

CHRONIC PAIN
NEUROTECHNOLOGY
NETWORK+

Oxford, Cardiff, Exeter Glasgow

Developing Responsible Neurotechnology for Chronic Pain

Community of researchers, clinicians and technologists dedicated to translational neurotechnology and innovation in the management of chronic pain. The network oversees a diverse range of activities to support research, training and collaboration

UKRI Network+

Responsible innovation and capacity building for UK Neurotechnology



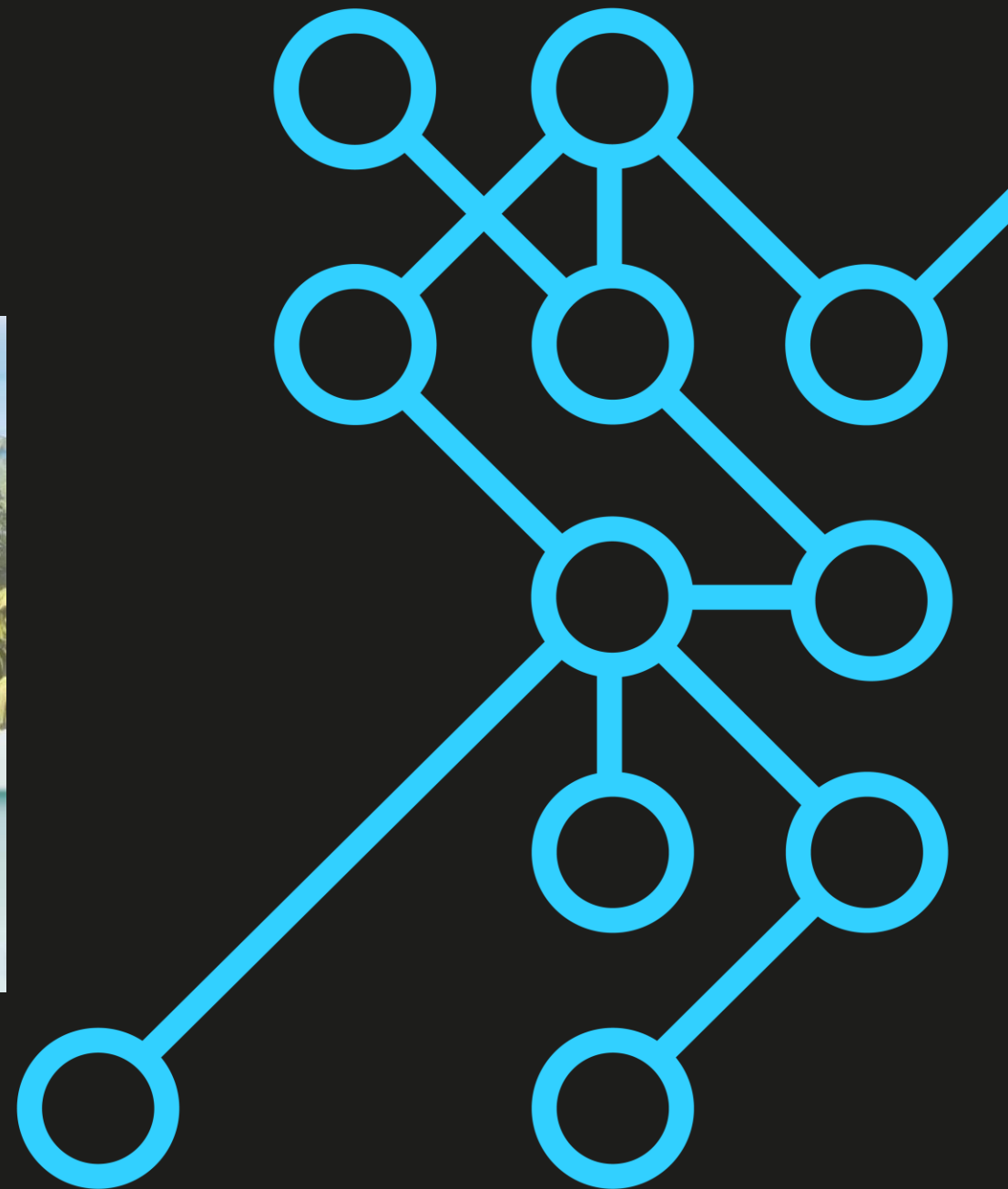
Ethical Issues related to Neurotechnology

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Case study presentation:

Research study using Virtual reality for people with Low back pain & quantitative sensory testing (QST)

