

**UNIVERSITY OF NOTTINGHAM  
RECRUITMENT ROLE PROFILE**

<b>Job Title:</b>	Research Assistant in On-line Digital Interventions
<b>School/Department:</b>	School of Health Sciences, Institute of Mental Health
<b>Job Family and Level:</b>	Research and Teaching Level 4a
<b>Contract Status:</b>	Fixed-term until 31 March 2022
<b>Hours of Work:</b>	Full-time (36.25 hours per week)
<b>Location:</b>	Institute of Mental Health, University of Nottingham Innovation Park
<b>Reporting to:</b>	NEON programme coordinator and Prof Mike Slade (PI)

**Purpose of the Role:**

The purpose of this role will be to assist and support the Chief Investigator (Prof Mike Slade) and the NEON Senior Research Fellow with all aspects of the NEON Study, which will design, implement and trial a web-based digital intervention for psychosis. Amongst other activities, the post-holder will work to design, test and support a technology prototype that will work reliably in a clinical trial with estimated 684 participants and a duration of 29 months. Technical and research supervision will be provided by Dr Jeroen Keppens (Department of Informatics, King's College London). Research supervision will also be provided by the NEON programme coordinator, Dr. Stefan Rennick-Egglestone, who is a healthcare technology specialist. The technology prototype will be built on existing web technologies (e.g. web implementation frameworks or content management systems), and will incorporate a machine learning component. The design of the digital intervention will draw on foundational knowledge developed during the first 18 months of the NEON study, and will incorporate contributions from the entire study team.

**Study Background:**

The National Institute of Health Research (NIHR) has funded 'Personal experience as a recovery resource in psychosis: Narrative Experiences ONline (NEON)' Study (grant RP-PG-0615-20016) (2017-2022). The NEON Study looks at whether experiencing online stories of personal recovery ('recovery narratives') told by peers improves quality of life for people with psychosis. Recovery narratives involve people describing their understanding of their mental health problems and their recovery from them. NEON also looks at whether these narratives can improve the way mental health workers support this client group.

The aim of the NEON study as a whole is to use recorded recovery narratives to support the recovery of people experiencing psychosis. The objectives are:

1. To collect recovery narratives from four under-researched groups (n=120), and combine this with existing repositories to create the world's largest collation of recovery narratives about different people's experiences of living with psychosis and their personal recovery.
2. To develop and validate (n=20) a conceptual framework characterising recovery narratives and their benefits to others, identifying which elements of existing and new recovery accounts may best help others.
3. To develop (n=40), refine (n=30) and optimise (n=81) an intervention using recorded narratives to benefit people experiencing psychosis. The online self-management tool will match the most hope-promoting narratives to the participant's needs and experiences. We will also assess the practicalities and safety of carrying out a large-scale evaluation.

4. To conduct a definitive randomised controlled trial to assess the effectiveness and cost-effectiveness of the intervention on current mental health service users experiencing psychosis from across England (n=683). The hypothesis is that participants receiving the narratives intervention will have improved quality of life at one-year follow-up compared with those not receiving the intervention.
5. To develop an online intervention for mental health professionals to increase hopefulness and expectations that recovery is likely for the people with psychosis.

If found effective, NEON could offer a low cost approach that would be delivered nationally, benefitting many people who experience psychosis across the country and saving the NHS money. The study is supported by a Lived Experience Advisory Panel, an International Advisory Board, and a Programme Steering Committee. Excellent organisational support is available from the Institute of Mental Health and the School of Health Sciences, and the study has a full-time Administrator.

**Benefits to the Post-Holder:**

The post-holder will gain substantial experience of topics relevant to digital intervention design and research, including working with a Clinical Trials Unit, the principals of Good Clinical Practice, working with people with lived experience of mental illness and recovery and of international collaborations. Career development support will be offered, including involvement in writing academic papers. Each of the three researchers in equivalent roles to this position in Prof Slade’s last Programme Grant – REFOCUS (see [www.researchintorecovery.com/refocus](http://www.researchintorecovery.com/refocus)) (2009-2014) – obtained a PhD and was co-author on 25 academic publications. The post-holder will engage with the entire process of a clinical trial, including preparation, conduct and evaluation. Active support for a part-time PhD will be available if the post-holder has not already completed a PhD. The Institute of Mental Health will pay for four years of part-time PhD fees (worth more than £8000), and the post-holder’s work on the study will be structured to enable them to work towards PhD submission.

Applicants will require the capability to produce working digital technologies at scale, and hence applicants who have relevant experience in a technical discipline (e.g. in Computer Science, Software Engineering or Health Informatics) and who wish to develop a career as a health services researcher may be interested, as may individuals who have health services research experience, but a thorough technical competence. The ideal candidate will have a strong commitment to recovery (whether developed through personal experience of mental illness and recovery or through previous work in the area) and be able to show evidence of interest in research and the ability to engage creatively and productively with mental health service users, workers and managers.

The post-holder will join the School of Health Sciences, Faculty of Medicine and Health Sciences. The post is located in the Institute of Mental Health (IMH), which is a partnership between University of Nottingham and Nottinghamshire Healthcare NHS Foundation Trust, to promote research excellence and its implementation in health and social care. The IMH currently manages £37.6 million in external research grants, with over 100 PhD students, and publication of 400 peer-reviewed journal papers per year. The recovery research team at IMH is led by Prof Slade, with a focus on developing theoretically-defensible and empirically-tested approaches to supporting recovery in mental health, using mixed-methods research designs and developing new measures (see [researchintorecovery.com](http://researchintorecovery.com)). The team co-ordinates the international Recovery Research Network (established 2009, n=550 members from 20 countries) and organises the *Refocus on Recovery* conferences, the field’s largest regular scientific meeting on recovery.

