

## A U T H O R   B I O G R A P H I E S

**HEATHER ALLANSDOTTIR** is a distinguished scholar in space law and constitutional law. She holds a doctorate in comparative constitutional law and human rights law from Oxford University, focusing on Egyptian constitutional developments post-2011. She has held postdoctoral positions in Tel Aviv and Moscow and currently lectures on law at Birkbeck University, London, while serving as a visiting fellow at the Lauterpacht Centre for International Law, University of Cambridge. She is also the founder of the space consultancy Astrodottir and has co-authored the forthcoming book *New Perspectives in Outer Space Law* (Springer, 2025). Her research spans constitutional law, human rights, and space law, with numerous publications in high-profile academic and media outlets.

**BRYANT CRUSE** has been a pioneer in the application of AI technology to difficult real-world problems. He graduated from St. John's College in Annapolis, Maryland, where he acquired his lifelong interest in the philosophy of epistemology or how we know what we know. After serving for eight years as a Naval Aviator, he returned to school for an MS in Space Systems Engineering from Johns Hopkins. While on the mission operations team for the Hubble Telescope, he found a personal mission to change the way spacecraft were operated by seeking a way to capture human knowledge in computers. This work led him to a six-month residency in AI (MS equivalent) at the Lockheed AI Center in Palo Alto. He went on to build two successful AI companies, both of which were ultimately acquired by public corporations. New Sapience is his third deep-tech company. The patented technology that comprises its cognitive core represents more than fifteen years of development and a lifetime of thinking from first principles.

**SYLVESTER KACZMAREK's** research at Imperial College London's Department of Computing establishes the theoretical and engineering foundations for trustworthy autonomous systems in safety-critical environments. He develops and validates novel, bio-inspired neuromorphic frameworks that provide verifiable guarantees of security, adaptation, and transparency for the next generation of space robotics. His broader work addresses the intersection of machine learning, control theory, and the long-term ethical governance of artificial intelligence. Recognized with an Award of Merit by the European Space Agency (ESA), his contributions are supported by national security and space agencies including the UK's NCSC and the US Space Force, and they inform policy on AI and cybersecurity for bodies including the UK Parliament's House of Lords.

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**ANNETTE R. MERCEDES, MPH**, is a rising second-year PhD student in the Molecular, Cellular, and Integrative Biosciences (MCIBS) program at Penn State, where she studies the evolution of immunity, including how antagonistic pleiotropy and adaptive trade-offs shape immune responses across human and non-human primate populations. As a 2025–2026 NASA Pennsylvania Space Grant Consortium (PSGC) Graduate Fellow and trainee in the NIH-funded T32 Physiological Adaptations to Stress program, she integrates evolutionary dynamics, comparative genomics, ancient DNA, and functional immunology to explore fundamental questions about life's resilience and adaptation. Although her primary research focuses on molecular evolution, Mercedes is deeply interested in how scientific futures are envisioned and who gets to shape them. Her background in anthropology and public health, as well as her lived experience as a first-generation Dominican American woman raising a daughter, informs her commitment to reproductive justice and inclusive space ethics, bridging biological inquiry with questions of social equity, justice, and planetary futures.

**J. N. “NICK” NIELSEN** is an independent scholar from Portland, Oregon, with interests in space philosophy, philosophy of history, technology, astrobiology, civilization, and the future. He has spoken at many events, including the Hundred Year Starship Symposium, Icarus Interstellar Starship Congress, International Big History Association, Network of Researchers on the Chemical Emergence of Life, Society for Social and Conceptual Issues in Astrobiology, Forming and Exploring Habitable Worlds, and International Society for the Comparative Study of Civilization. He has published in the *Journal of Space Philosophy*, *Journal of Big History*, *Heroism Science*, and *Frontiers in Virtual Reality*.

**YUG RAMAN SRIVASTAVA** is a second-year law student at Rajiv Gandhi National University of Law, Punjab. His academic interests include international law, space law, and interdisciplinary legal research.