



The Beginnings

10th Annual Scientific Meeting 25th June 2018

www.sinapse.ac.uk

The following Universities are charitable bodies, registered in Scotland, with registration numbers as below.



Mid 2000s – how bad was it?

Investment in scanners not matched by increase in expertise:

1992 - Scottish Office purchased 5 MR scanners

2006 – 36 in total

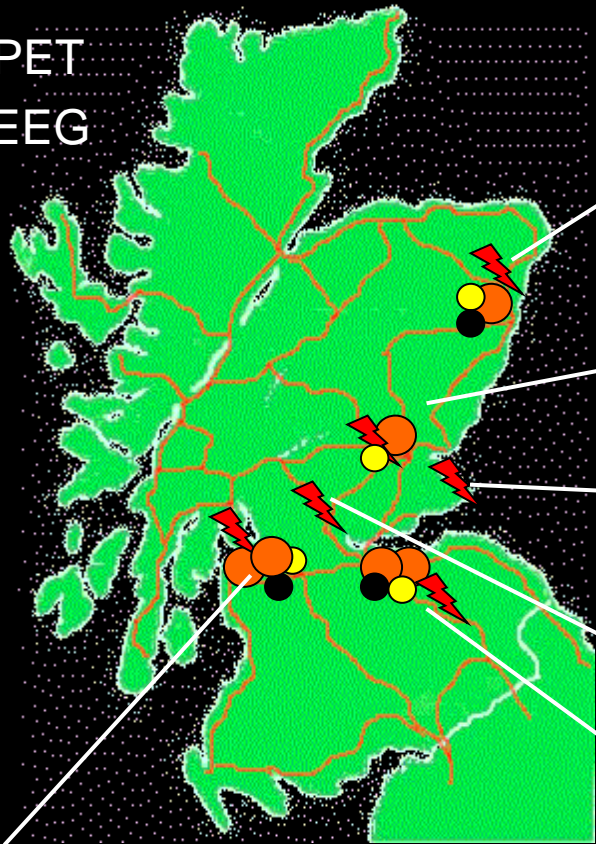
- 4 Aberdeen (2 Univ)
- 5 Dundee (1 Univ)
- 6 Edinburgh (2 Univ)
- 17 Glasgow (2 Univ)
- plus 4 experimental MR systems, all university

c 100,000 MR exams per year in Scotland
(2 million imaging examinations in total)

2006 Scot Exec purchased 4 PET scanners –
predict similar expansion.....

Research: Massive expansion in demand for imaging in research, lots of machines, pockets of expertise and excellence, but little cohesion

- MR
- PET
- ⚡ EEG



Aberdeen – MR physics
PET physics
Dementia,
Ageing,
Psychology

Dundee - Diabetes, Oncology
MR Physics
Psychology, EEG

St Andrews - Psychology
Ageing
Neuroscience

Stirling – EEG, Psychology
Evoked potentials

Edinburgh – Stroke, Psychiatry, Radiology, MR
Physics, Psychology, Ageing,
Dementia, Neurooncology,
Linguistics, Neurosurgery

Glasgow – Neurotrauma, Neurology
Neurosurgery, Stroke,
Psychology, Radiology

Opportunities.....

Scottish Science Advisory Committee report

Chief Scientist's Office – “senior academic(s)
in imaging”

