

Education**Associate of Arts** – Psychology

Ozarks Technical Community College, Springfield, MO

GPA:4.0 – May 2012

Bachelor of Science – Psychology (M) / Biology (m)

University of North Dakota, Grand Forks, ND

GPA:3.5 – May 2015

Master of Science – Human Factors in Aeronautics

Florida Institute of Technology, Melbourne, FL

GPA:4.0 – May 2017

Doctor of Philosophy – Human Centered Design

Florida Institute of Technology, Melbourne, FL

GPA:4.0 – May 2020

Titles Held

- Assistant Professor of Space Studies, University of North Dakota
- Health and Safety Officer of the Human Space Flight Lab, HCDI, Florida Institute of Technology
- NASA Community College Aerospace Scholar (NCAS)
- NASA NCAS Facilitator
- NASA Student Ambassador
- DAN DFA-Pro Provider*
- Research Assistant of the Human Space Flight Lab, HCDI, Florida Institute of Technology
- Health and Safety Officer, Crew 219 MDRS
- Commanding Officer, Crew 239 MDRS

Association Memberships [Selected]

- IAASS Human Performance and Health Technical Committee
- AsMA Life Sciences and Biomedical Engineering Branch
- AIAA Life Sciences Technical Committee
- AIAA Space Architecture Technical Committee
- Divers Alert Network – DAN DFA-Pro

Professional Certifications

- PADI Scuba Rescue Diver
- AAUS Science Diver [prior]
- PADI Aquanaut Diver
- ARRL General Class Radio Operator [W0DRV]
- OSHA HAZMAT for High Pressure Cylinders
- DAN DFA-Pro Provider

Current Research Interest Areas

- Extreme Environment Survivability
- Hemodynamics/Biometrics Vitals Monitoring In-Situ
- Long-Duration Mission Psychological & Physiological Impact
- *Study of Performance for Extravehicular Space Suit*
- Variable Gravity Emergency and Medical Systems
- Analog Environment/Simulation Fidelity and Safety
- Variable Gravity Rescue Systems Architecture
- AERO 24-hour Dive for Outreach and Novel Communications System for Ocean-Worlds Tools
- *Preliminary Study on the Feasibility of current US Spacecraft Systems to Support Parastronauts Activities*
- *Research and Development of a Lunar Boot Outsole*
- *Human Factor Analysis of Space Crop Cultivation Methods and Interactions*
- *Design and Fabrication of Inflatable Habitat Core Section for Microgravity Medical Systems*
- *Design and Fabrication of Action, Control, Tactile, Visual Board for HITL testing of IVA/EVA suits*

Awards and Honors [Selected]

- Florida Institute of Technology Outstanding Student of the Year, Graduate College of Engineering and Sciences 2020
- Ozarks Technical Community College: Dean's List 2009, President's List 2009-2011, Chancellor's List 2012
- NASA National Community College Aerospace Scholar winning team 2011
- Phi Theta Kappa's Competitive Edge Five Star Member, Honors Scholar 2011
- Phi Theta Kappa, Alpha Psi Tau Distinguished Officer Team Member, 2011-2012
- Phi Theta Kappa Missouri Alumni Association Distinguished Alumni Award
- Missouri Community College Association's Student Leadership Award, 2011
- Missouri All-Academic Scholar, Team 1, 2011
- Florida Tech Graduate Scholarship, 2017-Current
- USA All-Academic Team Nominee, 2012
- NASA Student Ambassador, 2014-2015

Professional Experience

- *Human Factors Engineering Internship*
Marshall Space Flight Center, Huntsville, AL EV74
Vehicles and Systems Engineering Directorate, Human
Factors Branch
- *Health and Safety Officer / Research Assistant*
Human Spaceflight Laboratory, Florida Institute of
Technology, Melbourne, FL
- *Health and Safety Officer / Commanding Officer*
Mars Desert Research Station (MDRS) Crew 219 / Crew
239, Utah High Desert, Hanksville, UT
- *Assistant Professor of Space Studies*
John D. Odegard School of Aerospace Sciences,
University of North Dakota, Grand Forks, ND

