Katherine M. Rahill, PhD

Senior Scientist, NASA Johnson Space Center

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Education

Mar 2020	Postdoc: Industrial Engineering University of Central Florida
	Concentration: Martian Psychophysics, Psychophysics in extreme environments
Mar 2019	Ph.D. Applied-Experimental Psychophysics Catholic University of America
	Concentration: Lunar psychophysics, physiological optics, atmospheric light scattering
Jan 2016	M.A. Human Factors Catholic University of America, Washington, DC
	Concentration: Cognitive engineering, VR modeling, human performance
May 2013	B.S. Psychology/Biology University of Dayton, OH
	Concentration: Human Factors

Experience

July 2022 National Aeronautics and Space Administration, Houston, TX

- Present NASA Johnson Space Center Human Health Countermeasures (HHC) Element

Associate Element Scientist (Acting)

- Serving as the Acting Associate Element Scientist for the Human Health Countermeasures (HHC) Element of NASA's Human Research Program (HRP).
- Supporting the HHC Element Scientist and Deputy Element Scientist in oversight and development of HHC's 9 risk portfolios for human spaceflight: Cardiovascular disease, Immunology, Microbiology, Sensory Adaptation Neuro-ocular Syndrome (SANS), Bone Microarchitecture, Musculoskeletal systems, Sensorimotor systems, Exercise Science, Food and Nutrition.
- Supporting HHC element in constructing detailed risk approach plans for NASA HRP's 20+ year plans for Artemis research on bone degradation, cardiovascular disease/radiation effects, SANS, and sensorimotor countermeasures in microgravity.
- Delivering a series of presentations on countermeasure approaches for a subset of HHC risks to the HRP Chief
 Scientist to approve and optimize strategy plans to meet Artemis-level objectives.
- Supporting HHC Element and Deputy Element Scientist in making logistical decisions related to research
 operations both in ground and in-flight analogs; formulating new strategies to optimize data collection quality
 while reducing payload and crew-time associated with collection
- Devising new project-level strategies with HHC Discipline Scientists to support programmatic changes within HRP and overarching Artemis objectives for NASA
- Working with HHC Element Scientist and Deputy Element Scientist to identify and delineate Artemis Enabling and Utilizing objectives within research approach plans; specifically, those involving external partnerships within NASA and commercial programs.

Apr 2020 National Aeronautics and Space Administration, Houston, TX

-Present NASA Johnson Space Center

Human Research Program, Chief Scientist Office (CSO)

Senior Scientist

- Senior Scientist supporting the Chief Scientist of NASA HRP; providing direct expert recommendations to Chief Scientist and assisting with oversight of research across HRP's research elements: Human Health Countermeasures, Human Factors and Behavioral Performance, Exploration Medical Capability, Space Radiation and Biology and Research Operations and Integration.
- Lead program scientist for NASA's Human Exploration Research Opportunities (HERO) Solicitations program, responsible for coordinating the oversight of annual soliciting, reviewing, awarding of approximately \$140 million in NASA HRP research projects.
- CSO program scientist sporting NASA HRP \$1 Billion CIPHER program (Complement of Integrated Protocols for Human Exploration Research); supporting team of epidemiologists to conduct extensive Spaceflight Standard Measure (SSM) measure evaluations for long-term space durability of "repeat flyer" astronauts.

- Organized team of scientists at NASA, Stanford, UCF, and ESA to support a novel expedition for genomics, psychophysics, and human behavior in Antarctica (Nov 2021). This 2,000 mile/80-day trek monitored physiological, psychophysical, and biological changes in response to isolation stress to simulate space travel conditions and extreme environments: https://www.chasingthelight2021.com
- Conducted a 6-month independent investigation on the stability of 126 different blood analytes to determine the most efficient means to collect, analyze, and store blood samples for Artemis missions II-VI; proposed several options for optimizing payload capacity in the Orion spacecraft. Solutions contributed to discussions on strategies for bio-sampling research on the lunar surface and eventual preparation for Mars.
- Reinforced programmatic changes to improve HRP research and data management systems; facilitated efforts for the re-organization and accessibility of 1,000 genomic datasets to aggregate and inform NASA's decisions on approaches/strategies to mitigate the risk of deleterious physiological effects of long duration spaceflight.
- Supporting HRP Human Factors Behavioral Performance (HFBP) Element via simulation and training design review/discussions for Human Systems Integration Architecture (HSIA) risks, and Space Radiation (SR) element for research and analysis of animal models to translate radiation exposure to astronaut cancer risks.
- Recipient of the NASA/KBR HRP 2021 Merit award for excellence in scientific leadership and contributions.

