

# Biology for the Blind

SENDA (2001)

“....an educational institution takes such steps as it is reasonable for it....to ensure that....disabled students are not at a substantial disadvantage...”

# Dealing with Visually Impaired (VI) Students

- Web Page Accessibility
- Screen Readers
- Staffordshire ASSIST – Assessment and Support for Sensory Impaired Students and Trainees
- Amanuensis (Note taker, reader etc)

# Practical Classes

## - the problem

- Microscopy
- Macroscopic Anatomy
- Biochemical techniques
- Animal Behaviour
- Fieldwork
- Physiology Experiments

# Practical Classes

## the approach

For each class

- What are the detailed learning outcomes?
- (How) can these be achieved by visually impaired or blind students?

# T3 - Tactile Talking Tablet

- Tactile diagrams placed on a touch screen computer (tablet).
- Touching the diagram produces spoken description of the item touched.
- Technology by Touch Graphics (NY)
- Developed and marketed by RNCB

# T3 - Tactile Talking Tablet

- The T3 device with USB interface lead
- The Tactile World Atlas - Map 1 The World (produced by the American National Geographic Society)
- The Match Game (Pelmanisim)
- A variety of sample overlays covering National Curriculum subjects
- The T3 Authoring Tool program for producing own overlays
- Price: £599 (VAT not included)

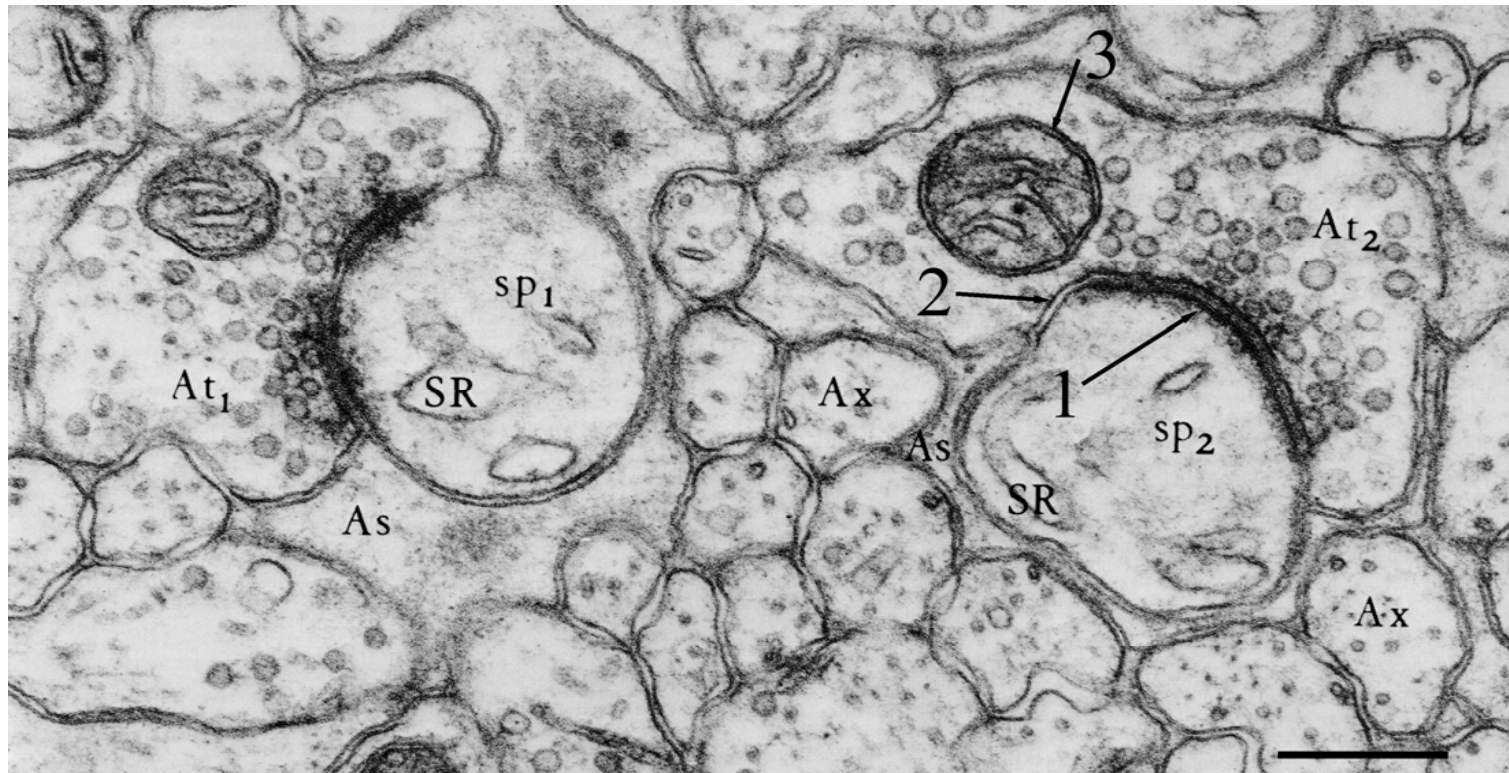
Copied from [www.RNCB.ac.uk](http://www.RNCB.ac.uk)

