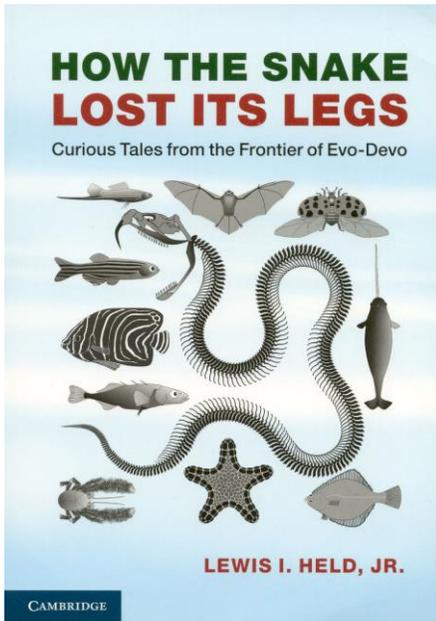


New Book Announcement



How the Snake Lost Its Legs: Curious Tales from the Frontier of Evo-Devo.

Held, Lewis I, Jr. 2014, 285 pp. Cambridge University Press, ISBN-13: 978-1-107-62139-8 (paperback); ISBN-10: 1107621399 (hard cover).

Education too often focuses on teaching facts to students. But in science, where our knowledge base is dynamic, learning how to think about unknowns may be as important, if not more so. Nature often does not take the most logical path. Being aware of that simple truth can open our minds to surprising and valuable discoveries. That, in a sense, is a take-home lesson from this wonderful new book by Lewis Held.

Have you ever asked how the fly tattooed its arms or why it twirls its penis? How do animals decorate their skin? How did a bat get its wings or a bee its pollen basket? Why does the centipede always

have an odd number of segments? Clear and often surprising answers to these puzzles are rooted in carefully described genetic mechanisms. Detailed diagrams throughout were done by the author. They show the developmental pathways and phenotype changes for characters like the title story about the transition from legged lizards to legless snakes via life in underground tunnels. The fact that many of these insights come from recently recovered fossils or new data from gene sequencing not only makes this an up-to-date, unfolding story, but it shows how quickly our understanding of biological processes and evolutionary history can grow.

Not only is it quite enjoyable to read, it is full of valuable reference sources, as are all of Dr. Held's previous works. The glossary and bibliography make up almost half of the volume and, by themselves, are worth the cost of the book (\$35.99 paperback, according to one source).