

2016 AFRL/DAGSI Fellowship Awards

RH: Human Effectiveness

Katelyn Berberich and Subhashini Ganapathy (WSU), sponsor Conwell: Dynamic Performance Measurement Tool for Medical Team Training – Model-Based Simulation Systems for Adaptive Training in Time-Critical Decision Making (MS)

Katherine Burns and Kristen Comfort (UD), sponsor Hussain: Development of a Dynamic Co-Culture Skin Model for the Evaluation of Synergistic Biological Responses following Exposure to Multiple Nanostructured Materials (MS)

Colin Elkin and Vijay Devabhaktuni (U Toledo), sponsor Funke: Assessment of Team Dynamics Using Adaptive Modeling of Biometric Data (Ph.D.)

Ryan Gabbard and Mary Fendley (WSU), sponsor Warren: Identifying the Impact of Stress on Anomaly Detection through Physiological Changes to Limit Detection Failures (MS)

RQ: Aerospace Systems

Timothy Arnett and Kelly Cohen (UC), sponsor Kingston: Planning, Guidance, and Control for Multiple UAV Cooperative Operations (Ph.D.)

Marcus Bracey and Rory Roberts (WSU), sponsor Zumberge: Numerical and Experimental Analysis of an Air Cycle Machine for an Aircraft Thermal Management System (MS)

Robert Buettner and Rory Roberts/Mitch Wolff (WSU), sponsor Behbahani: Adaptive Turbine Engine Control for a Vehicle Level Tip-to-Tail Model (MS)

Daniel Clark and Ha-Rok Bae (WSU), sponsor Beran: Stochastic Metamodeling for Design Validation (Ph.D.)

Melvin-Eddy Ikwubuo and Kumar Singh (Miami U), sponsors Kolonay and Beran: Design, Fabrication, and Testing of 3D Printed Wings for Aeroservoelastic Optimization Validation (MS)

Mackenzie Kirby-Tidball and Joseph Slater (WSU), sponsor Brown: Modeling and Analysis of Damping Performance of Hard Coatings in Turbomachinery (MS)

Owen Macmann and Kelly Cohen (UC), sponsor Behbahani: Intelligent Gas Turbine Control Systems and Engine Integrated Health Management Research (Ph.D.)

RQ: Aerospace Systems (continued)

Admir Makas and Ramana Grandhi (WSU), sponsor Beran: Multidisciplinary Topology Optimization of Hot Structures Subject to Random Engine Acoustic Loading (Ph.D.)

Christopher McClurg and Jack McNamara (OSU), sponsor Chona: Parallelizable Predictor-Corrector Time Marching for Structures Operating in Extreme Environments (Ph.D.)

Nathan McGillivray and Mitch Wolff (WSU), sponsor Hegenmaier: Design and Optimization of a Scramjet Fuel Delivery System (MS)

Michael Settle and Aaron Altman (UD), sponsor Beran: Development of a Predictive Capability for Multidisciplinary Design under Uncertainty and Sensitivity Analysis for Design Space Exploration (MS)

Dillon Stenger and Aaron Altman (UD), sponsor Ombrello: Dependency of Nanoparticle Flash Ignition on Light Source Wavelength (MS)

Joshua Thompson and Henry Chen (WSU), sponsor Smith: Advanced Integrated Smart Cell Onboard Printed Electronics Development (Ph.D.)

RX: Materials & Manufacturing

David Borth and Douglas Hansen (UD), sponsor Dudis: Non-Destructive Evaluation of Urethane-Epoxy Coating Systems using the Scanning Kelvin Probe Technique (MS)

Blake Emad and Christopher Muratore (UD), sponsor Ferguson: Atmospheric Plasma Deposition for Nanoelectronics (MS)

Darryl Gleason and Jonathan Pelz (OSU), sponsor Dorsey: Nanometer-Resolution Trap Spectroscopy of Functioning Cross-Sectioned GaN HEMT RF Devices and other Wide Bandgap Materials (Ph.D.)

Richard Lawniczak and Robert Brockman (UD), sponsor Przybyla: Stochastic Structure-Property Relationships of Continuous Ceramic Fiber Reinforced Ceramic Matrix Composites in Application Environments (MS)

David Lombardo and Andrew Sarangan (UD), sponsors Goodson and Urbas: An Integrated Photonics CMOS Compatible Platform for Chemical and Biological Sensors (Ph.D.)

Rachel Rai and Charles Browning (UD), sponsor Check: Synthesis of Large Area 2-Dimensional MoS₂ and WS₂ by Physical Vapor Deposition (Ph.D.)

RY: Sensors

Diane Wenbi Lai and Christopher Muratore (UD), sponsor Heckman: Printed and Flexible Electronics and Photonics for USAF Sensor Applications (MS)

Adam Mitchell and Graeme Smith (OSU), sponsor Duly: A Fully Adaptive Approach to Distributed MIMO Beamforming and Imaging (Ph.D.)

Dave Winarski and Farida Selim (Bowling Green), sponsor Heckman: Additive Manufacturing of Electronic Devices using ZnO-based Inks (Ph.D.)