Mar 2019 The University of Central Florida, Orlando, FL

-Mar 2020 Department of Industrial Engineering and Management Systems
Laboratory for Autonomy Brain-Exchange (LabX)

Preeminent Postdoctoral Associate

- Preeminent Postdoctoral Scholar at the University of Central Florida (UCF) for the Laboratory of Autonomy Brain-Exchange (LabX).
- Postdoctoral research placed in Top 3 Awards for NASA HRP Investigators Conference in 2020.
- Transitioned former CUA Lunar Psychophysics Virtual Reality Lab to UCF campus for collaboration on Martian and exoplanetary navigation research; recruited and oversaw 20 undergraduate and PhD students.
- Advanced specialized research in Lunar/Martian psychophysics and navigation, virtual modeling, and simulation
 of Rayleigh and Complex Particle Light Scattering for design of lunar spacecraft; models further supported
 ongoing need to better understand long-term impacts of changes in atmospheric scattering conditions (lunar
 and exoplanetary) on sensory perception within Applied Psychophysics/Engineering Psychology.
- Engaged in collaborative work with USAFA and US Army War College examining technology effectiveness in multi-domain operations in line with the Army's Synthetic Training Environment Cross-functional Teams.
- Explored neuro-security research within clinical populations to understand cybersecurity threats from biological warfare; studied post-clinical impacts of Embassy victims in Havana, Cuba.

Aug 2016 The Catholic University of America, Washington, D.C.

 -Jul 2019 Department of Applied-Experimental Psychology Lunar Psychophysics Virtual Reality Laboratory Lab Director, PhD Candidate

- Founder/Director of Lunar Psychophysics Virtual Reality Laboratory; independently supervised 17 research assistants and 5 lab managers during PhD candidacy for 2 years.
- Dissertation introduced "lunar psychophysics": the study of optical properties of light on the Moon to study the
 underlying causes of the perceptual challenges experienced by Apollo astronauts.
- Presented new interdisciplinary work in VR to examine complex particle light scattering (CPLS) on ecological/biological structures of human perception on the Moon.
- Integrated applied models in atmospheric physics in VR to simulate the visual effects of non-Lambertian reflectance properties of lunar regolith.
- Examined perceptual distortions of texture gradients, aerial perspective, linear declination and kinetic depth in Earth-like and Lunar-like conditions.
- Practical implications include the discussion of new methods with which to make accurate judgments, the
 development of training protocols and instruments to aid in overcoming future navigational difficulties.
- Received Outstanding Graduate Student Poster Award at CUA Research Day in 2017.
- Presented preliminary findings at NASA's Annual Human Research Program Investigators Workshop in 2018.
- Research featured in Singularity University's 2018 article: "How One Researcher is Using VR to Help Our Eyes Adapt to Seeing in Space."

Aug 2013 U.S. Army, Ft. Belvoir, VA

-Aug 2018 Army Research Institute for Behavioral and Social Sciences

Consortium Research Fellows Program

Doctoral Research Fellow

- Selected by the 2014 U.S. Army Chief of Staff's Strategic Studies Group (SSG) to participate in their review of Sikorsky's manufacturing contract for U.S. Military and Presidential aircraft.
- Participated in collaborations with NASA's team effectiveness and performance research programs for long duration space missions.
- Developed the Army Specific Items Module as an addendum to the existing DEOCS that is currently used by all Military services; operationalized 13 unidimensional constructs of Command Climate for the Army.
- Conducted research on the psychometric properties of organizational survey data and potential benefits of applying alternative approaches in survey design to reduce survey fatigue and increase response rates in the U.S. Army.
- Participated in the development of an integrative and comprehensive approaches to enhance unit performance, readiness and resilience.
- Developed a feasible application for learning management systems and online training programs to provide an
 accurate measure of skill-based predictors of performance and optimization of technology- delivered training
 environments in U.S. Army.

Aug 2013 The Catholic University of America, Washington, D.C.

