#### MOHAMMED OLUSOJI GBADAMOSI

January 2024

## **PERSONAL INFORMATION**

Office Address: Medical Sciences Building

1345 Center Drive, Room PG-29

Gainesville, FL 32610

Contact Information Email: mgbadamosi@ufl.edu

Cell Phone: (443) 447-1807

Place of Birth: Washington, D.C. Date of Birth: October 19, 1995

## **EDUCATION AND TRAINING**

AS	2015	Harford Community College, Bel Air, MD (Chemistry)
B.S.	2017	<b>University of Delaware</b> , Newark, DE (Biochemistry) Research Advisor: Dr. Sharon Neal
Ph.D.	2021	University of Florida College of Pharmacy, Gainesville, FL Dissertation Title: "Pharmacogenomic Drivers of Efficacy in Anti-CD33 Immunotherapeutic Treatment Strategies" Chair: Dr. Jatinder Lamba
Graduate Certificate	2023	<b>University of Florida College of Pharmacy</b> , Gainesville, FL Pharmacogenomics and Precision Medicine
CITRL Associate Teaching Certificate	2023	Center for the Integration of Research, Teaching, and Learning Obtained via the University of Florida Center for Teaching Excellence

# **PROFESSIONAL APPOINTMENTS**

01/2022 – 06/2022 09/2023 – 11/2023	Post-Doctoral Associate Department of Pharmacotherapy and Translational Research, University of Florida College of Pharmacy, Gainesville, FL Mentor: Dr. Jatinder Lamba
07/2022 – 09/2023	NIH T32 Program for Applied Research and Development in Genomic Medicine (PARADIGM) Post-Doctoral Fellow Department of Pharmacotherapy and Translational Research, University of Florida College of Pharmacy, Gainesville, FL Mentor: Dr. Duane Mitchell
11/2023 - Present	Assistant Professor

Department of Pharmacotherapy and Translational Research, University of Florida College of Pharmacy, Gainesville, FL

#### **VISION STATEMENT**

The Gbadamosi Lab aim to be a global leader in personalized cancer therapeutics, integrating big data analytics and cellular biology to pioneer transformative chemoimmunotherapeutic strategies, while concurrently fostering the success of the next generation of trainees through mentorship, innovation, and a culture of excellence.

The Vision of the Gbadamosi Lab is threefold:

- (1) Leverage big data analysis and cellular biology to execute the best transformative research focused on identifying the best chemoimmunotherapeutic strategies for patients.
- (2) Serve the next generation of trainees by mentoring and empowering them for success in scientific research, innovation, and leadership.
- (3) Establish the best personalized cancer therapeutics laboratory in the United States, characterized by excellence and a warm diverse culture that brings the best out of people.

#### **GRANTS, FELLOWSHIPS, AND OTHER FUNDING**

### **Current Support**

2023 – 2028 **DP5 NIH Director's Early Independence Award** (1DP5OD036134-01)

**Title:** Decoding the Heterogeneity in Chemo-Immunomodulation to Unlock the Potential of Chemoimmunotherapy in Metastatic Triple-Negative Breast Cancer

Role: PI

Total costs: \$1,906,250

#### **Completed Support**

2022 – 2023 Training Program for Applied Research and Development in Genomic Medicine (PARADIGM) Fellowship (T32HG008958), NIH/NHGRI.

**Title:** Optimization of Combinatorial Immuno-Oncology Treatment Strategies in Metastatic Triple-Negative Breast Cancer

Role: Postdoctoral Fellow.

**Total costs:** \$ 110,000 (stipend for two years) + \$ 11,850 (yearly training-related expenses)

2020 – 2021 Pre-Doctoral Fellowship, American Foundation for Pharmaceutical Education (AFPE)

Title: Pharmacogenomic Drivers of Efficacy in Anti-CD33 Immunotherapeutic

Treatment Strategies.

Role: PI

**Total costs**: \$10,000

2020 – 2021 McKnight Dissertation Award, Florida Education Fund.

Title: Pharmacogenomic Drivers of Efficacy in Anti-CD33 Immunotherapeutic

Treatment Strategies.

Role: Pl

**Total costs**: \$10,000

2017 – 2021 Graduate School Preeminence Award, University of Florida.