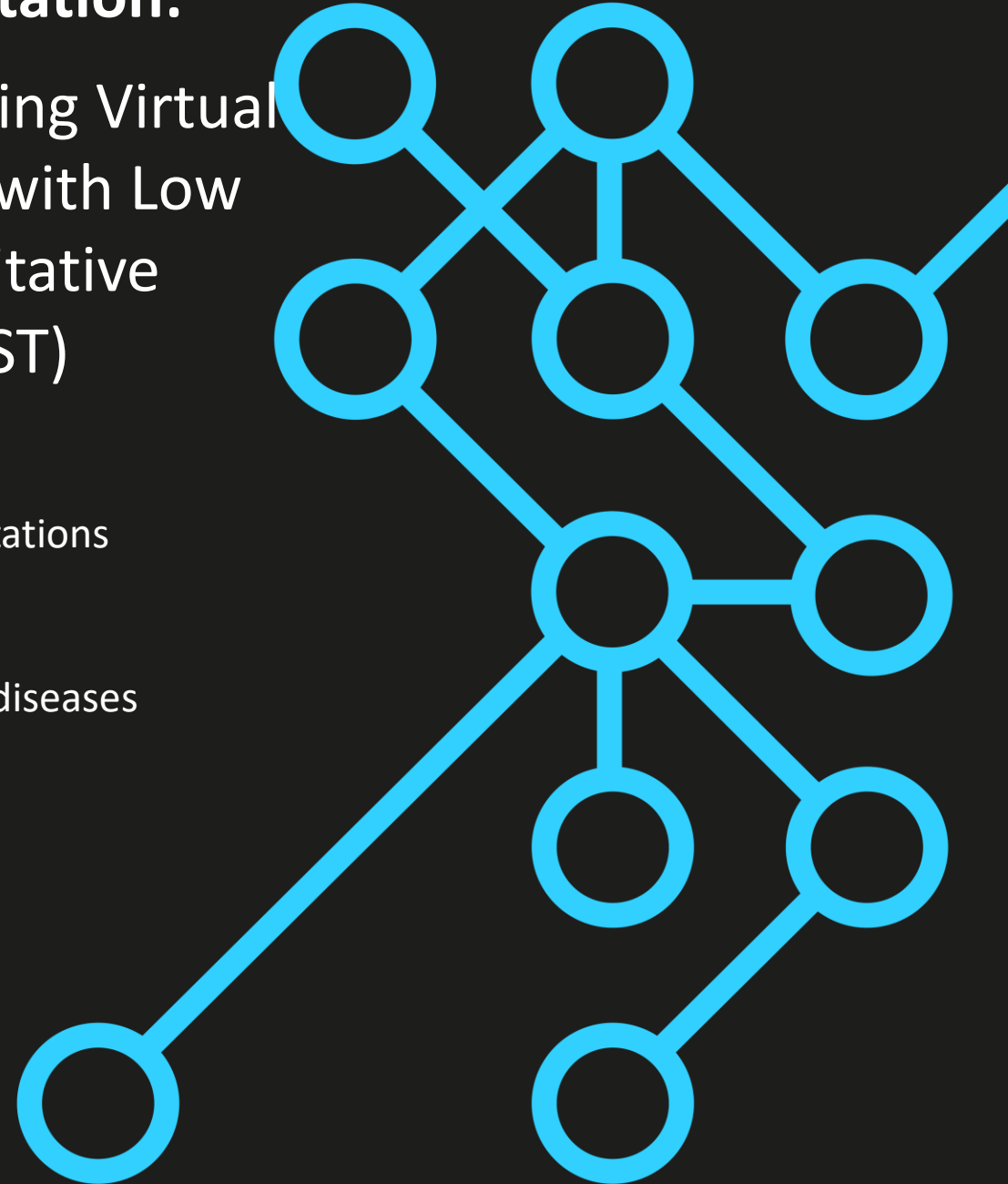
Although VR increasingly used within home setting -its not without limitations

Exclusion criteria

- Diagnosis of epilepsy, seizure disorder, dementia, or other neurological diseases
- Self-reported migraine
- A medical condition that causes nausea or dizziness
- Hypersensitivity to flashing lights or motion -Motion sickness
- Claustrophobia
- Severe hearing impairment
- Vestibular system dysfunction such as vertigo or imbalance
- Injury to eyes, face, or neck

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QST allows evaluation of sensory processing within small and large afferent nerve fibres or different afferent and efferent pathways

Two different elements of QST: the conditioned pain modulation (CPM) paradigm & the temporal summation (TS) paradigm.

