pgclinsci@ncl.ac.uk - Katie Green, Programme Administrator

Year 3 Specialist Practice	Healthcare Science Specialist Learning with Integrated Professional Practice [30]			Research Project Trainees would usually begin a work-based research project in Year 2 and complete the project in Year 3 [30]				
	Specialism							
Year 2 Specialist Practice	Foundations in Professional Practice & Clinical	Research Methods [10]	Healthcare Science Specialist Learning [20]	Research Project Trainees would usually begin a work-based research project in Year 2 and complete the project in Year 3 [30]				
Year 1 Core Modules	Leadership in Healthcare Science [20]	Specialism Healthcare Science Integrating underpinning knowledge required for each rotational element with Professional Practice [40]						
	Generic	Divisional/Theme						

#### Balance of F2F and distance learning

Knowledge front-loading – F2F teaching w/some elements of distance learning – link course requirements w/work requirements – case study approach

#### Support:

Virtual learning environment – Canvas

Personal tutor system – academic staff @ Newcastle Uni – each student given a name

Programme teams

Student group themselves – group work

Work-based research projects:

Employer supervisors as well as university faculty support

Patient and Public Involvement in teaching and programme management issues – VOICE

1<sup>st</sup> year – career conference – talk to 6-formers

2<sup>nd</sup> year – Healthcare science festival

 $3^{rd}$  year – 3 minute thesis event in front of invited audience – no slides – deliver research project idea to members of public

# MSC8002: Overview

- · Helps to support/ prepare students for future research
- · Curriculum set nationally
- At Newcastle both Medical Physicists and Physiological Scientists complete during Year 2
- Delivered solely via e-learning
- Covers statistics, good clinical practice, and patient involvement
- Flexible complete in their own time, but assessed on submission given a topic every 3-4 weeks

# Assessment

Assessment	Weight	Deadline
E-Learning participation	10%	Individual activity deadlines
Good clinical practice training	Competence	Monday 20th March 2023
Create a Participant Information Sheet (PIS) and Consent Form	90%	Monday 20th March 2023

 10% marks completed by completing 2 self-rating surveys (1 mark each) AND contribution of a "meaningful post" and a "meaningful response to a peer" (1 mark each) in each of 4 discussion forums online (see next slides)

# E-Learning Participation

- 1. What do you think are the advantages and disadvantages of REQUIRING clinical scientists to be involved in research?
  - Outline your thoughts on the impact of research involvement being compulsory and linked to ongoing professional registration.
- Which research method should be used to address the research question 'What helps smokers to give up smoking?'
  - Choose one type of method and briefly describe how this method could be used to address the question and the key strengths associated with that method.
- 3. "Randomised Controlled Trials are the 'gold standard'. All other research is pointless!" You will be allocated to either a position FOR or AGAINST this statement.
  - Use the discussion board to discuss, using examples from your own discipline, for or against the statement in accordance with the group you have been allocated to.
- 4. Select a research paper from your own discipline (if desired, this may relate to a field of study that you intend to pursue for your research project). You are required to create a 'lay summary' of the <u>research question and study design</u>, and post this in the discussion forum. Try to address the 6 points as described in topic 3:
  - · What? What is the intervention?
  - Why? Why this particular intervention?
  - · When? When is the intervention to be made?
  - · How / How often? How is this to be achieved?
  - · Where? Where is the setting?
  - Who? Who are the subjects?
- Use the discussion board to post your lay summary
  - Include, at the end, a link to the research article so that your peers may review your accuracy and explanations.
  - Provide peer feedback to (at least) one other student summary. Please ensure that you respond to one student who does not yet have feedback. Each student should get feedback from at least one peer.
- Generating a lay summary will be good preparation for module assessment.

"Meaningful post"? – well developed and addresses all aspects of the task – show good understanding of the topic – cite resources

Reply advances the discussion by analysing and building on the previous posts – cite resources

Complete GCP course from NIHR and submit the certificate of completion

Main Assessment:

# Participant Information Sheet and Consent Form

- Students choose <u>one</u> of the following study protocols
  - they can select either protocol as their preference
- Maddison, R et al. (2014) The remote exercise monitoring trial for exercise-based cardiac rehabilitation (REMOTE-CR): a randomised controlled trial protocol. *BMC Public* Health. 14:1236
- Xu, N et al. (2020) The value of dynamic MRI in the treatment of cervical spondylotic myelopathy: a protocol for a prospective randomized clinical trial. BMC Musculoskeletal Disorders. 21:83
- In 2021 choose one of the above papers

