

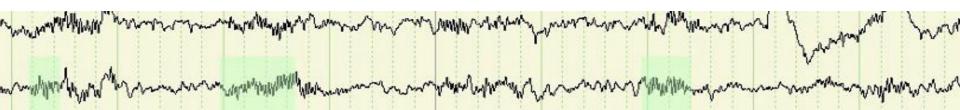


Healthcare Science Postgraduate Scientist Trainees and Supervisors Annual Conference 2018

## **RESEARCH AND DEVELOPMENT STORIES**

#### Dr Lizzie Hill PhD RPSGT EST

Sleep Research Fellow, The University of Edinburgh Specialist Clinical Physiologist (Sleep), Royal Hospital for Sick Children, Edinburgh NRS Career Research Fellow, Royal Hospital for Sick Children, Edinburgh









- How did I get here?
- What have I learned?
- Questions



## EARLY DAYS



## Generally curious

- How? Why?

### Interest in science

- Dinosaurs
- Volcanoes
- Human body

## Career plan

- Palaeontologist
- Scientist
- Fashion designer
- Medical researcher





## UNDERGRADUATE



#### • BSc (Hons) Human Life Sciences

- Anatomy
- Physiology
- Biochemistry
- Psychology
- Neuroscience

## • Graduated with 2:2

Not "high achiever"

## Career plan

- Biomedical Scientist
- "We're breeding research scientists, not lab technicians..."





## EARLY CAREER



#### Various lab-based jobs

- Summer student, NoSWA (temporary position)
- QC Technician, Rosgen (made redundant)
- QC Technician, Serologicals

#### Realised lab work was not for me

- Variety
- "People person"







## Sleep Technician post, RIE (30hr/wk)

- Science degree
- Physiology-based
- Patient contact
- Day shifts / split shifts

#### Diagnosis and treatment of sleep disorders

- Obstructive sleep apnoea
- Narcolepsy
- Parasomnias
  - Sleepwalking, night terrors, REM behaviour disorder









## On-the-job training

- No formal training pathway
- No professional qualifications / registration in UK
- "Not respiratory enough" for RCCP registration

## Strong research tradition

- Clinical research / RCTs
- Pioneers in field, e.g. Prof Sir Neil Douglas
- PhDs / MDs
- Publications in high-quality international journals
- But research and clinical staff very much divided
  - "them and us"









#### • Keen to be involved in research

- But "not part of the job for NHS staff"
- Clinical workload comes first

## Research Assistant post (7.5hr/wk)

- Assisting with technical and admin aspects of studies in department
- Learning basic research techniques
- Fostering research interest

#### Attended conferences

- British Sleep Society
- European Respiratory Society, Glasgow





#### Joined British Sleep Society

- Attended conferences
- Find own funding

#### Invited to teach

- Lectures
- Workshops

#### Networking

- Conference dinners / drinks
- Informal mentoring
- Encouraged to get more involved in Society / stand for election
- Chance meeting led to next job...



#### Editors's Message



Firstly, huge thanks to Rc time as editor. I hope to cor entertaining periodical, refle To this end, please get in better, write an article! This

opinions, enquiries and feedback; longer a



## **MOVING ON**



## Technical Manager, The Edinburgh Sleep Centre

- Private sleep clinic
- Commercial research
- Mentoring
- Gaining research skills

#### • Unexpected career change...





## **MOVING ON**



#### • Time out for maternity leave

- Returned to work part-time
- But covering full-time post in less hours!

## • No sleep jobs advertised anywhere!

- Contacted colleague at RIE
- Research Assistant, University of Edinburgh (21hr/wk)
  - Technical / admin support for study of OSA in adults with Down syndrome
  - CSO funded
  - Diagnostics / treatment







#### Disaster! Study lead pulls out...

- Funding in place but no one to lead
- Redundancy?
- Invited to lead study
  - Skills, experience

## • Grant states researcher will undertake higher degree

- Problem for funding?
- "It's ok, you can just do a PhD..."





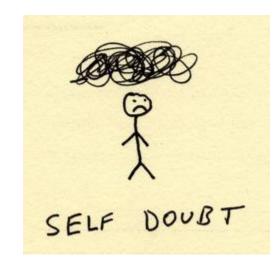


## PhD by Research, University of Edinburgh

- Fully funded
- Salary
- Entirely research based

## • But...

- I'm not a "high achiever"
- I'm not "academic enough"
- Mid-30s
- 1 year old child
- Not PhD material .....



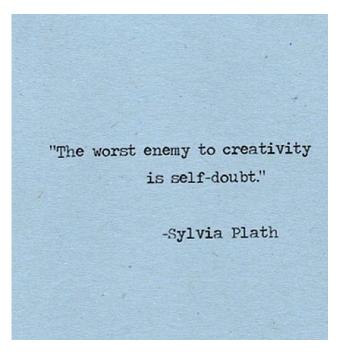




#### Encouraged by senior researchers in department

- Experienced in sleep
- Practical / technical
- Organisational skills
- Driven, focussed...