-Dec 2015 Department of A/E Psychology Cognition and Virtual Reality Laboratory Graduate Researcher

- M.A. thesis work investigated the extraction of user characteristics in avatar modeling for virtual environments
- Thesis proposal awarded 2014 APAGS Junior Scientist Fellowship Grant
- Results provided quantitative estimates of the degree to which VE simulations can be individualized for high performance and minimal error practices.
- Theoretical contributions of thesis work address significant methodological gaps in the literature; expanded upon original heuristic-based conceptual models of presence and performance in VR.
- Thesis introduced a new operational definition of a personally adaptive VE in identifying the virtual elements that should be present, absent or accentuated in VE designs.

Sep 2014- George Mason University, Fairfax, VA

May 2015 Department of Psychology
Cerebral Hemodynamics Laboratory
Graduate Researcher

- Collaborated with the Center of Excellence in Neuroergonomics, Technology and Cognition (CENTEC) to investigate the underlying factors of the vigilance performance decrement using Transcranial Doppler Sonography (TDS).
- Collected TDS data to analyze changes in cerebral blood flow velocity (CBFV) during vigilance/sustained attention tasks
- Successfully developed a baseline measure of CBFV to quantify the rate of performance decrements in single, dual-task, and multi-tasking scenarios.
- Integrated a series of additional neural-based techniques, including electroencephalography (EEG), optical tracking and electric potential measurements to observe trends in physiological and cortical activity that attribute to individual differences in cognitive performance.

May 2012 U.S. Air Force, Wright-Patterson Air Force Base, OH

-Aug 2013 Air Force Research Laboratory, 711th Human Performance Wing War-Fighter Interface Division, Battlespace Acoustics Branch Researcher

- Awarded a three-month SCEP summer internship and subsequent 1-year ORISE undergraduate research fellowship to conduct research at AFRL.
- Oversaw the completion of five research studies in the Multi-Modal Communications Research Laboratory in the War-fighter Interface Division.

- Participated in a variety of mission-critical simulations to help flight controllers coordinate with multiple aircraft in dynamic, high stress environments.
- Responsible for troubleshooting all technical based data collection; acquired the technical skills to organize, analyze, interpret, and evaluate scientific data to develop solutions to system engineering problems related to human performance.
- Specialized in the development of multimodal communication and spatial audio displays for a network- centric communication management suite for command and control operators.
- Developed cyber interface tools to manipulate and experiment factors within human performance in cognitive multitasking; created software solutions for cyber security via experimentation of cyber disruption on team biases.
- Developed a post-error editing correction algorithm for automated speech recognition software to transcribe, determine gender and report stress levels for command and control operator audio files.
- Received the USAF Human Performance Wing Challenge Coin In Excellence for Leadership in recognition for research contributions to AFRL's cyberspace research program.

Recent Invited Lectures

- **Rahill, K.** (Sep, 2022). *Psychophysical Challenges in Human Space Exploration: Considerations for Artemis and Lunar Surface Missions*. STEM Seminar Lecture at Catholic University of America, Washington, DC.
- **Rahill, K.** (Aug, 2021). Lunar Psychophysics: Effects of Atmospheric Light Scattering on Psychophysical Distortion in Lunar Environments. Briggs Dissertation of the Year Award, Lecture for the Division of Engineering and Applied Experimental Psychology (Division 21) at APA Virtual 2021 Conference.
- **Rahill, K.** (April, 2021). *Discovering Human Exploration Research Opportunities at NASA HRP*. Virtual lecture at University of Texas A&M Research Symposium
- **Rahill, K.** (June, 2019). *The Future of Neuro-security: Threats to Clinical and Non-Clinical Populations and Lessons Learned from Havana, Cuba*. Lecture given at Annual Summit for Military Psychology.

