

CURRICULUM VITAE

Name:

Mauricio J. Reginato, Ph.D.

Address:

Drexel University College of Medicine,
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Education and Training:

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 and Academic Appointment History:

Faculty:

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

Other:

6/89-8/91	Associate Scientist , Department of Investigative Toxicology, SmithKline Beecham Pharmaceuticals, King of Prussia, PA
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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**, Sidney 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, generates \$270,000-\$324,00 annual revenue, established education partnership with Wistar Institute)
- 7/16-8/20 **Co-Leader**, Breast Cancer Program, Sidney 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 and Cellular Oncology (TaCO) Program, Sidney Kimmel Cancer Center-NCI Designated Comprehensive 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.)
- 9/21-2/24 **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-NCI funding)
- 2/24-present **Chair**, Department of Biochemistry and Molecular Biology, Drexel University College of Medicine (promoted one new tenure-track research faculty focused on computational-aided drug design and structural biology).

Awards and Honors:

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 (highest award for mentoring faculty & students at DUCOM).
- 2021 Julian Marsh Faculty Scholar Award, Drexel University College of Medicine (highest award for scientific accomplishments at DUCOM).
- 2023 Outstanding Mentor of the Year Award for the STAR Undergraduate Scholars, Drexel University
- 2024 Nominated by SKCC Research Executive Council for the *Fox Chase Cancer Center Stanley P. Reimann Honor Award*. To recognize an individual on the basis of their significant and meritorious leadership contributions to cancer science and research.
- 2025 Selected to participate in the Executive Leadership in Medicine (ELAM) Allyship Program, DUCOM
- 2025 Edith Mitchell Mentoring Award, Sidney Kimmel Comprehensive Cancer Center (award for mentoring faculty and trainees across the consortium)

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:

- 2024-present Advisory Committee, Cancer Research, Training and Education Coordination, SKCC
- 2023-present Membership Committee, SKCC
- 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
- 2020-2023 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
2020-2025	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:

2025-present	Associate Editor, <i>Oncogene</i>
2025-	Grant Reviewer, Department of Defense, Breast Cancer Research Program, Breakthrough Awards
2025-	Ad-hoc Grant Reviewer, World Cancer Research Fund International
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-	Ad-hoc Grant Reviewer, Prostate Cancer United Kingdom
2013-2018	Standing Member, Peer Review Committee, Cell Structure and Metastasis, American Cancer Society
2012-2018	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

2006-2013 Ad-hoc Scientific Review Panel, New Jersey Commission
on Cancer Research

Manuscript Reviewer:

Oncogene (x17), Nature Communications (x10), Molecular Cancer Research (x9), Breast Cancer Research (x9), Cancer Research (x9), Cell Reports (x7), BMC Cancer (x6), Journal of Clinical Investigation (x5), Scientific Reports (x4), Cancers (x4), Molecular Cell (x4), PNAS (x4), Cancer Discovery (x3), Journal of Biological Chemistry (x3), iScience (x3), Cancer Cell (x2), Science Advances (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), Nature Cancer (x2), Heliyon (x2), Cell Metabolism, Nature Reviews Cancer, Nature Cell Biology, Genes & Development, Nature Chemical Biology, eLife, Journal of Clinical Investigation Insight, Trends in Cell Biology, Communications Biology, Clinical and Translational Medicine, Journal of Experimental Medicine, Molecular Metabolism, Journal of Cellular Physiology, Journal of Pharmaceutical Analysis, Journal of Advanced Research, Therapeutic Advances in Medical Oncology, Drug Resistance Updates, Signal Transduction & Targeted Therapy, Cell Press Community, BBA Reviews on Cancer, Redox Biology, Molecular Medicine, Glycobiology, 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) = **9,009**

Scopus *h*-index (*number of publications cited x times*): **41**

i10 index (number of publications with at least 10 citations): **53**

Publications cited >50 times = **36**

Peer-reviewed articles:

1. Le Minh, G., Esquea, E., Sharp, R., Dhameliya, T., Merzy, J., Lee, M. H., Ball, L. E., and Reginato M. J. (2025) GATAD2B O-GlcNAcylation regulates breast cancer stem-like potential and drug resistance. *Cells* Mar 8;14(6):398