Commenced PhD...!







## Skills gained through PhD

- Patients with intellectual disability
- Research skills
- Independent working
- People management / teamworking
- Time management
  - Job, study, travel, family...
- Data management
- Statistics
- Lecturing / presentation skills
- Confidence in myself and my skills / experience ...









the ref ap

csandra Piechuta (Warsaw, Poland) for abstract "OSA complication score as novel rence to assess systemic inflammation in sleep oea"\_\_\_\_\_



sanna SS Ng (Hong Kong, Hong Kong) fo e abstract "A randomized controlled stud examine the effect of lifestyle modification ogram in obstructive sleep apnea"

# Presented work at international conference

- Posters
- Oral presentations
- European Respiratory Society
  Travel Grant
  - Top 3 abstracts in sleep

#### World Sleep Federation Travel Grant

- Top abstracts submitted



## MOVING ON – AGAIN...!



#### • Disaster!

- Funding runs out...
- Still mid-data collection
- Made redundant

#### Contact network

- "You've probably heard..."
- Post created at RHSC
- 3-month stipend from University



## MOVING ON – AGAIN...!



## • Specialist Clinical Physiologist (Sleep)

- Part-time whilst finishing PhD
- Kept on full-time after completion of PhD

## Full-time clinical post

- Research interest within wider team
- But "not part of the job for NHS staff"
- Some funding to assist with ongoing research project
- Approached manager re. seeking my own research funding
  - Surprisingly supportive!

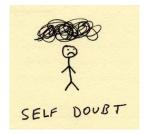


## MOVING ON – AGAIN...!



## Applied for NRS Career Research Fellowship

- Funding for up to 0.4WTE research time within existing clinical post
- 3 years
- Application form
- Research portfolio proposal
- Mentor



- Interview with panel of 8 clinicians, researchers from NHS and CSO

#### Awarded funding April 2017

- First physiologist to be awarded funding
- Ring-fenced time to undertake research





- Feel constrained by clinical post
- Research Assistant in Neurodegeneration and Sleep Disorders, University of Edinburgh
  - Full-time post
  - No longer entitled to NRS funding
  - Encouraged to speak to CSO by new line manager
- CSO agreed to continue funding provided 2 clinical sessions per week retained
  - "you don't ask, you don't get…"







- 3 days/wk Sleep Research Fellow, University of Edinburgh
  - Centre for Clinical Brain Sciences
  - Small vessel disease in adults with OSA (international collaboration)
- 1 day/wk Specialist Clinical Physiologist, NHS Lothian
  - RHSC
  - Clinical sleep diagnostics

#### • 1 day/wk NRS Career Research Fellow, NHS Lothian

- Parental group sleep education for pre-school children with Down syndrome
- Various other sleep-related projects



## WHY DO RESEARCH?



- Part of our job as Healthcare Scientists!
- Patient benefit
- Personal / professional curiosity
- Pursuit of knowledge / contribution to field
- Professional development / career progression
- Personal development / confidence in self



## WHAT HAVE I LEARNED?



#### Have a plan

- But be prepared to deviate
- Not everyone's path is the same
- Flexibility is key
- Don't wait to be asked make your own opportunities
  - But do grab opportunities when they arise
- Stay informed
  - CPD: professional bodies, conferences, publications



## WHAT HAVE I LEARNED?



#### • Network, network, network

- "It's not what you know, but who you know"

#### Find a mentor

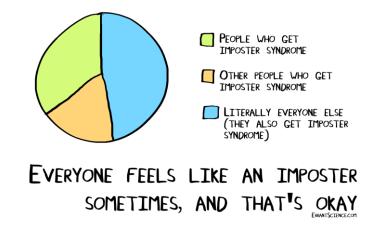
- Formal, informal

## Have confidence in yourself

- Avoid impostor syndrome
- Big yourself up!
- Social media, blogging

## Just do it!

- You won't know if you don't try...
- Don't be put off by negativity of others









#### • Be prepared to work hard

– but grab opportunities when they present themselves

#### • Use the resources at your disposal

- Training
- Networking
- Mentorship
- If there isn't a research culture in your department / hospital / field – cultivate one
- Stay curious!
  - Keep questioning







#### NHS Research Scotland (NRS)

- www.cso.scot.nhs.uk/nrs/

#### CHAIN

- www.chain-network.org.uk

#### Vitae

- www.vitae.ac.uk

#### Wellcome Trust Clinical Research Facility, Edinburgh

- www.wtcrf.ed.ac.uk/Courses

# Any questions?

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