# CURRICULUM VITA ANDREA WALENS, PhD

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# **EDUCATION**

2019	PhD	Duke University Department of Pharmacology and Cancer Biology Major: Molecular Cancer Biology
2014	BS	University of Georgia

# Department of Genetics

# ACADEMIC POSITIONS

2019-present	Postdoctoral Fellow
-	Lineberger Comprehensive Cancer Center
	Department of Epidemiology
	University of North Carolina at Chapel Hill

# HONORS AND AWARDS

2020	AACR Associate Member Award - SABCS
2020	AACR Scholar-In-Training Award
2017-2019	Ruth Kirschstein Individual National Research Service
	Award Fellowship
2014	Phi Beta Kappa Honors Society
2013	Alpha Lambda Delat Honors Fraternity

# PEER-REVIEWED PUBLICATIONS (7 ISI citations, h-index = 5) \*authors contributed equally

- 1. **Walens A**, Olsson LT, Gao X, Hamilton AM, Kirk EL, Cohen S, Midkiff B, Xia Y, Sherman M, Feinberg N, Serody J, Hoadley KA, Troester MA, Calhoun, BC. (2020) Protein-based immune profiles of Basal-like vs. Luminal breast cancers, *Laboratory Investigations*.
- Walens A\*, Lin J\*, Damrauer JS\*, Lupo R, Newcomb R, Fox DB, Mabe NW, Gresham J, De Buysscher T, Kelkar H, Mieczkowski PA, Owzar K, Alveraz JV. (2020) Adaptation and Selection Shape Clonal Evolution During Residual Disease and Recurrence, *Nature Communications.*
- 3. Walens A, DiMarco AV, Kroger BR, Damrauer JS, Lupo R, Alvarez JV. (2019) CCL5 promotes breast cancer recurrence through macrophage recruitment in residual tumors. *eLife.*

- 4. Damrauer JS\*, Phelps SN\*, Amuchastegui K, Lupo R, Mabe NW, **Walens A**, Kroger BR, Alvarez JV, (2018) Foxo-dependent Par-4 upregulation prevents the long-term survival of residual cells following inhibition of the PI3K-Akt pathway. *Molecular Cancer Research.* 16(4):599-609
- 5. Huang J, Chen M, Whitley MJ, Kuo HC, **Walens A**, et al., (2017) Generation and comparison of CRISPR-Cas9 and Cre-mediated genetically engineered mouse models of sarcoma. *Nature Communications* 9:15999
- 6. Eid RA, Friendman KM, Mkrtichyan M, **Walens A**, King W, Janik J, Khleif SN, (2015) Akt1 and -2 inhibition diminishes terminal differentiation and enhances central memory CD8+ T-cell proliferation and survival. *Oncoimmunology* 4(5): e1005448
- Davis MB, Walens A, Hire R, Mumin K, Brown AM, Ford D, Howerth EW, Monteil M, (2015) Distinct Transcript Isoforms of the Atypical Chemokine Receptor 1 (ACKR1)/Duffy Antigen Receptor for Chemokines (DARC) Gene Are Expressed in Lymphoblasts and Altered Isoform Levels Are Associated wth Genetic Ancestry and Duffy-Null Allele. *PLoS One* 10(10): e0140098