2. Esquea, E., Ciraku, L., Young, R., Merzy, J., Talarico, A., Ahmed, N. N., Karuppiyah, M., Ramesh, A., Chatoff, A., Crispim, C. V., Rashad, A. A., Cocklin, S., Snyder, N. W., Beld, J., Simone N. L., Reginato, M. J. and Dick, A. (2024) Selective and brain-penetrant ACSS2 inhibitors target breast cancer brain metastatic cells. *Frontiers in Pharmacology* May 16: 15: 1394685.
3. 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.
4. 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
5. 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)

6. 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.
7. 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.
8. 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.
 9. Sodi, V. L., Bacigalupa, Z. A., Ferrer, C. M., Lee, J. V., Gocal, W. A., Muhopadhyay, 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.
 10. 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.
 11. 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.
 12. 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 lymphangioleiomyomatosis. **JCI Insight** Nov17;1(19):e86629.
 13. Sodi, V. L., Khaku, S., Schwab, L. P., Vocadlo, 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*).
 14. 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)
 15. Karakashev, S. V. and Reginato, M. J. (2015) Hypoxia/HIF-1 α induces lapatinib resistance in ERBB2-positive breast cancer cells via regulation of DUSP2. **Oncotarget** Feb 10;6:1967-80.

16. 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
17. 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.
18. 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 & Differentiation*** Dec; 20(12):1675-87.
19. 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.
20. Kambach, D. M., Sodi, V., Lelkes, P. I., Azizkhan-Clifford, J., and Reginato, M. J. (2014) ErbB2, FoxM1, and 14-3-3 ζ prime breast cancer cells for invasion in response to ionizing radiation. ***Oncogene*** Jan 30;33(5): 589-98.
21. 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.
22. 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 & Differentiation*** Dec; 19 (12): 1908-16.
23. 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.
24. 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)

25. Yebes, R., Palacios, C., Reginato, M. J. and López-Rivas A. (2011) Cellular FLIP_L plays a survival role and regulates morphogenesis in breast epithelial cells. ***Biochim Biophys Acta***. Jan;1813(1):168-78.
26. 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. ***Molecular Biology of the Cell*** Nov; 21:3829-37.
27. 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.
28. 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.
29. 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)
30. 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. ***Molecular Cell Biology*** 25, 4591-4601. (ASM News (2005), Journal Highlights , 71, p325)
31. 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. ***Molecular Cell Biology*** 25, 5282-5291.
32. 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.
33. 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.
34. 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.
35. 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.
36. 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.
37. 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 γ -activating properties. **J. Biol. Chem.** 273, 32679-32684.
38. 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 γ . **Nature** 396, 377-380.
39. Reginato, M. J., Krakow, S. L., Bailey, S. T., and Lazar, M. A. (1998) Prostaglandins promote and block adipogenesis through opposing effects on PPAR γ . **J. Biol. Chem.** 273, 1855-1858.
40. Adams, M., Reginato, M. J.[#], Shao, D., Lazar, M. A., and Chatterjee, K. (1997) Transcriptional activation by peroxisome proliferator-activated receptor γ is inhibited by phosphorylation at a consensus mitogen-activated protein kinase site. **J. Biol. Chem.** 272, 5128-5132. [#] co-first author
41. Schwarz, E. J., Reginato, M. J.[#], Shao, D., Krakow, S. L., and Lazar, M. A. (1997) Retinoic acid blocks adipogenesis by inhibiting C/EBP β -mediated transcription. **Molecular Cell Biology** 17, 1552-1561. [#] co-first author
42. 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. **Molecular Cell Biology** 17, 1407-1416.
43. 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.

44. Katz, D., Reginato, M. J., and Lazar, M. A. (1995) Functional regulation of thyroid hormone receptor variant TR α 2 by phosphorylation. ***Molecular Cell Biology*** 15, 2341-2348.
45. 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.M., Young R.G., Ciraku L., Merzy J., Ahmed N.N., Talarico A.N., Karuppiiah M., Gocal W., Simone N.L., Dick A., Reginato, M. J. (2024) ACSS2 regulates ferroptosis in an E2F1-dependent manner in breast cancer brain metastatic cells bioRxiv [Preprint]. 2024 Oct 21:2024.10.18.619082
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Invited Reviews:

1. Young, R. G., Ahmed, N. N., and Reginato, M. J. (2025) New job for old tool: PI3K β phosphorylates OGT to regulate acetyl-CoA in glioblastoma. ***Trends in Cell Biology*** Apr 16:S0962-8924(25).
2. Esquea, E. M., Young, R. G., and Reginato, M. J. (2024) Fructose promotes liver cancer via microbial acetate-induced O-GlcNAcylation. ***Trends in Endocrinology & Metabolism*** 2024 Feb;35(2):88-90
3. 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
4. Le Minh, G., Reginato, M. J. (2023) Role of O-GlcNAcylation on cancer stem cells: Connecting nutrient sensing to cell plasticity. ***Advances Cancer Research*** 157:195-228.
5. Ciraku, L., Esquea, Reginato, M. J. (2022) O-GlcNAcylation regulation of cellular signaling in cancer. ***Cellular Signaling*** Feb;90:110201.
6. 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.
7. 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.
8. 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.

9. 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.
10. 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.
11. 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. ***Seminars in Pediatric Neurology*** Mar;22(1):49-72.
12. 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.
13. Lynch, T. P. and Reginato, M. J. (2011) O-GlcNAc Transferase: A sweet new cancer target. ***Cell Cycle***, Jun 1; 10: 1712-13.
14. 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.
15. Reginato, M. J. and Muthuswamy, S. K. (2006) Illuminating the center: Mechanisms regulating lumen formation and maintenance in mammary morphogenesis. ***J. Mammary Gland Biology & Neoplasia***. 11:205-11.
16. Reginato, M. J., and Lazar, M. A. (1999) Mechanisms by which thiazolidinediones enhance insulin action. ***Trends in Endocrinology & Metabolism*** 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:**

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|------------|---|
| July 2024 | "On a sugar high: O-GlcNAc regulation of cancer"
Institute of Biomedical Sciences, Universidad Andres Bello,
Santiago, Chile, Host: Patricio Burdiles, MD |
| March 2024 | "On a sugar high: Role of O-GlcNAcylation in cancer"
Van Andel Institute, Grand Rapids MI, Host: Brian Haab, PhD |
| 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 α 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):

- August 2024 Young, R., Esquea, E., Ciraku, L., Ahmed, N., Merzy, J., Talarico, A., Dick, A., and **Reginato, M. J.** “ACSS2 protects from ferroptosis via E2F1 regulation in breast cancer brain metastatic cells” 2024 Mechanisms & Models of Cancer meeting at Cold Spring Harbor Labs, Cold Spring Harbor, NY
- 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⁺-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 α .” 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 α /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)

[“Drug-like Molecules Show Promise Against Metastatic Breast Cancer Brain Tumors”](#)
Inside Precision Medicine (July, 2024)

[“Advancing Cancer Research Through Innovation: Dr. Emily Esquea’s Journey from Lab to Real-World Impact-Stories of Impact Series”](#)
Drexel Applied Innovation News, Drexel University (2024)

[“Sidney Kimmel Cancer Center Research Consortium: Committed to Changing the Cancer Landscape in Philadelphia”](#)
Pulse, Drexel University College of Medicine News (2024)

[“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****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)

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)

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: 91 (Serve as Chair-23).**

Graduated: Total: 80 (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: Eichichi 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: Lankenau 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 Storchlic, 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 Storchlic, Alison Goupil (M.S., Cancer Biology) PI: Todd Storchlic, 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 Storchlic, 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 Storchlic, 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, Dorothy Benton (MCBG) PI: Jonathan Chernoff (FCCC), Dema Ghaban (Micro & Immuno) PI: Alexander Muller (LMRI), Safoora Deihimi (Biomedical Engineering) PI: Ahmet Sacan, Alexandra Jednorski (Biomedical Engineering) PI: Wan Shih, Shabnam Pirestani (M.S., CBIO) PI: Erica Golemis (FCCC), Roshni Kadam (M.S., MCBG) PI: Sri Somarowthu, Kyle Yeakle (MCBG, *Chair*) PI: Michael Bouchard, Shih-Chun Shen (MCBG, *Chair*) PI: Alexander Muller (LMRI), Manasvi Sheta (M.S., Cancer Biology) PI: Eishi Noguchi.

