

Future Projects

- Active head support – for people with weak neck muscles
- Active Chair – for back pain prevention and relief
- Sip-aid – for people who cannot create suction with their mouth

Active head support – the need

- Requested by members of Motor Neurone Disease Association (MNDA)
- For people with weak neck muscles
- People currently propped in a reclined position or in a rigid support collar
- Difficulties eating, drinking and having conversations

Active head support

- New technology available
- Support collar, or forehead support
- Posture support
- Supports the head in a neutral position
- Moves head in a range of useful movements
- Uses either eye control or hand control

Active Chair – the basis

- Based on Brunel Active Balance Saddle (BABS) for children with cerebral palsy
- Moves with movement of a walking horse
- Theory, movement prevents and relieves back pain
- Which movements are most effective?

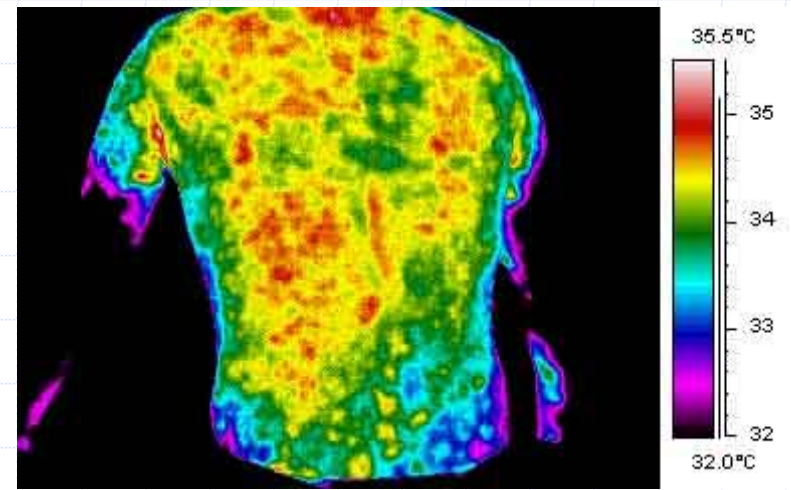
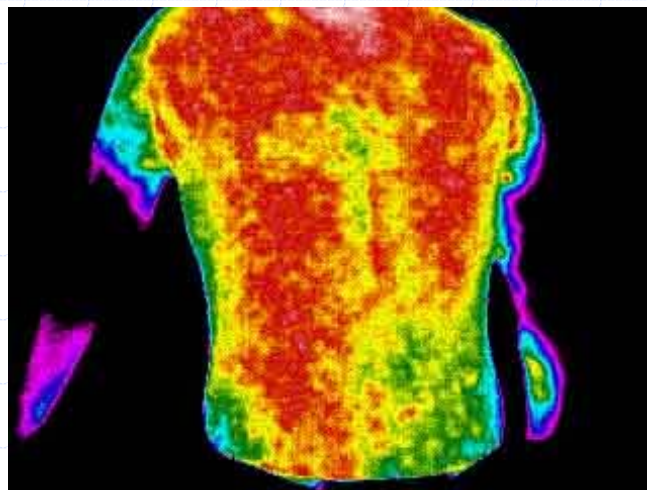
Active Chair

- Two types of chair
 - Therapeutic chair
 - Chair for workers with sedentary occupations
- Chairs with universal movements
- Analysis phase, different motion programmes
- Reduce to about 6 motion programmes
- Clinical testing

Active Chair

- Test objective measures of back pain assessment such as electromyography and thermography
- Research other objective test measures
- Could a stress indicator to be used as a measure of outcome in this work?

Thermography



Infra red picture of a volunteer's back and again
after 10 minutes

Sip-aid – the need

- Requested by members of Motor Neurone Disease Association (MNDA)
- For people who can no longer create suction with their mouths
- A drinking aid to enable people to be able to feed themselves drinks

Sip-aid

- Pumped drinking aid
- Portable, battery operated
- All parts disposable or cleanable
- Useful for most types of drink

Partner search

- Active head support
 - Clinical rehabilitation specialists
- Active Chair
 - Clinical back pain specialists
 - Office chair manufacturers
- Sip-aid
 - Industrial partner