MONDAY APRIL 25

| 1:00 – 5:00 Exhibitor Move-in – Ballroom Inre | 1:00 – 5:00 | Exhibitor Move-In – Ballroon | n Three |
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|---|-------------|------------------------------|---------|

3:00 – 5:00 **Registration** – Main Lobby – Near Ballroom Three

TUESDAY APRIL 26

6:30 – 8:00 **Continental Breakfast** – Ballroom Three

8:00 – 8:05 MODSIM World 2016 Welcome – Ballroom Two

Mr. Michael Spitz, Senior Systems Analyst, Training and Simulation, SAIC, MODSIM World 2016 Conference Chair

8:05 – 8:10 **Opening Remarks** – Ballroom Two

Senator Mark Warner, Commonwealth of Virginia (Video Presentation)

8:10 – 9:40 **Special Event** – Ballroom Two

"The Simulation Century" - Force of the Future

This is our fourth annual session to address the growing issue of managing the human/ machine interface as we hurtle towards the Singularity. We will continue our discussion of how to achieve fluency with smarter simulations, achieving the right blend of man and machine to optimize outcomes. The Simulation Century Panel presentations will focus on the growing importance of simulation in a wide variety of fields from healthcare and education to government and military. These brief, high impact presentations will envision how 21st century simulation will shape humanity's future.

Moderator: Mr. Richard Boyd, CEO, SZL.IT

Panel Members:

- Mr. Richard Boyd, CEO, SZL.IT, "The Force of the Future: Man vs. Machine"
- Mr. Kevin Clark, President, Content Evolution, "Choiceflow Matching People with Automated Work Opportunities"
- Mr. Miles Palmer, Co-Founder, 8Rivers Capital, "The Transparent Society and the Force of the Future"
- Mr. David Pickering, Vice President, USFalcon, "Simulation, Security and the Force of the Future"
- Dr. Sae Schatz, Director, Advanced Distributed Learning (ADL) Initiative, "Lifelong Learning in the Force of the Future"
- Mr. Bryan Setser, Chief Design Officer, Matchbook Learning, "Creating a Culture of Innovation and Practice for MODSIM in K-26 Education"

9:40 – 9:45 Introduction of Keynote Speaker – Ballroom Two

RADM James Robb, USN (Ret), President, National Training and Simulation Association (NTSA)

9:45 – 10:10 Keynote Speaker Address – Ballroom Two

The Honorable J. Randy Forbes, US Congress, 4th District of Virginia

10:10 – 10:15 Scholarship Awards – Ballroom Two

Mr. Jerold N. Register Mr. Dominic A. Scerbo

10:15 - 10:45 Break and Exhibit Time - Ballroom Three

10:15 – 7:00 Exhibit Displays, Challenge Competition, and Demonstrations – Ballroom Three

10:45 – 12:00 Special Event – Ballroom Two

Senior Leader Panel: Emerging Gaps and Innovations

Senior Leaders within both Government and Industry will share the role that M&S has in their organizations, their perspective on the issues and impact of M&S, and discuss gaps that M&S can fill in the future. Following the opportunity to hear their insights, attendees will be able to ask questions and gain a better understanding of the issues facing these leaders; issues that M&S technology transformation can potentially address.

Moderator: RADM James Robb, USN (Ret), President, NTSA

Panel Members:

- Dr. Pamela Andreatta, Immediate Past President, Society for Simulation Healthcare
- Mr. Frank DiGiovanni, Director, Force Training, Office of the Assistant Secretary of Defense (Readiness)
- Ms. Renee Forney, Executive Director, DHS Cyberskills Management Support Initiative
- Dr. Kurt Kendall, Vice President Consumer Data and Analytics, Under Armour