Current: Total: 11. Anna Lilly (MCBG, *Chair*) PI: Erica Golemis (FCCC), Brianna Trankle (MCBG, *Chair*) PI: Joan Font-Burgada (FCCC), Olivia El Naggar (MCBG, *Chair*) PI: Gabriele Romano, Lilly Oni (BHAD) PI: Sri Somarowthu, Bo Lim (Linda) Lee (BHAD, MD/PhD) PI: Sri

Somarowthu, Luisa Abadia (BHAD) PI: Chris Sell, Khushi Patel (M.S., MCBG) PI: Sanjeevani Arora (FCCC), Tevo'n Campbell (M.S., BHAD) PI: Sri Somarowthu, Shelby Pernell (M.S., BHAD) PI: Joris Beld, Maria Ruiz, (M.S., MCBG) PI: Lu Chen (FCCC), David Crowell (BHAD) PI: Ridhdi Desai

Graduate Students, Postdoctoral Fellows and Postgraduate Medical Trainees

Graduated Ph.D. students: Total: 12

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 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 3rd 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: [Associate Professor](#) (with tenure), Department of Cancer and Cellular Biology, Fels Cancer Institute for Personalized Medicine, 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 3rd 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 2nd 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.

*Received 1st 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

*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 1st 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 3rd 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

*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: Associate Editor, Communications Medicine

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.

* Received 2nd 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 3rd 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

*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. Christiane Eberhardt, Assistant Professor, at University of Geneva, Geneva, 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 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.
- *Awarded 2024 Amedeo Bondi PhD Endowed Graduate Award to top PhD student in graduating class, Drexel University College of Medicine
- Current Position: Postdoctoral Fellowship, laboratory of Dr. Reshma Taneja, Department of Physiology, National University of Singapore, Singapore.

12. *Emily Esquea*, MCBG Program since Summer 2021.

- *Received First Place for Outstanding Graduate Student Poster presentation at Sidney Kimmel Cancer Center 2022 Trainee Retreat, at Thomas Jefferson University.
- *Dean's Travel Award Recipient, Drexel University, College of Medicine, December 2022.
- *Received First Place for Outstanding Graduate Student Oral presentation at Sidney Kimmel Cancer Center 2023 Trainee Retreat, at Thomas Jefferson University.
- *Selected for short talk at 2024 Drexel University Emerging Graduate Scholars Conference to present her thesis research.
- *Received the 2024 Graduate College Research Excellence Award for Expanding the Impact of Research, Drexel University
- *Awarded 2025 Amedeo Bondi PhD Endowed Graduate Award to top PhD student in graduating class, Drexel University College of Medicine
- Current Position: Postdoctoral Fellowship, laboratory of Dr. Anil Rustgi, Director of the Herbert Irving Comprehensive Cancer Center at Columbia University Irving Medical Center.

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: Expert Scientist, Glaxo SmithKline, 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: Senior Research Assistant, 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: PhD Immunology Program, UT MD Anderson Cancer Center, UT Health, Houston, TX
 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: Senior Research Associate, CRISPR Therapeutics, Cambridge, MA
 10. *Aishwarya Subramanian, M.S.*, Biotechnology Graduate Program, 2016-2018
-Current Position: Senior Research Associate, Takeda Pharmaceuticals, 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 3rd 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. *Riley Young*, MCBG Program since Spring 2023.
 - *Received Honorable Mention for Outstanding Senior Graduate Student Poster presentation at Discovery Day 2024, Drexel University College of Medicine
 - *Selected for as the 2024 Community Outreach & Engagement Program Liaison at the Sidney Kimmel Cancer Center.
 - *Received First Place for Outstanding Graduate Student Oral presentation at 2024 Translational Cellular Oncology Program Retreat at Sidney Kimmel Cancer Center, Thomas Jefferson University.
 - *Selected for short talk platform presentation at 2024 Mechanisms & Models of Cancer meeting at Cold Spring Harbor Labs, Cold Spring Harbor, NY
 - *Received the 2025 Graduate College Outstanding Mentorship Award, Drexel University
2. *Nusaiba Ahmed*, BHAD Program since Spring 2024.

Current M.S. students: Total: 1.

1. *Kevin Hughley*, Cancer Biology Program since Spring 2025

Ph.D., Rotation Students: Total: 49. 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 3rd 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, Spencer Brackett (Biochem) Fall 2024, Danny Jiang (MCBG) Fall 2024, Jess Merzy (MCBG) Spring 2025.

Masters Rotation Students, Research Advisor: Total: 46. Hsiang-Hwa (Shawn) Chen (IMS Program) 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, Temidayo Adegbenro (MCBG) Spring 2025, Kevin Hughley (Cancer Bio) Spring 2025.