Publications and Proceedings

- Chappell, L., **Rahill, K.,** Elgart, R. (2023). Of Men and Mice: Using Terrestrial Radiation Epidemiology Methods to Inform Analysis of Animal Models for Space Radiation Research. *Submitted to Journal of Radiation Research*.
- **Rahill, K.** Sebrechts, M. (2022). Lunar Psychophysics: Effects of Atmospheric Light Scattering on Perceptual Distortion in a Lunar Virtual Environment. *Submitted to Journal of Experimental Psychology: Human Perception and Performance*.
- **Rahill, K.** & Sebrechts, M. (2021). Personally Adaptive Avatar Modeling: The Effects of Characteristic Matching and Construction Source of Avatars on Interactive *Gaming Performance*. *Computers in Human Behavior*, 4, 100-131.
- Hernandez C., **Rahill K.,** Pham M., Manriquez J., Louis M., Figueroa A., Medina B., Wolfe T., Sawyer, B. (2020). Driving Hazard Detection on the Road Does Not Reveal the Prevalence Effect, *Journal of Vision*, *20*(11), 1692-1693.
- Adis, C., Byrd, C. Wisecarver, M., Horgen, K., Badger, J., Hoffman, R., **Rahill, K.** (2020). Army Command Climate: The Viability of Single-Item Measures. Technical Report No. 1381. U.S. *Army Research Institute: Defense Technical Information Center*.
- Blair, E., **Rahill, K.**, Finomore, V., (2014). Best of Both Worlds: Evaluation of Multi-Modal Communication Management Suite. *Proceedings of the Human Factors and Ergonomics Society*, *58*(1), 410-414.
- Mancuso, V., Finomore, V., **Rahill, K.,** Blair, E., Knott, B. (2014). Effects of Cognitive Biases on Distributed Team Decision Making. *Proceedings of the Human Factors and Ergonomics Society, 58*(1), 405-409.
- Finomore, V., Sitz, A., Blair, E., **Rahill, K.**, Champion, M., Funke, G., Mancuso, V., & Knott, B. (2013). Effects of cyber disruption in a distributed team decision making task. *Proceedings of the Human Factors and Ergonomics Society*, *57*(1), 394-398.

Manuscripts in Preparation

- **Rahill**, K., Gerohristodoulos (2023). Baseline Comparisons of Modality on Distance and Slope Perception in Static and Dynamic Virtual Environments. *Manuscript in preparation*.
- Rahill, K. (2023). Exoplanetary Psychophysics: Perception Beyond Earth. Manuscript in preparation.

Presentations

- **Rahill, K.** Stenger, M., Brocato., B. (Sep, 2022). Bone Microarchitecture Research Approach Plan: Gaps, Health Monitoring and Countermeasure Strategies for Artemis. *Presentation Given at NASA HRP Element Scientist Working Group, JSC.*
- Miller, D., Sawyer, B. **Rahill, K.** (May, 2021). *Investigating AR and Shared Control Assistance in Extreme Environments*. Virtual presentation at SPACECHI Workshop 2021.
- **Rahill, K** (2021). *Perception Beyond Earth: The future of Exoplanetary Impacts on Astronauts.* Presentation at NASA Johnson Space Center, Houston, TX.
- **Rahill, K** (2021). Two-thousand Miles of Genomic profiling: A Case Study of Two Explorers on 80-day Antarctic Trek and Implications for Long-term Space Exploration. Presentation given at NASA Johnson Space Center.
- **Rahill, K.** (2021). Meta-review of Dry Blood Spot (DBS) Biomarkers and Volumetric Absorptive Microsampling: Capabilities and Considerations for NASA Artemis Missions II-VI. Presentation Given at NASA HRP Element Scientist Working Group, JSC.
- Rahill, K., Mansure, K., Yeckley, C. Gerohristodoulos, A. & Sebrechts, M. (Feb, 2019). *Perception in Space: The Impact of Kinesthetics and Sensorimotor Function on Perception in Microgravity*. Presentation at 2019 Catholic University of America Research Day, Washington, D.C.
- Rahill, K., Fioriti, C., Busog, D., Adoremos, I., Busog, D. & Sebrechts, M (Feb, 2019). A 3D Field of View: Effects of Immersive Displays on Perception and Experience in Virtual Reality. Presentation at 2019 Catholic University Research Day, Washington, D.C.
- **Rahill, K.,** Filiault, A., Ried, E. & Palmer, K. & Sebrechts, M. (Feb, 2019). *Moving in Virtual Reality: The Impact of Particle Flow Fields and Peripheral Blending on Motion perception.* Presentation at 2019 Catholic University Research Day, Washington, D.C.
- **Rahill, K.,** Incao, M., Johnson, R., Funk, M. Gualano, F., Miller, P. & Sebrechts, M. Feb, (2019). *Rendering Planetary Atmospheres in Virtual Reality*. Presentation at 2019 Catholic University of America Research Day, Washington, D.C.
- **Rahill, K.,** Hoffman, R., Darrow, J. (2018). *Understanding the Relationship of Unit Outcomes with Ethical Leadership and Climate Strength*. Symposium at American Psychological Association Conference, San Francisco, CA.
- Hughes, E., **Rahill, K.,** Darrow, J., Hoffman, R., (2018) *Military leader and peer support relationships within the dimensions of disciplinary action, stress, and withdrawal.* Poster presentation at 2018 APA Conference, San Francisco, CA.
- **Rahill, K.,** Sebrechts, M. (2017, Apr). *Lunar Psychophysics: Effects of Atmospheric Light Scattering on Perceptual Distortions in a Lunar Virtual Environment.* Poster presentation at 2017 Catholic University Research Day, Washington, D.C.
- **Rahill, K**., Sebrechts, M. (2016, May). *Virtual Adaptability: Personally Adaptive Avatar Modeling Leads to Improved Game Performance.* Poster presentation at Association for Psychological Science Convention 2016, Chicago, IL.
- **Rahill, K.,** Sebrechts, M. (2015, Apr). *Personally Adaptive Avatars Improves Game Performance*. Poster presentation at 2015 Catholic University of America Research Day, Washington, DC.
- **Rahill, K.,** (2014, Oct). Best of Both Words: Evaluation of Multimodal Communication Management Suite. Slide presentation at 2014 Human Factors and Ergonomics Society 2014, Chicago, IL.
- Mancuso, V., **Rahill, K.,** (2014, Oct). *Effects of Cognitive Biases on Distributed Team Decision Making*. Slide presentation at Human Factors and Ergonomics Society 2014, Chicago, IL.
- Rahill, K. (2014, Jun). The Benefits of Assistive Technologies for Skill Retention. U.S. Army Research Institute, Fort Belvoir, VA.
- **Rahill, K.** (2014, May). *Command Climate: U.S. Army and Organizational Culture.* Presentation at APA Division 19 Society for Military Psychology Chapter, Catholic University of America, Washington, D.C.