| TUESDAY APRIL 26 (CONTINUED) | | | |
|------------------------------|---|--|--|
| 12:00 – 1:30 | Lunch and Exhibit Time – Ballroom Three | | |
| 1:30 - 3:00 | Paper Session I | | |
| 1:30 – 3:00 | DATA ANALYT | TICS AND DECISION MAKING TRACK - Room 2A | |
| | 1:30 – 2:00 | Mahalanobis Taguchi System (MTS) for Pattern Recognition, Prediction and Optimization | |
| | | Mr. Steven Holcomb, Reed Integration, Inc. | |
| | 2:00 - 2:30 | Representation, Selection, and Scheduling of Training in a Lifelong Learning Context | |
| | | Dr. Alan Carlin, Aptima, Inc.; Dr. Danielle Ward, Aptima, Inc. and Dr. Jared Freeman, Aptima, Inc. | |
| | 2:30 - 3:00 | Utilization Tracking Needed for Analytics | |
| | | Ms. Julie Kent, Raytheon Intelligence, Information and Services | |
| 1:30 – 3:00 | SCIENCE AND | ENGINEERING TRACK - Room 2CD | |
| | 1:30 – 2:00 | Supporting Ship Overhaul with Customized Discrete Event Simulation | |
| | | Mr. William Shaffer, Newport News Shipbuilding andMs. Karina Lilliston, Newport News Shipbuilding | |
| | 2:00 - 2:30 | Modeling and Simulation Tools for Heavy Lift Airships | |
| | | Mr. Ron Hochstetler, SAIC; Mr. Girish Chachad, SAIC; Mr. Gordon Hardy, SAIC, Mr. Matthew Blanken, SAIC and Dr. John Melton, NASA Ames Research Center | |
| | 2:30 - 3:00 | Framework for ADAPT Simulated Testing (FAST) | |
| | | Mr. Ryan Condotta, Old Dominion University; Mr. Erik Jensen, Old Dominion University; Mr. Richard Garren, Old Dominion University; Mr. Tyler Alston, Old Dominion University; Mr. Michael Bonds, Old Dominion University; Mr. Reginald Hayes, Old Dominion University; Mr. Jerold Register, Old Dominion University; Mr. Darren Rose, Old Dominion University; Mr. Paul Smith, Old Dominion University; Mr. Spencer Smith, Old Dominion University; Mr. Andrew Sylvia, Old Dominion University and Mr. Brandon Waddell, Old Dominion University | |
| 1:30 – 3:00 | TRAINING AN | D EDUCATION TRACK - Room 2B | |
| | 1:30 – 2:00 | A Case Study on Developing Simulation-Based Training for Client Assessment Interviewing in Social Work | |
| | | Mr. Ryan Hill, University of Central Florida; Ms. Alexia Mandeville, E2i Creative Studio and Dr. Brian Goldiez, Institute for Simulation and Training | |
| | 2:00 - 2:30 | Next Generation Venipuncture and Phlebotomy High Fidelity Training System | |
| | | Dr. Teresita Sotomayor, US Army Research Lab; Ms. Angela Alban, SIMETRI, Inc. and Mr. Juan Vela, SIMETRI, Inc. | |
| | 2:30 – 3:00 | Development and Evaluation of a High Fidelity Anatomical Model for the Humeral Head Intraosseous (IO) Procedure | |
| | | Dr. Teresita Sotomayor, US Army Research Lab; Ms. Angela Alban, SIMETRI, Inc. and Mr. Edward Stadler, SIMETRI, Inc. | |
| 1:30 - 3:00 | VISUALIZATIO | ON AND GAMIFICATION TRACK - Room 3AB | |
| | 1:30 - 2:00 | Landstown High School Governor's STEM Academy Modeling and Simulation Pathway | |
| | | Dr. James Barger, Landstown High School; Ms. Jennifer Mattice, Landstown High School and Ms. Lisette Diehl, Landstown High School | |
| | 2:00 – 2:30 | The Battle of Isandlwana. A Historical 'What If' Analysis using Quantitative, Computer Based Simulation. | |
| | | Mr. Clinton Reilly, Computer Strategies Pty Ltd | |
| | 2:30 - 3:00 | Targeted Fidelity: Cutting Cost by Increasing Focus | |
| | | Mr. Trey Morabito, Adayana Government Group | |

