

FOR IMMEDIATE RELEASE:

BIOGEARS™ PRESENTED AT MEDICINE MEETS VIRTUAL REALITY CONFERENCE

MEDICINE MEETS VIRTUAL REALITY CONFERENCE (MMVR), MANHATTAN BEACH, Feb. 18 – Applied Research Associates (ARA, www.ara.com) will present BioGears™ (www.biogearsengine.com) at the Medicine Meets Virtual Reality Conference (MMVR, www.nextmed.com).

BioGears™ is a \$7M, multi-year program that will deliver an open source, comprehensive, extensible human physiology engine that will drive immersive medical education and training technologies. The BioGears™ project will enable the public to develop medical simulations that will benefit military as well as civilian medicine. Dr. Bryan Bergeron, a consulting medical doctor and a researcher working on BioGears™, said this project “represents the next stage in the evolution of modern physiology computing. It's logical, accessible, extensible, and open. What else could you ask for?”

BioGears™ physiology modeler, Mr. Rodney Metoyer, will present the four main thrust areas of the program at MMVR. At program maturation, BioGears™ will include:

1. An open source physiology engine,
2. An open source common data model,
3. Extensive documentation to enable integration and model extension, and
4. A website that will promote community involvement and contributions.

Mr. Metoyer is a former Army combat medic and understands the importance of advancements in medical training technologies. He said, “BioGears™ will be a powerful tool because our open source engine and common data model will allow a wide variety of users to create accurate simulated physiology that fits the needs of the medical simulation and training community.”

The BioGears™ research team is planning the first ‘mini build’ release of the engine and the full website launch in Fall 2014 with the beta build release in Fall 2015. The mini build will include showcase scenarios that demonstrate the degrees of patient customization, the numerous insults and injuries, and the various assessments available in the engine. The showcase scenarios will serve as a framework to enable community discussions about how to contribute to the project.

One of the showcase scenarios will simulate a healthy adult male who is dehydrated and performing work at high altitudes. This scenario will demonstrate our energy balance system that Mr. Metoyer and Dr. Bergeron are developing jointly. Mr. Metoyer said, “The energy system will allow us to model nutrient consumption and heat production, heat flow, the physiological effects of exercise and rest, dehydration, and fed or starved states. It will provide the ability for our simulated humans of various body states to interact with and react to differing environmental conditions.”

Rodney Metoyer will present BioGears™ for the Military Medical Simulation Session at MMVR on Wednesday, February 19 2014, at 1:20 at the Manhattan Beach Marriott Hotel. This session will inform the public of developments within the military medical simulation community, share ideas and engage the research community in advancing simulation goals.

If you are interested in the BioGears™ program and plan to attend MMVR, please stop by our booth or contact Jenn Carter (jcarter@ara.com) to set up a meeting with our team.

About Applied Research Associates, Inc. (ARA):

Applied Research Associates, Inc. (ARA) is an international research and engineering company recognized for providing technically excellent solutions to complex and challenging problems in the physical sciences. Our mission is to provide in-depth and diversified research, engineering, and technical support services. We have a broad range of technical expertise in biomedical engineering, defense technologies, civil engineering, computer software and simulation, systems analysis and environmental technologies. For additional information, please visit www.ara.com.

For more information contact:

Jenn Carter | jcarter@ara.com | 919.582.3438 | www.ara.com