<b>Main Responsibilities</b>	
1.	To understand and contribute to the theoretical foundations for the on-line intervention, drawing on foundational work conducted during the first 18 months of the NEON study team. To contribute to the translation of these foundations into a candidate intervention.
2.	To lead the development of a new online intervention comprising a person-specific matching approach, which will match recipients to narratives, with the intention of maximising positive and minimising negative impact. To contribute to the refinement of the Narratives of Recovery Scale (NORSE), for use in the matching algorithm. To

	contribute to the selection and parameterisation of a machine learning algorithm for the intervention.
3.	To contribute to all aspects of the design, management and data collection of an online randomised controlled trial (n=683), including creating secure databases for outcome, process and economic evaluation.
4.	To liaise with the study Pragmatic Clinical Trials Unit regarding all aspects of intervention implementation and database management / security.
5.	To actively contribute to the piloting and feasibility testing of the intervention, including the development and refinement of prototypes, cognitive debriefing with service users (n=40), workshops with healthcare professionals (n=30), liaising with experts (n=27), evaluation using think-aloud protocol with service users (n=30) and focus groups with GPs and other clinicians (n=24). To refine the intervention in the light of these evaluations.
6.	Working with international collaborators, to contribute to the creation and curating of the world's largest database of recovery narratives, leading on database implementation and the development of data archiving, anonymising, curating and access policies.
7.	To liaise with the developers of the current study website (researchintorecovery.com) and be centrally involved in website maintenance and development.
8.	To support the development of a parallel narrative-based online learning intervention for mental health professionals.
9.	To contribute to the production of research reports and publications, and to support knowledge mobilisation activities, e.g. <i>Refocus on Recovery 2017</i> [see <a href="http://researchintorecovery.com/ror2017">researchintorecovery.com/ror2017</a> ] and the Recovery Research Network [see <a href="http://researchintorecovery.com/rnn">researchintorecovery.com/rnn</a> ]
10.	To continue to develop skills in and knowledge of research methods and techniques and contribute to the development of/or choice of techniques, models, methods, critiques and approaches.
11.	To build relationships with internal and external contacts to develop knowledge and understanding and form relationships for future collaborations.
12.	To work in conjunction with others in the research team in order to achieve objectives and deadlines of the research project.
13.	Any other duties appropriate to the grade, as directed by Prof Slade or the Senior Research Fellow.

### Knowledge, Skills, Qualifications & Experience

	<b>Essential</b>	<b>Desirable</b>
<b>Qualifications/ Education</b>	<ul style="list-style-type: none"> <li>• Good first degree or equivalent in a relevant software engineering/computer science/informatics/digital media or social science/health-related discipline (2:1 or higher).</li> </ul>	<ul style="list-style-type: none"> <li>• Clinical qualification.</li> <li>• Relevant postgraduate qualification, e.g. Masters.</li> <li>• PhD or equivalent in a relevant subject.</li> </ul>
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Demonstrable working knowledge of and experience of developing reliable web-based technologies.</li> <li>• Demonstrable working knowledge of and experience of full stack web development.</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge and experience of web implementation frameworks and/or Content Management Systems.</li> <li>• Knowledge and experience of working with web-hosting technologies.</li> <li>• Knowledge and experience of Cloud Services in general, and cloud machine learning services in particular.</li> <li>• Knowledge and experience of software testing practices, especially in the context of web technologies.</li> </ul>

		<ul style="list-style-type: none"> <li>• Experience of analysing qualitative and quantitative data.</li> <li>• Experience and knowledge of health research and health care systems.</li> <li>• Experience of mental illness, its impact (on self or others) and of recovery.</li> <li>• Experience of mental health services research.</li> <li>• Development of online health interventions/self-management tools.</li> </ul>
<b>Skills/Training</b>	<ul style="list-style-type: none"> <li>• Training in or experience with data analysis, data science or machine learning.</li> <li>• Understanding of research design, and knowledge of some of the research methods to be used.</li> <li>• Analytical ability to facilitate conceptual thinking, innovation and creativity.</li> <li>• Ability to interact sensitively and professionally with people who use, work in and manage mental health services.</li> <li>• Ability to build relationships and collaborate with others, internally and externally.</li> <li>• Excellent oral and written communication skills, including the ability to communicate with clarity on complex information and the ability to speak with credibility to both academic and non-academic audiences.</li> <li>• Proficiency in IT (Word, Excel, database use).</li> </ul>	<ul style="list-style-type: none"> <li>• Familiarity with academic environments.</li> <li>• Demonstrable evidence of high quality writing for academic and practitioner audiences, with evidence of ability to publish at national or international level (to include conference and working papers).</li> <li>• Expertise in using software packages for qualitative and quantitative data analysis, such as NVivo and SPSS.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>• Ability to work autonomously and exhibit initiative.</li> <li>• Able to manage own workload.</li> <li>• Highly organised, able to work effectively on a complex project and prioritise tasks.</li> <li>• Able to work well in a team.</li> <li>• Strong motivating and influencing skills.</li> <li>• Career goals which demonstrate motivation for a mental health or informatics-related research role.</li> </ul>	<ul style="list-style-type: none"> <li>• Motivated to undertake a PhD (if not already in possession of one).</li> <li>• A genuine interest in recovery, mental health and mental health services.</li> </ul>



The University of Nottingham strongly endorses Athena SWAN principles, with commitment from all levels of the organisation in furthering women's careers. It is our mission to ensure equal opportunity, best working practices and fair policies for all.