

HHMI Evolution DVD: Fossils, Genes, and Mousetraps
Ken Miller Lecture

This new evolution DVD from HHMI offers an excellent supplement to the previous Evolution DVD from HHMI. It lacks the diversity of material and video clips provided in that first disc, but it includes a number of important issues that may well be raised in biology classrooms today, by students or parents. Teachers would do well to watch this 90-minute lecture (with lots of Q & A time included), where students have a chance to examine politically and theologically controversial issues of intelligent design (ID) and religion as they relate to evolution and science.

Included in the disc box is an index to the 37 segments (or “chapters”) covered in the lecture/discussion, to help the busy teacher return to particular parts of special interest. Each Q & A question asked by students at the lecture is identified with a separate number and title, so that a teacher could go there in response to questions that may arise in the classroom, and follow up with further discussion.

Some highlights and issues:

1. Whale evolution is presented as beginning about 80-90 million years ago, with mesonychids being shown as their antecedents. Current research puts the time at closer to 55 to 60 mya, with a different antecedent that also gave rise to the cetaceans’ closest living cousins, the hippopotamus, not mesonychids.
2. Nice comparison of a recent phylogeny of human evolution with the general pattern of evolution drawn by Darwin in his Origin of Species.
- 3, Part 5 (“30-second version of evolution” shows a delightful interview of Miller on the “Colbert Report”
4. About 27’ into program (part 13), Miller shares the part of his testimony at the Kitzmiller-Dover trial where he shows how our #2 chromosome resulted of the fusion of two chromosomes found in apes today.
5. He continues (after a Q&A session) with part 19, sharing other features of the Kitzmiller-Dover trial, where he does an excellent job of explaining ID, and showing how it clearly is not science; he compares irreducible complexity (IC) with evolution, revealing clearly the IC is simply wrong (about 48’ into program).
6. Other topics of interest discussed were speciation, eugenics, abiogenesis, exogenesis, and the “God” gene.

I probably would not show the entire program to my classes (interesting and well-done, but a long session with a “talking head”), but would very likely show selected short portions, as appropriate during my evolution unit, or other units that reference evolution, science or genetics. Also good as a conversation starter: show a short segment, then stop it, get questions and comments from the class, then show follow-up on the disc, or how some questions were handled in the program, leading to more in-class discussion.

Parts of the program could be used for follow-up after showing all (or parts) of the NOVA program:

“**Judgment Day: Intelligent Design on Trial.**” ENSI lessons that tie in closely with this program (and the NOVA program) would be the **Mystery of the Missing Marks** (chromosome fusion hypothesis for shared ancestry with chimps), **Becoming Whales**, and **Whale Ankles and DNA**.

I highly recommend adding this valuable DVD to your collection of resources. It’s FREE from HHMI at <http://www.hhmi.org/catalog/main?action=product&itemId=323>