2016 – 06/30/2017 0.12 calendar
Cancer League of Colorado $30,000
Examining oncogenic clonal expansion in the context of aging
The goals of this grant are to characterize age-dependent changes to the lung microenvironment and determine how age-related inflammation impacts selection for oncogenically-initiated cells.

AWD-430131 (DeGregori) 10/01/2016 – 09/30/2017 0.96 calendar
St. Baldrick's Foundation $100,000
Targeting MCJ/DNAJC15 and the mitochondrial electron transport chain in AML
The goal of this proposal is to demonstrate that MCJ agonistic peptides synergize with FLT3 inhibitors in the treatment of AML in vitro and in mouse models, and to understand the underlying molecular mechanism, with the long-term goal of developing therapies to improve outcomes for AML patients.

AWD-173567-JD (DeGregori) 07/01/2017 – 06/30/2018 0.12 calendar
Cancer League of Colorado $30,000
Understanding how smoking alters selection for common oncogenic mutations in the genesis of lung cancer
The goal of this proposal is to determine the contributions of the cigarette induced changes in lung tissue towards selection for PTEN deletion, an event common in squamous cell carcinoma of the lung.

P30CA046934 (PI: D. Theodorescu) 03/01/2012 – 01/31/2017 0.9 calendar
NIH / NCI $181,964 (provides 10% support for DeGregori salary)
Cancer Center Core Grant – Program Leaders
Role: Program Co-Leader of the Molecular Oncology Program
Major Goals: Advance translational and scientific interactions and collaborations in the treatment of cancer

1R01CA180175-01 (DeGregori) 09/01/2013 - 6/30/2019
NIH (NCI) $207,000
Aging-associated alterations in adaptive landscapes and the evolution of leukemias.
The goal is to determine how age associated changes in hematopoiesis, including declining B-lymphopoiesis and increased inflammation, contribute to increased frequencies of hematopoietic malignancies.

T2016-012 (DeGregori) 10/01/2016 – 09/30/2019 0.84 calendar
V Foundation $181,818
Exploring and exploiting metabolic dependencies in AML
Goals will be to 1) Determine how FLT3 and ATM/PPP inhibition impact glutamine uptake and metabolism. FLT3 inhibition results in severe reductions in glutamine uptake by AML cells, leading to similar reductions in glutaminolysis and glutathione synthesis. 2) Evaluate the activity of redox-modulating drugs in combination with inhibition of FLT3 or glutamine metabolism in AML cells in vitro and in vivo.

P50 CA058187 (Bunn) 07/30/2014 – 4/30/2019 1.2 calendar
NIH/NCI $189,372 for Project 2
SPORE in Lung Cancer (role for DeGregori; co-leader, Project 2): Improving outcomes from EGFR specific TKIs using rational combinations.
Goals: 1) Pre-clinically and clinically evaluate the roles for FGFRs in innate resistance to EGFR TKI including the development of biomarkers and conduct of a Phase 1/1b clinical trials, 2) Determine optimal biomarkers for and the clinical efficacy in a Phase I/Ib clinical trial of combining EGFR TKI with tankyrase inhibitors for treatment of NSCLC, and 3) Determine biomarkers and establish the pre-clinical efficacy of combining EGFR TKI with CK2 inhibitors for treatment of NSCLC.

R21 CA223439 (DeGregori) 06/01/2018 - 05/30/2020 0.96 calendar
NIH (NCI) $125,000
Targeting MCJ/DNAJC15 and the mitochondrial electron transport chain in acute myeloid leukemia.
These studies would extend those initiated with St. Baldrick's funding to develop mouse models of primary human leukemias, in order to determine whether co-treatment with MCJ agonists and FLT3 inhibitors can lead to more durable remissions for AML. These studies will also explore underlying mechanisms for synergy.

R01 CA190170-Supplement (Thorburn) 11/01/2018 - 10/31/2019 0.1 calendar

NIH (NCI) $66,660
Therapeutic targeting of autophagy-dependent cancer.
These studies will extend research proposed in this R01 to determine how autophagy contributes to tumor suppression in the context of aging.

U01CA236787-01 (DeGregori) 04/01/2019 - 03/31/2021 0.96 calendar
NIH (NIA) $75,000
Understanding and circumventing aging-dependent changes in the bone marrow microenvironment that promote leukemogenesis.
The goal is to determine how changes in bone marrow microenvironments impact leukemogenesis and to develop new prevention and treatment interventions through modulation of the tissue landscape.

Supplement P30CA046934 (R. Schulick) 1.20 calendar (UCD)
08/01/2019 – 07/31/2020 $296,865 0.70 calendar Total Professional
Project leaders: DeGregori and Pietras
NIH/NCI
INCLUDE Supplement- Cancer Center Core Grant
The goal of this supplement to the UCCC Cancer Center Support Grant (CCSG) is to test the paradigm-shifting hypothesis that hyperactive IFN signaling is a main driver of the differential malignancy spectrum observed in people with DS.

18-90-52-DEGR (multi-PI: DeGregori; Bruno) 07/01/2018 - 06/30/2021 2.4 calendar
AACR $ 488,168
Microenvironment-mediated Clonal Evolution and Risk of Lung Adenocarcinoma.
We will characterize changes in clonal evolution in the peripheral lung field indicative of field cancerization, and determine how changes in the immune/inflammatory peripheral lung landscape influences clonal evolution and cancer progression.

Swanton/DeGregori 0.12 calendar (UCD)
12/01/2021 – 11/30/2022 0.07 Total Professional Responsibilities
Mark Foundation. $121,000 (to DeGregori lab)
Environmental EXPosures And Normal tissue Somatic Evolution (EXPANSE)
Major Goals: to determine whether environmental exposures, such as air pollution, which are risk factors for developing lung cancer, drive the differential clonal expansion of mutant cells, through tissue remodeling to elevate the risk of cancer development.

7020-19 (Jordan) 10/01/2018 – 9/30/2023 1.80 calendar
Leukemia and Lymphoma Society $223,616 for Project 3
SCOR: Therapeutic Targeting of AML Stem Cells (role for DeGregori; co-leader, Project 3):
Extrinsic factors that mediate LSC drug sensitivity/resistance.
Goals: The objective of this project is to identify and characterize the extrinsic signals that mediate drug resistance and evolution of AML stem cells.

R01DK119394 (Pietras) 12/01/2018 – 11/30/2023 0.80 calendar

NIH/NIDDK $280,000
Impact of IL-1 signaling on hematopoietic stem cell function and emergence of clonal hematopoiesis
The goal of this project is to better understand how interleukin-1 (IL-1) impacts hematopoiesis and clonal hematopoiesis.

1 I01 BX004495-01 (DeGregori) 4/01/2019 - 3/31/2024 (NCE) 7.5 calendar
VA $ 295,985
Dissecting the Role of Inflammation in Smoking and Aging Associated Lung Cancers.
1) Determine how contexts associated with increased lung cancer risk, such as smoking or old age, impact oncogenesis through immune dysregulation. 2) Analyze the impact of the prostacyclin iloprost on the lung microenvironment and somatic evolution using biopsies from the Phase II iloprost trial.

