

Angel S. Byrd, M.D., Ph.D.

Howard University College of Medicine

Department of Dermatology

520 W Street, NW

1105 NUMA P.G. Adams Bldg WEST/COM, Room 3035/36

Washington, D.C. 20059

Phone: (401) 339-0133

Email: angel.byrd@howard.edu or angel_byrd@alumni.brown.edu

SUMMARY

PHYSICIAN SCIENTIST with collaborative pharmaceutical and academic experience. Authored and co-authored over 35 publications, including several senior author publications as a junior faculty, 30+ published abstracts, including more than 20 oral presentations at national and international meetings, and 25+ invited talks. Experience in neutrophil biology in the host defense against pathogens. Extrapolated this knowledge to implement translational medicine/research to understand the immunopathologic mechanisms contributing to Hidradenitis suppurativa and other dermatological diseases. Skilled in identifying clinical unmet needs and developing basic science approaches rendering improvements in patient treatments and outcomes (bench-to-bedside), analyzing and interpreting data, scientific and creative writing, facilitating and leading collaborative projects, team building, and mentoring.

Core competencies include: Clinical/scientific novelty • Innovation • Public speaking • Scientifically-driven approach to personalized medicine

CURRENT APPOINTMENTS

Associate Professor, Department of Dermatology (July 2023- present)
Howard University College of Medicine, Washington, D.C.

Assistant Professor, Department of Dermatology (July 2018 – July 2023)
Howard University College of Medicine, Washington, D.C.

Adjunct Assistant Professor, Department of Dermatology (July 2018 – present)
Johns Hopkins University School of Medicine, Baltimore, MD

EDUCATION AND TRAINING

Ethnic Skin Postdoctoral Fellowship; July 2018
Johns Hopkins University School of Medicine, Baltimore, MD

Doctor of Medicine; May 2016
Warren Alpert Medical School of Brown University, Providence, RI

Doctor of Philosophy, Pathobiology; May 2014
Brown University Graduate School, Providence, RI
Dissertation Title: *Regulation of Human Neutrophil Functions by the Integrin, CR3 – An Extracellular Matrix-Based Mechanism of Rapid Neutrophil Extracellular Trap Formation*

Bachelor of Science, Chemistry; May 2004 *Magna Cum Laude*
Tougaloo College, Tougaloo, MS
Exchange Semester, Fall 2003, Brown University

Diploma; May 2000 *Valedictorian*
Callaway High School, Jackson, MS

FACULTY DEVELOPMENT

2022 –present	Robert A. Winn Career Development Forums
2018	Georgetown University/MedStar Health Workshop on Conducting Clinical Trials
2019	National Institutes of Health/National Cancer Institute Mock Grant Review Workshop
2019	Health Disparities Institute National Institutes of Health/National Institute of Minority Health and Health Disparities
2019	Special Certificate Received: <i>Certificate of Achievement received in October 2019 for completing the 2019 Junior Faculty Writing and Creative Works Summer Academy</i>
2018 – 2023	Howard University Office of Faculty Development Junior Faculty Forums

RESEARCH EXPERIENCE

Ethnic Skin Postdoctoral Fellow, Department of Dermatology, The Johns Hopkins School of Medicine, Baltimore, MD - National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health (NIAMS, NIH) (Bethesda, MD) (July 2016 – July 2018)

- Established fresh tissue bank for Hidradenitis suppurativa (HS)
- Established and led various internal and external collaborations to study HS
- Prepared homogenized whole tissue lysates for protein analysis (Western blot, ELISA)
- Isolated and purified RNA for qPCR
- Primary cell isolation (neutrophils, monocytes) for functional analysis
- Immunostaining of tissue sections (IF, IHC)
- Trained and mentored high school, college, and graduate students, residents as well as junior-level research staff (neutrophil isolation and functional analyses)
- Delivered multiple scientific presentations in various departments within the university, NIH, and national/international meetings
- Organized focus group events to involve and educate the community about HS

Mentors: Drs. Ginette Okoye, Lloyd Miller, Mariana Kaplan, Carmelo Carmona-Rivera

Graduate Student, Brown University, Providence, RI - Laboratory of Clinical Infectious Disease, National Institute of Allergy and Infectious Diseases, National Institutes of Health (NIAID, NIH) (Bethesda, MD)/Department of Pediatrics, University of Massachusetts Medical Center (Worcester, MA)/Department of Pediatrics, Women and Infants Hospital (Providence, RI) (March 2013- May 2014)

- Established and led collaborations to study pediatric immunocompromised cells, including neutrophils from patients with Chronic Granulomatous Disease (CGD), Leukocyte Adhesion Deficiency (LAD), other genetic deficiencies
- Techniques included neutrophil preps, respiratory burst assays, microscopy, and several others
- Studying patients with primary immunodeficiencies will help elucidate the mechanisms in rapid release of Neutrophil Extracellular Traps (NETs) to fungal pathogens
- We report that neonatal neutrophils formed aggregates and released NETs rapidly and independent of ROS production

Mentors: Drs. Jonathan Reichner, Steven Holland, Peter Newburger, Joseph Bliss

Graduate Student/Intern, Brown University, Providence, RI - Department of Surgery, Division of Surgical Research, Rhode Island Hospital, Warren Alpert Medical School of Brown University, Pathobiology Department of Brown Graduate School (Providence, RI) / Eli Lilly and Company (Indianapolis, IN) (May 2009 – August 2009)

- Established a collaboration to study a portion of my graduate work using state-of-the-art technology

- Used elegant methods to determine a global analysis of alterations in phosphorylation
- Techniques included neutrophil preps, gel electrophoresis, immunoprecipitation, Western blot, and several others
- Ultimately, these studies are expected to render new pathways for neutrophil signaling, providing fundamental targets for pharmacological therapies

Mentor: Drs. Jonathan Reichner and Jesus Gutierrez

Graduate Student, Brown University, Providence, RI - Department of Surgery, Division of Surgical Research, Rhode Island Hospital, Warren Alpert Medical School of Brown University, Pathobiology Department of Brown Graduate School (Providence, RI) (January 2008 – May 2014)

- Primary graduate project - studied the receptor/ligand interactions and intracellular signaling mechanisms responsible for the elaboration of Neutrophil Extracellular Traps (NETs) in response to *Candida albicans*
- Techniques included venous blood draws, neutrophil preps, respiratory burst assays, microscopy, flow cytometry, gel electrophoresis, immunoprecipitation, Western blot, and several others
- Trained and mentored high school, college, and graduate students, residents as well as junior-level research staff (neutrophil isolation and functional analyses)
- Delivered multiple scientific presentations at national and international meetings
- We report that recognition of purified fungal pathogen-associated molecular pattern beta-glucan by human neutrophils causes rapid (less than or equal to 30 minutes) homotypic aggregation and NET release by a mechanism that requires fibronectin

Mentor: Dr. Jonathan Reichner

Graduate Student, Brown University, Providence, RI - Endocrinology and Diabetes, Rhode Island Hospital, Warren Alpert Medical School of Brown University, Pathobiology Department of Brown Graduate School (Providence, RI) (June 2006 – December 2008)

- Studied how the transcription factor Y box-binding protein-1 (YB-1) led to the upregulation of the prototypic protein tyrosine phosphatase (PTP1B)
- Techniques included cell culture, PCR, immunoprecipitation, Western blot, and several others
- This work detailed how the expression of PTP1B regulated insulin-mediated signaling pathways, which ultimately results in type 2 diabetes

Mentor: Dr. Robert Smith

Undergraduate Student, Tougaloo College, Tougaloo, MS - University of Mississippi Medical Center Microbiology Research Lab (Jackson, MS) (January 2001 – May 2004)

- Conducted studies to determine the genomic sequence of the Regina ranavirus (RRV), which is responsible for salamander die-offs in western North America
- Techniques included PCR, gel electrophoresis, Western blot, dot plot analysis, and several others
- This work provided the RRV sequence information, which will aid in the development of useful diagnostic probes rendering the identification of RRV infections

Mentor: Dr. Jinghe Mao

Undergraduate Student, Tougaloo College, Tougaloo, MS - Jackson Heart Study (JHS), Tougaloo College (Jackson, MS/Tougaloo, MS) (August 2002 – May 2004)

- Was chosen as one of the twelve JHS Scholars of the 2004 class
- Participated in longitudinal cohort study that investigates the risks associated with cardiovascular disease in African-Americans in metropolitan Jackson and surrounding area
- From sophomore to senior year - devoted time working at the JHS medical clinic assisting investigators in data collection, routine visits, and evaluating the risk of cardiovascular disease among the participants
- Completed courses to develop and enhance my skills in public health, biostatistics, epidemiology, and ethics

Mentor: Dr. Wendy White

Undergraduate Student/Intern, Tougaloo College, Tougaloo, MS - The Weight Control and Diabetes Research Center, Miriam Hospital, Warren Alpert Medical School of Brown University, The Leadership Alliance (Providence, RI) (May 2003 – August 2003)

- The Leadership Alliance is a program that identifies undergraduate students who are interested in pursuing research
- Afforded the opportunity to conduct research at renowned institutions that are a part of its elite consortium
- Was among the twenty students selected to participate in the 2003 summer program at Brown University
- Explored my interests in clinical research related to diabetes
- Conducted clinical studies to observe the effects of long-term weight loss on cardiovascular disease in type 2 diabetes
- Duties included patient interviews and physical exams, data entry, and several others
- This randomized controlled trial concluded that weight loss improved cardiovascular disease in patients with type 2 diabetes

Mentor: Dr. Rena Wing

Undergraduate Student/Intern, Tougaloo College, Tougaloo - Peking University Health Science Center (MIRT Program) (Beijing, China) (May 2002 – August 2002)

