

Strengthening Air Force Human Capital Management

Committee

Julie J. Ryan

Co-Chair

Julie J.C.H. Ryan is the CEO of Wyndrose Technical Group, having retired from academia in 2017. Her last position in academia was professor of cybersecurity and information assurance at the U.S. National Defense University. Prior to that, she was tenured faculty at the George Washington University and a visiting scholar at the National Institute for Standards and Technology (NIST). Dr. Ryan came to academia from a career in an industry that began when she completed military service. Upon graduating from the U.S. Air Force Academy, Dr. Ryan served as a signals intelligence officer in the Air Force, and then as a military intelligence officer with the Defense Intelligence Agency. Upon leaving government service, she worked in a variety of positions, including systems engineer, consultant, and senior staff scientist with companies including Sterling Software, Booz Allen & Hamilton, Welkin Associates, and TRW/ESL supporting a variety of projects and clients. She is the author of several books, including *Defending Your Digital Assets Against Hackers, Crackers, Spies, and Thieves* (McGraw Hill 2000), and is a fellow of the American Academy of Forensic Sciences (AAFS). At Wyndrose Technical Group, she focuses on futures forecasting and strategic planning with an eye on technology surprise and disruption. She has been a member of numerous National Academies' committees including the Committee on Avoiding Technology Surprise for Tomorrow's Warfighter Symposium and the Committee on Human-Automation Interaction Consideration for Unmanned Aerial System Integration. She holds a Ph.D. in engineering management from The George Washington University.

William J. Strickland

Co-Chair

William J. Strickland recently retired as president and chief executive officer of the Human Resources Research Organization (HumRRO) in Alexandria, Virginia. Before his appointment as CEO in 2008, he spent over 10 years as a HumRRO vice president, directing its Workforce Analysis and Training Systems Division. Before joining HumRRO, he served in the U.S. Air Force and retired with the rank of colonel; in his last assignment, he was the director for Air Force research in the areas of recruiting, personnel selection and classification, technical training, aircrew training, and logistics. He is a fellow of the American Psychological Association (APA) and of the Society for Industrial and Organizational Psychology, past president of APA's Division of Military Psychology, and served for six years as that division's representative on the APA Council of Representatives. He also served on the APA Board of Directors, and represented APA on the Board of the Consortium of Social Science Organizations and on the Council of the Federation for Brain and Behavioral Sciences. He has been a member of numerous National Academies' committees including the Committee on Measuring Human Capabilities: Performance Potential of Individuals and Collectives and the Committee on Strengthening Data Science Methods for Department of Defense Personnel and Readiness Missions. He is a graduate of the United States Air Force Academy and earned a Ph.D. in industrial and organizational psychology from Ohio State University.

Terry A. Ackerman

Member

Terry A. Ackerman is a distinguished visiting professor in educational measurement and statistics at the University of Iowa College of Education. He is an internationally renowned psychometrician with expertise in item-response theory, differential item functioning, and computerized testing. His research focuses on trying to model educational assessment data. In particular, he explores the dimensionality of these data and what may be the cause of the dimensionality in order to create more valid assessments and provide diagnostic and prescriptive information for teachers to make them more effective in the classroom. Previously, he was a faculty member at the University of Illinois and later served as the associate dean of research and assessment at the University of North Carolina at Greensboro School of Education. He also served as ACT's first Lindquist Chair. He is a past president of the Psychometric Society and of the National Council on Measurement in Education, and he previously served on the Defense Advisory Committee on Military Personnel Testing. He has also served on technical advisory committees for College Board, ETS, GRE, Measured Progress, among others. He has a bachelor's degree in mathematics education from the University of Wisconsin-Madison and a master's and Ph.D. in educational psychology from the University of Wisconsin-Milwaukee.