R01AG067584-07 (DeGregori) 10/01/2019 - 09/30/2024 2.04 calendar
NIH (NIA) $250,000
Determining how aging-associated changes in the microenvironment contribute to leukemogenesis.
The goal is to determine how age associated changes in hematopoiesis and the bone marrow microenvironment contribute to increased frequencies of leukemias.

R01HD103828 (MPI- DeGregori/Thorburn) 09-01-2020 08-31-2024 1.80 calendar
NIH $417,150
Down syndrome as a systemic autophagy deficiency disorder
The goal of this project will be to determine the extent to which variable deficiencies in autophagic flux in individuals with Down Syndrome contribute to increased incidence of clonal hematopoiesis as well as increased disease incidence.

Active:

P30CA046934 (PI: Schulick) 03/01/2012 – 01/31/2017 1.2 calendar
NIH / NCI $209,112 (provides 15% support for DeGregori salary)
Cancer Center Core Grant – Associate Directors
Role: Deputy Director
Major Goals: Advance translational and scientific interactions and collaborations in the treatment of cancer

R01AG066544-02 (DeGregori) 01/01/2020 – 11/30/2025 (NCE) 0.4 calendar
NIH (NIA) $153,396
Aged tissue environments as drivers of oncogenic adaptation in hematopoiesis.
The goal is to better understand how inflammation contributes to the selection of core proliferation and differentiation altering events in hematopoietic stem and progenitor cells, and the development of interventions to prevent such selection.

Subcontract 0255-2675-4609
R01CA109182-18 (Aguirre-Ghiso) 0.18 calendar (UCD)
07/01/2021 – 06/30/2026 0.11 Total Professional Responsibilities
NIH (NCI). $41,001 for DeGregori lab
Functional determinants of metastatic dormancy
Goals: Proposed studies will determine how primary metastatic lesions (early or late) may pre-program dormant cancer cells for dormancy in defined target organ niches which further reinforce dormancy *via* specific cues, which may be affected by aging.

U01 CA271830-01 (MPI: Li and DeGregori) 0.91 calendar (UCD)
12/01/2021– 11/30/2026 0.53 Total Professional Responsibilities
NIH $299,999
Impact of aging and clonal hematopoiesis on epigenetic heterogeneity, evolvability, and leukemogenesis
We will elucidate how aging and CH influence the *propensity* of blood stem cells to adapt to altered environments ("evolvability"), which could not only forge a new paradigm for our understanding of leukemia onset but also provide candidate pathways for the development of preventative interventions.

R01CA150925 (DeGregori) 1.80 calendar (UCD)
05/01/2021 – 04/30/2025 1.05 Total Professional Responsibilities
NIH $232,626
Autophagy regulation of apoptosis and necroptosis within cell populations
Major Goals: to test whether cell-to-cell variation in autophagic flux underlies the sensitivity of cells to different cell death stimuli mediated by apoptosis or necroptosis.

7033-24 (PI- Jordan; Project 3 Leader – DeGregori) 1.8 calendar
10/01/2023 – 09/30/2028
Leukemia and Lymphoma Society $294,118/yr for Project 3
SCOR: Therapeutic targeting of AML stem cells (role for DeGregori: co-leader, Project 3: Therapeutic targeting of FLT3 mutant LSCs via disruption of microenvironment interactions.
Goals: The objective of this project is to characterize and target mechanisms of AML resistance to FLT3 targeted therapies, including in a clinical trial.

REVIEW AND REFEREE ACTIVITY

Ad Hoc Reviewer:
Hematopoiesis/Immunity and Leukemia journals: Journal of Immunology, Blood, Haematologica, Leukemia, Immunity, Stem Cells

Cancer journals: Molecular Cancer Research, Clinical Cancer Research, Cancer Research, Cancer Discovery, Cancer Cell, Cancer Letters, Oncogene, Nature Reviews Cancer, Trends in Cancer, BBA Review on Cancer

Evolution Journals: Nature Ecology and Evolution, Evolution, Evolutionary Applications, Ecology Letters, BMC Evolutionary Biology, Biological Reviews, Philosophical Transactions of the Royal Society, Proceedings of the Royal Society B, Journal of the Royal Society Interface, Heredity

General journals and others: Nature, Nature Cell Biology, Nature Genetics, Nature Communications, PLoS Genetics, PLoS Biology, PLoS One, Molecular and Cellular Biology, Nucleic Acids Research, EMBO, EMBO Reports, Genes and Development, Biotechniques, Journal of Biological Chemistry, eLife, Science, Science Translational Medicine, PNAS, Developmental Cell, Journal of Clinical Investigations, Molecular Biology of the Cell, Trends in Molecular Medicine

Grant review committees (external only):

1999-2004	NRSA Fellowships Immunobiology NIH Study Section (ZRG1 IMB; Ad Hoc)
1999-2000	ACS IRG/ University of Colorado Cancer Center Seed Grant Review
2000	Ad Hoc Reviewer, NIEHS Special Emphasis Panel: RFA ES00-005, Comparative Mouse Genomics Centers Consortium.
2001,2003	Member, Scientific Advisory Board, Cancer League of Colorado
2002	Chairman, Scientific Advisory Board, Cancer League of Colorado
since 2002	Ad Hoc, NCI PO1 Review Group NCI-C GRB (G1).
2002-2005	Ad Hoc, Subcommittee C, Basic and Preclinical NCI Initial Review Group (May and December meetings).
2005-2009	Member, NIH Cellular and Molecular Immunology (CMI)-B Integrated Review Group
2005	Ad Hoc Reviewer, Medical Research Council
2005	Ad Hoc Reviewer, Science Foundation Ireland
2006	Reviewer, HHMI Med Into Grad Initiative
2006	Ad Hoc Reviewer, Israel Science Foundation
2006-2009	Member, HHMI Med Review Panel
2007	Ad Hoc Reviewer, Association for International Cancer
2009	Reviewer, DOD Blood Cancer Panel
2009	Reviewer, NIH ARRA-GO Grant Panel (RC2)
2006-2009	Associate Editor, Cell Division
2009	Member, AACR Carcinogenesis Subcommittee for 2010 Program
2010	Member, AACR Carcinogenesis Subcommittee for 2011 Program
2010	Ad Hoc Reviewer, NIH CMI-B Integrated Review Group
2010-2013	Reviewer, Florida Department of Health's James and Esther King Biomedical Research Program and Bankhead Coley Cancer Research Program
2011-present	Reviewer, AIRC (Associazione Italiana per la Ricerca sul Cancro; Italian Association for Cancer Research)
2011	Ad Hoc Reviewer, NHS Greater Glasgow & Clyde Research Endowment Fund Committee