Medical Student, Research Advisor: Total: 13. Ashley S. Doane*, Spring/Summer 2009; Kaitlin Ritter*, Summer 2011 (Co-mentor with Laura Steel, Ph.D.), 2011, Received 2nd Prize, Best Poster Medical Student, Discovery Day 2011:DUCOM, John Falcone, Summer 2012, Received 1st Prize, Outstanding Medical Student Poster, Medical Student Research Day 2013:DUCOM, Sean Breslin*, Summer 2013, DUCOM, 2013, Received 2nd 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, Matthew Lieberman*, Summer 2024, Alexander Chong*, Summer 2024, Kaylyn Clouser*, Summer 2025. *Received Medical Student Summer Research Fellowship.

Summer Undergraduate Research Fellowship (SURF) students: Total: 12. Kristina Shahriari, Carnegie Mellon University, Summer 2005 & 2006, *Received 2nd 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: 32. 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 2nd 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, *Received Honorable Mention for Outstanding Undergraduate Poster Presentation, Discovery Day 2023, *Selected to present project at National Conference on Undergraduate Research, Long Beach, CA 2024, , Nina Haracz, *STAR Program Summer 2022, Allie Talarico, Undergraduate Research, Fall 2022, *Received 3rd Place for Outstanding Undergraduate Poster Presentation, Discovery Day 2023, *Selected to present project at National Conference on Undergraduate Research, Long Beach, CA 2024, , Sindhu Raghava, Undergraduate Research, Spring 2023, Anna Ramesh, *STAR Program Summer 2023, Madhu Karupiah, *STAR Program Summer 2023, *Received 2nd Place for Best Quick-Pitch Competition, *Received 2nd Place for Outstanding Undergraduate Poster Presentation, Discovery Day 2024, Aman Gupta, Undergraduate Research, Summer 2023, Abby Dech, DU volunteer Fall 2023, Sophia Medori, DU volunteer Spring 2024, Syd Worthington, *STAR Program Summer 2024, Rujula Warade, *STAR Program Summer 2024, Veronika Medvedeva, DU volunteer Summer 2024, Milind Sangani, DU volunteer Summer 2024.

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.

Sponsor: Pre-Doctoral Fellowships:

Keneshia Haenssen	BC073462: Functional role of integrin $\alpha 5$ in ErbB2-mediated oncogenesis of human mammary epithelial cells. U.S. Army, Department of Defense (DOD) Breast Cancer Research Program Predoctoral Traineeship Award: 1/08-12/09 (\$64,800)
Christina Ferrer	CA155413: Role of nutrient sensor O-GlcNAc transferase in regulating cancer. NIH NCI Pre-Doctoral Supplement to Promote Diversity Fellowship: 8/12-9/13 (\$195,000)
Christina Ferrer	CA183574: Understanding role of O-GlcNAcylation on cancer cell metabolism and survival. NIH-NCI NRSA (F31) Predoctoral Fellowship Award: 10/13-11/15 (\$125,079)
Valerie Sodi	CA192868: Understanding the role of O-GlcNAcylation in regulating cancer lipid metabolism. NIH-NCI NRSA (F31) Predoctoral Fellowship Award: 7/15-12/16 (\$123,830)
Zachary Bacigalupa	Targeting Glioblastoma with Metabolism and Immune Modulators. Dean's Fellowship for Excellence in Collaborative or Themed Research, Drexel University College of Medicine: 4/16-5/17 (\$40,000)

Lorela Ciraku	Targeting CDK5/ACSS2 Axis Using Novel Glioblastoma <i>Ex Vivo</i> Model. Dean's Fellowship for Excellence in Collaborative or Themed Research, Drexel University College of Medicine: 4/19-5/20 (\$40,000)
Giang Le Minh	Understanding role of GATAD2B O-GlcNAcylation on breast cancer stem cell potential and chemoresistance. Dean's Fellowship for Excellence in Collaborative or Themed Research, Drexel University College of Medicine: 4/22-5/23 (\$40,000)
Emily Esquea	CA244303: Role of O-GlcNAcome on Breast Cancer Initiating Cells. NIH NCI Pre-Doctoral Supplement to Promote Diversity Fellowship: 6/22-6/24 (\$226,279)

Research Support

Present:

Project Title: **Role of O-GlcNAcome on Breast Cancer Initiating Cells**

Sponsor: NIH: NCI 1U01-CA244303

Project Period: 2/20-3/25

P.I.: Mauricio Reginato (MPI) and Lauren Ball (MPI)

Total Direct Costs: \$1,853,175

Project Title: **Role of ACSS2 in Breast Cancer Brain Metastasis Survival**

Sponsor: Pennsylvania Breast Cancer Coalition Award

Project Period: 4/23-2/25

Role: Mauricio Reginato

Total Direct Costs: \$100,000

Project Title: **Structural and Functional Studies of lncRNAs in Gene Activation**

Sponsor: NIH: NIGMS, 1R01GM149780

Project Period: 3/23-2/28

CO-P.I.: Srinivas Somarowthu and Mauricio Reginato

Total Direct Costs: \$2,259,773

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

Sponsor: Coulter-Drexel Translational Research Partnership Grant

Project Period: 12/23-5/25

P.I.: Mauricio Reginato

Total Direct Costs: \$178,323

Project Title: **Developing novel ACSS2 inhibitors for targeting breast cancer brain Metastasis.**

Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)

Project Period: 03/25-04/26 (pending final contract approval)

P.I.: Mauricio Reginato

Total Direct Costs: \$90,000

Project Title: **Institutional Cancer Center Core Grant**

Sponsor: NIH: NCI P30 CA056036
Project Period: 6/95-5/29
PI: Andrew Chapman, M.D.
Role: Senior Leadership (Program Leader, Translational Cellular Oncology Program)

Pending:

Project Title: Acetate metabolism regulates ferroptosis in breast cancer brain metastasis

Sponsor: NIH: NCI, R01CA296282
Project Period: 9/24-8/29
P.I.: Mauricio Reginato
Total Direct Costs: \$2,407,930

Project Title: Targeting ACSS2 in Breast Cancer Brain Metastasis

Sponsor: METAvivor Translational Research Award
Project Period: 1/26-2/28
P.I.: Mauricio Reginato
Total Direct Costs: \$450,000

Past:

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

Sponsor: Coulter-Drexel Translational Research Partnership Seed Grant
Project Period: 10/22-4/23
P.I.: Mauricio Reginato
Total Direct Costs: \$68,000

Project Title: Uncovering metabolic vulnerabilities for targeting breast cancer brain metastatic growth

Sponsor: SKCC Consortium Multi-PI Collaborative Grant Program
Project Period: 3/22-3/23
P.I.: Mauricio Reginato
CO-PI: Nicole Simone, M.D., Sidney Kimmel Cancer Center, Thomas Jefferson University
Total Direct Costs: \$50,000

Project Title: Targeting CDK5/ACSS2 Axis in Glioblastoma

Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)
Project Period: 06/19-06/22
P.I.: Mauricio Reginato
CO-PI: Joshua Jackson, Ph.D., Department of Pharmacology & Physiology, Drexel University
Total Direct Costs: \$75,000

Project Title: Investigating the Molecular Mechanism of lncRNA HOTAIR in Breast Cancer

Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)
Project Period: 6/18-5/20
PI: Srinivas Somarowthu, Ph.D. Department of Biochemistry & Molecular Biology,
Drexel University
CO-P.I.: Mauricio Reginato
Total Direct Costs: \$75,000

Project Title: **Role of Septin 9 in Breast Cancer Metastasis**
Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)
Project Period: 6/18-5/20
PI: Elias Spiliotis, Ph.D., Department of Biology, Drexel University
CO-P.I.: Mauricio Reginato
Total Direct Costs: \$75,000

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

Project Title: **O-GlcNAc regulation of acetate metabolism in glioblastoma**
Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)
Project Period: 1/17-12/17
P.I.: Mauricio Reginato
Total Direct Costs: \$75,000

Project Title: **Development of targeted therapy against BRCA-deficient familial breast cancer**
Sponsor: Drexel Univ. Clinical and Translational Research Institute
Project Period: 12/15-11/16
PI: Alex Mazin, Ph.D., Department of Biochemistry & Molecular Biology, DUCOM
CO-P.I.: Mauricio Reginato
Total Direct Costs: \$75,000

Project Title: **Role of nutrient sensor O-GlcNAc transferase in regulating cancer**
Sponsor: NIH: NCI, 1R01CA155413
Project Period: 2/11-3/16
P.I.: Mauricio Reginato
Total Direct Costs: \$1,250,000

