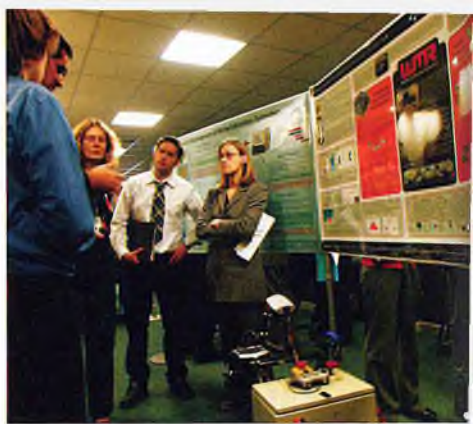


## Presenting a poster

12 a In pairs, answer the following questions.

- 1 Have you ever attended a conference poster presentation session? If so, did you speak with any presenters?
- 2 Have you ever prepared and presented a poster at a conference? If so, did anyone ask you questions about your research?
- 3 What do you think the key features of a good poster are? Make a list.



b Complete the advice below about preparing a poster using the words in the box.

abstract colours columns contact font heading number sentences  
simple text title white space

### General points

- Give your poster a (1) \_\_\_\_\_ which summarises the main idea.
- Keep your poster focused and (2) \_\_\_\_\_ so someone can understand the key points without any extra explanation.
- Remember that a poster is a summary of your work – so it's not usually necessary to include an (3) \_\_\_\_\_.
- Don't forget to include your name and (4) \_\_\_\_\_ information.

### The look of your poster

- Arrange information in (5) \_\_\_\_\_.
- Use charts and diagrams as much as possible, only using (6) \_\_\_\_\_ to support your visuals.
- Give each section of your poster a clear (7) \_\_\_\_\_ in large type.
- (8) \_\_\_\_\_ each section to guide readers through your poster.
- Leave plenty of (9) \_\_\_\_\_ around each section to make them stand out more easily.

### The text in your poster

- Use phrases rather than full (10) \_\_\_\_\_.
- Try to keep phrases short.
- Choose a (11) \_\_\_\_\_ size which makes the text easy to read from a distance of 1–2 metres.
- Use different (12) \_\_\_\_\_ for different kinds of information in the poster – but remember to use them consistently.

c You are going to see two examples of conference posters and decide how well they have been designed. Do not try to read the text on the posters, but look at each one for just five seconds and think about how it looks. Then in pairs, answer questions 1–3 on your first impressions. For poster A, turn to page 89. For poster B, turn to page 90.

- 1 Were the posters well organised?
- 2 Was there space around the sections?
- 3 Could you see the title and section headings easily?

Which poster do you think was more successful? Why?

# ERP measures of material specificity for crossmodal relational memory

Greg Savage<sup>1</sup> Blake Johnson<sup>1</sup> Megan Willis<sup>1</sup> Stuart Lee<sup>2</sup> Genevieve McArthur<sup>1</sup>

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## The issue

Unilateral brain disorders can show *material specificity* on memory testing:

- verbally-mediated testing reliably assesses left hemisphere (LH) memory problems
- "nonverbal" testing assesses right hemisphere (RH) memory problems
- BUT : nonverbal findings are not reliable, posing problems for neuropsychologists, neurosurgeons, and ultimately, patients

## Specific problems

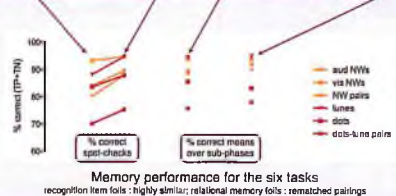
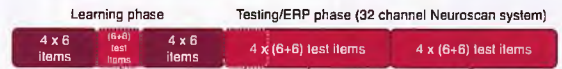
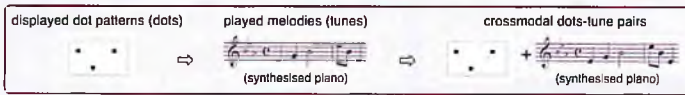
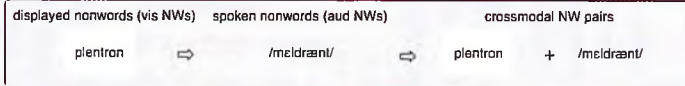
- Conceptually:
- what counts as *nonverbal* test material?
    - designs, faces most commonly used
- Methodologically:
- nonverbal tests can be *verbalised*
  - verbal/nonverbal tests are not *matched*
    - known vs novel content
    - auditory vs visual mode of presentation
    - recall vs recognition mode of response

## Specific solutions?

- Conceptually : appeal to cognitive models
- RH: spatial location, melodic contour
  - LH: orthographic/phonological processing
- Methodologically:
- use nonverbal materials which *can't* be verbalised; use verbal materials which aren't imageable
  - match verbal/nonverbal subtests
    - make all items novel
    - use *both* visual and auditory modes
    - use Yes/No recognition responses only

