

**CURRICULUM VITAE****Name:**

Mauricio J. Reginato, Ph.D.

**Address:**

Drexel University College of Medicine,  
Department of Biochemistry and Molecular Biology  
245 N. 15<sup>th</sup> Street, M.S. 497, NCB Rm. 11117  
Philadelphia, PA 19102  
Phone: 215-762-3554  
Fax: 215-462-4452  
Email: mjr53@drexel.edu

**Education:***Undergraduate:*

1985-1989 Bachelor of Science, Biology  
Penn State University,  
University Park, PA

*Graduate:*

1992-1998 Ph.D., Pharmacology  
University of Pennsylvania  
Philadelphia, PA  
Thesis advisor: Mitchell A. Lazar, M.D., Ph.D.  
Thesis Title: Inhibitory Mechanisms Regulating Hormone  
Receptor Action.

*Postgraduate training:*

1998-2004 Postdoctoral Fellow  
Department of Cell Biology  
Harvard Medical School,  
Boston, MA  
Advisor: Joan S. Brugge, Ph.D.

**Employment History:**

6/89-8/91: **Associate Scientist**, Department of Investigative Toxicology, SmithKline  
Beecham Pharmaceuticals, King of Prussia, PA

Faculty:

8/04-2/11 **Assistant Professor**, Department of Biochemistry and Molecular  
Biology, Drexel University College of Medicine (DUCOM)  
3/11-2/14 **Associate Professor**, Department of Biochemistry and Molecular  
Biology, Drexel University College of Medicine  
3/14-5/16 **Associate Professor (with tenure)**, Department of Biochemistry and  
Molecular Biology, Drexel University College of Medicine  
6/16-present **Professor (with tenure)**, Department of Biochemistry and Molecular  
Biology, Drexel University College of Medicine

Administrative:

2/12-present **Director**, In Vivo Animal Imaging Program, Drexel University College  
of Medicine (Provide oversight and training for approximately 20 labs

- at university on IVIS animal imaging equipment)
- 5/12-present **Member**, Sydney Kimmel Cancer Center-NCI-Designated Cancer Center, Thomas Jefferson University, Philadelphia, PA
- 2/13-present **Director**, Cancer Biology Graduate Program, Drexel University College of Medicine (Created new M.S. graduate program and provide oversight of training for 10-12 M.S. students/yr in the Cancer Biology Program)
- 7/16-8/20 **Co-Leader**, Breast Cancer Program, Sydney Kimmel Cancer Center (SKCC)-NCI Designated Cancer Center, Thomas Jefferson University, Philadelphia, PA (Help promote transdisciplinary research between SKCC and DUCOM, integrate basic research with clinical research members to translate ideas into clinical interventions, assists members with their grants and recruit new members to the program. Helped improve Program score from Very Good to Excellent in 2018 NCI CCSG review).
- 9/17-4/19 **Interim Director**, Biochemistry Graduate Program, Drexel University College of Medicine (Provide oversight of training for approximately 20 M.S., Ph.D., & M.D./Ph.D. track students in the Biochemistry Program).
- 8/20-present **Program Leader**, Translational Cellular Oncology (TaCO) Program, Sydney Kimmel Cancer Center-NCI Designated Cancer Center, Thomas Jefferson University, Philadelphia, PA (Help promote transdisciplinary research between SKCC and Drexel University, integrate basic research with clinical research members to translate ideas into clinical interventions, assists members with their grants, and recruit new members to the program. TaCO Program was recognized as best Community Outreach & Engagement participation at 2023 SKCC Retreat. Co-wrote Program write-up and was only Drexel faculty to present at NCI CCSG review in Summer 2023 where program received a score of Outstanding to Excellent and SKCC received Comprehensive status for the first time in its history.)
- 9/21-present **Interim Chair**, Department of Biochemistry and Molecular Biology, Drexel University College of Medicine (Recruited teaching faculty to create an on-line M.S. Program in Cancer Biology launched in Fall 2023, increased our M.S. program revenue to over \$1,000,000, and hired one new tenure-track research faculty with NIH funding)

### Honors and Awards:

- 1991 Impact Award-SmithKline Beecham Pharmaceuticals
- 1992 Predoctoral Fellowship Award-NIGMS
- 1992 Fontaine Fellowship Predoctoral Award-University of Pennsylvania
- 1995 Predoctoral Award-Merck-Dupont Pharmaceuticals
- 1996 Endocrine Society Travel Award-International Congress of Endocrinology
- 1997 NIH Travel Grant-Keystone Symposia, Molecular and Cell Biology
- 1998 Best Poster, Predoctoral Investigator, Signal Transduction Retreat, University of Pennsylvania

- 1998 NIH Travel Grant-Keystone Symposia, Molecular and Cell Biology  
 1998 Saul Weingrad Best Dissertation Award: Pharmacological Sciences, University of Pennsylvania  
 1999 Susan G. Komen Breast Cancer Foundation Postdoctoral Fellowship  
 2010 Professional Enrichment and Growth Award, Drexel University College of Medicine  
 2010 Young Investigator Award, Drexel University College of Medicine  
 2016 Faculty Mentoring Award, MS Research-Intensive Programs, Graduate Student Association, Drexel University College of Medicine  
 2018 Elias Abrutyn Mentoring Award, Drexel University College of Medicine  
 2021 Julian Marsh Faculty Scholar Award, Drexel University College of Medicine  
 2023 Outstanding Mentor of the Year Award for the STAR Undergraduate Scholars, Drexel University

**Professional Society Memberships:**

- American Association of Cancer Research  
 American Society of Cell Biology  
 American Society for Biochemistry and Molecular Biology

**Professional Committees, Administrative Service and Public Media:**

*Institutional Service:*

- 2023-present Membership Committee, SKCC  
 2023-present Educational Coordinating Committee, DUCOM  
 2023-present Internal Advisory Committee, SKCC  
 2021-2022 Member, Dean's Fellowship Review Committee, DUCOM  
 2021-2022 Member, Drexel 2030 Strategic Plan, Pricing & Financial Aid Initiative Team  
 2020-present Education and Training Advisory Committee, SKCC  
 2020-2021 Member, Finance Committee, DUCOM  
 2020- Ad-hoc Grant Reviewer, SKCC NCI Predoctoral to Postdoctoral Fellow Transition Award (F99/K00)  
 2020-2022 Member, Committee for Diversity and Inclusive Excellence, DUCOM  
 2020-present Liberty Scholar Mentor, Drexel University  
 2020-2022 Member, Committee for a New Research Facility, DUCOM  
 2020- Ad-hoc Grant Reviewer, SKCC Multi-PI RO1 Pilot Funding  
 2019-2020 Member, PhD Program Alignment and Review (PAR) Committee, DUCOM  
 2019- Ad-hoc Grant Reviewer, SKCC Transdisciplinary Integration of Population Science Pilot Funding  
 2019- Ad-hoc Grant Reviewer, Commonwealth Universal Research Enhancement (CURE) Grants, DUCOM  
 2018-2021 Member, Tenure Committee, DUCOM  
 2018- Ad-hoc Grant Reviewer, Pew Scholars in Biomedical Research, Drexel University (DU)

2016-2018	Institutional Advancement Research Committee, DUCOM
2015-	Ad-hoc Grant Reviewer CURE Grants, DUCOM
2015-	Tenure Review Committee for Adrian Shieh, Ph.D., Drexel University, School of Biomedical of Engineering
2015-2017	Drexel University Representative, Pennsylvania Cancer Alliance
2014-2015	Ad-hoc Grant Reviewer, Clinical & Translational Research Institute, DUCOM
2014-2016	Member, Health Sciences Research Task Force, Drexel University and DUCOM
2014-2015	Ad-hoc Grant Reviewer, Thomas Jefferson University, Kimmel Cancer Center, American Cancer Society- Institutional Research Grant Review Committee
2014-2017	Member, Curriculum and Evaluation Committee, DUCOM
2013-2018	Member, Finance Committee, DUCOM
2012-present	Director, Masters in Cancer Biology Program, DUCOM
2012-2015	Member, MD/PhD Advisory Committee, DUCOM
2012-2015	Member, Elected At-large representative to the Executive Committee of the Division of Biomedical Sciences, DUCOM
2011-2013	Chair, Faculty Search Committee, Biochemistry Department (recruited Dr. Todd Strochlic)
2010-2013	Member, Steering Committee of the Faculty, DUCOM
2010-2013	Steering Committee Representative, Executive Committee of the Faculty, DUCOM
2009-2017	Co-Director, Summer Undergraduate Research Fellowship (SURF) Program, DUCOM
2008-present	Prelim. Exam Committee, Molecular Cell Biology & Genetics (MCBG) Graduate Student Program
2008-2011	Faculty Search Committee, Biochemistry Department
2007-2012	Discovery Day Committees, Poster Judge Committee
2007-2015	Member, Steering Committee, MCBG Graduate Student Program, DUCOM
2006-2012	Student Faculty Advisor, Interdepartmental Medical Science Program, DUCOM
2006-2010	Radiation Safety Committee Member, DUCOM
2006-2010	Admissions Committee, Biochemistry Graduate Program

***Extramural Service:***

2023-present	Associate Editor, <i>Breast Cancer Research</i>
2023-	Promotion review, Bojana Gligorijevic, Ph.D., Temple University, Bioengineering Department
2023-	Ad-hoc Grant Reviewer, NIH National Center for Advancing Translational Sciences- Clinical and Translational Science Program Awards (T32, R25, K12 awards)

- 2022-present Ad-hoc Grant Reviewer, NIH Fellowships Panel: Oncological Sciences (F09A). Oncology – Basic Translational (review F30, F31, F32 grants)
- 2022- Ad-hoc Grant Reviewer, National Science Center, Poland
- 2022- Ad-hoc Grant Reviewer, The Wellcome Trust DBT India Alliance Fellowship
- 2022- Ad-hoc Grant Reviewer, NIH Fellowships Panel: Oncological Sciences (F09C). Cancer Immunology and Immunotherapy
- 2021- Ad-hoc Grant Reviewer, French National Research Agency
- 2021- Ad-hoc Grant Reviewer, Graduate Women in Science (GWIS) National Fellowship Program
- 2021- Ad-hoc Grant Reviewer, NIH-NCI Program Project III (ZCA1 RPRB-L 01) Study Section
- 2021- Tenure Review for Mirvat El-Sibai, Ph.D., Lebanese American University, Department of Natural Sciences
- 2020-2022 Grant Reviewer, Department of Defense, Breast Cancer Research Program, Breakthrough Awards
- 2019- Ad-hoc Grant Reviewer, Breast Cancer Now UK
- 2019- Tenure Review for Hong Sun, Ph.D., UNLV, Department of Chemistry & Biochemistry
- 2018- Ad-hoc Grant Reviewer, Worldwide Cancer Research
- 2018- Promotion Review for Alan Howe, Ph.D., University of Vermont, Department of Pharmacology
- 2018- Ad-hoc Grant Reviewer, METAvivor Research Award
- 2018- Tenure Review for Elizabeth Yeh, Ph.D., Medical University of South Carolina, Department of Pharmacology
- 2017- Ad-hoc Grant Reviewer, Wellcome Trust UK
- 2017- Ad-hoc Grant Reviewer, The Netherlands Organisation for Scientific Research
- 2016- Expert Testimony, Patent Infringement Case, Phigenix, Inc. v. Genentech Inc.
- 2016- Tenure Review for Prashanth Asuri, Ph.D., Santa Clara University, Department of Bioengineering
- 2016-2017 Grant Reviewer, Department of Defense, Breast Cancer Research Program, Era of Hope Scholar Review Panel
- 2016- Ad-hoc Grant Reviewer, U.S.-Israel Binational Science Foundation
- 2016- Ad-hoc Grant Reviewer, Canada Research Chairs Program in Molecular Oncology, Tier 1
- 2015 Ad-hoc Grant Reviewer, The PA Breast Cancer Coalition
- 2015-2021 Standing Committee Member, NIH-NCI, Transition to Independence Study Section (K awards)
- 2014- Ad-hoc Grant Reviewer, The University of Alabama at Birmingham, Comprehensive Cancer Center Partnership

