



# Genome Sciences Seminar

Wednesday, 12.8.21 | 3:30

held remotely: <https://depts.washington.edu/gstrestrc/remote.htm>

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## Dr. Kaela Singleton

Postdoctoral Fellow, Emory University

Adjunct Professor, Agnes Scott College

Co-Founder and President-Elect, Black In Neuro

## “Systems Biology approach to cellular and molecular phenotypes in neurodevelopmental disorders”

My postdoc research focuses on a Menkes disease, a progressive form of childhood neurodegeneration that is triggered by dysregulation of copper. Importantly, Menkes disease shares pathogenic mechanisms with both neurodevelopmental and neurodegenerative disorders. I am testing the hypothesis that deficits in ATP7A, a chief transporter required for copper homeostasis, activates the pink-parkin mitophagy pathway in order to trap damaged mitochondria within the soma, thus preventing mitochondria delivery to the synapse in patients with Menkes disease.

<https://www.kaelasingleton.com/>

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Questions? Contact Brian Giebel at [bgiebel@uw.edu](mailto:bgiebel@uw.edu) or visit the Seminar website at <http://www.gs.washington.edu/news/seminars.htm>

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