

# F3 COMPANIES GOT TALENT 2021

## Session #1: Insect Ingredients in Aquafeeds: fishmeal/fish oil substitution



**Kevin Fitzsimmons, Ph.D., Moderator, Chair of the F3 Challenge and Judge, Professor and Director of International Programs at The University of Arizona:** Fitzsimmons has devoted the last 40 years to improving the sustainability of aquaculture in Arizona, across the U.S. and globally in over 80 countries. This work has included polyculture systems, integrated farming systems irrigating field crops and hydroponics and alternative protein sources to make diets more sustainable. Fitzsimmons served as the President of the U.S. and World Aquaculture Societies and was the second Chairman of the global charity, Aquaculture Without Frontiers. He received a Fulbright Fellowship in 2004 to teach and conduct research in Thailand and is working on a second Fulbright Fellowship in Myanmar, where he is finishing a 3-year USAID project supporting aquaculture.



**Kees Aarts, CEO, [Protix](#):** Kees Aarts began his career as a consultant at McKinsey in R&D innovation and business development. In 2009, Kees founded Protix to create a more sustainable food system that is able to feed the growing world population with an eye for and conservation of the earth's natural resources. Protix has received various prizes and awards in recent years, including the Technology Pioneer award by the World Economic Forum. Kees is also a member of the board of directors of [smartparks.org](#) and is a member of the World Economic Forum for food security and agriculture. He received an MSc degree in Aerospace Engineering from the University of Delft.



**Patrick Crowley, CEO, [Chapul Farms](#):** With a Masters in Watershed Hydrology and background in climate modeling, Pat founded Chapul to reverse engineer the sustainable benefits of insect agriculture, by developing a pull-through market demand. Chapul launched in 2012 with an oversubscribed crowdfunding campaign in an attempt to directly address consumer perceptions regarding novel insect protein. Since then, Chapul has pioneered many new market segments for insect products and in 2020 he launched Chapul Farms to build and scale modular insect farms to close the loop between organics waste management and animal feed markets.



**Xingwang Liu, Ph.D., MBA, CTO, [Guangzhou FishTech Co.](#):** Xingwang Liu has long been engaged in research related to aquatic animal nutrition, physiology and feed science, as well as technology development and management of agricultural and livestock feed enterprises, and has rich experience in front-line technology, management and administration. He has published more than 40 scientific research papers in high-quality journals. He has authorized more than 40 national invention patents, and won two first prizes for scientific and technological progress at provincial and ministerial level, and two first prizes for scientific and technological progress at local and municipal level, and has been awarded as "Innovation and Entrepreneurship" leading talents and "Science and Technology Entrepreneur" in Jiangsu Province.



**Nick Piggott, CEO & Co-Founder, [Nutrition Technologies](#):** Nutrition Technologies is an industrial-scale BSF manufacturer based in South East Asia. Nick became acutely aware of the challenges of food security whilst working for the UN in West Africa, and the company has since developed insect-based feed-ingredients for the livestock and aquaculture industries to address this issue. Founded in 2015 with R&D centres in Singapore and Vietnam and manufacturing operations in Malaysia, Nutrition Technologies specialises in tropical production systems, and is targeting rapid regional expansion in the coming two years.

