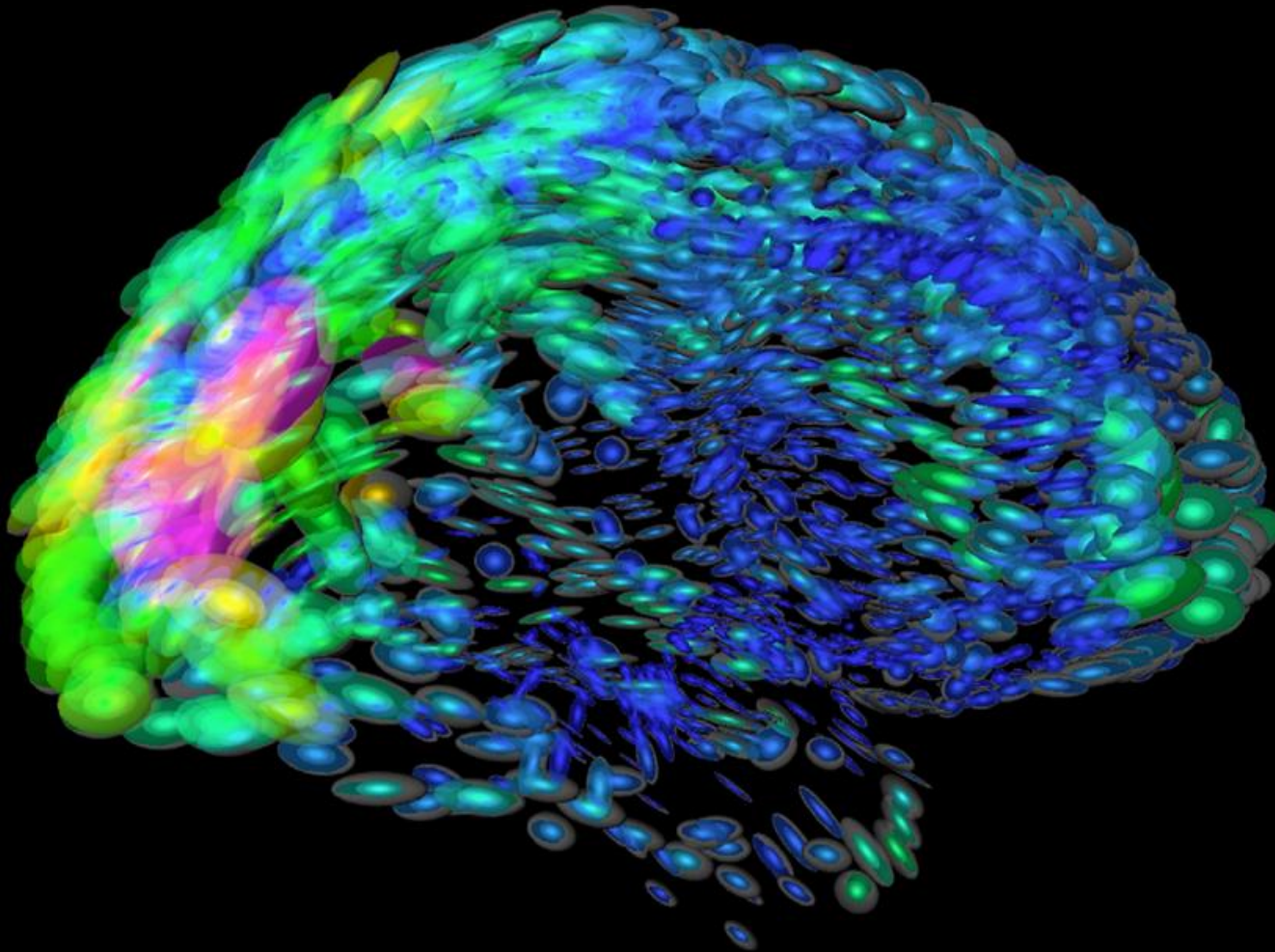
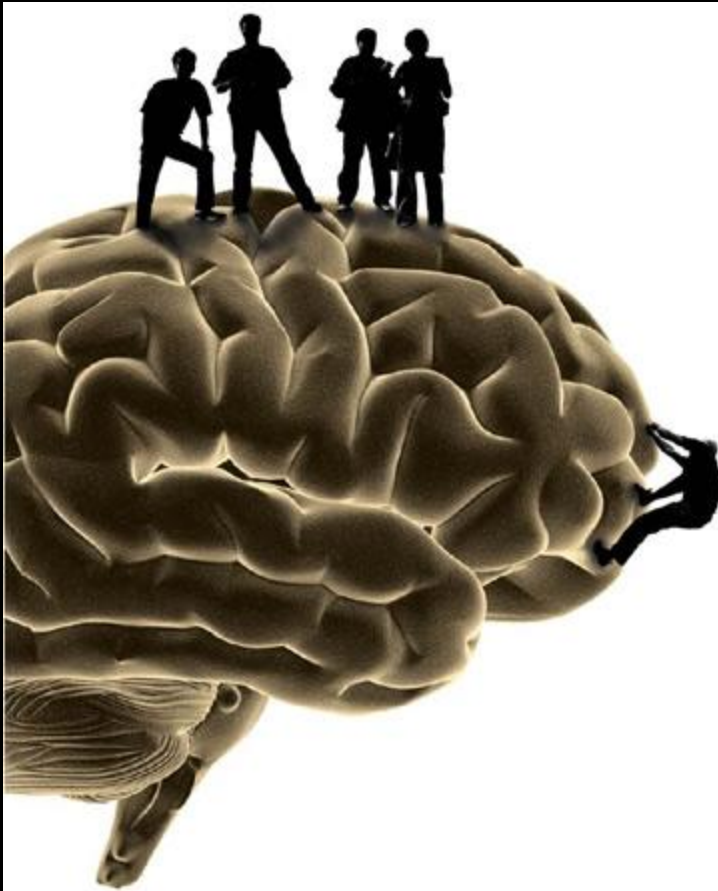