#### SCHOLARLY PRESENTATIONS \*Authors Contributed Equally <sup>§</sup>Presenter

- Walens A<sup>§</sup>, Alsten SC, Smith MA, Gao X, Hamilton AM, Kirk EL, Hursting SD, Hoadley KA, Vaziri C, Troester MA, "DNA repair imbalance and immune response in breast cancer mortality disparities", SABCS, Virtual, December 2020 Recorded Poster Presentation
- Walens A<sup>§</sup>, Olsson LT, Gao X, Hamilton AM, Kirk EL, Cohen S, Midkiff B, Xia Y, Sherman M, Feinberg N, Serody J, Hoadley KA, Troester MA, Calhoun, BC, "Uncovering spatial relationships of the tumor microenvironment in the Carolina Breast Cancer Study", AACR Annual Meeting, Virtual, June 2020 Recorded Poster Presentation
- 3. Walens A<sup>§</sup>, Olsson LT, Gao X, Hamilton AM, Kirk EL, Cohen S, Midkiff B, Xia Y, Sherman M, Feinberg N, Serody J, Hoadley KA, Troester MA, Calhoun, BC, "Uncovering spatial relationships of the tumor microenvironment in the Carolina Breast Cancer Study", ASPO Annual Meeting, Virtual, March 2020 *Twitter Poster Presentation*
- 4. Walens A<sup>§</sup>, Olsson LT, Gao X, Hamilton AM, Kirk EL, Cohen S, Midkiff B, Xia Y, Sherman M, Feinberg N, Serody J, Hoadley KA, Troester MA, Calhoun, BC, "Uncovering spatial relationships of the tumor microenvironment in the Carolina Breast Cancer Study", Lineberger Comprehensive Cancer Center Annual Meeting, September 2019 Poster Presentation
- 5. **Walens A**<sup>§</sup>, DiMarco AV, Kroger B, Damraeur JS, Lupo R, Alvarez J, "Awakening the dormant tumor: the role of CCL5 and macrophages in breast cancer recurrence," Duke

University Pharmacology and Cancer Biology Department Retreat, Durham, NC, September 2018 *Poster Presentation* 

- Walens A<sup>§</sup>, "The role of the tumor microenvironment in breast cancer dormancy and recurrence," AACR Special Conference on Cancer Dormancy and Residual Disease, Montreal, CA, June 2018 Selected Talk/Poster Presentation
- 7. **Walens A**<sup>§</sup>, Damraeur JS, Kroger B, Williams N, Shinder E, Lupo R, Phelps A, Alvarez J, "Awakening the dormant tumor: the role of CCL5 and macrophages in breast cancer recurrence," Duke Cancer Institute Scientific Retreat, Durham, NC, October 2017 *Poster Presentation*
- 8. **Walens A**<sup>§</sup>, Damraeur JS, Kroger B, Williams N, Shinder E, Lupo R, Phelps S, Alvarez J, "Awakening the dormant tumor: the role of CCL5 and macrophages in breast cancer recurrence," Duke University Pharmacology and Cancer Biology Department Retreat, Wrightsville, NC, September 2017 *Poster Presentation*
- Walens A<sup>§</sup>, Damrauer JS, Kroger B, Phelps A, Alvarez J, "The Role of the Tumor Microenvironment in Breast Cancer Dormancy," Keystone Symposia, Cell Plasticity within the Tumor Microenvironment, Big Sky, MT, January 2017 Poster Presentation
- 10. **Walens A**<sup>§</sup>, Damrauer JS, Kroger B, Phelps S, Alvarez J, "The Role of the Tumor Microenvironment in Breast Cancer Dormancy," Duke Cancer Institute Scientific Retreat, Durham, NC, October 2016 *Poster Presentation*
- 11. Walens A<sup>§</sup>, "The Role of the Microenvironment in Breast Cancer Dormancy," Duke University Pharmacology and Cancer Biology Department Retreat, Wrightsville, NC, September 2016 Selected Talk
- 12. **Walens A**<sup>§</sup>, Kroger B, Damrauer JS, Alvarez J, "Interplay of Par-4 and PI3K Pathway in Response to Therapy for ER+ Breast Cancer," Duke University Pharmacology and Cancer Biology Department Retreat, Wrightsville, NC, September 2015 *Poster Presentation*
- 13. **Walens A**<sup>§</sup>, Bennett B, Mumin K, Campbell H, Lou M, Hire R, Monteil M, Davis M, "Investigating correlations of DARC under-expression (Duffy Null phenotypes) with increased Breast Cancer lymph node metastasis" AACR Annual Meeting, San Diego, CA, April 2014 *Poster Presentation*
- 14. Mumin K<sup>§</sup>, **Walens A**, Bennett B, Swanson J, Hire R, Monteil M, Davis M, "Investigating correlations of DARC under-expression (Duffy Null phenotypes) with increased Breast Cancer lymph node metastasis" AACR Conference Cancer Health Disparities, Atlanta, GA, December 2013 *Poster Presentation*
- 15. Hire R<sup>§</sup>, Bennet B, **Walens A**, Thomsen C, Chukwu A, Davis M, "Differential Regulation of the ERBB4 and CARM1 Gene in Breast Cancer Cells: an epigenetic

and expression profile" University of Georgia Genetics Department Symposium, University of Georgia, Athens, GA, September 2013 *Poster Presentation* 

