## **Doubts about Darwin**

This workshop will present the essential material from the book by Dr Woodward of the same title. It focuses not only on the history of Intelligent Design research, but on the specific nature of the arguments advanced by Intelligent Design that the culture has found hard to resist.

**Dr Thomas E. Woodward** completed his doctoral work in the Department of Communication at the University of South Florida in the Rhetoric of Science. In 2003 his dissertation, a rhetorical history of the Intelligent Design Movement, was published by Baker Books as <u>Doubts about Darwin</u>. Since 1988, Dr. Woodward has directed Trinity's Center for University Ministries (CFUM), along with an evangelical teaching and discipleship ministry, the C.S.Lewis Society, which is housed at Trinity College. The Society and CFUM together host the busy <u>apologetics.org</u> website, hold conferences and seminars on evidences for the Christian faith on university campuses, and produce video and other resources. Together they have produced <u>The Princeton Chronicles</u>, <u>Opening Darwin's Black Box</u>, <u>Light of the Nations</u>, <u>The Duna Stor</u>, <u>A Chemist's Story</u>, and <u>Is There a Rational Morality</u>?

I. Introduction: The Issue: *Is design "real" or merely "apparent?"* Can nature produce the design we see?

- Hoyle: A common sense interpretation of the data suggests that a superintellect has monkeyed with physics, as well as with chemistry and biology.
- Mark Davis: The rate of expansion in the universe is fine-tuned to sixty decimal places; this is level of fine-tuning that's "crazy"...
- A. Design in the Air... 1) Fine-tuning...note the Privileged Planet Hypothesis 2) Big Bang
- B. Is biology's response the same as physics? Note two quotes from Richard Dawkins: 1. Biology is the study of complicated things that give the appearance of having been design for a purpose."
- 2. "Darwin made it possible to be an intellectually fulfilled atheist." ID Critiques produce:
- C. ID's Main Points: First, ID is skeptical of...
- (1) Common ancestry
- (2) Chemical evolution of the first life
- (3) Natural selection/mutation Mechanism Percentages?

#### ID's Positive Side

- Science can <u>empirically detect</u> the action of an intelligent cause in nature.
- The cell is filled with <u>dozens of complex systems</u> which have already passed this test of empirical detection of ID.

Question: How radical is this combination of critiques plus the "detectability thesis"?

- D. Intelligent Design in the News
- New York Times, Washington Post, Boston Globe, Time Magazine, Newsweek, CNN, Fox News

- Telling students that evolution is "just a theory" is a slippery slope similar to the one that led to Nazis killing Jews *Jeffrey Selman, Plaintiff in Cobb County, GA court case, Cleveland Jewish News, 1-22-05*
- Critics of Darwin are ... like the Taliban Dr. Lawrence Krauss, Case Western University, in the New York Times, 3-31-05
- Denying evolution is like denying the holocaust Eugenie Scott, NCSE, Seattle Post-Intelligencer, 4-2-05

## E. What is Evolution?

Two Kinds of Evolution...

• Microevolution vs. Macroevolution

Dissatisfaction with D-Macro...

- New MIT Press book...
- The Origination of Organismal Form
- Opening chapter by Muller & Newman
- We lack "a theory of the generative"...

Question: How radical is this discussion, this admission?

F. A Tale of Two Radicals...

# Michael Denton: Prototype ID Radical

- Agnostic when writing...
- Macroevolution (by mutation-selection) is Denton's target—neo-Darwinism.
- Denton: Current paradigm is in a crisis.
- Evolution: A Theory in Crisis (1986) spread a virus of radical skepticism.
- "I have adopted the radical approach." "Ultimately, the Darwinian theory of evolution is no more nor less than the cosmogenic myth of the twentieth century."

# Second Radical: Phillip Johnson at UC Berkeley

- Evidence for undirected macroevolution?
- Between "weak and nonexistent."
- Gould: "The book, in short is full of errors, badly argued, based on false criteria, and abysmally written."