- **Rahill, K.** (2014, Mar). *Direct Manipulation in Virtual Reality: Distinguishing Between User Preference and Performance.*Presentation at Technology and Human Performance Seminar, Washington, D.C.
- Champion, M., Finomore, V., Sitz, A., Blair, E, & **Rahill, K.** (2013, Aug). *How Reliable is Your Information: The Effects of Deceptive Communication on Information*. Presentation at RH Human Effectiveness Presentation Day, WPAFB, OH.
- **Rahill K.** (2013, Jul). ELICIT 2.0: *Technical Manual for Scenario Development and Coding Analysis for Distributed Team Decision Making*. Slide presentation for AFRL Annual Experimenter Review, WPAFB.
- Finomore, V., Sitz, A., **Rahill, K.,** Blair, E., & Champion, M. (2013, May). *Effects of an Advanced Communication Management Suite for Team Collaboration and Message Detection*. Presentation at Int'l Symposium on Aviation Psychology, Dayton, OH.
- **Rahill, K.,** Finomore V. (2013, Mar). *Human Computer Interaction & Decision Making in Cyber Security: The "Cognitive Malware" Effect.* Presentation at Experimenter's AFRL Working Group, Wright State University, Beavercreek, OH.

Teaching Experience & Curriculum Development

- Psychophysics of Space Exploration (300 level; 2022, 2 semesters)
- Psychology and Technology (300 level/200 level; 2020-21, 2 semesters)
- Cognitive Engineering and Human Performance (400 level; 2020, 1 semester)
- Professional Development in Research, Publications and Presentations (400 level; 2019, 1 semester)
- Biological Psychology (400 level; 2019, 1 semester)
- Sensation and Perception (400 level; 2017-2018; 2 semesters)
- Cognitive Psychology (400 level; 2017, 1 semester)
- Experimental Research Methods (300 level; 2016, 1 semester)

Extramural Leadership Experience

Jan 2020- American Psychological Association, Washington, DC

Sep 2020 Society of Military Psychology (Division 19)

Society Leadership Program

- Selected for intensive 10-month program for the Military Psychology Society Leadership Program (SLP);
- 1 civilian among 7 officers selected for SLP class of 2020; paired with a Division 19 mentor in the organization to oversee and progress on SLP Division capstone project.
- Participated in 10 hour-long virtual lessons with mentor, Division faculty, and peers on leadership growth and development.
- Designed, conducted, and completed capstone project that contributed to SLP initiative on improving online organizational presence amidst the COVID-19 pandemic.
- Completed a series of leadership assessments to understand leadership style, strengths, and areas of improvement: 360 officer assessments, CCL Skillscope, EQ-I 2.0, VAI-IS, and IPIP.
- Awarded 2021 Military Psychology Challenge Coin of Education, Well-Being, Applied Practice & Ethical Service.