Role: Predoctoral Fellow

**Total costs:** ~\$36,000/year (tuition + stipend)

### **AWARDS AND HONORS**

- 2017 Board of Education Summer Fellowship, University of Florida
- 2017 McKnight Doctoral Fellowship Affiliate Award, Florida Education Fund
- 2019 Ibrahim Dawaas Award for Cancer Research, University of Florida College of Pharmacy
- 2019 Charlotte Liberty Grad Program Award, University of Florida College of Pharmacy
- 2019 Minority Hematology Abstract Achievement Award (MGHAAA), American Society of Hematology
- 2020 1st Place Winner of Millard Senior Basic Science Division for the 33rd Annual Showcase Oral Presentation Competition, University of Florida College of Pharmacy
- 2020 SECU MD Foundation Scholarship, State Employee's Credit Union
- 2020 University of Florida Health Cancer Center Poster Award
- 2021 1st Place Winner of Senior Clinical Sciences Division for the 34th Annual Showcase Oral Presentation Competition, University of Florida College of Pharmacy
- 2021 AACR Scholar-in-Training Abstract Achievement Award
- 2021 UF Graduate School Travel Award
- 2022 University of California, Los Angeles (UCLA), Lange Symposium Travel Award
- 2023 University of Florida Health Cancer Center Poster Award
- 2023 NIH DP5 Director's Early Independence Award\*\*\*
- 2023 ASCPT Presidential Trainee Award

#### **PUBLICATIONS**

#### Research and Review Articles (Dr. Gbadamosi trainees are underlined)

- Gbadamosi MO, Bhise N, Taraswi GM, Molchan EK, Olabige O, Yang C, Mitchell D, Fridley B, Lamba JK. Integrated genomics and transcriptomics analyses using HapMap cell lines reveal key modulators of cellular response to cyclophosphamide. Clinical Cancer Research [Under Review].
- 2. Tao H, Chen D, Yang C, Nguyen DT, Liu R, Liu T, Hou AY, Petit NA, Abbas M, Von Roemeling C, Jin L, Gu T, Pepe A, Pedro DI, **Gbadamosi MO**, Chakraborty A, Yu S, Abboud G, Mendez-Gomez H, Karachi A, Weidert F, Jin D, Long-James K, <u>Molchan EK</u>, Castillo PC, Ligon JA, Ghiaseddin A, Sayour EJ, Rahman M, Deleyrolle LP, Kim BYS, Mitchell DA, Sawyer WG, Huang J. Disrupting the LAIR1-FXIIIA-collagen Loop by LAIR1 blockade enhances antitumor immunity. The Innovation. [**Under Review**].
- 3. Shastri VM, Chauhan L, **Gbadamosi M**, Alonzo TA, Wang YC, Aplenc R, Hirsch BA, Kolb EA, Gamis AS, Meshinchi S, Lamba JK. Genetic variation in DNA damage response pathway and response to Gemtuzumab Ozogamicin in pediatric AML: a report from the Children's Oncology Group. Clin Cancer Res. doi:10.1158/1078-0432.CCR-23-2073

<sup>\*\*\*</sup> One of thirteen awardees selected. This supports outstanding junior scientists with the intellect, scientific creativity, drive, and maturity to bypass the traditional postdoctoral training period to launch independent research careers.

- Nguyen NHK, Rafiee R, Tagmount A, Sobh A, Loguinov A, <u>de Jesus Sosa AK</u>, Elsayed AH, Gbadamosi MO, Seligson ND, Cogle CR, Rubnitz JE, Ribeiro RC, Downing MD JR, Cao X, Pounds SB, Vulpe CD, Lamba JK. Genome-wide CRISPR/Cas9 Screen Identifies Etoposide Response Modulators Associated with Outcomes in Pediatric AML. Blood Adv. September 16, 2022:bloodadvances.2022007934. doi:10.1182/bloodadvances.2022007934
- Gbadamosi MO, Shastri VM, Elsayed AH, Ries R, <u>Olabige O</u>, Nguyen NHK, <u>De Jesus A</u>, Wang YC, Dang A, Hirsch BA, Alonzo TA, Gamis A, Meshinchi S, Lamba JK. A ten-gene DNAdamage response pathway gene expression signature predicts gemtuzumab ozogamicin response in pediatric AML patients treated on COGAAML0531 and AAML03P1 trials. Leukemia. Published online June 2022. doi:10.1038/s41375-022-01622-0
- 6. **Gbadamosi MO**, Shastri VM, Hylkema T, Papageorgiou I, Pardo L, Cogle CR, Doty A, Loken MR, Meshinchi S, Lamba JK. Novel CD33 antibodies unravel localization, biology, and therapeutic implications of CD33 isoforms. Futur Oncol. doi:10.2217/fon-2020-0746
- Papageorgiou I, Loken MR, Brodersen LE, **Gbadamosi M**, Uy GL, Meshinchi S, Lamba JK. CCGG deletion (rs201074739) in CD33 results in premature termination codon and complete loss of CD33 expression: another key variant with potential impact on response to CD33-directed agents. Leuk Lymphoma. 2019;60(9). doi:10.1080/10428194.2019.1569232.
- 8. **Gbadamosi M**, Meshinchi S, Lamba JK. Gemtuzumab ozogamicin for treatment of newly diagnosed CD33-positive acute myeloid leukemia. Futur Oncol. 2018;14(30). doi:10.2217/fon-2018-0325.

