Dr. John Jungck Named 2022 NABT Honorary Member

November 26, 2022 - It is a unique challenge to describe the impact of John Jungck's career on biology education. "Influencer" doesn't fully capture John's warmth and unwavering support as he encourages every learner and colleague he encounters. "Visionary" does not adequately convey the seismic impact of John's work. A 1994 article in *Science* is probably the closest when author Virginia Morrell described John as the "Godfather of Virtual Bio and Genetics Labs."

This year, the National Association for Biology Teachers is proud to name Dr. John Jungck as the 2022 NABT Honorary Member, the highest honor given by NABT. The Honorary Membership recognizes individuals who have "achieved distinction in teaching, research, or service." Even if you do not know John's name, you have benefited from his groundbreaking work in mathematical modeling, quantitative biology, and science education.

John describes himself as a "theoretical biologist who specializes in molecular evolution, evolutionary bioinformatics, image analysis, and mathematical biology education. My interests are deeply involved with various aspects of promoting interdisciplinary work: science, technology, and society; history, philosophy, and social studies of biology; art and science (STEAM – putting art in Science, Technology, Engineering, and Mathematics); numeracy (quantitative reasoning); Citizen Science and Participatory Democracy; international collaboration (International Union of Biological Sciences); mathematics and science education (PBL, collaborative learning, open-ended investigations, strategic simulations for learning long-term strategies of research, problem-solving, interdisciplinary education, progressive cyberlearning); and, promoting diversity and student retention."

It can be a lot to unpack unless you appreciate that one of John's fundamental qualities is identifying intersections (or making them happen into existence). John earned his BS in Biochemistry and Mathematics and MS in Genetics and

Microbiology, both at the University of Minnesota. He then earned his PhD in Evolution, Molecular, and Cellular Biology at the University of Miami. He also has an Honorary Doctor of Science from the University of Minnesota.

John's experience teaching evolutionary biology led him to get involved in many organizations, including NABT. His service to NABT resulted in him being appointed editor of *The American Biology Teacher* in 1984. He also was NABT's formal representative to AAAS for many years.

In 1986, John co-founded the BioQUEST Curriculum Consortium, then at Beloit College. Working with Nils S. Peterson, CEO of From the Heart Software, John developed the "3 P's(problem posing, problem-solving, and peer persuasion) in learning biology that is the bedrock of BioQUEST's approach to resource and network development. Interestingly, the 3P's were introduced not in a biology teaching journal but in *Academic Computing* in 1988.

After stepping down as the decades-long director of BioQUEST, John joined the faculty at the University of Delaware, where he is a Professor of Biological Sciences and Mathematical Sciences, the Inaugural Fellow of the Honors College, and Associate Director of the Institute for Transforming University Education.

Throughout his time at BioQUEST and now at the University, John has served as the editor for several journals, received awards and honors like being named a Fellow of AAAS, ACUBE, AIBS, and SICB, being a Fulbright Scholar in Thailand, and being a recipient of the *Bruce Alberts Award* from the American Society for Cell Biology and the *T. H. Huxley Award* from the Society for the Study of Evolution. He also has an award named after him. The *John Jungck Prize for Excellence in Education* is now given by the Society for Mathematical Biology.

"My aspiration as a biology educator has been to try to create a community devoted to making biology education more open and accessible so as to be more inclusive, collaborative, and supportive," said John in a statement. "As an evolutionary biologist and genetics educator, I believe that mathematics is a civil right that empowers students to become better citizens in a participatory democracy and socially responsible."

John's career changed how we teach biology. But as the letters of support for the honorary membership illustrated, John also changed why we teach biology. Words like "mentor," "connector," and "friend" really do get closer to describing John. And don't forget "Godfather."

NABT will officially recognize Dr. John Jungck at the 2022 Honors Luncheon during the NABT Professional Development Conference, where we can finally thank him for making (a least some of) us enjoy teaching math.

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About NABT: Since being established in 1938, the National Association of Biology Teachers (NABT) has been the recognized "leader in life science education." Thousands of educators have joined NABT to share experiences and expertise with colleagues from around the globe; keep up with trends and developments in the field; and grow professionally. For more information about NABT, please visit www.NABT.org.

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