2011-2015	Member, NIGMS Training and Workforce Development Subcommittee (TWD-A)
2012-2014	External Advisor, NCI T32, University of Texas MD Anderson Cancer Center, Science Park-Research Division
2012	External Reviewer, University of North Carolina, Curriculum in Genetics and Molecular Biology
2013-present	Member, Editorial Board of Molecular Cancer Research
2014	Ad hoc reviewer, Leukaemia & Lymphoma Research
2015-2016	Reviewer, Linda Crnic Institute for Down Syndrome
2014,2015	Mail reviewer, NCI Transformative Research Awards (TR01)
2015	NCI Review Panel Member, RAS Program (IMAT RFA CA14-314)
2016	Member, Leukemia and Lymphoma Society Career Development Program Review Panel
2017	Member, St. Baldrick's Career Development Award Review Committee
2017	Ad hoc reviewer, National Medical Research Council (NMRC), Singapore
2017	Ad hoc reviewer, Henry Ford Cancer Institute Early Career Investigator Award
2017-2018	Member, 2018 AACR Basic Cancer Research Grants Scientific Review Committee
2018	Reviewer, NSERC Discovery Grants (Canada)
2018	Reviewer, French National Research Agency (ANR) 2018
2018	Reviewer, Breast Cancer Now (UK) 2018
2018	Reviewer, Leukemia and Lymphoma Society, Screen-to-Lead Program
2019	Ad Hoc, NCI NIH Oncological Sciences Fellowship Study Section
2019	Reviewer, Swiss National Science Foundation
2019	Reviewer, Dutch Cancer Society (KWF Kankerbestrijding)
2019	Reviewer, Dutch Research Council (NWO)
2019	Reviewer, DOD CDMRP PRCRP
2019	Ad Hoc Reviewer, Cancer Research UK
2020	Reviewer, NCI/P01 review study section
2020	Reviewer, National Science Centre Poland
2020	Reviewer, NIH Tumor Microenvironment (TME) study section
2020	Reviewer, VA ORD SPLP Virtual Review of LPOP
2021	Reviewer, NIH/NCI Panel Mammalian Models for Translational Research
2022	Reviewer, NIH/NCI Panel Mammalian Models for Translational Research
2022	Ad Hoc Reviewer, Blood Cancer UK
2023	Reviewer (ad hoc), ZGM1 TWD-B (MK) Review Study Section for K99 Mosaic Applications
2024	Reviewer, PROMINENT team, Cancer Grand Challenges (NCI/CRUK), London, March 2024
2024	Reviewer (ad hoc), MCT-A Review Study Section (R01/R21)

Grant review committees (University of Colorado Medical Campus): Golfers Against Cancer (every few years), PreK Mock Study Section (every few years)

INVITED PRESENTATIONS (External)

Seminar, Department of Biochemistry, Fort Collins, CO; March 23, 1997

Seminar, Department of Biochemistry, University of Colorado at Boulder, February 3, 1999

Seminar, Department of Cancer Biology, Sunnybrook Health Science Centre, University of Toronto, March 31, 1999

Seminar, Department of Immunology, Scripps Research Institute, LaJolla, CA, May 27, 1999

Seminar, Department of Immunology, National Jewish Hospital, Denver, CO, Oct. 13, 1999

Seminar, AMC Cancer Center, Denver, CO, Oct. 25, 1999

Seminar, Department of Genetics, Duke University, Durham, NC, Oct. 12, 2000

Platform presentation: Cold Spring Harbor Laboratory Symposium: Cancer Genetics and Tumor Suppressor Genes, August 2000.

Seminar, University of Texas MD Anderson Cancer Center, Science Park Research Division, Oct. 23, 2000

Speaker: Gordon Conference: Pathways in Cell Proliferation and Differentiation, July 2001.

Seminar, AMC Cancer Center, Denver, CO, March 21, 2002

Platform presentation: Cold Spring Harbor Laboratory Symposium: Cancer Genetics and Tumor Suppressor Genes, August 2002.

Speaker: Western Regional Islet Study Group meeting, Victoria B.C., September 2002.

Speaker: International Society for Translational Research, The Cell Cycle as a Target in Chemoprevention and Cancer Therapy Conference, Austin, TX, October 2002.

Seminar, Columbia University, New York, October 8, 2002.

Seminar, University of Cincinnati, Cincinnati, March 2003.

Speaker: Gordon Conference: Pathways in Cell Proliferation and Differentiation, July 2003.

Seminar, Fred Hutchinson Cancer Research Center, Seattle, WA, September 2003.

Speaker: Western Regional Islet Study Group meeting, Seattle, WA, September 2003.

Seminar, Vanderbilt School of Medicine, Nashville, TN, December 2003.

Seminar, Oregon State University, Corvalis, OR, April 2004.

Speaker, The Second p73/p63 International Workshop, Rome, March 2004

Seminar, Manitoba Institute of Cell Biology, University of Manitoba, June 2005

Seminar, University of Houston, Houston, September 2006

Seminar, Baylor College of Medicine, Houston, September 2006

Seminar, University of Texas Health Sciences Center, San Antonio, September 2006

Speaker, Stem Cell Clonality and Genotoxicity Retreat, Orlando, December 2006

Seminar, University of Colorado, Boulder (MCDB), January 2007

Speaker, AACR Special Conference: Translational Research at the Aging and Cancer Interface, San Diego, February, 2007

Seminar, The Children's Hospital of Philadelphia, University of Pennsylvania, March 2007

Seminar, Microbiology and Immunology at Wake Forest University Health Sciences, Greensboro, NC, April 2007.

Seminar, Ohio State University, Columbus, May 2007

Seminar, University of Texas, Austin, September 2007

Seminar, MD Anderson Cancer Center, Smithville, TX, September 2007

Speaker, 2008 BMT Tandem Meetings, San Diego, February 2008.

Speaker, 200 Years of Darwin: Darwin's Magnificent Legacy, UC Denver/Metro, February 2009.

Short talk, AACR 100th Annual Meeting, Denver, April 2009.

Speaker, Symposium on Molecular Mechanisms of Adult Stem cell Aging, Ulm, Germany, May 2009.

Seminar, Centro Nacional de Investigaciones Oncológicas, Madrid, Spain, May 2009.

Seminar, H. Lee Moffitt Cancer Center, Tampa, FL, Sept 2009.

Seminar, Oregon Health and Sciences University, OR, Mar 2010

Speaker, 4th International Systems Radiation Biology Workshop, NY City, May 2010.

Speaker, NCI workshop: The Molecular Bases of Radiation Resistance of Human Cancers, Bethesda, MD, Sept 2010.

Speaker, Leukemia and Lymphoma Society TRP Meeting, NY City, Oct 2010.

Session Chair, Cancer as a Microevolutionary Process, Wilton Park, West Sussex (UK), Mar 2011.

Speaker, 3rd Else Kröner-Fresenius Symposium on Molecular Mechanisms of Stem Cell Aging, Günzburg, Germany, May 2011.

Speaker, First Biannual International Evolution and Cancer Conference, San Francisco, CA, June 2011.

Plenary lecture, NASA 22nd Space Radiation Investigators' Workshop, League City, TX, Sept 2011.

Speaker, Uniting Against Lung Cancer Annual Meeting, NY, NY, Nov 2011.

Speaker/Instructor, Functional Genomics Course, Institut Pasteur, Montevideo, Uruguay, Dec 2011.

