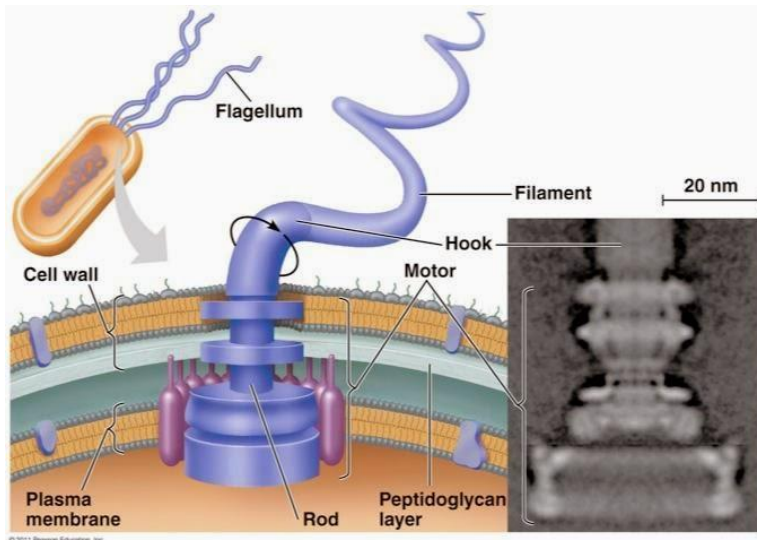


Irreducible Complexity:

a single system that is necessarily composed of several well-matched, interacting parts that contribute to the basic function, and where the removal of any one of the parts causes the system to effectively cease functioning

1. A sketch of the intelligent design hypothesis

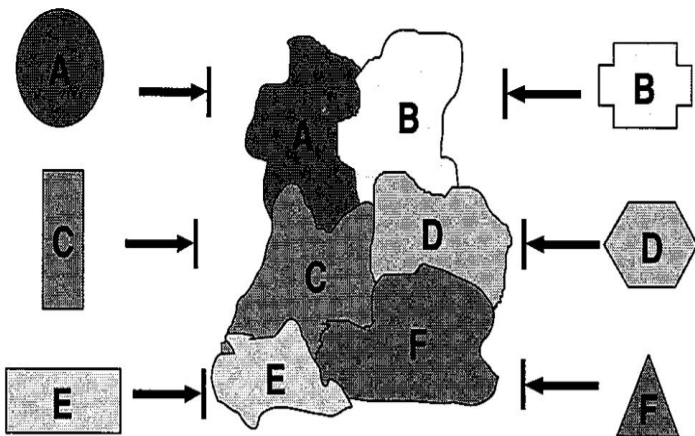


- The flagellum can be thought of as an outboard motor that bacteria use to swim
- First truly rotary structure discovered in nature.
- In absence of any of the proteins the system ceases to function

2. Intelligent Design and Evolution

- No quarrel between ID and Evolution per se
- Explains what Darwin's theories fail to explain
- Mechanism of evolution (i.e. how did all this happen, by natural selection or by purposeful Intelligent Design?)
- Opposition to Behe's theory stems from the philosophical and theological implications that his theory has
- Quantum events such as radioactive decay are not governed by causal laws
 - ➔ Influencing such events would break no laws of nature

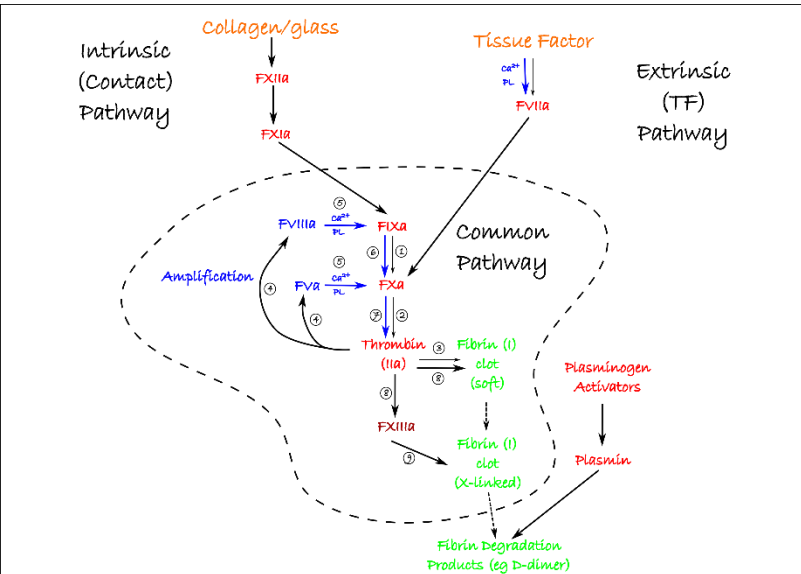
3. Misconceptions concerning supposed ways around the irreducibility of biochemical systems



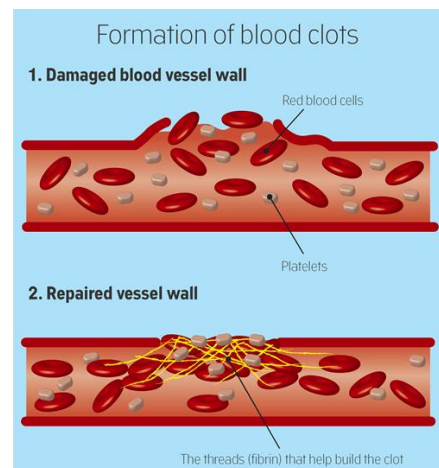
- This drawing emphasizes that even if individually acting proteins homologous to parts of a complex originally had separate functions, their surfaces would not be complementary to each other
- Thus, problem of irreducibility remains, even if individual proteins homologous to system components separately and originally had their own functions
- Kenneth Miller has pointed to the redundancy of the cilium as a counterexample to the claim of its irreducibility (Miller 1999, 140-3). But redundancy only delays irreducibility; it does not eliminate it.

- Irreducible complexity focuses on the functioning of the system (not on the misc. functions of the individual components)

4. The blood clotting cascade



- Fibrinogen deficiency leads to an inability to clot, hemorrhaging, and death of females during pregnancy.
- Plasminogen deficiency leads to a different suite of symptoms- thrombosis, ulcers, and high mortality.



- Mice missing both genes were "rescued" from the ill effects of plasminogen deficiency only to suffer the problems associated with fibrinogen deficiency.

→“irreducible complexity seems to be a much more severe problem than Darwinists recognize, since the experiment Doolittle himself chose to demonstrate that "music and harmony can arise from a smaller orchestra" showed exactly the opposite”

5. Future prospects of the intelligent design hypothesis

- The idea of Intelligent Design arose not from the work of any individual but from the collective work of biology, particularly in the last fifty years
- The cell is not getting any simpler; it is getting much more complex. And as imagined simplicity vanishes, the idea of intelligent design becomes more and more compelling. That trend is continuing inexorably.