THE UNIVERSITY of EDINBURGH

Masters by Research in Life Sciences and Medicine: your questions answered

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What is a Masters by Research?

Our MScRs here at the University of Edinburgh are an opportunity for research with increasing academic depth.

- Studied on-campus.
- Most of the time is spent undertaking two research projects, in different laboratories.
- You will gain a spectrum of academic research skills, so critical thinking surrounding existing and new knowledge, and uncertainty; technical & laboratory; data handling; etc.
- You will also gain a wide range of professional skills: time & project management; teamwork; being effective in a complex environment; communicating your understanding; resilience and autonomy.

Why study a Masters by Research?

- Opportunity for research with increasing academic depth.
- Are you considering a professional / scientific / medical career that you want to be able to demonstrate experience, insight and skills?
- Are you considering a PhD?
  - Exploration - What will a PhD be like?
  - Experience
  - Insight
  - Being successful in applying for a PhD

Finding your ideal Masters by Research

- Decide what you need, but be open to other options that may fit better longer term, or widen or offer a slightly different approach that you had not anticipated.
- Lots of opportunities out there, the ideal programme is out there for you!
- but they do sometimes take time to find, and websites can sometimes be complicated.
- Most importantly – if you need more information, contact the academic staff involved, perhaps talk to current or past students.
- *Give yourself time to do your research and to reflect, to make the right choice.*

Emma Smith - studying MSc by Research Regenerative Medicine and Tissue Repair

Why did you choose to study your Masters by Research?

I have always been interested in the role that stem cells and various cellular therapies can play in rare diseases, neurological diseases, and other regenerative therapies. This MScR programme gave me the opportunity to explore this interest on a deeper level while allowing me to be immersed in full-time research. I also knew that I wanted to do research in my future career, so this programme was a great way to begin to get more hands-on experience!

Favourite aspect of the programme?

All of the various opportunities that the programme and the Centre provides for me to work independently on a project while still learning from and collaborating with other scientists through seminars, conferences and journal clubs. there is an opportunity to work on the second project in an industry setting and this opportunity was another major reason that I chose this programme over others!

Most challenging aspect of your degree?

This degree involves two independent research projects and each require a dissertation. Therefore, the balancing of writing a dissertation, designing experimental plans and effectively executing the experiments within the 20 week time periods can be difficult.

Career aspirations?

I hope to pursue a career in industry as a research and development engineer or tissue engineer to bring work from the bench to the clinic!

Hailey Kadonoff - studying MSc by Research Regenerative Medicine and Tissue Repair

Why did you choose to study your Masters by Research?

The programmes' focus on interdisciplinary collaboration integrating stem cell biology, tissue engineering and clinical applications perfectly aligns with my passion for advancing regenerative therapies. This unique structure allowed me to dive deeply into these areas through dedicated, hands-on research, giving me a strong foundation to explore how these fields intersect.

Favourite aspect of the programme?

My favourite part is the chance to work in an interdisciplinary environment where I can engage in meaningful research alongside leading scientists. The access to state-of-the-art facilities and the emphasis on translating scientific discoveries into real-world therapeutic solutions are inspiring and rewarding.

Most challenging aspect of your degree?

Managing time and independence has been the biggest challenge. With few set deadlines, it's easy to delay tasks, especially while balancing lab work. Learning to structure my time effectively has been crucial to staying on track.

Career aspirations?

I plan to pursue a PhD or work as a scientist in the cell therapy industry.

Petra Juhász - studying MSc by Research Regenerative Medicine and Tissue Repair

Why did you choose to study your Masters by Research?

I felt that I couldn't use my full potential during my undergraduate degree and at my industry job. I am also very interested in the cellular mechanisms of diseases and in the potential of regenerative therapies. I can fully immerse myself in the field with hands-on research.

Favourite aspect of the programme?

I really like how independent we can be in our research but also there is always someone here to help in case you have any questions. We can learn a lot from other scientists across this field.

Most challenging aspect of your degree?

There are two projects involved and there is a considerably short time period for them so it can be very challenging to decide what can and cannot fit in that 20 weeks.

Career aspirations?

I hope to secure a job as a research assistant, possibly in relations with neuro or cardiovascular sciences.

