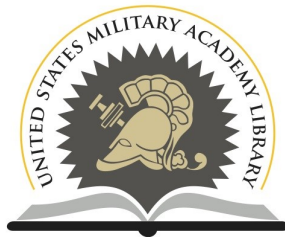




A CELEBRATION OF WEST POINT AUTHORS

**Highlighting the 218 collected works of
scholarship published and presented between
January - June 2020.**



A Celebration of West Point Authors

Today we celebrate the more than 200 works of scholarship produced at the Academy between January and June 2020. Of note, this time period also encompasses the start of the COVID-19 pandemic which resulted in the cancellation or postponement of many conferences and the move to remote learning after Spring Break 2020. The virtual program features speakers whose work centered around assessing and shaping public opinion.

Panelists

- COL Joseph Lindquist, Department of Mathematical Sciences
 - Effective Use of Public Perceptions in Assessments
- Dr. Robert Thomson, Army Cyber Institute & Department of Behavioral Sciences and Leadership
 - Identifying Indicators of Bias in Data Analysis Using Proportionality and Separability Metrics
- COL Christopher Korpela, Department of Electrical Engineering and Computer Science
 - Artificial Intelligence Ethics: Governance through Social Media
- COL John Gregory, Department of Foreign Languages, and Dr. Thomas Sherlock, Department of Social Sciences
 - Hedged Bets or Shared Norms? Sino-Russian Great Power Relations and Public Opinion

Moderator

- Heather Seminelli, USMA Library

Department of Behavioral Sciences and Leadership COL Everett Spain, Department Head

Boyce, Michael (Dr.), C. Stainrod, and **Dr. Aryn Pyke (ACI).** “Physiological versus Self-Report Measures of Arousal During Tactical Training Involving a Synthetic Topographic Environment.” Paper presented at the Simulation Innovation Workshop, Orlando, Florida, February 2020.

Groysberg, Boris, Paul Healy, and **Dr. Eric Lin.** “Determinants of Gender Differences in Change in Pay among Job-Switching Executives.” *ILR Review* (June 2020): 0019793920930712.
<https://doi.org/10.1177/0019793920930712>.

Matthews, Michael D. (Dr.). “Forward.” In *The Routledge International Handbook of Military Psychology and Mental Health*, edited by Updesh Kumar. Abingdon, U.K.: Routledge, 2020. <https://www.routledge.com/The-Routledge-International-Handbook-of-Military-Psychology-and-Mental/Kumar/p/book/9780367237066>.

Matthews, Michael D. (Dr.). *Head Strong: How Psychology Is Revolutionizing War, Revised and Expanded Edition.* Illustrated Edition. New York: Oxford University Press, 2020.

Pak, Richard, Jessica J. Crumley-Branyon, Ewart J. de Visser, and **Dr. Ericka Rovira.** “Factors That Affect Younger and Older Adults’ Causal Attributions of Robot Behaviour.” *Ergonomics* 63:4 (April 2020): 421–439. <https://doi.org/10.1080/00140139.2020.1734242>.

Pak, Richard, Ewart J. de Visser, and **Dr. Ericka Rovira,** eds. *Living with Robots.* London, United Kingdom: Elsevier, 2020.
<https://doi.org/10.1016/C2017-0-03348-7>.

Smith, Daniel R. (LTC), Michael E. Hoffman, and James M. LeBreton. “Conditional Reasoning: An Integrated Approach to Item Analysis.” *Organizational Research Methods* 23:1 (January 2020): 124–153.
<https://doi.org/10.1177/1094428119879756>.

Swain, Jordon E. (LTC), MAJ Jason A. Bogardus, and Dr. Eric Lin. “‘Come on Down’: Using a Trivia Game to Teach the Concept of Organizational Justice.” *Management Teaching Review* (published online December 12, 2019). <https://doi.org/10.1177/2379298119892588>.

Wenjuan Zhang, **MAJ David Feltner,** James Shirley, David Kaber, and Manida S. Neubert. “Enhancement and Application of a UAV Control Interface Evaluation Technique: Modified GEDIS-UAV.” *ACM Transactions on Human-Robot Interaction* 9:2 (January 2020): Article 14. <https://doi.org/10.1145/3368943>

Department of Chemistry and Life Science COL F. John Burpo, Department Head

Aprile, Francesco A., Pietro Sormanni, Marina Podpolny, Shianne Chhangur, Lisa-Maria Needham, Francesco S. Ruggeri, Michele Perni, **Dr. Ryan Limbocker,** et al. “Rational Design of a Conformation-Specific Antibody for the Quantification of A Beta Oligomers.” *Proceedings of the National Academy of Sciences of the United States of America* 117:24 (June 2020): 13509–13518. <https://doi.org/10.1073/pnas.1919464117>.

Bischer, Andrew P., **Christopher J. Kovacs,** Roberta C. Faustoferri, and Robert G. Quivey. “Disruption of L-Rhamnose Biosynthesis Results in Severe Growth Defects in *Streptococcus mutans*.” *Journal of Bacteriology* 202:6 (March 2020): e00728-19. <https://doi.org/10.1128/JB.00728-19>.

Burpo, F. John (COL), CDT Anchor R. Losch ‘20, Dr. Enoch A. Nagelli, Stephen J. Winter, Stephen F. Bartolucci, Joshua P. McClure, David R. Baker, **Jack K. Bui ‘19, Alvin R. Burns ‘19, CDT Sean F. O’Brien ‘20,** Greg T. Forcherio, **CDT Brittany R. Aikin ‘21, CDT Kelsey M. Healy ‘21, CDT Mason H. Remondelli ‘21,** Alexander N. Mitropoulos (former D/C&LS), **Lance Richardson, Dr. J. Kenneth Wickiser,** and Deryn D. Chu. “A Salt-Templated Synthesis Method for Porous Platinum-Based Macrobeams and Macrotubes.” *JoVE (Journal of Visualized Experiments)*, no. 159 (May 18, 2020): e61395. <https://doi.org/10.3791/61395>.

Emdadi, Laleh, Luther Mahoney, Ivan C. Lee, Asher C. Leff, Wei Wu, Dongxia Liu, **COL Chi K. Nguyen,** and Dat T. Tran. “Assessment of Coke Deposits on Lamellar Metal-Modified MFI Zeolites in Ethylene Transformation to Aromatic Liquids.” *Applied Catalysis A: General* 595 (April 2020): 117510. <https://doi.org/10.1016/j.apcata.2020.117510>.

Eslinger, Melissa (LTC), MAJ Ryan E. Rodriguez, and Dr. Jonathan W. Roginski (D/Math). “Genetic Testing - It’s a Relative Question.” *National Center for Case Study Teaching in Science*, January 14, 2020.
https://sciencecases.lib.buffalo.edu/collection/detail.html?case_id=1080&id=1080.

Eslinger, Melissa (LTC), LTC Carl E. Lundell, and MAJ Ryan E.

Rodriguez. “A Calculated Bang: Explosive Predictions and the Ideal Gas Law.” National Center for Case Study Teaching in Science, June 1, 2020. https://sciencecases.lib.buffalo.edu/collection/detail.html?case_id=1132&id=1132.

Farlow, Jason, Maia Nozadze, Nino Mitaishvili, Adam Kotorashvili, Nato Kotoria, Keto Arobelidze, Viktoria Tavadze, Tsiuri Simsive, Paata Imnadze, Nabil Latif, Mikeljon P. Nikolich, **LTC Michael Washington**, et al. “Comparative Genomic Analysis of Four Multidrug-Resistant Isolates of *Acinetobacter Baumannii* from Georgia.” *Journal of Global Antimicrobial Resistance* 21 (June 2020): 363–368. <https://doi.org/10.1016/j.jgar.2019.11.002>.

Hickey, Bradley, Nimfa Teneza-Mora, Joanne Lumsden, Sharina Reyes, Martha Sedegah, Lindsey Garver, Michael R. Hollingdale, Jo Glenna Banania, Harini Ganeshan, Megan Dowler, Anatalio Reyes, Cindy Tamminga, Alexandra Singer, Alicia Simmons, Maria Belmonte, Arnel Belmonte, Jun Huang, Sandra Inoue, Rachel Velasco, Steve Abot, Carlos S. Vasquez, Ivelese Guzman, Mimi Wong, Patrick Twomey, Mariusz Wojnarski, James Moon, Yolanda Alcorta, Santina Maiolatesi, Michele Spring, **LTC Silas Davidson**, Sidhartha Chaudhury, Eileen Villasante, Thomas L. Richie, and Judith E. Epstein. “IMRAS—A Clinical Trial of Mosquito-Bite Immunization with Live, Radiation-Attenuated *P. Falciparum* Sporozoites: Impact of Immunization Parameters on Protective Efficacy and Generation of a Repository of Immunologic Reagents.” Edited by Steffen Borrmann. *PLOS ONE* 15:6 (June 2020): e0233840. <https://doi.org/10.1371/journal.pone.0233840>.

Hummel, Stephen G., and **COL F. John Burpo**. “Small Groups, Big Weapons: The Nexus of Emerging Technologies and Weapons of Mass Destruction Terrorism.” West Point, New York: Combating Terrorism Center, April 2020. <https://ctc.usma.edu/small-groups-big-weapons-the-nexus-of-emerging-technologies-and-weapons-of-mass-destruction-terrorism/>.