- The MIRT program is designed to render international research opportunities to undergraduate students
- Was among the three students selected to study abroad for a summer
- Was chosen to conduct research at Peking University where I engaged in studies to observe the prokaryotic expression of the pancreatic and duodenum homeobox-1 gene (PDX-1)
- Techniques included cell culture, electrotransformation, gel electrophoresis, protein purification, and several others
- These studies rendered the identification of the PDX-1 recombinant protein, which can further be applied for the production of antibodies

Mentor: Drs. Chunyan Zhou and Shun Lu

PUBLICATIONS

Complete List of Published Work in MyBibliography: <https://www.ncbi.nlm.nih.gov/myncbi/collections/mybibliography/>

1. Okeke C.A.V., Williams J..P, Tran J.H., **Byrd, A.S.** Adverse childhood experiences (ACEs) and associated health outcomes among adults with skin cancer. *J Dermat Cosmetol.* 2023;7(3):91–97. DOI: 10.15406/jdc.2023.07.00243.
2. Okeke, C.A.V., Tran, J., Wright, I., Okoye, G.A., Burgess, C.M., **Byrd, A.S.** Skin tone representation in dermatologic direct-to-consumer advertisements: a cross-sectional analysis and call to action. *International Journal of Women's Dermatology* 9(3):p e101, October 2023. | DOI: 10.1097/JW9.000000000000101.
3. Nina, N.C., Richmon, J.M., Kelliher, M.A., **Byrd, A.S.** (2023) What is Acute Lymphoblastic Leukemia? *Front. Young Minds, submitted.*
4. Nwade, N.C., Desse, S.I, Nagarkar, A., James, N.E.R., Svoboda, R., Okoye, G.A., Richmond, J.M., **Byrd, A.S.** Immunopathogenesis of cutaneous T-cell lymphoma in skin of color patients part 2: Sézary syndrome, *Clinical Immunology Communications*, Volume 4, 2023, Pages 30-34, ISSN 2772-6134, <https://doi.org/10.1016/j.clicom.2023.07.002>.
5. Desse, S.I., Nwade, N.C, Nagarkar, A., James, N.E.R., Svoboda, R., Okoye, G.A., **Byrd, A.S.**, Richmond, J.M. Immunopathogenesis of cutaneous T-cell lymphoma in skin of color patients part 1: Mycosis fungoides, *Clinical Immunology Communications*, Volume 4, 2023, Pages 35-40, ISSN 2772-6134, <https://doi.org/10.1016/j.clicom.2023.07.004>.

6. Byrd A.S., Rosenberg A.Z., Shipman W.D., Okoh U.J., Mazhar M., Okoye G.A., Bragazzi N.L., Mortellaro C., Jemec G.B.E., Damiani G. Hidradenitis suppurativa in Black and White patients - a clinical study. *Eur Rev Med Pharmacol Sci.* 2023 Apr;27(3 Suppl):92-98. doi: 10.26355/eurrev_202304_31325. PMID: 37129339.
7. Simmons-O'Brien E., Callender V.D., Orlinsky D., Hassan S., Okeke C.A.V., **Byrd A.S.** Exploring the importance of inclusion criteria beyond the color of skin: Improvement in facial redness in skin of color subjects-An open-label, single center clinical study utilizing low molecular weight heparan sulfate. *J Am Acad Dermatol.* 2023 Jan 16:S0190-9622(23)00075-0. doi: 10.1016/j.jaad.2022.12.041. Epub ahead of print. PMID: 36657646.
8. George R., Gallo R.L., Cohen J.L., Brown M., Okeke C.A.V., **Byrd AS.** Reduction of Erythema in Moderate-Severe Rosacea by a Low Molecular Weight Heparan Sulfate Analog (HSA). *J Drugs Derm.* 2023;22(6). Epub ahead of print.
9. Callender V.D., Orlinsky D., Simmons-O'Brien E., Nwade N.C., Rhodes T., **Byrd A.S.** Clinical Study to Compare Efficacy and Tolerability of Two Pigment Correcting Products in Subjects with Moderate to Severe Hyperpigmentation and Skin Unevenness. *J Drugs Derm.* July 2023, *under review.*
10. Cobb C.B.,C, Heath C.R., **Byrd A.S.**, McKinley-Grant L.J., Callender V.D., Adamson A.S., Brown S.G., Desai S.R., Glass D.A., Jaleel T., Okoye G.A., Taylor S.C., Harvey V.M., The Skin of Color Society Meeting the Challenge Summit 2022: Diversity in Dermatology Clinical Trials Proceedings. *JAMA Dermatol.* 2023 Jul 1;159(7):757-762. doi: 10.1001/jamadermatol.2023.1285. Erratum in: *JAMA Dermatol.* 2023 Jul 1;159(7):793. PMID: 37223905.
11. Ajayi A., Richmond J., Okoye G., **Byrd A.** (2023) Hidradenitis Suppurativa—Painful Boils That Affect Much More Than Skin. *Front. Young Minds.* 11:782192. doi: 10.3389/frym.2022.78219.
12. Byrd A.S., Rosenberg A.Z., Shipman W.D., Okoh U.J., Mazhar M., Okoye G.A., Bragazzi N.L., Mortellaro C., Jemec G.B.E., Damiani G. Hidradenitis suppurativa in Black and White patients - a clinical study. *Eur Rev Med Pharmacol Sci.* 2023 Apr;27(3 Suppl):92-98. doi: 10.26355/eurrev_202304_31325. PMID: 37129339.
13. Oliveira C.B., **Byrd A.S.**, Okoye G.A., Kaplan M.J., Carmona-Rivera C. Neutralizing Anti–DNase 1 and –DNase 1L3 Antibodies Impair Neutrophil Extracellular Traps Degradation in Hidradenitis Suppurativa. *J Invest Dermatol.* 2022 Aug 4:S0022-202X(22)01682-7. doi: 10.1016/j.jid.2022.06.024. Epub ahead of print. PMID: 35934056.
14. Okeke C.A.V., Williams J.P., Iwuala C.U., Igwe P.K., Khanna R., Perry J.D., Okoye G.A., **Byrd A.S.** What's Race Got to Do With It? CRP Levels in Immune Mediated Skin Diseases: Considerations for Hidradenitis Suppurativa. *Front Immunol.* 2022 Mar 29;13:847050. doi: 10.3389/fimmu.2022.847050. PMID: 35432388.
15. Okoye, G., Kamara, H. I., Strobeck, M., Mellman, T., Kwagyan, J., Sullivan, A., **Byrd, A.S.**, Shokrani, B., Mighty, H. E. (2022). Diagnostic accuracy of a rapid diagnostic test for the early detection of COVID-19. *J Clin Virol.* 2022 Feb;147:105023. doi: 10.1016/j.jcv.2021.105023. Epub 2021 Oct 28. PMID: 35121489.
16. Carmona-Rivera, C., O'Neil, L. J., Patino-Martinez, E., Shipman, W. D., Zhu, C., Li, Q. Z., Kerns, M. L., Barnes, L. A., Caffrey, J. A., Kang, S., Kaplan, M. J., Okoye, G., **Byrd, A.S.** Autoantibodies Present in Hidradenitis Suppurativa Correlate with Disease Severity and Promote the Release of Proinflammatory Cytokines in Macrophages. *J Invest Dermatol.* 2022 Mar;142(3 Pt B):924-935. doi: 10.1016/j.jid.2021.07.187. Epub 2021 Oct 1. PMID: 34606886.
17. Okeke C.A.V., Perry, J., Simmonds, F. C., Erskine, A. B., Shipman, W. D., Seltzer, J. A., Andrews, M. R., Saini, A. D., Cole, T. A., Perkins, J. A., Otado, J., Kwagyan, J., Collins CIF, Okoye, G., **Byrd, A.S.** Clinical Trials and Skin of Color: The Example of Hidradenitis Suppurativa. *Dermatology.* 2022;238(1):180-184. doi: 10.1159/000516467. Epub 2021 Jun 9. PMID: 34107480.
18. Okeke C.A.V., Khanna, R., Okoye, G., **Byrd, A.S.** Assessment of the generalizability of hidradenitis suppurativa microbiome studies: The minimal inclusion of racial and ethnic populations. *J Am Acad Dermatol.* 2022 Apr;86(4):e159-e161. doi: 10.1016/j.jaad.2021.10.042. Epub 2021 Oct 29. PMID: 34757150.