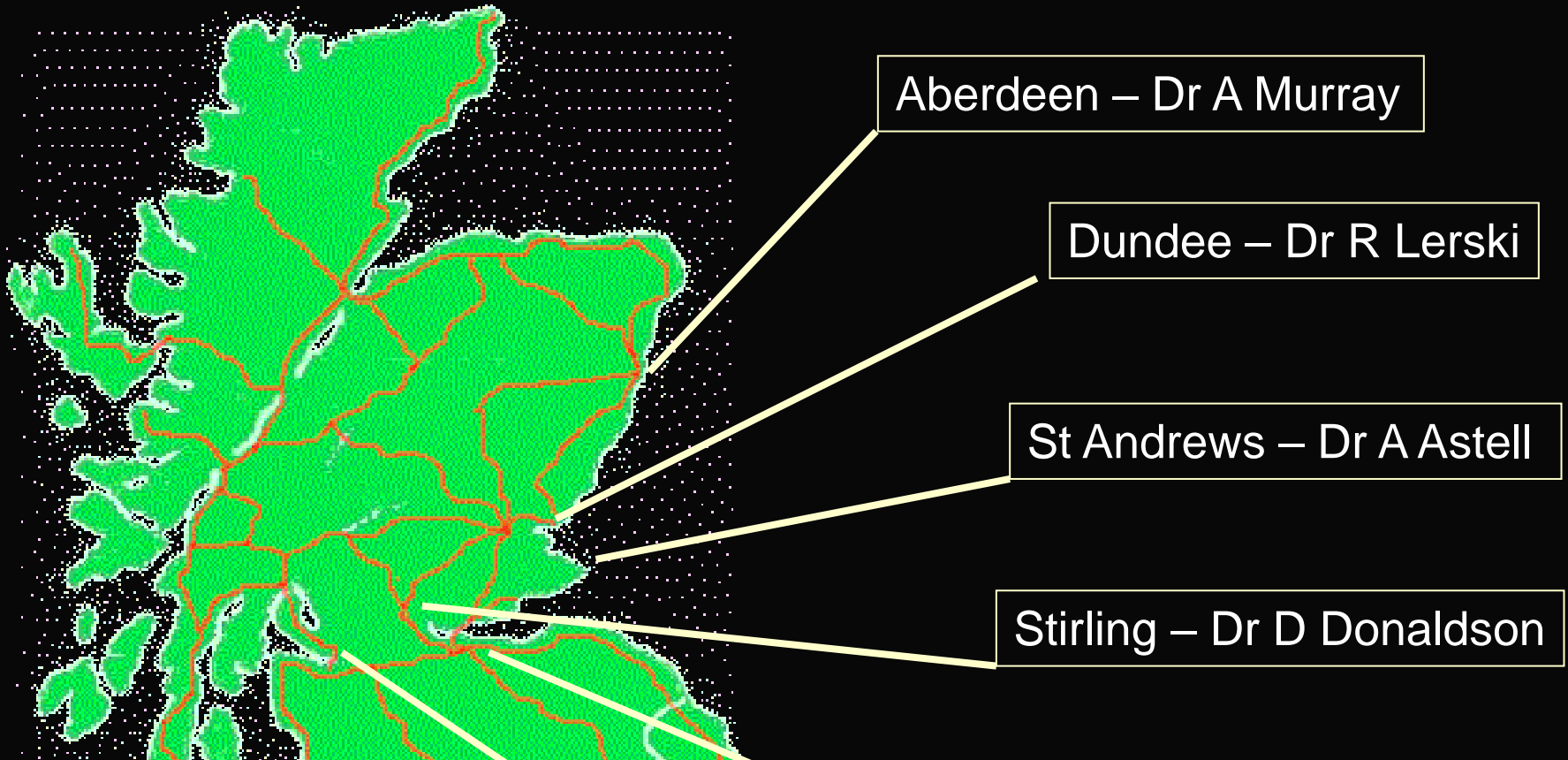
Clinical Research Networks

Translational Medicine Research Centre and
Scottish Health Science Centre

Individual collaborative projects

Industry approaches

SINAPSE – Initiators



Scottish Imaging Network: A
Platform for Scientific Excellence

SINAPSE – Initiators



Scottish Imaging Network: A
Platform for Scientific Excellence

SINAPSE: Goal



A single virtual national clinical imaging research laboratory for 5.5 million people which will be unique in the world