James, Corey (LTC), LTC Matthew Armstrong, Dr. Gary Washington, and Dr. Andrew Biaglow. “Consistency of Thermodynamic Properties from CHEMCAD Process Simulations.” *Chemical Data Collections* 27 (June 2020): 100371. <https://doi.org/10.1016/j.cdc.2020.100371>.

James, Corey (LTC), CDT Tae Young Kim ‘21, and Dr. Robert Jane. “A Review of Exergy Based Optimization and Control.” *Processes* 8:3 (March 2020): 364. <https://doi.org/10.3390/pr8030364>.

Jane, Robert (Dr.), Gordon Parker, Gail Vaucher, and Morris Berman. “Characterizing Meteorological Forecast Impact on Microgrid Optimization Performance and Design.” *Energies* 13:3 (February 2020): 577. <https://doi.org/10.3390/en13030577>.

Kobylnski, KC., P. Jittamala, B. Hanboonkunupakarn, S. Pukrittayakamee, K. Pantuwatana, S. Phasomkusolsil, **LTC Silas Davidson**, et al. “Safety, Pharmacokinetics, and Mosquito-Lethal Effects of Ivermectin in Combination with Dihydroartemisinin-Piperaquine and Primaquine in Healthy Adult Thai Subjects.” *Clinical Pharmacology Therapeutics* 107:5 (May 2020): 1221–1230. <https://doi.org/10.1002/cpt.1716>.

Kosoltanapiwat, Nathamon, Jarinee Tongshoob, Preeraya Singkhaimuk, Chanyapat Nitatsukprasert, **LTC Silas A. Davidson**, and Alongkot Ponlawat. “Entomological Surveillance for Zika and Dengue Virus in *Aedes* Mosquitoes: Implications for Vector Control in Thailand.” *Pathogens* 9:6 (June 2020): 442. <https://doi.org/10.3390/pathogens9060442>.

Limbocker, Ryan (Dr.), Benedetta Mannini, Rodrigo Cataldi, Shianne Chhangur, **CDT Aidan K. Wright ‘23, CDT Ryan P. Kreiser ‘22, J. Alex Albright ‘20**, et al. “Rationally Designed Antibodies as Research Tools to Study the Structure-Toxicity Relationship of Amyloid-Beta Oligomers.” *International Journal of Molecular Sciences* 21:12 (June 2020): 4542. <https://doi.org/10.3390/ijms21124542>.

Nahid, Md A., Carmen E. Campbell, Keith S. K. Fong, **LTC Jason C. Barnhill, and LTC Michael A. Washington.** “An Evaluation of the Impact of Clinical Bacterial Isolates on Epithelial Cell Monolayer Integrity by the Electric Cell-Substrate Impedance Sensing (ECIS) Method.” *Journal of Microbiological Methods* 169 (2020): 105833. <https://doi.org/10.1016/j.mimet.2020.105833>.

Pfister, Bryan J., Jonathan M. Grasman, and **Dr. Joseph R. Loverde.** “Exploiting Biomechanics to Direct the Formation of Nervous Tissue.” *Current Opinion in Biomedical Engineering* 14 (June 2020): 59–66. <https://doi.org/10.1016/j.cobme.2020.05.009>.

Pfluger, Andrew (LTC), LTC Matthew Armstrong, MAJ Trevor Corrigan, Dr. Enoch Nagelli, LTC Corey James, LTC April Miller, and Dr. Andrew Biaglow. “Framework for Analyzing Placement of and Identifying Opportunities for Improving Technical Communication in a Chemical Engineering Curriculum.” *Education for Chemical Engineers* 31 (April 2020): 11–20. <https://doi.org/10.1016/j.ece.2020.02.001>.

Schubert, Sara L., and **Dr. Vanessa R. Melanson**. “Prevalence of Lyme Disease Attributable to Military Service at the USMA, West Point NY: FY2016-2018.” *Military Medicine* 185:1–2 (February 2020): E28–34. <https://doi.org/10.1093/milmed/usz156>.

Shebert, George L., Somayeh Zamani, **CPT Caspar Yi**, and Yong Lak Joo. “Polysulfide Entrapment and Retardation in Gel Electrolyte Li–S Batteries: Experiments and Modeling.” *Journal of Materials Chemistry A* 8:8 (February 2020): 4341–4353. <https://doi.org/10.1039/C9TA14234G>.

Sheppard J.T., **Dr. Elizabeth K. Mentis (former D/C&LS)**, MAJ Kathleen M. Leforte, **Dr. Michael A. Butkus**, J.A. Starke, D.D. Bowman, and **Dr. Michael P. Labare**. “Butanoic Acid Inactivation of B. Anthracis Sterne Strain Endospores for Surface Decontamination.” Poster presented at the ASM Biothreats, Arlington, Virginia, January 28, 2020.

Yan, Gang, Bereket Zekarias, Xiaoyu Li, **LTC Victor Jaffett**, Ilia Guzei, and Jennifer E. Golden. “Divergent 2-Chloroquinazolin-4(3H)-one Rearrangement: Twisted-Cyclic Guanidine Formation or Ring-Fused N-Acylguanidines via a Domino Process.” *Chemistry – A European Journal* 26: 11 (February 2020): 2486–2492. <https://doi.org/10.1002/chem.201905219>.

Department of Civil and Mechanical Engineering COL Karl F. Meyer, Department Head

Banko, Andrew J., **COL Michael J. Benson**, Ian E. Gunady, Christopher J. Elkins, and John K. Eaton. “An Improved Three-Dimensional Concentration Measurement Technique Using Magnetic Resonance Imaging.” *Experiments in Fluids* 61:2 (January 2020): 53. <https://doi.org/10.1007/s00348-020-2889-9>.

Barry, Brock E. (Dr.), and Stephanie Slocum. “The Engineer of 2020 as of 2020.” Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/the-engineer-of-2020-as-of-2020>.

Benson, Michael J. (COL), Andrew J. Banko, Christopher J. Elkins, Don-Gwan An, Simon Song, Martin Bruschewski, Sven Grundmann, Daniel D. Borup, and John K. Eaton. “The 2019 MRV Challenge: Turbulent Flow through a U-Bend.” *Experiments in Fluids* 61:6 (June 2020): 148. <https://doi.org/10.1007/s00348-020-02986-8>.

Benson, Michael (COL), Nicholas Wilde, Alexander Brown, and Christopher Elkins. “Detailed Magnetic Resonance Imaging Measurements of a Contaminant Dispersed in an Oklahoma City Model.” *Atmospheric Environment* 222 (February 2020): 117129. <https://doi.org/10.1016/j.atmosenv.2019.117129>.

Bruhl, Jakob C (LTC). “Making Connections: Ensuring Strength of the Civil Engineering Curriculum.” Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/making-connections-ensuring-strength-of-the-civil-engineering-curriculum>.

Bruhl, Jakob C. (LTC), and Win Gilbert Bruhl. “Engineering Creativity: Ideas from the Visual Arts for Engineering Programs.” Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/engineering-creativity-ideas-from-the-visual-arts-for-engineering-programs>.

Bruhl, Jakob C. (LTC), and **Dr. Ledlie Klosky**. “Deliberate Development of Creative Engineers.” Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/deliberate-development-of-creative-engineers>.

Delatte, Norb, Stephen J. Ressler, Audra N. Morse, Camilla M. Saviz, and **Dr. Brock E. Barry**. “Toward Continuous Improvement of EAC/ABET Criteria 3 and 5.” Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/toward-continuous-improvement-of-eac-abet-criteria-3-and-5>.

Doscher, Daniel. “Angles-Only State Estimation of Orbital Debris for Direct Capture Mechanisms.” Paper presented at the AIAA SciTech Forum and Exposition, Orlando, Florida, January 2020.

Hill, Aaron T. (COL), **LTC Kevin P. Arnett**, **Cosme Alejandro Lopez ‘20**, **James Anthony Baglino ‘20**, **Nicholas Perovich ‘20**, **Adriel Evan Moran ‘20**, **Adam Thomas Hebert ‘20**, and **Anthony Bradley ‘20**. “Analyzing the Effectiveness of Competition and Interdisciplinary Teams in Student Learning.” Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/analyzing-the-effectiveness-of-competition-and-interdisciplinary-teams-in-student-learning>.

Kralick, Jonathan (MAJ), and Barbara A. Karanian. “Implementing Abbreviated Personas into Engineering Education.” Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/implementing-abbreviated-personas-into-engineering-education>.

Linford, Patrick Alan (MAJ), LTC James E. Bluman, Dr. Gregory Martin Freisinger, Dr. John R. Rogers, and LTC Brian J. Novoselich. “The Self-Evaluation and Revision Method for Homework: A Homework Method for Metacognition Improves Post-Secondary Engineering Students’ Attitudes Toward Homework.” Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/the-self-evaluation-and-revision-method-for-homework-a-homework-method-for-metacognition-improves-post-secondary-engineering-students-attitudes-toward-homework>.

McMullen, Kevin F. (Dr.), and Arash E. Zaghi. “Accelerated Repair of Corroded Steel Bridge Girders with Ultra-High Performance Concrete.” *2020 Transportation Research Board Annual Meeting*, Washington, DC., January 2020.