# Task

- Review the study protocol chosen.
- · Assess the need for:
  - Invitation and Summary
  - More details of what is involved
  - Supporting information
- Create a participant information sheet (PIS) and consent form

Podcast added for 2022 – 2023 due to difficulties completing tasks

Preparing for Research Projects:

Clinsci.projects@newcastle.ac.uk

## MSc Dissertation modules:

# **Summative assignments**

#### Planning Module (30 credits) MSC8003

Assessed end year 2

- (5500ish words)
  - Background & Literature Review
  - Lay summary
  - Project Proposal
  - Governance Requirements
  - Resources & Risks
- Lay summary feedback by lay representative

#### **Dissertation Module (30 credits)** MSC8004

Assessed end year 3

- Integrated project proposal (100%) Scientific paper (3500+250 words) (65% dissertation +10% abstract)
  - e-poster (one A1 sheet) (25%)

# MSc Dissertation modules: Formative assignments

#### Planning Module (30 credits)

MSC8003

Assessed year 2

- Formative project proposal
- Lay summary session

Dissertation Module (30 credits)

MSC8004

Assessed year 3

- 3 minute-thesis
- Ethics and governance evidence

Ethics and Governance Evidence Submission Form You must submit evidence of any ethical, research governance or other approvals required for yo formal approvals are required, you must submit evidence from your local Research and Develops to confirm that no approvals are required, this can be in the form of e.g., a copy of an email, stat Preser like one of the following boses:

May project does not require MRA approval (submission of BRAS form), All of the below are

Preservation of the project does not require MRA approval (submission of BRAS form), All of the below are

Preservation of care for participants in my mudy are not allocated by a sofonization, ARD

to the study protect does not require changing treatment/pastent care from the accepted its for any of the pasteon provider.

All the project of the pasteon provider of the pasteon The following approvers are also required and obtained through IRAS sub-that apply – note this may be none):

SPONSOR: the person or organisation who takes responsibility for the initiation, management and financing of a trial.

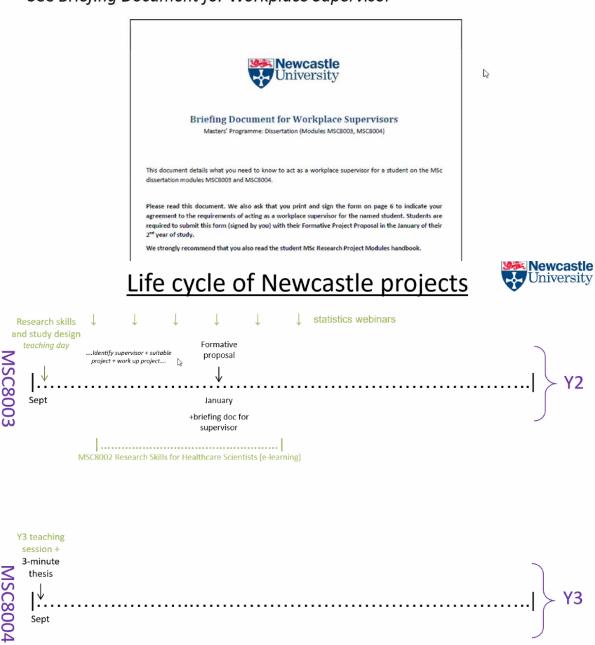
#### THE HOST INSTITUTION OWNS THE PROJECT

2

#### THE HOST INSTITUTION MUST SPONSOR THE PROJECT

Project sponsored by the hospital where the student works.

- Students MUST have a named workplace supervisor for their dissertation
- See Briefing Document for Workplace Supervisor



- Assessments @ end of YR 2 and 3 are fixed, but everything else in the research project is flexible

## Projects must...

- Have a workplace supervisor and the support of the host institution.
- Seek to acquire knowledge surveys without questions are out!
- Demonstrate student's understanding of the research process.

S

# Definitive answers are not necessary Sources of projects

Any question-led study. . .

- Comparison of two methods (old/new, mobile device/fixed, etc)
- Part of an existing project where a piece is pared off for the student, SO LONG AS it supports a stand-alone study design.
- Questionnaire-based investigations using qualitative research methods.
- Bedroom research . . . IF it answers a question using a structured analytical method, eg. meta analysis, database study.