A virtual national training “college” for imaging researchers of the future

SINAPSE – Ambitions and Benefits

Multicentre and multidisciplinary

Multimodality

Stability and critical mass of researchers

Shared facilities and expertise

Harmonisation and standardisation

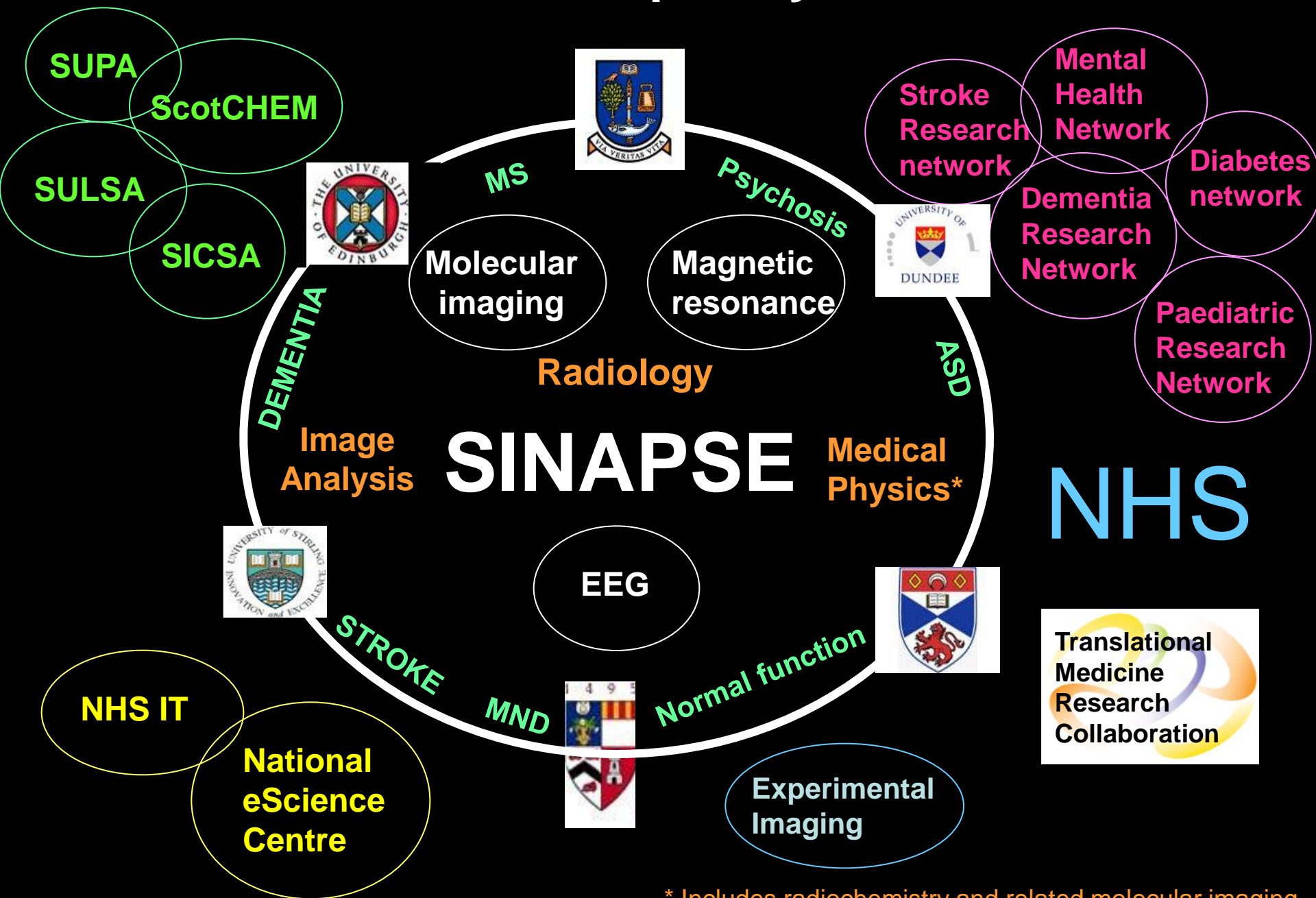
Produce the next generation of 5* researchers