BSc. Neuroscience



*“There is no scientific study more vital to man than the study of his own brain.
Our entire view of the universe depends on it.”
- Francis H.C. Crick (Co-discoverer of DNA)*

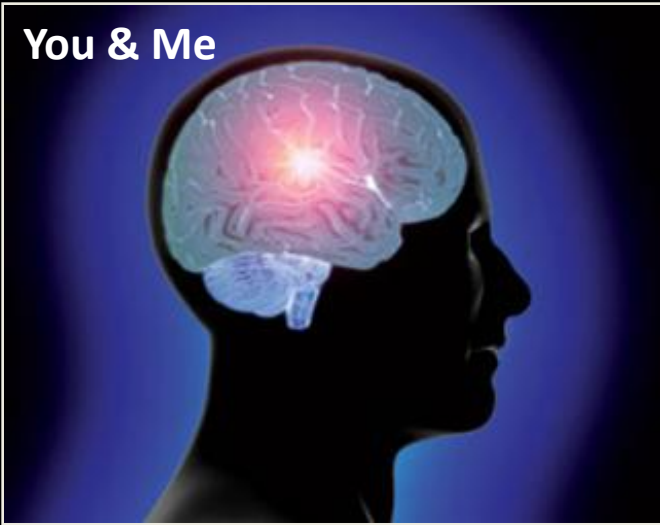
What is Neuroscience?