## **ABSTRACTS** (Dr. Gbadamosi trainees are underlined)

- Gbadamosi MO, Bhise N, Mitra T, Molchan E, Olabige O, Yang C, Mitchell D, Fridley B, Lamba JK. Integrated genomics and transcriptomics analysis using HapMap cell lines reveals key modulators of response to cyclophosphamide. (Lighting Talk Oral Presentation NHGRI Training Meeting 2023; ASCPT Presidential Trainee Award 2023).
- 2. **Gbadamosi MO**, Bhise N, Mitra T, <u>Olabige O</u>, Yang C, Mitchell D, Fridley B, Lamba JK. A genome-wide association study using HapMap cell lines reveals key modulators of response to cyclophosphamide. 2023 University of Florida Health Cancer Center (UFHCC) Poster Symposium, January 2023 (**UFHCC Poster Award**).
- 3. Francisco M, Stockard B, Nguyen N, Marrero R, **Gbadamosi M**, Schiff F, Shastri V, Parcha P, Ahmed J, Garret T, Rubnitz J, Lamba Jatinder. A Metabolite Signature Predicts Outcome in Pediatric AML Patients. 35<sup>th</sup> Annual UF College of Pharmacy Research Showcase. February 2022. (**UF College of Pharmacy Poster Award in Cancer Research Category**)
- 4. Shastri VM, Hylkema TA, **Gbadamosi MO**, Meshinchi S, Lamba JK; Unraveling Subcellular Localization of CD33 Splicing Polymorphism Variant. *Blood* 2021; 138 (Supplement 1): 1290.
- 5. **Gbadamosi MO**, Shastri VM, Meshinchi S, Lamba JK; The rs35112940 CD33 Polymorphism Reduces CD33 Internalization and Efficacy of CD33-Directed Gemtuzumab Ozogamicin. Blood 2021; 138 (Supplement 1): 2247.

- 6. **Gbadamosi M**, Shastri V, Meshinchi S, Lamba JK. The rs35112940 CD33 polymorphism reduces CD33 internalization and efficacy of CD33-directed gemtuzumab ozogamicin. AACR-NCI-EORTC Virtual International Conference on Molecular Targets and Cancer Therapeutics. October 2021. (**AACR Scholar-in-Training Award**)
- 7. **Gbadamosi M**, Shastri V, Meshinchi S, Lamba JK. The rs35112940 CD33 Polymorphism Reduces CD33 Internalization and the Efficacy of CD33-Directed Gemtuzumab Ozogamicin. Cell-NCI Symposium: Beyond Cancer Genomics Toward Precision Oncology. October 2021
- 8. **Gbadamosi M**, Elsayed AH, Nguyen N, Shastri V, de Jesus A, <u>Olabige O</u>, Ries R, Meshinchi S, Lamba JK. The CIDDR gene expression signature predicts response to gemtuzumab ozogamicin. 34th Annual UF College of Pharmacy Research Showcase, April 2021(**Oral Presentation; Winner of Oral Presentation Competition in the Senior Clinical Sciences section**).
- Gbadamosi M, Elsayed AH, Ries RE, Meshinchi S, Lamba JK. Preliminary LASSO Regression Analysis Identifies Gene Expression Signature Predictive of Clinical Outcomes in Patients Using Gemtuzumab Ozogamicin, 32<sup>nd</sup> Annual UF College of Pharmacy Research Showcase, February 2019 (Best Poster; Ibrahim Dawaas Award for Cancer Research Recipient).
- 10. Gbadamosi M, Shastri V, Hylkema TA, Papageorgiou I, Pardo L, Cogle C, Doty A, Loken M, Meshinchi S, Lamba JK. Novel CD33 Antibodies Reveal New Strategies for Advances in CD33 Immunotherapy. 2020 University of Florida Health Cancer Center (UFHCC) Poster Symposium, December 2020 (UFHCC Poster Award).
- 11. **Gbadamosi M**, Shastri V, Hylkema TA, Papageorgiou I, Meshinchi S, Lamba JK. Novel CD33 antibodies reveal therapeutic implications of CD33 splicing variant. 33<sup>rd</sup> Annual UF College of Pharmacy Research Showcase, February 2020 (**Oral Presentation**; **Winner of Millard Senior Basic Science Division** (1<sup>st</sup> place oral competition among senior students)).
- 12. **Gbadamosi M**, Elsayed AH, Ries RE, Meshinchi S, Lamba JK. Preliminary Lasso Regression Analysis Identifies DNA-Damage Gene Expression Signature Predictive of Clinical Outcomes in Patients Using Gemtuzumab Ozogamicin. Blood. 2019;134(Supplement\_1):1401. doi:10.1182/blood-2019-131210.
- 13. **Gbadamosi M**, Hylkema TA, Meshinchi S, Lamba JK. Novel CD33 Antibodies Unravel Localization, Biology, and Therapeutic Implications of CD33 Isoforms. Blood. 2019;134(Supplement\_1):908. doi:10.1182/blood-2019-122596. (**Oral Presentation; Minority Graduate Student Abstract Achievement Award**)