# T3 - Tactile Talking Tablet

## Other requirements

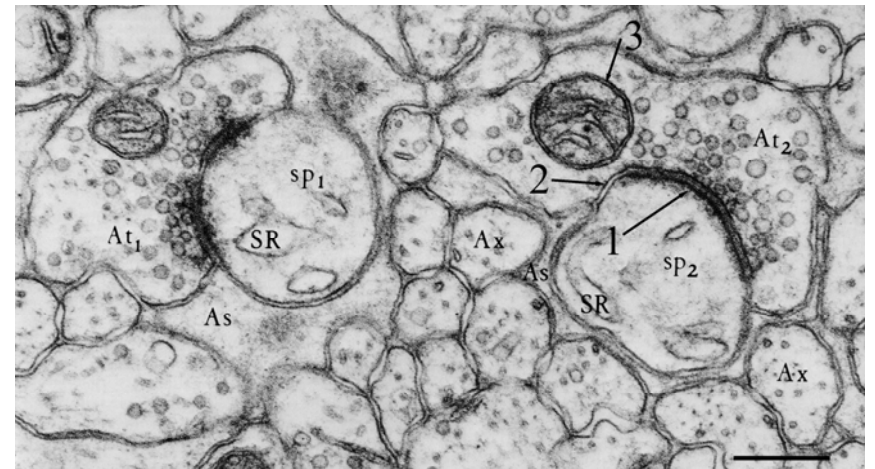
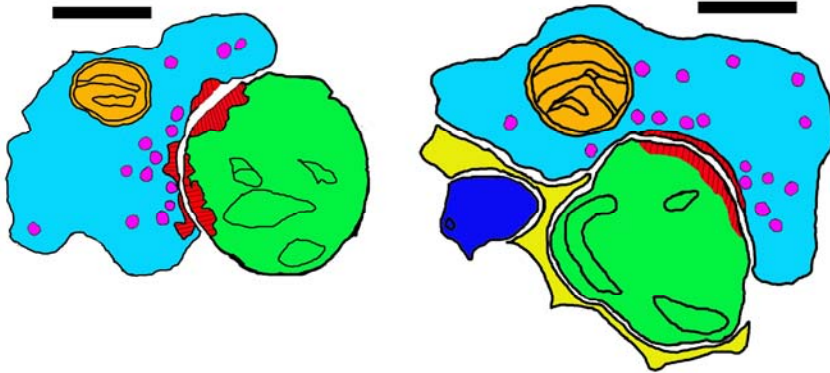
- “Zyfuser” and paper
- Dedicated laptop
- Headphones and microphone
- Training from RNCB
- Ideas and time ...!

# Electron Microscopy





# Adapting the Image



# Other solutions

- Anatomical Models
- Daisy (Digital Accessible Information System) reader
- More Ideas ..... ???
- Acknowledgement: Thanks to HEA Biosciences and TechDis for a grant to buy the T3 Tactile Talking Tablet
- Adela Nacer – specialist teaching assistant