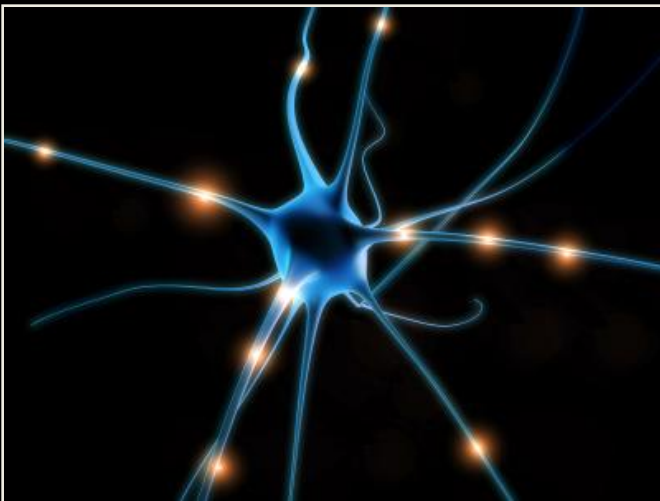
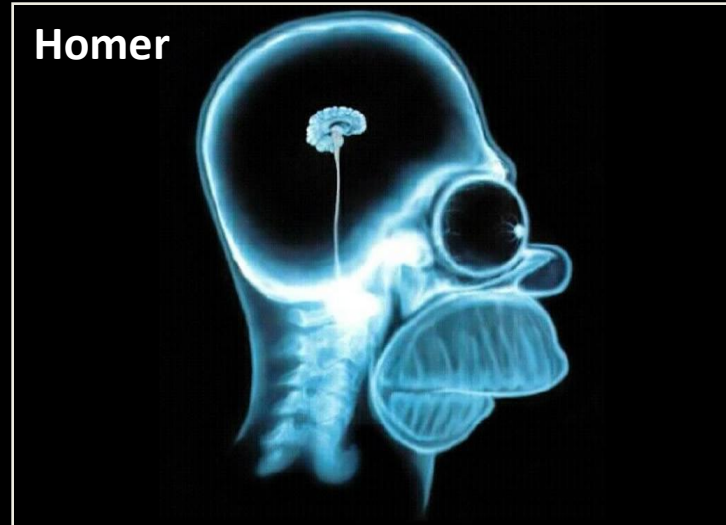
- *It's the study of the nervous system.*
- *Brain, Spinal Cord and other nerves in the body.*
- *From the tiny - DNA*
- *To the large - Thought*

Why study Neuroscience?

You & Me



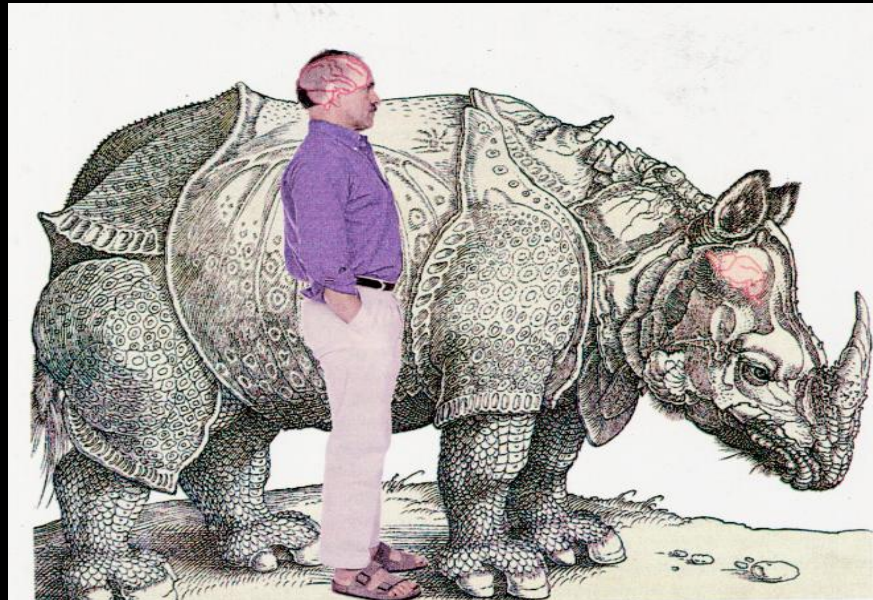
Homer



- *Astonishingly complex organ*
- *100,000,000,000 neurons (100 billion)*
- *It controls everything*

Why study Neuroscience?

- Current knowledge - tip of the iceberg.
- For example, we do not understand vision,
- We do not understand the biological basis of motivation, emotion, decision making and memory retrieval.
- What is consciousness? What do we mean by it? Is a rhino conscious?

