

Stanford



Aluya Oseghale, PhD

Postdoctoral Scholar, Stem Cell Transplantation

Curriculum Vitae available Online

CONTACT INFORMATION

- **Alternate Contact**

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Bio

BIO

My primary goal is to develop an independent research career in hematology. As an African from a family background afflicted by hereditary hematologic disorders, I have longed to be part of research efforts to develop better treatments for blood diseases. My doctoral research focused on sickle cell disease where I conducted a preclinical investigation of a novel derivative of butyrate as a drug candidate for ameliorating the complications of the illness (Oseghale AR et al. *Blood Cells Mol Dis.* 2019 Jul 9;79:102345). My current focus as a postdoctoral scholar, in the Porteus laboratory, is to use CRISPR/Cas9 for genomic modification of human primary cells for curative therapeutic applications. A major aim of my project is to develop an automated closed system for the manufacturing of CRISPR/Cas9-engineered chimeric antigen receptor-expressing (CAR) T cells.

STANFORD ADVISORS

- Matthew Porteus, Postdoctoral Faculty Sponsor

Research & Scholarship

LAB AFFILIATIONS

- Matthew Porteus, Porteus lab (7/1/2019)

Publications

PUBLICATIONS

- **High-efficiency transgene integration by homology-directed repair in human primary cells using DNA-PKcs inhibition.** *Nature biotechnology* Selvaraj, S., Feist, W. N., Viel, S., Vaidyanathan, S., Dudek, A. M., Gastou, M., Rockwood, S. J., Ekman, F. K., Oseghale, A. R., Xu, L., Pavel-Dinu, M., Luna, S. E., Cromer, et al 2023
- **Conjugate prodrug AN-233 induces fetal hemoglobin expression in sickle erythroid progenitors and #-YAC transgenic mice.** *Blood cells, molecules & diseases* Oseghale, A. R., Zhu, X., Li, B., Peterson, K. R., Nudelman, A., Rephaeli, A., Xu, H., Pace, B. S. 2019; 79: 102345

- **Mechanisms of NRF2 activation to mediate fetal hemoglobin induction and protection against oxidative stress in sickle cell disease.** *Experimental biology and medicine (Maywood, N.J.)*

Zhu, X., Oseghale, A. R., Nicole, L. H., Li, B., Pace, B. S.
2019; 244 (2): 171-182

- **Arginase 1: an unexpected mediator of pulmonary capillary barrier dysfunction in models of acute lung injury.** *Frontiers in immunology*

Lucas, R., Czikora, I., Sridhar, S., Zemskov, E. A., Oseghale, A., Circo, S., Cederbaum, S. D., Chakraborty, T., Fulton, D. J., Caldwell, R. W., Romero, M. J.
2013; 4: 228

- **Mini-review: novel therapeutic strategies to blunt actions of pneumolysin in the lungs.** *Toxins*

Lucas, R., Czikora, I., Sridhar, S., Zemskov, E., Gorshkov, B., Siddaramappa, U., Oseghale, A., Lawson, J., Verin, A., Rick, F. G., Block, N. L., Pillich, H., Romero, et al
2013; 5 (7): 1244-60

- **Agonist of growth hormone-releasing hormone reduces pneumolysin-induced pulmonary permeability edema.** *Proceedings of the National Academy of Sciences of the United States of America*

Lucas, R., Sridhar, S., Rick, F. G., Gorshkov, B., Umapathy, N. S., Yang, G., Oseghale, A., Verin, A. D., Chakraborty, T., Matthay, M. A., Zemskov, E. A., White, R., Block, et al
2012; 109 (6): 2084-9

PRESENTATIONS

- Novel Conjugates of Butyrate and #-aminolevulinate Increase #-globin Gene Expression and Fetal Hemoglobin Synthesis in Erythroid Progenitors - American Society of Hematology (December 2017)