Seminar, University of Buenos Aires, Buenos Aires, Argentina, Dec 2011.

Seminar, AACR Speakers Symposium, Northwestern SOM, Chicago, Mar 2012

Seminar, CSU, Fort Collins, April 2012

Seminar, CU Boulder, April 2012 (Keynote address for Biology of the Cancer Cell Symposium)

Seminar, Lung Cancer Spore, July 2012, Pittsburg, PA.

Seminar, University of Arkansas Medical Center, December 2012.

Seminar, Moffitt Cancer Center, Tampa, FL, March 2013.

Speaker, Second Biannual International Evolution and Cancer Conference, San Francisco, CA, June 2013.

Speaker, 59th Radiation Research Society Annual Meeting, New Orleans, Sept 2013.

Seminar, MD Anderson, Houston, TX, October 2013.

Seminar, University of Vermont Cancer Center, July 2014.

Seminar, Dana Farber Cancer Institute, Harvard University Medical School, January 2015.

Seminar (Grand Rounds, McMullin Oncology Lecture Series), Penrose Cancer Center, Colorado Springs, CO, March 2015

Seminar, Brigham Young University, Provo, UT, March 2015

Session Chair and Discussant, World Conference on Lung Cancer, Denver, September 2015

Seminar, University of Massachusetts School of Medicine, Worchester, MA, September 2015

Seminar, Baylor College of Medicine, Houston, TX, February 2016

Seminar, Nature-MSKCC conference on “Cancer as an evolving and systemic disease”, 2016

Seminar, Moffitt Cancer Center, Tampa, FL, April 2016.

Speaker, Samuel Waxman Cancer Research Foundation: Aging, Hematopoiesis and Cancer Workshop, NY, April 2016

Speaker, International Thyroid Oncology Group, Aurora, CO, May 2016

Speaker, NCI Lung SPORE Workshop, NIH, Bethesda, MD, June 2016.

Speaker, The Allied Genetics Conference (TAGC), Workshop on Cell Competition, Orlando, FL, July 2016.

Seminar, Centro Nacional de Investigaciones Oncológicas (CNIO), Madrid, Spain, September 2016.

Seminar, University of Vermont, Lung Cancer program, September 2016.

Seminar, University of Ulm, Ulm, Germany, October 2016.

Speaker, International Conference - The Role of Evolution in Medicine – New Insights in Understanding and Treating Human Diseases, Delmenhorst, Germany, October 2016.

Seminar, Massachusetts Institute of Technology (Koch Cancer Center), October 2016.

Grand Rounds, University of Vermont Cancer Center, December 2016.

Speaker and Session Chair, AACR National Conference 2017, Washington DC.

Seminar, University of the Basque Country, Bilbao, Spain; April 2017.

Seminar, bioGUNE (Center for Cooperative Research in Biosciences), Bizkaia, Spain; April 2017.

Speaker, 28th Annual Cancer Progress Conference, March 2017, New York City

Speaker, Samuel Waxman Cancer Research Foundation: Aging, Hematopoiesis and Cancer Workshop, NY, April 2017

Seminar, Rutgers University Cancer Center, April 2017

Speaker, Lung Cancer SPORE Workshop, Yale University, New Haven, CT, June 2017

Seminar (Distinguished), Emory University, Atlanta, October 2017

Speaker, CSHL Meeting on Biology of Cancer: Microenvironment, Metastasis & Therapy, October 2017

Seminar, Shaanxi Normal University, Xi'an, China, November 2017

Seminar, China Agricultural University, Beijing, China, November 2017

Speaker, CSHA Meeting on Cancer and Aging, Suzhou, China, November 2017

Speaker, International Society for Evolution, Ecology and Cancer Biannual Meeting (Resistance, Resilience, and Robustness), Tempe, AZ, December 2017

Seminar, University of Chicago, January 2018

Distinguished Lecturer, Eastern-Atlantic Student Research Forum (ESRF), Miami, February 2018

Seminar, Fox Chase Cancer Center, March 2018

Speaker, Samuel Waxman Cancer Research Foundation: Annual Scientific Review and Symposium, NY, April 2018

Speaker, Think Tank #1: Measuring Aging and Identifying Aging Phenotypes in Cancer Survivors, National Cancer Institute, July 2018 Linear and Non-Linear Metastasis

Speaker, II Joint Congress on Evolutionary Biology, Montpellier, France, August 2018

Speaker, Workshop: The cancer mosaic, traits, strategies and adaptations, Montpellier, France, August 2018

Speaker, Workshop, Linear and Non-Linear Metastasis, National Cancer Institute, Sept 2018

Speaker, Radiation Research Society, National Meeting, Chicago, Sept 2018

Grand Rounds, University of Florida Health Cancer Center, Gainesville, Oct 2018

Speaker, RUNX1 Research Program, 2018 Conference, Santa Barbara, CA, November 2018.

Speaker, Société Française du Cancer - Evolution and Cancer Conference, February, 7, 2019, Institut Curie in Paris

Speaker, MD Anderson Cancer Center, Department of Cancer Biology, February, 2019.

Speaker, Keystone Symposium, Cell Competition in Development and Disease, February, 2019.

Speaker, Department of Cancer Biology, Mayo Clinic Cancer Center, Jacksonville, FL, March, 2019.

Headlining Speaker, Society of Molecular Biology of Evolution, Satellite Meeting on Cancer Evolution, Yale University, April 2019.

Speaker, Symposium on Evolution and Cancer, Georgia Tech, April 2019.

Speaker and Participant, Working Group on Hallmarks of Biological Failure, Santa Fe Institute, April 2019.

Speaker and Participant, NCI and NIA Working Group on Transformation and Aging of Stem Cells, Bethesda, MD, April 2019.

Keynote speaker, NY Academy of Science Symposium: Targeting Tumor Heterogeneity, New York City, May 8, 2019.

Lectures as Visiting Professor, University of Cagliari, UniCa, Cagliari, Italy, May 2019.

Lecture, Institute for Cancer Research (ICR), London, July, 2019

Lecture, Francis Crick Institute, London, July, 2019

Speaker, International Society for Evolution, Ecology and Cancer Biannual Meeting, Wellcome Genome Campus, Hinxton, England, July, 2019

Speaker, 31st Annual Usha Mahajani Symposium, Salk Institute, La Jolla, August 2019

Speaker, 21st Annual John Goldman Conference on Chronic Myeloid Leukemia, Bordeaux, September 2019

Speaker, Chinese Society for Clinical Oncology, Xiamen, China, September 2019

Speaker, Beckman Symposium, City of Hope, Los Angeles, CA, November 2019

Speaker and Session Chair, AACR National Conference 2020 (virtual), June 2020

Speaker, Moffitt Cancer Center (virtual), July 2020.