#### **Other Electronic Publications**

1. **Gbadamosi M**, Lamba JK. CD33-directed therapy: Current and future perspectives on targeted therapy in acute myeloid leukaemia (AML) [editorial]. Open Access Government 2018:100-102. https://www.openaccessgovernment.org/cd33-directed-therapy/47313/

## **INVITED SCIENTIFIC PRESENTATION**

- 1. Novel CD33 Antibodies Reveal New Strategies for Advances in CD33 immunotherapy. Department of Pharmacotherapy and Translational Research Seminar Series, University of Florida College of Pharmacy, Gainesville, FL, October 2020.
- 2. A seven-gene gene expression score predicts outcome in patients treated with gemtuzumab ozogamicin. Department of Pharmacotherapy and Translational Research Seminar Series, University of Florida College of Pharmacy, Gainesville, FL, May 2020.
- 3. Novel Approaches to Improving CD33-Directed Immunotherapy, Department of Pharmacotherapy and Translational Research Seminar Series, University of Florida College of Pharmacy, Gainesville, FL, May 2019.
- 4. LASSO Regression Analysis Identifies Gene Expression Signature Predictive of Clinical Outcomes in Patients Using Gemtuzumab Ozogamicin, McKnight Mid-Year Research and Writing Conference, Tampa, FL, February 2019 (**Panel Chair**).
- 5. Predicting and Improving Clinical Outcomes in AML Patients Using Immunotherapy, McKnight Mid-Year Research and Writing Conference, Tampa, FL, February 2019 (**Keynote Speaker**).
- 6. The Case for Preemptive Genotyping in Atomoxetine Using Patients. Pharmacogenetics Debate, University of Florida College of Pharmacy, April 2018.

### OTHER INVITED PRESENTATIONS

- 1. The Ripple Effect Beyond the Classroom: Virtual Graduate School Mentoring Panel. University of Florida Graduate School, Gainesville FL, January 2024
- 2. Tips for a Successful Graduate School Application and Program. 2023 UF Campus Visitation Program. University of Florida Graduate School, Gainesville FL, October 2023
- 3. Success to Significance. 2022 Academic Success Seminar. The Redeemed Christian Church of God Grace and Mercy Chapel, Gainesville FL, September 2022

## PATENTS AND PATENT APPLICATIONS

Jatinder K. Lamba, **Mohammed O. Gbadamosi**, and Vivek Shastri. "CD33 Antibodies". Patent Application No.: US 63/078686. Provisional patent application filed on September 15, 2021.

#### **MENTORING**

#### **Undergraduate Students**

Alyssa Ohaegbulam, Santa Fe College Undergraduate Student, 2024-Present

- SF2UF Bridge to Baccalaureate Fellow

Arlen Gyden, UF Undergraduate Student, 2023-Present Currently Undergraduate Research in the UF Brain Tumor Immunotherapy Program and UF Health Clinical Pathology Student Assistant Elizabeth Molchan, UF Undergraduate Student, 2023-Present.

