Stanford

BRIGHT ASARE-BEDIAKO

Postdoctoral Scholar, Ophthalmology

Bio

BIO

Dr. Asare-Bediako is a Ghanaian-trained Optometrist who started his career as a Teaching/Research Assistant at the Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. He obtained a doctorate degree in Vision Science from the University of Alabama at Birmingham, US, where he worked on animal models of diabetic retinopathy and hematopoiesis in Prof. Maria Grant's lab. Currently, he is a postdoctoral scholar in Prof. Mary Elizabeth Hartnett's lab studying retinopathy of prematurity. His current interests lie in understanding mechanisms of angiogenesis in retinopathy of prematurity and diabetic retinopathy.

INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

HONORS AND AWARDS

- Johnson & Johnson Vision Student Travel Fellowship, American Academy of Optometry (2021)
- Qais Farjo, MD Memorial Travel Grant, Association for Research in Vision and Ophthalmology (2021)
- Outstanding PhD Student Award, School of Optometry, University of Alabama at Birmingham (2022)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Association for Research in Vision and Ophthalmology (2019 - present)
- Member, American Academy of Optometry (2018 - present)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, University of Alabama Birmingham (2023)
- Doctor of Science, Kwame Nkrumah University of Science and Technology (2015)
- OD, Kwame Nkrumah University of Science and Technology , Optometry (2015)
- PhD, University of Alabama at Birmingham , Vision Science (2023)

STANFORD ADVISORS

- Mary Elizabeth Hartnett, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Resilient Calvarial Bone Marrow Supports Retinal Repair in Type 2 Diabetes.** *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*
  Asare-Bediako, B., Calzi, S. L., Behnsen, J. G., Prasad, R., Blaszkiewicz, M., Adu-Rutledge, Y., Rosencrans, R. F., Floyd, J. L., Rennhack, A., Stanford, D., Lin, A., Lydic, T. A., Sheridan, et al
  2026: e19680

- **Endothelial MEMO1 Regulates Angiogenic Signaling in a Model of Retinopathy of Prematurity.** *FASEB bioAdvances*

Ramshekar, A., Asare-Bediako, B., Nguyen, J., Suresh, A., Simmons, A., Bretz, C. A., Wang, H., Kunz, E., Zaugg, C. J., Wallace-Carrete, C., Hartnett, M. E.

2025; 7 (9): e70051

- **Phosphorylation of Y1212 (p-Y1212) on VEGFR2 affects developmental angiogenesis and neurogenesis in the retina**

  Asare-Bediako, B., Satheesh, S., Ramshekar, A., Tankersley, M., Beri, S., Bright, M.

  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2025

- **Elucidating the role of MEMO1 in EPO-triggered signaling in retinal microvascular endothelial cells**

  Ramshekar, A., Asare-Bediako, B., Jasmine Nguyen, Suresh, A., Hartnett, M.

  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024

- **Short-term selective activation of phospho-Y1175 (p-Y1175) on VEGFR2 suppresses retinal endothelial cell migration**

  Asare-Bediako, B., Ramshekar, A., Nguyen, J., Suresh, A., Hartnett, M.

  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024

- **The calvarium bone marrow responds to acute retinal injury and is resilient to chronic diabetes compared to long bone marrow**

  Calzi, S., Asare-Bediako, B., Prasad, R., Adu-Agyeiwaah, Y., Rosencrans, R. F., Floyd, J., Stanford, D., Lin, A., Lydic, T. A., Boulton, M., Busik, J., Grant, M. B.

  ASSOC RESEARCH VISION OPHTHALMOLOGY INC.2024