

## Royal Holloway, University of London

# A-level Psychology worksheets

#### **Neuroscience**

## "Your brain can tell fake from real laughter"

In this worksheet, we will be discussing the research of Dr Carolyn McGettigan from the Psychology department at Royal Holloway. You will need a copy of the news article "You really can't fake a laugh" and the video interview with Dr McGettigan.

First, please read the news article "You really can't fake a laugh", and then answer the following questions:

- 1. Why is it important for us to be able to tell the difference between real and fake laughter?
- 2. In your own words, write down what you think the researchers did and what they found.
- 3. What questions would you have for the researcher after reading this article?

Now watch the interview with Dr McGettigan (<a href="https://www.youtube.com/watch?v=tMR1\_Y\_be4w&t=1s">https://www.youtube.com/watch?v=tMR1\_Y\_be4w&t=1s</a>), and answer the following questions.

- 1. Why is laughter and the way we use our voices important in our social interactions?
- 2. What was the researcher's main aim?
- 3. Explain in more detail the methods used in the study, and think about what methodological limitations the researcher would need to consider when they designed their study.
- 4. Exactly which parts of the brain were involved when participants heard fake and real laughter?
- 5. When we hear fake laughter, why do we try to "mentalise"?

# **Further study**

Why not try to find out more about the different parts of the brain and the methods used to examine brain activity?

The original research article describing this research can be found here: <a href="http://cercor.oxfordjournals.org/content/early/2013/08/21/cercor.bht227.full.pdf+html">http://cercor.oxfordjournals.org/content/early/2013/08/21/cercor.bht227.full.pdf+html</a>

You can find out more about Dr McGettigan's research here: http://www.carolynmcgettigan.com/