Kelsey Sheard, Ph.D.
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EDUCATION

2016 – 2022 **Ph.D. Molecular and Cell Biology,** Uniformed Services University
Dissertation Title: "Clueless is a novel stress-responsive ribonucleoprotein particle"
Thesis Advisor: Rachel Cox, Ph.D.

2011 **B.S. Biology,** Georgia Institute of Technology

RESEARCH EXPERIENCE

2016 – 2022 **PhD Candidate**
Uniformed Services University, Thesis Advisor: Rachel Cox, Ph.D.

- Investigation of the protein Clueless as an uncharacterized ribonucleoprotein particle in *Drosophila*
- Elucidation of Clu's molecular mechanisms and effects on mitochondrial function in *Drosophila*

2011 **Undergraduate Research Experience**
Georgia Institute of Technology, Advisor: Kirill Lobachev, Ph.D
Project Title: "The Role of DNA Helicases Rvb1 and Rvb2 on DNA Repair and Metabolism"

- Investigated the effects of chromosomal mutations and rearrangements on eukaryotic genome instability

PROFESSIONAL EXPERIENCE

2012 – 2016 **Biologist ORISE Fellow**
Centers for Disease Control and Prevention

- Responsible for the congenital hypothyroidism quality control and hormone proficiency testing programs within the Newborn Screening Quality Assurance Program

2010 – 2011 **Undergraduate Cleanroom Technical Staff Member**
Institute for Electronics and Nanotechnology, Nanotechnology Research Center

- Trained under experienced engineers to become proficient in the operation, application, and technical training of nanotechnology in support of applications to academic and industrial research

AWARDS

2019	Vice President of Research's Travel Award Uniformed Services University
2018	Vice President of Research's Travel Award Uniformed Services University
2007 – 2009	NASA Science, Technology, Engineering, and Mathematics Scholarship Georgia Southwestern State University

PUBLICATIONS

Sheard, K.M., Thibault-Sennett, S.A., Sen, A., and Cox, R.T. (2021) "Addition of Hydrogen Peroxide to Drosophila Egg Chambers During Live Imaging." *Journal of Visualized Experiments.*

Sheard, K.M., Thibault-Sennett, S.A., Sen, A., Shewmaker, F., and Cox, R.T. (2020). "Clueless forms dynamic, insulin-responsive bliss particles sensitive to stress." *Developmental Biology*.

PRESENTATIONS

Sheard, Kelsey. June 2021. Clu bliss particles function in the translation and import of nucleus-encoded mitochondrial proteins. Molecular and Cell Biology Student Seminar Series, Uniformed Services University, Bethesda, Maryland. Student seminar speaker.

Sheard, Kelsey. May 2021. Clu bliss particles function in the translation and import of nucleus-encoded mitochondrial proteins. Graduate Student Colloquium, Uniformed Services University Research Days, Uniformed Services University, Bethesda, Maryland. Seminar speaker.

Sheard, Kelsey. April 2021. Clu bliss particles function in the translation and import of nucleus-encoded mitochondrial proteins. *61th Annual Drosophila Research Conference*. Virtual. Poster presenter.

Sheard, Kelsey. May 2020. Clu bliss particles respond to nutritional regulation in *Drosophila* germ cells. Molecular and Cell Biology Student Seminar Series, Uniformed Services University, Bethesda, Maryland. Student seminar speaker.

Sheard, K.M and Cox, R.T. May 2020. Clu bliss particles function in the translation and import of nucleus-encoded mitochondrial proteins. Uniformed Services University Research Days, Uniformed Services University, Bethesda, Maryland. Poster presenter.

Sheard, Kelsey. April 2020. Clu bliss particles respond to nutritional regulation in *Drosophila* germ cells. *The Allied Genetics Conference 2020*, Virtual. *Invited speaker*.

Sheard, Kelsey. March 2020. Clu bliss particles respond to nutritional regulation in *Drosophila* germ cells. *Drosophila* Neurobiology Colloquium, National Institutes of Health, Bethesda, Maryland. Seminar speaker.

Sheard, Kelsey. May 2019. Clueless forms dynamic, insulin-responsive bliss particles sensitive to stress. Molecular and Cell Biology Student Seminar Series, Uniformed Services University, Bethesda, Maryland. Student seminar speaker.

Sheard, K.M., Thibault-Sennett, S.A., Sen, A., Shewmaker, F., and Cox, R.T. 2019. Clueless forms dynamic, insulin-responsive bliss particles sensitive to stress. 2019 NHLBI Mitochondrial Biology Symposium on Mitochondrial Networks & Energetics, Bethesda, Maryland. Poster presenter.

Sheard, K.M., Thibault-Sennett, S.A., Sen, A., Shewmaker, F., and Cox, R.T. 2019. Clueless forms dynamic, insulin-responsive bliss particles sensitive to stress. Uniformed Services University Research Days, Uniformed Services University, Bethesda, Maryland. Poster presenter.

Sheard, K.M., Thibault-Sennett, S.A., Sen, A., Shewmaker, F., and Cox, R.T. 2019. Clueless forms dynamic, insulin-responsive bliss particles sensitive to stress. *60th Annual Drosophila Research Conference*. Dallas, TX. Poster presenter.

Sheard, K.M., Sen, A., Cox, R.T. 2018. The role of Clueless in mitochondrial function. Uniformed Services University Research Days, Uniformed Services University, Bethesda, Maryland. Poster presenter.

Sheard, K.M., Sen, A., Cox, R.T. 2018. The role of Clueless in mitochondrial function. *59th Annual Drosophila Research Conference*. Philadelphia, PA. Poster presenter.

PROFESSIONAL AFFILIATIONS AND ASSOCIATION MEMBERSHIPS

American Association for the Advancement of Science
Genetics Society of America

SKILLS AND TECHNIQUES

Technical: *Drosophila* manipulation, genetics, and functional assays, confocal, fluorescence, and live imaging microscopy, Western blot analysis, functional biochemical assays, smFISH, FRAP, basic Python and R proficiency

Communication: Strong oral presentation and writing skills, manuscript writing, editing, and reviewing, synthesizing scientific information into concise and cohesive narratives for oral, written, and visual communications, Microsoft Office Suite, Adobe Photoshop and InDesign

Interpersonal: Strong communication, documentation, and analytical skills, exemplary attention to detail and accuracy, effective multitasking and project management