

Call for Researchers

Are you interested in pharmaceutical excipients, formulation science, or blood–brain barrier (BBB) biology?

European Paediatric Formulation Initiative (EuPFI) is inviting young researchers and experts to join our excipient workstream's effort in advancing understanding pharmaceutical excipients safety and its effect on the blood brain barrier. This call is for researchers interested in exploring the relationship between the anatomy and physiology of the blood–brain barrier (BBB) and the potential impact of pharmaceutical excipients on its formation, structure and function.

The project seeks to critically examine the current landscape of knowledge on excipient-BBB interactions and assess whether predictive and experimental frameworks established for APIs can be applied or adapted for excipients. A further focus is the potential for some excipients to influence BBB formation or maturation in perinatal and neonatal populations.

Given the ethical and practical limitations of in vivo research in neonates, the project places strong emphasis on alternative and emerging technologies, including advanced in vitro BBB models, organ-on-chip systems, and computational or in silico approaches. Contributors are encouraged to critically assess the translational relevance, strengths, and limitations of these methods for paediatric applications. A central component of this work is a systematic literature review and formal gap analysis, aimed at mapping the existing evidence base, identifying methodological limitations and inconsistencies, and highlighting under-researched areas particularly in relation to excipients and paediatric or neonatal BBB development.

Who should contribute?

We welcome involvement from early-career researchers and experienced scientists with expertise in pharmaceutical sciences, biomedical sciences, toxicology, neuroscience, bioengineering, or regulatory science, who are interested in literature research, critical analysis, and interdisciplinary collaboration. By bringing together BBB biology and excipients safety knowledge, this project aims to build a more predictive and evidence-based understanding of excipient BBB interactions and to support the careful selection of excipients and ultimately development of safer, age-appropriate medicines.

How to get involved

Please send your CV and a brief statement (150–200 words) explaining why you are interested in collaborating on this topic to admin@eupfi.co.uk. Shortlisted candidates will be invited for a brief interview. If you need more information or would like to talk about this opportunity, please feel free to contact admin@eupfi.co.uk.

How will benefit you

Published paper as a leading author, opportunity to connect and collaborate with leading experts, and contribute ideas that can shape the future of excipients safety in paediatric population. In addition, it will support to strengthen your professional profile and CV.