McMullen, Kevin F. (Dr.), and Arash E. Zaghi. “Experimental Evaluation of Full-Scale Corroded Steel Plate Girders Repaired with UHPC.” *Journal of Bridge Engineering* 25:4 (April 2020): 04020011. [https://doi.org/10.1061/\(ASCE\)BE.1943-5592.0001535](https://doi.org/10.1061/(ASCE)BE.1943-5592.0001535).

Nowicki, Margaret (LTC), W. Zhu, K. Sarkar, R. Rao, and L. Zhang. “3D Printing Multiphasic Osteochondral Tissue Constructs with Nano to Micro Features via PCL Based Bioink.” *Bioprinting* 17 (March 2020): e00066. <https://doi.org/10.1016/j.bprint.2019.e00066>.

Owkes, Mark, **COL Michael Benson**, Christopher Elkins, Nicholas Wilde, and **COL Bret Van Poppel**. “Three-Dimensional Velocity and Concentration Measurements and Simulations of a Scaled Jack Rabbit II Mock Urban Array.” *Atmospheric Environment* 233 (July 2020): 117520. <https://doi.org/10.1016/j.atmosenv.2020.117520>.

Paquin, Jeremy (MAJ). “Methodology for Choosing a Contractor for the Apollo Spacecraft Command and Service Module.” Presented at the AIAA SciTech 2020 Forum, Orlando, Florida, January 6, 2020.

Paquin, Jeremy (MAJ), COL Bret Van Poppel, LTC Andrew Bellocchio, MAJ Matthew Miller, MAJ Briana Fisk, L. Ebner, J. Woodruff, D. Crow. “Undergraduate Internal Flow Pipe Friction Laboratory,” *Proceedings of the American Society of Thermal Fluids Engineers (ASTFE) 4th Thermal and Fluids Engineering Conference*, New Orleans, Louisiana, April 5-8, 2020: TFEC-2020-31995. <http://dx.doi.org/10.1615/TFEC2020.edu.031995>

Wambeke, Brad (COL). “Building Bridges – Spanning the Gap between the Classroom and Professional Practice.” Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/building-bridges-spanning-the-gap-between-the-classroom-and-professional-practice>.

Department of Electrical Engineering and Computer Science COL James Raftery, Department Head

Blair, Jean (Dr.), **COL Christa Chewar**, Rajendra Raj, and **Dr. Edward Sobiesk (ACI)**. “Infusing Principles and Practices for Secure Computing Throughout an Undergraduate Computer Science Curriculum.” Paper presented at the 2020 ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE '20), June 2020. <https://dl.acm.org/doi/10.1145/3341525.3387426>.

Brooks, William, **Dr. Dominic Larkin**, and **COL Christopher Korpela**. “Robotics Technology Kernel for Radiation Sensing and Site Exploitation.” Paper presented at the *10th Annual Computing and Communication Workshop and Conference (CCWC)*, Las Vegas, Nevada, January 2020. <https://doi.org/10.1109/CCWC47524.2020.9031259>.

Carey, Kevin, Benjamin Abruzzo, **COL Christopher Lowrance**, Eric Sturzinger, Ross Arnold, and **COL Christopher Korpela**. “Comparison of Skeleton Models and Classification Accuracy for Posture-Based Threat Assessment Using Deep-Learning.” In *SPIE Artificial Intelligence and Machine Learning for Multi-Domain Operations Applications II*, 11413:1141321. International Society for Optics and Photonics, 2020. <https://doi.org/10.1117/12.2556422>.

Donner (CDT, '20), Phillip, Dr. Aaron St. Leger, and LTC Raymond Blaine. “Unsupervised Machine Learning for Anomaly Detection in Synchrophasor Network Traffic.” In *2019 North American Power*

Symposium (NAPS), Wichita, Kansas, October 2019.
<https://doi.org/10.1109/NAPS46351.2019.9000400>.

Gonzalez, Daniel, and Harry Asada. "Passive Quadrupedal Gait Synchronization for Extra Robotic Legs Using a Dynamically Coupled Double Rimless Wheel Model." Paper presented at the 2020 IEEE International Conference of Robotics and Automation, Virtual Conference, June-August 2020.

Popko, Gerald B. (CPT), Thomas K. Gaylord, and Christopher R. Valenta. "Geometric Approximation Model of Inter-Lidar Interference." *Optical Engineering* 59:3 (March 2020): 033104.
<https://doi.org/10.1117/1.OE.59.3.033104>.

Popko, Gerald B. (CPT), Thomas K. Gaylord, and Christopher R. Valenta. "Interference Measurements between Single-Beam, Mechanical Scanning, Time-of-Flight Lidars." *Optical Engineering* 59:5 (May 2020): 053106.
<https://doi.org/10.1117/1.OE.59.5.053106>.

Semmens, Rob, **Dr. Michael Novitzky**, Paul Robinette, and Gregory Lieberman (ARL). "Insights into Expertise and Tactics in Human-Robot Teaming." Paper presented at the ACM/IEEE Conference on Human-Robot Interaction, Cambridge, United Kingdom, March 23, 2020. <https://hri-methods-metrics.github.io/Semmens%20-%20Abstract.pdf>.

Department of English and Philosophy COL David Harper, Department Head

Parsons, Graham (Dr.). "A Reply to Terrorism Unjustified by Vicente Medina." *Reason Papers* 41:1 (Summer 2019): 26–40.

Parsons, Graham (Dr.). "Contract, Gender, and the Emergence of the Civil-Military Distinction." *The Review of Politics* 82:3 (Summer 2020): 1–22.

Parsons, Graham (Dr.). "Walzer's Soldiers: Gender and the Rights of Combatants." In *Walzer and War: Reading Just and Unjust Wars Today*, edited by Graham (Dr.) Parsons and Mark A. Wilson, 1st ed. Cham, Switzerland: Palgrave Macmillan, 2020.

Parsons, Graham (Dr.), and Mark A. Wilson, eds. *Walzer and War: Reading Just and Unjust Wars Today*. 1st ed. Cham, Switzerland: Palgrave Macmillan, 2020.

Salyer, Matthew Carey (CPT). *Brokering Culture in Britain's Empire and the Historical Novel*. London: Rowman and Littlefield, 2020.

Salyer, Matthew Carey (CPT). *Ravage & Snare*. Boston: Pen and Anvil Press, 2020.

Samet, Elizabeth D. (Dr.). "Review of *Interrupted Odyssey: Ulysses S. Grant and the American Indians* by Mary Elizabeth Stockwell." *Journal of American History* 106:4 (March 2020): 1073–1074. <https://doi.org/10.1093/jahist/jaz746>.

Department of Foreign Languages COL Gregory Ebner, Department Head

Benjamin, John (Dr.). "Graphic Narrative Network: Comics in Translation." Roundtable Discussion at the Michigan State University Comics Forum, East Lansing, Michigan, February 2020.

Benjamin, John (Dr.). Devon Donohue-Bergeler, Katrin Fuchs, and Alexander Lorenz. "'Is Nicht Egal': Guided Multimodal Reading of a Music Video Advertisement." *Unterrichtspraxis-Teaching German* 53:1 (March 2020): 55–65. <https://doi.org/10.1111/tger.12118>.

Benjamin, John (Dr.). "It's Fine with Me: Guided Multimodal Reading of a Music Video Advertisement." Department of Foreign Languages Mentorship Colloquium, United States Military Academy, West Point, New York, March 2020.

Benjamin, John (Dr.). "L2 learners' knowledge of and experience with comics." Presented at the American Council for the Teaching of Foreign Languages/Middlebury Research Forum, Middlebury, Vermont, June 2020. Moved online due to COVID-19.

Chenoweth, Carlotta. "Slogans, Graphs, and the Calendar for 1925: Dora El'kina's Down with Illiteracy." Presented at the 2020 American Association of Teachers of Slavic and East European Languages (AATSEEL) Annual Conference, San Diego, California, February 2020.

Ensen, Joshua Alma. "The Brazil Reader: History, Culture, Politics." *Ellipsis* 4:2 (Fall 2019): 296–298.

**Department of Geography
and Environmental Engineering
COL Mark Read, Department Head**

Miller, Zachary F. (COL), and Aline Godfroid. "Emotions in Incidental Language Learning an Individual Differences Approach." *Studies in Second Language Acquisition* 42:1 (March 2020): 115–141.
<https://doi.org/10.1017/S027226311900041X>.

Miller, Zachary F. (COL), and Dustin Crowther. "Foreign language learning motivation in a U.S. military academy: A comparative case study on the effects from the learning environment." *Applied Language Learning* 30:1&2 (March 2020): 41-59.

Miller, Zachary F. (COL), & D. Crowther. *Foreign language learning in the U.S. military: Environmental effects within and beyond the classroom*. Paper accepted for the American Association for Applied Linguistics, March 2020, Denver, Colorado. (Conference cancelled)

Pendergast, John (Dr.). "The Wizard of Igor: Cherniakov's Prince Igor, Met Opera 2014." Presented at the 2020 American Association of Teachers of Slavic and East European Languages (AATSEEL) Annual Conference, San Diego, California, February 2020.

Pereira, Vinícius Carvalho and **Joshua Alma Enslen** (editors). *Diálogos Intermediais do Texto Poético* (special edition of *Revista Texto Poético*) 29:16 (2020): 168pp. <http://textopoetico.emnuvens.com.br/rtp/issue/view/41>

Praud, Julia (Dr.). "Gaël Faye: Intermediality and Creolization from *Pili pili* to *Petit Pays*." Presentation at Northeastern Modern Language Association (NeMLA) Conference, Boston, Massachusetts, March 5-8, 2020.

