



Big Data Training for Cancer Research

Special Lecture Series

Research Misconduct: From Definitions to Prevention

Dr. Georg Striedter

July 18, 2024, 1:00 – 2:15 PM (PDT)

Sue Gross Auditorium, Susan & Henry Samueli College of Health Sciences



Speaker Bio: Georg Striedter is a Professor of Neurobiology & Behavior at the University of California, Irvine. He grew up in Germany, received his undergraduate training at Cornell, and obtained a Ph.D. from UC San Diego. His research has always focused on how and why organisms changed over the course of evolutionary time. In his laboratory, he worked with birds as well fishes, and compared both adult and developing brains to determine how those of different species diverged. Dr. Striedter has published two books on brain evolution, namely *Principles of Brain Evolution* (2005) and *Brains Through Time: A Natural History of Vertebrates* (2020; with Glenn Northcutt). He has also written a college-level textbook on neurobiology (*Neurobiology: A Functional Approach*, 2016), and a comparative perspective on the use of model systems in biomedical research (*Model Systems in Biology: History, Philosophy, and Practical Concerns*; 2022). A fifth book, titled “*Bird Brains and Behavior*” (co-authored with A. N. Iwaniuk) is currently in production at MIT Press. Dr. Striedter received a fellowship from Berlin’s Institute for Advanced Study in 2002-2003 and a Guggenheim Memorial Fellowship in 2009. He was elected fellow of the American Association for the Advancement of Science (AAAS) in 2023. He is currently serving as Research Integrity Officer for UC Irvine.

Abstract: Ideally, science is a self-correcting enterprise. However, an alarming rise in scandals, retractions, and paper mills is undermining the public’s confidence in science and scientists. This presentation will review some evidence to document this crisis and then delve into the definition of “research misconduct” versus “questionable research practices” (QRPs). It is difficult estimate the frequency of these problems, but some data indicate that it is higher than we used to think. In parallel, new tools have been developed to spot and publicize problems in published research. A major challenge for institutions investigating research misconduct is to distinguish willful misconduct from “honest mistakes.” A larger, even more important question is how to reduce the pressures that lead researchers to cut corners, “beautify results,” and fabricate data. Hopefully the talk will generate a lively discussion of these challenges.