

Research in Travel Medicine – How to Get Started

Travel medicine is a young discipline and indeed it is not much older than myself. There is already a substantial evidence base for the practice of travel medicine and both the Faculty of Travel Medicine¹ and the Royal College of Nursing² in the UK have published their recommendations for travel medicine practice based on reviews of the relevant literature and expert consensus opinion. The Faculty of Travel Medicine endorses the journal *Travel Medicine and Infectious Disease* which has a healthy 2013 journal impact factor of 1.538. The International Society of Travel Medicine is affiliated with the *Journal of Travel Medicine* (journal impact factor 1.525). Other travel medicine-related journals include *Tropical Medicine and International Health* (journal impact factor 2.302) and the *International Journal of Travel Medicine and Global Health* (impact factor pending). Of course, many mainstream journals in general internal medicine, general practice, occupational medicine, public health medicine, infectious diseases, and nursing will also publish travel medicine articles relevant to their audience.

Original research articles are often, but not always, presented as oral or poster presentations at international scientific meetings such as the Northern European Conference on Travel Medicine (NECTM) or the Conference of the International Society of Travel Medicine (CISTM), before they are published online or in the printed journal. The gold standard research study design is randomised controlled clinical trials and this may be used to evaluate the efficacy of travel vaccines, for example. Other study designs include cohort surveys (e.g. *what are the health problems of a large cohort of Irish aid workers travelling to west Africa?*), serological surveys (e.g. *what is the rate of dengue infection in backpackers from Ireland travelling to South East Asia for prolonged periods?*), and cross-sectional surveys (e.g. *what are travellers' knowledge, attitudes and practices in relation to road traffic accident prevention: results from an airport survey*).

Cross-sectional questionnaire-based studies are subject to selection and reporting bias and have several limitations, but are a very feasible type of research project for the novice travel medicine researcher. Case studies or series of illnesses in returned travellers are also very relevant but often more difficult to get published. Where a TMSI member has

demonstrable expertise in a given subject area within travel medicine, there may be scope for writing a narrative literature review which critically appraises the most recent evidence available in the literature. The ISTM has published a list of research questions which reflect the research priorities of the ISTM Research committee.³ This list highlights some of the gaps in our existing knowledge that could reasonably be addressed with further research. I have extracted and edited some of these priority research questions in Table 1 for the benefit of TMSI members. These research questions could well be addressed by multiple members of TMSI collaborating on carefully designed research projects.

Table 1. Selected Research Priorities in Travel Medicine

Pre-travel	Safety during travel	Post-travel
What are the best ways to access travellers who do not seek pre-travel health advice?	What are the barriers to implementing best-practice preventive measures among health-care workers in developing countries?	How effective are algorithms in the management of post-travel syndromes such as fever in returned travellers?
What pre-travel counselling leads to fewer road traffic accidents, animal bites, and safer sexual behaviours?	How should novel anticoagulants be incorporated into guidelines for travellers?	What is the awareness amongst travellers and health-care professionals of post-infectious irritable bowel syndrome?
For whom should we prescribe gastrointestinal protozoal self-treatment medications, e.g. metronidazole?	Do long-term travellers behave differently to short-term travellers?	How cost effective is screening for schistosomiasis and intestinal parasites in asymptomatic returned travellers?
How common is medical tourism from Ireland, and how should we best prepare these tourists?	Do travellers who develop high altitude illness respond appropriately to their symptoms in a wilderness environment?	What is the role of travellers in the spread of emerging infections such as Chikungunya fever?

TMSI is keen to promote research activity amongst its members and will fund selected projects where there is a strong proposal, including a detailed methodology which takes

account of ethical considerations, and which could be translated into improvements in clinical practice. If you would like to develop a research question, I would be happy to work with TMSI members who are motivated to present and publish their research findings. I will guide feasible projects at all stages, including refining the research question, reviewing the literature, elaborating a study design, ethics committee application, statistical support, writing of a research abstract, and helping to write the final paper for submission to a peer-reviewed journal. Where funding is required to complete the project and where the lead investigator has costed the project, applications for limited funding from TMSI will be reviewed by the TMSI Executive committee. Additional support will be provided if any output is accepted for presentation at an international conference such as NECTM or CISTM.

I hope that our nearly 400 members who are travel medicine practitioners will consider whether they would like to develop a project to answer a burning research question they may have. If you have a research idea you would like to explore please email our Honorary Secretary, Anne Redmond, at annehredmond@eircom.net with a brief 100 word summary of your proposal. If a research question cannot be condensed into 100 words, then it probably is not focused enough! I look forward to helping our members to conduct original research in travel medicine and to present and publish their work, thereby contributing to the growing evidence base in our dynamic discipline and raising the profile of travel medicine in Ireland and beyond.

References:

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2. Royal College of Nursing (2012). Travel health nursing: career and competence development. RCN guidance. London: RCN.
3. Talbot EA, Chen LH, Sanford C, McCarthy A, Leder K (2010). Travel medicine research priorities: establishing an evidence base. *Journal of Travel Medicine* 17(6):410-415.

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