

REPPERGER RESEARCH INTERN PROGRAM

RESEARCH PROJECT #: AFRL-RHB-24-03

Development and Psychometric Evaluation of Experimental Personnel Assessment Methods to Determine Suitability for Training

PROJECT DESCRIPTION: The US Military has a long history of personnel assessment involving both cognitive ability and non-cognitive characteristics to determine suitability for military enlistment and training assignment. To ensure their continued effectiveness, it is important to examine the utility of these assessments, updating their content and methodology, as warranted. Recent projects have focused on expanding the attributes measured (e.g., competencies, situational judgment), assessment methodology (e.g., computer-adaptive testing, gamified assessment), and examining procedures to simultaneously improve predictive validity and diversity of the workforce (e.g., application of pareto optimization). The student intern will learn to 1) conduct literature reviews to support research projects, 2) administer computer-based personnel assessments, 3) develop content for cognitive and non-cognitive assessments, and 4) conduct and interpret psychometric analyses of examinee data.

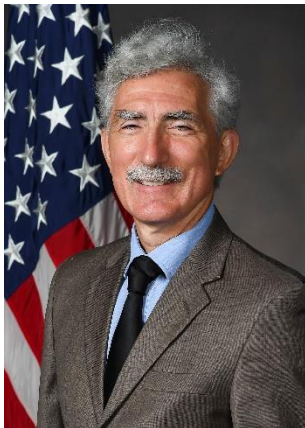
ACADEMIC LEVEL: Undergraduate; Masters; Doctoral

DISCIPLINE NEEDED:

- Psychology

RESEARCH LOCATION: TBD (Virtual/Hybrid or Dayton, OH)

RESEARCH MENTOR: Thomas Carretta, Ph. D.
Psychology, University of Pittsburgh, 1983



Thomas R. Carretta received a Ph.D. in social/personality psychology from the University of Pittsburgh. He is a Senior Research Psychologist at the Air Force Research Laboratory at Wright-Patterson AFB, Ohio where he conducts research regarding the development and psychometric evaluation of advanced personnel measurement, selection, and classification methods including cognitive and non-cognitive measures and competency-based job performance criteria. For over 15 years, he was the USAF psychologist representative to a NATO working group concerned with recruitment, selection, and training of military aircrew personnel. Since 2004, he has been the USAF technical representative to a DoD working group concerned with military enlistment qualification and works closely with the Air Force Personnel Center, Air Force Testing and Survey Policy, and other US Military Services. His professional interests include the role of general and specific abilities in skill acquisition and methods to improve predictive validity of assessment methods while simultaneously improving diversity/inclusion of the workforce. He has published over 100 journal articles and book chapters.