| TUESDAY APRIL 26 | 6 (CONTINUED) | | |
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| 3:00 - 3:30 | Break and Exhi | bit Time – Ballroom Three | |
| 3:30 - 5:00 | Paper Session I | | |
| 3:30 - 5:00 | DATA ANALYTICS AND DECISION MAKING TRACK - Room 2A | | |
| | 3:30 - 4:00 | Improve Test Results by Piloting: How to Simulate Field Data in the Lab | |
| | | Mr. Jay Gendron, Booz Allen Hamilton; Ms. Tammy Crane, SRC andMr. Gerrod Seifert, Booz Allen Hamilton | |
| | 4:00 - 4:30 | Optimizing Model Combinations | |
| | | Dr. Jacob Barhak, Professor Aaron Garrett, Jacksonville State University andMr. W. Andrew Pruett, University of Mississippi Medical Center | |
| | 4:30 - 5:00 | Data Farming and Quantitative Analysis of Cyber Defense Technologies and Measures | |
| | | Dr. Gary Horne, Blue Canopy Group and Dr. Santiago Balestrini, Georgia Tech Research Institute | |
| 3:30 - 5:00 | SCIENCE AND | ENGINEERING TRACK - Room 2CD | |
| | 3:30 - 4:00 | Electrolyte Concentration Dependence of Ion Transport through Nano-channels | |
| | | Mr. Murat Bakirci, Old Dominion University and Mr. Yunus Erkaya, Old Dominion University | |
| | 4:00 – 4:30 | A Human-Centered Approach to Modeling Security Information and its Impact on Cargo Operations for Guidance in the Design of Interventions in the Information Sharing Environment | |
| | | Ms. Melissa Braxton, University of Washington; Ms. Maura Rowell, University of Washington;Dr. Keith Butler, University of Washington and Dr. Mark Haselkorn, University of Washington | |
| | 4:30 - 5:00 | TraceLogic™: Rule Extraction and Visualization from Data Traces | |
| | | Dr. Paul Mario Koola, Knowledge Based Systems Inc., Dr. Satheesh Ramachandran, Knowledge Based Systems Inc. and Mr. Kalyan Vadakkeveedu, Knowledge Based Systems Inc. | |
| 3:30 - 5:00 | TRAINING AN | ID EDUCATION TRACK - Room 2B | |
| | 3:30 - 4:00 | Using an Analytical Approach to Understand Integrated Training Environment Utility | |
| | | LTC Glenn Hodges, USA, US Army's Capabilities Integration Center | |
| | 4:00 - 4:30 | Bold Quest 15.2: A Case Study in Establishing Multinational Simulator Interoperability | |
| | | Mr. Kevin Seavey, Alion Science and Technology; Ms. Emilie Reitz, Alion Science and Technology; Major William Gorham, Canadian Army Simulation Centre; Mr. Dan Whelan, Calian Technology, Ltd; Capitaine Pierre "Leo" Lagrange, Nancy-Ochey Airbase, France and Mr. Hervé Biran, Airbus Defense and Space, France | |
| | 4:30 - 5:00 | Evaluating Adaptive Training for Teams Using the Experience API | |
| | | Mr. Rodney Long, US Army Research Lab; Ms. Ashley Medford, Problem Solutions; Mr. Gabriel Diaz, Problem Solutions; Ms. Jennifer Murphy, Quantum Improvements Consulting; Mr. Chad Ruprecht, Quantum Improvements Consulting; Ms. Tara Kilcullen, Raydon Corporation and Mr. Robert Harvey Jr., Raydon Corporation | |
| 3:30 - 5:00 | VISUALIZATIO | ON AND GAMIFICATION TRACK - Room 3AB | |
| | 3:30 – 4:30 | Track Keynote Speaker: <i>Dr. Andrew J. Collins</i> , Old Dominion University Simulation Visualization Issues for Users and Customers | |
| | 4:30 - 5:00 | Visualizing Big Data: How To Tell a Better Story | |
| | | Dr. Candace Eshelman-Haynes, HQ SACT; Mr. Jay Gendron, Booz Allen Hamilton;Ms. Sanci Hall, VolleySim, LLC and Mr. Brian Hall, VolleySim, LLC | |

TUESDAY APRIL 26 (CONTINUED)