Pshevorska, Liana. "Sighting a New Language: Ekphrasis and Translingualism in Gabriel Osmonde's *Alternance*." Conference presentation at Northeastern Modern Language Association (NeMLA) Conference, Boston, Massachusetts, March 5-8, 2020.

Watson, Jeffrey (Dr.). "Promoting Intercultural Competence through Transdisciplinarity." 7th International Conference on the Development and Assessment of Intercultural Competence, January 23-25, 2020.
<https://www.youtube.com/watch?v=tvq-43IQN8c>

Barron, Jes, **LTC Brad C. McCoy**, **LTC Jakob C. Bruhl**, **MAJ John J. Case (D/Systems Engineering)**, and **MAJ John Andrew Kearby (D/Math)**. "The Napkin Sketch Pilot Study: A Minute-Paper Reflection in Pictorial Form." Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/the-napkin-sketch-pilot-study-a-minute-paper-reflection-in-pictorial-form>.

Barron, Jes, **LTC Andrew Ross Pfluger**, **LTC Kathryn K. Pegues (D/Systems Engineering)**, and **MAJ Thomas Bazemore (D/SOSH)**. "Examination of Faculty Development in the Departments of Civil & Mechanical Engineering and Geography & Environmental Engineering at the United States Military Academy." Presented at the American Society for Engineering Education National Conference, Virtual, June 2020.
<https://doi.org/Paper ID: 28887>.

Butkus, Michael A. (Dr.), **Anand Deju Shetty**, **LTC Benjamin Michael Wallen**, **MAJ Nathaniel Sheehan**, and **LTC Andrew Ross Pfluger**. "The Five-Minute Adsorption Demonstration." Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://doi.org/Paper ID: 29025>.

Dacunto, Philip (COL), and **CPT Andrew Ng**. "Course Outcome Assessment: Is Using the Average Good Enough?" Presented at the American Society for Engineering Education National Conference, Virtual, June 2020.

Easter, Madeleine S. (CDT 2020), **LTC Christopher Oxendine**, and **LTC William C. Wright**. "Visualizing the Rwandan Genocide." Presented at the 2020 ESRI Federal Users Conference, Washington, D.C., February 10, 2020.

McCollum, Caleb James (MAJ), **Dr. Michael A. Butkus**, and **LTC Andrew Ross Pfluger**. "Technical Communications in an Environmental Engineering Curriculum: A Framework for Analysis and Continual Improvement." Presented at the American Society for Engineering Education National Conference, Virtual, June 2020.
<https://doi.org/Paper ID: 28851>.

Mower, Ruth (MAJ), MAJ Erick Martinez, LTC Landon Raby, MAJ John Boyle, and LTC Andrew Pfluger. “Making Water Work: An Energy Head Equation Demonstration.” Presented at the American Society for Engineering Education National Conference, Virtual, June 2020.
<https://doi.org/Paper ID: 29094>.

O'Banion, Matthew S. (Dr.), CDT Deborah C. Majkowicz '20, Dr. Michael W. Boyce (D/BS&L), LTC William C. Wright, LTC Christopher E. Oxendine, and MAJ Nicholas S. Lewis. “Evaluating Immersive Visualization Technology for Use in Geospatial Science Education.” *Surveying and Land Information Science* 79:1 (May 2020): 15–22.

Pfluger, Andrew (LTC), Rebecca Erickson, Gary Vanzin, Martha Hahn, Jennie Callahan, Junko Munakata-Marr, and Linda Figueroa. “Energy-Generating Potential of Anaerobically Enhanced Primary Treatment of Domestic Wastewater Using Multiple-Compartment Bioreactors.” *Environmental Science-Water Research & Technology* 6:1 (January 2020): 117–131. <https://doi.org/10.1039/c9ew00526a>.

Pfluger, Andrew (LTC), LTC Matthew Armstrong (D/C&LS), MAJ Trevor Corrigan (D/C&LS), Dr. Enoch Nagelli (D/C&LS), LTC Corey James (D/C&LS), LTC April Miller (D/C&LS), and Dr. Andrew Biaglow (D/C&LS). “Framework for Analyzing Placement of and Identifying Opportunities for Improving Technical Communication in a Chemical Engineering Curriculum.” *Education for Chemical Engineers* 31 (April 2020): 11–20. <https://doi.org/10.1016/j.ece.2020.02.001>.

Richmond, Amy (Dr.), Dr. Richard Wolfel, and Karen Walsh. “Using a Socio-Cultural Framework to Understand Leadership Structures Amongst the Urban Poor.” *Urban and Regional Planning* 4:3 (September 2019): 79. <https://doi.org/10.11648/j.urp.20190403.11>.

Sylvester, Benjamin (MAJ). “Review of *When Montezuma Met Cortes: The True Story of the Meeting That Changed History* by Matthew Restall.” *Journal of Historical Geography* 66 (October 2019): 117–118. <https://doi.org/10.1016/j.jhg.2019.03.009>.

Wallen, Benjamin Michael (LTC), Dr. Michael A. Butkus, MAJ Nathaniel P. Sheehan, CPT Andrew Ng, and LTC Andrew Ross Pfluger. “Engaging Students Through an Interactive Mass Balance Fundamentals Demonstration.” Presented at the American Society for Engineering Education National Conference, June 2020.

Watson, Jeff, and **Dr. Richard Wolfel.** “Promoting Intercultural Competence through Transdisciplinarity.” Invited/Refereed Paper presented at the Seventh International Conference on the Development and Assessment of Intercultural Competence, Tucson, Arizona, January 23, 2020.

Weaver, Elizabeth (LTC), Korine N. Kolivras, R. Quinn Thomas, Valarie A. Thomas, and Kaja M. Abbas. “Environmental Factors Affecting Ecological Niche of *Coccidioides* Species and Spatial Dynamics of Valley Fever in the United States.” *Spatial and Spatio-Temporal Epidemiology* 32 (February 2020): 100317. <https://doi.org/10.1016/j.sste.2019.100317>.

Wright, William C. (LTC), MAJ Nicholas S. Lewis, and LTC Diana Loucks (PANE). “Educating Future Leaders about Space at West Point: An Update 10 Years Later.” *Purview*, June 2020.
<https://purview.dodlive.mil/2020/06/01/educating-future-leaders-about-space-at-west-point-an-update-10-years-later/>.

Wright, William C. (LTC), LTC Christopher Oxendine, Dr. Matthew S. O'Banion, Jakeb Prickett, and CPT Krystle Harrell. “Leveraging GIS and Dynamic Dashboards to Enable Force Protection During the COVID-19 Pandemic.” *Purview*, June 2020.
<https://purview.dodlive.mil/2020/06/01/educating-future-leaders-about-space-at-west-point-an-update-10-years-later/>.

Department of History COL Gail Yoshitani, Department Head

Geheran, Michael (Dr.). “The First Soldier: Hitler as Military Leader.” *German Studies Review* 43:1 (February 2020): 191–193.
<https://doi.org/10.1353/gsr.2020.0022>.

Geheran, Michael (Dr.), and Dr. David Frey. “Leadership in War and Genocide: Roméo Dallaire in Rwanda.” In *Historians on Leadership and Strategy: Case Studies From Antiquity to Modernity*, edited by Martin Gutmann, 15–39. Berlin: Springer Verlag, 2019.
<https://doi.org/10.1007/978-3-030-26090-3>.

Nimick, Thomas G. (Dr.). “Mapping the Background: The Uncertain Influence of the Ming State and Imperial Leadership.” In *The Ming World*, edited by Kenneth M. Swope. New York: Routledge, 2020.
<https://doi.org/10.4324/9780429318719>.

Watson, Samuel J. (Dr.). “James Monroe and American Military Policy: A Lifetime of Connection and Growing Advocacy for a Standing Army.” *The Virginia Magazine of History and Biography* 128:1 (2020): 2–43. <https://doi.org/10.2307/26878494>.

Department of Law COL Shane Reeves, Department Head

Bakken, Tim, J.D. *The Cost of Loyalty: Dishonesty, Hubris, and Failure in the U.S. Military*. 1st edition. New York: Bloomsbury Publishing, 2020.

Hartley, Chris (LTC). “Under the Istrian Sun: Navigating International Law Solutions for the Slovenia-Croatia Maritime Border Dispute.” *Boston University International Law Journal* 38:2 (Summer 2020): 240–285.

Hartley, Christopher (LTC). “Double Fault: How the NCAA’s No-Agent Rule Serves Legal and Policy Errors into the Courts of Tennis.” *Arkansas Law Review* 72:3 (February 2020): 553.

Maurer, Dan (LTC). “Paved with Good Intentions? Civil-Military Norms, Breaches, and Why Mindset Matters.” *Journal of National Security Law & Policy* 11:2 (Spring 2020): 1–21.

Maurer, Dan (LTC). “The ‘Shadow Report’ on Commanders’ Prosecutorial Powers Raises More Questions Than Answers.” *Lawfare*, May 11, 2020. <https://www.lawfareblog.com/shadow-report-commanders-prosecutorial-powers-raises-more-questions-answers>.

Maurer, Dan (LTC). “The Generals’ Constitution.” *Just Security*, June 9, 2020. <https://www.justsecurity.org/70674/the-generals-constitution/>.