Various tests : Heat and Cold-water bath , pressure pain testing

Patient Exclusion criteria

Raynaud's disease

Diabetes mellitus

Psoriasis

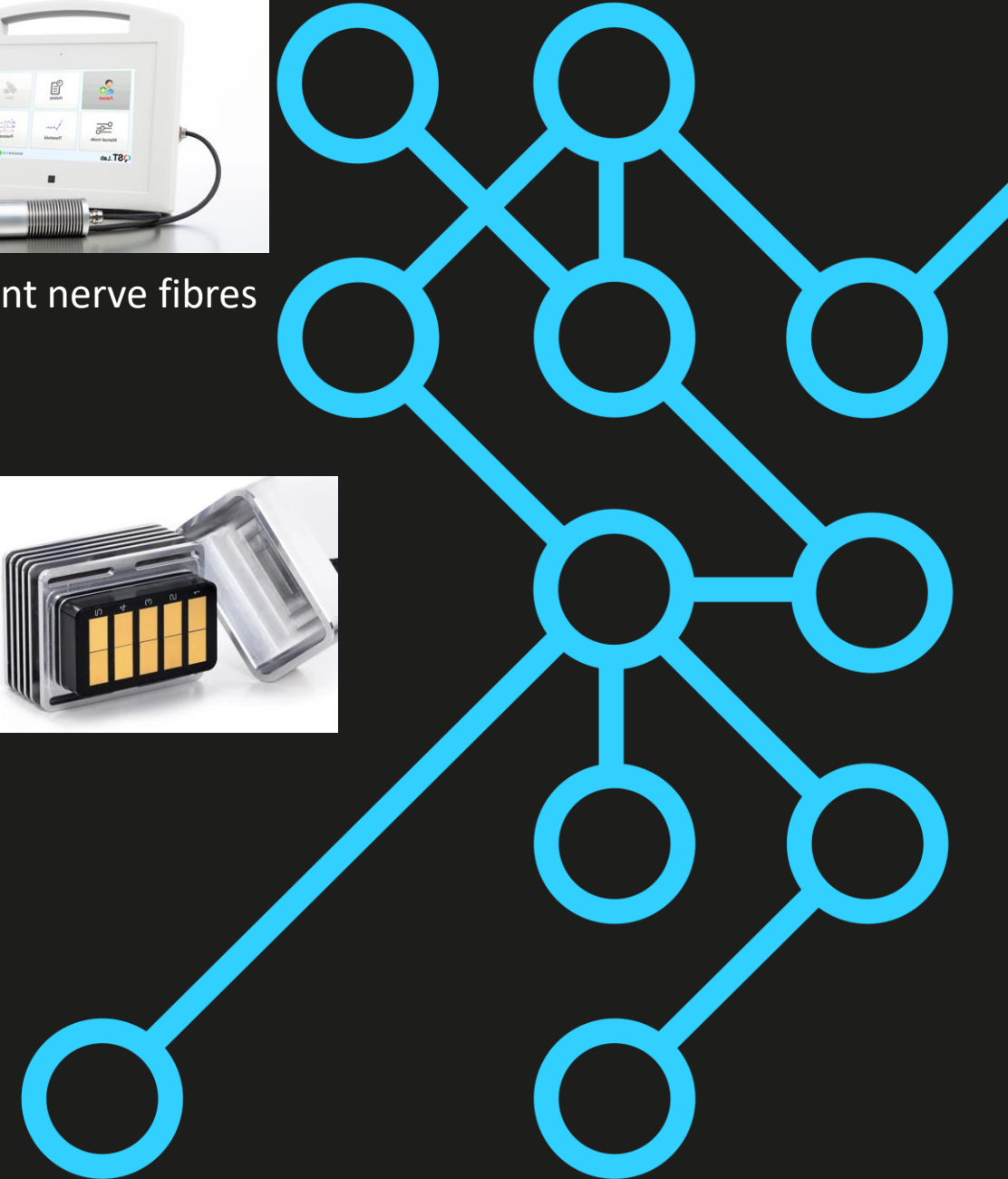
Skin lesions on their forearm arms and hands



- Images on information sheet

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School Ethics: making every stage crystal clear

REC/NHS meeting: Bearing in mind testing could burn people ...main query was

Had Patient and Public been involved from the start of planning stage

Made a case that it was a standalone PhD project

Requested that information sheet be reviewed by patient prior starting and needed evidence of any changes