5:00 - 6:30 Attendee Networking Event - Ballroom Three

WEDNESDAY APRIL 27

| 7:00 – 5:30 | Registration – Main Lobby – Near Ballroom Three |
|-------------|--|
| 7:00 – 8:00 | Continental Breakfast – Ballroom Three |
| 8:00 - 8:10 | Day Two Opening Remarks – Ballroom Two Mr. Matt Spruill, Chairman, Virginia Modeling and Simulation Partnership (VMSP) |
| 8:10 - 8:15 | Introduction of Keynote Speaker – Ballroom Two Mr. Michael Spitz, Senior Systems Analyst, Training and Simulation, SAIC, MODSIM World 2016 Conference Chair |
| 8:15 – 8:45 | Keynote Speaker – Ballroom Two Mr. Douglas Wagoner, Sector President, SAIC Will the U.S. Lead in Modeling and Simulation to Drive Global Economic Growth? |

8:45 – 10:00 Special Event – Ballroom Two

Entrepreneur Competition Finals - Sponsored by VMASC Industry Association

The Entrepreneur Competition is a unique event to showcase innovative start-up ideas in modeling and simulation. Individuals, small teams, and small businesses compete for a cash prize awarded to the best new modeling and simulation-based product or service. Finalists from the preliminary competition will present their idea in front of an esteemed panel of judges and the live audience. All conference attendees are encouraged to view this event. During this final round, the audience will have an opportunity to vote for their favorite idea by using electronic voting devices provided by Turning Technologies, LLC. The winner will be announced on Thursday April 28.

Moderator: Mr. Jesse Barboza, Senior Business System Analyst, SimIS Inc.

| 10:00 - 10:30 | Break and Exhibit Time – Ballroom Three |
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| 10:00 – 4:00 | Exhibit Displays, Challenge Competition, and Demonstrations – Ballroom Three |
| 10:30 – 12:00 | Paper Session III |
| 10:30 – 12:00 | DATA ANALYTICS AND DECISION MAKING TRACK - Room 2A |

| 10:30 – 11:00 | Modeling and Simulation of an Integrated Gate Turnaround Management Concept |
|---------------|---|
| | Mr. William Chung, SAIC at NASA Ames Research Center; Mr. Doug Ahlquist, Metis at NASA Ames Research Center; Ms. Carla Ingram, NASA Ames Research Center; Mr. Girish Chachad, SAIC at NASA Ames Research Center and Mr. Spencer Monheim, SAIC at NASA Ames Research Center |
| 11:00 – 11:30 | A Hybrid Metaheuristics Algorithm for Multi-objective Runway Scheduling Problem in Simulation-based Optimization |
| | Dr. Bulent Soykan , Old Dominion University and Professor Ghaith Rabadi , Old Dominion University |
| 11:30 - 12:00 | Data Analytics: Techniques and Applications to Transform Army Learning |
| | Mr. Dadney Lang LIS Army Decemb Lab. Mr. Michael Smith LCE International |

Mr. Rodney Long, US Army Research Lab; Mr. Michael Smith, ICF International; Dr. Sue Dass, ICF International; Mr. Clarence Dillon, ICF International and Ms. Kate Hill. ICF International

WEDNESDAY APRIL 27 (CONTINUED)

10:30 - 12:00

10:30 - 12:00 SCIENCE AND ENGINEERING TRACK - Room 2CD

| 10:30 - 11:00 | Socio-Technical Simulation of Contested Environments |
|---------------|---|
| | Dr. Benjamin Bell, Aqru Research and Technology, LLC andDr. William J. Clancey, Florida Institute for Human and Machine Cognition |
| 11:00 – 11:30 | Physics Engine Benchmarking in Three-Dimensional Virtual World Simulation |
| | Dr. Sean Mondesire, US Army Research Lab; Dr. Douglas Maxwell, US Army Research Lab; Dr. Jonathan Stevens, Institute for Simulation and Training; Mr. Steven Zielinski, Institute for Simulation and Training and Dr. Glenn Martin, Institute for Simulation and Training |
| 11:30 – 12:00 | Thoracostomy Simulations: A Comparison of the Mechanical Properties of Human Pleura vs Synthetic Training Pleura |
| | Mr. Jack Norfleet, US Army Research Lab; Mr. Luis Morales Tenorio, Center for Research in Education and Simulation Technologies; Mr. Kurtis Palata, US Army Research Lab; Dr. Victor Barocas, University of Minnesota and Dr. Robert Sweet, University of Minnesota |