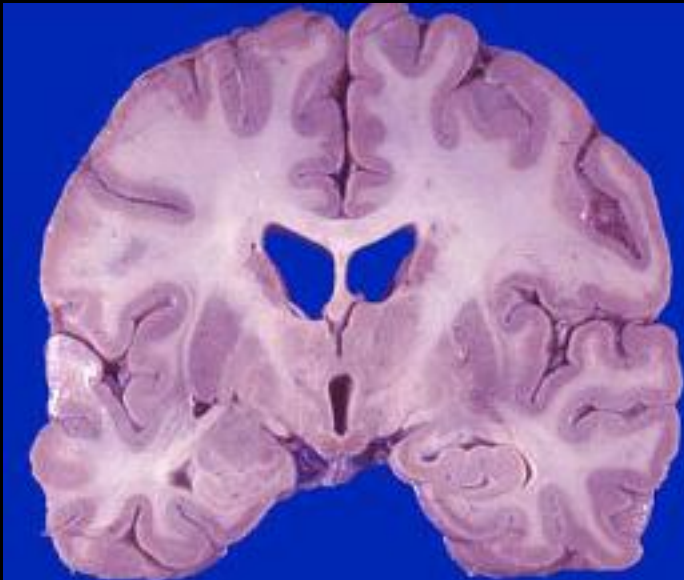


Why study Neuroscience?

"Injury and Neurodegenerative disease"

- Injury and diseases caused by degeneration of nerve cells
- Changes in these cells cause them to function abnormally
 - This eventually brings about their death
- Examples are Alzheimer's, Parkinson's, and multiple sclerosis
- Incidence increasing and in 2004 CNS disorders cost est. €386 billion in EU alone

Normal Brain



Alzheimer's Brain



BSc. Neuroscience - *The Location*

The "Bertram Windle" building

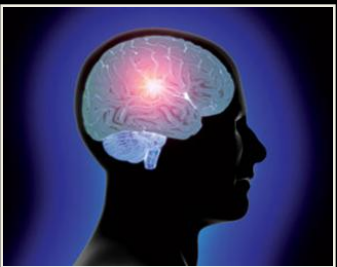


- Flagship degree program of the Dept. of Anatomy & Neuroscience.
- Established in 1998
- Controlled student numbers - teaching excellence by strongly active researchers.
- First of its kind in Ireland.

