PLORAS Newsletter

Predicting **L**anguage **O**utcome and **R**ecovery **A**fter **S**troke

Hello!

We **hope** you had a **good year**. Read on for **more exciting results** and **news** from our team.

In this issue...

UCL World Stroke Day

- **Over 100 stroke survivors** and carers **attended**.
- **10 stalls** on **stroke research**, **clinical work** and **charities**.
- **Workshops** and **talks** about the **latest news** in **stroke research** at **UCL**.
- **Event for stroke survivors** to **influence future** stroke **research**

This **event** is part of a **new public engagement** program funded by the **Wellcome Centre for Human Neuroimaging**.

For **more information** about other **engagement events** by the Centre visit **www.ucl.ac.uk/ion/public-engagement**

Recent research results

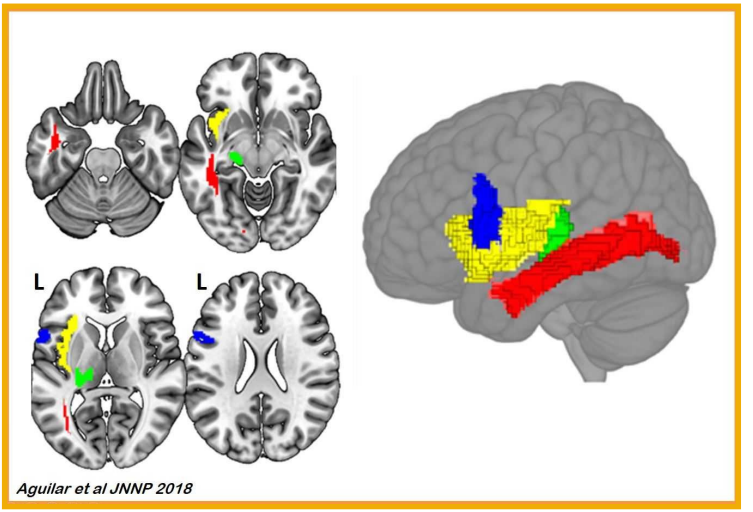
Predicting responses to therapy

- **Participants** had **impaired reading**.
- We **tested** their **language skills** (including **reading**) and took a **brain scan**.
- **Participants** were then **treated** using a **reading therapy App** (**iReadMore**).

iReadMore
Word-reading therapy

- **Conclusion:** We could **use language data** and **brain scans** to **predict how much** each participants' **reading improved.**

The picture below shows the **four brain regions** that help **predict variability** in participants' **responses to iReadMore**

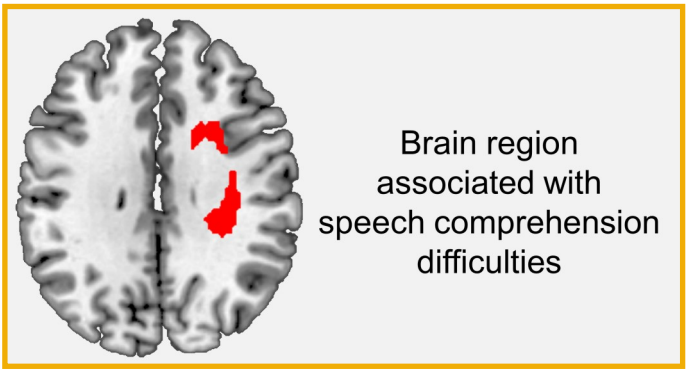


Aguilar OM, Kerry SJ, Ong Y-H, Callaghan MF, Crinion J, Woodhead ZVJ, Price CJ, Leff AP, Hope TMH. (2018). Lesion site dependent responses to therapy after aphasic stroke. Journal of Neurology, Neurosurgery, and Psychiatry (Epub Apr 17).

Recent research results

Right hemisphere damage and speech comprehension

- **Aphasia** is commonly **associated** with **left hemisphere damage**.
- However, there is growing **evidence** that the **right hemisphere** also has a **role** in **language processing**.
- We **explored** the **role** of **right hemisphere** regions in **language functions** that are traditionally **associated** with the **left hemisphere**.
- **Conclusion**: We found that **long-lasting speech comprehension difficulties** were frequently observed in **right-handed** stroke **patients** with **damage** to the **right frontal lobe**.



Gajardo-Vidal A, Lorca-Puls DL, Hope TMH, Parker Jones O, Seghier ML, Oberhuber M, Prejawa S, Crinion J, Leff AP, Green DW, Price CJ. (2018). How right hemisphere damage after stroke can impair speech comprehension. Brain in press

Spotlight on… Andrea Gajardo Vidal & Diego Lorca-Puls (PhD students and Research Assistants)

Andrea and Diego are involved in:
- Assisting with **structural** and **functional MRI scans**.
- **Analysing neuroimaging** and **behavioural data**

They studied:
BSc in **Speech, Language and Hearing Sciences**
PGDip in **Adult Neuropsychology and Neuropsychiatry**
MSc in **Cognitive Neuroscience**

Andrea and Diego plan to become **post-doctoral researchers** next year.

Alan Turing Institute Collaboration

- We invited **data scientists** from all over the world to use their **knowledge** and **expertise** with **PLORAS data**.
- The event was a great **success**. We developed lots of **new ideas** and formed **partnerships** with scientists from **around the world**.

Finally…

We wish you all a very **Happy Christmas** and **New Year**!

Don't want our newsletter in future? Please tell us.

From all the PLORAS Research Team

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@PLORASResearch

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