David S. Chu

Member

David S. Chu is president of the Institute for Defense Analyses (IDA), a non-profit focused on providing federally funded research and development on national security issues and challenges. Prior to his position at IDA, he served in the U.S. Army and at RAND, was assistant director of the Congressional Office for National Security and International Affairs, director (later assistant secretary of Defense) for Program Analysis and Evaluation, and Under Secretary of Defense for Personnel and Readiness. He is a member of the Defense Science Board, a fellow of the National Academy of Public Administration, and a recipient of the Department of Defense Medal for Distinguished Public Service with Gold Palm. He is a current member of the National Academies' Board on Mathematical Sciences and Analytics and a previous member of the Committee on Strengthening Data Science Methods for Department of Defense Personnel and Readiness Missions. Dr. Chu received a bachelor's degree in economics and mathematics, as well as a Ph.D. in economics from Yale University.

Gina Grosso

Member

Lieutenant General Gina M. Grosso recently retired from the position of Deputy Chief of Staff for Manpower, Personnel and Services, Headquarters U.S. Air Force, Washington, D.C. In this position, General Grosso served as the senior Air Force officer responsible for comprehensive plans and policies covering all life cycles of military and civilian personnel management, which includes military and civilian end strength management, education and training, compensation, resource allocation, and the worldwide U.S. Air Force services program. General Grosso entered the Air Force in 1986 as a Reserve Officer Training Corps distinguished graduate from Carnegie-Mellon University. She has held several command and staff positions throughout her career. As a staff officer, she served as an operations analyst; personnel programs analyst; Air Staff and Office of the Secretary of Defense action officer; major command director of Manpower and Personnel; director of the Air Force Colonel Management Office; director, Manpower, Organization and Resources; and director of Force Management Policy. Her command tours include a Headquarters Squadron Section, Military Personnel Flight, Mission Support Squadron, command of the Air Force's sole Basic Military Training Group, and as Joint Base and 87th Air Base Wing commander at Joint Base McGuire-Dix-Lakehurst, NJ. Prior to her current assignment, she was the director of the Air Force Sexual Assault Prevention and Response, Office of the Vice Chief of Staff, Headquarters U.S. Air Force, Washington, DC. She holds a master's degree in business administration from the College of William and Mary as well as a master's degree in national security and strategic studies from Naval Command and Staff College in Newport, RI

Leon A. Johnson

Member

Brigadier General Leon A. Johnson retired from the U.S. Air Force Reserves with the rank of brigadier general after 33 years of service and most recently retired from United Parcel Service (UPS) after nearly 20 years of service as chief pilot, human resources manager and manager for flight operations, providing expertise in logistics, flight operations, and human resources. During his Air Force career, his responsibilities ranged from command of an Air Force reserve fighter squadron and a reserve fighter group to the mobilization assistant to the assistant secretary of the Air Force for Manpower and Reserve Affairs. His UPS responsibilities range from flying the A-300 for commercial logistic operations to managing a variety of employee and human relations functions. Prior to UPS, he worked for Trans World Airlines as a line pilot and pilot hiring manager. General Johnson is a member of several organizations, including the Air Force Association, Reserve Officers Association, League of United Latin American Citizens, Women in Aviation, and the International Black Aerospace Council. He has been elected to his fifth 2-year term as the national president of the Tuskegee Airmen Incorporated. He served as a member of several National Academies' committees including the Committee on Examining the U.S. Air Force's Science, Technology, Engineering, and Mathematics Workforce Needs in the Future and Its Strategy to Meet Those Needs; the Committee on Manpower and Personnel Needs for a Transformed Naval Force; and a study on logistics in the Pacific theater for the Board on Army Science and Technology. He is a former member of the Naval Studies Board. General Johnson received a B.S. in political science from Oregon State University and an honorary Ph.D. in humane letters from Tuskegee University.

Judith S. Olson

Member

Judith S. Olson (NAE) is the Bren professor of information and computer sciences Emerita in the Informatics Department at the University of California, Irvine. Her research focused on human-computer interaction, computer supported cooperative work, and human-robot interaction, emphasizing right technologies and social practices when working at a distance. She has researched teams whose members are not co-located for more than 30 years. Her current work focuses on ways to verify her theory's components while at the same time helping new scientific collaborations succeed. Dr. Olson is a member of the National Academy of Engineering and has been a member of several National Academies' activities including most recently as a member of the Committee on the Science of Team Science. She holds a B.A. from Northwestern University and a Ph.D. from the University of Michigan.