# <u>Inspirations</u>

- <u>I wonder why?</u> If you ask others will too. Just make sure they haven't already answered it.
- <u>Conspicuous controversy</u> This instrument or that? To rest or to exercise? To irradiate or to operate? Why do we do X?
- £££££ available Research priorities, like much else, have fashions.
- Experience available In research, credibility and resource is all.
- Have a look on Canvas abstracts from previous student's dissertations
- Students can start collecting data at any time, however must submit governance/ethics approvals in place first!

# FAQs: what should I look out for?

- Feasibility of the project: nothing fails like the unfeasible
- 13
- Ethics and governance approvals, confirmation with R&D
- Risks to resources
- Too many aims / poorly defined research question / project too large
- Timescale: things take longer than you expect!

Approvals take longer.

Recruitment takes longer.

Analysis takes longer.

Writing up takes longer.

Getting started takes MUCH longer.

Well defined projects with a (single) clear research question are best.

- What to look out for as a supervisor

# What is research? What is not?

• Tricky one! research is defined as the attempt to derive generalisable or transferable¹ new² knowledge to answer or refine relevant questions with scientifically sound methods.

UK Policy Framework for Health and Social Care Research



Health Research Authority (HRA) decision tool

# What support will the University offer?

- Research methods module MSC8002
- Lectures: start of Y2+Y3, statistics webinar series, ethics webinar
- Support from subject and module lead by email/phone/zoom clinsci.projects@newcastle.ac.uk
- Detailed course instructions, notes & tools via Canvas
- Support to write lay summaries (1-1 with lay rep)
- Support for HRA/REC applications: flowchart, webinar
- University IT package: e-journals, referencing and statistics software, RAID secured storage, exchange email etc.
- 121 statistics support provided by university

FOUNDATIONS IN PROFESSIONAL PRACTICE:

# Aims of MSC8006 'Foundations in Professional Practice and Clinical Leadership'

To provide all trainees with a greater knowledge & understanding of:

- Professional practice & clinical leadership
- Why they are so important?
- How they can utilise theoretical evidence/literature/best practice in healthcare to support learning

#### **Outcomes of MSC8006**

To become confident & competent 'agents of change' in healthcare science within NHS



# Good Scientific Practice [2021] 5 Domains

- 1. Professional Practice
- 2. Scientific Practice
- 3. Clinical Practice
- 4. Research, development and innovation
- 5. Clinical Leadership

## MSC8006 Content - 20 credits

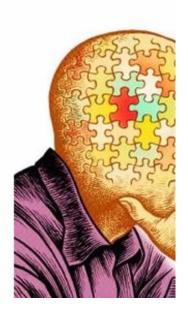
(not exhaustive list!!)

# Critically evaluate/reflect on key themes & concepts

- professionalism & identity in Healthcare
- communication & compassionate care
- effective teamworking & innovation
- public health & access to care/inequalities
- clinical leadership (focus on selfleadership)

#### **How impacts on Patient Experience?**

- Introduction to research in UK and internationally
- Encourage logging critical incidents / reflective journal



# Juggling Act! Challenges & barriers to learning?

- Many trainees are new to the NHS
- So ....little or no practice nor understanding of patient care
- Module assessments task them to consider their impact on the patient experience
- Many trainees [Medical Physics] have little or no direct contact with patients
- Perspective is one of a more subjective & qualitative nature [debate/discussion]
- Critical reflection is a key theme but....a new skill for most trainees
- Out of their comfort zone!



#### **Assessments**

#### Year 1 Compulsory & Formative:

Reflections on leadership

Group Presentation/Observation of Practice

#### Year 2 Summative x 2:

**Reflections Patient Experience** 

Clinical Leadership & Critical Incidents

Critically reflective skills will support....

# Final reflective practice & writing for the IACC

#### Levels of reflection



Students need to use and check their Newcastle University address when contacting the university Assignment hand in date for rotational modules 11 April 2023 @ 12pm

# Assignments Deadlines:



- The deadline Tuesday 11<sup>th</sup> of April at 12pm is the last opportunity to submit work for:
- CVR8001, CVR8002, CVR8003, CVR8005, CVR8006.
- CVR8004 assignment and CVR8025 poster presentation (24<sup>th</sup> of April 2023).

This means each student will have three final deadlines on 11<sup>th</sup> of April 2023.