10:30 - 12:00 TRAINING AND EDUCATION TRACK - Room 2B

| 10:30 - 11:00 | Semantic and Episodic Learning to Integrate Diverse Opportunities for Life-Long Learning |
|---------------|---|
| | Dr. Jeremiah T. Folsom-Kovarik, Soar Technology, Inc.; Dr. Randolph M. Jones, Soar Technology, Inc. and Dr. Dylan D. Schmorrow, Soar Technology, Inc. |
| 11:00 - 11:30 | Building and Maintaining an Efficient e-Learning Team |
| | Ms. Dena Trammell, SAIC and Ms. Alysson Hursey, SAIC |

VISUALIZATION AND GAMIFICATION TRACK - Room 3AB

| A Game-Based Modeling and Simulation Environment to Examine the Dangers of Task- Unrelated Thought While Driving |
|---|
| Dr. Kevin Hulme, University at Buffalo; Dr. Panagiotis Ch. Anastasopoulos, University at Buffalo;Mr. Thomas Androutselis, University at Buffalo and Mr. Ugur Eker, University at Buffalo |
| Mobile Application for The Basic School |
| Captain Carl "Marshall" Tucker, USMC, United States Marine Corps |
| Track Guest Speaker: <i>Mr. Clint Dalton</i> , Sprouthaus LLC <i>Pictures on Walls: Our Early Years</i> |
| |

12:00 - 1:30 Lunch and Exhibit Time - Ballroom Three

1:30 – 2:30 Technology Showcase – Ballroom Three

The Technology Showcase allows attendees to learn about the latest technologies and tools being developed by M&S companies first hand. These short, focused briefs, conducted in sequence, will highlight M&S products and services, address state-of-the-art technology implementations, and describe how consumers and customers may benefit from these technologies. As part of the event, there will be a demonstration of Unmanned Aircraft Systems (UAS) M&S capabilities, sponsored by the Virginia M&S Partnership, that describe the huge potential of government, industry and academia collaboration in virtual/simulation environments to promote, expand, and implement robust commercialization of UAS.

Moderators:

Technology Showcase: *Mr. Nick Drucker,* Modeling and Simulation Product Manager, Newport News Shipbuilding **UAS Demonstration:** *Mr. Rick Severinghaus,* Owner and Director, CRTN Solutions, LLC

WEDNESDAY APRIL 27 (CONTINUED)

2:30 – 3:00 Special Event – "Challenge Competition Presentation" - Ballroom Three - Sponsored by SimIS, Inc.

The Challenge Competition is a unique event where talented individuals use the power of M&S to solve problems important to their community, government, business or industry sector. Developers, analysts, and subject matter experts participate in this competition and demonstrate the power of M&S. Team introduction videos will be presented and the live audience invited to vote for the overall best M&S solution. All conference attendees are encouraged to attend this event and vote.

Moderator: Ms. Stefani Werner, Software Engineer and Analyst, Newport News Shipbuilding

| M&S Challenge Competition Participants | | |
|--|--|--|
| Team # | Description | |
| 1 | Improving Health for the Next Generation | |
| 2 | Selective Tolerance | |
| 3 | Supply Chain Challengers | |
| 4 | Zika Virus | |
| 5 | Multi-core Processors | |
| 6 | Reliable GPUs | |
| 7 | Design Solutions for Public Policies | |
| 8 | Reliable Replenishment | |
| 9 | Optimizing Voter Wait Times | |
| 10 | Managing Data Center Tickets | |

3:00 - 3:30 Break and Exhibit Time - Ballroom Three

3:30 - 5:00 Paper Session IV

3:30 – 5:00 DATA ANALYTICS AND DECISION MAKING TRACK - Room 2A

3:30 – 4:00 Animal Disease Spread Modeling for Epidemiological and Economics Purposes: Learning from the 2015 Highly Pathogenic Avian Influenza Outbreak

Ms. Melissa Schoenbaum, USDA-CEAH; Dr. Kelly Patyk, USDA-CEAH; Dr. Amy Delgado, USDA-CEAH and Dr. Columb Rigney, USDA-CEAH

Panel: Cognitive Considerations for Decision Makers

Decision makers, like all of us, take mental shortcuts when they are pressed for time. If you, as a data scientist, can't provide a good story, they will make up their own. Using real world examples, this panel will focus on strategies to make data more relevant and concrete for decision makers.

