

National School for Primary Care Research

Summer 2022 Internships with the Exeter Collaboration for Academic Primary Care (APEX)

Guidance notes and application form for undergraduate students

The Exeter Collaboration for Academic Primary Care (APEX) is delighted to invite talented undergraduate students, from *any* course and from any University, to apply for a School for Primary Care Research Summer Internship. These internships have been developed with a view to supporting students' interests in a career in research, with a specific focus on academic primary care.

There are two internships being offered by APEX for Summer 2022:

- One post is reserved for a non-medical undergraduate (this includes those training to be allied health professionals, medical imaging and medical sciences students, along with statisticians for example, or biology undergraduates, etc.).
- Internships will last six weeks and will take place between 20th June and 23rd September.
- A bursary of £1,000 will be available to support each intern.
- The start date and use of funds are flexible, will be agreed with the research lead in advance, and can be tailored to the individual and proposed project.

During the Summer placement, interns will produce a piece of primary care-focussed academic work and will be given the opportunity to later present their work at the NIHR National School for Primary Care Research annual showcase event. Students will gain hands-on experience of primary care research whilst under the supervision of a specialised team of mentors and supervisors. Experiences may include training in research methods, literature reviewing, designing a research study, analysis of

secondary data, and attendance at team meetings and seminars. Successful students may also seek opportunities for ongoing support from their research lead in order to publish their project work.

The Exeter Collaboration for Academic Primary Care (APEX) is a multidisciplinary team within the College of Medicine and Health at the University of Exeter. The collaboration's excellence in academic primary care is reflected in its status as one of the nine departments which form the NIHR's National School for Primary Care 2021–2026. Further information about the APEX team and our core research interests can be found on the website <http://medicine.exeter.ac.uk/research/healthresearch/apex/>

Information on the specific projects available for undergraduate interns for Summer 2022 can be found on pages 4-8 of this document.

To apply please email Sara Hayes (S.Hayes@exeter.ac.uk) copying Jo Butterworth (J.E.Butterworth@exeter.ac.uk) by 5pm on Tuesday 3rd May 2022 and attach:

- Your completed Expression of Interest form (page 9)
- Your CV

Successful applicants will be notified by Friday 20th May 2022. Applications will be scored independently by three members of the core APEX team, followed by discussion and agreement on the two highest scoring applicants. Selection will be based on criteria including:

- evidence of commitment to primary care scholarship;
- critical thinking and reflexivity about how this award will support your future professional growth;
- and creativity and commitment to making an active contribution during the internship to the primary care knowledge field.
- Patient and Public Involvement is central to all our research themes.

Feedback from the APEx Summer '21 interns

"I really enjoyed being part of the CR-Expo team last summer for my internship. My goal was to do this internship as a 1st year medical student and I was able to do that. I was able to do this internship as a 1st year medical student and I was able to do that. I was able to do this internship as a 1st year medical student and I was able to do that."
"The CR-Expo team was very helpful and I was able to do this internship as a 1st year medical student and I was able to do that. I was able to do this internship as a 1st year medical student and I was able to do that. I was able to do this internship as a 1st year medical student and I was able to do that."
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Kesri Gajadhar, 2nd year
BMBS medical student

APEX Internship projects available for Summer 2022

Internship project (a):

Name & email supervisor(s): Emma Pitchforth and Kasim Allel
Proposed length of internship and when it could take place: May – October 2022 (with flexibility to suit applicant)
Host department: Exeter Collaboration for Academic Primary Care, University of Exeter
How will the internship be conducted: ☐ In person at the university ☐ Virtual/ from home ☒ Both are possible, depending on preference student
Title internship project: Antimicrobial resistance: a mapping and review of policy
Summary of the internship project: <i>(max 250 words, can include hyperlinks to further information)</i> Antimicrobial resistance (AMR) is a major global public health threat. Policies to address the challenge require a One Health approach, integrating human, animal and environmental perspectives. There have been increasing global commitments to address AMR but many countries are grappling with how to effectively design and implement National Action Plans. This internship will be part of ongoing research which involves AMR stakeholder and policy analysis in Argentina and the UK. Depending on the stage of the review the intern will contribute to a review of AMR policy and stakeholders and contribute to effective ways to visualise policy development pathways and related data flows. The overall project outlined here brings together experts in human, animal and environmental health and presents an exciting opportunity for an intern to consider an issue pertinent to primary care in a broader global and One Health context.
Learning objectives: 1. To contribute to a mapping of AMR policy and stakeholders relevant to the AMR National Action Plans of the UK and/or Argentina 2. To contribute to the development of an effective visualisation of policy/stakeholder analysis 3. To write up findings and learnings for an APEX (Exeter Collaboration for Academic Primary Care) blog and as appropriate publications resulting from the research.
Any further information: Further information about the overall research project and focus of the internship can be provided. Please contact Emma Pitchforth, Senior Lecturer and Senior

Research Fellow in Primary Care e.pitchforth@exeter.ac.uk or Kasim Allel, Research Associate, k.allel-henriquez@exeter.ac.uk

Internship project (b):