- 16. Walens A\*<sup>§</sup>, Gerber G\*, Manschreck C, Rau Murthy R, Corines M, Garcia-Grossman I, Sullivan J, Littman J, Zhang L, Bajorin D, Feldman D, van Alstine L, Murali R, Klein E, Stadler Z, Schrader K, Joseph V, Offit K, (\*equal contributions), "Germline variants in *hTERT* promoter identified in prostate, breast, bladder and lung cancers" GSK SURP, Memorial Sloan Kettering Cancer Center, New York, New York, August 2013 *Poster Presentation*
- 17. M Dye K<sup>§</sup>, **Walens A**, Farmer M, "Identification of Trypanin and Trypanin Related Proteins in Euglenids", International Congress on Protistology, Vancouver, BC, Canada, August 2013 *Poster Presentation*
- 18. Walens A<sup>§</sup>, Abu Eid R, Mkrtichyan M, Friedman K, Khleif S, "PI3K/AKT pathway necessary for Treg proliferation *in vitro* but not T cell homeostasis *in vivo*" STAR Program, Georgia Health Science University (now Georgia Regeants), Augusta, GA, July 2012 Poster Presentation
- 19. **Walens A**<sup>§</sup>, Hayes C, Gilmour S, "UVB irradiation and the immune system" Lankenau Summer Bench Intern Program, Lankenau Institute for Medical Research, Wynnewood, PA, July 2011 *Poster Presentation*

# POSTDOC, GRADUATE AND UNDERGRADUATE STUDENT MENTORING

- Undergraduate Technicians (UGA): Alyssa Farber (Fall 2011 Fall 2012), Emily Polur (Fall 2012 – Fall 2013), Vitaliano Cama (Spring 2012 – Fall 2013), Rachel Vaizer (Spring 2014), Samantha Chang (Spring 2014).
- Undergraduate Researchers and Visiting Students (Duke U): Ben Kroger (Summer 2015 – May 2017), Nidha Williams (Summer 2017), Eliane Shinder (Spring 2017-Spring 2018), Cui Rong Teo (September 2018)
- 3. *High School Students (UNC):* Alexa Tomlinson (Fall 2019 Spring 2020)

#### **RESEARCH PROPOSALS (PENDING)**

2020	DoD BCRP Level 1 – "DNA repair imbalance and chemoresistance in breast cancer mortality disparities" PI: Andrea Walens
2020	U54 – "Interplay of stromal/hepatocyte growth factor and immune microenvironments in breast cancer mortality disparities" PI: Melissa Troester and Jodie Fleming
2021	NCI K99/R00 – ""Homologous recombination deficiency and chemoresistance in breast cancer mortality disparities" PI: Andrea Walens

2021 AACR Elion Cancer Research Award – "Investigating Survivin as a new target in Black women with breast cancer" PI: Yara Abdou

#### **FUNDED RESEARCH (Future)**

2021-2026 "P53, DNA Repair Imbalance, and Immune Response in Breast Cancer Mortality Disparities". PI: Melissa Troester and Katie Hoadley, R01-CA253450

#### FUNDED RESEARCH (CURRENT)

2019-2021 Training Program in Cancer Control Education – UNC CH Lineberger Comprehensive Cancer Center. PI: Kurt Ribisl, T32-CA057726-28

#### FUNDED RESEARCH PROPOSALS (COMPLETED)

- 2017-2019 "Awakening the dormant tumor: the role of the tumor microenvironment in breast cancer recurrence", F31 CA220957
- 2014-2015 Molecular Cancer Biology training grant: PI: WANG, XIAO-FAN, Grant: 5T32CA059365-20

#### **PROFESSIONAL SERVICE**

2017 Director of SURPH@Duke (Summer Undergraduate Research Program in Pharmacology and Cancer Biology)

- 2019-2020 Postdoctoral Teaching Assistant in Mentorship North Carolina School of Science and Math, Durham, NC (October 2019-February 2020)
- 2021 Sub-committee member for Lineberger's Equity Council's Phase 2 Implementation