Biology 1B (Evolution)
John Huelsenbeck
Alexander Fleming
(1881–1955)
In a plate plated with Staphylococi a colony of a mould appeared. After about two weeks it was seen that the colonies of Staphylococi 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.
Route of the HMS BEAGLE through Galapagos

- Red dots: Sites explored by Darwin on foot
- Green dots: Sites described by Darwin from on board the Beagle

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Marine Iguana

Galapagos Tortoise

Land Iguana
A Darwin Finch
Stages of eye complexity in mollusks:

- **Pigment spot**: Photoreceptor layer (pigment cells and nerve cells), epithelium, nerve fibres.
- **Pigment cup**: Photoreceptor layer, epithelium, nerve fibres.
- **Simple optic cup** ("pinhole-lens" eye; *Nautilus*): Epithelium, water-filled cavity, photoreceptor layer (retina).
- **Eye with primitive lens** (Murex, a marine snail): Epithelium, refractive lens, optic nerve, retina.
- **Complex eye** (octopus): Refractive lens, iris, cornea, retina, optic nerve, vitreous body.
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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<tbody>
<tr>
<td>$\alpha$-Enolase $\Psi_1$</td>
<td>11 Myr</td>
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<td>AS $\Psi_7$</td>
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