Biosciences Institute



Anatomy



Pharmacology



Psychology

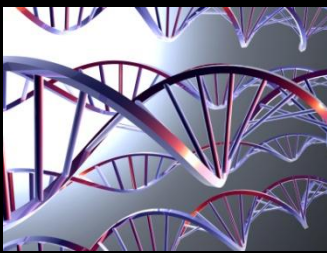


Research

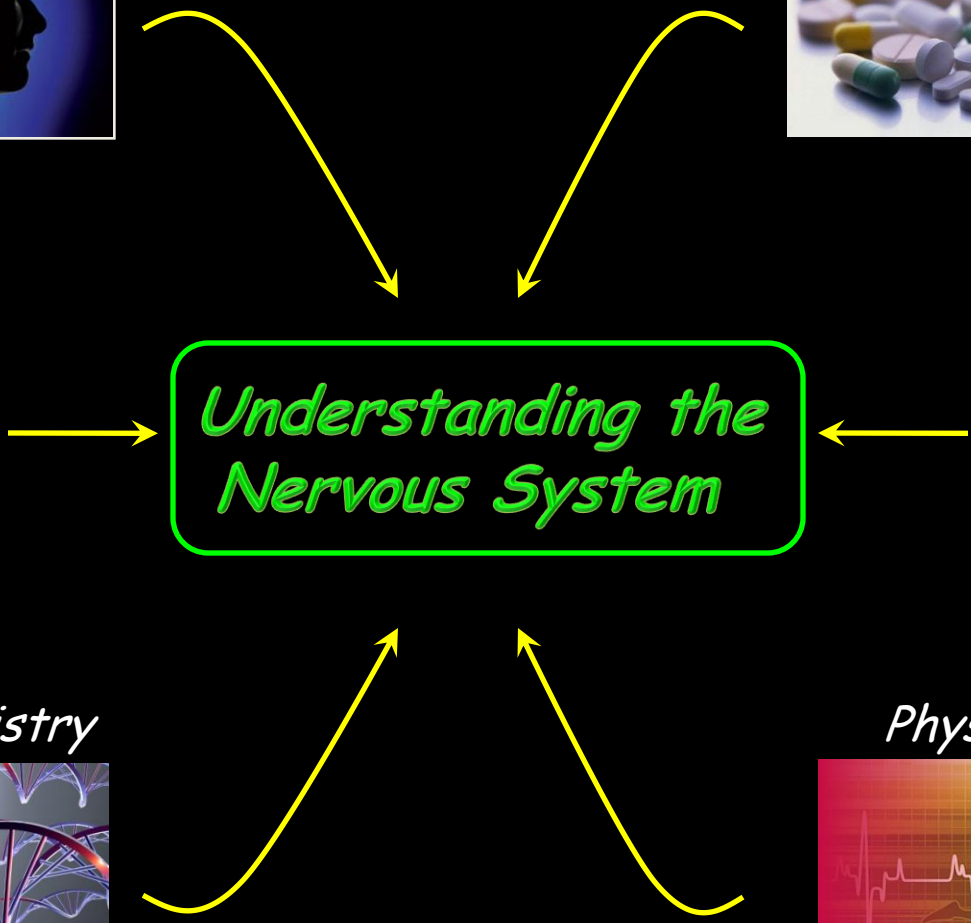


Understanding the Nervous System

Biochemistry



Physiology



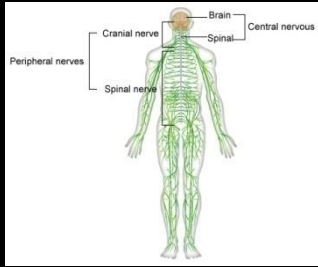
BSc. Neuroscience - The Course

- 1st Science : common CK402 1st year modules
- 2nd Science : 12 modules in all.
 - Two are common to all
 - Six are compulsory to do third year Neuroscience.
- common - molecular biology + statistics
- neuroscience - 2 anatomy + 2 physiology + 2 biochemistry
- 3rd Science: Nine compulsory modules + one elective
- 4th Science: Seven compulsory modules + one elective

BSc. Neuroscience - The Course

3rd Science modules

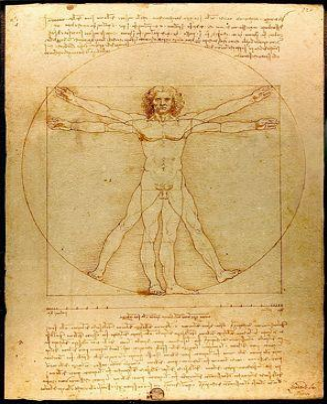
Human nervous system



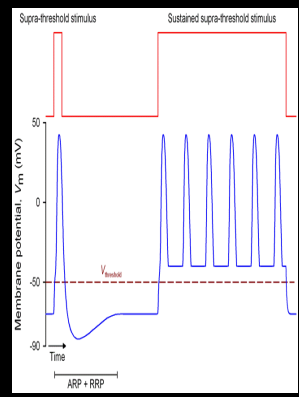
Embryology & Dev. Biology



Regional & Topographical Anatomy



Neurobiology of Regulatory Systems



BSc. Neuroscience - *The Course*

3rd Science modules

Research methods
in Neuroscience



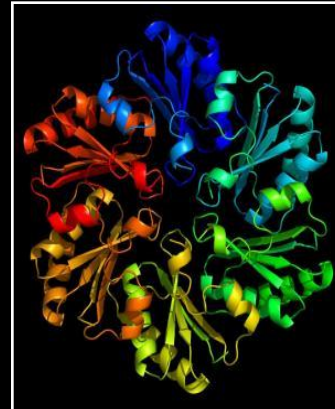
Library project



Pharmacology



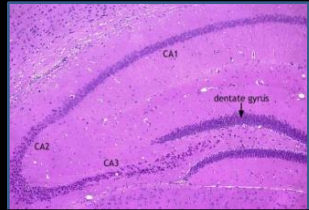
Biochemistry
(2 modules)