Clinical Lead for Vasc Science @ Newcastle uni: Kathia Fiaschi – Freeman Hospital

#### Year 1 (*Residential*) Timetable

CVR8001/2/3/4/5/6 & MSC8006 (Foundation in Professional Practice & Clinical Leadership in Healthcare Science)

Six week block: 3<sup>rd</sup> October – 11<sup>th</sup> November 2022

Eight day block: 6th - 17<sup>th</sup> March 2023

(Mainly CVR8004, CVR8025 & MSC8006 Review of previously taught material, Student conference 'Scientist careers in the NHS').

Exams: Semester 2 assessment period

(Provisional - Monday 22<sup>nd</sup> May 2023 to Friday 9<sup>th</sup> June 2023)

1 hr exam for intro to cardiac science, intro to vascular science, and intro to resp and sleep science

#### CVR800x: Assessment

Assessment document & guidance on Canvas module pages

**SUMMATIVE** (mandatory – assessment of learning)

Case Study Assessments	Submission Date (12 noon deadline)	Module Mark(%)
1000 Word Assignment for each of CVR8001/2/3/5/6	11 <sup>th</sup> April 2023	50%
1 hour MCQ exam for each module (apart from CVR8004 & CVR8025)	Semester 2 examination period	50%/70%
1000 Word Assignment for CVR8004	24 <sup>th</sup> April 2023	70%
Oral Presentation (CVR8004 & CVR8025)	Semester 2 examination period - TBC	30%

Must pass the module overall – not all components.

If a failed component is re-sat, the module mark will be capped at 50%





#### On-line / distance learning

Research Skills for Health Care Professionals

MSC8002: October 2023 - February 2024

• MSC8003: Identifying & Planning a Project

• Residential: Specialist Modules:

• 10 day block: 4th September – 15th September 2023

• ~4 day block: w/c 19th February 2024

• 1 day: exam: Semester 2 assessment period (May/June 2024) - TBC

### Specialism Modules (Year 2 – 20 credits)

**Specialism Modules: CVR800x** 

**10 day block:** 4<sup>th</sup> September – 15<sup>th</sup> September 2023

**Assessment:** 

**Assignment (2,000 words):** March Y2 (50%)

Examination date (1½ hr): Semester 2 assessment period (May/June 2023)

Must pass the written exam <u>and</u> the module overall. If a failed component is re-sat, the module mark will be capped at 50%.

Note: Subject to final confirmation.

## **MSC8003** Research Project 1: Project Planning

#### **FORMATIVE:**

Compulsory formative assessment (deadline: 3rd week of Jan Y2)

#### **SUMMATIVE:**

Assignment	Module marks
A structured project proposal following the style of an ethical submission (4,000 - 5,000 words)	100%

Submission date: 3<sup>rd</sup> week of June Year 2

## Specialism Modules (Year 3 - 30 credits)

## **Specialism Modules:**

**10 day block:** 4<sup>th</sup> September – 15<sup>th</sup> September 2023

**Assessment:** 

Assignment (3000 words): December Year 3 (50%)

Examination date (2 hr): Semester 1 Exam Period (50%)

Must pass the written exam and the module overall. If a failed component is resat, the module mark will be capped at 50%.

Note: Subject to final confirmation.

2 week block in year 3 is end of September, not beginning!

# **MSC8004** Research Project 2: Dissertation

# FORMATIVE (Compulsory): 3 minute thesis (Sept Y3)

Assignment	Module marks
E-poster of project results - standard powerpoint	25%
Dissertation: ≤ 3,500 in the format of a research paper To include: Abstract: ≤ 250 word – as used in application to a conference of a professional body	75% (65% dis) (10% abs)

Submission date (all assignments): end May Y3

E-poster is a single PowerPoint slide

# **HEI Expectations**

#### Assessments

- develop a succinct scientific writing style
- OBSERVE the GUIDANCE on case studies (see Canvas sites)
- DO NOT include patient identifiable data
- consider marking scheme, avoid penalties (e.g. late submissions are penalised)
- meet submission dates (always 12 noon)

#### Feedback

- please keep it constructive.