- 2014- Ad-hoc Grant Reviewer, Swiss National Science Foundation
- 2013-2015 Ad-hoc Grant Reviewer, Department of Defense, Breast Cancer Research Program, Breakthrough Awards
- 2013- Ad-hoc Grant Reviewer, NIH-NCI Tumor Cell Biology Study Section Oncology 1- Basic Translational Integrated Review Group
- 2013- Ad-hoc Grant Reviewer, NIH-NIGMS Pathway to Independence Study Section
- 2013-2015 Ad-hoc Grant Reviewer, NIH-NCI I-Transition to Independence Study Section
- 2013-2013-2018 Ad-hoc Grant Reviewer, Prostate Cancer United Kingdom Standing Member, Peer Review Committee, Cell Structure and Metastasis, American Cancer Society
- 2012-present Ad-hoc Grant Reviewer, Medical Research Council, United Kingdom
- 2012- Ad-hoc Grant Reviewer, Israel Science Foundation
- 2011-2012 Ad-hoc Grant Reviewer, Cell Structure and Metastasis, American Cancer Society
- 2011 Ad-hoc Grant Reviewer, Dutch Cancer Society
- 2010 AACR 2011 Annual Meeting Program Committee: Member of the Cellular Stress Responses Subcommittee
- 2010 Ad-hoc Grant Reviewer, Department of Defense, Breast Cancer Research Program
- 2009 Ad-hoc Grant Reviewer, Ireland Health Research Board
- 2006-present Ad-hoc Scientific Review Panel, New Jersey Commission on Cancer Research

*Manuscript Reviewer:*

Oncogene (x15), Nature Communications (x9), Molecular Cancer Research (x9), Breast Cancer Research (x9), Cancer Research (x7), Cell Reports (x7), BMC Cancer (x6), Journal of Clinical Investigation (x5), Scientific Reports (x4), Cancers (x4), Molecular Cell (x4), PNAS (x3), Cancer Discovery (x3), Journal of Biological Chemistry (x3), iScience (x3), Cancer Cell (x2), Breast Cancer Research & Treatment (x2), Oncotarget (x2), Trends in Cancer (x2), Cell Death and Disease (x2), Experimental Cell Research (x2), Cancer & Metabolism (x2), Theranostics (x2), International Journal of Cancer (x2), International Journal of Molecular Sciences (x2), Journal of Experimental & Clinical Cancer Research (x2), Cell Metabolism, Nature Cancer, Nature Reviews Cancer, Nature Cell Biology, Genes & Development, Nature Chemical Biology, Journal of Clinical Investigation Insight, Journal of Experimental Medicine, Journal of Advanced Research, Drug Resistance Updates, Signal Transduction & Targeted Therapy, Cell Press Community, BBA Reviews on Cancer, Redox Biology, Molecular Medicine, Molecular Cancer Therapeutics, Cell Chemical

Biology, Molecular Biology of the Cell, Journal of Cell Biology, British Journal of Cancer, Stem Cells, Oncogenesis, Signal Transduction & Targeted Therapy, Stem Cell Reports, BBA Molecular Basis of Disease, Computational and Structural Biotechnology Journal, Frontiers in Oncology, Advanced Science, Cancer Drug Resistance, Experimental Biology & Medicine, Translational Oncology, PLOS One, Aging, Cells, Gastric Cancer, Cellular Physiology & Biochemistry, Journal Cellular Biochemistry, Proteomics-Clinical Applications, Frontiers in Endocrinology, Clinical and Experimental Medicine, Journal of Oncology, OncoTargets and Therapy, Biochemical Society Transactions, Journal of Bioenergetics & Biomembranes, International Journal of Oncology, Oncology Reports, Molecular Carcinogenesis, Current Cancer Drug Targets, Expert Opinion on Drug Discovery, Molecular Carcinogenesis, Cell Communication & Signaling, Apoptosis, Gynecologic Oncology, Journal Biomedical Research, Tissue & Cell, Cell Biology & Toxicology, Cell Biology International, Biotechnology Progress, Biotechniques

**Public Media:**

- 2019 *Participant*, AACR, NBC10/Telemundo Progress and Promise Against Cancer live phone bank. Interviewed Live (in Spanish) by Telemundo to discuss benefits of early detection in breast cancer
- 2018 *Participant*, American Association for Cancer Research (AACR), NBC10/Telemundo Progress and Promise Against Cancer live phone bank

**Publications:**

Number of total citations (Google Scholar) = **8,223**  
Scopus *h*-index (*number of publications cited x times*): **38**  
*i10* index (*number of publications with at least 10 citations*): **52**  
*Publications cited >50 times* = **32**

**Peer-reviewed articles:**

1. Le Minh, G., Esquea, E. M., Dhameliya, T. T., Merzy, J., Lee, M. H., Ball, L. E., and **Reginato M. J.** (2023) Kruppel-like factor 8 regulates triple negative breast cancer stem cell-like activity. Frontiers in Oncology Apr 19: 13:1141834.
  2. Ciraku, L., Bacigalupa, Z. A., Ju, J., Moeller, R. A., Le Minh, G., Lee, R. H., Smith, M. D., Ferrer, C. M., Trefely, S., Izzo, L. T., Doan, M. T., Gocal, W. A., D'Agostino, L., Shi, W., Jackson, J. G., Katsetos, C. D., Wellen, K. E., Snyder, N. W., and **Reginato, M. J.** (2022) O-GlcNAc Transferase Regulates Glioblastoma Acetate Metabolism via Regulation of CDK5-dependent ACSS2 phosphorylation. Oncogene Apr;41(14):2122-2136
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3. Ciraku, L., Moeller, R., Esquea, Gocal, W., Hartsough, E., Simone, N., Jackson, J., **Reginato, M. J.** (2021) An *ex vivo* brain slice model to study and target breast cancer brain metastatic tumor growth. Journal Visualized Experiments Sep 22; (175)
4. Akella, N. M., Le Minh, G., Ciraku, L., Mukherjee, A., Bacigalupa, Z. A., Muhopadyay, D., Sodi, V. L., and **Reginato, M. J.** (2020) O-GlcNAc Transferase Regulates Tumor-Initiating Cell Activity in Breast Cancer Cells. Molecular Cancer Research 2020 Apr;18(4):585-598.
5. Delaney, L., Ciraku, L., Oeffinger, B., Wessner, C., Liu, J., Li, J., Nam, K., Forsberg, F., Leeper, D., O'Kane, P., Wheatley, M., **Reginato, M. J.**, Eisenbrey, J. (2019) Breast cancer brain metastasis response to radiation following microbubble oxygen delivery in a murine model. Journal of Ultrasound in Medicine Dec; 38(12): 3221-3228.
6. Beatty, A., Fink, L. S., Singh, T., Strigun, A., Peter, E., Ferrer, C. M., Nicolas, E., Cai, K. Q., Moran, T. P., **Reginato, M. J.**, Rennefahrt, U., Peterson, J. R. (2018) Metabolite profiling reveals the glutathione biosynthetic pathway as a therapeutic target in triple negative breast cancer. Molecular Cancer Therapeutics Jan; 17(1): 264-275.
7. Sodi, V. L., Bacigalupa, Z. A., Ferrer, C. M., Lee, J. V., Gocal, W. A., Muhopadyay, D., Wellen, K. E., Ivan, M., and **Reginato, M. J.** (2018) Nutrient sensor O-GlcNAcylation controls cancer lipid metabolism via SREBP-1 regulation. Oncogene Feb 15; 37(7): 924-934.
8. Segovia-Mendoza, M., Díaz, L., Prado-Garcia, H., **Reginato, M. J.**, Larrea, F. and García-Becerra, R. (2017) The addition of calcitriol or its synthetic analog EB1089 to lapatinib and neratinib treatment inhibits cell growth and promotes apoptosis in breast cancer cells. Am J Cancer Res. Jul 1;7(7):1486-1500.
9. Ferrer, C. M., Lu, T. Y., Bacigalupa, Z. A., Katsetos, C. D., Sinclair, D. A. and **Reginato, M. J.** (2017) O-GlcNAcylation regulates breast cancer metastasis via SIRT1 modulation of FoxM1 pathway. Oncogene Jan 26;36(4):559-569.
10. Li, C., Li, N., Liu, X., Zhang, E. Y., Sun, Y., Masuda, K., Li, J., Sun, J., Morrison, T., Li, X., Chen, Y., Wang, J., Karim, N. A., Zhang, Y., Blenis, J., **Reginato, M. J.**, Henske, E. P., Yu, J. J. (2016) Proapoptotic protein Bim attenuates estrogen-enhanced survival in lymphangioliomyomatosis. JCI Insight Nov17;1(19):e86629.
11. Sodi, V. L., Khaku, S., Schwab, L. P., Voadlo, D. J., Seagroves, T. N. and **Reginato, M. J.** (2015) mTOR/MYC axis regulates O-GlcNAc transferase



- expression and O-GlcNAcylation in breast cancer. Molecular Cancer Research May;13(5):923-33 (article featured in *Highlights of This Issue*).
12. Tchafa, A. M., Ta, M., **Reginato, M. J.** and Shieh A. C. (2015) Epithelial-to-mesenchymal transition alters interstitial fluid flow-induced signaling in ERBB2-positive breast cancer cells. Molecular Cancer Research Apr;13(4):755-64. (*co-corresponding author*)
  13. Karakashev, S. V. and **Reginato, M. J.** (2015) Hypoxia/HIF-1 $\alpha$  induces lapatinib resistance in ERBB2-positive breast cancer cells via regulation of DUSP2. Oncotarget Feb 10;6:1967-80.
  14. Ferrer, C. M., Lynch, T. P., Sodi, V., Falcone, J. N., Schwab, L., Peacock, D., Vocadlo, D.J., Seagroves, T. N. and **Reginato, M. J.** (2014) O-GlcNAcylation regulates cancer metabolism and survival stress signaling via regulation of HIF-1 pathway. Molecular Cell; June 5;54(5); 820-31
  15. Martin-Perez, R., Palacios, C., Yerbes, R., Cano-Gonzales, A., Iglesias-Serret, D., Gil, J., **Reginato, M. J.** and López-Rivas A. (2014) Activated HER2 licenses sensitivity to apoptosis upon endoplasmic reticulum stress through a PERK-dependent pathway. Cancer Research Mar 15;74(6):1766-77.
  16. Ferdin, J., Wu, x., Nishida, N. Nicoloso, M. S., Shah, N. M., Devlin, C., Ling, H., Shimizu, M., Kumar, K., Cortez, M. A., Ferracin, M., Bi, Y., Yang, D., Czerniack, B. A., Zhang, W., Schmittgen, T. D., Voorhoeve, M. P., **Reginato, M. J.**, Negrini, M., Davuluri, R. V., Kunej, T., Ivan, M., and Calin, G.A. (2013) HINCUTs in Cancer: Hypoxia-Induced Non-Coding Ultraconserved Transcripts. Cell Death Differ Dec; 20(12):1675-87.
  17. Whelan, K. A. Schwab, L., Karakashev, S., Franchetti, L., Johannes, G. J., Seagroves, T. N., and **Reginato, M. J.** (2013) The oncogene HER2/neu (erbB2) requires the hypoxia-inducible factor (HIF-1) for mammary tumor growth and anoikis resistance. J. Biol Chem, May 31; 288(22): 15865-77.
  18. Kambach, D. M., Sodi, V., Lelkes, P. I., Azizkhan-Clifford, J., and **Reginato, M. J.** (2014) ErbB2, FoxM1, and 14-3-3 $\zeta$  prime breast cancer cells for invasion in response to ionizing radiation. Oncogene Jan 30;33(5): 589-98.
  19. Botta, G. P., Reichert, M. **Reginato, M. J.**, Heeg, S., Rustgi, A. K. and Lelkes, P. I. (2013) ERK2-regulated TIMP1 induces hyperproliferation of K-Ras (G12D)-transformed pancreatic ductal cells. Neoplasia Apr 15 (4): 359-72.
  20. Yerbes, R., López-Rivas A. **Reginato, M. J.** and Palacios, C. (2012) Control of FLIPL expression and TRAIL resistance by the extracellular signal

- regulated kinase (ERK)1/2 pathway in breast epithelial cells. Cell Death Differ Dec; 19 (12): 1908-16.
21. Lynch, T. P., Ferrer, C. M., Jackson, S. R., Shahriari, K. S., Vosseller, K. and **Reginato, M. J.** (2012) Critical role of O-GlcNAc transferase in prostate cancer invasion, angiogenesis and metastasis. J. Biol Chem, March 30; 287 (14): 11070-81.
  22. Botta, G. P., **Reginato, M. J.**, Reichert, M., Rustgi, A. K. and Lelkes, P. I. (2012) Constitutive K-RasG12D activation of ERK2 specifically regulates 3D invasion of human pancreatic cancer cells via MMP-1. Molecular Cancer Research, Feb; 10: 183-96. (article featured in *Highlights of This Issue*, p118)
  23. Yerbes, R., Palacios, C., **Reginato, M. J.** and López-Rivas A. (2011) Cellular FLIP<sub>L</sub> plays a survival role and regulates morphogenesis in breast epithelial cells. Biochim Biophys Acta. Jan;1813(1):168-78.
  24. Whelan, K. A., Caldwell, S. A., Shahriari, K., Jones, L., Johannes, G. and **Reginato, M. J.** (2010) Hypoxia Blocks Anoikis and Lumen Formation of Cultured Mammary Epithelial Acini via Inhibition of BH3-only Proteins Bim and Bmf. Mol. Biol. Cell Nov; 21:3829-37.
  25. Caldwell, S. A., Jackson, S. R., Shahriari, K. S., Lynch, T., Sethi, G., Walker, S., Vosseller, K., and **Reginato, M. J.** (2010) Nutrient Sensor O-GlcNAc Transferase Regulates Breast Cancer Tumorigenesis via Targeting of the Oncogenic Transcription Factor FoxM1. Oncogene, May 13; 29:2831-42.
  26. Haenssen, K. K., Caldwell, S. A., Shahriari, K., Jackson, R., Whelan, K., Klein-Szanto, A., and **Reginato, M. J.** (2010) ErbB2 requires integrin  $\alpha 5$  for anoikis resistance via c-Src regulation of receptor activity in human mammary epithelial cells. J. of Cell Science, Apr 15; 123:1373-82.
  27. Sodunke, T. R., Turner, K. K., Caldwell, S. A., McBride, K. W., **Reginato, M. J.** and Noh, N. (2007) Micropatterns of Matrigel for Three-Dimensional Epithelial Cultures. Biomaterials 28:4006-16. (*co-corresponding author*)
  28. **Reginato, M. J.**, Mills, K. R., Becker, E.B., Lynch, D.K., Bonni, A., Muthuswamy S., and Brugge, J. S. (2005) Bim regulation of lumen formation in cultured mammary epithelial acini is targeted by oncogenes. Mol. Cell Biol. 25, 4591-4601. (ASM News (2005), Journal Highlights , 71, p325)
  29. Collins, N., **Reginato, M. J.**, Paulus, J. K., Witt, A., LeBear, J., and Brugge, J. S. (2005) G1/S cell cycle arrest provides anoikis resistance through Erk-mediated Bim suppression. Mol. Cell Biol. 25, 5282-5291.