19. Zouboulis, C. C., Goyal, M., **Byrd, A.S.** Hidradenitis suppurativa in skin of colour. *Exp Dermatol.* 2021 Jun;30 Suppl 1:27-30. doi: 10.1111/exd.14341. PMID: 34085333.
20. Abousy M., **Byrd A.**, Succaria F., Kerns M., Caffrey J. Burn Center Management of Severe Necrotic Cutaneous Polyarteritis Nodosa in a Patient With a History of Thymoma. *Cureus.* 2021 Feb 4;13(2):e13134. doi: 10.7759/cureus.13134. PMID: 33728150; PMCID: PMC7935156.
21. Quartey, Q. Q., Edoror, R. O., **Byrd, A.S.**, Okoye, G. Bonds and bridges: the role of social capital in building a more diverse dermatology workforce. *Cutis.* 2020 Nov;106(5):242-244. doi: 10.12788/cutis.0111. PMID: 33465196.
22. Zouboulis, C. C., Benhadou, F., **Byrd, A.S.**, Chandran, N. S., Giamarellos-Bourboulis, E. J., Fabbrocini, G., Frew, J. W., Fujita, H., González-López, M. A., Guillem, P., Gulliver WPF, Hamzavi, I., Hayran, Y., Hórvath, B., Hùe, S., Hunger, R. E., Ingram, J. R., Jemec GBE, Ju, Q., Kimball, A. B., Kirby, J. S., Konstantinou, M. P., Lowes, M. A., MacLeod, A. S., Martorell, A., Marzano, A. V., Matusiak, Ł., Nassif, A., Nikiphorou, E., Nikolakis, G., da Nogueira Costa, A., Okun, M. M., Orenstein LAV, Pascual, J. C., Paus, R., Perin, B., Prens, E. P., Röhn, T. A., Szegedi, A., Szepietowski, J. C., Tzellos, T., Wang, B., van der Zee, H. H. What causes hidradenitis suppurativa?—15 years after. *Exp Dermatol.* 2020 Dec;29(12):1154-1170. doi: 10.1111/exd.14214. PMID: 33058306.
23. Kerns, M. L., Miller, R. J., Mazhar, M., Byrd, A.S., Archer, N. K., Pinkser, B. L., Lew, L., Dillen, C. A., Wang, R., Miller, L. S., Chien, A. L., Kang, S. Pathogenic and therapeutic role for NRF2 signaling in ultraviolet light-induced skin pigmentation. *JCI Insight.* 2020 Oct 15;5(20):e139342. doi: 10.1172/jci.insight.139342. PMID: 33001866; PMCID: PMC7605539.
24. Okeke C.A.V., Shipman, W. D., Perry, J., Kerns, M. L., Okoye, G., **Byrd, A.S.** Treating hidradenitis suppurativa during the COVID-19 pandemic: tele dermatology exams of sensitive body areas. *J Dermatolog Treat.* 2022 Mar;33(2):1163-1164. doi: 10.1080/09546634.2020.1781042. Epub 2020 Jul 9. PMID: 32643464.
25. Khanna, R., Whang, K. A., Huang, A. H., Williams, K. A., **Byrd, A.S.**, Okoye, G., Kwatra, S. G. Inpatient burden of hidradenitis suppurativa in the United States: analysis of the 2016 National Inpatient Sample. *J Dermatolog Treat.* 2022 Mar;33(2):1150-1152. doi: 10.1080/09546634.2020.1773380. Epub 2020 Jun 30. PMID: 32436763.
26. Seltzer, J. A., Okeke CAV, Perry, J., Shipman, W. D., Okoye, G., **Byrd, A.S.** Exploring the risk of severe COVID-19 infection in patients with hidradenitis suppurativa. *J Am Acad Dermatol.* 2020 Aug;83(2):e153-e154. doi: 10.1016/j.jaad.2020.05.012. Epub 2020 May 8. PMID: 32389715.
27. Anzaldi, L., Perkins, J. A., **Byrd, A.S.**, Kharrazi, H., Okoye, G. Characterizing inpatient hospitalizations for hidradenitis suppurativa in the United States. *J Am Acad Dermatol.* 2020 Feb;82(2):510-513. doi: 10.1016/j.jaad.2019.09.019. Epub 2019 Sep 19. PMID: 31541745.
28. **Byrd, A.S.**, Carmona-Rivera, C., O'Neil, L. J., Carlucci, P. M., Cisar, C., Rosenberg, A. Z., Kerns, M. L., Caffrey, J. A., Milner, S. M., Sacks, J. M., Aliu, O., Broderick, K. P., Reichner, J. S., Miller, L. S., Kang, S., Robinson, W. H., Okoye, G., Kaplan, M. J. Neutrophil extracellular traps, B cells, and type I interferons contribute to immune dysregulation in hidradenitis suppurativa. *Sci Transl Med.* 2019 Sep 4;11(508):eaav5908. doi: 10.1126/scitranslmed.aav5908. PMID: 31484788.
29. **Byrd, A.S.**, Dina, Y., Okoh, U. J., Quartey, Q. Q., Carmona-Rivera, C., Williams, D. W., Kerns, M. L., Miller, R. J., Petukhova, L., Naik, H. B., Barnes, L. A., Shipman, W. D., Caffrey, J. A., Sacks, J. M., Milner, S. M., Aliu, O., Broderick, K. P., Kim, D., Liu, H., Dillen, C. A., Ahn, R., Frew, J. W., Kaplan, M. J., Kang, S., Garza, L. A., Miller, L. S., Alavi, A., Lowes, M. A., Okoye, G. Specimen Collection for Translational Studies in Hidradenitis Suppurativa. *Sci Rep.* 2019 Aug 21;9(1):12207. doi: 10.1038/s41598-019-48226-w. PMID: 31434914.
30. Quartey, Q. Q., Miller, R. J., Pinsker, B. L., Okoh, U. J., Shipman, W. D., George, B. A., Nwizu, C. C., Barnes, L. A., Kerns, M. L., Caffrey, J. A., Aliu, O., Brown, I. D., Succaria, F., Maynard, J. P., Herbert, A. S., Kang, S., Miller, L. S.,

Okoye, G., **Byrd, A.S.** Lessons learned from the development of a hidradenitis suppurativa xenograft mouse model. *Clin Exp Dermatol.* 2020 Mar;45(2):202-206. doi: 10.1111/ced.14054. Epub 2019 Oct 20. PMID: 31322280.

31. Frew, J. W., Navrazhina, K., **Byrd, A.S.**, Garg, A., Ingram, J. R., Kirby, J. S., Lowes, M. A., Naik, H., Piguet, V., Prens, E. P. Defining lesional, perilesional and unaffected skin in hidradenitis suppurativa: proposed recommendations for clinical trials and translational research studies. *Br J Dermatol.* 2019 Dec;181(6):1339-1341. doi: 10.1111/bjd.18309. Epub 2019 Aug 29. PMID: 31269228.
32. Marchitto, M.C., Dillen, C.A., Liu, H., Miller, R.J., Archer, N.K., Ortines, R.V., Alphonse, M.P., Marusina, A.I., Merleev, A.A., Wang Y., Pinkser, B.L., **Byrd, A.S.**, Brown, I.D., Ravipati, A., Zhang, E., Cai, S.S., Limjunyawong, N., Yeaman, M.R., Simon, S.I., Shen, W., Durum, S.K., O'Brien, R.L., Maverakis, E., Miller, L.S. Clonal V γ 6⁺V δ 4⁺ T cells promote IL-17-mediated immunity against *Staphylococcus aureus* skin infection. *Proc Natl Acad Sci U S A.* 2019 May 28;116(22):10917-10926. doi: 10.1073/pnas.1818256116. Epub 2019 May 14. PMID: 31088972.
33. **Byrd, A.S.**, Toth, A.T., Stanford, F.C. Racial Disparities in Obesity Treatment. *Curr Obes Rep.* 2018 Jun;7(2):130-138. doi: 10.1007/s13679-018-0301-3. PMID: 29616469.
34. **Byrd, A.S.**, Kerns, M.L., Williams, D.W., Zarif, J.C Rosenberg, A.Z., Delsante, M., Liu, H., Caffrey, J.A., Sacks, J.M., Milner, S.M., Aliu, O., Broderick, K.P., Lew, L., Lloyd, L.S., Kang, S., Okoye, G.A. Collagen deposition in chronic hidradenitis suppurativa: potential role for CD163+ macrophages.. *Br J Dermatol.* 2018 Sep;179(3):792-794. doi: 10.1111/bjd.16600. Epub 2018 Jun 29. PMID: 29603182.
35. Johnson, C.M., O'Brien, X.M., **Byrd, A.S.**, Parisi, V., Loosley, A.J., Li, W., Witt, H., Faridi, M.H., LeFort, C.T., Gupta, V., Kim, M., Reichner, J.S. Integrin cross-talk regulates the human neutrophil response to fungal beta-glucan in the context of extracellular matrix: A prominent role for VLA3 in the anti-fungal response. *J Immunol.* 2017 Jan 1;198(1):318-334. doi: 10.4049/jimmunol.1502381. Epub 2016 Nov 16. PMID: 27852744.
36. **Byrd, A.S.**, O'Brien, X.M., Leforce-Nesbitt, S.S., Parisi, V., Hirakawa, M., Bliss, J.M., Reichner, J.S. NETosis in neonates: evidence of a ROS-independent pathway in response to fungal challenge. *J Infect Dis.* 2016 Feb 15;213(4):634-9. doi: 10.1093/infdis/jiv435. Epub 2015 Sep 2. PMID: 26333942.
37. **Byrd, A.S.**, O'Brien, X.M., Johnson, C.M., Lavigne, L.M. and Reichner, J.S. In This Issue. *J Immunol.* 2013, 190(8): 3829-3830.
38. **Byrd, A.S.**, O'Brien, X.M., Johnson, C.M., Lavigne, L.M., Reichner, J.S. An extracellular matrix-based mechanism of rapid neutrophil extracellular trap formation in response to *Candida albicans*. *J Immunol.* 2013 Apr 15;190(8):4136-48. doi: 10.4049/jimmunol.1202671. Epub 2013 Mar 15. PMID: 23509360.

BOOK CHAPTERS

39. Textbook Chapter (Elsevier): Okeke C.A.V., Okoye, G.A, and **Byrd A.S.** Hyperpigmentation: Other Localized Hyperpigmentation. Feb 2023, *submitted*.
40. *Textbook*: A Comprehensive Guide to Hidradenitis Suppurativa. 1st Edition (2021). Farah, S., Kerns. M.L., **Byrd, A.S.** Chapter 5 - Histopathology of the Pilosebaceous Unit and Interstitium of Hidradenitis Suppurativa. A Comprehensive Guide to Hidradenitis Suppurativa (1st Edition ed., pp. 37-44).

