

## INTERVIEW WITH DANIEL J. MOLLICONE, PH.D.

PRESIDENT AND CEO OF PULSAR INFORMATICS

### 1 Briefly describe your top technologies and their applications for space and Earth-based markets.

We provide computer-based cognitive performance tests and customizable fatigue management software solutions. Our technology provides astronauts, soldiers, pilots, and other mission-critical workers immediate feedback about their performance levels. Our fatigue risk prediction tools help increase workforce effectiveness and improve workplace safety.

### 2 What market needs do your products address?

Our technology reduces fatigue-related risk in space, military, or industrial operations in which the consequence of human error is costly and dangerous. Our products directly address the need to improve worker effectiveness and safety (while lowering operating costs) in jobs involving extended duty hours, night work, or crossing time zones.

### 3 What are the features and benefits of your product(s)?

Our cognitive tests are uniquely customized to be brief and simple to perform while maintaining scientifically-validated accuracy and reliability. Further, our fatigue prediction technology can use these test results to "learn" the fatigue-related characteristics of a given individual—and then generate worker-specific performance predictions. Together, our fatigue testing and modeling tools enable individuals and organizations to effectively measure, predict, and counteract fatigue-related risks.

### 4 Current Customers:

#### Who are your current Earth-based customers?

Our neurocognitive tests are used by university-based researchers and large pharmaceutical companies performing clinical drug trials (e.g., Merck and Cephalon). We have provided fatigue management solutions to government agencies (e.g., U.S. DOD, Australian Civil Aviation Authority) and to companies in the aviation industry (e.g., FedEx).

#### When did you get your first non-government customers?

March 31st 2008.

#### How did they find out about your technology?

Our first private-sector customers were referred to us by our government customers.

#### Why did they choose you and not your competitors?

Our customers are confident in the measures they obtain because our products deliver precise, accurate measurement and rigorous data quality control. Further, unlike some of the product offerings of our competition, our technology is an end-to-end solution encompassing measurement, analysis, prediction, and recommendation.

### 5 Briefly describe a future that has incorporated your technology in everyday life. How has your product(s) improved life on Earth? In space?

We can envision our products being seamlessly integrated into the workplace environments of astronauts, doctors, pilots, truck drivers, and other workers affected by fatigue. Interfaced through personal digital devices or standard consoles, our tools will detect and prevent high risk fatigue conditions, helping to prevent workplace accidents.

### 6 How has your involvement with the space program impacted the way your technology developed?

The challenge of designing for the International Space Station forced us to build a product that keeps the operational burden low, works in remote environments, and eliminates the need for specialized hardware. As a result, our systems can be deployed in virtually any operational environment.

### 7 What role has the NSBRI played in your product development?

The NSBRI has provided research and development funding and the opportunity to interact with leading university-based researchers like Dr. David F. Dinges of the University of Pennsylvania.

### 8 Describe a key collaborator and how he or she shaped the direction and success of your company and/or technology?

Dr. Dinges has contributed to our product development strategy with expertise to maintain high scientific validity behind our technology, and guidance on tailoring solutions for other government and industry customers.

### 9 Describe how your management team is uniquely poised for successfully growing your company.

I have led federally funded research programs for NASA, DOD, NIH, DOT, and DHS. Matthew van Wollen, our CFO, has extensive experience in technology venture capital, project finance, and mergers & acquisitions in North America and in Europe. Christopher Mott, our CTO, has more than 10 years of experience managing large scale software engineering projects.

### 10 What is next for the company? What can we look forward to in the immediate future?

Our goal is to deploy the products we have developed for astronauts on the Space Station in Earth-based, work environments. We are currently establishing industrial partnerships to complete development and validation of a number of industry-specific applications of our technology.