30. Yan, S. R., Joseph, R. R., Rosen, K., **Reginato, M. J.**, Jackson, A., Allaire, N., Brugge, J. S., Jobin, C., and Stadnyk, A. W. (2005) Activation of NF-kappa-B following detachment delays apoptosis in intestinal epithelial cells. Oncogene, 24, 6482-6491.
31. Martin, S., Ridgeway, A., Pinkas, J., Lu, Y., **Reginato, M. J.**, Koh, E., Michelman, M., Brugge, and Leder, P. (2004) A cytoskeleton-based functional genetic screen identifies Bcl-xL as an enhancer of metastasis, but not primary tumor growth. Oncogene, 23, 4641-4645.
32. Mills, K. R., **Reginato, M. J.**, Debnath, J., Queenan, B., and Brugge, J. S. (2004) Tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) is required for induction of autophagy during lumen formation in vitro. Proc. Natl. Acad. Sci. USA, 101, 3438-3443.
33. **Reginato, M. J.**, Mills, K. R., Paulus, J. K., Lynch, D. K., Sgroi, D.C., Debnath J., Muthuswamy S., and Brugge, J. S. (2003) Integrins and EGFR coordinately regulate the pro-apoptotic protein Bim to prevent anoikis. Nature Cell Biology. 5, 733-740.
34. Debnath, J., Mills, K. R., Collins, N., **Reginato, M. J.**, Muthuswamy S., and Brugge, J. S. (2002) The role of apoptosis in creating and maintaining luminal space within normal and oncogene expressing mammary acini. Cell 111, 29-40.
35. **Reginato, M. J.**, Bailey, S. T., Krakow, S. L., Minami, C., Ishii, S., Tanaka, H., and Lazar, M. A. (1998) A potent antidiabetic thiazolidinedione with unique PPAR $\gamma$ -activating properties. J. Biol. Chem. 273, 32679-32684.
36. Shao, D., Rangwala, S. M., Bailey, S. T., Krakow, S. L., **Reginato, M. J.**, and Lazar, M. A. (1998) Interdomain communication regulating ligand binding by PPAR $\gamma$ . Nature 396, 377-380.
37. **Reginato, M. J.**, Krakow, S. L., Bailey, S. T., and Lazar, M. A. (1998) Prostaglandins promote and block adipogenesis through opposing effects on PPAR $\gamma$ . J. Biol. Chem. 273, 1855-1858.
38. Adams, M., **Reginato, M. J.**<sup>#</sup>, Shao, D., Lazar, M. A., and Chatterjee, K. (1997) Transcriptional activation by peroxisome proliferator-activated receptor  $\gamma$  is inhibited by phosphorylation at a consensus mitogen-activated protein kinase site. J. Biol. Chem. 272, 5128-5132. <sup>#</sup> co-first author
39. Schwarz, E. J., **Reginato, M. J.**<sup>#</sup>, Shao, D., Krakow, S. L., and Lazar, M. A. (1997) Retinoic acid blocks adipogenesis by inhibiting C/EBP $\beta$ -mediated transcription. Mol. Cell. Biol. 17, 1552-1561. <sup>#</sup> co-first author

40. Cheng, X., **Reginato, M. J.**, Andrews, N., and Lazar, M. A. (1997) The Transcriptional integrator CBP mediates positive crosstalk between nuclear hormone receptors and the hematopoietic bZip protein p45/NF-E2. Mol. Cell. Biol. 17, 1407-1416.
41. **Reginato, M. J.**, Zhang, J., and Lazar M. A. (1996) DNA-independent and DNA-dependent mechanisms regulate the differential heterodimerization of the isoforms of the thyroid hormone receptor with retinoid X receptor. J. Biol. Chem. 271, 28199-28205.
42. Katz, D., **Reginato, M. J.**, and Lazar, M. A. (1995) Functional regulation of thyroid hormone receptor variant TR $\alpha$ 2 by phosphorylation. Mol. Cell. Biol. 15, 2341-2348.
43. Macia, R. A., Gabel, R. A., **Reginato, M. J.**, and W. D. Matthews. (1990) Hypotension induced by growth hormone releasing peptide is mediated by mast cell serotonin release in the rat. Tox. And Appl. Pharmacol. 104: 403-410.

**Manuscripts under review or preparation:**

1. Esquea, E., Ciraku, L., Young, R., Merzy, J., Talarico, A., Rashad, A. A., Cocklin, S., Simone N. L., Beld, J., **Reginato, M. J.** and Dick, A. (2023) Discovery of novel brain permeable ACSS2 inhibitors for blocking breast cancer brain metastatic growth (*bioRxiv 2023 Dec 23*)
  2. Le Minh, G., Esquea, E., Sharp, R., Dhameliya, T., Merzy, J., Lee, M. H., Ball, L. E., and **Reginato M. J.** (2023) O-GlcNAcylation of GATAD2B regulates breast cancer stem-like potential (*in preparation*).
  3. Esquea, E., Ciraku, L., Young, R., Merzy, J., Le Minh, G., Talarico, A., Gocal, W., Dick, A., and **Reginato, M. J.** (2023) Targeting ACSS2 induces ferroptosis in breast cancer brain metastatic cells (*in preparation*)
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**Invited Reviews:**

1. Le Minh, G., Esquea, E., Young, R., and **Reginato, M.J.** (2023) On a sugar high: Role of O-GlcNAc in cancer J. Biol Chem. Oct 12; 299 (11): 105344
2. Le Minh, G., **Reginato, M. J.** (2023) Role of O-GlcNAcylation on cancer stem cells: Connecting nutrient sensing to cell plasticity. Adv Cancer Res 157:195-228.
3. Ciraku, L., Esquea, **Reginato, M. J.** (2022) O-GlcNAcylation regulation of cellular signaling in cancer. Cell Signal Feb;90:110201.
4. Akella, N. M., Ciraku, L., **Reginato, M. J.** (2019) Fueling the fire: Emerging role of the Hexosamine Biosynthetic Pathway in cancer. BMC Biology Jul 4;17(1):52.

5. Bacigalupa, Z. A., Bhadiadra, C., and **Reginato, M. J.** (2018) O-GlcNAcylation: key regulator of glycolytic pathways. Journal of Bioenergetics and Biomembranes Jun;50(3):189-198.
6. Ferrer, C. M., Sodi, V. L. and **Reginato, M. J.** (2016) O-GlcNAcylation in cancer biology: Linking metabolism and signaling. Journal of Molecular Biology Aug 14;428(16):3282-94.
7. Karakashev, S. V., and **Reginato, M. J.** (2015) Progress towards overcoming hypoxia-induced resistance in solid tumor therapy. Cancer Management and Research Aug 12;7; 253-64.
8. Ferrer, C. M., and **Reginato, M. J.** (2014) Sweet Connections: O-GlcNAcylation links cancer metabolism and survival. Molecular & Cellular Oncology Oct 29;2(1):e961809.
9. Katsetos, C. D., **Reginato, M.J.**, Baas, P.W., D'Agostino, L., Legido, A., Tuszynski, J.A., Dráberová, E., Dráber, P. (2015) Emerging microtubule targets in glioma therapy. Semin Pediatr Neurol. Mar;22(1):49-72.
10. Ferrer, C. M., and **Reginato, M. J.** (2014) Sticking to Sugars at the Metastatic Site: Sialyltransferase ST6GalNAc2 acts as Breast Cancer Metastasis Suppressor. Cancer Discovery, March 4(3); 275–7.
11. Lynch, T. P. and **Reginato, M. J.** (2011) O-GlcNAc Transferase: A sweet new cancer target. Cell Cycle, Jun 1; 10: 1712-13.
12. Whelan, K. A. and **Reginato, M. J.** (2011) Surviving without oxygen: Hypoxia regulation of mammary morphogenesis and anoikis. Cell Cycle, Jul 15; 10: 2287-94.
13. **Reginato, M. J.** and Muthuswamy, S. K. (2006) Illuminating the center: Mechanisms regulating lumen formation and maintenance in mammary morphogenesis. J. Mammary Gland Bio & Neoplasia. 11:205-11.
14. **Reginato, M. J.**, and Lazar, M. A. (1999) Mechanisms by which thiazolidinediones enhance insulin action. Trends Endocrinol. Metab. 10, 9-13.

**Books and chapters in books (invited):**

1. Le Minh, G. and **Reginato, M. J.** (2022) Role of hexosamine biosynthetic pathway on cancer stem cells: Connecting nutrient sensing to cancer cell plasticity. Comprehensive Pharmacology. Elsevier, Elizabeth Yeh (Ed.) Vol. 6, pp. 401-418
2. Ferrer, C. M., and **Reginato, M. J.** (2014) Cancer Metabolism: Cross Talk

Between Signaling and O-GlcNAcylation. *Cancer Genomics and Proteomics: Methods and Protocols, Methods in Molecular Biology, Springer, Narendra Wajapeyee (Ed.)* 1176:73-88.

**Other Communications:**

**PATENTS:**

**Reginato, M. J.**, and Vosseller, K. V. United States National Phase Application o. 12,679,562 filed October 3, 2007 "Methods For Treating Neoplastic Disease Targeting O-Linked N-Acetylglucosamine Modifications Of Cellular Proteins"

**PATENTS (pending):**

Dick, A., Ahmed, A., Cocklin, S., Ciraku, L., and **Reginato, M. J.** "Treating cancer with small molecules that inhibit ACSS2" U.S. Provisional Application No 63/326,363 issued April 1, 2022.

**Presentations (since 2004):**

***1. Invited lectures:***

- Nov 2023      "*On a sugar high: O-GlcNAc regulation of cancer*"  
Fels Cancer Institute for Personalized Medicine, Temple  
University Lewis Katz School of Medicine, Philadelphia, PA,  
Host: Kelly Whelan, PhD
- July 2022      "*Nutrient sensor O-GlcNAcylation: Linking signaling and  
metabolism in cancer & beyond*" ASBMB Symposium: O-GlcNAc  
regulation of cellular physiology and pathophysiology, Athens,  
GA, Host: Gerald Hart, PhD
- Feb 2022      "*Role of O-GlcNAc in breast cancer*"  
Sidney Kimmel Cancer Center Retreat, Philadelphia, PA. Host:  
Andrew Aplin, Ph.D.
- Oct 2021      "*O-GlcNAcylation: Linking metabolism & signaling in cancers*"  
*Keynote Speaker*, Cancer Symposium, 6th Latin American  
Congress of Glycobiology  
Mexico City, Mexico, Host: Verónica Vallejo Ruiz, Ph.D.
- Sept 2021     "*Nutrient sensor O-GlcNAcylation: Linking signaling and acetate  
metabolism in brain tumors*" NIH Symposium: The Glycobiology  
of Cancer. Host: Karl Krueger, Ph.D.
- Mar 2021      "*Signaling and metabolic vulnerabilities in cancer*" Community of  
Scholars Meeting, Drexel University College of Medicine,  
Philadelphia PA, Host: Kenny Simansky, Ph.D.