FUNDING

JHUSOM Physician Scientist Training Program Microgrant Award "Understanding the collective role of *Candida albicans*, Neutrophils and Macrophage Extracellular Traps in the pathogenesis of Hidradenitis Suppurativa" – Role: PI; Award period: 09/15/2017 - 09/15/2019; Total Award: \$5,000

Danby Hidradenitis Suppurativa Foundation Research Grant “Establishment of a fresh tissue bank for hidradenitis suppurativa to elucidate immunopathological mechanisms” – Role: PI; Award period: 06/05/2018 - 08/05/2021; Total Award: \$5,000

Johns Hopkins Blaustein Pain Research Fund Grant “The impact of pain and sleep on surgical wound healing in hidradenitis suppurativa” - Zohar (PI); Role: Co-Investigator; Award period: 01/14/2020-01/14/2022; Total Award: \$10,000

Pfizer Pharmaceutical Company “Howard University Skin of Color Postgraduate Research Fellowship” - Okoye (PI); Role: Co-Investigator / Co-Director; Award period: 01/15/2020 – 01/15/2022; Total Award: \$349,520

Society for Investigative Dermatology (SID) Freinkel Diversity Fellowship “Efforts to Increase Diversity in Women of Color Participating in Dermatology Research” – Role: PI; Award period: 06/1/2021 – 05/31/2023; Total Award: \$15,000

Skin of Color Society Career Development Award (Sponsored by Pfizer) “Elucidating the Role of Autoantibodies in Hidradenitis Suppurativa” – Role: PI; Award period: 07/1/2021 – 06/30/2023; Total Award: \$100,000

American Skin Association Milstein Research Award for Melanoma/Non-Melanoma Skin Cancer “Examining gene expression in mycosis fungoides in skin of color” – Role: PI; Award period: 05/01/2022 – 04/30/2023; Total Award: \$60,000

Mary Kay-Society for Investigative Dermatology (SID) Skin Research Grant "Uncovering the Genetic Basis of Melasma in Skin of Color" – Role: PI; Award period: 06/01/2022 – 05/31/2023; Total Award: \$25,000

Women’s Dermatologic Society (Sponsored by La Roche-Posay) “Dermatology Fellowship at Howard University College of Medicine – Okoye (PI); Role: Co-Investigator/Co-PI; Award Period: 07/01/2022 – 06/30/2023; Total Award: \$250,000

Janssen Pharmaceuticals Fellowship “The Howard University Longitudinal Dermatology Fellowship program for students from groups Underrepresented in Medicine (UIM)” – Okoye (PI); Role: Co-Investigator/Co-PI; Award period: 07/01/2022 – 06/30/2023; Total Award: \$50,000

Skin of Color Society Research Award (Sponsored by Pfizer) “Examining gene and protein expression in clinically diverse Mycosis Fungoides Samples from Skin of Color Patients” – Role: Co-PI; Award period: 07/1/2021 – 06/30/2023; Total Award: \$15,000

Bristol Myers and Squibb Foundation Robert A. Winn Career Development Award “A pragmatic trial of home versus office based narrow band ultraviolet B phototherapy for the treatment of psoriasis (Light Treatment Effectiveness ‘LITE’ Study)” - Gelfand/Okoye (PI); Role: PI (CDA); Award period: 11/01/2022 – 10/31/2024; Total Award: \$240,000

Janssen Pharmaceuticals Fellowship “The Howard University Dermatology Fellowship program for students from groups Underrepresented in Medicine (UIM) – Hidradenitis Suppurativa” – Okoye (PI); Role: Co-Investigator/Co-PI; Award period: 07/01/2023 – 06/30/2024; Total Award: \$250,000

TEACHING EXPERIENCE

Dermatology Journal Club and Research Lab – Department of Dermatology, Howard University (July 2018 – present)

- Actively work with residents, medical students, and undergraduates to facilitate literature searches, review of the scientific/translational literature, preparation of presentations, and basic science techniques
- Aid trainees and students in understanding the connection between basic science and clinical studies/research
- Teach the craft of conceptualizing an idea and drafting abstracts and manuscripts to contribute to the scientific literature
- Hone presentation delivery and skills

Invited Lecturer – Clinical and Translational Research Online Seminar Course – Georgetown University, Washington, D.C. (April 2019)

- Actively engaged in questions regarding ongoing research in the Department of Dermatology, particularly studies focused on hidradenitis suppurativa
- Spoke to students about aspects of my career path and efforts to lead translational studies

Senior Scholar for Initiative to Maximize Student Development (IMSD) – Brown University, Providence, RI (September 2008 – January 2014)

- Doctoral program which promotes and creates a diverse environment in which all students contribute to an enriched graduate student experience
- Helped organize and conducted annual weekly modules focused on “Writing and Defending Your Research Proposal” and “Reading Scientific Publications”

Summer Coordinator, The Leadership Alliance - Brown University, Providence, RI (May 2013– August 2013)

- Was chosen to serve as the mentor and summer coordinator to assist with tasks including, the coordination of weekend activities, professional development seminars, review and preparation of research poster and oral presentations, and any other support that the students needed

Invited Lecturer for Bio 1550 - Biology of Emerging Disease - Brown University, Providence, RI (February 2012)

- Delivered a lecture to students titled “*Candida albicans*: Neutrophils and *Candida*”
- Spoke to the students about aspects of my dissertation work and the neutrophil response to *Candida albicans*

Teaching Assistant (TA), Virology - Pfizer Pharmaceutical Company, Groton, CT (September 2008 – December 2008)

- Semester course that was offered to employees at Pfizer
- Wrote and graded quizzes, lectured when needed, led exam review sessions, and supported the students.
- Worked from Providence, RI writing and grading online quizzes and served as a resource for the students

Teaching Assistant (TA), Virology (Biomed 1560 S01) - Brown University, Providence, RI (January 2008 – May 2008)

- Wrote and graded quizzes, lectured when needed, led exam review sessions, and supported the students

Tutor, Summer Science Program (SSP) – Tougaloo College, Tougaloo, MS (June 2001 – August 2001)

- Five-week science program geared toward those students interested in pursuing an education in the natural sciences
- Was chosen as a tutor to lead teaching sessions as well as prepared students for upcoming exams and presentations
- Designed to give students exposure to the college life, college level courses, and numerous opportunities in the field of natural science

MENTORING

2019-2022 Mya Abousy, MD
Present position: Ophthalmology Resident Physician
Shared publications: 1

Cassandra Ine Collins, MD, MPH
Present position: Resident Physician
Shared publications: 1

Marcus Andrews, BS
Present position: Graduate student
Shared publications: 1

Arjun Saini, MD
Present position: Dermatology Resident Physician
Shared publications: 1

Nina Nwade, BS
Present position: Medical student
Shared publications: 2

Nia James, BS
Present position: Medical student
Shared publications: 2

Madeline Brown, BS
Present position: Medical student
Shared publications: 1

2018-present Chidubem Okeke, BS
Present position: Medical Student/Research Fellow
Shared publications: 10

Shahzeb Hassan, MD
Present position: Internal Medicine Resident Physician
Shared publication: 1

Callyn Iwuala, BS
Present position: Medical student
Shared publications: 1

Pearl Igwe, MD
Present position: Resident Physician
Shared publications: 1

Raveena Khanna, MD
Present position: Dermatology Resident Physician
Shared publications: 3

Jessica Perry, MD
Present position: Internal Medicine Resident Physician
Shared publications: 3

Janyla Seltzer, MD
Present position: Internal Medicine Resident Physician (Prelim);
Dermatology Resident Physician: July 2023
Shared publications: 2

Faith Simmonds, BS
Present position: NIH/NIAMS Postbaccalaureate Intramural Research Training Award Fellow
Shared publications: 1

2018-2020 Momina Mazhar, MD
Present position: Dermatology Resident Physician
Shared publications: 1

Lance Lew, BS

Present position: Medical student
Shared publication: 2

Jamilah Perkins, MD
Present position: Research Fellow
Shared publications: 2

Taylor Cole, MD
Present position: Emergency Medicine Resident Physician
Shared publications: 1

Azure Erskine
Present Position: Medical Student
Shared publications:1

2017-present Quaren Quartey, MD
Present position: Dermatology Resident Physician
Shared publications: 3

Rachel Richardo, MD
Present position: Resident Physician
Shared publications: 1

Bret Pinkster, BS
Present position: Medical student
Shared publications: 2

Uchechukwu Okoh, BS
Present position: Medical student
Shared publications: 2

William Shipman, MD, PhD
Present Position: Dermatology Resident Physician
Shared publications: 6

Bethany Ann George, MD
Present position: Resident Physician
Shared publications: 1

Chibuikem Nwizu, BS
Present position: MD/PhD Student
Shared publications: 1

Leandra Barnes, MD
Present position: Dermatology Resident Physician (Chief)
Shared publications: 3

Yemisi Dina, MD
Present position: Dermatology Resident Physician
Shared publications: 1

2017-2018 Mark Marchitto, MD
Present position: Dermatologist
Shared publications: 1

2016-2018 Philip Carlucci, MD
Present position: Resident Physician
Shared publications: 1

ORAL PRESENTATIONS

National Medical Association – Dermatology Section (July 2023)

Cellular Contributions to Immune Dysregulation in Hidradenitis Suppurativa: A Closer Look at African Americans

Loma Linda University Department of Dermatology Grand Rounds (April 2023); Virtual

Understanding Cellular Contributions to Immune Dysregulation in Hidradenitis Suppurativa

NIAMS/NIH Dermatology Seminar (April 2023); Virtual

The Interplay of Cells: Understanding Immune Dysregulation in Hidradenitis Suppurativa

Columbia University Department of Dermatology Grand Rounds (2023); Virtual

Demystifying the Complexities of Hidradenitis Suppurativa: The Interplay of Cells and Immune Dysregulation

National Medical Association (NMA) National Assembly (2022); Atlanta, GA

The Interplay of Cells: Understanding the Role of Lesional Fibroblasts in Hidradenitis Suppurativa

Skin of Color Society Meeting the Challenge Summit: Diversity in Dermatology Clinical Trials (2022); Washington, D.C.