Improve imaging research infrastructure

Develop novel methods

Improve patient outcomes: translating best research into best clinical practice

A national interdisciplinary research lab



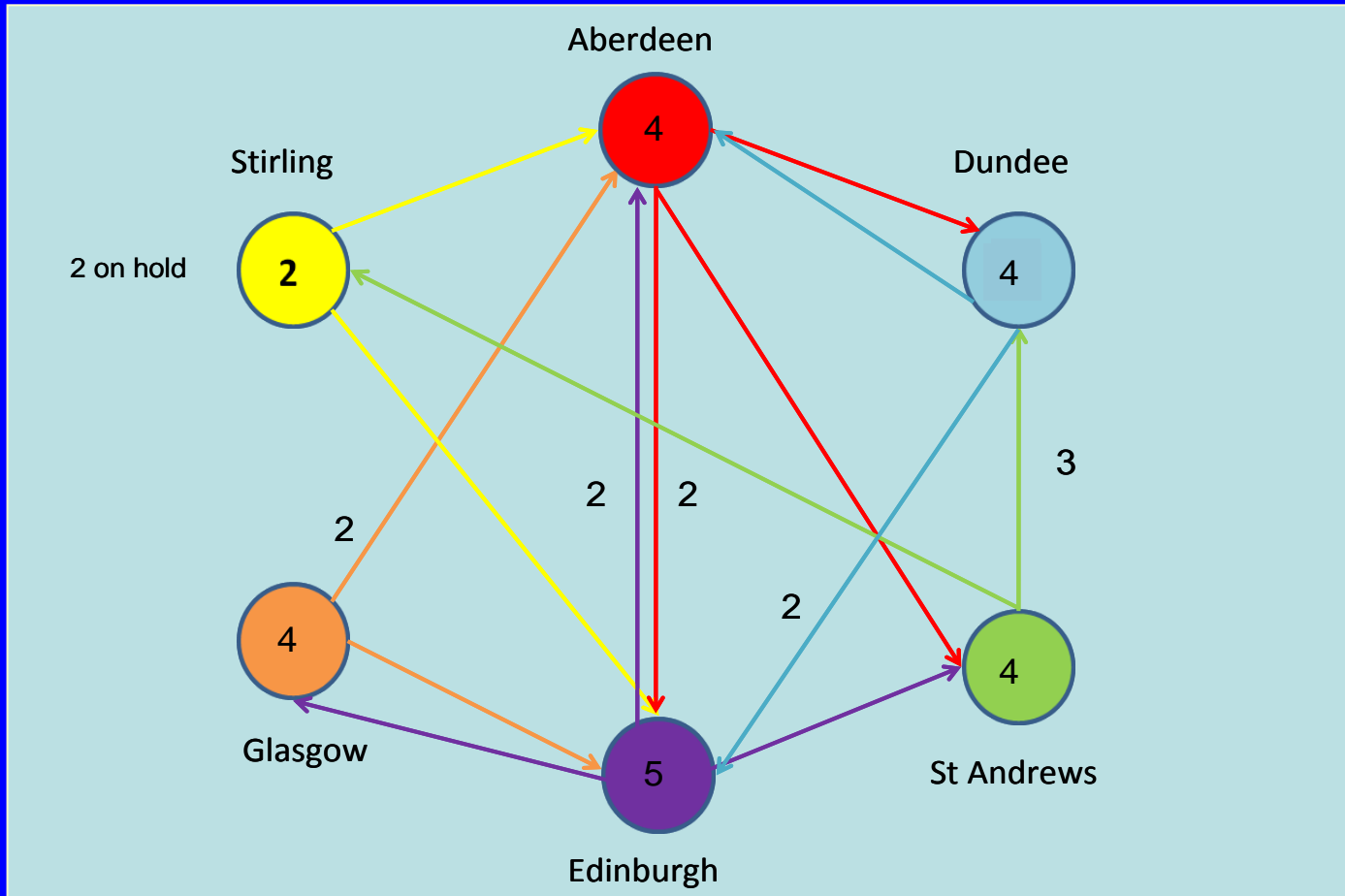
* Includes radiochemistry and related molecular imaging

SINAPSE – filling the gaps

£7.2M SFC, £700K CSO

- Key staff : Chairs – 5 (+ 4)
Midlevel posts – 15 (+2)
- Training – PhDs - 24 (+26)
Joint projects
Imaging Graduate School
- Standardised training materials, workshops,
networking conferences – rounded future
imaging researchers

Cross-Site collaboration was a must SINAPSE Studentships 2009



Insisted on rotating meeting locations,
Made sure committees reflected all sites

SINAPSE – in 5 years...