- Nov 2020      *“O-GlcNAcylation: Linking metabolism & signaling in cancers”* Sydney Kimmel Cancer Center, Translational Cellular Oncology Program Meeting, Thomas Jefferson University, Philadelphia PA. Host: Ubaldo Martinez-Outschoorn, M.D./Ph.D.
- Feb 2020      *“Role of O-GlcNAc on breast cancer initiating cells”* NCI-The Alliance of Glycobiologists for Cancer Research Annual Meeting, Rockville MD. Host: Neeraja Sathyamoorthy, Ph.D.
- Dec 2019      *“Nutrient sensor O-GlcNAcylation: Linking signaling and acetate metabolism in brain tumors”* Molecular and Cellular Oncogenesis Program, Wistar Institute, Philadelphia PA, Host: Maureen Murphy, Ph.D.
- Jan 2019      *“O-GlcNAcylation regulates glioblastoma acetate metabolism via CDK5-dependent phosphorylation of ACSS2”* Sidney Kimmel Cancer Center Retreat, Philadelphia, PA. Host: Karen Knudsen, Ph.D.
- Nov 2018      *“Glycosylation: Linking Signaling and Metabolism in cancer and beyond”* Distinguished Lectures in Cancer Research, Abramson Family Cancer Research Institute, University of Pennsylvania, Philadelphia, PA. Host: Kathryn Wellen, Ph.D.
- March 2018    *“Glycosylation: Linking Signaling and Metabolism in cancer and beyond”* The Lankenau Institute for Medical Research, Wynnewood, PA. Host: George Prendergast, Ph.D.
- Nov 2017      *“Glycosylation: Linking Signaling and Metabolism in cancer and beyond”* Department of Cell and Molecular Pharmacology, Medical University of South Carolina, Host: Lauren Ball, Ph.D.
- July 2017      *“Unsolved problems in Breast Cancer: Basic Research”* Sidney Kimmel Cancer Center, Breast Cancer Program Retreat, Thomas Jefferson University, Philadelphia PA. Host: Daniel Silver, M.D./Ph.D.
- March 2017    *“Glycosylation: Linking Metabolism and Signaling in cancer and beyond”* Department of Biochemistry and Molecular Biology, Drexel University College of Medicine, Host: Jane Clifford, Ph.D.
- Oct 2016      *“Breast Cancer Biology: Recent Progress & Discoveries”* 5th Annual Symposium on Breast Cancer, University of Antofagasta, Antofagasta, Chile, Host: Marcos Cikutovic, Ph.D.
- March 2016    *“Nutrient sensor O-GlcNAcylation: Linking metabolism and*

- signaling in cancer*” The Lankenau Institute for Medical Research, Wynnewood, PA. Host: Margaretha Wallon, Ph.D.
- Dec 2015      “*Signaling pathways regulating hormone-independent breast cancers*” Sidney Kimmel Cancer Center Consortium Basic Scientific Retreat, Thomas Jefferson University, Philadelphia PA. Host: Karen Knudsen, Ph.D.
- Oct 2015      “*Nutrient sensor O-GlcNAcylation: Linking metabolism and signaling in cancer*” University of Antofagasta, Antofagasta, Chile, Host: Cristina Dorador, Ph.D.
- July 2015      “*Nutrient sensor O-GlcNAcylation: Linking metabolism and signaling in cancer*” Origins of Cancer Symposium, Van Andel Research Institute, Grand Rapids, Michigan, Host: George Vande Woude, Ph.D.
- May 2015      “*Nutrient sensor O-GlcNAcylation: Linking metabolism and signaling in cancer*” Molecular and Cellular Oncogenesis Program, Wistar Institute, Philadelphia PA, Host: Maureen Murphy, Ph.D.
- Feb 2015      “*Integrating Signaling, Transcription, and Metabolic Pathways in Cancer*” Department of Chemistry and Biochemistry, Rider University, Lawrenceville, NJ, Host: Barry Spiegelberg, Ph.D.
- Jan 2015      “*Sweet Connections: Glycosylation Links Cancer Cell Metabolism to Survival*” Cancer Biology Program, Fox Chase Cancer Center, Philadelphia PA, Host: Jeffrey Peterson, Ph.D.
- Nov 2014      “*Sweet Connections: Glycosylation Links Cancer Cell Metabolism to Survival*” Graduate Center for Toxicology, The Markey Cancer Center, University of Kentucky College of Medicine, Lexington, KY, Host: Qiou Wei, M.D./Ph.D.
- Oct 2014      “*Breast Cancer Biology: Recent Progress & Discoveries*” 3rd Annual Symposium on Breast Cancer, Antofagasta, Chile, Host: Nuvia Aliaga, M.D.
- May 2014      “*A Sweet Way to Die: Glycosylation Links Cancer Cell Metabolism to Survival*” Department of Biology, Drexel University, Host: Laura Duwel, Ph.D.
- April 2014      “*A Sweet Way to Die: Glycosylation Links Cancer Cell Metabolism to Survival*” Department of Biochemistry and



- Molecular Biology, Drexel University College of Medicine, Host: Jane Clifford, Ph.D.
- March 2014      *“Role of hypoxia/HIF-1 $\alpha$  on lapatinib resistance in ErbB2-positive breast cancer”* Cancer Cell Biology & Signaling Program, Kimmel Cancer Center, Thomas Jefferson University, Philadelphia PA. Host: Andrew Aplin, Ph.D.
- November 2013      *“Modeling Cancer in Three Dimensions”* The Creativity and Innovation Colloquia, Drexel University, Host: Drexel University, Graduate Student Association
- June 2013      *“Interplay Between O-GlcNAcylation and Cancer”* International Symposium on Molecular Medicine and Infectious Disease, Drexel University College of Medicine, Host: Brian Wigdahl, Ph.D.
- April 2013      *“Research Models for 3D Growth of Breast Cancer Cells”* Breast Cancer Research Program, Kimmel Cancer Center, Thomas Jefferson University, Philadelphia PA, Host: Hallgier Rui, M.D./Ph.D.
- April 2013      *“Nutrient Sensor O-GlcNAcylation: A Sweet Role in Cancer Cell Metabolism and Survival”* Joint Seminar Series/Microbiology & Immunology/Biochemistry/Cancer Biology/Kimmel Cancer Center, Thomas Jefferson University, Philadelphia PA, Host: Richard Davidson, Ph.D.
- Nov 2012      *“Integrating Signaling, Transcription, and Metabolic Pathways in Cancer”* Department of Biology, Drexel University, Philadelphia PA, Host: Jennifer Stanford, Ph.D.
- Oct 2012      *“Integrating Signaling, Transcription, and Metabolic Pathways in Cancer”* Department of Biochemistry and Molecular Biology, Drexel University College of Medicine, Host: Jane Clifford, Ph.D.
- Sept 2012      *“Integrating Signaling, Transcription, and Metabolic Pathways in Cancer”* Department of Pharmacology, University of Pennsylvania School of Medicine, Philadelphia PA, Host: Marcelo Kazanietz, Ph.D.
- July 2012      *“Taking Sugar from Cancer: Targeting O-GlcNAcylation in Tumorigenesis”* Institute for Hepatitis and Virus Research, Doylestown PA, Host: Tim Block, Ph.D.
- June 2012      *“Cancer in 3D: Mechanisms of Breast Cancer Survival, Invasion, and Metabolism”* Cancer Cell Biology & Signaling Program,

- Kimmel Cancer Center, Thomas Jefferson University, Host: Jeffrey Benovic, Ph.D.
- May 2012      *“O-GlcNAcylation: A Sweet Role in Cancer Cell Survival”*  
Interdisciplinary Symposium on Invasion, Homing and Survival of Cancer Cells, Drexel University College of Medicine, Host: Noreen Robertson, DMD
- May 2012      *“Taking Sugar from Cancer: Targeting O-GlcNAcylation in Tumorigenesis”* Research and Development Department, Medical Diagnostic Laboratories, HUMIGEN, The Institute of Genetic Immunology, Hamilton NJ, Host: Joseph Nickels, Ph.D.
- Sept 2011      *“O-GlcNAc Nutrition Sensor Regulates Tumorigenesis”*  
XXVIII Jean-Claude Dreyfus Symposium on “Obesity, Diabetes and Cancer”, INSERM, Institut Cochin, Paris France, Host: Ralf Jockers, Ph.D.
- June 2011      *“Surviving without oxygen: Hypoxia/HIF regulation of mammary morphogenesis and oncogenesis”* Interdisciplinary Symposium on Oxygen: From Molecular Mechanisms to Real-Time Monitoring, Translational Medicine & Applied Biotechnology, Drexel University College of Medicine, Philadelphia PA, Host: Noreen Robertson, DMD
- April 2011      *“O-GlcNAc Transferase: A sweet new target for cancer”* Ontario Cancer Institute, University of Toronto, Toronto Canada, Host: Senthil Muthuswamy, Ph.D.
- Nov 2010      *“O-GlcNAc Transferase: A sweet new target for cancer”*  
GlaxoSmithKline, Cancer Metabolism Group, Collegeville PA, Host: Benjamin Schwartz, Ph.D.
- July 2009      *“Understanding Breast Cancer Using 3D In Vitro Culture Models”* Department of Cancer Biology, University of Pennsylvania School of Medicine, Abramson Cancer Center, Philadelphia PA, Host: Roger Greenberg, M.D./Ph.D.
- May 2009      *“Identification of Biomarkers and Therapeutic Targets in 3D Hypoxic Breast Cancer”* Interdisciplinary Seminar Series, Translational Medicine & Applied Biotechnology, Drexel University College of Medicine, Host: Noreen Robertson, DMD
- May 2008      *“Understanding Breast Cancer in Three Dimensions: Mechanisms of HER2/ErbB2-Mediated Oncogenesis”* Sol Sherry Thrombosis

Research Center, Temple University School of Medicine,  
Philadelphia PA, Host: Satya Kunapuli, Ph.D.

- May 2008      *“Understanding Breast Cancer Using 3D In Vitro Culture Models”* Breast Cancer Interdisciplinary Scientific Symposium, Translational Medicine & Applied Biotechnology Working Group, Drexel University College of Medicine, Host: Noreen Robertson, DMD
- April 2008      *“Targeting Breast Cancer in Three Dimensions: Mechanisms of HER2/ErbB2-Mediated Oncogenesis”* Prostate Cancer Initiative Network, Department of Pathology & Laboratory Medicine, Drexel University College of Medicine, Host: Mark Stearns, Ph.D.
- April 2008      *“Targeting Breast Cancer in Three Dimensions: Mechanisms of HER2/ErbB2-Mediated Oncogenesis”* Department of Biochemistry and Molecular Biology, Drexel University College of Medicine, Host: Jane Clifford, Ph.D.
- Jan 2007      *“Modeling Breast Cancer in 3D”* Sex and Gender Research Forum, Institute for Women’s Health, Drexel University College of Medicine, Host: Noreen Robertson, DMD
- April 2006      *“Breast Cancer in 3D: Understanding Matrix and Growth Factor Regulation of Epithelial Survival, Morphogenesis and Transformation”* Center of Integrated Bioinformatics, School of Biomedical Engineering, Drexel University, Host: Aydin Tozeran, Ph.D.
- March 2006      *“Breast Cancer in 3D: Understanding Matrix and Growth Factor Regulation of Epithelial Survival, Morphogenesis and Transformation.”* Department of Biochemistry and Molecular Biology, Drexel University College of Medicine, Host: Jane Clifford, Ph.D.
- Jan 2006      *“Breast Cancer in 3D: Understanding Matrix and Growth Factor Regulation of Epithelial Survival, Morphogenesis and Transformation.”* Department of Bioscience and Biotechnology, Drexel University, Host: Aleister Saunders, Ph.D.
- Nov 2004      *“Use of a 3D Breast Epithelial Cell Model in Monitoring Oncogene and Drug Activities.”* Tissue Models for Drug Discovery Conference, Boston, MA, Host: Cambridge Healthtech Institute

