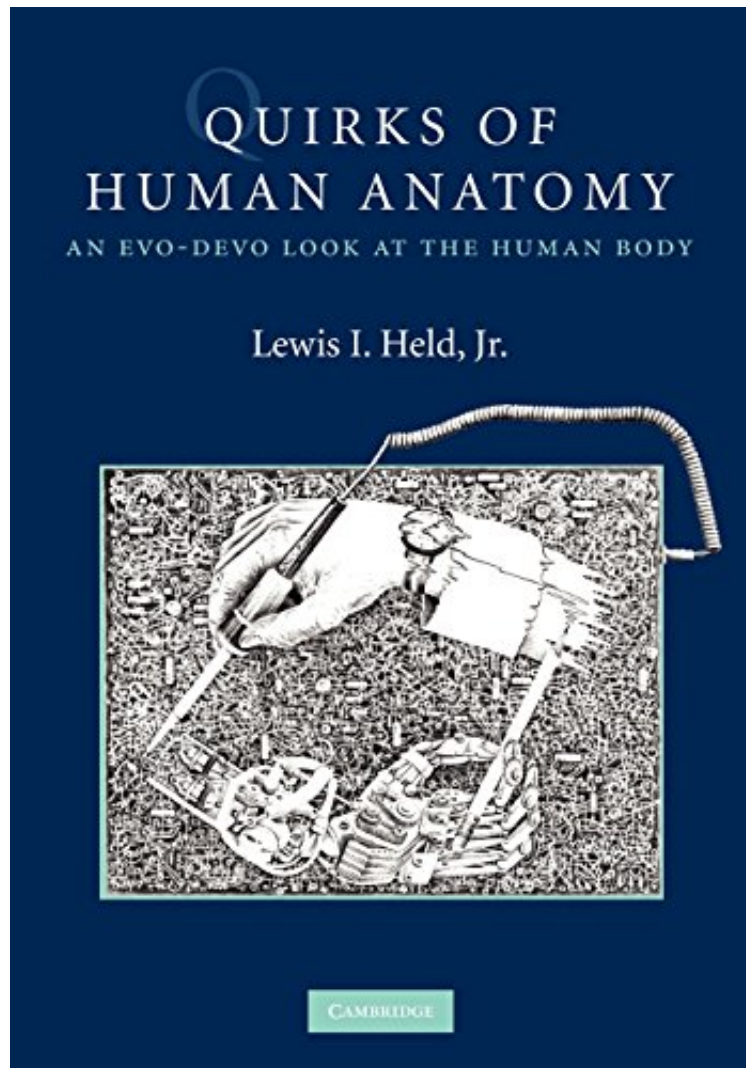


(Download ebook) Quirks of Human Anatomy: An Evo-Devo Look at the Human Body

Quirks of Human Anatomy: An Evo-Devo Look at the Human Body

Lewis I. Held Jr

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Lewis I. Held Jr : Quirks of Human Anatomy: An Evo-Devo Look at the Human Body before purchasing it in order to gage whether or not it would be worth my time, and all praised Quirks of Human Anatomy: An Evo-Devo Look at the Human Body:

2 of 2 people found the following review helpful. Fun to readBy Quantum326A fairly technical compendium, with references, of evolutionary left-overs in the human body. About half the book is the listing of references. Fun to read, however.2 of 2 people found the following review helpful. Great intro to human evo-devoBy Susan CachelThis little book summarizes many strange aspects of human anatomy, including not only the musculo-skeletal system, organ structure and placement, and neurology, but the external soft tissue (e.g., hair). The chapters on the possibilities of

evolution (why no flying elephants and 6-limbed vertebrates) and human sexual dimorphism are great. The only drawback is that the illustrations are hugely complicated, even with extensive captioning. They need to be studied a long time.²³ of 23 people found the following review helpful. life's little quirksBy Barry R. DavisHeld does an excellent job of exploring and explaining some quirks of human anatomy. Through a series of interesting and provocative questions, he examines human development and evolution in an entertaining and didactic but rigorous way. Using the coined term "bislaggiatt," an acronym for "but it seemed like a good idea at the time", and an array of fascinating diagrams with detailed explanations, the author sets out to show how the current discipline of evolutionary development, or evo-devo, can address some of the most fundamental aspects of human form, growth, and development. Questions such as why some parts of our anatomy are symmetric and others are not, why are arms different from legs, why men and women have different size and shapes, and why some of our structures seem ill-equipped for certain tasks, provide the basis for covering much of what is known about evolution, genetics, and development. "Quirks of Human Anatomy" would be quite useful as additional reading for any course on evolution or development. It also stands alone as a very worthwhile, very enjoyable scientific book.

