Ivan Pavlov
A study of his life and work

Amelia and Lisa
Life: Growing up

- As a teen Pavlov was studying to be a Russian Orthodox priest.
- Always interested in studying
- Wrote reports for head priest on his readings
- Started to change plans for life
- 1860’s science was big
- 1869 told father he didn’t want to go back to seminary for his last year
Discovering Science

- Was accepted at St. Petersburg University.
- Decided he would be a priest of a “new goddess”… science.
- At university developed physiology as his specialty
- Became good friends with Tsion – professor in University – inspired Pavlov
- Met Serafina Karcherskaia a young woman with the same scientific interests. Married not long later.
Personality

- Overly sensitive to insults
- Great commitment to honesty
  “However things may change, what is important to me is my own consciousness of the rightness of my behavior”
- Always tried to have a mature mind and accept the knowledge of those who knew more.
Times will change

- Couple had little money
- Gave lectures for money
- Son Valdimir dies
- Serafina spends much time in church praying and Pavlov dives into his studies
- Pavlov gets job in medical lab
- Serafina gives birth to second son and names him Valdimir as well.
1890’s – top of the world

- 1891 – Pavlov becomes chief of Russia’s largest most modern physiology lab
- Supports family well, 4 children
- 1904 – Won noble prize
- 1914 Pavlov ‘on top of the world’ 65 and financially stable
Troubled Times

- Aug 1914 WWII
- Loss of jobs, lack of fuel, poverty
- Nicholas II and Alexandria not trusted by people and government.
- Lenin introduces a social system. Everything belongs to the state.
- Civil war breaks out
- Russia devastated → many deaths
- Loses Nobel Prize to government
- Pavlov’s darkest days, scrounges for food at 70, stops working
- Pavlov writes to Lenin asking leave to emigrate
Bright for some

- Lenin decides to give Pavlov “everything he wants and needs” since he is such a valued citizen.
- Pavlov gets updated lab, materials, workers. Very best conditions.
  
  “We live under the rule of the cruel principal that the state is everything and that the person is nothing” – Pavlov

- 1929 Lenin dies
- Stalin the bloody dictator rules with a Communist party
- Pavlov still lives and works in comfort yet denounces Stalin’s terror
Ivan Pavlov first began his studies on digestion.
Investigating the digestive process between the salivation and the reactions of the stomach.

Ivan Pavlov first experiment was on the gastric functions for dogs by externalizing a saliva gland.
Used to measure, collect, and analyze the saliva in order to produce food, under different conditions.
Focus: to manipulate the stimuli occurring before the presentation of food.
Pavlov created: “Conditioned Reflexes”, the salivation within the dogs.
Bell and food experiment

- The dogs in Pavlov’s experiments demonstrated the saliva response when they were offered food. (unconditioned stimuli.)

- Food was then offered numerous times with the sound of a bell. By doing this, it would produce the salivation response.

- Eventually, the dog will salivate (conditioned response) at the sound of the bell alone (the conditioned stimulus).

- The dog has associated the tone with food.
Food $\rightarrow$ spit

Bell $\rightarrow$ no spit

Bell + food $\rightarrow$ spit
Further studies

- Conditioned Reflexes: to explain behaviours of psychotic people.

- Researched those who withdrew from society and might associate stimulus with an injury or threat.

- Was also a behaviourist

- Studied theories that mainly focused on the behaviours that could be measured and the thought that could not.

Why reflexes make us act a certain way.

How animals and humans can be trained to respond in a certain way.
“National Hero”

- After a second attack of pneumonia 86 year old Pavlov dies.
- Feb. 27 1936
- Named a “national hero and leader of international science”
- Decades later scientists still vitally use his research

“Pavlov’s life story was that of a great visionary, a brilliant experimental scientist, he believed in the power of science to change our world for the better.”