Our Masters by Research programmes

Biomedical Sciences (Life Sciences)	Cardiovascular Biology	Infectious Diseases	Integrative Neuroscience
Regenerative Medicine and Tissue Repair	Reproductive Sciences	Science Communication, Public Engagement and Informal Learning	

Spotlight on Biomedical Sciences (Life Sciences)

- **Focus on research:** acquire research skills - explore scientific research and methodologies.
- **2 x 20 week projects:** your chance to explore different areas and research methodologies.
- **Wide choice of projects :** work at any lab in Edinburgh.

Programme Director: Paul LeTissier

Email: Paul.LeTissier@ed.ac.uk

Spotlight on Cardiovascular Biology

- Broad-based training in biomedical research, with a focus on cardiovascular science.
- You will gain an integrated view of the physiology and pathology of cardiovascular system from both basic and clinical scientists.
- Structure: seminars, tutorials + 3 research projects at world-renowned **Centre for Cardiovascular Science.**

Programme Director: Dr Laura Denby

Email: laura.denby@ed.ac.uk

Spotlight on Infectious Diseases

- An opportunity for biologists, medics and veterinarians to develop their skills in infectious disease research.
- This is an immersive degree, consisting of a single laboratory placement, with research opportunities from across Edinburgh Infectious Diseases

Programme Director: Dr Kim Picozzi

Email: Kim.Picozzi@ed.ac.uk

Spotlight on Integrative Neuroscience

- **Semester 1: September – December – taught element:** Broad review of neuroscience research and core skills training. In-depth learning in one neuroscience research area (through an elective course).
- **Semester 2: January – August – research element:** 1 long research project or 2 shorter projects, culminating in: poster, written dissertation and oral presentation.
- Opportunity to go to a national or international neuroscience **research conference** during your studies.

Programme Director: Dr Emma Wood

Email: emma.wood@ed.ac.uk

Spotlight on Regenerative Medicine & Tissue Repair

- **Research focus:** prepare for a research career in academia or industry.
- **Training from experts** who work across the life cycle of cell and gene therapy.
- **2 pathways of study:** Discovery Science or Clinical Development.
- **2x 20 week projects:** topics range from fundamental research to real-life development and manufacturing scenarios for cell and gene therapies.

Regenerative Medicine and Tissue Repair

Programme Director: Dr Marieke Hoeve **Email:** mscr.regenmedrepair@ed.ac.uk

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Spotlight on Reproductive Sciences

One year, full-time, on-campus masters programme, structured around:

- Two ~20 week research projects
- A research project proposal writing course

Topics cover diverse aspects of Reproductive Health.

Research projects under guidance of discovery scientists or clinician-scientists.

Based mainly at the Centre for Reproductive Health, part of the Institute for Regeneration and Repair.

Students will attend Masterclasses, seminars, journal clubs and lab meetings, hone writing and presenting skills, and join the MScR science retreat in the Scottish Highlands.

Institute for Regeneration and Repair

Programme Director: Dr Marieke Hoeve

Email: mscr.reprosci@ed.ac.uk

Spotlight on Science Communication, Public Engagement and Informal Learning

- **Research:** develop social science research skills for science communication research and apply them in your **own** dissertation project.
- **Content:**

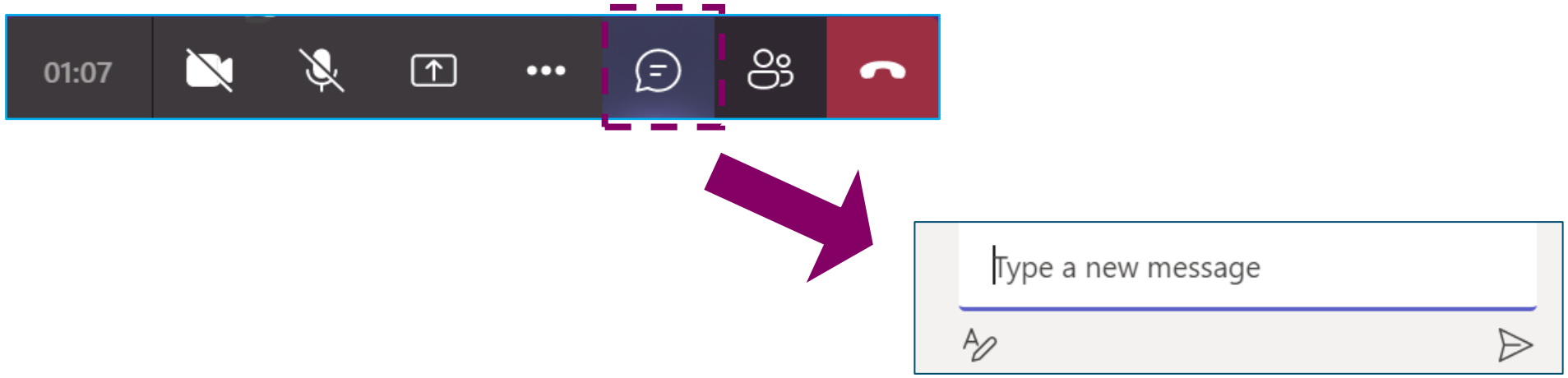
- Foundational courses in science, communication and public engagement
- Introduction to global challenges and science communication practices
- Research skills courses in social science research skills,
- Dissertation project