Speaker, Samuel Waxman Cancer Research Foundation: Educational Session (virtual), Sept 2020

Speaker, AACR Special Conference on Tumor Heterogeneity (virtual), Sept 2020

Speaker and panel member, NCI/NIA/NIEHS workshop: Age-Dependent Changes in Cancer Biology, Oct 2020 (virtual)

Speaker and Discussion Leader, Club EvMed of the International Society for Evolution, Medicine and Public Health, Oct 2020 (virtual)

Speaker, Dana Farber/Harvard Cancer Center Connect Science Series, Dec 2020 (virtual)

Speaker, Geriatric Society of America Annual Meeting, session on “When does aging begin?”, Dec 2020 (virtual).

Co-Organizer, Session Chair and Speaker, International Conference on Aging and Cancer, Haiku, China, Dec 2020 (meeting was in person, but my roles were via Zoom)

Speaker, Northwestern’s NCI-sponsored IDEAS lab on Cancer and Aging, Dec 2020 (virtual)

Speaker, Oregon Health Sciences University, Jan 2021

Chair and Speaker, AACR National Meeting, Educational Session: Understanding Mechanisms of Aging in Cancer Development in Human Populations; April 2021

Speaker, Second Virtual Alliance Mini-Symposium on Cancer and Aging – An Intimate and Dangerous Relationship; June 2021

Speaker, 2021 Oklahoma GeroOncology Symposium; Aug 2021

Speaker, The Scientist Symposium - Aging and Cancer: A Complex Relationship; Aug 2021

Speaker, AACR Cancer and Evolution Seminar Series; Sept 2021

Speaker, Samuel Waxman Cancer Research Foundation, Annual Meeting; Sept 2021

Speaker, 3rd Annual RAS Targeted Drug Development Summit 2021; Sept 2021

Speaker, ABCD distinguished lecture series, Italian Association for Cell Biology (ABCD, Associazione Biologia Cellulare e Differenziamento) (virtual); Sept 2021

Speaker, National Academies workshop on *The Role of Companion Animals as Sentinels for Predicting Environmental Exposure Effects on Aging and Cancer Susceptibility in Humans; Nov 2021*

Organizer and Speaker, 3rd Annual International Conference on Aging and Cancer, Haiku, China; Dec. 2021

Speaker, UFHealth Cancer Center 2022 Virtual Cancer & Aging Symposium; Feb 2022

Co-organizer and speaker of AACR Conference - Evolutionary Dynamics in Carcinogenesis and Response to Therapy, Denver, March 2022.

Speaker, AACR National Meeting, April 2022

Speaker (remote), 48th Workshop on: "Darwin in Medicine: Why evolution is relevant for research and medical practice"; Erice, Sicily, April 2022

Speaker, 2022 Annual Lung Cancer NCI SPORE Workshop, June 2022

Organizer and session chair, Samuel Waxman Cancer Research Foundation: Aging and Cancer Workshop, NY, September 2022

Speaker, Arcachon workshop on Cancer and Evolution, Arcachon, France, Oct 2022

Speaker, Systems Approaches to Cancer Biology, Woods Hole, MA, Oct 2022

Lecture, Arizona State University, Nov 2022

Organizer and Speaker, 4th Annual International Conference on Aging and Cancer, Haiku, China; Dec. 2022

Speaker, NIH Health and Aging Trajectories (HAT) Working Group, March 2023

Speaker, AACR National Meeting, April 2023

Lecture, Johns Hopkins University (online), April 2023

Lecture, 2023 Susan Swerling Lectureship, Dana Farber Cancer Institute, Boston, May 2023

Speaker, Wiley China Symposium on Precise Cancer Prevention and Treatment (virtual), Guangzhou, China May 2023

Speaker, Cancer Research UK Marshall Symposium: the tumour macro-environment – embracing complexity, July 2023

Invited talk, Duke University, July 2023

Keynote address, 8th Annual meeting of the International Society for Evolution, Medicine and Public Health, Irvine, CA, Aug 2023

Speaker, Samuel Waxman Cancer Research Foundation, Annual Meeting; Sept 2023

Speaker, CSHL meeting on Biology of Cancer: Microenvironment & Metastasis, Cold Spring Harbor Labs, NY, Sept 2023

Speaker and Moderator, NIH Health and Aging Trajectories Workshop (virtual), Sept 2023

Speaker, 4th Crick International Cancer Conference, London, October 2023

Speaker, 51th International Symposium of the Princess Takamatsu Cancer Research Fund, Tokyo, November 2023

Organizer and Speaker, 5th Annual International Conference on Aging and Cancer, Haiku, China; Dec. 2023

Chair and Speaker, Major Symposium at the AACR Annual Meeting on Somatic Evolution in Normal Tissues: Causes and Consequences, San Diego, April 2024

Keynote Speaker, Wellcome conference Cancer Evolution: From Genome to Ecology, Hinxton, UK, May 2024

Speaker, Barcelona Biomed Conference on CANCER PROMOTION, Barcelona, June 2024

Lecture, Oregon Health Sciences University, Portland, OR; Aug, 2024

Presenter, OncoAging Consortium Workshop, Bethesda, MD; Sept, 2024.

Speaker, AACR special conference on Tumor-body Interactions: The Roles of Micro- and Macroenvironment in Cancer, Boston, MA; Nov, 2024.

Organizer and Speaker, 6th Annual International Conference on Aging and Cancer, Haiku, China; Dec. 2024

Lecture, Cincinnati Children's Hospital, Cincinnati, OH; Dec, 2024

Lecture, Washington University Siteman Cancer Center, St. Louis, MO; Jan, 2025

Lecture, University of Miami Cancer Center, Miami, FL; Jan, 2025

COMMUNITY OUTREACH

Cofounded *Colorado Evolutionary Response Team* with Jeff Kieft and David Pollock. CERT is a coalition of Colorado scientists dedicated to promoting the teaching of evolutionary theories in our public schools. Website: www.**evolution**arygenomics.com/**CERT**/**CERT**.html.
Our activities have included an op-ed letter in the Denver Post (Kieft), an interview on Colorado Public Radio (DeGregori) and speaking at a local conference on religion and science, Intersections: Science, Religion and Ethics (Pollock).

Panel Member, Workshop: *Teach Evolution - Yes We Can and Yes We Should*, Boulder, CO, April 2009.

Presentation at COLORADO-WYOMING JUNIOR ACADEMY OF SCIENCE; "MEDICINE AND SCIENCE 2015": **"*Understanding Life, Death, Health and Disease through an Evolutionary Lens"***

Presentation at COLORADO-WYOMING JUNIOR ACADEMY OF SCIENCE; "MEDICINE AND SCIENCE 2011": **"How Cancer Shapes Evolution, and How Evolution Shapes Cancer"**

Presentation at COLORADO-WYOMING JUNIOR ACADEMY OF SCIENCE; "MEDICINE AND SCIENCE 2010": **"Searching for the Achilles heel of leukemia"**

Presentation at Secular Hub on Darwin Day 2013; **"Evolution, science and society"**

Presentation "**Evolution Matters**" for *Research Program for High School Educators*, National Jewish Health, 2013.

Presentations "**Natural Selection and Your Health: Can I have a different evolutionary history, please?**" for Nerd Nite Denver, July 2014.