Project Title: **Targeting Microtubule-severing ATPases in Glioblastoma**
Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)
Project Period: 1/15-12/15
PI: Christos Katsetos, M.D., Ph.D., Department of Pediatrics, DUCOM
CO-P.I.: Mauricio Reginato

Total Direct Costs: \$75,000

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

Sponsor: Pennsylvania Breast Cancer Coalition

Project Period: 1/15-12/15

P.I.: Mauricio Reginato

Total Direct Costs: \$50,000

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

Sponsor: Drexel College of Engineering/College of Medicine Seed Grant Program

Project Period: 6/14-7/15

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

CO-P.I.: Mauricio Reginato

Total Direct Costs: \$25,000

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

Sponsor: Sidney Kimmel Cancer Center/Drexel University Pilot Project

Project Period: 5/13-4/14

P.I.: Mauricio Reginato

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

Total Direct Costs: \$20,000

Project Title: **Interaction of Interstitial Flow and ErbB2 Signaling in Breast Cancer Invasion**

Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)

Project Period: 1/13-12/13

P.I.: Mauricio Reginato

CO-PI: Adrian Shieh, Ph.D. School of Biomedical Engineering, Drexel University

Total Direct Costs:

Project Title: **Characterization of Altered Cellular Metabolism in Pulmonary Hypertension**

Sponsor: Drexel Univ. Clinical and Translational Pilot Project Grant

Project Period: 5/12-12/12

PI: Nancy MacGarvey, M.D., Department of Medicine, Division of Pulmonary Medicine, DUCOM

CO-P.I.: Mauricio Reginato

Total Direct Costs: \$13,000

Project Title: **Role of cytoskeletal dynamics in radiation-induced breast cancer invasion**

Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)

Project Period: 1/11-12/11

P.I.: Mauricio Reginato

CO-PI: Peter Baas, Ph.D., Department of Neurobiology & Anatomy, DUCOM

Total Direct Costs: \$55,000

Project Title: **Targeting Protein O-GlcNAc Modifications in Breast Cancer**

Sponsor: U.S. Army, Department of Defense, Breast Cancer Research Program

Idea Award, BC074374

Project Period: 8/08-8/10

P.I.: Mauricio Reginato

Total Direct Costs: \$500,000

Project Title: **MNK2 is Required for Hypoxic-Mediated Cell Survival of Breast Cancer Cells**

Sponsor: U.S. Army, Department of Defense Breast, Cancer Research Program

Concept Award, BC086596

Project Period: 5/09-4/10

P.I.: Mauricio Reginato

Total Direct Costs: \$75,000

Project Title: **Identification of Biomarkers and Therapeutic Targets in 3D Hypoxic Breast Cancer Model**

Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)

Project Period: 2/09-1/10

P.I.: Gregg Johannes, Ph.D., Department of Pathology & Laboratory Medicine, DUCOM

CO-P.I.: Mauricio Reginato

Total Direct Costs: \$125,000 (renewed)

Project Title: **Role of O-GlcNAc Transferase as a Biomarker and Therapeutic Target for Prostate Cancer**

Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)

Project Period: 2/09-1/10

P.I.: Mauricio Reginato

CO-PI: Fernando Garcia, M.D. Department of Pathology & Laboratory Medicine

Total Direct Costs: \$75,000

Project Title: **Identification of Biomarkers and Therapeutic Targets in 3D Hypoxic Breast Cancer Model**

Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)

Project Period: 1/08-1/09

PI: Fernando Garcia, M.D. Department of Pathology & Laboratory Medicine

CO-P.I.: Mauricio Reginato

Total Direct Costs: \$75,000

Project Title: **Protein O-GlcNAc Modifications are Required for Breast Cancer Cell Survival**

Sponsor: U.S. Army, Department of Defense, Breast Cancer Research Program

Concept Award, BC062762

Project Period: 7/07-8/08

P.I.: Mauricio Reginato

Total Direct Costs: \$75,000

Project Title: **Targeting Protein O-GlcNAc Modifications in Breast Cancer**

Sponsor: PA Health Dept. Commonwealth Universal Research Enhancement (CURE)

Project Period: 1/07-1/08

P.I.: Mauricio Reginato

Total Direct Costs: \$100,000