



## AvantBio Corporation Scientific Advisory Board



**Paul W. Cook, Ph.D., CEO, CSO, co-founder of AvantBio Corporation, Scientific Advisory Board Member and Chairman, Board of Directors.** Paul Cook is a well-established scientist, leading expert, innovator and entrepreneur, with an extensive background in cell and molecular biology. More specifically, Paul has focused over the last 20 years on cutaneous (skin) biology with an interest in the emerging field of isolating and propagating normal human cells under synthetic, chemically defined animal origin-free (cdAOF) conditions. He continues to direct R&D at Avantbio within the areas of cdAOF cell propagation and cdAOF tissue reconstruction. As CEO, with his management and scientific team, he is pushing forward, focusing on cdAOF regenerative and esthetic medicine products and services, with an initial emphasis on the automated production (e.g. 3D-bioprinting) of therapeutic reconstructed human tissues (e.g. skin and cornea), as well as therapies that utilize stem cells and their acellular derivatives (e.g. conditioned media and exosomes). See Paul's publications at: <http://www.avantbio.com/wp-content/uploads/Paul-W.-Cook-publications.pdf> and Dr. Cook's LinkedIn profile at:

<https://www.linkedin.com/in/dr-paul-w-cook-415959b/>

**Yves Poumay, Ph.D., Full Professor at the University of Namur (Medicine) and member of NAMur Research Institute for Life Sciences (NARILIS), Namur, Belgium.**



Trained in cell biology, his initial research project studied human LDL processing in endothelial cell cultures. Yves received his PhD degree in 1988 from the University of Namur, then moved on as a postdoc working the field of epidermal wound healing. Four years later, Yves moved to the U.S. for a postdoctoral stay at the Mayo Clinic, in Rochester MN, under the supervision of Dr. Mark R. Pittelkow, in the department of Dermatology. Moving back to Belgium, Yves developed his research lab investigating skin cell and tissue biology using human epidermal keratinocyte cultures. His lab gained an interest in, and then notoriety from his published studies on 3D reconstructed human epidermis (RHE) derived from epidermal keratinocytes cultured on filters. Yves's laboratory currently works on the development and analysis of in vitro reconstructed epidermis models conditioned to mimic human epidermal pathologies in 3D RHE cultures. These RHE models are generated using either RNA interference, CRISPR-Cas9 technology, alterations of plasma membrane composition and structure, exposure to inflammatory cytokines, infection with fungi (dermatophytes and *Malassezia* spp. yeasts) or

using keratinocytes isolated from patients with inherited genetic defect(s). Yves lab also has a special interest in epidermal production and release of hyaluronic acid. Yves has been inspired by Open-Source principles developed in computer science to promote sharing of know-how between researchers using cell culture to replace studies on laboratory animals. See Yves's publications at:

<https://researchportal.unamur.be/en/persons/yves-poumay> and his LinkedIn profile at:

<https://www.linkedin.com/in/yves-poumay-12724315/>.

See Yves's ORCID link



at:



**Bob Ferlauto, Ph.D., COO, and Scientific Advisory Board Member.** Bob Ferlauto is a PhD graduate of Rutgers University in pharmaceutical sciences. Moreover, Bob was a Senior Operations Executive with more than 35 years of experience transforming and integrating operations and the end-to-end Supply Chain. He has made major contributions creating value in roles spanning the operations / supply chain continuum – from R&D, process engineering, and technology planning to procurement, demand and supply planning, manufacturing, logistics and customer service. Previously, Bob created significant value in operations and supply chain roles across various industries including Kyowa Kirin, a \$4B global biopharmaceutical company, Solvay, a \$12B global chemical company and Colgate-Palmolive Company, a \$16B global Consumer Products corporation. He is keenly focused on fostering operations and supply chain excellence to drive the key financial metrics around growth, profitability, cash flow and complexity. Bob also

has deep experience and passion for holistic work systems design methodology to drive alignment, agility and adaptability. See Bob Ferlauto's LinkedIn profile at: <https://www.linkedin.com/in/bobferlautophd/>



**Lise Alexander, M.D., Medical Regulatory Officer for AvantBio.** Lise is a practicing physician in the Seattle metro area and a graduate of the University of Washington School of Medicine. Concomitantly, Lise also holds leadership management positions within a major West Coast healthcare system. Lise is also a member of the Grand Ronde Tribes (CGRT) of Oregon as well as member of the Association of American Indian Physicians. She has participated in many committees involved in Healthcare delivery and has been an invited speaker, both nationally and internationally. Also see Lise's LinkedIn profile at: <https://www.linkedin.com/in/lise-alexander-0bb47449/>



**Rolf W. Winter, Ph.D., Co-founder, VP Director of Chemistry R&D, Scientific Advisory Board Member and Member, Board of Directors.**

Dr. Winter received his doctorate from Portland State University in the laboratory of Prof. Gary Gard (emeritus) on the topic of the synthesis of pentafluorosulfur ( $\text{SF}_5$ )-substituted organic compounds, with an emphasis on the aliphatic series. After completing his doctoral research, Dr. Winter became a pharmaceutical chemist in the laboratory of Dr. Michael Riscoe at the PVAMC. His work centered on the synthesis of novel drugs for the treatment of infectious diseases caused by different species of the phylum Apicomplexa, including malaria, babesiosis, toxoplasmosis, and others. He is still working in this capacity at present. Dr. Winter has published numerous papers on the fluorination of organic compounds, with a particular emphasis on aliphatic pentafluorosulfur ( $\text{SF}_5$ ) chemistry. He holds several patents in the field of

sulfur-fluorine chemistry. His pharmaceutical chemistry work has resulted in numerous patents and publications. In 1990 Dr. Winter co-founded C. Haymond & Associates of Portland, Oregon, a firm specialized in environmental chemical analysis. He has also acted as a consultant with a firm developing a polyacrylamide gel as wound dressing, and has taught Organic Chemistry at Portland State University. In January 2008, Dr. Winter and Dr. Cook launched Avant Bio Corporation, a new company that leverages expertise in bioscience, biomedicine and chemistry to develop new products for the therapeutic and bio research. Also See dr. Winter's publications at: <http://www.avantbio.com/wp-content/uploads/RW-Winter-AVB-biblio-v-10-03-11.pdf>