Panel Members:

- Dr. Candace Eshelman-Haynes, Technology and Human Factors Branch, NATO Allied Command Transformation
- Mr. Jay Gendron, Associate Data Scientist, Booz Allen Hamilton
- Ms. Melissa Schoenbaum, Biological Scientist, USDA-CEAH-Monitoring and Modeling Unit

3:30 – 5:00 SCIENCE AND ENGINEERING TRACK - Room 2CD

| 3:30 - 4:00 | An Adaptive Planning Tool for Ship Construction and Material Logistics |
|-------------|---|
| | Mr. Kenyth Campbell, Newport News Shipbuilding |
| 4:00 - 4:30 | Cellular Dynamics During Epicutanenous Immunotherapy Using Agent Based Modeling |
| | Mr. Andrew Hinton, Old Dominion University |

Theme Legend

WEDNESDAY APRIL 27 (CONTINUED)

3:30 – 5:00 TRAINING AND EDUCATION TRACK - Room 2B

| 3:30 – 4:00 | A Metaphor for Immersive Environments: Learning Experience Design Challenges and Opportunities |
|-------------|--|
| | Dr. Elaine Raybourn, Sandia National Labs and ADL Initiative |
| 4:00 - 4:30 | High-Fidelity Training on Demand via the Cloud |
| | Ms. Lisa Bair, SAIC; Mr. John Fairchild, SAIC and Mr. Stephen Elkins, SAIC |
| 4:30 - 5:00 | Tailored Cybersecurity Training in LVC Environments |
| | Dr. Denise Nicholson, Soar Technology, Inc.; Ms. Lauren Massey, Soar Technology, Inc.; Mr. Eric Ortiz, Soar Technology, Inc. and Mr. Ryan O'Grady, Soar Technology, Inc. |

3:30 - 5:00 VISUALIZATION AND GAMIFICATION TRACK - Room 3AB

| 3:30 - 4:00 | Training Effectiveness Evaluation of Lightweight Game-based Constructive Simulation | |
|---|---|--|
| | Mr. Dean Reed, Institute for Simulation and Training, Dr. Jonathan Stevens, Institute for Simulation and Training; Ms. Latika Effert, US Army Research Lab; Dr. Stephen Serge, Institute for Simulation and Training and Dr. Sean Mondesire, US Army Research Lab | |
| 4:00 – 4:30 Workload Analysis of Virtual World Simulation for Military Training | | |
| | Mr. Dean Reed, Institute for Simulation and Training, Dr. Jonathan Stevens, Institute for Simulation and Training; Dr. Crystal Maraj, Applied Cognition and Training in Immersive Virtual Environments | |

Simulation and Training Technology Center (ARL-HRED STTC)

(ACTIVE) Lab; *Mrs. Karla Badillo-Urquiola*, Institute for Simulation and Training; *Dr. Sean Mondesire*, US Army Research Lab and *Dr. Douglas Maxwell*, US Army Research Laboratory-Human Research and Engineering Directorate,

4:30 – 5:00 Track Guest Speaker: Mr. Clint Dalton, Sprouthaus LLC Pictures on Walls: Our Years of Wonder Lately

5:30 – 7:30 Offsite Networking Event

Hilton Garden Inn Öceanfront Nautilus Foyer / Nautilus Balcony 3315 Atlantic Avenue Virginia Beach, VA 23451

- Pre-registration and pre-payment are required for this event
- Registration onsite at MODSIM available

THURSDAY APRIL 28

| 7:00 – 3:30 Registration - I | Main Lobby - | Near Ballroom Three |
|------------------------------|--------------|---------------------|
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7:00 – 8:00 Continental Breakfast – Ballroom Three

8:00 – 9:30 Special Event – "Innovation in Action: Real Applications of Emerging Learning Science & Technology" – Room 2A

Learning Science doesn't stop at the theory stage, or at the initial development of techniques and application of measurements to assess impact. For learning science to have a meaningful application, it must be integrated into new technologies during the development process, not just added on as a "good idea" later. This panel will feature thought leaders and technology developers who are actively applying Learning Science principles to new learning technologies. They will discuss the learning science that underpins their technologies, and provide a demo of each system, spanning from new concepts for learning management systems to models for supporting interactive tutors.