BSc. Neuroscience - The Course

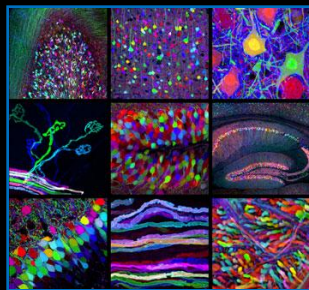
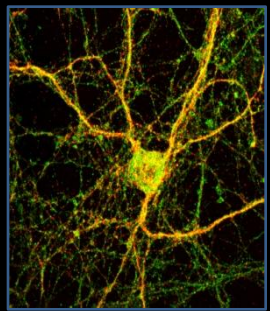
4th Science modules

Biochemistry of
degenerative disease



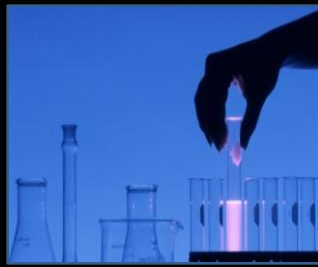
Behaviour
And Cognitive
Neuroscience

Cellular & molecular
neuroscience



Developmental
Neurobiology

Neuropharmacology



Research project

Q. Ok I have a BSc In Neurosciencenow what?

- **Stay In University?!** - MSc and/or PhD
- **Medicine** - Great entry point to graduate medicine
- **Teaching** - Qualified to teach any science subject
- **Research** - University, hospitals etc.
- **Pharmaceutical Industry** - Pfizer, Merck, Eli Lilly
 - Sales & marketing
 - Company based
- **Scientific publishing and journalism**
- **Advisory / Consultation work (UN, WHO etc).**

+ countless other options.....!!!

If you would you like further information?

- www.ucc.ie/en/anatomy/
- www.neuroscienceireland.org



- www.bna.org

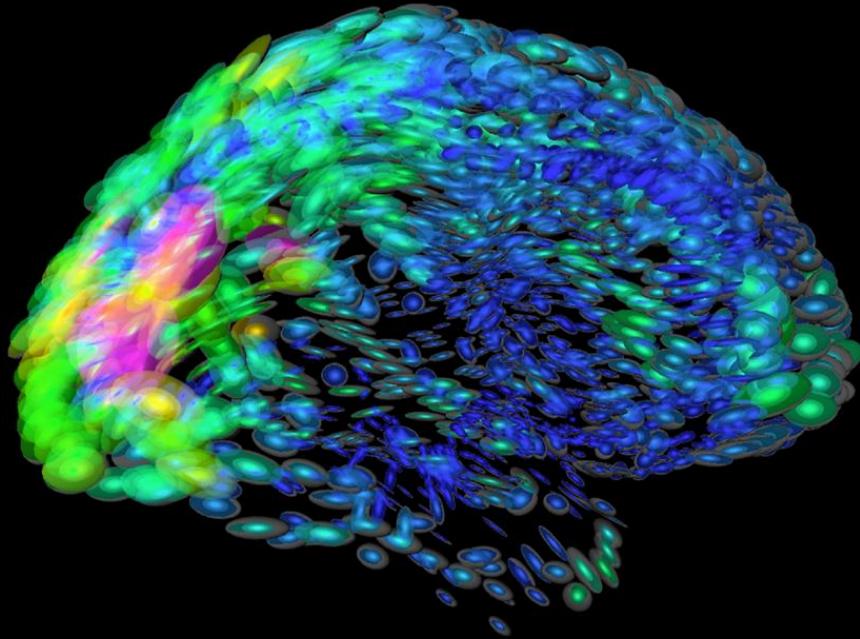


- www.ibro.info
(International Brain Research Organisation)



- www.sfn.org





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Anatomy and Neuroscience