**2. By competition or Peer-Review (oral presentations):**

- April 2021 Ciraku, L., Bacigalupa, Z. A., Smith, M., Ferrer, C. M., D'Agostino, L., Trefely, S., Snyder, N., Katsetos, C. and **Reginato, M. J.** "O-GlcNAc Transferase Regulates Glioblastoma Acetate Metabolism via Regulation of CDK5-dependent ACSS2 phosphorylation" 2021 AACR Annual Meeting Minisymposium on Metabolic Pathways in Cancer
- Sept 2019 Ciraku, L., Bacigalupa, Z. A., Smith, M., Ferrer, C. M., D'Agostino, L., Trefely, S., Snyder, N., Katsetos, C. and **Reginato, M. J.** "O-GlcNAc Transferase Regulates Glioblastoma Acetate Metabolism via Regulation of CDK5-dependent ACSS2 phosphorylation" Biology of Cancer: Microenvironment & Metastasis Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor NY
- Oct 2017 Akella, N., Mukhopadhyay, D., Mukherjee, A., Bacigalupa, Z., **Reginato, M.J.** "O-GlcNAc transferase regulates breast cancer tumor initiating cells" Biology of Cancer: Microenvironment & Metastasis Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor NY
- Feb 2016 Bacigalupa, Z., Ferrer, C., Xerri, N., D'Agostino, L., Katsetos, C., and **Reginato, M.J.** "Role of OGT and O-GlcNAcylation in glioblastoma lipid metabolism and growth." 2016 Keystone Symposium: New Frontiers in Understanding Tumor Metabolism in Banff, Alberta, Canada
- March 2015 Ferrer, C.M., Lu, T., Sinclair, D. A., and **Reginato, M.J.** "O-GlcNAcylation regulates breast cancer cell invasion via the NAD<sup>+</sup>-dependent deacetylase SIRT1." Biology of Sirtuins, Keystone Symposia, Santa Fe, NM
- Aug 2014 Ferrer, C.M., Lynch, T., Sodi, V., Vocadlo, and **Reginato, M.J.** "O-GlcNAcylation Regulates Global Cancer Metabolism in Cancer Cells via Regulation of HIF-1 $\alpha$ ." Mechanisms and Models of Cancer, Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor NY
- Sept 2013 Karakashev, S.K., and **Reginato, M.J.** "Hypoxia induces Lapatinib resistance in ErbB2-positive breast cancer cells via regulation of DUSP2" Third AACR International Conference on Frontiers in Basic Cancer Research in National Harbor, Maryland
- Apr 2013 Ferrer, C.M., Lynch, T., Sodi, V., Vocadlo, and **Reginato, M.J.** "O-GlcNAcylation Regulates Cancer Metabolism and Stress

Signaling via the HIF1 $\alpha$ /Glut1 Axis” Cancer Biology & Therapeutics, Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor NY

Aug 2011 **Reginato, M. J.**, Lynch, T., Ferrer, C., Jackson, R., Shahriari, K., and Vosseller, K. “Nutrient sensor O-GlcNAc Transferase regulates breast cancer tumorigenesis via targeting of the oncogenic transcription factor FoxM1”. Department of Defense, Breast Cancer Research Program Era of Hope Conference, Orlando FL

Apr 2011 **Reginato, M. J.**, Lynch, T., Falcone, J., and Shahriari, K. “Nutrient sensor O-GlcNAc Transferase regulates cancer glycolysis”. The Biology of Cancer: Microenvironment, Metastasis & Therapeutics, Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor.

**News Release** (since 2004)

["Starving Breast Cancer in the Brain"](#)

*EXEL* - Drexel University Research Magazine (2023)

["PA Breast Cancer Coalition Awards \\$100,000 Grant to Mauricio Reginato"](#)

*College of Medicine Newsroom* (May, 2023)

["STAR Scholar Scales Real-World Learning Curve in Cancer Research"](#)

*Drexel News* (February 23, 2023)

["Teaming Up to Fight Brain Tumors"](#)

*College of Medicine Alumni Magazine* (Fall/Winter 2016)

["Professors Receive Grants Through Statewide Refunds for Breast Cancer Research Campaign"](#)

*College of Medicine Newsroom* (March 4, 2015)

["Cancer Groups Celebrate Pa. Program That Helps Taxpayers Donate to Research Programs"](#)

*PA Breast Cancer Coalition* (March 3, 2015)

["Drexel University researchers receive \\$100,000 through breast cancer research program"](#)

*Reading Eagle* (January 27, 2015)

["Study Finds Novel Molecular Mechanism for Breast Cancer Cell Metabolism and Survival"](#)

*College of Medicine Newsroom* (May 23, 2014)

["Cancer Discovery"](#)

*EXEL* - Drexel University Research Magazine (2014)

["Study links cancer growth to sugar-based modification found naturally in the body"](#)

*News-Medical.Net* (April 15, 2010)

**Educational Activities:****1. Teaching Experience:****a. Taught****Medical Student Instruction (current hrs/yr: 0)**

2019- 2020	“Transcription” Medical Biochemistry Interactive Session (2 hrs)
2013-2017	“Cancer” Medical Biochemistry (3 hrs) Interdisciplinary Foundations of Medicine (IFM) Curriculum
2011-2016	“Gene Regulation” Medical Biochemistry (2 hrs) Program of Integrated Learning (PIL)
2010-2016	“Gene Regulation” Medical Biochemistry (4 hrs) Interdisciplinary Foundations of Medicine (IFM) Curriculum
2009-2016	“Abnormal Amniocentesis” Module, Small Group Conference, IFM (3 hrs)
2005-2016	“Suspicious Lump” Module, Cancer Case Group Conference, IFM (3 hrs)
2005-2011	“Chest Pain” Module, Hyperlipidemia Case Group Conference, IFM (3 hr)

**Graduate Student Instruction (current hrs/yr: 32)**

2020-present	“Microscopy Techniques” Techniques in Molecular & Cell Biology & Genetics (2 hrs)
2019-present	“Cancer Metabolism” Cancer Biology (2 hrs)
2019-present	“Challenges in Breast Cancer” Cancer Biology (2 hrs)
2019-present	“Cancer Stem Cells” Cancer Biology (2 hrs)
2019-20221	“Preclinical Cancer Animal Models” Biochemistry of Drug Discovery & Design (2 hrs)
2017-2021	“Transcription I & II” Core Curriculum I (4 hrs)
2017-2021	“Conference: Transcription” Core Curriculum I (2 hrs)
2013-2020	“Cancer Metabolism” Fundamentals of Molecular Medicine III (2 hrs)
2013-2021	“Integrated Systems: Cancer Biology” Core Curriculum II (9 hrs)
2011-2021	“Integrins and extracellular matrix” Core Curriculum II (2 hrs)
2010-present	“Cancer Metabolism” Advanced Cancer Biology (2 hrs)
2010-present	“Cancer Stem Cells” Advanced Cancer Biology (2 hrs)
2010-present	“How to read a paper” Advanced Topics in Biochemistry & Molecular Biology/LEAP (2 hrs)
2010-2020	“Cancer Metabolism” Advanced Topics in Biochemistry & Molecular Biology (2 hrs)
2009-2022	“Animal Models of Cancer Research” Animal Models in Biomedical Research (1 hr)

2008-present	“Steroid Receptors in Cancer” Cancer Biology (2 hrs)
2006-present	“Cell-Extracellular matrix communication” Advanced Cell Biology (2 hrs)
2006-present	“Cell Death Model Systems” Cell Cycle and Apoptosis (3 hrs)
2006-present	“Death Receptor Signaling” Cell Cycle and Apoptosis (3 hrs)
2005-present	“Tumor Microenvironment I & II” Cancer Biology (6 hrs)
2005-present	“Apoptosis in Cancer” Cancer Biology (2 hrs)
2004-2022	“Light Microscopy Techniques” Experimental Approaches to Biochemical Problems (2 hrs)

### **b. Coordinated**

2017-2019	Interim Director, Graduate Program in Biochemistry, DUCOM
2012-present	Director (new program), Cancer Biology Graduate Program, DUCOM
2013-present	Course Director, CBIO 503: Cancer Biology Program Journal Club
2010-present	Course Director, CBIO 512: Advanced Cancer Biology (new course)
2007-present	Course Director, MCBG 513: MCBG Program Student-Organized Seminar Series
2006-present	Course Co-director, MCBG 514: Cell cycle & Apoptosis, MCBG Program (new course)
2005-2011	Course Director, MCBG 512: MCBG Program Journal Club

### **c. Developed**

1. Created new Masters Program in [Cancer Biology](#) (matriculated students since 2013= 58)
2. Helped update content of “Suspicious Lump” Module, Cancer Case Group Conference, IFM
3. Developed new course- Advanced Cancer Biology
4. Helped develop new course-Cell Cycle and Apoptosis

### **2. Mentoring:**

#### **Thesis Examination Committees: Total: 82 (Serve as Chair-23).**

Graduated: Total: 71 (all Ph.D.’s unless noted). Meirav Zaks-Zilberman (Biochem), PI: Irwin Chaiken, Jeff Pawlikowski (Biochem, M.S., *Chair*), PI: Peter Adams: Fox Chase Cancer Center (FCCC), Amy Clippinger (MCBG), PI: Michael Bouchard, Bez Torabi (MCBG), PI: Jane Clifford, Lizalynn Dias (Molecular Path.), PI: Gregg Johannes, Preeti Khandelwal (Biology, DU), PI: Aleister Saunders, Soonjin Hong (Biomedical Engineering, DU), PI: Kenneth Barbee, Temi Sodunke (Mechanical Engineering, DU), PI: Moses Noh, Nadia Tikhmyanova (Biochem, *Chair*), PI: Erica Golemis (FCCC), Amanda Frank (MCBG, *Chair*), PI: Maureen Murphy (FCCC), Vladimir Ratushny (MCBG, MD/PhD), PI: Erica Golemis (FCCC), Adam Leman (MCBG, *Chair*), PI: Eichi Noguchi, Gregory Botta (MCBG, MD/PhD, *Chair*) PI: Peter Lelkes, Bei Yang (MCBG) PI: Michael Bouchard, Mike Amatangelo (MCBG, *Chair*) PI: Mark Stearns, Niyant Shah (MCBG, M.S.) PI: Eichi Noguchi, Lisa Jones (Molecular Path.) PI; Gregg



Johannes, Hollie Flick (Biochem) PI: Alexander Muller: Lanckenau Medical Research Institute (LMRI), Geetika Sethi (Biochem) PI: Andrew Godwin (FCCC), Jeff Thomas (Molecular Path.) PI: Gregg Johannes, Shuo Qie (Molecular Path.) PI: Nianli Sang, Kate Beishline (Biochem) PI; Jane Clifford, Zhi Yuan Ma (MCBG) PI: Keith Vosseller, Sonali Jalan (MCBG, *Chair*) PI: Jonathan Chernoff (FCCC), Siddhartha Rawat (MCBG, *Chair*) PI: Michael Bouchard, Molly Kellie (Biochem) PI: Jonathan Chernoff (FCCC), Alimatou Minkeu (Biomedical Engineering, DU) PI: Adrian Shieh, Divya Sagar (Neuroscience) PI: Pooja Jain, Shuyang Chen (Biology, DU) PI: Nianli Sang, Adam Canver (Biomedical Engineering, DU, MD/PhD) PI: Alisa Morss Clyne, Mariana Gadelata (MCBG, *Chair*) PI: Eichi Noguchi, Sumedha Bagga (MCBG, *Chair*) PI: Michael Bouchard, Chelsea Burgwin (MCBG) PI: Elizabeth Blanckenhorn, Lee Dolat (Biology, DU) PI: Elias Spiliotis, Yu-Hung Huang (MCBG, *Chair*) PI: Janet Sawicki (LMRI), Samuel Flashner (M.S., Cancer Biology, *Chair*) PI: Jane Clifford, Fei Shen (Pharmacology) PI: Alessandro Fatatis, Tim Beck (MCBG, MD/PhD, *Chair*) PI: Erica Golemis (FCCC), Meghan Kopp (M.S., Cancer Biology) PI: Erica Golemis (FCCC), Tanu Singh (MCBG, *Chair*) PI: Alana O'Reilly (FCCC), Sajitha Anthony (MCBG) PI: Jeffery Peterson (FCCC), Safoora Deihimi (M.S., Cancer Biology, *Chair*) PI: Wafik El-Deiry (FCCC), Yayi Feng (M.S., Cancer Biology) PI: Erica Golemis (FCCC), Lindsay Pomykala (Micro & Immuno) PI: Akhil Vaidya, Arpita Mondal (Micro & Immuno) PI: Alexander Muller: (LMRI), Khin Pyae (M.S., MCBG) PI: Michael Bouchard, Kristen Maslar (M.S., Cancer Biology) PI: Todd Strohlic, Carlie Mendoza (M.S., Cancer Biology, *Chair*) PI: Paul Lieberman (Wistar), Iman Khan, Dalhousie University. External PhD Examiner, Christina Maher (Pharmacology) PI: Felix Kim, Kelly Donovan (MCBG, MD/PhD, *Chair*) PI: Jane Clifford, Jennifer Gray (MCBG) PI: Edna Cukierman (FCCC), Daphney Chery (Biomedical Engineering, DU) PI: Lin Han, Sarah Basehore (Biomedical Engineering, DU) PI: Alisa Morss Clyne, Jacob Parfianowicz (M.S., Cancer Biology) PI: Todd Strohlic, Alison Goupil (M.S., Cancer Biology) PI: Todd Strohlic, Sheila Longo (MCBG, *Chair*) PI: Alana O'Reilly (FCCC), Aarti Ramanathan (Micro & Immuno) PI: Akhil Vaidya, Kritika Hanamshet (MCBG) PI: Alex Mazin, Derick Haas (Pharmacology) PI: Felix Kim, Charlie Kivolowitz (Thomas Jefferson U, outside member) PI: Nicole Simone, Jacob Yo (M.S., MCBG, *Chair*) PI: Edward Hartsough, Fatimah Alfaran (M.S., Cancer Biology) PI: Todd Strohlic, Samuel Flashner (MCBG, *Chair*) PI: Jane Clifford, Daniel Slusaw (M.S., MCBG, *Chair*) PI: Sri Somarowthu, Sydney Campbell (UPenn, outside member) PI: Kathryn Wellen, Melissa Sutton-Navarro (M.S., CBIO), Marwah Al-Aloosi (M.S., CBIO) PI: Michael Bouchard, Rongrong Li (M.S., MCBG) PI: Todd Strohlic, Avantika Ahiya (Micro & Immuno) PI: Akhil Vaidya, Dalal Hasan (M.S., CBIO) PI: Alfonso Bellacosa (FCCC), Alexa Cannon (MCBG) PI: Jonathan Chernoff (FCCC), Samuel Evans (M.S., CBIO) PI: Sri Somarowthu, Meagan Tomasso (Biochem) PI: Shae Padrick.