[2012]



- First two cohorts of SINAPSE PhDs completed, be moving into research community, new posts developing
- Five SINAPSE scientific conferences held, plus numerous subgroup meetings - fermenting new ideas, new collaborations and strategic planning.
- Exchange programmes for students and post docs established with universities elsewhere
- On-line training available and widely used externally, helping to attract more people
- Major EU and US NIH funded collaborations established
- Management committee will have developed strategy for the next five years
- Major international imaging meeting

SINAPSE – in 5 years...

[2012]



- First two cohorts of SINAPSE PhDs completed, be moving into research community, new posts developing c50 PhDs – and they come back!

SINAPSE – in 5 years...

[2012]



- Five SINAPSE scientific conferences held, plus numerous subgroup meetings - fermenting new ideas, new collaborations and strategic planning.

Imaging in Society; Incidental Findings Guidelines
International Standards for Small Vessel Disease
Brain Image Banking - BRAINS

SINAPSE – in 5 years...

[2012]



- Exchange programmes for students and post docs established with universities elsewhere

PECRE

SINAPSE – in 5 years...

[2012]



- On-line training available and widely used externally, helping to attract more people

MSc, CPD, SINAPSE Grad Schl

SINAPSE – in 5 years...

[2012]



- Major EU and US NIH funded collaborations established
H2020, Leducq, many large trials

SINAPSE – in 5 years...

[2012]



- Management committee will have developed strategy for the next five years
Generated >£40M in new grants;
and planned SINAPSE 2

SINAPSE – in 5 years...

[2012]