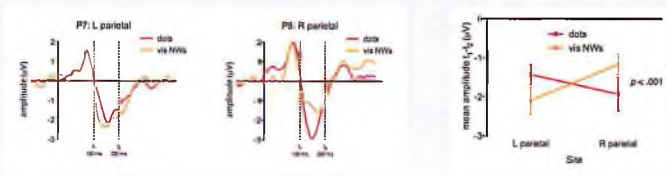
## Methods

24 healthy Ss; 6 subtests: verbal/nonverbal versions of visual, auditory, and crossmodal pairings



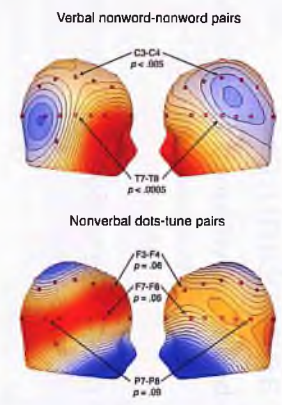
## Temporal analyses

N1 responses : verbal-nonverbal differences only at bilateral parietal sites (P7, P8)  
 Material specificity : LH responses larger for nonwords, RH responses larger for dots



## Spectral analyses

Gamma (35-45 Hz) activation for crossmodal pairings showed *material specificity* : LH activation larger for nonword-nonword pairs, RH responses larger (trend) for dots-tune pairs



## Conclusions

- ERPs showed material specificity in recognition memory for both verbal and nonverbal materials, matched for novelty, presentation modality, and testing mode
- Singleton and relational paradigms both show material specificity
- Clinical memory tests should contain well-matched verbal and nonverbal subtests; nonverbal subtests could usefully incorporate spatial patterns and melodic stimuli





### Insect aquaplaning:

### Wetness-based activation of traps in *Nepenthes* pitcher plants

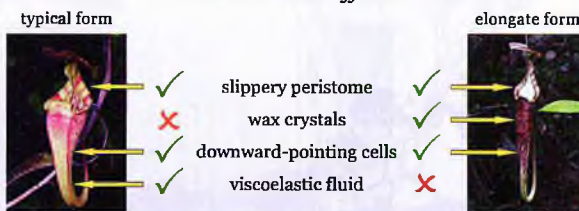
Ulrike Bauer and Walter Federle

UNIVERSITY OF CAMBRIDGE 800 YEARS 1209-2009

### Pitcher plants use various structures to capture prey

*Nepenthes* pitchers are highly specialised leaves to attract, capture, retain and digest arthropod prey. Specialised trapping structures include a viscoelastic digestive fluid, slippery wax crystals and downward-pointing cells on the inner pitcher wall, and the pitcher rim (peristome) which causes insects to 'aquaplane' when it is wet. We investigated the relevance of individual structures in the field by comparing two forms of *N. rafflesiana* with different combinations of pitcher traits.

### Different combinations of trapping structures in 2 forms of *N. rafflesiana*



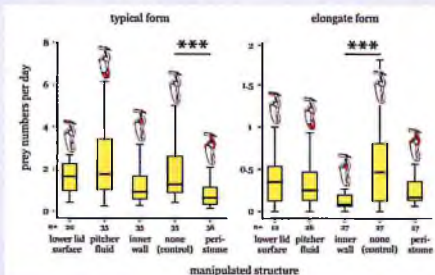
### Peristome and wax crystals are relevant for natural prey capture

#### The test:

'Knock-out' manipulations of individual structures:

- surfaces coated with transparent, odourless silicon polymer
- fluid replaced with water

Observation of natural prey capture



#### The answer:

Only wax crystals and the peristome are relevant

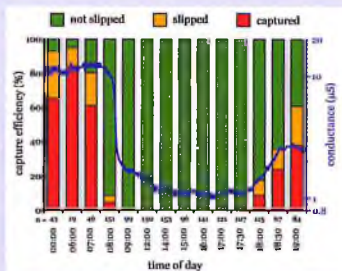
#### But:

Many species do not have wax crystals!

#### And:

The peristome is only slippery when it is wet!

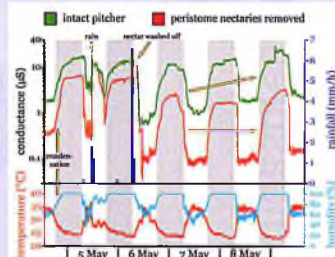
### Rain and air humidity cause strong variations of capture efficiency



#### The test:

Measurement of...

- peristome wetness (as electrical conductance)
- capture efficiency (running tests with ants)
- meteorological data (rainfall, temperature, air humidity)



Capture efficiency and peristome wetness vary synchronously

Wetting is caused by rain, condensation and nectar

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