## **John Schutte**

NEWS & VIEWS

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Hollywood readily portrays the military as an elite group of musclebound warriors with unlimited stamina and strength, saving the free world from imminent destruction with only minutes to spare. After the final credits roll, viewers expect those cinematic depictions to transpose to the real world...that's where the military's human performance team steps in.

Enter stage right, the 711th Human Performance Wing.

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The 711th Human Performance Wing, or 711 HPW, is the Air Force's premier organization for assuring their dominant advantage in air, space, and cyberspace by advancing human performance. Located at Wright-Patterson Air Force Base in Ohio, the Wing also functions as a joint Department of Defense (DoD) Center of Excellence for human performance sustainment and readiness, optimization, and enhancement through partnerships with the Naval Medical Research Unit-Dayton and nearby universities, industry, and medical institutions. These partnerships are made possible in part by the 711 HPW's Office of Research and Technology Applications (ORTA).

The 711 HPW ORTA is a team of specialists working to transition new technologies into the hands of the warfighter, as well as transfer the technology into the commercial market through an Air Force program called Technology Transfer and Transition (T3). "The 711 HPW ORTA supports 1,200 personnel across the Wing in developing and implementing partnerships with industry and academia, identifying and protecting intellectual property, and working to commercialize inventions when appropriate," outlines John Schutte, a member of the team. "The ORTA also provides education and consultation services to researchers and Wing leadership. In the Wing, the ORTA is also responsible for alliances, so our office is involved in a significant number of the 711 HPW noncontract partnerships."

The technologies and advances championed by the 711 HPW T3 office center around science, technology, and aerospace medicine to complement the Wing's multidisciplinary workforce of over 70 occupational specialties within those fields. With the critical nature of the military's mission, Schutte assists researchers in realizing the Wing's vision – to be experts in Airman/Guardian performance and recognized DoD leaders in human performance.

"The human warfighter, whether Airmen or Guardians or Soldiers or Sailors, is the most critical component of any system across the DoD," says Schutte. "We deliver the knowledge, technology, and solutions that keep the human performing to the limit of their physical and mental capacity, assuring their readiness to execute the operational mission in any environment."

Schutte negotiates various partnering agreements to deliver new technologies to the warfighter, one of which is the Cooperative

Research and Development Agreement (CRADA). "Our organization partnered with MusclePharm, Inc., via a CRADA, to develop an all-inclusive meal replacement nutritional supplement product with quality protein that would ensure sustained energy, eliminate bacterial contamination and reduce the weight carried by operator in the field," he reveals. The powder-form supplement is now patented and has been licensed to three companies for commercialization.

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"We also have issued multiple licenses for the Battlefield Assisted Trauma Distributed Observation Kit (BATDOK) application developed by 711 HPW researchers," Schutte adds. "BATDOK™ is a multi-patient, point of injury, casualty tool that assists our human operators and improves care for the injured. BATDOK™ runs on a smart phone or other mobile device to provide tools to decrease the cognitive workload of medics and allows them to provide lifesaving care to multiple patients simultaneously."

Schutte may not receive a star on the Walk of Fame for indirectly influencing some of Hollywood's acclaimed actors and actresses, but the satisfaction he garners is just as rewarding. "The highlight for me is working every day among the best and brightest scientists, engineers and aerospace medicine professionals in the world to provide support for US warfighters," Schutte states. "It's a challenge sometimes to juggle a large number of agreements, while also maintaining process integrity and implementing process improvements, transitioning fully into the digital age of documentation, and fulfilling the short-term tasks that flow down."

Much like the protagonist, there may never be a challenge too great for Schutte to overcome. Being a 711 HPW ORTA member since 2008, he is well-versed on how to employ human performance enhancements, even outside the office. Years ago, Schutte ran his first half-marathon in 1 hour, 47 minutes, with his last being clocked at 2 hours, 15 minutes. Slightly dismayed by the 28-minute increase and the need of a total knee replacement, Schutte devised the perfect plan for personal productivity...change his pastime to golf!

To learn more about the Office of Research and Technology Applications, please visit <u>https://www.aft3.af.mil/</u>, or send an e-mail request for 711 HPW ORTA information to john.schutte.3@us.af.mil.

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