Moderator: Dr. Sae Schatz, Director, Advanced Distributed Learning (ADL) Initiative Panel Members:

- Dr. J.T. Folsom-Kovarik, Lead Scientist, Soar Technology
- Dr. Michael Freed, Program Director, Artificial Intelligence Center, SRI International
- Mr. Mark Torpey, Principal Investigator, Virtual Worlds Lab, Lockheed Martin, Mission Systems and Training (MST), Advanced Simulation Centers (ASC)
- Mr. Steven Vergenz, Software Engineer, ADL Initiative



THURSDAY APRIL 28 (CONTINUED)

8:00 - 9:30

Special Event – "Unmanned Aircraft Systems in Commercial Airspace--Opening New Chapters in Real & Virtual Environments" – Room 2B

On 30 December 2013, the FAA designated six Test Ranges to support the safe and efficient integration of Unmanned Aircraft Systems (UAS) into the National Air Space, both civil and public. Today's panelists, each with deep involvement in promoting Unmanned Aerial Systems, and more generally Unmanned Systems (UMS) of all types (air, surface, maritime), will address aspects of the challenges in, and the opportunity and potential for, creation of the broad-reaching economic and social benefits that will come from commercialization of UAS.

Moderator: Mr. Rick Severinghaus, Owner and Director, CRTN Solutions, LLC Panel Members:

- Mr. John Coggin, Chief Engineer, VT Unmanned Arial Systems (UAS) and Mid-Atlantic Aviation Partnership (MAAP)
- Mr. David Hinton Special Advisor for UMS, Commonwealth of Virginia, and Executive Director, Virginia Unmanned Systems Commission
- Mr. Brad Pilsl, Unmanned Systems Strategic Lead, Booz Allen Hamilton
- Dr. Seshadri Subbanna, Director, Innovation and Technology Evaluation, IBM Corporate HQ, T.J. Watson Research Center

9:30 - 10:00

Break - Ballroom Three

10:00 – 12:00 "Better Living Through Simulation" – Healthcare and Human Factors Panel – Room 2A

During this two-hour workshop, led by our panel, we will discuss how modeling and simulation (M&S) is being leveraged in the areas of education and training, data analytics, and delivery of care within the healthcare and human factors sector. Current trends and future directions will be presented and discussed to help learners better understand how M&S and related technologies might be leveraged within these sectors.

Moderator: Mr. Andrew Cross, Instructor, Eastern Virginia Medical School Panel Members:

- Mr. Geoff Miller, Research Scientist, Medical Modeling and Simulation Innovation Center (MMSIC), Telemedicine and Advanced Technology Research Center (TATRC)
- Dr. Don Robison, Instructional Designer, Eastern Virginia Medical School
- CDR Michael Spooner, USN, Director Healthcare Simulation and Bioskills Training Center (HSBTC), Naval Medical Center Portsmouth
- Dr. Lateefah Hughes, Health Expert Advisory Board (HEAD), ARDX

10:00 - 12:00

"Got Grid" - Energy and Cyber Workshop - Room 2B

This workshop will be the culmination of a month-long virtual event that combines an online game, an Internet think tank, and a virtual brainstorming session. The game will focus on specific ways that modeling and simulation can be applied to increase antifragility of our critical infrastructure—with a focus on power generation and distribution—in the event of a potentially catastrophic event resulting from a series of cyber-attacks. During the workshop, participants will see the culmination of ideas, and use those to formulate an action plan to engage agencies and the M&S community.