A Spotlight on Barriers to Skin of Color Inclusion in Clinical Trials: A Bright Future Ahead

Sonoma Biotherapeutics (2021); South San Francisco, CA

A Closer Look: Neutrophil Extracellular Trap-Mediated Immune Dysregulation in Hidradenitis Suppurativa

Uniformed Services University Roundtable Discussion (2021); Bethesda, MD

A Closer Look: Immune Dysregulation and Understanding the Histopathology of Hidradenitis Suppurativa

Skin of Color Symposium (SOCS) (2021); VIRTUAL

Brown University/Rhode Island Hospital – Department of Surgery Research Seminar (2021); Virtual Seminar

From an HBCU to Ivy League and Back: Understanding the Role of Neutrophils and Immune Dysregulation in Hidradenitis Suppurativa

5th Annual Symposium on Hidradenitis Suppurativa Advances (SHSA) (2020); Virtual

Immune Dysregulation in Hidradenitis Suppurativa

10th European Hidradenitis Suppurativa Foundation e.V. (EHSF 2021); Virtual

Stage-Dependent Autoantibodies and Promotion of Proinflammatory Cytokines in Hidradenitis Suppurativa

Stanford University School of Medicine Dermatology Grand Rounds (2021); Virtual Seminar

Understanding the Immunobiology of Hidradenitis Suppurativa

University of Wisconsin – Madison Dept. of Medical Microbiology and Immunology (2021); Virtual Seminar

Understanding the Role of Neutrophils and Immune Dysregulation in Hidradenitis Suppurativa

Global Dermatology Talks (2021); Virtual Seminar

Unraveling the Complexities of Immune Dysregulation in Hidradenitis Suppurativa

Society for Investigative Dermatology (SID) National Meeting (2021); Virtual

From biobank to bedside- Neutrophil extracellular traps and type 1 IFN contribute to immune dysregulation in Hidradenitis Suppurativa

Howard University College of Medicine - Dept. of Physiology and Biophysics Seminar (2019); Washington, D.C.
From biobank to bedside- Neutrophil extracellular traps, B cells, and type 1 interferons contribute to immune dysregulation in Hidradenitis Suppurativa

Howard University Research Symposium (2019); Washington, D.C.
Johns Hopkins Department of Dermatology Fifth Annual Research Day (2018); Baltimore, MD
Neutrophil extracellular traps and type 1 IFN contribute to autoimmunity in Hidradenitis Suppurativa

Symposium on Hidradenitis Suppurativa Advances (SHSA) (2017); Detroit, MI
From bank to bedside: Establishment of a fresh tissue bank for hidradenitis suppurativa

National Medical Association (NMA) Resident Symposium (2017); Philadelphia, PA
From bedside to bench: Establishment of a fresh tissue bank for hidradenitis suppurativa

Travel Award Recipient - 1st Place Oral Presentation

NESS/Harvard Medical School (2017); Boston, MA
CASTING A WIDER NET: The role of the host immune response in hidradenitis suppurativa
2nd Place Oral Presentation Winner - Ruth and William Silen, M.D. Award

1st Annual Excellence in Diversity Symposium, Johns Hopkins University School of Medicine (2016); Baltimore, MD
CASTING A WIDER NET: A preliminary investigation of the role of human neutrophils in hidradenitis suppurativa
Travel Award Recipient

2014 St. Jude National Graduate Student Symposium (2014); Memphis, TN
Assessment of NETosis in patients with primary immunodeficiencies: evidence for a ROS-independent pathway

Brown University Graduate School Pathobiology Retreat (2013); Providence, RI
An Extracellular-Matrix Based Mechanism of Rapid Neutrophil Extracellular Trap Formation in Response to C. albicans
1st Place Poster Presenter

Society for Leukocyte Biology (SLB) Annual Meeting (2013); Newport, RI
Immunodeficient patients support a mechanism for a ROS-independent pathway for rapid NET
Travel Award Recipient

Experimental Biology (EB)/American Society for Investigative Pathology (ASIP) Annual Meeting (2013); Boston, MA
An Extracellular-Matrix Based Mechanism of Rapid Neutrophil Extracellular Trap Formation in Response to C. albicans
Travel Award Recipient

NESS/Harvard Medical School (2013); Boston, MA
An Extracellular-Matrix Based Mechanism of Rapid Neutrophil Extracellular Trap Formation in Response to C. albicans
1st Place Oral Presentation Winner - Ruth and William Silen, M.D. Award

Merck & Company, Inc. (2012); Boston, MA
An Integrin-Based Mechanism of Rapid Neutrophil Extracellular Trap Formation

10th Annual Advances in Inflammation Research Symposium (2012); Providence, RI
An Integrin-Based Mechanism of Rapid Neutrophil Extracellular Trap Formation

Student National Medical Association (SNMA) Annual Medical Education Conference (AMEC) (2012); Atlanta, GA
A Recognition of Fungal beta-glucan by Human Neutrophil CR3 (CD11b/CD18) Results in Homotypic Cell Aggregation and Rapid Formation of Extracellular Traps by a Mechanism That Depends on alpha5beta1

Travel Award Recipient

EB/ASIP Annual Meeting (2012); San Diego, CA

Recognition of Fungal beta-glucan by Human Neutrophil CR3 Results in Homotypic Aggregation and Neutrophil Extracellular Traps

Travel Award Recipient

9th Annual Advances in Inflammation Research Symposium (2011); Providence, RI

Recognition of Fungal beta-glucan by Human Neutrophil CR3 Results in Homotypic Aggregation and Neutrophil Extracellular Traps

EB/ASIP Annual Meeting (2011); Washington, D.C.

Phosphoproteomic Analysis of Differentially Ligated Human Neutrophils Elucidates Downstream Tyrosine Phosphorylation Events

Travel Award Recipient

Undergraduate Research Conference on Global Public Health (2004); Atlanta, GA

National Institutes of Health (NIH) Monitoring Board Meeting for the Jackson Heart Study (2004); Bethesda, MD

Leadership Alliance Annual National Symposium (2003); Chantilly, VA

Look AHEAD: Does Long-Term Weight Loss Reduce the Risk of Cardiovascular Disease in Type 2 Diabetics?

Travel Award Recipient

INVITED TALKS

National Medical Association – Dermatology Section (July 2023); New Orleans, LA

Loma Linda University Department of Dermatology Grand Rounds (April 2023); Virtual

Columbia University Department of Dermatology Grand Rounds (2023); Virtual

University of Massachusetts Dermatology Research Seminar (2022); Virtual

Skin of Color Society Meeting the Challenge Summit: Diversity in Dermatology Clinical Trials (2022); Washington, D.C.

Sonoma Biotherapeutics (2021); South San Francisco, CA

Skin of Color Symposium (SOCS) (2021); Virtual

5th Annual Symposium on Hidradenitis Suppurativa Advances (SHSA) (2020); Virtual

10th European Hidradenitis Suppurativa Foundation e.V. (EHSF 2021); Virtual

Skin of Color Society Media Day (2021); Virtual

Stanford University School of Medicine Dermatology Grand Rounds (2021); Virtual

University of Wisconsin – Madison Dept. of Medical Microbiology and Immunology (2021); Virtual

Global Dermatology Talks (2021); Virtual Seminar

Brown University/Rhode Island Hospital – Department of Surgery Research Seminar (2021); Virtual

Society for Investigative Dermatology (SID) Diversity Panel (2021); Virtual

Society for Investigative Dermatology (SID) National Meeting (2021); Virtual

Howard University College of Medicine - Dept. of Physiology and Biophysics Seminar (2019); Washington, D.C.

Leadership Alliance Summer Research Experience Seminar – Howard University (2019); Washington, D.C.

AbbVie Sponsored Symposium - 77th Annual Society for Investigative Dermatology (SID) meeting (2019); Chicago, IL

Keynote Speaker for SSP Awards Program – Tougaloo College (2017); Tougaloo, MS

Keynote Speaker for MERIT's (Minority Education Resources Initiative for Teens) Annual Symposium – Johns Hopkins University School of Medicine (2016); Baltimore, MD

Speaker for Minority Biomedical Research Support (MBRS) Program - California State University Dominguez Hills (CSUDH) (2009, 2012, 2019); Carson, CA

Brown University Graduate School Pathobiology Retreat (2013); Providence, RI

Speaker for Student Seminar - TIMES² STEM Academy and Sophia Academy (2012); Providence, RI

United Negro College Fund (UNCF)/Merck Science Initiative Graduate Science Research Dissertation Fellowship acceptance speech (2011); Blue Bell, PA

Keynote Speaker for Inman Page Black Alumni Council – Brown University (2011); Providence, RI

ABSTRACTS

Okeke, C.A.O., Carmona-Rivera, C., Oliveira, C.B., Kaplan, M.J., Okoye, G.A., **Byrd, A.S.** Analysis of RNA-Seq data reveals involvement of JAK/STAT signaling pathway in Hidradenitis Suppurativa (Brigham and Women's Hospital Dermatology Medical Student; Virtual Research Symposium (May 2023)

Nagarkar, A., Nwade, N.C., James, N.E.R., Desse, S., Yildiz-Altay, U., Shokrani, B., Deng, A., Dresser, K., **Byrd, A.S.**, Okoye, G.A., Richmond, J.M. Examining Transcriptomic Differences Underlying Mycosis Fungoides in Skin of Color and White Patients (American Association of Immunologists; Washington, DC) (May 2023)

Nwade, N., James, N., Desse, S., Nagarkar, A., Yildiz-Altay, U., Okoye, G., **Byrd, A.S.**, Richmond, J. Elucidating Mycosis Fungoides Gene Expression in Skin of Color Patients from Howard University Dermatology (Howard University Research Symposium; Washington, DC) (April 2023); (American Association of Immunologists; Washington, DC) (May 2023)

James, N., Nwade, N., Desse, S., Nagarkar, A., Yildiz-Altay, U., Okoye, G., Richmond, J., **Byrd, A.S.** Elucidating the role of TCR expression in Mycosis Fungoides: A Preliminary Analysis of Skin of Color biospecimens from Howard University Department of Dermatology (Howard University Research Symposium; Washington, DC) (April 2023); (American Association of Immunologists; Washington, DC) (May 2023)

Okeke, C.A.V., Williams, J.P., Okoye, G.A., **Byrd, A.S.** Adverse childhood experiences (ACEs) and associated health outcomes among adults with skin cancer (Howard University Research Symposium; Washington, DC) (April 2023)

Nwade, N.C., James, N., Nagarkar, A., Desse, S., Yildiz-Altay, U., Richmond, J., Okoye, G.A., **Byrd, A.S.** Investigating Cutaneous T-Cell Lymphoma Immunopathogenesis and Gene Expression in Skin of Color Patients from Howard University Dermatology (Howard University Research Symposium; Washington, DC) (April 2023).