Presentation at Secular Hub June 2016; **"Natural Selection and Your Health"**

Speech at March for Science, Denver 2018

Moderator, Colorado Citizens for Science Forum: **Viruses, Microbes, and Your Health**, May 2019

I regularly volunteer for Leukemia and Lymphoma Society events (3-4 times/year), speaking to volunteers and patients and leading lab tours. I have also spoken at LLS conferences, including the 2012, 2013 and 2015 Rocky Mountain Blood Cancer Conferences. I also am member of Team N Training (participating in four Century bike rides, a triathlon and three marathons, and raising money for them).

I regularly lead lab tours for potential donors for the CU Fund. In 2013, I spoke at their University of Colorado Cancer Center Showcase.

2019-2023 **Board Member**, Colorado Citizens for Science

Mentor, **MIT Hacking Medicine 2020 Grand Hack**

POPULAR ARTICLES WRITTEN ABOUT OUR WORK (selected)

http://www.cancertodaymag.org/Summer2017/Pages/The-Evolution-of-Cancer-James-Degregori-microenvironment.aspx

http://nautil.us/blog/the-problem-with-the-mutation_centric-view-of-cancer

https://www.eurekalert.org/pub_releases/2017-07/uoca-rti073117.php

https://www.sciencedaily.com/releases/2017/07/170731134120.htm

https://www.statnews.com/2018/06/27/cancer-treatment-prevention-evolution/ (I wrote this one)

RECRUITMENT of UNDERREPRESENTED SCIENTISTS

2007 Poster Judge at SACNAS National Conference (Austin, TX)

2008 Visit to MARCS program at the University of Houston Downtown

2009 Poster Judge at SACNAS Rocky Mountain Regional Meeting (Denver, CO)

2009 Poster Judge at SACNAS National Meeting (Dallas, TX)

2010 Visit to MARCS program at the University of New Mexico

UCD SOM SERVICE

2024	Member, Search committee for Director of Flint Animal Cancer Center
2024	Member, Cancer Biology Preliminary Exam Committee
2021-2022	Chair, Biochemistry and Molecular Genetics Search committee
2020-2021	Interim co-Director, Thoracic Oncology Research Initiative (TORI)
2020-2021	Chair, Search committee for Director of TORI
2020-2021	Member, Search committee for Chair of Pharmacology
2018-2021	Dean's Advisory Committee
2017-present	Member, Advisory Committee, Comparative Pathology Shared Resource
2017-2018	Member, Search committee for Chair of Dpt of Immunology and Microbiology
2017-present	Deputy Director, UCCC
2016-2017	Member, Search committee for thoracic oncology leader (UCCC)
2015-present	Internal Advisory Board Member, Head&Neck SPORE
2014-2017	Member, Linda Crnic Center Grant Review Committee
2016-present	UCCC International Committee
2017-2018	Pharmacology/Cancer Faculty Search Committee, Member

2014-2015	Pharmacology/Cancer Faculty Search Committee, Member
2014-present	Board Member, Lung Cancer Colorado Fund
2010-2017:	Co-leader, Molecular Oncology Program, UCCC
2013-2016:	Associate Director for Basic Research, UCCC
2014	Pharmacology Faculty Search Committee
2014-2015	MSTP faculty advisor for National Conference
2014-2016	Assoc. Director, Molecular Biology Graduate Program
2005-2013	Director, Molecular Biology Graduate Program
2012-2019	UC Lung Cancer SPORE Executive Committee
2012-2019	UC Lung Cancer SPORE Career Development Committee
2003-2013	Graduate Executive Committee (Chair since 2008)
2004-present	Biochemistry Executive Committee
2011-2013	Dean's Advisory Committee
2011-2012	SIRC (Strategic Infrastructure for Research Committee)
2011-2012	Scientific Study Chair, Phase 1b trail NCT01426334
2012-2013	SIRC, Chair
2012	Search Committee, Scientific Director of the Pediatric Experimental Therapeutics Program
2008-2010	K12 Scholar Advisory Committee
2007	Graduate School Consolidation Committee
2007	Core Course Revision Committee
2007-2008	MSTP faculty advisor for National Conference
2005-2010	Biochemistry Promotions Committee
2003-2005	Director, Biochemistry Graduate Program
2002-2010	Biochemistry Education Committee
2002-2005	Biochemistry Seminar Committee, member
2004-2005	Chair, Faculty Membership, Program in Molecular Biology
2004-2006	Search Committee for the Director of Medical Oncology
2004-2005	Faculty Search Committee, BMG
2004-2005	Member, UCD SOM Institutional Animal Care and Use Committee
1997-2007	Cancer Center Transgenic Core Oversight Committee
1998-2004	Chair, Recruitment and Admissions, Program in Molecular Biology
1998-2003	Faculty Senator
2003	Internal reviewer, Pew Scholar applicants from UCD SOM
1998-2002	Biochemistry Seminar Committee, Chair
1998-2000	Biochemistry Faculty Search Committee
1999-2000	Curriculum Committee, Program in Molecular Biology
1997-1998	Recruitment and Admissions, Biomedical Sciences Program
2000	Molecular Biology Director Search Committee
2000	Chair, Molecular Biology Retreat Committee (co-Chair in 1999)
2024	

TEACHING:

2020 Instructor, CU-Boulder/CSU Graduate Course on Aging
2018 Instructor, FYSM-1000-033 Origins. The Origins of Everything. CU Boulder.
2017-present: Instructor, Biomedical Sciences Core Course (IDPT7800) UCD SOM – designed and taught lectures for block on Evolution (26 hr total) with Sandy Martin and David Pollock.
2013-present: Instructor, Cell Development Stem Cells (CSDV 7605) UCD SOM.
2009-2018: Instructor, Immunology (IMM7662) UCD SOM.
2014-2019: Instructor, Immunology (IMM7602) UCD SOM.
2007-present: Instructor, Cancer Biology (CANB7600) UCD SOM.
2012-2015: Instructor, Ethics in Research (PHCL 7605) UCD SOM.
1999-2012: Instructor, Receptors and Signaling, Pharmacology, UCD SOM.
1999-2015: Instructor, Biomedical Sciences Core Course (IDPT7800) UCD SOM.
1999-2003: Instructor, Practical application of molecular and cell biology techniques for the clinical investigator (CLSC 7500), UCD SOM.
1998-2004: Instructor, Molecular Biology of Cancer (MED6626), UCD SOM.
1999-2002: Instructor and Course Director, Topics in Molecular Biology (MOLB7802) UCD SOM.
2005, 2007-2009: Instructor, Topics in Molecular Biology (MOLB7802, 7800) UCD SOM.
1997-1999: Instructor, Medical Genetics (BBGN5001), UCD SOM.
2004-2005: Instructor, Medical Genetics (BBGN5001), UCD SOM.
1998-2001: Instructor, Clinical Sciences Laboratory Course (CLSC7500), UCD SOM.
1990: Graduate Teaching Assistant, Massachusetts Institute of Technology, Cambridge, MA. Project Lab (intensive laboratory training for undergraduates in cellular and molecular biology).
1989: Graduate Teaching Assistant, Massachusetts Institute of Technology, Cambridge, MA: Tumor Biology course for undergraduate and graduate students.

