

To Dr. Matthew Doll, Director  
SSM Health Treffert Center  
Fond du Lac, Wisconsin

From: Richard Boyle, PhD  
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cc: Dante Lauretta, Principal Investigator, NASA Osiris Rex Asteroid Sample Return Mission; Regent Professor, Lunar and Planetary Laboratory, University of Arizona.

Dear Dr. Doll and Ms. Stine,

It is with heartfelt condolences that I write, having just learned of the passing of Dr. Darold Treffert. Although we only spoke over the telephone, his enthusiasm and passion for understanding the nature of savantism and autism were clear. These passions motivated his personal and professional interests. It was always a joy to trade stories and ideas. I so much enjoyed our thoughtful discussions.

In 2004 I met the mega-savant Kim Peek, the role model for the congenital savant syndrome character Raymond Babbitt, in the movie *The Rain Man*. He and his father, Fran, were invited by the Rotary Club of Salinas (California) to share their story with the community to help others searching for hope. At the time, I had a research project with the Radiology Department at the Memorial Hospital. Since the Peeks would not even accept an honorarium, they asked me what the hospital could offer to the Peeks. I suggested imagining the primary vascular structures from the ascending aorta of the heart to the circle of Willis in the brain to identify potential abnormalities that might affect Kim's health. I saw much of what Dr. Daniel Christensen reported and later described in the Scientific American article with Darold. I never studied Kim Peek and did not intend to do so. Darold understood from a scientific perspective my rationale. I am a neuroscientist specializing in neurophysiology and neuroanatomy, and Kim was too exceptional. Kim was fascinated with NASA and virtually every topic on outer space and the potential for life beyond Earth. We discussed on several occasions a project in which Kim could focus his unique talents on probing fundamental questions of the cosmos. Unfortunately, time was not on our side.

This letter introduces you to Daniel Lappin, who recently reached out to me due to my work at NASA and interactions with Mr. Peek. You might be interested in speaking to him.

Daniel reached out to me for two reasons:

First, he has been invited to apply to be a 'Performance and Creative Science' consultant for the NASA Osiris RE-x Asteroid Sample Return Mission (OREX) to study planetary formation and the origin of life.

Second, he was told by an established researcher in the savant syndrome field that his medical condition and resulting skill and insights fit the characteristics of an acquired savant (talented).

Daniel's proposal to NASA may be interesting to The Treffert Center or the network of savant researchers pursuing Dr. Treffert's interest in the 'Sudden Savant,' or 'Sudden Genius' syndrome, i.e., to identify methods to help typical people access the genius mechanisms of the savant without the congenital birth insult or Central Nervous System injury.

He proposes an initiative to NASA's OREX team that builds upon his experience as an acquired savant. Specifically, a portion of the 'island of genius' savant talent, to quote Dr. Treffert, that emerged during his 30-year complex medical condition (pseudo strokes) parallels the approximate primordial and protocell structure and mechanism of the origin of life. He believes this may add evidence to the hypothesis that the savant accesses internal memory structures to the layers of genetic information to express their ability.

Daniel proposes that he has developed a methodology that can be taught and might support neurotypical people, such as neuroscientists, to achieve a 'Sudden Genius' state. Potentially this method would help a researcher access deeper anatomical and functional spaces and internal genetic information and thus gain insight, for example, into the origin of life. He proposes that this is a generic methodology that can support all forms of research across NASA and beyond, yet is especially beneficial to the origin of Life research.

Daniel's proposal to the OREX team is still under consideration. Depending upon how the proposal unfolds, Daniel believes that The Treffert Center may potentially be a resource in this initiative over time.

After meeting the mega-savant Kim Peek, I became intrigued with the genius phenomena of the savant. After 20 years as a NASA scientist, and a researcher since 1971, it is clear that we are only scratching the surface of revealing the mysteries of the human brain and physiology. I remember a discussion with Darold. We both marveled at what we saw in a brain imaging scan could have seemingly no correspondence with the individuals in front of us. Kim lacked the Corpus Callosum that connects the two hemispheres, atrophy of the left cerebellum, and also lacked the anterior commissure (precommissure). Despite having what would be considered negative life consequences, there was Kim with all his amazing talents.

Daniel's novel approach may open new doors for people to access knowledge and intelligence in the service of science, health, and humanity and reveal insights into the mystery of the origin of life and beyond.

With my warmest wishes

Richard Boyle

Richard Boyle NASA Profile;

<https://www.nasa.gov/ames/research/space-biosciences/richard-boyle>