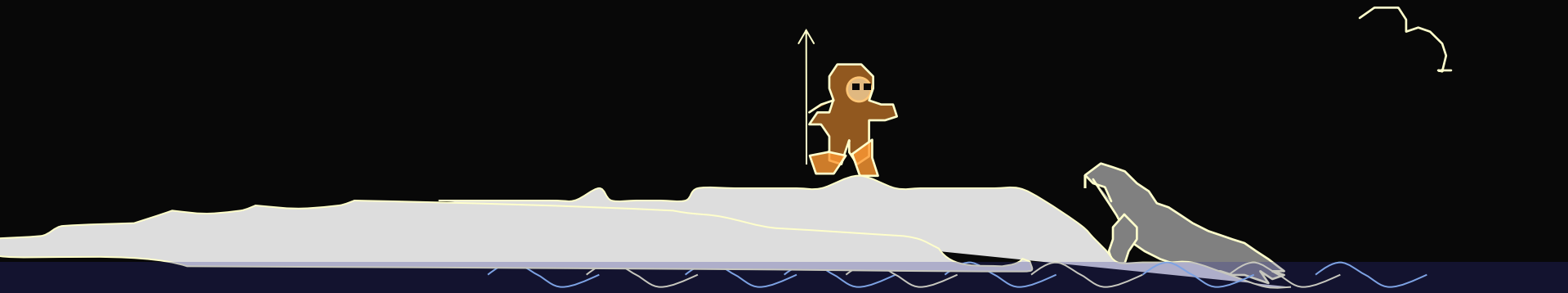


ESNR, ESMRM, MIUA, PET

- Major international imaging meeting

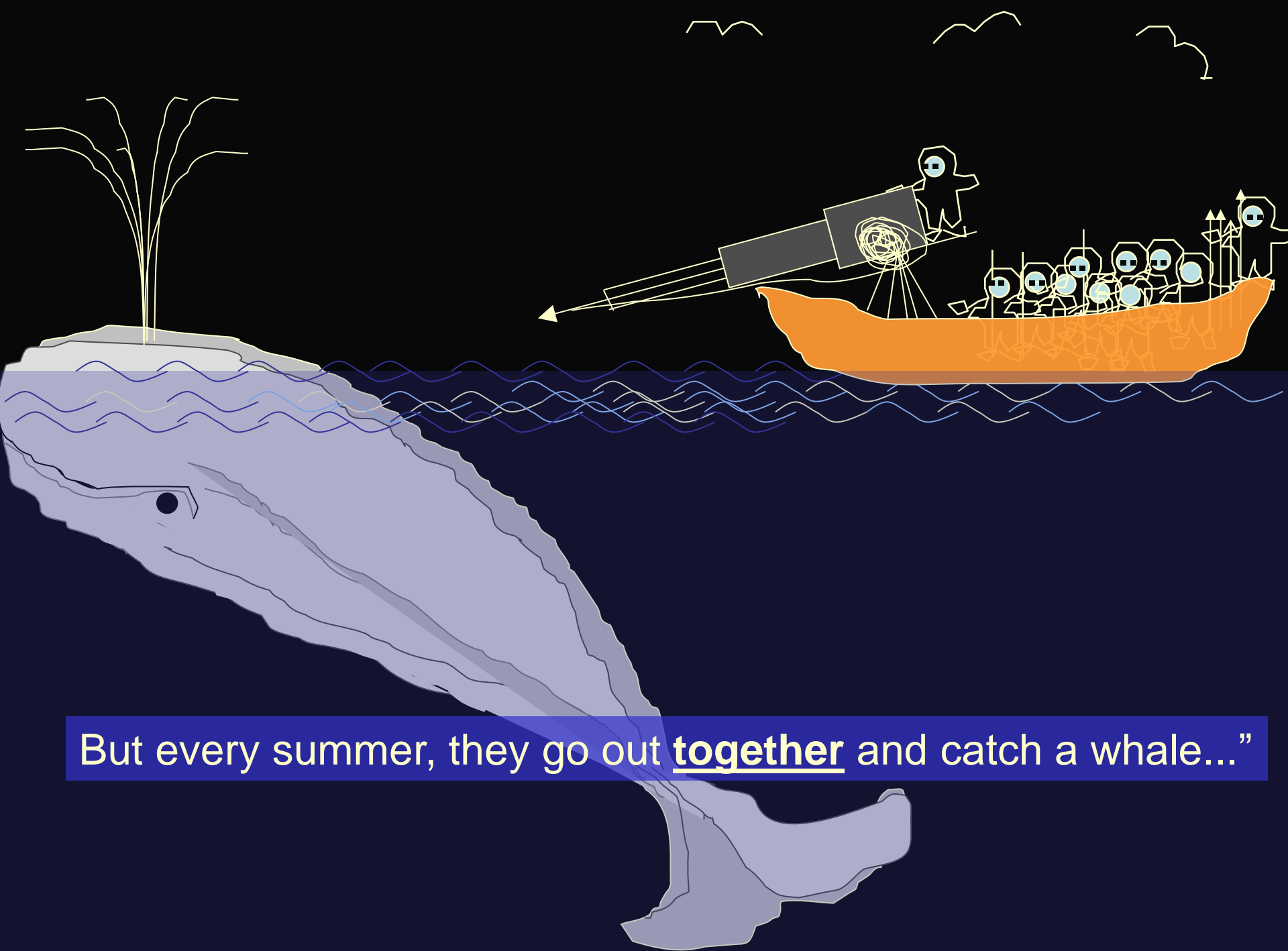
Postdoc fellows, more Chairs, Senior Lecturers

SINAPSE – the parts or the whole?



The Inuit have a saying

“Every winter, hunters go out on their own to catch a seal ...



But every summer, they go out together and catch a whale...”

Thank you

Principals – inspired vision

Scottish Funding Council

Chief Scientist Office

All imaging departments

R+D Departments

Clinical Research Facilities

Clinical Research Networks

Poolings – Physics, Chemistry, Biology, Informatics

Ongoing thanks to all staff and students