GRADUATE STUDENT AND POSTDOCTORAL FELLOW TRAINING:

Currently mentoring:

Graduate students:

Amy Briggs, since 2020, Cell, Stem cells and Development

Bryan Johnson, since 2021, Cell, Stem cells and Development

Daniela Ortiz Chavez, since 2022, Cancer Biology

Bridget Hoag, since 2022, Cancer Biology

Postdocs:

Dr. Shibiao Chia, since 2020, Postdoctoral Fellow

Dr. Marcos De Dominici, since 2019, Postdoctoral Fellow

Dr. Edward Evans, since 2019, Postdoctoral Fellow

Dr. Johannes Menzel, since 2021, Postdoctoral Fellow

Research Faculty:

Dr. Mark Gregory since 2006, Research Assistant Professor

Former graduate trainees:

Dr. Yisong Wan, 1998-2003, Program in Molecular Biology. Received PhD in Nov 2002. He is currently an Associate Professor position at the University of North Carolina Medical School (tenure track).

Dr. Feng Li, 1998-2003, Department of Biochemistry. Received PhD in Nov 2002. He is currently a Senior Scientist with Corning Life Sciences, Bedford, MA.

Dr. Jing Zhu, 1998-2001, graduated with PhD 11/01 from Dept of Biochemistry. Currently Jing is a Clinical Scientist in cancer immunotherapy at Genentech.

Dr. Jeffrey Tessem, 2002-2007, Program in Molecular Biology, PhD 2007. Jeff is an Associate Professor at Brigham Young University since Fall 2013 (tenure track).

Dr. Ganna Bilousova, 2003-2007, graduated with PhD in 2007 from Dept of Biochemistry. Currently Anya is an Associate Professor in the Department of Dermatology at UCD SOM (tenure track).

Dr. Andriy Marusyk, 2002-2008. Program in Molecular Biology. Received PhD in Nov 2006. Assistant Member in Moffitt Cancer Center (tenure-track position equivalent to assistant professor) in the Department of Cancer Imaging and Metabolism; Cancer Biology and Evolution Program.

Dr. Melanie Bui 2005-2009, MSTP/Immunology. Received PhD in May 2009. Associate Professor, College of Medicine at The University of Vermont.

Dr. Matias Casas-Selves 2007-2011, Program in Molecular Biology. Received PhD in Dec 2011. Senior Scientist at Repare Therapeutics, Montreal, Quebec, Canada.

Dr. Francesca Alvarez-Calderon, 2009-2013, Immunology/MSTP. Received PhD in Feb 2012. Currently a Ped/HemeOnc Fellow at Dana Farber and Boston Children's/Harvard University in Boston, MA.

Dr. Courtney Fleenor, 2009-2014, Immunology. Received PhD in Feb 2012. Currently Director, Research & Development, ImmunityBio, Denver, CO.

Dr. Hannah Scarborough, 2012-2017, Molecular Biology/MSTP. Community mental health (psychiatrist) in Thorton, CO

Dr. Luther (Alex) Liggett, 2013-2019, Cells, Stem Cells and Development (CSD). Currently Senior Scientist, Clinical Genomics Research, Hematology R & D.

Dr. Kelly Higa, 2014-2020, Immunology/MSTP. Currently a resident at Stanford University.

Dr. Cathy Pham, 2014-2019, Cancer Biology. Currently a postdoc at University of Colorado Anschutz Medical Campus

Dr. Hae (Harry) Park, 2017-2022, Molecular Biology/MSTP; currently in medical school.

Former postdoctoral trainees:

Dr. Nathan Jones, postdoc in 2001. Currently a Senior Research Scientist at Genzyme.

Dr. Deborah DeRyckere, Postdoctoral Fellow: 1998-2004 (NRSA recipient). She is currently an Assistant Professor in the Department of Pediatrics at Emory University.

Dr. Gary Shapiro, Postdoctoral Fellow: 2003-2004 (recipient of LLS Fellow Award). Currently Vice President, Discovery Biology, Affini-T Therapeutics in Arlington, MA.

Dr. Angela Trobaugh-Lotrario, Pediatric Oncology Fellow: 2002-2005. Currently pediatric hematologist/ oncologist, Sacred Heart Children's Hospital in Spokane, WA.

Dr. Ritsuko Iwanaga, 2005-2007. Currently Ritsuko is a Research Associate in the Department of Obstetrics & Gynecology (UCD SOM).

Dr. Hanna Pelli 2006-2008, Postdoctoral Fellow. Currently Faculty/GI Surgeon (tenure track), University of Helsinki.

Dr. Christopher Porter, Pediatric Oncology Fellow 2003-2009 (recipient of Brent Eley/Brian Hicks Foundation and St. Baldrick's Fellowships). Associate Professor (tenure track) in the Department of Pediatrics at Emory University.

Dr. Rodrigo Maegawa, 2009-2011, Hematology Oncology Fellow (recipient of Cancer League of Colorado Fellowship). Currently an oncologist for Eastern Maine Medical Center Cancer Care, Brewer, Maine.

Dr. Jennifer Salstrom, 2011-2015, Pediatric Oncology Fellow (recipient of St. Baldrick's fellowship). Currently Medical Director, PAREXEL International; Billerica, MA.

Dr. Curtis Henry, 2008-2016, Postdoctoral Fellow (Recipient of NCI K01). Currently an Associate Professor (tenure track) in the Department of Microbiology and Immunology at the University of Colorado School of Medicine and Deputy Associate Director of DEIA for the Cancer Center.

Dr. Andrii Rozhok, 2012-2018, Postdoctoral Fellow. Currently an Instructor in the Department of Dermatology, University of Colorado School of Medicine.

Dr. Nathaniel Little, 2014-2018, Fellow. Pulmonologist, private practice.

Dr. Courtney Jones, 2016-2020 (co-mentored with Craig Jordan). Currently a faculty member of the Division of Experimental Hematology and Cancer Biology at Cincinnati Children's Hospital Medical Center.

Dr. Clara Troccoli, 2021-2022, Postdoctoral Fellow. Currently Scientist - Flagship Biosciences.

Visiting faculty:

Dr. Fabio Marongiu, Associate Professor at the University of Sardinia (Italy), 2019-2022

ADDITIONAL MENTORING:

1998: Mentored high school student for the Diversity Summer Scholars Program.
2000 & 2005: Mentored GEMS summer college student.