Current: Total: 11. Dorothy Benton (MCBG) PI: Jonathan Chernoff (FCCC), Dema Ghaban (Micro & Immuno) PI: Alexander Muller (LMRI), Kyle Yeakle (MCBG, *Chair*) PI: Michael Bouchard, Anna Lilly (MCBG, *Chair*) PI: Erica Golemis (FCCC), Shih-Chun Shen (MCBG, *Chair*) PI: Alexander Muller (LMRI), Safoora Deihimi (Biomedical Engineering) PI: Ahmet Sacan, Alexandra Jednorski (Biomedical Engineering) PI: Wan Shih, Brianna Trankle (MCBG, *Chair*) PI: Joan Font-Burgada (FCCC), Shabnam Pirestani (M.S., CBIO) PI: Erica Golemis (FCCC), Olivia El Naggar (MCBG, *Chair*) PI: Gabriele Romano, Roshni Kadam (M.S., MCBG) PI: Sri Somarowthu.

### **Graduate Students, Postdoctoral Fellows and Postgraduate Medical Trainees**

**Graduated Ph.D. students: Total: 11**

1. *Keneshia Haenssen, Ph.D.*, MCBG Graduate Program, Drexel University College of Medicine, 2006-2010  
Thesis Title: Functional role of integrin  $\alpha 5$  in ErbB2-mediated oncogenesis of human mammary epithelial cells.
  - \*Received Department of Defense Breast Cancer Research Program Predoctoral Traineeship Award: 1/08-12/09 (\$64,800)
  - \*Received Honorable Mention, Platform Presentation Speaker, Discovery Day 2005: Drexel University College of Medicine
  - UNCF/Merck Postdoctoral Fellowship, laboratory of Dr. Edmund Lattime, Deputy Director & Professor, The Cancer Institute of New Jersey, Robert Wood Johnson Medical School/UMDNJ.
  - Current Position: Senior Scientist, Oncobiologics Inc.
2. *Kelly Whelan, Ph.D.*, MCBG Graduate Program, Drexel University College of Medicine, 2007-2011  
Thesis title: Hypoxia/HIF-1 regulation of mammary morphogenesis and oncogenesis.
  - \*Received 3<sup>rd</sup> Prize, Outstanding Junior Graduate Student Poster, Discovery Day 2007: Drexel University College of Medicine
  - \*Selected Platform Presentation Speaker, Discovery Day 2009, Drexel University College of Medicine
  - Postdoctoral Fellow, University of Pennsylvania, K99-R00 Fellowship recipient.
  - Current Position: [Assistant Professor](#) (tenure-track), Department of Pathology and Laboratory Medicine, Fels Institute of Cancer Research and Molecular Biology, Temple University Lewis Katz School of Medicine
3. *Thomas P. Lynch, Ph.D.*, MCBG Graduate Program, Drexel University College of Medicine, 2008-2012  
Thesis title: Role of O-GlcNAc Transferase in Cancer Cell Metastasis and Metabolism.
  - \*Selected Platform Presentation Speaker, Discovery Day 2010, Drexel University College of Medicine
  - \*Chosen for platform presentation at 2011 The Biology of Cancer: Microenvironment, Metastasis & Therapeutics at Cold Spring Harbor Labs, Cold Spring Harbor, NY
  - \*Awarded Keystone Symposia Future of Science Fund travel scholarship to present his research at 2012 Keystone Symposia on Cancer and Metabolism, Banff, Canada
  - NJ Commission on Cancer Research Postdoctoral Fellowship, laboratory of Dr. Estela Jacinto, Associate Professor Dept. of Biochemistry & Molecular Biology, The Cancer Institute of New Jersey, UMDNJ-Robert Wood Johnson Medical School.
4. *Diane Kambach, Ph.D.*, MCBG-Mol. Path. Graduate Program, Drexel University College of Medicine, 2010-2012 Co-mentor with Dr. Jane Clifford.  
Thesis title: Mechanisms Regulating Breast Cancer Invasion in Response to Ionizing Radiation
  - \*Selected Platform Presentation Speaker, Discovery Day 2011, Drexel University College of Medicine
  - \*Awarded DUCOM GSA Student Travel Award to present work at 2012

- AACR Annual Meeting, Chicago  
-Current Position: Director, U.S. Cell Analysis Field Applications Scientists, Agilent Technologies.
5. *Sergey Karakashev*, Biochemistry Graduate Program, Drexel University College of Medicine, 2010-2015  
Thesis title: The Role of Hypoxia in Mediating Resistance to Breast Cancer Therapy
- \*Received 3<sup>rd</sup> Prize, Outstanding Senior Graduate Student Poster, Discovery Day 2012, Drexel University College of Medicine
  - \*Selected for short talk platform presentation at 2013 Third AACR International Conference on Frontiers in Basic Cancer Research in National Harbor, Maryland
  - \*Awarded DUCOM GSA Student Travel Award to present his research at 2014 AACR Annual Meeting, San Diego, CA
  - \*Awarded DUCOM GSA Fellowship Award (\$2,000) for thesis project
  - \*Received 2<sup>nd</sup> Prize, Best Graduate Student Poster, 2014 Sidney Kimmel Cancer Center Consortium, Thomas Jefferson University
  - \*Selected Platform Presentation Speaker, Discovery Day 2014, Drexel University College of Medicine
  - Postdoctoral (K99/R00) Fellowship, laboratory of Dr. Rugang Zhang, Professor, Gene Expression and Regulation Program, Wistar Institute
  - Current Position: [Assistant Professor](#) (tenure-track), Department of Cancer & Cellular Biology, Temple University Lewis Katz School of Medicine
6. *Christina Ferrer*, MCBG Graduate Program, Drexel University College of Medicine, 2010-2015  
Thesis title: O-GlcNAcylation: Linking Metabolic Reprogramming to cancer Cell Survival, Invasion and Metastasis.
- \*Awarded NIH NCI Pre-Doctoral Minority Supplemental Fellowship (8/12-7/15, \$195,000)
  - \*Received 1<sup>st</sup> Prize, Outstanding Senior Graduate Student Poster, Discovery Day 2012, Drexel University College of Medicine
  - \*Awarded Keystone Symposia-NIGMS Ancillary Training Program travel scholarship to present her research at 2013 Keystone Symposia on Tumor Metabolism, Keystone CO
  - \*Received travel award and chosen for short talk platform presentation at 2013 Cancer Biology & Therapeutics meeting at Cold Spring Harbor Labs, Cold Spring Harbor, NY
  - \*Received NIH-National Cancer Institute NRSA (F31) Predoctoral Fellowship Award: 10/13-09/15 (\$125,079)
  - \*Selected Platform Presentation Speaker, Discovery Day 2013, Drexel University College of Medicine
  - \*Received travel award and chosen for short talk platform presentation at 2014 Mechanisms & Models of Cancer meeting at Cold Spring Harbor Labs, Cold Spring Harbor, NY
  - \*Received Bondi Fellowship Award for excellence in research at Discovery Day 2014, Drexel University College of Medicine

\*Awarded Keystone Symposia-NIGMS Ancillary Training Program travel scholarship and chosen for short talk platform presentation at 2015 Keystone Symposia on Biology of Sirtuins, Santa Fe NM

\*Awarded AACR Scholar-in-Training Award to attend 2015 AACR Annual Meeting at Philadelphia PA

\*Awarded 2016 Amedeo Bondi PhD Endowed Graduate Award to top PhD student in graduating class, Drexel University College of Medicine -Postdoctoral Fellow, laboratory of Dr. Raul Mostoslavsky, Professor, Massachusetts General Hospital/Harvard Medical School, K99-R00 Fellowship recipient.

Current Position: [Assistant Professor](#) (tenure-track), University of Maryland School of Medicine

7. *Valerie Sodi*, MCBG Graduate Program, Drexel University College of Medicine, 2011-2016

Thesis title: Regulation of O-GlcNAc Transferase in breast cancer and its role in regulating lipid metabolism

\*Received 1<sup>st</sup> Prize, Outstanding Junior Graduate Student Poster, Discovery Day 2012, Drexel University College of Medicine

\*Awarded DUCOM GSA Student Travel Award to present her research at 2013 Keystone Symposia on Tumor Metabolism, Keystone, CO

\*Received 3<sup>rd</sup> Prize, Best Graduate Student Poster, 2014 Sidney Kimmel Cancer Center Consortium, Thomas Jefferson University.

\*Awarded Dean's Graduate Student Travel Award to present her research at 2015 Biology of Cancer meeting at Cold Spring Harbor Labs, Cold Spring Harbor, NY

\*Received NIH-National Cancer Institute NRSA (F31) Predoctoral Fellowship Award: 7/15-06/17 (\$123,830)

\*Selected Platform Presentation Speaker, Discovery Day 2015, Drexel University College of Medicine

-Postdoctoral T32 Fellowship, laboratory of Dr. Denise Connolly, Associate Professor, Fox Chase Cancer Center, Philadelphia, PA

Current Position: Field Application Scientist, BioTek Instruments, Inc.

8. *Zachary Bacigalupa*, MCBG Graduate Program, Drexel University College of Medicine, 2013-2018.

Thesis title: Role of O-GlcNAc transferase in glioblastoma growth and acetate metabolism and tissue homeostasis

\*Awarded Dean's Graduate Student Travel Award and chosen for short talk platform presentation at to present his research at 2016 Keystone Symposium: New Frontiers in Understanding Tumor Metabolism in Banff, Alberta, Canada

\*Awarded DUCOM PhD Biomedical Sciences GSA Fellowship Award (\$2,000) for thesis project

\*Awarded International Travel Award from Office of International Programs at Drexel University to present his research at 2017 Keystone Symposium: Tumor Metabolism: Mechanisms and Targets in Whistler, Canada.

\*Awarded Dean's Fellowship for Excellence in Collaborative or Themed Research, Drexel University College of Medicine

\* Received 2<sup>nd</sup> Prize, Best Platform Presentation Speaker, Discovery Day 2017, Drexel University College of Medicine

-Postdoctoral T32 Fellowship, laboratory of Kimryn Rathmell, M.D., Ph.D., Professor of Cancer Biology, Vanderbilt University Medical Center, Nashville, TN.

Current Position: [Research Assistant Professor](#), Department of Medicine, Division of Hematology Oncology, Vanderbilt University Medical Center, Nashville, TN.

9. *Neha Manjari Akella*, Biochemistry Program, Drexel University College of Medicine, 2013-2019.

Thesis title: The role of O-GlcNAc transferase and O-GlcNAcylation in regulation of breast cancer stemness and tumor initiation

\*Awarded DUCOM GSA Student Travel Award to present her research at 2016 Keystone Symposium: Stem Cells and Cancer, Breckenridge, CO

\*Selected Oral Presentation, Drexel University Emerging Graduate Scholars Conference, April 2017

\*Selected for short talk platform presentation at 2017 Biology of Cancer: Microenvironment & Metastasis meeting at Cold Spring Harbor Labs, Cold Spring Harbor, NY

\*Chosen for a short talk at the September 2018 Sidney Kimmel Cancer Center at Thomas Jefferson University Educational Retreat

\*Received First Prize for Best Poster at the Sydney Kimmel Cancer Center Breast Cancer Symposium in November 2018.

-Postdoctoral Fellowship, laboratory of Dr. Christopher Maxwell, Associate Professor, at University of British Columbia, Vancouver, Canada.

Current Position: Research Network Manager for BC MS Cell Therapies Translational Research Network, The University of British Columbia

10. *Lorela Ciraku*, MCBG Graduate Program, Drexel University College of Medicine 2016-2022.

Thesis title: OGT/CDK5/ACSS2 axis regulates metabolic adaptation of tumors in the brain

\*Received 3<sup>rd</sup> Prize for Best Senior Graduate Student Poster presentation, Discovery Day 2018, Drexel University College of Medicine

\*Awarded DUCOM GSA Student Travel Award to present her research and was selected for short talk platform presentation at 2019 Biology of Cancer: Microenvironment & Metastasis meeting at Cold Spring Harbor Labs, Cold Spring Harbor, NY

\*Awarded 2019 Dean's Fellowship for Excellence in Collaborative or Themed Research, Drexel University College of Medicine.