McLaughlin, Robert. *Recognition of Belligerency and the Law of Armed Conflict*. Managing Editors are **LTC Winston Williams** and **COL Shane Reeves**. Vol. 3. The Lieber Studies Series. Oxford, New York: Oxford University Press, 2020.

Reeves, Shane (COL), and LTC Winston Williams. “Was the Soleimani Killing an Assassination?” *Lawfare*, January 17, 2020. <https://www.lawfareblog.com/was-soleimani-killing-assassination>.

Reeves, Shane R. (COL), LTC Winston Williams, and Amy H. McCarthy, J.D. “How Do You Like Me Now? Hamdan V. Rumsfeld and the Legal Justifications for Global Targeting.” *University of Pennsylvania Journal of International Law* 41:2 (2019): 329–376.

Wallace, David A. (COL), and COL Shane Reeves. “Protecting Critical Infrastructure in Cyber Warfare: Is It Time for States to Reassert Themselves?” *UC Davis Law Review* 53:3 (February 2020): 1607–1642.

Department of Mathematical Sciences COL Tina Hartley, Department Head

Balogovic, M., Z. Daugherty, I. Entova-Aizenbud, I. Halacheva, J. Hennig, **Dr. Mee Seong Im**, G. Letzter, E. Norton, V. Serganova, and C. Stroppel. “The Affine VW Supercategory.” *Selecta Mathematica-New Series* 26:2 (March 2020): UNSP 20. <https://doi.org/10.1007/s00029-020-0541-4>.

Blyman, Kayla K. (Dr.), LTC Kristin M. Arney, MAJ Bryan E. Adams, and Tara A. Hudson. “Does Your Course Effectively Promote Creativity? Introducing the Mathematical Problem Solving Creativity Rubric.” *Journal of Humanistic Mathematics* 10:2 (2020): 157–193. <https://doi.org/10.5642/jhummath.202002.09>.

Bronson, Richard, and **Dr. Gabriel B. Costa.** *Matrix Methods: Applied Linear Algebra and Sabermetrics*. 4th edition. Philadelphia: Academic Press, 2020.

Coulson, Rebecca (Dr.). “Using an iPad in Teaching and Research: Some Tips, Techniques, and Lessons Learned.” Presented at the Mathematical Associate of America Metro New York Annual Meeting, Virtual, May 3, 2020.

Cummiskey, Kevin (LTC), MAJ Bryan Adams, MAJ James Pleuss, MAJ Dusty Turner (former D/Math), LTC Nicholas Clark, and COL Krista Watts. “Causal Inference in Introductory Statistics Courses.” *Journal of Statistics Education* 28:1 (February 2020): 2–8. <https://doi.org/10.1080/10691898.2020.1713936>.

Doyle, Aiden (’19), Anton Nelson ’19, Matthew Yuan ’19, Noah J. DeMoes ’18, Bryce D. Wilkins ’17, K. E. Grubaugh, and Dr. Theodore V. Hromadka. “Advances in the Greedy Optimization Algorithm for Nodes and Collocation Points Using the Method of Fundamental Solutions.” *Engineering Analysis with Boundary Elements* 111 (February 1, 2020): 148–153. <https://doi.org/10.1016/j.enganabound.2019.10.018>.

- Evans, Lee (LTC)**, and LTC G. Lee Robinson (Hunter Army Airfield). "Evaluating Our Evaluations: Recognizing and Countering Performance Evaluation Pitfalls." *Military Review* 100:1 (January 2020): 89–99.
- Grubaugh, K.E., **Bryce D. Wilkins '17**, and **Dr. Theodore V. Hromadka**. "Using Taylor Series to Assess Goodness of Groundwater Models." *Professional Geologist* 57:1 (March 2020): 50–61.
- Hannon, Bridget A., William D. Fairfield, **MAJ Bryan Adams**, Theodore Kyle, **COL Mason Crow**, and **Dr. Diana M. Thomas**. "Use and Abuse of Dietary Supplements in Persons with Diabetes." *Nutrition & Diabetes* 10:1 (April 2020): 14. <https://doi.org/10.1038/s41387-020-0117-6>.
- Hromadka, Theodore V. (Dr.)**, P. Rao, and Mohsen Battoei. "CFD Analysis of Flow in a Grated Inlet." *Open Journal of Civil Engineering* 10:1 (January 2020): 32–42. <https://doi.org/10.4236/ojce.2020.101004>.
- Hwaung, Phoenix, Moonseong Heo, Samantha Kennedy, Sangmo Hong, **Dr. Diana M. Thomas**, John Shepherd, and Steven B. Heymsfield. "Optimum Waist Circumference-Height Indices for Evaluating Adult Adiposity: An Analytic Review." *Obesity Reviews* 21:1 (January 2020): e12947. <https://doi.org/10.1111/obr.12947>.
- Im, Mee Seong (Dr.)**, and Emily Norton. "Irreducible Calibrated Representations of Periplectic Brauer Algebras and Hook Representations of the Symmetric Group." *Journal of Algebra* 560 (October 2020, published online June 2020): 442–485. <https://doi.org/10.1016/j.jalgebra.2020.05.035>.
- Joseph, Anny-Claude (Dr.)**, Montserrat Fuentes, and David C. Wheeler. "The Impact of Population Mobility on Estimates of Environmental Exposure Effects in a Case-Control Study." *Statistics in Medicine* 39:11 (May 20, 2020): 1610–1622. <https://doi.org/10.1002/sim.8501>.
- Kearby, John A. (MAJ)**, Ryan D. Winz, Thom J. Hodgson, Michael G. Kay, Russell E. King, and Brandon M. McConnell. "Modeling and Transportation Planning for US Noncombatant Evacuation Operations in South Korea." *Journal of Defense Analytics and Logistics* (published online February 7, 2020). <https://doi.org/10.1108/JDAL-05-2019-0010>.
- Lindquist, Joseph (COL)**, and LTC Charles Sulewski. "Microsoft Excel: The Universal Tool of Analysis." In *Handbook of Military and Defense Operations Research*, edited by Natalie M. Scala and James P. Howard, II, 19–54. Series in Operations Research. Boca Raton, Florida: CRC Press, 2020.
- Morse, Steven, Kevin Talty, Patrick Kuiper, **COL Michael Scioletti**, Steven B. Heymsfield, Richard L. Atkinson, and **Dr. Diana M. Thomas**. "Machine Learning Prediction of Combat Basic Training Injury from 3D Body Shape Images." *Plos One* 15:6 (June 30, 2020): e0235017. <https://doi.org/10.1371/journal.pone.0235017>.
- O'Keeffe, Majella, Stuart W. Flint, **COL Krista Watts**, and Francesco Rubino. "Knowledge Gaps and Weight Stigma Shape Attitudes toward Obesity." *Lancet Diabetes & Endocrinology* 8:5 (May 2020): 363–365. [https://doi.org/10.1016/S2213-8587\(20\)30073-5](https://doi.org/10.1016/S2213-8587(20)30073-5).
- Rao, P., and **Dr. Theodore V. Hromadka**. "Comparison of Numerical Model Results for Flow in a Constriction." *American Institute of Hydrology Bulletin*, Spring/Summer 2020, 5–8.
- Scala, Natalie M., and **COL Paul L. Goethals**. "A Model for and Inventory of Cybersecurity Values: Metrics and Best Practices." In *Handbook of Military and Defense Operations Research*, edited by Natalie M. Scala and James P. Howard, II. Series in Operations Research. Boca Raton, Florida: CRC Press, 2020.
- Thomas, Diana M. (Dr.)**, LTC Nicholas Clark, **MAJ Dusty Turner (former D/Math)**, Cynthia Siu, Tanya M. Halliday, Bridget A. Hannon, Chanaka N. Kahathuduwa, Cynthia M. Kroeger, Roger Zoh, and David B. Allison. "Best (but Oft-Forgotten) Practices: Identifying and Accounting for Regression to the Mean in Nutrition and Obesity Research." *The American Journal of Clinical Nutrition* 111:2 (February 2020): 256–265. <https://doi.org/10.1093/ajcn/nqz196>.
- Thomas, Diana M. (Dr.)**, **MAJ David Galbreath**, Maura Boucher, and **COL Krista Watts**. "Revisiting Leonardo Da Vinci's Vitruvian Man Using Contemporary Measurements." *Jama-Journal of the American Medical Association* 323:22 (June 2020): 2342–2343. <https://doi.org/10.1001/jama.2020.3501>.
- Titch, Marshall (MAJ)**. "Providing Academic Support Remotely via Technology at the Time of Need to Enhance and Encourage Learning in Mathematical Sciences." Presented at the Mathematical Associate of America Metro New York Annual Meeting, Virtual, May 3, 2020. <http://sections.maa.org/metrony/meetings/spring2020.pdf>.
- Wattenberg, Frank (Dr.)**, LTC Kristin Arney, and **MAJ Sean Griffin**. "Real World Application in the Space Program." Panelists at the 32nd International Conference on Technology in Collegiate Mathematics, March 2020 (Conference cancelled).
- Weld, Christopher (LTC)**, Andrew Loh, and Lawrence Leemis. "Plotting Likelihood-Ratio-Based Confidence Regions for Two-Parameter Univariate Probability Models." *The American Statistician* 74:2 (2020): 156–168. <https://doi.org/10.1080/00031305.2018.1564696>.