David Raup (2000) on Johnson...

• "Phil Johnson's work is very good scholarship and, of course, this has been widely denied. He cannot be faulted; he did his homework and he understands 99 percent of evolutionary biology."

Rhetoric: signs of radical tension

Evidence is overwhelming... For Darwinian evolution (Mayr).

Evidence is non-existent... For the two central axioms of Darwinism (Denton)

- G. We need to...
- Explore three radicalisms that characterise ID, using icons of engine, tree, and filter.
- Point out the key values of science at stake, and assess the explanatory power of ID
- II. Radical Point #1No "Engine" of Macroevolution
- A How plausible is the building of genes through random mutation..??
- B. Note that DNA has voluminous quantities of specified information
- Typical short gene: 300-400 nucleotide pairs
  - Typical mammal genome: 30,000 genes
- C. The Peppered Moth...
  - 1. The original story, and its plain irrelevance...
  - 2. The more recent story: a case of fraud?
- D. Doug Axe, PhD Cal Tech, Cambridge University, doing mutagenesis
  - 1. Specificity Problem: Origin of Novel Proteins
- 2. Protein Islands in an Ocean of Non-function
- 3. Findings: Intermediate Stepping Stones Don't Exist
- III. Radical Point #2: **No Tree** of Common Ancestry
- A. The Great Fossil Mystery
- Two Great Patterns:
  - 1. New types appear abruptly, called... "Abrupt Appearance"
  - 2. New types stay the same, called... "Stasis"
- B. A Prime Example: The Eocene Bat
  - Found in Wyoming; dated in the Eocene Era
  - Structure was virtually identical to a modern brown bat

More examples, from the Cambrian Explosion...

Burgess Shale Wiwaxia Hallucigenia

Opabinia...Five-eyed Oddity

Life at Chengjiang, with Microdictyon

Anomalicaris

#### C. The Big Picture...

- At the higher levels, fossils <u>never</u> document gradualism.
- Fossil evidence fits perfectly with the idea of separate origin of basic kinds.
- Not a "tree" but a "lawn."

#### IV. Radical Point #3

#### The Explanatory Filter:

Detecting intelligent causation of complexity, using a Probabilistic Filter

A. First Kind of Complexity: Specified Complexity

The Information Problem

• KEY: There is no empirical data for any process in nature that can arrange letters in a precise sequence, yet ...

## Human agents do this easily!

# B. Second Kind of Complexity: Cellular Machines

Using "Darwin's Own Test"

• "If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, *my theory would absolutely break down.*" (154)

When Does Darwinism "Break Down"?

- When we find systems with a "machine-like complexity" of many interacting parts.
- These machines lose function if one part is removed.
- "Irreducible complexity" is Behe's phrase for this machine-complexity which cannot be reduced.

(Rube Goldberg Complexity pictures... - !!)

# Behe's Shocking Discovery:

The number of published proposals, over the past 40 years, showing how these systems might have evolved: a nice round number, Zero!

Example: Jodie Foster

More Examples of Design-Detection....

#### C. The Explanatory Filter:

Take object, event, or phenomenon X, and see if it can be explained by "law" (HP event) first, then "chance" (MP event), or if neither of these applies (ie it's a "SP event"),

Then, Intelligent Design is indicated, if...

X Conforms to an "Independent, Specified Pattern"

# Defending Scientific Values

- To rule out "intelligent causes" a priori is to truncate science.
- Richard Lewontin: "We can't allow a divine foot in the door."
- Follow T.H.Huxley's advice: Sit, like a child, before the evidence and allow it to lead one to a cogent, empirically sensible conclusion.

#### The Conclusion...

- Some scientists, without compelling evidence, attribute *to nature* the ability to create specified complexity.
- Yet, natural causes (chance and scientific law) have been found to be simply <u>too stupid</u> to produce irreducible complexity and specified complexity.

• Such complexity-building is an effect, in our experience, produced only by intelligence.