



THE PAUL G. ALLEN FRONTIERS GROUP

BIOGRAPHIES



PAUL G. ALLEN

Founder, The Paul G. Allen Frontiers Group

With lifetime giving totaling over \$2 billion, investor and philanthropist Paul G. Allen has spent his career tackling some of the world's biggest challenges and pushing the boundaries of what's possible. Through both for-profit and philanthropic investments, Allen has sparked important developments and innovations in the areas of science, technology, education, conservation, the arts and community improvement.

Allen, who co-founded Microsoft in 1975, is mapping new frontiers and fueling exploration across a broad range of industries as the founder and chairman of Vulcan Inc., the Seattle-based company that oversees his business and philanthropic efforts. Allen's vision has forwarded projects such as leading the massive redevelopment of Seattle's South Lake Union neighborhood, founding three museums including Seattle's critically acclaimed EMP Museum, funding the first privately-backed effort to successfully put a civilian in suborbital space, and launching Stratolaunch Systems, which is developing a revolutionary airborne

launch system. He also owns the Seattle Seahawks of the National Football League, the Portland Trail Blazers of the National Basketball Association, and is part of the primary ownership group for the Seattle Sounders FC, the city's Major League Soccer team.

Allen is included among the world's leading philanthropists who have pledged to give away the majority of their fortunes to charity. His giving is channeled through The Paul G. Allen Family Foundation, and through direct gifts, including \$26 million in 2010 to Washington State University for the Paul G. Allen School for Global Animal Health. In 2003, he founded the Allen Institute for Brain Science to accelerate understanding of the human brain in health and disease, supporting the Seattle non-profit with \$500 million to date. A decade later, he launched the Allen Institute for the Artificial Intelligence to explore critical questions in AI. In 2014, he founded the Allen Institute for Cell Science and its inaugural project, the Allen Cell Observatory, which will accelerate disease research by creating predictive cell models.

Allen's award-winning film company, Vulcan Productions, develops and supports media projects that help audiences understand the world around them and respond to challenges. *Idea Man*, Allen's 2011 memoir, was a *New York Times* bestseller.



TOM SKALAK, PH.D.

Executive Director, The Paul G. Allen Frontiers Group

Tom Skalak is the founding Executive Director of The Paul G. Allen Frontiers Group, launched in 2016. The Frontiers Group seeks to explore new frontiers, re-invent fields in ways that reflect major societal challenges and fundamental scientific curiosity, and bring new knowledge to light with a broad array of partners, making a positive impact on the world. A major interest of the Frontiers Group is the wide and growing landscape of quantitative bioscience. Previously, Tom was Vice President for Research at the University of Virginia, where he led research and innovation programs spanning biosciences, environmental sustainability, physical sciences, engineering and technology, arts, design, and humanities. Tom led the launch of the OpenGrounds collaboration initiative, bringing people together across fields for ideation; the statewide i6 Virginia Innovation Partnership; and the Global Water Games, a participatory computer game that improves the health of watersheds worldwide. As a Professor of Biomedical Engineering, Tom's

personal research included biomechanics of the cardiovascular system, angiogenesis, computational modeling, systems biology, wound repair, and regenerative medicine. He is a past President of both the American Institute of Medical and Biological Engineering (AIMBE) and the Biomedical Engineering Society (BMES). Tom is a frequent speaker on innovation and creativity with Fortune 500, venture capital, major art museum, and government partners, including The White House. He is a Council Member of the GUIRR Research Roundtable, a convening body of the National Academies of Sciences, Engineering, and Medicine in the U.S. Tom was the founder of the UVA-Coulter Foundation Translational Research Partnership and other proof-of-concept funds with corporate partners such as Johnson & Johnson and

BIOGRAPHIES

AstraZeneca. One outcome was that the National Venture Capital Association ranked the Charlottesville region the #1 fastest-growing venture capital ecosystem in the United States between 2010-2015. Tom was educated as a bioengineer at The Johns Hopkins University (B.E.S. 1979) and at the University of California, San Diego (Ph.D. 1984), is a Fellow of the National Academy of Inventors, and now enjoys exploring the deep waters of the Pacific Northwest with family and friends.



