Life Sciences in Space Research (LSSR) COSPAR Outstanding Paper Award for Young Scientists - 2022

Dr. Deriesha Gaines is recognized for her manuscript entitled "Extracellular vesicles-derived microRNAs expression as biomarkers for neurological radiation injury: Risk assessment for space exploration". Deriesha grew up in New Orleans, LA, obtained her B.Sc. degree in chemistry from Dillard University and Ph.D. degree in molecular science and nanotoxicology at the Louisiana Tech University. Her research focuses on radiation-induced exosomal microRNA changes and RNA purification technology for space research applications. Through her studies she saw firsthand how concepts and inventions can change industries, enhance lives, and pave the way for the discovery of other worlds which could also help us to understand our own.



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Ms. Zeinab Ibrahim is a teaching assistant and third-year Ph.D. student in the College of Medicine at the University of Sharjah, United Arab Emirates. Her paper entitled "Suppression of endoplasmic reticulum stress prevents disuse muscle atrophy in a mouse model of microgravity" was selected by the editors among two dozen eligible entries for the recognition. In her acceptance statement, Zeinab mentioned that "Astronauts in space experience a unique environment with reduced gravitational forces. My research focuses on studying the impact of microgravity on cardiovascular and skeletal muscle health, as well as the composition of gut microbiota using mouse models. I'm really passionate about advancing scientific knowledge in these areas and making meaningful contributions to the field."



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