Jones, C., Okeke, C.A.V., Carmona-Rivera, C., Oliverira, C.B., Kaplan, M.J., Okoye, G., **Byrd, A.S.** Targeting the JAK/STAT signaling pathway in Hidradenitis Suppurativa: From Bench to Clinic. (Howard University Research Symposium; Washington, DC) (April 2023).

Carmona-Rivera, C., Oliveira, C.B., Romo-Tena, J.R., Patino-Martinez, E., Woo, A., **Byrd, A.S.**, Okoye, G.A., Kaplan, M.J. NET-associated DLL4 activates Notch- γ secretase signaling in macrophages and fibroblasts and promotes pro-fibrotic responses in Hidradenitis Suppurativa (ISID; Tokyo, Japan) (May 2023)

Okeke, C.A.V., Carmona-Rivera, C., Oliveira, C.B., Kaplan, M., Okoye, G.A., **Byrd, A.S.** The JAK/STAT signaling pathway: Practical Considerations in Hidradenitis Suppurativa in Skin of Color. (ISID; Tokyo, Japan) (May 2023).

Okeke, C.A.V., Seltzer, J.A., Okoye, G.A., Wu, P.A., **Byrd, A.S.** An Analysis of Contact Allergens in Popular Chemical Hair Relaxers. (WDS; Orlando, FL) (April 2023).

Okeke, C.A.V., Tran, J., Wright I., Tran E., Dinkins J., Frey C., Okoye, G.A., **Byrd A.S.** Analysis of the Representation of Skin of Color in Dermatological Direct-to-Consumer Advertisements. (SOCS; New Orleans, LA) (March 2023).

***1st Place Winner**

Okeke, C.A.V., **Byrd, A.S.**, Burgess, C.M. Improving Hairdressers' Knowledge and Self-efficacy to Detect CCCA by Use of an Educational Video. (SOCS; New Orleans, LA) (March 2023).

James, N.E.R., Okeke, C.A.V., Richert-Jones, J., Carmona-Rivera, C., Kaplan, M., Okoye, G.A., Harvey, V.M., Chan, J., **Byrd, A.S.** Zebrafish as a Promising Model in the Study of Hidradenitis Suppurativa and Other Inflammatory Dermatoses. (SOCS; New Orleans, LA) (March 2023).

Dinkins, J., Okeke, C.A.V., **Byrd, A.S.**, Okoye, G.A., Frey, C. Examining Racial Diversity in Hyperpigmentation and Post-Inflammatory Hyperpigmentation Clinical Trials in the United States. (SOCS; New Orleans, LA) (March 2023).

Sampath, A.J., Blum, F.R., Miedema, J.R., Googe, P.B., Frew, J.W., **Byrd, A.S.**, Lowes, M.A., Sokumbi, O., Naik, H., Sayed, C.J. Protocol for the Clinical Characterization of Tissue Samples from Patients with Hidradenitis Suppurativa (SHSA; Miami, FL) (October 2022).

Okeke, C.A.V., McAdoo, D., Williams, J.P., Tran, J., Okoye, G.A., **Byrd, A.S.** Hidradenitis Suppurativa among Transgender Patients: Advocating for Representation within Dermatological Research (SHSA; Miami, FL) (October 2022).

George, R., Gallo, R.L., Cohen, J.L., Okeke, C.A.V., Brown, M., **Byrd, A.S.** Dermal Repair Cream rapidly reduces moderate to severe erythema in rosacea and inhibits cytokine release by the action of low molecular weight heparan sulfate analog (HSA) (ASDS; Denver, CO) (October 2022).

Callender, V.D., Orlinsky, D., Simmons-O'Brien, E, **Byrd, A.S.** Clinical Study to Compare Efficacy and Tolerability of Two Pigment Correcting Products in Subjects with Moderate to Severe Hyperpigmentation and Skin Unevenness (SOCU; New York, NY) (September 2022).

Byrd, A.S., Richert-Jones, J., Carmona-Rivera, C., Kaplan, M.J., Okoye, G.A., Harvey, V.M., Chan, J. The Interplay of Cells: Understanding the Role of Lesional Fibroblasts in Hidradenitis Suppurativa (NMA; Atlanta, GA) (July 2022).

Byrd, A.S., Richert-Jones, J., Carmona-Rivera, C., Kaplan, M.J., Okoye, G.A., Harvey, V.M., Chan, J. A Closer Look: Understanding the Role of Lesional Fibroblasts in Hidradenitis Suppurativa (SID; Portland, OR) (May 2022).

Kerns, M.L., Xing, X., Gudjonsson, J., **Byrd, A.S.**, Kang, S. Impaired follicular Nrf2 signaling: A potential early therapeutic target in Hidradenitis Suppurativa (SID; Portland, OR) (May 2022).

Cohen, J.L., Callender, V.D., **Byrd, A.S.** Improvements in Facial Redness and Inflammation: An Open-label, single center clinical study including low molecular weight heparan sulfate (HSA) in patients with sensitive skin (AAD; Boston, MA) (March 2022).

Simmons-O'Brien, E., Callender, V.D., Orlinsky, D., **Byrd, A.S.** Exploring the Importance of Inclusion Criteria Beyond the Color of Skin: Improvement in Facial Redness in Skin of Color Subjects – An Open-label, Single Center Clinical Study Utilizing Low Molecular Weight Heparan Sulfate (HSA) (SOCS; Boston, MA) (March 2022).

White, B., Okeke, C.A.V., Khanna, R., Okoye, G.A., Campbell, M.C., **Byrd, A.S.** A Preliminary Analysis of the *DDB1* Gene: Genome-Wide Association Studies in African and admixed African American Populations - Is our skin different? (SOCS; Boston, MA) (March 2022);* (Howard University Research Week Symposium; Washington, D.C.) (April 2022).

***1st Place Winner**

Okeke, C.A.V., Okoh, U.J., Simmonds, F.C., Bhayana, M., Erskine, A.B., Perry, J.D., Shipman, W.D., Seltzer, J.A., Otado, J., Okoye, G.A., **Byrd, A.S.** Identifying Potential Patient Barriers to African American participation in Hidradenitis Suppurativa Clinical Trials. (Howard University Research Week Symposium; Washington, D.C.) (April 2022).

Okeke, C.A.V., Khanna, R., Okoye, G.A., **Byrd, A.S.** Microbiome studies for hidradenitis suppurativa: Does race and ethnicity matter? (SHSA; VIRTUAL) (October 2021).

Colvan, L., **Byrd, A.S.**, Fleck, T. The Fine Line Between Aging Gracefully and Photodamaged Skin: The Effect & Tolerability of a Retinol and Antiaging Hydrator Regimen in Patients with Moderate Facial Photodamage (ASAPS; Boston, MA) (May 2021).

Okoh, U.J., Simmonds, F.C., Bhayana, M., Okeke, C.A.V., Erskine, A.B., Perry, J.D., Shipman, W.D., Seltzer, J.A., Otado, J., Okoye, G.A., **Byrd, A.S.** Identifying Potential Patient Barriers to African American participation in Hidradenitis Suppurativa Clinical Trials (NESS; VIRTUAL) (April 2021).

Brown, M.C., Zewdie, N.Z., Seltzer, J.A., Burke, M.W., Shipman, W.D., Cole, T.A., Haddad, G.E., Lew, L.S., Caffrey, J.A., Sacks, J.M., Aliu, O, Broderick, K.P., Tarzami, S.T., Sanchez-Flores, D., Naab, T.J., Okoye, G.A., **Byrd, A.S.** Exploring the role of cell regulatory pathways in Hidradenitis Suppurativa (HU MSSRP; Washington, D.C.) (August 2021); (HU Regional SNMA: Washington, D.C.) (October 2021); (SOCS; VIRTUAL) (March 2021).

Bhayana, M., Perry, J.D, Okeke, C.A.V., Simmonds, F.C., Okoh, U.J., Erskine, A.B., Shipman, W.D., MD, Seltzer, J.A., Otado, J., Okoye, G.A., **Byrd, A.S.** Investigating Limitations of African American Enrollment in Hidradenitis Suppurativa Clinical Trials: A Patient Perspective (SOCS; VIRTUAL) (March 2021).

Okeke, C.A.V., Bhayana, M., Simmonds, F.C., U.J., Erskine, A.B., Perry, J.D., Shipman, W.D., Seltzer, J.A., Otado, J., Okoye, G.A., **Byrd, A.S.** Improving African American enrollment in Hidradenitis Suppurativa clinical trials: A clinical and research staff perspective (AAD; VIRTUAL) (April 2021).

Carmona-Rivera, C., Kerns, M.L, Zhu, C., Li, Q.Z., Shipman, W.D., Barnes, L.A., Kaplan, M.J., Okoye, G.A., **Byrd, A.S.** IgG autoantibodies correlate with Hidradenitis Suppurativa clinical severity (SID; VIRTUAL) (May 2020).