Department of Physics and Nuclear Engineering COL John Hartke, Department Head

Bowen, James (MAJ), CDT Monica Eckford '21, Yun Joon Han '20, Kazper Lewis, Dr. David Kashinski, CDT Eric Moraly '21, CDT Jennifer Reis '21, and CDT Clayton Shivers '21. "Inclusion in Physics: Making Physics More Approachable." Presented at the Eastern Sociological Society's 2020 Winter Meeting, Philadelphia, Pennsylvania, February 2020.

Hoak, Steven (MAJ), and LTC John P. Richards (CME). "A Study of the Effectiveness of Using Hands-on Active Learning Exercises in a Production Operations Management Course." Presented at the American Society for Engineering Education National Conference, Virtual, June 2020. <https://peer.asee.org/a-study-of-the-effectiveness-of-using-hands-on-active-learning-exercises-in-a-production-operations-management-course>.

Rahon, Jill (MAJ), and Areg Danagouljian. "Hydrogenous Content Identification in Heterogeneous Cargoes via Multiple Monoenergetic Neutron Radiography." *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* 949 (January 2020): 162860. <https://doi.org/10.1016/j.nima.2019.162860>.

Riccardi, Gabriele, Brian T. Kirby, Cristian Antonelli, and Michael Brodsky. "An Information-Theoretical Treatment of Nonlocal PMD Compensation." In *Advanced Optical Techniques for Quantum Information, Sensing, and Metrology*, edited by P. R. Hemmer, A. L. Migdall, and Z. U. Hasan, 11295:112950T. Bellingham: Spie-Int Soc Optical Engineering, 2020. <https://doi.org/10.1117/12.2546523>.

Department of Social Sciences COL Suzanne Nielsen, Department Head

Alexander, Audrey. "The Security Threat COVID-19 Poses to the Northern Syria Detention Camps Holding Islamic State Members." *CTC Sentinel* 13:6 (June 2020). <https://ctc.usma.edu/the-security-threat-covid-19-poses-to-the-northern-syria-detention-camps-holding-islamic-state-members/>

Alexander, Audrey. "'Help For Sisters': A Look at Crowdfunding Campaigns with Potential Links to Terrorist and Criminal Networks," *Global Network on Extremism & Technology*, June 11, 2020. <https://gnet-research.org/2020/06/11/help-for-sisters-a-look-at-crowdfunding-campaigns-with-potential-links-to-terrorist-and-criminal-networks/>

Jahanbani, Nakissa (Dr.). "Beyond Soleimani: Implications for Iran's Proxy Network in Iraq and Syria," *Combating Terrorism Center – Perspectives* (January 10, 2020). <https://ctc.usma.edu/beyond-soleimani-implications-irans-proxy-network-iraq-syria/>.

Jahanbani, Nakissa (Dr.). "Reviewing Iran's Proxies by Region: A Look Toward the Middle East, South Asia, and Africa," *CTC Sentinel* 13:5 (May 2020). <https://ctc.usma.edu/reviewing-irans-proxies-by-region-a-look-toward-the-middle-east-south-asia-and-africa/>.

Jadoon, Amira (Dr.), Dr. Nakissa Jahanbai, and Charmaine Willis. "Rising in the East: A Regional Overview of the Islamic State's Operations in Southeast Asia," *Combating Terrorism Center* (July 20, 2020). <https://ctc.usma.edu/rising-in-the-east-a-regional-overview-of-the-islamic-states-operations-in-southeast-asia/>.

Lupton, Danielle and Robinson, Michael A. (MAJ, PhD), "Grading Joe Biden on Foreign Policy", *Political Violence At A Glance*, March 17, 2020, <https://politicalviolenceataglance.org/2020/03/17/grading-joe-biden-on-foreign-policy/>.

Robinson, Michael A. (MAJ, PhD), and MAJ Zachary E. Griffiths (former D/SOSH). "Three things to know about military endorsements for the 2020 campaign." *The Washington Post*, August 28, 2020, <https://www.washingtonpost.com/politics/2020/08/28/three-things-know-about-military-endorsements-2020-campaign/>

Robinson, Michael A. (MAJ, PhD). Invited guest speaker, PS799: Advanced American Civil Military Relations, Duke University (Prof. Peter Feaver), April 7, 2020.

Van Der Heide, Liesbeth, and Audrey Alexander. Homecoming: Considerations for Rehabilitating and Reintegrating Islamic State-Affiliated Minors. *Combating Terrorism Center: West Point, NY*. June 2020. <https://ctc.usma.edu/homecoming-considerations-for-rehabilitating-and-reintegrating-islamic-state-affiliated-minors/>

Yon, Richard M. (Dr.). "An Unprecedented Vice Presidency: The Rise and Fall of Dick Cheney's Influence." Presented at the Southern Political Science Association Annual Conference 2020, San Juan, Puerto Rico, January 11, 2020.

Department of Systems Engineering COL Ricardo Morales, Department Head

- Burk, Roger (Dr.).** “Multiattribute Decision Modeling in Defense Applications.” In *Handbook of Military and Defense Operations Research*, edited by Natalie M. Scala and James P. Howard, II, 55–82. Series in Operations Research. Boca Raton, Florida: CRC Press, 2020.
- Burk, Roger (Dr.).** “Analytical Modeling of Stochastic Systems.” In *Handbook of Military and Defense Operations Research*, edited by Natalie M. Scala and James P. Howard, II, 155–170. Series in Operations Research. Boca Raton, Florida: CRC Press, 2020.
- Cave, Kara M., LTC Brandon S. **Thompson**, Kichol Lee, and John G. Casali. “Optimization of an Auditory Azimuth Localization Training Protocol for Service Members.” *International Journal of Audiology* 59:1 (2020): S3-S11. <https://doi.org/10.1080/14992027.2019.1691747>
- Dittmer, Foster (CDT, '20)**, Hays Greer, **CDT Hannah Homsy '20**, **CDT Conner Long '20**, **CDT Kathryn Seyer '20**, and **LTC Joshua Eaton**. “A Cut Above the Rest: Team Performance as a Function of Team Cohesion, Team Familiarity, Team Effectiveness, and Soldier Lethality,” Paper presented at the 2020 Systems and Information Engineering Design Symposium (SIEDS), Charlottesville, Virginia, April 2020. <https://ieeexplore.ieee.org/document/9106660>
- Dixon, Caneel (CDT, '20)**, and **Dr. Kenneth McDonald**. “A Case Study of Management: Bosnian Rail-Trail Bridge Design”, General Donald R. Keith Annual Capstone Conference Proceedings, Society for Industrial and Systems Engineering, April 30, 2020.
- Enos, James R. (LTC)**, and Roshanak R. Nilchiani. “Understanding the Importance of Expanding the Definition of Interoperability through Social Network Analysis.” *Systems Engineering* 23:2 (March 2020): 139–153. <https://doi.org/10.1002/sys.21500>.
- Enos, James R. (LTC)**, **John V. Farr**, and **Roshanak Nilchiani**, “Identifying how non-functional attributes affect a system’s lifecycle.” *Engineering Management Journal* (published online 30 June 2020). <https://doi.org/10.1080/10429247.2020.1772948>
- Enos, James R. (LTC)**. “Developing a theoretical real system age.” *IEEE Systems Journal* (published online 27 April 2020). <https://doi.org/10.1109/JSYST.2020.2983852>
- Lesinski, Eugene (Dr.)**, and Steven Corns. A Pareto Based Multi-Objective Evolutionary Algorithm Approach to Military Installation Rail Infrastructure Investment. *Industrial and Systems Engineering Review* 7:2 (2019): 64-75. <https://doi.org/10.37266/ISER.2019v7i2.pp64-75>

McDonald, Kenneth (Dr.), **CDT Travis Lee '20**, **CDT Jason Green '20**, **CDT David Kerstens '20**, and **CDT David Pinter '20**. “Deep Water Ports Investments.” General Donald R. Keith Annual Capstone Conference Proceedings, Society for Industrial and Systems Engineering, April 30, 2020.

Mittal, Vickram (Dr.), **Dr. Michael Boyce (D/BS&L)**, **Dr. Aryn Pyke (ACI)**, **CDT Preston Fuller '20**, **CDT Alejandro Tombrink '20**, **CDT John Descisciolo '20**, and **CDT Leo Ciullo '20**. “The Use of Simulation to Support Tactical Augmented Reality Requirement Development.” Paper presented at the 2020 Simulation Innovation Workshop, Orlando, Florida, February 10-14, 2020. https://www.sisostds.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=51387&PortalId=0&TabId=105.

Schreiner, James H. (LTC), Deborah L. Thurston, and Ann Willemsen-Dunlap. “Readmission Risk Assessment Technologies and the Anchoring and Adjustment Heuristic.” *Journal of Medical Systems* 44:3 (February 2020): 61. <https://doi.org/10.1007/s10916-020-1522-z>.