Currently Undergraduate Research in the Gbadamosi Lab and UF Brain Tumor Immunotherapy Program

- NIGMS/NIH T34 MARC GatorSTAR Fellowship Recipient
- 2024 ABRCMS Poster Award in Cancer Biology (Top 10% of Presenters)

Darryl Owusu-Ansah, BSc, Career mentee, 2021-Present.

Currently NIH Postbaccalaureate Intramural Research Trainee at the Department of Transfusion Medicine at NIH

Oluwaseyi Olabige, UF Undergraduate Student, 2020-2023 Undergraduate Researcher in the Lamba lab Undergraduate Researcher in the UF Brain Tumor Immunotherapy Program

#### **PharmD Students**

Angelica de Jesus, PharmD, Assisted in mentoring for research in Lamba Lab, 2020-2021. Next Position PGY1 at North/South Georgia Veterans Health System

Andrew Asante, PharmD, Assisted in mentoring for research rotation in Lamba Lab, 2018. Next Position Medical Science Liason at Amgen

## **TEACHING**

## **University of Florida**

04/2023	Completed Preparing Future Faculty Program at the University of Florida
04/2023	Associate Teaching Certificate from Center for the Integration of Research,
	Teaching and Learning and University of Florida Center for Teaching Excellence

Table of All Taught Courses		
Year	Course	Role
2020 – 2022	PHA 6894 Intro to Grad Studies	Graduate Student Teaching Assistant
2023	PHA 5780 Oncology Clinical Trials	Co-Faculty Instructor
	Elective	

#### UNIVERSITY SERVICE AND ORGANIZATIONAL MEMBERSHIP

## **University of Delaware**

2016 – 2017	University of Delaware Gospel Choir, Historian
2017 – 2018	National Society of Black Engineers (NSBE), Senator

### **University of Florida**

2018 - 2019	College of Pharmacy, Department Representative
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2018 – 2019	Gator McKnight Unite (GMU), Vice President
2018 – 2019	Graduate Education Diversity Champion Award Selection Panel, Member
2019 – 2020	College of Pharmacy Graduate Student Organization (COP GSO), Founder and
	President

2019 – 2021	Pediatric Cancer Immunotherapy Initiative (PCI <sup>2</sup> ), Member
2020 – 2022	University of Florida Graduate Student Diversity Team: Outreach and
	Engagement, Member
2020 – 2023	University of Florida College of Pharmacy Dean's Leadership Council, Member
2023 – 2024	University of Florida College of Pharmacy Centennial Planning Committee
2019 –	GradCru (formerly known as Campus Crusade for Christ), Member
2022 –	University of Florida Health Cancer Center Breast Cancer Research Group,
	Member
2022 –	University of Florida Cancer Al Working Group, Member
2022 –	University of Florida Health Jacksonville Breast Cancer Research Group, Member
2022 –	Wells Brain Tumor Center, Investigator
2022 –	Brain Tumor Immunotherapy Program, Investigator

# PROFESSIONAL SERVICE AND ORGANIZATIONAL MEMBERSHIP

# **NIH Study Section**

2023 – Gene Regulation in Cancer (GRIC)

# **Professional Organizations**

2015 – 2017 2015 – 2017	National Organization for the Professional Advancement of Black Chemists and
2015 2017	Chemical Engineers (NOBCChE), Member
2015 – 2017	National Society of Black Engineers (NSBE), Member (Served as Senator in 2017)
2018 – 2019	American Society for Clinical Pharmacology and Therapeutics (ASCPT), Member
2020 - 2021	American Society for Clinical Pharmacology and Therapeutics (ASCPT), Member
	(renewed)
2017 –	American Society of Hematology (ASH), Member
2018 –	American Association of Cancer Research (AACR), Member
2018 –	Minorities in Cancer Research (MICR), Member
2023 –	Cancer Research Education and Engagement (CaRE2) Health Equity Program,
	Member
2023 –	Pharmacogenomics Global Research Network, Member

## **Manuscript Reviewing**

2022 –	Future Oncology, Reviewer Board Member
2022 –	Clinical Pharmacology & Therapeutics, Reviewer
2022 –	Clinical and Translational Science, Reviewer
2022 –	Journal of Immunotherapy and Precision Oncology, Reviewer
2023 –	Future Medicine Artificial Intelligence (AI) Hub, Reviewer

## **Abstract Reviewing**

2023 ASCPT Annual Meeting Abstract Reviewer

## **Scientific Sessions Judging**

2023 Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS)
Computational Biology Poster Presentation Judge