Presenters:

- Dr. Charles "Chick" Macal (Invited), Argonne National Laboratory and Senior Fellow, Computation Institute, University of Chicago
- Dr. Mark Nesselrode, Modeling and Simulation, Subject Matter Expert for Training and Simulation Solutions Division, General Dynamics
- Mrs. Janet Spruill, Vice President, Training and Simulation for Hickory Ground Solutions, LLC

10:00 - 12:00

"Lifelong Learning" - Adult Learning/Learning Science Corner Workshop - Room 2CD

In conjunction with the Advanced Distributed Learning Co-Lab, join us for a facilitated workshop focused on generating your requirements to support lifelong adult learning, whether from the perspective of your users, your organization, or your client's needs. Come prepared to discuss gaps you've experienced, potential emerging science and technology solutions, and join into this highly interactive session. By the end of this workshop, you'll have a list of top requirements to facilitating lifelong adult learning, sourced from the best SMEs of government, academia and industry.

Presenter: Dr. Sae Schatz, Director, ADL Initiative

THURSDAY APRIL 28 (CONTINUED)

10:00 – 12:00 "Special Delivery" – Shipping and Transportation Panel – Room 3AB

The special delivery panel will discuss the application of modeling, simulation and analytics as it applies to the manufacturing and supply chain business sectors. The panel will address items such as how modeling and simulation can be utilized to forecast demand for manufacturers and likewise manufacturing simulation can communicate supply chain performance. The panel with address technologies such as additive manufacturing, digital engineering and predictive analytics applications within the manufacturing supply chain.

Moderator: Mr. Rob Lisle, Director, Program Integration for SN3 (Stoller Newport News Nuclear), Huntington Ingalls Industries

Panel Members:

- Mr. Reejo Mathew, Senior Research Scientist, GE Industrial Digital
- Mr. Ilyas Ustun, Predictive Analytics, Intermodal Transportation
- Ms. Kirste Webb, Executive Director, Visionary Center for Sustainable Communities (VCSC)
- Mr. Rex Wallen, Product Manager-Industrial Engineering, Newport News Shipbuilding

10:00 - 12:00 Student STEM Event - Ballroom Three - Sponsored by Virginia Beach Department of Economic Development

The STEM event at MODSIM provides a unique opportunity for the conference to contribute directly to the school experience of the youth who are just beginning to formulate their dreams for the future.

Approximately 100 area high school students will get the opportunity to see firsthand the World of Modeling and Simulation (M&S). The students will rotate through multiple hands-on M&S demonstrations.

12:00 – 1:15 Lunch, Awards and Announcements – Ballroom Three

1:15 – 3:15 "Protecting the Nation" – Defense and Homeland Security Panel – Ballroom Two

In this panel participants will provide an overview of their Modeling and Simulation organizations, investments, and initiatives. The moderated panel discussion will highlight challenges and opportunities related to cyber defense, information sharing, capability development and acquisition.

Moderator: *Dr. Marty Irvine,* Head, Readiness & Training Systems Department (R) NSWC Dahlgren Division Panel Members:

- Mr. Wayne Buck, Wayne Buck, M&S SME, HQ Supreme Allied Commander Transformation
- Dr. Syed Mohammad, HQ, DHS, HSARPA Modeling and Simulation Engine (MS-E) Lead
- Mr. Dennis Reed, Deputy Naval M&S Executive

3:30 – 5:00 National Modeling and Simulation Coalition (NMSC) Workshop – "Building the Business Case for NAICS" – Ballroom Two

The North American Industry Classification System (NAICS) is the Federal standard for collecting statistical data across U.S. business sectors. The National Modeling & Simulation Coalition (NMSC) is the capstone organization to promote and leverage M&S to better the human condition and to strengthen the National well-being. NMSC works to create a unified national community of individuals and organizations around the M&S discipline and professional practice and to be the principal advocate for M&S. In line with this mission, NMSC has engaged in a four-year plan to identify why a NAICS code for M&S will provide better statistical data related to the U.S. economy, socialize our findings with the technology community and policymakers, and produce a compelling proposal to add a NAICS code for M&S in the next NAICS update cycle. This workshop will further this effort with the goal of identifying a compelling case for a NAICS code for M&S.