Dean’s Staff

- Arney, Chris (Dr., former D/Math)**, **COL Michael Yankovich**, and **COL Krista Watts (D/Math)**. “Modernizing Military Operations Research Education.” In *Handbook of Military and Defense Operations Research*, edited by Natalie M. Scala and James P. Howard, II. Series in Operations Research. Boca Raton, Florida: CRC Press, 2020.
- Finn, Stephen (Dr., FLICR)**. “Academic Freedom and the Choice of Teaching Methods.” *Teaching in Higher Education* 25:1 (2020): 116–123. <https://doi.org/10.1080/13562517.2019.1672149>.
- Mosher, Laura (USMA Library)**. “Engaging STEM Faculty with Archives & Special Collections Materials.” Presented at the American Society for Engineering Education National Conference, Virtual, June 21, 2020.
- Novoselich, Brian J. (LTC, G5)**, and **LTC Russell P. Lemler (D/BS&L)**. “Military Leadership for Engineers: A Comprehensive Look at Leadership from Army Doctrine to Engineering Coursework.” Presented at the American Society for Engineering Education National Conference, Virtual, June 21, 2020. <https://peer.asee.org/military-leadership-for-engineers-a-comprehensive-look-at-leadership-from-army-doctrine-to-engineering-coursework>.

Register-Mihalik, Johna, Melissa Kay, Zachary Kerr, **Karen Peck (FLICR)**, Megan Houston, Paula Gildner, Steven Svoboda, Stephen Marshall, and Kenneth Cameron. "Influence of Concussion Education Exposure on Concussion-Related Educational Targets and Self-Reported Concussion Disclosure among First-Year Service Academy Cadets." *Military Medicine* 185:3-4 (March 2020): e403-e409. <https://doi.org/10.1093/milmed/usz414>.

Roach, Sean, Megan Houston, **Karen Peck (FLICR)**, Steven Svoboda, Tim Kelly, Steven Malvasi, Gerald McGinty, Darren Campbell, and Kenneth Cameron. "The Influence of Self-Reported Tobacco Use on Baseline Concussion Assessments." *Military Medicine* 185:3-4 (March 2020): e431-37. <https://doi.org/10.1093/milmed/usz352>.

Schumacher, Jen (CEP), and Bridget Ann Frugoli Melton. "Survival Swimming Performance Enhancement Workshop – Mental Skills and Virtual Reality to Manage Acrophobia." *Tactical Strength and Conditioning Report* 54:3 (January 2020): 14-17.

Swain, Jordon (LTC, CJO), MAJ Andrew Bond (G5), and LTC Daniel Smith (D/BS&L). "Looking Back in Order to Move Ahead as a Leader: A Personal Journey Line Narrative Exercise." *Journal of Leadership Education* 19:1 (2020): A4. <https://doi.org/10.12806/V19/I1/A4>.

Swain, Jordon (LTC, CJO), and Elise Murray. "Assessing Leader Humility." *Journal of College and Character* 21:3 (2020): 204-211. <https://doi.org/0.1080/2194587X.2020.1781657>.

Department of Military Instruction COL Alan Boyer, Department Head

Livieratos, Cole (MAJ), Mark Mitchell, and **MAJ Zachary Griffiths (former D/SOSH)**. "America's Special Operators Will Be Adrift without Better Civilian Oversight." *War on the Rocks*, February 18, 2020. <https://warontherocks.com/2020/02/americas-special-operators-will-be-adrift-without-better-civilian-oversight/>.

Wright, Jeffrey (LTC). "The Storm on Our Shores: One Island, Two Soldiers, and the Forgotten Battle of World War II." *Journal of Military History* 84:1 (January 2020): 326-327.

Department of Physical Instruction COL Nicholas Gist, Master of the Sword

COL Kevin Bigelman (former DPE), Dr. Jennifer Hewit, and Dr. Daniel Jaffe. "Effects of Testing Surface on Performance Time in a Sled Drag Shuttle Event." Presented at the Annual meeting of the American College of Sports Medicine, San Francisco, California, May 2020.

Dr. Jeffrey D. Coelho, and Guadalupe Contreras. "STEAMing Ahead with an Obstacle Course Design Challenge." *Strategies* 33:2 (March 2020): 13-17. <https://doi.org/10.1080/08924562.2019.1705216>.

William R. Conkright, **LTC Nicholas D. Barringer**, Paula B. Lescure, Kimberly A. Feeney, Martha A. Smith, and Bradley C. Nindl. "Differential Recovery Rates of Fitness Following U.S. Army Ranger Training." *Journal of Science and Medicine in Sport* 23:5 (May 2020): 529-534. <https://doi.org/10.1016/j.jsams.2019.12.010>.

Dr. Todd Crowder, Dr. Daniel Jaffe, and Dr. Jennifer Hewit. "United States Military Academy; Army Combat Fitness Test & The APFT; The New Frontier." *Medicine and Science in Sports and Exercise* 52:7S (July 2020): 303-304. doi: 10.1249/01.mss.0000677848.32884.5d. Along with poster presentation at the Virtual American College of Sports Medicine National Conference.

Dr. Lynn Fielitz, Dr. Drew Van Dam, Dr. Jason Suby, and MAJ John Borman. "Use of Teaching Assessment and Improvement Program in Physical Education." Presented at the 2020 SHAPE American National Convention Research Session Gallery, June 2020.

Dr. Jesse L. Germain, and M. Turner. "Combat Warriors: Fighting Sexual Harassment and Sexual Assault at Our Nation's Military Academy." Presented at the National Conference of the National Association of Kinesiology in Higher Education, Palm Springs, California, January 2020.

Dr. Jennifer Hewit, Dr. Daniel Jaffe, and Dr. Todd Crowder. "Optimizing Pull-up Performance through Submaximal Performance Prediction Training." Presented at the International Congress on Soldiers' Physical Performance, Quebec, Canada, February 2020.

MAJ Andrew T. Inman, MAJ Sarah Ferreira, CPT Andrew F. Plucker (D/Math), COL Nicholas H. Gist, and Dr. Diana M. Thomas (D/Math). “Determinants of Performance and Comparison of Army Physical Fitness Test and Combat Fitness Test Scores.” *Medicine and Science in Sports and Exercise* 52:7S (July 2020): 372-373. doi: 10.1249/01.mss.0000677848.32884.5d.

Dr. Daniel A. Jaffe. “Supplements? Yes, Whey.” Invited Speaker at the Holistic Health and Fitness Integration Lecture Series, West Point, New York, February 2020.

Dr. Daniel A. Jaffe, and LTC Nicholas Barringer. “Optimized Nutrition for the Cadet.” Invited Speaker presented at the Evening Lecture Series hosted by Brigade Tactical Department, West Point, New York, December 2019.

Dr. Daniel A. Jaffe, Dr. Jennifer Hewit, Karl Zang, Alexander Bedard (former DPE), MAJ Anthony Tankiewicz (former DPE), and Dr. Todd Crowder. “The Role of The Coach in Determining Success at A National Powerlifting Competition.” *Medicine and Science in Sports and Exercise* 52:7S (July 2020): 1043.

Army Cyber Institute **COL Jeffrey M. Erickson, Director**

Alhajjar, Elie (Dr.), and MAJ Steve Morse (former D/Math). “A Layered Network Collapse Method in Cyber Terrorism.” Paper presented at the 15th International Conference on Cyber Warfare and Security (ICCWS 2020), Norfolk, Virginia, March 2020. <https://doi.org/10.34190/MLG.19.003>.

Bastian, Nathaniel D. (MAJ), Brian J. Lunday (AFIT), MAJ Christopher B. Fisher (former D/Math), and COL Andrew O. Hall. “Models and Methods for Workforce Planning under Uncertainty: Optimizing U.S. Army Cyber Branch Readiness and Manning.” *Omega* 92 (April 2020): 102171. <https://doi.org/10.1016/j.omega.2019.102171>.

Bastian, Nathaniel D. (MAJ), Brian J. Lunday, MAJ Christopher B. Fisher (former D/Math), and COL Andrew O. Hall. “Models and Methods for Workforce Planning under Uncertainty: Optimizing US Army Cyber Branch Readiness and Manning.” *Omega-International Journal of Management Science* 92 (April 2020): UNSP 102171. <https://doi.org/10.1016/j.omega.2019.102171>.

Beshaj, Lubjana (Dr.), and COL Andrew O. Hall. “Recent Developments in Cryptography.” Paper published for the proceedings of the 12th International Conference on Cyber Conflict, 2020. https://ccdcoe.org/uploads/2020/05/CyCon_2020_19_Beshaj_Hall.pdf.

Borghard, Erica D. (Dr.). “Cyber Command Needs New Acquisition Authorities.” *Lawfare Blog*, May 12, 2020.

Borghard, Erica D. (Dr.). “Preserving and Employing the Military Instrument of Power in Cyberspace.” Panelist for the Cyberspace Solarium Commission Roundtable, May 2020.

Borghard, Erica D. (Dr.), and Madison Creery. “Persistent Vulnerabilities: Strengthening Cybersecurity Requirements for the Department of Defense.” Council on Foreign Relations, June 17, 2020. <https://www.cfr.org/blog/persistent-vulnerabilities-strengthening-cybersecurity-requirements-department-defense>.

Dawson, Jessica (MAJ). “Microtargeting as Information War.” *Invisible Force: Information Warfare and the Future of Conflict* (2020): 16–17. https://threatcasting.asu.edu/sites/default/files/2020-06/Invisible_Force_%5BWEB%5D_0.pdf.

Dobrowolski, Daniel, **Dr. David Gioe**, and Alicia Wanless. “How Threat Actors Are Manipulating the British Information Environment.” *RUSI Journal* 165:3 (June 2020): 22–38. <https://doi.org/10.1080/03071847.2020.1772674>.

