**Abstract Submission Form Queen Square Symposium 2020**

**Closing date: 31st of July 2020**

**Categories:**

* Animal Research
* Clinical Neuroscience
* Cognitive and behavioural Neuroscience
* Electrophysiology
* Imaging
* Molecular Neuroscience
* Motor Neuroscience

**Formatting as below:**

* Word document (.docx or .doc) – No other formats accepted (including .pdf).
* All text in Arial, 12 pt. All regular formatting, unless Latin nomenclature (e.g. *in vivo*; *a priori*)
* Length: Maximum 250 words, excluding affiliations
* Text alignment: Left

**Abstract to include:**

Category  
Authors (in bold and underlined)  
Affiliations (in italics)

Title  
Background  
Aims  
Methods/Materials/Patients (delete as appropriate)  
Results  
Conclusion

**Important notes:**   
Failure to comply with these guidelines may result in rejection of the abstract submitted. We recognize that some students may lack sufficient results to present. If this is the case, we strongly encourage students to nonetheless submit. The results section may be used for instance to predict the potential outcome of your experiments; what you could have done differently; and to reflect on your research. **Additional information on poster guidelines will be updated on the website. All cost for poster printing will be covered the Queen Square Committee.**

**Example Abstract**

**Category:** Electrophysiology **Authors:** Stevens M1,2, Izzard E1, Neeson L1 ***Affiliations:*** *1Department of Clinical and Experimental Epilepsy, UCL Institute of Neurology 2Department of Molecular Neuroscience, UCL Institute of Neurology*

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**ABSTRACT [250 words]**

**Title of presentation: The role of post-synaptic NMDA receptors in LTP formation**

Background: Long-term potentiation (LTP) is a mechanism that underlies the strengthening of synapses based on activity, resulting in a long-lasting increase in signal transmission across a synapse.   
  
Aims: To investigate the role of post-synaptic NMDA receptors in LTP formation in the rat hippocampus using electrophysiological techniques.

Methods: The rising slope of an excitatory post-synaptic potential (EPSP) field was recorded in the stratum radiatum (SR) of the CA1 hippocampal area following extracellular stimulation of Schaffer collaterals using a high-frequency (1s) tetanus stimulus to evoke field potentials.

Results: The EPSP rising slope (in mV/ms) was drastically increased (0.1 above baseline) immediately following tetanus stimulation (t=0 s), indicating post-tetanic potentiation. After 3 to 60 minutes the EPSP field rising slope was persistently increased (0.03 above baseline), indicating that LTP had been formed.

Conclusion: Tetanus stimulation of Schaffer collaterals results LTP in Schaffer collateral/CA1 synapses in the hippocampus, indicating mechanism underlying a persistent increase in synaptic strength.