\*Selected for short talk at 2020 Drexel University Emerging Graduate Scholars Conference to present her thesis research.

\*Selected Platform Presentation Speaker, Discovery Day 2020, Drexel University College of Medicine

\*Selected for short talk at the 2021 AACR Annual Meeting Minisymposium on Metabolic Pathways in Cancer.

\*Received the 2022 Research Excellence for Original & Creative Work Award, DUCOM

\*Received the 2022 Graduate College Research Excellence Award for Most Original & Creative Work, Drexel University

-Current Position: Postdoctoral Fellowship, laboratory of Dr. Fernanda Herrera, Assistant Professor, at University of Lausanne, Swiss Cancer Center, Lausanne, Switzerland.

11. *Giang Le Minh*, Biochemistry Graduate Program, 2018-2023

\*Received Honorable Mention for Outstanding Senior Graduate Student Poster presentation at Discovery Day 2020, Drexel University College of Medicine

\*Awarded 2022 Dean's Fellowship for Excellence in Collaborative or Themed Research, Drexel University College of Medicine.

\*Awarded Dean's Student Travel Award to present his at 2022 Mechanisms and Models Cancer meeting at Cold Spring Harbor Labs, Cold Spring Harbor, NY

\*Selected for short talk at Sidney Kimmel Cancer Center 2022 Trainee Retreat, at Thomas Jefferson University.

-Current Position: Postdoctoral Fellowship, laboratory of Dr. Reshma Taneja, Department of Physiology, National University of Singapore, Singapore.

**Graduated Masters student: Total: 15**

1. *Sakina Khaku*, M.S., MCBG Graduate Program 2010-2012

Thesis title: O-GlcNAc Transferase Expression is Regulated by mTOR and Myc pathways in cancer cells.

-Current Position: Associate Scientist, Spark Therapeutics, Philadelphia, PA

2. *Asma Ashraf*, M.S., Drug Discovery & Development Graduate Program 2012-2014

Thesis title: Reducing O-GlcNAcylation Sensitizes Breast Cancer Cells to Lapatanib.

-Current Position: Research Scientist, Department of Cell Biology, Advanced Bioscience Laboratories Inc., Rockville, MD

3. *Tong Lu*, M.S., Cancer Biology Graduate Program 2013- 2016

Thesis title: Understanding O-GlcNAc transferase regulation of SIRT1 in Breast Cancer Cells.

-Current Position: Ph.D. candidate, Biomedical Sciences Program, Penn State University

4. *Peter Michener*, M.S., MCBG, Graduate Program 2014- 2017

Thesis title: Identification of oncogene-dependent protein interactions with O-GlcNAc transferase

-Current Position: Research Scientist, Kimmel Cancer Center, Thomas Jefferson University, Philadelphia PA, Lab of Dr. Chris Eishen

5. *Michael Smith*, M.S., Biochemistry Graduate Program 2015-2017

Thesis title: Regulation of ACSS2 by O-GlcNAc transferase in glioblastoma cells.

6. *Dimpi Mukhopadhyay*, M.S., Cancer Biology Graduate Program 2015-2017

Thesis title: Role of spastin in regulating glioblastoma cell survival

-Current Position: Ph.D. candidate, Program in Molecular Medicine & Molecular, Cell, and Cancer Biology, University of Massachusetts Medical School

7. *Chaitali Bhadiadra, M.S.*, MCBG Graduate Program 2015-2017  
Thesis title: Using cancer genomic databases to identify glycosyltransferases involved in tumor growth.  
-Current Position: Research Technician, laboratory of Dr. Laurence Eisenlohr, University of Pennsylvania, Philadelphia, PA
8. *Rusia Lee, M.S.* Cancer Biology Graduate Program, 2016-2018  
Thesis title: Targeting cyclin-dependent kinase 5 in glioblastoma  
-Current Position: Ph.D. candidate, Biology Program, City College New York
9. *Ayonika Mukherjee, M.S.*, Biotechnology Graduate Program, 2016-2018  
-Current Position: Associate Scientist, Molecular Biology Division, GlaxoSmithKline, Upper Providence, PA
10. *Aishwarya Subramanian, M.S.*, Biotechnology Graduate Program, 2016-2018  
-Current Position: Senior Research Associate, Affinivax, Cambridge, MA
11. *Jing Ju, M.S.*, Cancer Biology Program, 2017-2019  
Thesis title: Role of ACSS2-Ser267 phosphorylation in glioblastoma cells.  
-Current Position: Ph.D. candidate, Molecular & Cellular Biology Program, Virginia Tech University
12. *Rebecca Moeller, M.S.*, Cancer Biology Program, 2018-2020  
Thesis title: Exploring CDK5 as a novel therapeutic target in glioblastoma  
-Current Position: Senior Associate Scientist, Cancer Biology, Bristol Myers Squibb, San Francisco, CA
13. *Emily Esquea, M.S.*, MCBG Program, 2019-2021.  
*Thesis title:* Understanding the role of the OGT/CDK5/ACSS2 signaling axis on breast cancer brain metastatic growth  
\*Received 3<sup>rd</sup> Prize, Outstanding Junior Graduate Student Poster, Discovery Day 2020, Drexel University College of Medicine  
\*Received 2021 Excellence in Research Thesis Master's Award, DUCOM  
\*Received the 2021 Jane Clifford, PhD, Best Master's Thesis Award DUCOM  
-Current Position: Ph.D. candidate, MCBG Program, DUCOM
14. *Tejsi Dhameliya, M.S.*, MCBG Program, 2019-2021.  
*Thesis title:* The role of KLF8 in breast cancer stem cells  
-Current Position: Research Assistant II, Sana Biotechnology
15. *Ryan Sharp, M.S.*, BHAD Graduate Program, 2020-2022  
*Thesis title:* Regulation of NuRD complex proteins by O-GlcNAc transferase in breast cancer cells

**Current Ph.D. students: Total: 2**

1. *Emily Esquea*, MCBG Program since Summer 2021.  
\*Awarded NIH NCI Pre-Doctoral Minority Supplemental Fellowship (6/22-5/25, \$226,279)  
\*Received First Place for Outstanding Graduate Student Poster presentation at Sidney Kimmel Cancer Center 2022 Trainee Retreat, at Thomas Jefferson University.  
\*Received First Place for Outstanding Graduate Student Oral presentation at Sidney Kimmel Cancer Center 2023 Trainee Retreat, at Thomas Jefferson University.

2. Riley Young, MCBG Program since Spring 2023.

**Current M.S. students: Total: 0.**

**Ph.D., Rotation Students: Total: 46.** Keneshia Haenssen (MCBG) Spring 2005, Aleem Choudhary (Biochem) Spring 2005, Adam Leham (MCBG) Fall 2005, Mike Amatangelo (MCBG) Spring 2006, Kelly Whelan (MCBG) Summer 2006, Jeff Pawlikowski (Biochem) Fall 2006, Emily Butte (Molecular Pathology) Spring 2007, Thomas Lynch (MCBG) Fall 2007, Benjamin Stager (MCBG) Spring 2008, Geetika Sethi (Biochem) Spring 2008 \*Received 3<sup>rd</sup> Prize, Best Poster Junior Graduate Student, Discovery Day 2008 DUCOM, Zhiyuan Ma (MCBG) Fall 2008, Shuo Qie (Molecular Pathology) Fall 2009, Sumedha Bagga (MCBG) Spring 2010, Scott Melideo (Biochem) Fall 2010, Christina Ferrer (MCBG) Fall 2010, Patrice Worthy (Biochem) Winter 2011, Sergey Karakashev (Biochem) Spring 2011, Valerie Sodi (MCBG) Fall 2011, Tim Nacarelli (MCBG) Spring 2012, Mallory Zvarick (MCBG) Fall 2012, Arpita Mondal (Micro & Immuno) Winter 2013, Neha Manjari Akella (Biochem) Fall 2013, Peter Michener (MCBG) Spring 2015, Kristopher Raghavan (MCBG) Fall 2015, Kiran Madugula (Micro & Immuno) Spring 2016, Anthony Dinatale (MD/PhD) Summer 2016, Lorela Ciraku (MCBG) Fall 2016, Jennifer Koch (Biochem) Winter 2017, Sydney Wilson (MCBG) Fall 2017, Meagan Tomasso (Biochem) Winter 2018, Ahn Tran (Pharmacology) Spring 2018, Dorothy Benton (MCBG) Fall 2018, Alexandra Guffey (MCBG) Fall 2018, Giang Le Minh (Biochem) Spring 2019, Shih-Chun Shen (MCBG) Fall 2019, Flaviane Silva (MCBG) Fall 2020, Teddy Nguyen (MCBG) Spring 2021, Alyssa Sanders (MCBG) Summer 2021, Victoria Mischley (MCBG, MD/PhD) Summer 2021, Kendall Torres (Biochem) Fall 2021, Yetunde Oyende (Pharmacology) Fall 2021, Ahmed Bulhassan (Biochem) Summer 2022, Riley Young (MCBG) Fall 2022, Kendra Williams (MCBG) Summer 2023, David Crowell (Biochem) Fall 2023, Nusaiba Ahmed (Biochem) Spring 2024.

**Medical Student, Research Advisor: Total: 10.** Ashley S. Doane\*, Spring/Summer 2009; Kaitlin Ritter\*, Summer 2011 (Co-mentor with Laura Steel, Ph.D.), 2011, Received 2<sup>nd</sup> Prize, Best Poster Medical Student, Discovery Day 2011:DUCOM, John Falcone, Summer 2012, Received 1<sup>st</sup> Prize, Outstanding Medical Student Poster, Medical Student Research Day 2013:DUCOM, Sean Breslin\*, Summer 2013, DUCOM, 2013, Received 2<sup>nd</sup> Prize, Outstanding Medical Student Poster, Medical Student Research Day 2014, DUCOM, Harun Thimmiah\*, Summer 2015, Richard Wolfe\*, Summer 2016, Traci King\*, Summer 2017, Joseph Assali\*, Summer 2019, Anirudh Rao\*, Summer 2020, Jessie Huang\*, Summer 2023.

\*Received Medical Student Summer Research Fellowship.

**Masters Rotation Students, Research Advisor: Total: 44.** Hsiang-Hwa (Shawn) Chen (IMS Program) Fall 2005-Spring 2006, Nada Abdel-Magid (MCBG) Winter 2008, Celal Emre Yetkin (MCBG) Fall 2010, Sakina Khaku (MCBG) Spring 2011, Suyash Bhatnagar (MCBG) Spring 2012, Matthew Leberer (MMS Program) Fall-2012, Asma Ashraf (Drug Discovery & Development) Summer 2013, \*Received Honorable Mention, Junior Graduate Student Poster, Discovery Day 2013, DUCOM, Zachary Bacigalupa (Cancer Bio) Fall 2013, Tracey Yenilaitus (Biochem) Winter 2014, Samuel Flashner (Cancer Bio) Winter 2014, Tong Lu (Cancer Bio) Spring 2014, Safoora Deihimi (Cancer Bio) Fall 2014, Kelly Geosits (MCBG) Spring 2015, Justine Gandia-Jackson (Drug Discovery & Development) Spring 2015, Dimpri Mukhopadhyay (Cancer Bio) Fall 2015, Chaitali Bhadiadra (MCBG) Winter 2016, Khin Zar Win Pyae (MCBG)



Winter 2016, Parin Mehta (MCBG) Winter 2016, Courtney Fesko (Biochem) Fall 2016, Kiana Shahidi (Cancer Bio) Fall 2016, Ayonika Mukherjee (Biotech) Winter 2017, Rusia Lee (Cancer Bio) Spring 2017, Aishwarya Subramanian (Biotech) Summer 2017, Jing Ju, (Cancer Bio) Fall 2017, Ruth Sueker, (Cancer Bio) Winter 2018, Shivani Sheth (Cancer Bio) Fall 2018, Rebecca Moeller (Cancer Bio) Winter 2019, Fatimah Alfaran (Cancer Bio) Winter 2019, Tara Daly (Cancer Bio) Spring 2019, Daniel Kantner (MCBG) Fall 2019, Emily Esquea (MCBG) Winter 2020, Tejsi Dhameliya (MCBG) Winter 2020, Anna Zhang (Pharmacology) Spring 2020, Aaron Slifer (Cancer Bio) Fall 2020, Ryan Sharp (Biochem) Fall 2020, Pritika Shahani (Cancer Bio) Winter 2021, Dalal Hassan (Cancer Bio) Spring 2021, Shabnam Pirestani (Cancer Bio) Spring 2022, Steve Rutledge (MCBG) Fall 2022, Roshni Kadam (MCBG) Fall 2022, Kshiti Vaishnav (Cancer Bio) Spring 2023, Vidhi Shah (Cancer Bio) Spring 2023, Shelby Pernell (Biochem) Fall 2023, Matthew Yohannes (Drug Discovery) Fall 2023.