#### Observe the Students' Charter

# **Academic Resources**

#### Teachers – USE THEM

#### Virtual Learning Environment, Canvas

- Timetables Calendar
- Syllabi
- Teaching material
- Sample exam questions / examination guidance
- Reading lists

#### Library & other spaces

- Includes a printing allowance
- Access to computers
- Use the Newcastle University and Canvas websites
- Right-Cite NU's site for help with citation and writing skills



# Struggling - Need Help?

Academic: USE the teachers

Programme queries/difficulties:

Programme Administrator: pgclinsci@newcastle.ac.uk

Curriculum Director: Peter Luke

• Peter.luke@newcastle.ac.uk

Personal Extenuating Circumstances

- impacting on academic work

# Personal Extenuating Circumstances:

Students who believe that their study or ability to complete assessments is being adversely affected by unforeseen and unavoidable personal extenuating circumstances should advise their School by completing the on-line PEC form, available via the student's Self Service Portal (S3P), so that appropriate adjustments can be made.

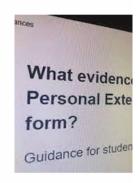
**PEC** 

(https://s3p.ncl.ac.uk/login/index.aspx)

## Personal Extenuating Circumstances (PEC)

# Not normally accepted

- •Instances where an appropriate adjustment has already been made.
- Retrospective report, without good reason.
- •Ongoing medical conditions/disabilities should get support via a Student Support Recommendation (SSR)
- •Transport problems need to allow adequate time
- Unspecified anxiety or examination stress
- Minor infection such as coughs, colds, headaches etc.
- · Distress relating to family pet
- Holidays, house moves, sporting or other social events
- Known employment or financial responsibilities
- · Problems with personal computers, printers etc.
- Where the circumstances could have been avoided
- Personal tutor can help with difficulties
- Speak to training officer or supervisor
- Contact the STP (NSHS) there is a "Trainee in Difficulty" Policy







#### Support

Support is available to students with disabilities and long-term medical conditions, along with those who have caring responsibilities for those with disabilities. Conditions include:

- unseen long-term health conditions eg Epilepsy, Diabetes, Migraine, severe Asthma, Arthritis, Cystic Fibrosis, Cancer, HIV, Chronic Fatigue Syndrome, Irritable Bowel Syndrome
- physical conditions may use mobility equipment such as a wheelchair or crutches on a regular basis or this may fluctuate from day to day
- sensory conditions eg visual or hearing impairment, Autism Spectrum Condition
- · specific learning difficulties eg Dyslexia, Dyspraxia, Dyscalculia, ADHD
- The Disability Team provides assessments and recommends to schools the academic adjustments students with mental health
  disabilities require. They also provide advice and facilitate access to practical support for students with ongoing mental health
  disabilities and significant vulnerabilities, with the aim of enabling them to engage with their studies in a safe and effective
  way. With student consent, they will liaise with external mental health partners, to help maintain student mental wellbeing and
  aid any transition into and out of University.
- <u>students who have caring responsibilities</u> this includes looking after a family member, partner, or friend who may be ill, disabled, have a mental health condition, or is misusing alcohol or drugs

#### Disability support adjustments

- · advice, information and guidance for new applicants at any stage of your application
- · advice, information and guidance throughout all stages of your university degree
- · exam concessions
- an individual Student Support Plan (SSP)
- · transitional and social support
- · advice and information for academic staff
- Student Support Plan if extra support needed for medical conditions

#### **Student Support Plan**

You will only be able to view this document if you have met with Student Health and Wellbeing Services about specific support and adjustments.

A Student Support Plan is produced by the Student Health and Wellbeing Service and it sets out identified support and reasonable adjustments, and the information staff need to be aware of to ensure that you can access and participate in your course of study. The Student Support Plan is intended to be a working document and can be updated at any point during your studies.

If you feel this is something you could benefit from, please contact the Student Health and Wellbeing Service directly by emailing: <a href="mailto:disabilityadvisor@ncl.ac.uk">disabilityadvisor@ncl.ac.uk</a> or by booking an appointment via their <a href="mailto:web enquiry form">web enquiry form</a>.

If you require these documents to be officially stamped by the University, do not print them yourself. Instead, send your request to <a href="mailto:student-registration@ncl.ac.uk">student-registration@ncl.ac.uk</a> or, if you are on campus, call in to Student Services at level 2, King's Gate.



11<sup>th</sup> April 2023 is the absolute deadline for most of your CVRx module written work.



This is intentional to allow you the MAXIMUM time within the academic calendar to submit these assignments.



PLEASE don't leave it to the last minute – the assignments will be available soon and you can start work on them immediately, in any order you wish.



Aim to complete **at least** 1 assignment before Christmas...



Advice can be sought from module leaders – **though they** will not provide comments on draft submissions.