Name & email supervisor(s): Dr Luke Mounce; L.T.A.Mounce@exeter.ac.uk
Proposed length of internship and when it could take place: 6 weeks, available from 01/07/2022 to 31/08/2022
Host department: Exeter Collaboration for Academic Primary Care, University of Exeter
How will the internship be conducted: ☐ In person at the university ☐ Virtual/ from home ☒ Both are possible, depending on preference student
Title internship project: Spotting Cancer among Comorbidities (SPOCC): Who is disadvantaged in the cancer diagnostic pathway?
Summary of the internship project: <i>(max 250 words, can include hyperlinks to further information)</i> The first work package of the Spotting Cancer among Comorbidities project is exploring which patients with pre-existing conditions (comorbidities) are disadvantaged in the cancer diagnostic pathway, and where that disadvantage occurs in the pathway. To accomplish this, we have a dataset of ~150,000 anonymised electronic GP patient records, linked to secondary care data and cancer registry data. We are exploring the following outcomes: Stage at diagnosis (early vs advanced) 30-day mortality Route to diagnosis (e.g. via emergency or cancer-specific referral) Length of time before patient reports their symptom to a GP Length of time before a GP refers to secondary care Consultation rates prior to diagnosis For each outcome, we are exploring the impact of: • Conditions individually • Counts of conditions • Burden of conditions • Whether a condition offers a plausible alternative explanation for a symptom of the patient's cancer We may find, for example, that patients with diabetes are at greater risk of advanced stage colon cancer, that they do not experience longer intervals before referral, but such patients take longer to present to their GP. This might indicate that interventions should be patient-focussed.

This internship project would involve compiling the results for analyses conducted thus far, exploring them for trends (such as the example above), and exploring ways of summarising these for dissemination. The intern will have the opportunity to work with a multidisciplinary team of researchers, clinicians and patient representatives.

Learning objectives:

- Understanding how to interpret statistical outputs, with the help of the team's statisticians
- Understanding how to triangulate different research outputs to formulate an overall picture of effects
- Exploring some of the mechanisms of how pre-existing conditions can impact the cancer diagnostic pathway
- Creating concise and clear presentations of research findings
- Working in a multidisciplinary team.
- Learning to integrate the patient perspective into the research narrative

Any further information:

The Spotting Cancer among Comorbidities project is a 5-year NIHR Programme Grant for Applied Research. More information is available here:

<https://fundingawards.nihr.ac.uk/award/NIHR201070>

Internship project (c):

Name & email supervisor(s): Dr Sinéad McDonagh (SPCR Postdoctoral Research Fellow in Primary Care and Cardiovascular care, early career researcher, < 4 years post PhD viva): s.t.j.mcdonagh@exeter.ac.uk Dr Rosina Cross (Postdoctoral Research Associate in Primary Care, early career researcher, < 1 year post PhD viva): r.cross2@exeter.ac.uk
Proposed length of internship and when it could take place: 6 weeks – any time from June 20 th until Sept 23 rd 2022 (w/c 8 th August til w/c 12 th September would be preferable)
Host department: Exeter Collaboration for Academic Primary Care, University of Exeter
How will the internship be conducted: ☐ In person at the university ☐ Virtual/ from home ☒ Both are possible, depending on preference student
Title internship project: Impact of the COVID-19 pandemic on rural primary care
Summary of the internship project: <i>(max 250 words, can include hyperlinks to further information)</i> The COVID-19 pandemic has presented a huge global burden to health and healthcare systems. The outbreak resulted in considerable morbidity and mortality as well as substantial shortages of healthcare staff, equipment and resources, and changes to healthcare delivery. Even before the pandemic, rural General Practice (GP) surgeries have struggled to employ and retain multidisciplinary team members. Existing research into rural healthcare staff recruitment and retention issues is limited, and usually focusses on doctors; the impact of the COVID-19 outbreak, to our knowledge, has not yet been studied in this setting. Therefore, the aim of this study is to determine the impact of the COVID-19 pandemic on rural primary care. We undertook 17 semi-structured interviews with multidisciplinary team members of rural dispensing practices across England from July til November 2021. Interviews were audio-recorded, transcribed and anonymised. We are seeking an enthusiastic intern to join our team for 6 weeks to learn and undertake a qualitative analysis of interview data using Framework Analysis and Nvivo 12. This will enable us to identify themes relating to the COVID-19 pandemic and its effect on rural primary care. The findings from this study will provide an understanding of the impact of the COVID-19 pandemic on rural primary care and may inform future studies and grant applications. The

results from this work will be written up for a peer-reviewed publication. The opportunity to present this work at primary care conferences may also arise.

The intern will be supervised by Dr Sinéad McDonagh and Dr Rosina Cross.

Learning objectives:

- To develop an understanding of rural primary care practice
- To generate an understanding of the impact of the COVID-19 pandemic on rural primary care through qualitative analysis of existing interview data
- To learn and undertake qualitative analysis techniques
- To learn how to use NVivo qualitative data analysis software
- To collaborate professionally with members of the primary care research team and members of the public
- To understand more about patient and public involvement in primary care research

Any further information:

Dr Chris Clark (Clinical Senior Lecturer in General Practice) is PI for this project. He will take overall responsibility for and offer senior supervision of this internship. Dr Emma Cockcroft (SPCR postdoctoral research fellow and PPI expert) are also co-applicants on this piece of work and will be available to support the intern over the summer period too.

Exeter Academic Collaboration for Primary Care (APEX) Summer internships for undergraduate students: Expression of Interest form

Full name	
Email address	
Host University; Undergraduate programme and year	
Please answer the following questions (max 150 words for each section).	
1. Why are you applying for this internship? Please include information about which project you would like to join and why.	
2. Do you have any previous experience of research in Primary Care?	
3. How will this internship support your future career or professional development plans?	
4. What contribution do you think you can make during the internship?	