Kerns, M.L, Carmona-Rivera, C., Zhu, C., Li, Q.Z., Shipman, W.D., Barnes, L.A., Kaplan, M.J., Okoye, G.A., **Byrd, A.S.** Friend or foe: Elevated sera levels of IgM autoantibodies targeting hair follicle components detected in patients with Hidradenitis Suppurativa (SID; VIRTUAL) (May 2020).

Seltzer, J.A., Okeke, C.A.V., Perry, J.D., Simmonds, F.C., Azure, E. B., Shipman, W.D., Saini, A.D., Cole, T.A., Perkins, J.A., Kwagyan, J., Otado, J., Collins, C.I., Okoye, G.A., **Byrd, A.S.** Bridging the diversity gap: An examination of African American participation in Hidradenitis Suppurativa clinical trials in the United States (NMA; VIRTUAL) (July 2020).

Perkins, J.A., Olufajo, O.A., Shipman, W.D., Brown, M.C., Zewdie, N.Z., Seltzer, J.A., Cole, T.A., Okoye, G.A., **Byrd, A.S.** Characterizing the association of hidradenitis suppurativa with chronic kidney disease and subsequent end-stage renal disease (Excellence in Diversity Symposium/EiD; Johns Hopkins University School of Medicine; Baltimore, MD) (November 2019); (SOCS; Denver, CO) (2020). **accepted, meeting cancelled due to COVID-19*

Cole, T.A., Perkins, J.A., Kerns, M.L, Okoye, G.A., Byrd, A.S. Examining the Role of Estrogen Receptor $-\alpha$ and $-\beta$ in the Pathophysiology of Hidradenitis Suppurativa (NMA/Dermatology Nth Dimensions; Honolulu, HI) (July 2019). ***1st Place Winner**

Shipman, W.D., Kerns, M.L., Lew, L.S., Maynard, J.P., Quartey, Q.Q., Okoh, U.J., Okoye, G.A., **Byrd, A.S.** Exploring the role of p53 signaling in hidradenitis suppurativa (NMA; Honolulu, HI) (July 2019);* (SHSA; Detroit, MI) (November 2019). ***2nd Place Winner**

Barnes, L.A., Sie, B.M., Shan, K., Perkins, J.A., Griffin, G., Rosenberg, A.Z., Miller, L.S., Okoye, G.A., Larman, B.H. and **Byrd, A.S.** Identification of Autoantibodies in Patients with Hidradenitis Suppurativa Using PhIP-Seq. 24th World Congress of Dermatology (WCD; Milan, Italy) (2019).

Khanna, R., Whang, K., **Byrd, A.S.**, Okoye, G., and Kwatra, S.G. Inpatient burden of hidradenitis suppurativa in the United States: Analysis of the 2016 National Inpatient Sample (SID; Chicago, IL) (2019).

Kerns, M.K., Miller, R.J., Archer, N., **Byrd, A.S.**, Mazhar, M., Miller, L.S., Chien, A.L. and Kang, S. NRF2-mediated inhibition of UV-induced hyperpigmentation by topical sulfuraphane is dependent on upregulation of IL-6 α expression on keratinocytes. Society for Investigative Dermatology (SID; Chicago, IL) (2019).

Barnes, L.A., George, B.A., Miller, R.J., Quartey, Q.Q., Okoh, U.J., Pinsker, B.L., Kerns, M.L., Caffrey, J.A., Sacks, J.M., Aliu, O., Milner, S.M., Nwizu, C.C., Brown, I.D., Succaria, F., Kang, S., Miller, L.S., Okoye, G.A. and **Byrd, A.S.** Dyspigmentation in Hidradenitis Suppurativa: Clinical and Pathologic Findings from a Xenograft Mouse Model. 15th Annual Skin of Color Society Symposium (SOCS; Washington, D.C.) (2019).

Lew, L., Byrd, A.S., Kerns, M.L., Williams, D.W., Zarif, J.C., Rosenberg, A.Z., Delsante, M., Liu, H., Caffrey, J.A., Sacks, J.M., Milner, S.M., Aliu, O., Broderick, K.P., Lew, L., Lloyd, L.S., Kang, S., Okoye, G.A. Excessive collagen deposition in chronic Hidradenitis Suppurativa: Potential role for CD163+ macrophages (Excellence in Diversity Symposium/EiD; Johns Hopkins University School of Medicine; Baltimore, MD) (2018).

Quartey, Q.Q., Miller, R.J., Pinsker, B.L., Okoh, U.J., Kerns, M.L., Caffrey, J.A., Sacks, J.M., Aliu, O., Milner, S.M., Nwizu, C.C., Brown, I.D., George, B.A., Miller, L.S., Okoye, G.A., **Byrd, A.S.** Transplanting the Way to Clearance: Lessons Learned from Development of a Hidradenitis suppurativa (HS) Xenograft Mouse Model. (SHSA; Toronto, Canada) (2018); (Excellence in Diversity Symposium/EiD; Johns Hopkins University School of Medicine; Baltimore, MD) (2018).

Byrd, A.S., Carmona-Rivera, C., Carlucci, P.M., Okoye G.A., Kerns, M.L., Caffrey, J.A., Milner, S.M., Sacks, J.M., Aliu, O., Broderick, K.P., Cisar, C., Robinson, W.H., Reichner, J.S., Miller, L.S., Kang, S., Okoye, G.A., Kaplan, M.J. Neutrophil extracellular traps and type 1 IFN contribute to autoimmunity in Hidradenitis Suppurativa. (NESS/Harvard Medical School; Boston, MA) (2018);* Society for Investigative Dermatology|International Investigative Dermatology Meeting (SID/IID;Orlando, FL) (2018); (International Symposium|Neutrophil 2018; Quebec City, Canada) (2018); (Howard University Research Week Symposium; Washington, D.C.) (April 2019); (NIH/NIAMS Research Retreat; Bethesda, MD) (2018).* ***1st Place Winner**

Kerns, M.L., Pinsker, B., **Byrd, A.S.**, Chien, A., Miller, L.S., Kang, S. Pharmacological Activation of NRF2 Signaling Prevents UVB Induced Hyperpigmentation. (SID/IID; Orlando, FL) (2018).

Byrd, A.S., Kerns, M.L., Carmona-Rivera, C., Zarif, J.C., Kaplan, M.J., Miller, L.S., Okoye, G.A. Casting a wider NET: A preliminary investigation of the role of human neutrophils in hidradenitis suppurativa. (Excellence in Diversity Symposium/EiD; Johns Hopkins University School of Medicine; Baltimore, MD) (2018). ***1st Place Winner**

Byrd, A.S., Kerns, M.L., Carmona-Rivera, C., Carlucci, P.M., Milner, S.M., Caffrey, J.A., Sacks, J.M., Miller, L.S., Aliu, O., Kaplan, M.J., Okoye, G.A. From bedside to bench: Establishment of a fresh tissue bank for hidradenitis suppurativa. (NMA; Philadelphia, PA) (2017). **1st Place Winner**

Byrd, A.S., Kerns, M.L., Carmona-Rivera, C., Carlucci, P.M., Milner, S.M., Caffrey, J.A., Sacks, J.M., Miller, L.S., Kaplan, M.J., Okoye, G.A. Casting a wider NET: A preliminary investigation of the role of human neutrophils in hidradenitis suppurativa. New England Science Symposium/Harvard Medical School (NESS; Boston, MA) (2017). **2nd Place Winner**

Byrd, A.S., Carmona-Rivera, C., Kerns, M.L., Kaplan, M.J., Miller, L.S., Reichner, J.S., Okoye, G.A. Journal of Investigative Dermatology. Role of fungi and the extracellular matrix in hidradenitis suppurativa. 2017, May; 137(5S): Supplement 1 (S112).

Johnson, C.M., **Byrd, A.S.**, O'Brien, X.M., Parisi, V., Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. Integrin Crosstalk Regulation of Human Neutrophils Adhered to Fibronectin and Beta-glucan. 2015, Apr; 29(1): Supplement 925.2.

Byrd, A.S., O'Brien, X.M., Johnson, C.M., Zarembler, K.A., Sampio, E.P., Leforce-Nesbitt, S.S., Bliss, J.M., Newburger, P.E., Holland, S.M., Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. Assessment of NETosis in patients with primary immunodeficiencies: evidence for a ROS-independent pathway. 2014, Apr; 28(1): Supplement 1046.6. **Travel Award Recipient**

Johnson, C.M., **Byrd, A.S.**, Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. Role of GSK beta and ERK in human neutrophil response to fungal beta-glucan. 2014, Apr; 28(4): Supplement 1046.5.

Byrd, A.S., O'Brien, X.M., Johnson, C.M., Lavigne, L.M., Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. An extracellular matrix-based mechanism of rapid neutrophil extracellular trap formation in response to *C. albicans*. 2013, Apr; 27(4): Supplement 132.4. **Travel Award Recipient**

Byrd, A.S., O'Brien, X.M., Johnson, C.M., Zarembek, K.A., Elizabeth, P.S., Holland, S.M., Reichner, J.S. Immunodeficient patients support a mechanism for a ROS-independent pathway for rapid NET release. 46th Annual Meeting of SLB (Newport, RI) and SIPMeT/ASIP Young Scientists Meeting (Rome, Italy) (2013). **Travel Award Recipient**

Johnson, C.M., **Byrd, A.S.**, Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. Integrin crosstalk regulation of human neutrophils adhered to fibronectin and beta-glucan. 2013, Apr; 27(1): Supplement 138.3.

