

Whatever Happened to the Tree of Life?

Many Christians have been persuaded by Biologos (not to mention the evolutionary biology community itself) that universal common descent (UCD) — i.e., the theory that all organisms on Earth have descended from a common ancestor — is factual and thus must be reconciled with Christianity. This talk will review the many lines of evidence that now challenge UCD, and how intelligent design uniquely illuminates the current situation in historical and comparative biology. The talk will draw on work done with Prof. Richard Buggs of Queen Mary College, Univ. of London.

Paul A. Nelson studied evolutionary theory and the philosophy of science at the University of Chicago, where he received his Ph.D. in 1998. Since that time, he has been a Fellow of the Discovery Institute and from 2004 to the present an Adjunct Professor in the Master of Arts Program in Science & Religion at Biola University. Nelson's scholarly articles have appeared in journals such as *Biology & Philosophy*, *Zygon*, *Rhetoric and Public Affairs*, and *BioComplexity*, and book chapters in the anthologies *Mere Creation*, *Signs of Intelligence*, *Intelligent Design Creationism and Its Critics*, and *Darwin, Design, and Public Education*. He is a member of the Society for Developmental Biology (SDB) and the International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB).

I. Introduction: A Tree Dissolving From Its Root Upward

II. Darwin's Test for Common Descent: The Principle of Continuity

III. The Discovery of "ORFan" and Taxonomically Restricted Genes

IV. Has the Principle of Continuity Been Violated?

V. Conclusion – Seeking a Better Geometry of Life

Suggested Readings:

W. Ford Doolittle and Eric Baptiste, “Pattern pluralism and the Tree of Life hypothesis,” *Proceedings of the National Academy of Sciences USA* 104 (2007):2043-49.

Eugene Koonin, “The Biological Big Bang Model for the Major Transitions in Evolution,” *Biology Direct* 2 (2007):21.

Graham Lawton, “Why Darwin was wrong about the tree of life,” *New Scientist* 29 January 2009

Vicky Merhej and Didier Raoult, “Rhizome of life, catastrophes, sequence exchanges, gene creations, and giant viruses: how microbial genomics challenges Darwin,” *Frontiers in Cellular and Infection Microbiology* 2 (2012):113.