**Summer Undergraduate Research Fellowship (SURF) students: Total: 12.** Kristina Shahriari, Carnegie Mellon University, Summer 2005 & 2006, \*Received 2<sup>nd</sup> Prize, Best Poster, Carnegie Mellon's Undergraduate Research Symposium, May 2007, Pritika Gupta, Haverford College, Summer 2007, Ian Henderson, University of Maryland, Summer 2008, Summer 2009, John Falcone, Drexel University, Summer 2010, Summer 2011, Sabita Gautam, Wesleyan College, Summer 2012, Kelvin Soewono, Rutgers University, Summer 2012, Ling Huang, Johns Hopkins University, Summer 2013, Nicholas Xerri, University of Pittsburgh, Summer 2014, Summer 2015. Sarah Hyman, Colgate University, Summer 2016, Mitasha Palha, Lehman College, Summer 2017, Andrew Pomonamz, James Madison University, Summer 2018, Jeffrey Sun, University of Pittsburgh, Summer 2022.

**Undergraduates: Total: 27.** Deborah Healy, DU Undergraduate Research, Ronak Shah, DU Work-study student, Greg Conner, DU Work-study student, Divya Enika, DU Work-study student, Freddy Padilla, DU Work-study student, John Falcone, DU Work-study student, \*STAR Program Summer 2010, \*Selected to present project at National Conference on Undergraduate Research, Salt Lake City, Utah 2012, \*Received 2<sup>nd</sup> Prize, Best Poster College of Arts and Sciences Research Day 2012, Drexel University, Katerina Hatzis, DU Work-study student, Christopher Schultz, DU Work-study student, \*STAR Program Summer 2011, Geena John, DU Work-study student, Kevin Truskowski, DU Work-study student, Andrea Lomotan, DU Work-study student, Zachary Cirelli, DU Work-study student, Jenna Marinock, DU, CO-OP student, Wiktoria Gocal, DU Work-study student, \*STAR Program Summer 2016, Eugene Fradkov, DU Work-study student, Mei Fang Wang, DU Work-study student, Vlada Kuprienko, DU Work-study student, Shruti Joshi, \*STAR Program Summer 2019, Sam Zion, DU, CO-OP student, Jess Merzy, DU CO-OP student 2022, Nina Haracz, \*STAR Program Summer 2022, Allie Talarico, Undergraduate Research, Fall 2022, Sindhu Raghava, Undergraduate Research, Spring 2023, Anna Ramesh, \*STAR Program Summer 2023, Madhu Karuppiah, \*STAR Program Summer 2023, \*Received 2<sup>nd</sup> Place for Best Quick-Pitch Competition, Aman Gupta, Undergraduate Research, Summer 2023, Abby Dech, DU volunteer Fall 2023.

**International Student: Total: 4.** Rosario Yerbes, Ph.D. Candidate, Centro Andaluz de Biología Molecular y Medicina Regenerativa, Sevilla, Spain Fall 2007, Maria Drexler, Undergraduate, Ludwig-Maximilians-Universitaet Muenchen, Munich, Germany Fall 2010, Mariana Mendoza,

Ph.D. Candidate, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico, Spring 2016, Nan Li, China Pharmaceutical University, Spring 2018.

## **Research Support**

### **Present:**

NIH/NCI, 1 U01-CA244303

Title: Role of O-GlcNAc on Breast Cancer Initiating Cells

Award period: 2/20-1/25

Total Direct Costs: \$1,853,175

Role: Principal Investigator

Pennsylvania Breast Cancer Coalition Award

Title: Role of ACSS2 in Breast Cancer Brain Metastasis Survival

Award period: 4/23-2/245

Total Direct Costs: \$100,000

Role: Principal Investigator

NIH/NIGMS, 1R01GM149780-01

Title: Structural and Functional Studies of lncRNAs in Gene Activation

Award period: 3/23-2/28

Total Direct Costs: \$2,259,773

Role: CO-Principal Investigator

PI: Srinivas Somarowthu, Ph.D. Department of Biochemistry, Drexel University

Coulter-Drexel Translational Research Partnership Grant

Title: Pharmacological Inhibition of the Human ACSS2 Protein for Therapeutic Intervention with Breast Cancer Brain Metastatic Tumor Growth

Award period: 11/23-12/24

Total Direct Costs: \$178,323

Role: Principal Investigator

NIH/NCI P30 CA056036

Title: Institutional Cancer Center Core Grant

Award period: 6/95-5/25

Role: Senior Leadership (Program Leader, Translational Cellular Oncology Program)

PI: Andrew Chapman, M.D.

### **Past:**

Coulter-Drexel Translational Research Partnership Seed Grant

Title: Pharmacological Inhibition of the Human ACSS2 Protein for Therapeutic Intervention with Breast Cancer Brain Metastatic Tumor Growth

Award period: 10/22-4/23

Total Direct Costs: \$68,000

Role: Principal Investigator

SKCC Consortium Multi-PI Collaborative Grant Program

Title: Uncovering metabolic vulnerabilities for targeting breast cancer brain metastatic growth  
Award period: 3/22-3/23  
Total Direct Costs: \$50,000  
Role: Principal Investigator  
CO-PI: Nicole Simone, M.D., Kimmel Cancer Center, Thomas Jefferson University

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)  
Title: Targeting CDK5/ACSS2 Axis in Glioblastoma.  
Award period: 06/19-06/22  
Total Direct Costs: \$75,000  
Role: PI  
CO-PI: Joshua Jackson, Ph.D., Department of Pharmacology & Physiology, Drexel University

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)  
Title: Investigating the Molecular Mechanism of lncRNA HOTAIR in Breast Cancer  
Award period: 6/18-5/20  
Total Direct Costs: \$75,000  
Role: CO-PI  
PI: Srinivas Somarowthu, Ph.D. Department of Biochemistry, Drexel University

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)  
Title: Role of Septin 9 in Breast Cancer Metastasis  
Award period: 6/18-5/20  
Total Direct Costs: \$75,000  
Role: CO-PI  
PI: Elias Spiliotis, Ph.D., Department of Biology, Drexel University

Kimmel Cancer Center Breast Cancer Pilot Project  
Title: Investigating breast cancer brain metastasis response to radiation following microbubble oxygen delivery *in vivo*  
Award period: 10/17-9/18  
Total Direct Costs: \$15,000  
Role: CO-PI  
PI: John Eisenbrey, Ph.D., Kimmel Cancer Center, Thomas Jefferson University

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)  
Title: O-GlcNAc regulation of acetate metabolism in glioblastoma  
Award period: 1/17-12/17  
Total Direct Costs: \$75,000  
Role: Principal Investigator

NIH-NCI NRSA (F31) Predoctoral Fellowship Award, 1F31CA192868  
Title: Understanding the role of O-GlcNAcylation in regulating cancer lipid metabolism  
Award period: 10/15-12/16  
Total Direct Cost: \$120,357  
Role: Mentor

PI: Valerie Sodi, Ph.D. Candidate, MCBG Program

Drexel Univ. Clinical and Translational Research Institute

Title: Development of targeted therapy against BRCA-deficient familial breast cancer

Award period: 12/15-11/16

Total Direct Cost: \$75,000

Role: Co- Investigator

PI: Alex Mazin, Ph.D., Department of Biochemistry & Molecular Biology, DUCOM

NIH/NCI, 1R01CA155413

Title: Role of nutrient sensor O-GlcNAc transferase in regulating cancer

Award period: 2/11-3/16

Total Direct Costs: \$1,250,000

Role: Principal Investigator

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)

Title: Targeting Microtubule-severing ATPases in Glioblastoma

Award period: 1/15-12/15

Total Direct Costs: \$75,000

Role: Co- Investigator

PI: Christos Katsetos, M.D.,Ph.D. Department of Pediatrics, Drexel University

Pennsylvania Breast Cancer Coalition

Title: Targeting triple negative breast cancers with novel O-GlcNAcylation inhibitors

Award period: 1/15-12/15

Total Direct Costs: \$50,000

Role: Principal Investigator

NIH-NCI NRSA (F31) Predoctoral Fellowship Award, 1F31CA183574

Title: Understanding role of O-GlcNAcylation on cancer cell metabolism and survival

Award period: 10/13-11/15

Total Direct Cost: \$125,079

Role: Mentor

PI: Christina Ferrer, Ph.D. Candidate, MCBG Program

Drexel College of Engineering/College of Medicine Seed Grant Program

Title: Characterization of Altered Cellular Metabolism in Novel Model of Pulmonary Hypertension

Award period: 6/14-7/15

Total Direct Cost: \$25,000

Role: Co-Principal Investigator

P.I: Nancy MacGarvey, M.D., Department of Medicine, DUCOM

Kimmel Cancer Center/Drexel University Pilot Project

Title: Role of Tumor Microenvironment on Progression of ErbB2-positive DCIS into Invasive Cancer

Award period: 5/13-4/14

Total Direct Costs: \$20,000

Role: Principal Investigator  
CO-PI: Halgier Rui, M.D./Ph.D., Kimmel Cancer Center, Thomas Jefferson University

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)  
Title: Interaction of Interstitial Flow and ErbB2 Signaling in Breast Cancer Invasion  
Award period: 1/13-12/13  
Total Direct Costs: \$70,000  
Role: Principal Investigator  
CO-PI: Adrian Shieh, Ph.D. School of Biomedical Engineering, Drexel University

Drexel Univ. Clinical and Translational Pilot Project Grant  
Title: Characterization of Altered Cellular Metabolism in Pulmonary Hypertension  
Award period: 5/12-12/12  
Total Direct Costs: \$13,000  
Role: Co-Principal Investigator  
PI: Nancy MacGarvey, M.D., Department of Medicine, Division of Pulmonary Medicine, DUCOM

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)  
Title: Role of cytoskeletal dynamics in radiation-induced breast cancer invasion  
Award period: 1/11-12/11  
Total Direct Costs: \$55,000  
Role: Principal Investigator  
CO-PI: Peter Baas, Ph.D., Department of Neurobiology & Anatomy, DUCOM

U.S. Army, Department of Defense, Breast Cancer Research Program  
Idea Award, BC074374  
Title: Targeting Protein O-GlcNAc Modifications in Breast Cancer  
Award period: 8/08-8/10  
Total Direct Costs: \$500,000  
Role: Principal Investigator

U.S. Army, Department of Defense Breast, Cancer Research Program  
Concept Award, BC086596  
Title: MNK2 is Required for Hypoxic-Mediated Cell Survival of Breast Cancer Cells  
Award period: 5/09-4/10  
Total Direct Costs: \$75,000  
Role: Principal Investigator

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)  
Title: Identification of Biomarkers and Therapeutic Targets in 3D Hypoxic Breast Cancer Model  
Award period: 2/09-1/10  
Total Direct Costs: \$125,000 (renewed)  
Role: Co-Principal Investigator  
Collaborators: Gregg Johannes, Ph.D. (PI) and Fernando Garcia, M.D. Department of Pathology & Laboratory Medicine, DUCOM

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)  
Title: Role of O-GlcNac Transferase as a Biomarker and Therapeutic Target for Prostate Cancer  
Award period: 2/09-1/10  
Total Direct Costs: \$75,000  
Role: Principal Investigator  
CO-PI: Fernando Garcia, M.D. Department of Pathology & Laboratory Medicine

U.S. Army, Department of Defense, Breast Cancer Research Program  
Predoctoral Traineeship Award  
Title: Functional role of integrin  $\alpha 5$  in ErbB2-mediated oncogenesis of human mammary epithelial cells.  
Award period: 1/08-12/09  
Total Direct Costs: \$64,800  
Role: Mentor  
PI: Keneshia Haenssen, Ph.D. candidate, MCBG Program

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)  
Title: Identification of Biomarkers and Therapeutic Targets in 3D Hypoxic Breast Cancer Model  
Award period: 1/08-1/09  
Total Direct Costs: \$75,000  
Role: Co-Principal Investigator  
Collaborators: Gregg Johannes, Ph.D. (PI) and Fernando Garcia, M.D. Department of Pathology & Laboratory Medicine

U.S. Army, Department of Defense, Breast Cancer Research Program  
Concept Award, BC062762  
Title: Protein O-GlcNac Modifications are Required for Breast Cancer Cell Survival  
Award period: 7/07-8/08  
Total Direct Costs: \$75,000  
Role: Principal Investigator

Drexel Univ. Translational Foundation Grants (PA Tobacco Settlement Funds)  
Title: Targeting Protein O-GlcNac Modifications in Breast Cancer  
Award period: 1/07-1/08  
Total Direct Costs: \$100,000  
Role: Principal Investigator  
CO-PI: Keith Vosseller, Ph.D., Department of Biochemistry & Molecular Biology, DUCOM