Dan J. Putka

Member

Dan J. Putka has over 18 years of experience helping private and public-sector organizations innovate in the areas of talent acquisition and human capital analytics. Dr. Putka has helped numerous organizations develop, evaluate, and implement assessments to enhance their hiring and promotion processes and to guide individuals to career and job opportunities that fit them well. He has also led several large-scale analytics projects to identify key drivers of turnover, improve personnel selection, and evaluate enlisted waiver policy in the U.S. Armed Services. Complementing his client-centered work, Dr. Putka has maintained an active presence in the industrial and organizational psychology scientific community. He has delivered over 80 presentations and invited workshops at national conferences, published over 20 book chapters and articles in peer-reviewed journals, and serves on the editorial board of several scientific journals. He is a fellow of the American Psychological Association and three of its divisions to include APA's Quantitative and Qualitative Methods Division (Division 5), the Society for Industrial and Organizational Psychology (SIOP; Division 14), and the Society for Military Psychology (Division 19). He has also served on multiple national-level committees focused on psychological assessment and validation issues to include APA's Committee on Psychological Tests and Assessments, and SIOP's committee tasked with updating the Principles for the Validation and Use of Personnel Selection Procedures. Beyond the contributions above, Dr. Putka has received multiple national awards and distinctions in recognition of outstanding and unusual contributions to multiple domains of applied psychological science and practice. He earned a Ph.D. in industrial and organizational psychology, with a focus in quantitative psychology, from Ohio University.

Alvin E. Roth

Member

Alvin E. Roth (NAS) is the Craig and Susan McCaw Professor of Economics at Stanford University, and the George Gund Professor Emeritus of Economics and Business Administration at Harvard. His research is in game theory, experimental economics, and market design. Among the markets he has designed (or, in this case, redesigned) is the National Resident Matching Program, through which most doctors find their first employment as residents at American hospitals. He has also helped in the reorganization of the market for more senior physicians, as they pursue subspecialty training, and in other labor markets. He helped design the high school matching system used in New York City, and the school matching systems used in Boston, Denver, and New Orleans. He is one of the founders and designers of kidney exchange in the United States, which helps incompatible patient-donor pairs find life-saving compatible kidneys for transplantation. He shared the 2012 Nobel memorial prize in Economics. He has a B.S., M.S., and Ph.D. in operations research from Stanford University.

Ann M. Ryan

Member

Ann Marie Ryan is professor of organizational psychology at Michigan State University. Her major research interests involve improving the quality and fairness of employee selection methods, and topics related to diversity and justice in the workplace. In addition to publishing extensively in these areas, she regularly consults with organizations on improving assessment practices. She is a past president of the Society of Industrial and Organizational Psychology (SIOP), and past editor of *Personnel Psychology*. She has previously contributed to several National Academies activities including as a member of the Panel to Review the Occupational Information Network (O*NET) and the Committee on Workforce Planning Models for Forensic Science: A Workshop. She is also a previous member of the Board on Testing and Assessment. She received a B.S. with a double major in psychology and management from Xavier University and a M.A. and Ph.D. in Psychology from the University of Illinois at Chicago.

Stephen Stark

Member

Stephen Stark is area director and professor of industrial and organizational psychology at the University of South Florida. His research focuses on improving the measurement of noncognitive constructs, such as personality, in high-stake environments; computerized adaptive testing; differential item functioning; and methods for detecting aberrant responding (e.g., “faking”) on high-stakes tests. He is a senior fellow of the Army Research Institute University Consortium and a fellow of the Society for Industrial and Organizational Psychology and the American Psychological Association. He is currently editor of *International Journal of Testing* and serves on the editorial boards of *Applied Psychological Measurement*, *Journal of Business and Psychology*, *European Journal of Psychological Assessment*, and *International Journal of Selection and Assessment*. He was a member of the National Academies’ Committee on Measuring Human Capabilities: Performance Potential of Individuals and Collectives. He has a B.S. in physics from the University of New Orleans and an A.M. and Ph.D. in industrial and organizational psychology with a minor in quantitative psychology from the University of Illinois at Urbana-Champaign.