Biology 1B (Evolution)
John Huelsenbeck
Alexander Fleming
(1881–1955)
On a plate planted with staphylococci a colony of a mould appeared. After about two weeks it was seen that the colonies of staphylococci near the mould colony were degenerate.
Staphylococcus aureus
(Bacterial lawn is yellow tinged. Note zone of inhibition by Oxacillin disk.)

Pseudomonas aeruginosa
(The greenish tint to the bacterial lawn is caused by the bacteria itself)
Well-defined margin of inhibition around disk.

The small zone of inhibition around this Ceftriaxone disk is interpreted as resistance.
Charles Robert Darwin
Born 12 February 1809
Died 19 April 1882
Westminster Abbey
Route of the HMS BEAGLE through Galapagos

- Sites explored by Darwin on foot
- Sites described by Darwin from on board the Beagle

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Galapagos Tortoise

Marine Iguana

Land Iguana
A Darwin Finch
Stages of eye complexity in mollusks

1. Pigment spot
   - Photoreceptor layer (pigment cells and nerve cells)
   - Nerve fibres
   - Epithelium

2. Pigment cup
   - Photoreceptor layer
   - Nerve fibres
   - Epithelium

3. Simple optic cup ("pinhole-lens" eye; Nautilus)
   - Epithelium
   - Water-filled cavity
   - Photoreceptor layer (retina)
   - Optic nerve

4. Eye with primitive lens (Murex, a marine snail)
   - Epithelium
   - Refractive lens
   - Retina
   - Optic nerve

5. Complex eye (octopus)
   - Refractive lens
   - Iris
   - Cornea
   - Retina
   - Vitreous body
   - Optic nerve

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Chihuahua

Great Dane

Sheep Dog

Wolf
<table>
<thead>
<tr>
<th>Pseudogene</th>
<th>Estimated age</th>
<th>Human</th>
<th>Chimp</th>
<th>Gorilla</th>
<th>Orangutan</th>
<th>Rhesus monkey</th>
<th>Capuchin monkey</th>
<th>Hamster</th>
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