2004-2011: Faculty mentor for Dr. Doug Graham (now at Emory as Section Chief, Pediatrics).
2005-2009: Faculty mentor for Dr. Rui Zhao (assistant professor in BMG).
2007-2010: Faculty mentor for Dr. Thomas Flaig (assistant professor in Medical Oncology).
2008-~2012: Member, Scholarship Oversight Committee for Pediatric Oncology Fellows:
Lisa M Reaves, MD
Kristen Eisenman, MD
2005-2009: Derrick Leopold, Mentored Scholarly Activity (Medical Student)
2007: Allyson Wood, Mentored Scholarly Activity (Medical Student)
2012-2013: Chelsea Wong (Medical Student; research in my lab).
2009-2017: Alisa Lee Sherick, MD; Pediatric Oncology Fellow in Graham lab
2011-2014: Jeffrey Knipstein, MD; Pediatric Oncology Fellow in Foreman lab (for K22)
2011-2015: Jean Mulcahy-Levy, MD; Pediatric Oncology Fellow in Foreman lab (for K12)
2012: Kamesh Bikkavilli, PhD; Instructor in Winn lab.
2012-2016: Faculty mentor for Dr. Tobias Neff (assistant professor in Pediatric Oncology).
2013-2016: Mentor for Subhajyoti De, PhD (assistant professor, Department of Medicine)
2013 (summer): Mentor for GEMS student Linda Jimenez
2013 (summer): Mentor for high school student Monisha Lensink-Vasan
2013-2015: Mentor for medical student John Pham (MSA)
2015-2022: Member, Advisory Committee for Daniel Sherbenou, MD/PhD
2015-2020: Member, K12 Advisory Committee for Adam Green, MD
2016-2021: Member, Advisory Committee for Eric Pietras, PhD
2017-present: Member, Mentoring Committee for Maura Gasparetto, MD
2017: Mentor for Annika Gustafson, Cancer Center Summer Fellowship program
2017-present: Member, Mentoring Committee for Katherine A. Waugh, PhD
2015-2020: Member, Mentoring Committee for Angelo D'Alessandro, PhD
2017-2019: Member, Scientific Mentor for Mathew Oh, undergraduate at the University of Colorado, Boulder
2017-2020: Member, Mentoring Committee for Kambez H. Benam, PhD
2018: Mentor for Aaron Abai, Cancer Center Summer Fellowship program
2019-present: Mentor for Austin Gillen PhD (for his VA Career Development Award).
2019-2020: Member, Mentoring Committee for Zhonghe Ke, PhD.
2021-2023: Member, Mentoring Committee for Jonathan Kurche, MD/PhD
2021: Member, Mentoring Committee for Dallas Jones, PhD
2021: Mentor for Robert Ross-Shannon, Cancer Center Summer Fellowship program
2023: Mentored three summer students.
2022-present: Member, Mentoring committee for Maria Amaya, MD, Asst Prof at VA/CU
2023-present: Member, Mentoring committee for Erin Schenk, Asst Prof in Medical Oncology
2023-present: Member, Mentoring committee for Adam Harris, PhD, Asst Prof at CSU
2023-present: Member, Mentoring committee for Mark Althoff, PhD, Postdoc-Jordan lab
2021-present: Member, Mentoring committee for Sweta Patel, PhD, Postdoc-Pietras lab
2024-present: Member, Mentoring committee for Ana Vujovic, PhD, Postdoc-Jordan lab
2024-present: Member, Mentoring committee for Joe Nassour, PhD, Asst Prof in BMG

THESIS AND COMPREHENSIVE EXAM COMMITTEES:

1997-present: Member of the following graduate student committees (excluding trainees):

Katia Niño, Molecular Biology
Kaiah Fields, Molecular Biology
Chris Alderman, MSTP
Brandon Buck, Molecular Biology
Katherine Matlin, Molecular Biology
Daniel Moskop, Cancer Biology
Arthur Wolin, Molecular Biology
Wolfgang Schleicher, Cell, Stem cells and Development
Alexander Beacom, Cancer Biology
Nadia Wright, Cell, Stem cells and Development

Defended:

Kathryn Stack, Molecular Biology, PhD 2001
George Poggioli, MSTP, PhD 2001
Bryn Grimison, Molecular Biology, PhD 2001 (Chair)
Yihong Wan, Molecular Biology, PhD 2001
Andrea Bild, Pharmacology, PhD 2002
John Marecki, Biochemistry, PhD 2002 (Chair)
Gary Shapiro, Immunology, PhD 2002
Tracy DeVries, Pathology, PhD 2003
Elaine Epperson, Molecular Biology, PhD 2003
Steve Kattman, Immunology, PhD 2003
David Mills, Immunology, PhD 2003
Don Licatalosi, Biochemistry, PhD 2003
Suzanne Wardell, Molecular Biology, PhD 2003
Holly Maier, Immunology, PhD 2004
Yanan Zhu, Biochemistry, PhD 2004 (Chair)
Kristie Grebe, Immunology, PhD 2004
Michelle Sleater, Immunology/MSTP, PhD 2006
Wayne Lilystrome, Biochemistry (Chair), PhD 2006
Michael Bassetti, MSTP, PhD 2006
Hui Yang, Molecular Biology, PhD 2007
Kim Christenson, Molecular Biology, PhD 2007
Yibing Wang, Immunology, PhD 2007
Lisa Moffitt, Immunology, PhD 2008
Lisa Williams, Immunology/Microbiology, PhD 2007
Kira Glover, Molecular Biology, PhD 2008
Erica McCoy, Molecular Biology, PhD 2008
Andrea Suarez, Molecular Biology/MSTP, PhD 2009 (Chair)
Hua Gao, Molecular Biology, PhD 2009
Lisa Guerrettaz, Immunology, PhD 2009

Keith Anderson, Molecular Biology, PhD 2009
Douglas Micalizzi, Molecular Biology/MSTP, PhD 2009
Joanna Poczobutt, Molecular Biology, PhD 2009
Robert Ian Hardy, Immunology, PhD 2010
Igor Kogut, Biochemistry, PhD 2010
Sarah Rowland, Immunology, PhD 2010
Jenean O'Brien, Cancer Biology, PhD2010
Susan Farabaugh, Biochemistry, PhD 2010
Francie E Hyndman, Cells, Stem Cells and Development, PhD 2012
Ryan Henry, MCDB, CU Boulder, PhD 2012 (defense only)
Amber Bilak, MCDB, CU Boulder, PhD 2012 (defense only)
Robin Tyler, Molecular Biology/MSTP, PhD 2012
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Van Willis, Molecular Biology (Chair), , PhD 2012
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Jennifer Schlegel, Molecular Biology, PhD 2012
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Kathryn Singleton, Cancer Biology, PhD 2013
Kris Brannan, Molecular Biology, PhD 2014
Laura Hudish, Molecular Biology, PhD 2015
Debra Bryan, Molecular Biology, PhD 2015
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Divij Mathews, Immunology (Chair), PhD 2019
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Ariel Hernandez, Molecular Biology, PhD 2019
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Gregory Wright, Pharmacology, PhD 2023
Connor Hughes, Pharmacology, PhD 2023
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Anagha Inguva, Cancer Biology, PhD 2023
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Raisa Bailon, Cell, Stem Cell and Development, PhD 2023
Lorraine Davis, Cancer Biology, PhD 2024
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1997-present: Member of the following graduate comprehensive exam committees (but without service on thesis committee):

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Thomas Precht, Pharmacology
Amanda Kostyk, Immunology
Carrie Eckert, Molecular Biology
Melanie Hippert, Pharmacology
Patrick O'Toole, Pharmacology

1997-present: Member of the following graduate student committees for students who received M.S. degrees:

Aya Murakami, Molecular Biology