KATHY RICHMOND, PH.D.

Senior Program Officer, The Paul G. Allen Frontiers Group

Kathy Richmond is engaged with overall research portfolio strategy, listening tours, and all grant programs at The Paul G. Allen Frontiers Group. In addition, she frequently serves as a reviewer with partner organizations for multidisciplinary 'frontier' research programs, and as an invited panel member on topics ranging from science philanthropy to global health.

Her position at the Frontiers Group follows her role as the Director of Enabling Technologies at the Great Lakes Bioenergy Research Center, one of three Department of Energy funded biofuels Centers. In that position, she oversaw a diverse portfolio of technologies ranging from 'Omics to plant transformation which supported the research needs of its 300 members. Prior to that Kathy worked as a bench scientist, project lead and industry consultant, garnering two patents and multiple publications. Along with a Ph.D. in Cell

and Molecular Biology from the University of Wisconsin-Madison, Richmond also holds a M.B.A. and attended Stanford University as an American Cancer Society postdoctoral fellow.



NICOLE HUBER, PH.D.

Associate Program Officer, The Paul G. Allen Frontiers Group

Nicole Huber supports the implementation and management of the portfolio of grants in The Paul G. Allen Frontiers Group, and conducts special projects. Nicole oversaw the design and installation of a unique patient care facility for ten major West Coast medical imaging clinics, easing the stress of cancer therapy for over 10,000 patients annually. Prior to joining the Frontiers Group, Nicole was a postdoctoral research associate at the University of Washington, where she also earned her Ph.D. in Biology, with a focus on in vivo muscle mechanics paired with x-ray diffraction. She received her B.S. in Biology from the University of California, Berkeley.



ALLAN JONES, PH.D.

President and Chief Executive Officer, Allen Institute

Allan Jones is President and Chief Executive Officer of the Allen Institute, an independent, nonprofit research organization dedicated to answering some of the biggest questions in bioscience and accelerating research worldwide. The Allen Institute currently encompasses three entities (the Allen Institute for Brain Science; the Allen Institute for Cell Science; and The Paul G. Allen Frontiers Group) supported by a shared administration group.

Jones joined the Allen Institute for Brain Science in 2003, managing its growth and impact over its first decade. He led the launch of the Allen Institute for Cell Science in 2014 and the launch of The Paul G. Allen Frontiers Group in 2016. He has been instrumental in helping Paul G. Allen realize his vision of broad impact on the field of bioscience, building a unique multidisciplinary team model of engineers, scientists and business professionals operating on an annual budget of over \$100M.

Unprecedented in its size and data sharing capacity, the suite of Allen Institute for Brain Science tools and data, openly available to the public, has been used by tens of thousands of individuals and scientific communities worldwide. The Allen Institute for Cell Science is working to develop dynamic, visual data on cell organization and activities, all to be shared openly with the scientific community. The Paul G. Allen Frontiers Group expands and complements the reach of investments to identify and fund new ideas in bioscience across the world.

Originally from Wichita, Kansas, Jones received a B.S. in biology from Duke University and Ph.D. in genetics and developmental biology from Washington University School of Medicine. After a brief period as a post doc at the University of Pennsylvania, Jones joined Avitech Diagnostics, a small start-up company in Philadelphia. He moved to Seattle to work for Rosetta Inpharmatics, which was later acquired by Merck and Co.

After the launch of the Allen Institute for Brain Science 10-yr, \$1B plan in 2012, Jones has acted as a key collaborator and organizer with a variety of organizations worldwide. Jones attended both the European Union's announcement in February 2013 of the Human Brain Project, and President Obama's White House announcement in April 2013 of the BRAIN Initiative. His 2011 TED Talk has garnered nearly a million views. Jones currently serves on several advisory boards and is the former Chair and current member of the World Economic Forum's Global Agenda Council on Neuroscience and Behavior.