Dec 2019- American Psychological Association, Washington, DC

Dec 2021 Society of Military Psychology (Division 19)

Chair of Communications

- Served two-year appointment as Communications Chair-Select for APA Society of Military Psychology,
- Direct representative for all Division communications (internal and external).
- Supported the Division President in executing vision; identified key areas of improvement for Division communication.
- Devised a series of new communication vision objectives to improve overall vision, collaboration and Communication within Division 19.
- Spearheaded and oversaw the development of a new division website.
- Developed a virtual membership portal for new and seasoned members to communicate, network, engage and collaborate with each other.
- Collected interim data from members to modify streamlined communications with executive committee leadership via listervs and other online distributions.
- Spoke with Division 19 Executive Committee leadership and members on a weekly basis and distributed information to over 6,000 members about conferences, fellowships, webinars, fellowships, and policy changes within the organization.
- Received 2020 APA Presidential Citation in Leadership Award for contributions as Chair-Select.

Jun 2017- The Catholic University of America, Washington, D.C.

Jul 2019 American Psychological Association Society of Military Psychology Campus Representative

- Established the Society of Military Psychology (APA Division 19) organization at CUA.
- Led bi-weekly meetings with members to plan, discuss and organize Division 19 events.
- Served as liaison between all branches of the Military and the student/faculty caucus.
- Organized campus wide events to educate students and faculty on Military Psychology; invited active/veteran speakers from each branch discuss the impact of Military psychology across services.
- Successfully introduced CUA's first Military Psychology course (400/500 level) in Spring 2018.
- Organized Military Psychology Pentagon Tour with Assistant Secretary of Defense, Dr. Elise Van Winkle to introduce undergraduates on potential career paths in Military psychology.
- Organized meetings with VA Departments of Mental Health and Trauma, Integrated Health and Wellness, and the Women's Veterans' Health Pavilion to discuss research partnerships for CUA students interested in Military Psychology as a research career.
- Organized undergraduate research apprenticeships with Family Medicine and Medical and Clinical Psychology
 Health Sciences at Uniformed Services University; the recipient of a 1.2-million-dollar grant on Military Sexual
 Health.

Jun 2017- The Catholic University of America, Washington, D.C.

Jul 2019 Association for Psychological Science Student Caucus Representative

- Established the Association of Psychological Science (APS) student organization at CUA.
- Started an undergraduate mentorship program for Psychology majors; paired 35 undergraduates with 20 graduate mentors the first year.
- Invited external speakers monthly to present topics of interest within APS, such as psychoneuroimmunology, psychophysiology, and neuroscience.
- Organized a series of graduate and undergraduate workshops for GRE prep, oral presentations and grant writing
- Led bi-weekly meetings with members to plan, discuss and organize APS events.
- Provided graduate students opportunities to present research and gain experience in public speaking through discussion and dissemination of research findings.
- Introduced the APS sponsored Behavioral Science Research Fair for undergraduates to present research, gain experience in public speaking through discussion and dissemination of research findings.

Awards, Honors and Achievements

- 2021 NASA HRP/KBR Excellence in Scientific Merit & Performance Award
- 2021 APA Society of Military Psychology Coin of Education, Well-Being, Applied Practice and Ethical Service
- 2020 APA Military Psychology Society Leadership Program (SLP) Graduate
- 2020 APA Briggs Dissertation Award for Outstanding Dissertation in Engineering Psychology
- 2020 NASA HRP IWS Postdoctoral Research Award (Lunar Psychophysics)
- 2020 APA Society of Military Psychology: Presidential Citation in Leadership Award
- 2020 NASA Astronaut Applicant
- 2020 UCF Preeminent Postdoctoral Scholarship: Industrial Engineering
- 2019 APA Society of Military Psychology Travel Grant
- 2019 APA Society of Military Psychology Outstanding Student Chapter Award
- 2018 CUA Outstanding Graduate Student Presentation Award
- 2017 CUA Excellence in Teaching and Leadership Award
- 2016 CUA Department of Psychology Beryl Anderson Travel Award
- 2016 NASA Astronaut Applicant
- 2015 CUA Graduate Teaching Fellowship (4 yrs)
- 2014 APA Graduate Student Psi-Chi Fellowship-Grant
- 2013 US Army Consortium Doctoral Research Fellowship (5 yrs)
- 2013 US Air Force Challenge Coin of Excellence in Leadership, Education & Consultation for Human Performance
- 2013 University of Dayton Reverend R. Roesch Award of Excellence to the Outstanding Students in Psychology