Teaching Experience

- SPST 200 Introduction to Space Studies, undergraduate
course
- SSEP Student Spaceflight Experiment Program
[SPST200] Team Mentor; Experiment Launch to ISS
2024
- SPST 310 Introduction to Dinosaurs, undergraduate
course [under development]
- SPST 530 Human Centered Design, graduate course
- SPST 531 Applied Human Centered Design, graduate
course
- SPST 532 Disasters in Human Spaceflight, graduate
course
- SPST 533 Space Architecture: SciFi to Reality
- Training of MDRS Crew 219 & 239 participants in
emergency and off-nominal procedures
- Training of Florida Tech Human Spaceflight Laboratory
researchers and participants in safe operation of the
Intravehicular (IVA) Spacesuit as well as other necessary
safety requirements and risk mitigation techniques
- Training/Briefing UND ILMAH crews on safety
procedures related to habitat/simulation
- Teaching Assistant at Ozarks Technical Community
College for the Sophomore Seminar class 'Leadership
Development', a course created by Phi Theta Kappa
International Honor Society
- Assistant Facilitator NASA's National Community
College Aerospace Scholars (NCAS) program. Oversaw
over forty community college students during the three-
day event held at the Marshall Space Flight Center in
Huntsville, Alabama.
- Have facilitated several leadership activities and various
breakout sessions during Phi Theta Kappa local and
regional events.
- Resident Assistant for Noren Hall, University of North
Dakota 2014-2015

Professional Presentations

- 2019 Oral Presentation for IAF/IAA Space Life Sciences
Symposium (A1) as part of the 70th International
Astronautical Congress, Washington D.C. *"Cis-Lunar
Orbital Medical Facility and Roadmap"*
- 2019 Presentation for Experience 2 Lead, Cape
Canaveral, FL *"Human Centered Design / Design
Thinking aspects with an Intravehicular Activity Space
Suit"*
- 2013 Graduate Students Scholarly Forum Poster
Presentation *"Development of a Contained Environment
Airlock System and Geologic Sample Return Container"*
- Fall 2012 NASA Internship Final Presentation *"Design
and Development of a Contained Environment Airlock
and Sample Materials Return System (CEB-SMR)"*
- SpaceVision 2013 Students for the Exploration and
Development of Space, Poster Presentation *"Design
and Development of a Contained Environment Airlock
and Sample Materials Return System (CEB-SMR)
Emphasis on Additive Manufacturing"*

Published Works [Selected]

- Doule, O., Kobrick, R.L., Crisman, K., Skuhersky, M.,
Lopac, N., Fornito II, M.J., Covello, C., Banner, B.C.
(2021), *IVA spacesuit for commercial spaceflight -
Upper body motion envelope analysis*. Acta
Astronautica, Vol 186
- K. Crisman, O. Doule, K. Momose, (2019), *Cis-Lunar
Orbital Medical Facility and Roadmap*, IAF/IAA Space
Life Sciences Symposium (A1). 70th International
Astronautical Congress, Washington D.C. Published at
IAC 2019
- Doule, O., Crisman, K., Kobrick, R.L., Lopac, N., Fornito
II, M.J., Covello, C., and Banner, B. (2019), *Adjustable
IVA Analog Spacesuit Ergonomics – Upper Body
Motion Envelope Reference Model*. 10th International
Conference on Applied Human Factors and
Ergonomics, 7th International Conference on Human
Factors in Transportation: Space. Washington D.C.,
USA
- O. Doule, D. Kiss, Y. Mehta, K. Crisman, E. Beltran, and
M. Miller, (2019), *Design and Operational
Considerations for Human Spaceflight Occupant
Safety*, New Space, Vol 7, No 2
- PhD Dissertation: Crisman, K. (2020), *Microgravity
Emergency Medical Containment System – A Concept
of Architecture, Prototyping, and Usability Research*
- Multiple interviews as subject matter expert in local,
state, and federal news sources (KVRR, *Florida Today*,
Newsweek, etc.)