Byrd, A.S., Yu, K., Johnson, C.M., O'Brien, X.M., Lavigne, L.M., Salomon, A.S., Reichner, J.S.: Recognition of fungal β -glucan by human neutrophil CR3 (CD11b/CD18) results in homotypic cell aggregation and rapid formation of extracellular traps by a mechanism that depends on $\alpha_5\beta_1$. 1st Joint Meeting of Pathology and Laboratory Diagnostics, 2012 September 12-15, Udine, Italy. Am J Pathol 2012, 181(Suppl):S1 Abstract AMT1. **Travel Award Recipient**

Byrd, A.S., Yu, K., Johnson, C.M., O'Brien, X.M., Lavigne, L.M., Salomon, A.S., Reichner, J.S. American Journal of Pathology. Recognition of fungal beta-glucan by human neutrophil CR3 (CD11b/CD18) results in homotypic cell aggregation and rapid formation of extracellular traps by a mechanism that depends on alpha5beta1. 2012, Sep; 181(Suppl.): S12 Abstract IHD8. **Travel Award Recipient**

Johnson, C.M., **Byrd, A.S.**, Reichner, J.S. American Journal of Pathology. Signaling molecules involved in homotypic aggregation of human neutrophils in response to fungal beta-glucan. 2012, Sep; 181(Suppl.): S12 Abstract IHD9.

Byrd, A.S., Yu, K., Johnson, C.M., Lavigne, L.M., Salomon, A.R., Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. Recognition of fungal beta-glucan by human neutrophil CR3 results in homotypic aggregation and Neutrophil Extracellular Traps. 2012, Apr; 26(4): Supplement 276.3. **Travel Award Recipient**

Johnson, C.M., **Byrd, A.S.**, Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. Mechanistic role for alpha3beta1/CD151 and the neutrophilic fungal response to beta-glucan. 2012, Apr; 26(4): Supplement 276.4.

Byrd, A.S., Yu, K., Morin, N.A., Johnson, C.M., Salomon, A.S., Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. Phosphoproteomic analysis of differentially ligated human neutrophils elucidates downstream tyrosine phosphoproteomic events. 2011, Apr; 25(4): Supplement 38.9. **Travel Award Recipient**

Byrd, A.S., Yu, K., Salomon, A.R., Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. Characterization of beta-glucan treated human neutrophils provides a phospho-site-specific global proteomic analysis of downstream phosphorylation events. 2011, Apr; 25(4): Supplement 793.6. **Travel Award Recipient**

Johnson, C.M., **Byrd, A.S.**, Loosley, A.J., Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. Signaling molecules differentiate single versus dual ligation of Complement Receptor 3. 2011, Apr; 25(4): Supplement Ib325.

Byrd, A.S., Morin, N.A., Lavigne, L.M., Reichner, J.S. The Journal of the Federation of American Societies for Experimental Biology. Beta2 integrin Complement Receptor 3 (CR3, CD11b/CD18) regulation of neutrophil function. 2009, Apr; 25(4): Supplement 568.2. **Travel Award Recipient**

AFFILIATIONS AND PROFESSIONAL SOCIETIES

Howard University College of Medicine – Office of Faculty Development, Justice, Equity, Diversity and Inclusion (OFD JEDI) – Planning Committee (2023)

Skin of Color Society (SOCS) | Task Force, Diversity in Clinical Trials Summit (2021-present)

Member, Brown University | Tougaloo College Partnership Advisory Board (2019-present)

Planning Committee SHSA, Hidradenitis Suppurativa Foundation (2019-2021)

Member, Skin of Color Society (SOCS) (2018-present)

National Medical Association (NMA) (2017–present)

Johns Hopkins University Post-Doctoral Association (DPAC) – Planning Committee (2016–2018)
Planning Committee, Society for Investigative Dermatology (Skin of Color Section) (2017-2019)
Society for Investigative Dermatology (SID) (2016–present); Reviewer: “Skin of Color” Mini-Symposium Category for 2019 SID Annual Meeting
Baltimore Fungal Biology Society (2016–present)
American Society for Cell Biology (ASCB) (2009-2013)
Society for Leukocyte Biology (SLB) (2009-2013)
American Society for Investigative Pathology (ASIP) – Programming Council (2008-2014)
American Society for Biochemistry and Molecular Biology (ASBMB) (2009-2016)
Brown University Graduate School Advisory Council (2009-2012)
American Association for the Advancement of Science / Science Program for Excellence in Science (2006-2016)
Student National Medical Association (SNMA) (2004-2016)
Alpha Kappa Alpha Sorority, Incorporated (2003-present)
Alpha Lambda Delta National Honor Society (2000-2004)
Tougaloo College Pre-Health Club (2000-2004)

JOURNAL REVIEWER

2021-present JAMA Dermatology
2020-present Journal of Clinical Investigation
Journal of Investigative Dermatology Innovations
JAMA
2019-present British Journal of Dermatology
Dermatology
ePlasty
2018-present Clinical and Experimental Dermatology

HONORS AND AWARDS

Bristol Myers and Squibb Foundation Robert A. Winn Career Development Award (2022)
Mary Kay-Society for Investigative Dermatology (SID) Skin Research Grant (2022)
American Skin Association Milstein Research Award for Melanoma/Non-Melanoma Skin Cancer (2022)
Skin of Color Society Career Development Award (2021)
Society for Investigative Dermatology Freinkel Diversity Scholar, Society for Investigative Dermatology (2021)
National Institutes of Health-Howard University Intramural Research Collaboration (NIH-HUIRC) Scholar (2019)
National Institute for Minority Health Disparities/NIH Health Disparities Research Institute Scholar (2019)
National Cancer Institute/NIH Professional Development Workshop and Mock Interview (2019)
Howard University – Junior Faculty Writing and Creative Series Summer Academy (2019)
NIH/National Medical Association Career Development Award (2018)
New England Science Symposium (NESS) / Harvard Medical School – Cloud Health Genomics Translational Research Award – Poster Presentation – 1st place (2018)
Johns Hopkins Provost Diversity Postdoctoral Award (2018)
Tougaloo College Top 40 Under 40 (2017)
New England Science Symposium (NESS) / Harvard Medical School – Ruth and William Silen, M.D. Award – Oral Presentation – 2nd place (2017)
National Medical Association (NMA) Dermatology Resident Symposium – Travel Award recipient and 1st place oral presentation (2017)
Honorary Co-Chair for 2016-2017 Tougaloo College UNCF Scholarship Campaign (2016–2017)
<https://drive.google.com/file/d/0B61Rmxy5w3LdbmIFdmZKc29yenM/view?usp=sharing>
Scientific Mentoring and Diversity Program for Medical Technology (SMDP MedTech) Scholar (2016)
Inducted into Sigma Xi National Honor Society (2016)
New England Science Symposium (NESS) / Harvard Medical School – Beth Israel Deaconess Medical Center Department of Neonatology Award – Poster Presentation - 1st Prize (2014)
Accepted to participate in the 2014 St. Jude National Graduate Student Symposium (2014)

Jeffrey Osborne Foundation – Rhode Island Community Image Award (2014)
 1st place in Graduate Student Poster Competition – American Society for Cell Biology (2013)
 Brown University Graduate School Pathobiology Retreat – 1st place poster presenter (2013)
 Inaugural Robateau-Epps Fund Scholarship Recipient (2013)
 Federation of American Societies for Experimental Biology (FASEB)/Minority Access to Research Careers (MARC) Travel Award to attend the Società Italiana di Patologia e Medicina Traslazionale (SIPMeT)/ASIP Young Scientists Meeting (Rome, Udine, and Salerno, Italy) (2010-2013)
 Accepted to attend the 2013 NIH National Graduate Student Research Conference (2013)
 UNCF/Merck Science Initiative Undergraduate Selection Committee (2013)
 Anne Murray Bell, MD Medical Scholarship – The Middlesex County Chapter of The Links, Inc. (2012/2013/2015)
 2nd Place in the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) Midwest Regional Biotechnology Conference Poster Presentation (2011)
 Keynote Speaker for Tougaloo College’s 142nd Founders’ Convocation – Presidential Citation (2011)
 Featured among Brown Graduate School’s Emerging Experts (2001) <http://www.vimeo.com/14243125>
 Featured on BET/*UNCF an Evening of Stars* Program (2011)
 Biomedical Science Careers Program (BSCP) – Hope Scholarship Recipient (2011)
 UNCF/Merck Graduate Science Research Dissertation Fellowship Recipient (2011-2013)
 2nd Place in the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) Midwest Regional Biotechnology Conference Poster Presentation (2008)
 Who’s Who Among Students in American Universities and Colleges (2001-2004)
 Bill Gates Millennium Scholar (Gates Foundation) (2000-Spring 2010)
 Louis Stokes Alabama Alliance for Minority Participation (AMP) Scholar (2000-2004)
 Tougaloo College President’s List / Tougaloo College Dean’s List (2000-2004)
 Tougaloo College Summer Science Program (SSP) Scholar (2000)
 Callaway High School Hall of Fame / Miss Callaway High School (2000)

PROFESSIONAL/PUBLIC SERVICE

2023	Pathways: Inclusivity in Dermatology Career Prep Program American Academy of Dermatology
2023	Howard University Research Month Symposium Judge
2023	Howard University College of Medicine – Justice, Equity, Diversity, Inclusion
2023	Howard University College of Medicine Space Allocation Committee
2022	National Medical Association – Dermatology Section (student led Journal Club facilitator)
2022	Light the Way Nonprofit Organization
2020	Howard University COVID-19 Vaccination Recruiter
2020-2022	Comprehensive Medical Mentoring Program
2019	National Institutes of Health Diversity Day/Summer Health Professionals Education Program
2018-present	Tougaloo College Natural Science Division/Pre-Health Mentoring Program
	Leadership Alliance Mentoring Program
2010	Advances in Hypertrophic Cardiomyopathy
2004-2014	Alpha Kappa Alpha Sorority, Inc.