With the emergence of the new field of evolutionary developmental biology we are witnessing a renaissance of Darwin's insights 150 years after his Origin of Species. Thus far, the exciting findings from "evo-devo" have only been trickling into college courses and into the domain of non-specialists. With its focus on the human organism, Quirks of Human Anatomy opens the floodgates by stating the arguments of evo-devo in plain English, and by offering a cornucopia of interesting case studies and examples. Its didactic value is enhanced by 24 schematic diagrams that integrate a host of disparate observations, by its Socratic question-and-answer format, and by its unprecedented compilation of the literature. By framing the "hows" of development in terms of the "whys" of evolution, it lets readers probe the deepest questions of biology. Readers will find the book not only educational but also enjoyable, as it revels in the fun of scientific exploration.

"I heartily recommend this book and found it a joy to read...The rich array of evo-devo research that is brought to bear in Quirks of Human Anatomy provides another independent line of evidence for our connection to the tree of life." - Andrew J. Petto, Evolution: Education and Outreach"The book is indeed a great success as it enables a simple and pleasing introduction to the field of evolutionary biology and Darwinian medicine...I strongly recommend reading it because it may inspire many future students to be engaged in various aspects of evolutionary studies. It is also a good read for the general public curious about evolution." - Israel Hershkovitz, The Evolution Medicine "Quirks of Human Anatomy: An Evo-Devo Look at the Human Body, by Lewis I. Held, Jr. is a lively romp through the evolution of the human body - with particular attention to traits that do not work so well, which he calls 'quirks.' The book is well written, with humor and a real passion for the subject. The illustrations are clear and informative, and, as the text, packed with details." - Anne Buchanan, BioEssays"....Bridges the gap between basic research and comparative anatomy, but does so in a delightful and engaging manner that anyone can understand.... Despite the light touch of the author's prose, this is a serious book, supplemented by dozens of excellent illustrations and nearly 3,000 references, that has lots to offer anyone interested in evolution." - John G. Fleagle, Evolutionary Anthropology"An interesting and thoughtful book.... At times, humorous and whimsical but always accurate in addressing the issue, principally from an embryological perspective. It presents numerous tables and illustrations and more than adequate commentary.... Overall, the book is a good read for those interested in evolutionary biology and should be a successful book in the hands of those students Held is aiming to reach." - James M. Williams, The Journal of the American Medical Association"For graduate students looking for meaningful questions in the biological sciences to investigate, this book will provide an outstanding collection of many such questions, and provide some hints of where to start, with nearly half the book providing appropriate references - places to start the search, all neatly linked to their presentation in the text.... All in all, a fascinating read, presented with delightful humor, many helpful graphic aids, and a great variety related topics." - Larry Flammer, Evolution and the Nature of Science Institutes (ENSI)"The potential readership of this precious little book is wide and diverse. Among those in the trade of Evo-Devo, I doubt there are more than a handful who have ever looked at their own body with professional eyes, as Lewis Held has done so successfully in these pages. Thus, I expect many colleagues will enjoy this book as I did. But for those who need an introduction to the field, this is one of the first titles I would recommend, not simply because it offers a readable and provocative introduction to most of the core concepts and issues in Evo-Devo, but also because it balances so effectively two seemingly opposite, but equally fundamental truths. On the one hand, a great many quirks of animal (not necessarily human) anatomy make sense only when seen through the lens of evolutionary developmental biology. On the other hand, the field of Evo-Devo has just begun to be explored: Held's list of unresolved puzzles, well searchable through the book's analytical index, includes as much as 113 entries." - Alessandro Minelli, Evolution and Development "I heartily recommend this book and found it a joy to read...The rich array of evo-devo research that is brought to bear in Quirks of Human Anatomy provides another independent line of evidence for our connection to the tree of life." - Andrew J. Petto, Evolution: Education and Outreach"The book is indeed a great success as it enables a simple and pleasing introduction

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About the Author
Dr Lewis I. Held earned his BS in Life Sciences from the Massachusetts Institute of Technology in 1973. On completion of his PhD in molecular biology from the University of California, Berkeley in 1977, he became a Postdoctoral Fellow at the University of California, Irvine's Developmental Biology Center from 1977 to 1980. Following a 6-year period as an Assistant Professional Research Biologist at the University of California, Irvine, he joined Texas Tech University as an Associate Professor of Biology in 1987. He was awarded the President's Excellence in Teaching Medal from Texas Tech University in 1995 and is the author of *Models for Embryonic Periodicity and Imaginal Discs: The Genetic and Cellular Logic of Pattern Formation*.