Science Communication, Public Engagement and Informal Learning

Programme Director: Dr Elizabeth Stevenson **Email:** e.stevenson@ed.ac.uk

Asking questions

- Type your question into the Chat Area



Next steps…

https://virtualvisits.ed.ac.uk/pg

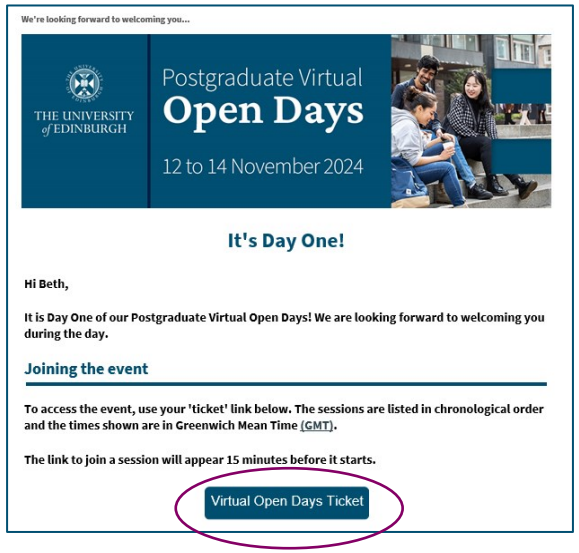
https://edin.ac/student-chat-pg

Contact details for follow-up questions

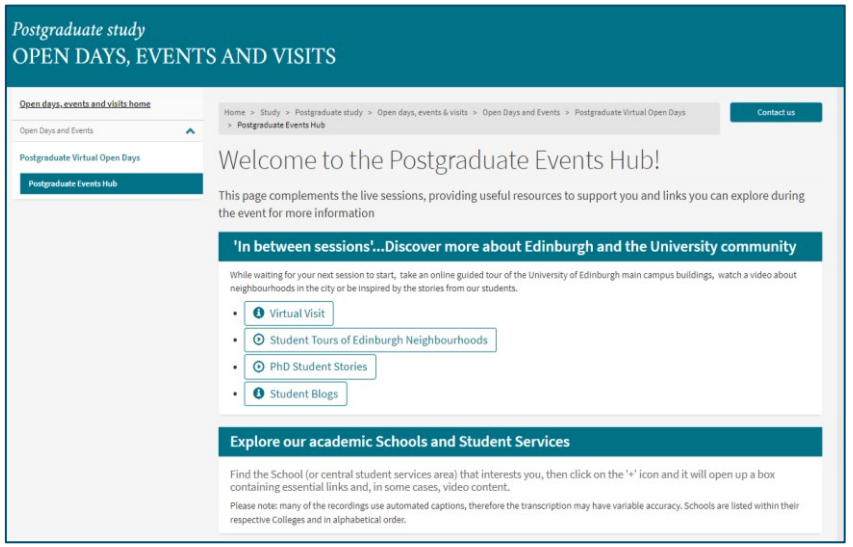
- We apologise if we did not get through all of your questions in the time allotted for this session. If you have further questions that have not been answered, please email: futurestudents@ed.ac.uk

Thank you – click ‘Leave’ when the session ends

- Return to your ‘e-ticket’ to find and attend other sessions you’ve booked – by clicking on the button in the email we sent you…



- …and visit the events hub:
- https://edin.ac/4gZuP3G



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Thank you

Professor Simon Riley

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