Gioe, David V. (Dr.). “The Afghanistan Papers and the Perils of Historical Analogy.” *Lawfare*, January 21, 2020. <https://www.lawfareblog.com/afghanistan-papers-and-perils-historical-analogy>.

Gioe, David V. (Dr.), Michael S. Goodman, and Tim Stevens. “Intelligence in the Cyber Era: Evolution or Revolution?” *Political Science Quarterly* 135:2 (June 2020): 191–224. <https://doi.org/10.1002/polq.13031>.

Gioe, David V. (Dr.), Joseph M. Hatfield, and Mark Stout. “Can United States Intelligence Community Analysts Telework?” *Intelligence and National Security* 35:6 (May 25, 2020): 885–901.

Hall, Andrew (COL), and Ken Kraetzer. *Talking with Veterans*. Sons of the American Legion Radio, May 2020. <https://www.youtube.com/watch?v=idzs6aHCWOY>.

Hamilton, Stephen (COL), and CW4 Judy Esquibel. “High Frequency Communications Features Highs and Lows.” *SIGNAL Magazine*, January 27, 2020. <https://www.afcea.org/content/high-frequency-communications-features-highs-and-lows>.

Kallberg, Jan (Dr.). “For Ethical Artificial Intelligence, Security Is Pivotal.” Fifth Domain, May 20, 2020. <https://www.fifthdomain.com/opinion/2020/05/19/for-ethical-artificial-intelligence-security-is-pivotal/>.

Kallberg, Jan (Dr.), and COL Stephen Hamilton. “What COVID-19 Can Teach Us about Cyber Resilience.” Fifth Domain, March 23, 2020. <https://www.fifthdomain.com/opinion/2020/03/23/what-covid-19-can-teach-us-about-cyber-resilience/>.

Kallberg, Jan (Dr.), COL Stephen S. Hamilton, and MAJ Matthew G. Sherburne. “Electronic Warfare in the Suwalki Gap: Facing the Russian ‘Accompli Attack’.” *National Defense University Press* (2020). <https://ndupress.ndu.edu/Media/News/News-Article-View/Article/2106498/electronic-warfare-in-the-suwalki-gap-facing-the-russian-accomplish-attack/>

Kallberg, Jan (Dr.). “Why Iran would avoid a major cyberwar.” Fifth domain, January 17, 2020. <https://www.fifthdomain.com/thought-leadership/2020/01/17/why-iran-should-avoid-a-major-cyber-war/>

Klipstein, Michael, MAJ Austin Minter, and CW3 Jeremiah Pittman. “Understanding the Information Environment to Win the Next Conflict Without Firing a Shot.” *IEEE Security & Privacy* 18:1 (February 2020): 39–45. <https://doi.org/10.1109/MSEC.2019.2935064>.

Milner, Alyssa (CDT, ‘20), CDT Dae Han Seong ’20, Ralph W. Brewer, Anthony L. Baker, Andrea Krausman, David Chhan, Dr. Robert Thomson, Dr. Ericka Rovira (D/BSL), and Kristin E. Schaefer. “Identifying New Team Trust and Team Cohesion Metrics that Support Future Human-Autonomy Teams.” In *AHFE 2020: Advances in Simulation and Digital Human Modeling*, edited by Daniel N. Cassenti, Sofia Scataglini, Sudhakar L. Rajulu, and Julia L. Wright. Part of the Advances in Intelligent Systems and Computing book series, vol 1206. Cham: Springer. https://doi.org/10.1007/978-3-030-51064-0_12. Winner of Best Paper Award.

Mitsopoulos, Konstantinos, Sterling Somers, Christian Lebiere, and Dr. Robert Thomson. “Cognitive Architectures for Introspecting Deep Reinforcement Learning Agents.” Paper presented at the International Conference on Learning Representations (ICLR) 2020 Workshop on “Bridging AI and Cognitive Science.”

Pittman, Jeremiah (CW3), and Dr. Jan Kallberg. “Warrant Officers Should Be the next Cyber Operators.” Fifth Domain, April 20, 2020. <https://www.fifthdomain.com/opinion/2020/04/20/warrant-officers-should-be-the-next-cyber-operators/>.

Pyke, Aryn (Dr.), Jordan Richard Schoenherr, and Dr. Robert Thomson. “A Professional Ethics Curriculum for Cyber Operations.” In *IEEE International Conference on Software Engineering Education & Training (CSEE&T 2020)*.

Robbins, Matthew J., Phillip R. Jenkins, MAJ Nathaniel D. Bastian, and Brian J. Lunday. “Approximate Dynamic Programming for the Aeromedical Evacuation Dispatching Problem: Value Function Approximation Utilizing Multiple Level Aggregation.” *Omega-International Journal of Management Science* 91 (March 2020): UNSP 102020. <https://doi.org/10.1016/j.omega.2018.12.009>.

Rockman, Mason (CDT, ‘20), CDT Keenan O’Shea ’20, Dr. Robert Thomson, Michael Boyce, Nathan Vey, J. Allen Geddes, Mark Rusboldt, LTC Chad Bates (USA Cyber Command), and CW3 Eric Colon (USA Cyber Command). “Assessing Cognitive Load and Usability for CEMA Training Using COBWebS.” Paper presented at the 2020 Simulation Innovation Workshop, Orlando, Florida, February 10-14, 2020. https://www.sisostds.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?Command=Core_Download&EntryId=51315&PortalId=0&TabId=105.

Russell, Travis B. (Dr.). “Two-Outcome Synchronous Correlation Sets and Connes’ Embedding Problem.” *Quantum Information & Computation* 20:5–6 (May 2020): 361–374.

Russell, Travis B. (Dr.). “Geometry of the Set of Synchronous Quantum Correlations.” *Journal of Mathematical Physics* 61:5 (May 2020): 052201. <https://doi.org/10.1063/1.5115010>.

Schoenherr, Jordan Richard, and Tyler J. Burleigh. “Dissociating Affective and Cognitive Dimensions of Uncertainty by Altering Regulatory Focus.” *Acta Psychologica* 205 (April 2020): 103017. <https://doi.org/10.1016/j.actpsy.2020.103017>.

Schoenherr, Jordan Richard, and Dr. Robert Thomson. “Insider Threat Detection: A Solution in Search of a Problem.” In *IEEE Cyber Science 2020*.

Schoenherr, Jordan Richard, and Dr. Robert Thomson. “Beyond the Prisoner’s Dilemma: The Social Dilemmas of Cybersecurity.” In *IEEE Cyber Science 2020*.

Shakarian, Paulo, Eric Nunes, Casey Buto, Christian Lebiere, Dr. Robert Thomson, and Stefano Bennati. “Systems and Methods for Data Driven Malware Task Identification.” In *Open Source Intelligence and Security Informatics*, 165-194, Springer Publishing, 2020.

Somers, Sterling., Konstantinos Mitsopoulos, Christian Lebiere, and Dr. Robert Thomson. “CogXAI: A Generalized Cognitive Approach for Explainable Artificial Intelligence.” In *Proceedings of the International Conference on Cognitive Modeling* (2020).

Thomson, Robert (Dr.). “The Perils of Black-Box Intelligence: Why Explainable Artificial Intelligence Should be Mandatory”, *INFORMS Analytics Conference*, April 28, 2020 (Conference cancelled).

Thomson, Robert (Dr.), and Jordan Richard Schoenherr. “Knowledge-to-Information Translation Training (KITT): An Adaptive Approach to Explainable Artificial Intelligence.” *In Human Computer Interaction International 2020 Conference - Special Section on Interaction Design for Adaptive Instructional Systems* (2020).

Visger, Mark LTC. "The Canary in the Military Justice Mineshaft: A Review of Recent Sexual Assault Courts-Martial Tainted by Unlawful Command Influence." *Mitchell Hamline Law Journal of Public Policy and Practice* 41:1 (2020): 3.
<https://open.mitchellhamline.edu/policypractice/vol41/iss1/3>

Call for Published Scholarship

The Office of the Dean and the USMA Library continue to seek the submission of scholarship published by cadets, faculty, and staff in order to better promote and celebrate the contribution by USMA personnel to scholarly communication across all disciplines.

Work should be original scholarship, and can include monographs, journal articles, bibliography, conference presentations and papers, research posters, literature, art, poetry, film, and music.

The period of interest for the next Dean’s Celebration of West Point Authors is July 1– December 31, 2020. Please submit your work to USMA Digital Commons, or your library liaison listed below:

Behavioral Sciences and Leadership	Jennifer Chess
Chemistry and Life Science	Manja Yirka
Civil and Mechanical Engineering	Laura Mosher
Electrical Engineering and Computer Science	Thomas Lynch
English and Philosophy	Susan Lintelmann
Foreign Languages	Elaine McConnell
Geography and Environmental Engineering	Alicia Mauldin-Ware
History	Mary Ahenakew & Mark Danley
Law	Suzanne Christoff
Mathematical Sciences	Heather Seminelli
Physics and Nuclear Engineering	Celeste Evans
Social Sciences	Michael Arden
Systems Engineering	Daniel Pritchard
Military Instruction	Daniel Pritchard
Physical Education	Daniel Pritchard & Jessica Patterson
Center for Enhanced Performance, Mounger Writing Center, and USMA Prep School	Stacy Bloomingdale & Lauren Dodd
Dean’s Staff	Jessica Patterson
Army Cyber Institute	Thomas Lynch