# Clinical guidelines for Tinnitus: development, evaluation and implementation of clinical standards

**COST GRANT: TINNET BM1306** 

Host TINNET member: Rilana Cima (WG1)

Host organisation: Maastricht University

Visiting TINNET member: Derek Hoare (WG1)

Visitor's affiliation: University of Nottingham

Dates: Sunday 30th April to Friday 5th May (5 days)

I would like to sincerely thank Dr Cima for her organisation of the mission and her kind hospitality throughout my time in Maastricht.

## Original motivation and purpose of the STSM

The main motivation for this STSM was the requirement that I spend some intensive time working with Dr Cima to prepare a consultation ready draft of the TINNET European clinical practice guideline for tinnitus. This was time sensitive because to maintain the trajectory of WG1 we needed to have a draft Guideline ready for circulation for a first round of consultation stage within weeks.

A second motivation for the STSM was for me to learn from Dr Cima's experience of developing the TINNET guideline and the Dutch national guideline. I am leading the development of the British Society of Audiology clinical practice guideline over the next 8 months and so again the timing of this visit and this specialist learning was optimal.

Another motivation for the mission was for me to gain insight into tinnitus treatment as it is currently delivered by Dr Cima's team in Maastricht. Her stepped care approach is world leading and the opportunity to see it in action was important to me. Our respective research programmes have many parallels and so I considered it valuable to my own development and my own research on tinnitus to observe the work of Dr Ciima and her team, and to actively consider opportunities for collaboration.

## Background

The overarching objective of TINNET WG1 is to develop a practical accessible European clinical practice guideline for the management of tinnitus in adults. Dr Cima and I are steering group members of WG1 and senior authors on the Guideline. To maintain our planned timeline for the Guideline we urgently needed to work together to complete a draft document. This was best achieved face-to-face as it allowed use to work on iterations to various sections of the document and finalise them in real time. We planned to have a final document ready to go to consultation after this mission.

### Detailed work plan

This 5-day visit was planned in detail to ensure the all aims were met. My time was divided between Maastricht University and the Adelante audiology and tinnitus treatment centre at Hoensbroek. There was some travel time involved to move between sites and Dr Cima and I used that time to discuss aspects of current and future collaboration.

30APR2017: arrival into Maastricht. Spent the evening orientating myself to the local area and University, prepared aspects of the Guideline document for priority discussion with Dr Cima.

1 May 2017	
Meet Rilana at Universiteitssingel 40	Maastricht
Travel to Adelante in Hoensbroek	Hoensbroek
Lunch - discussions with multi disiplinary team	Hoensbroek
Step 1 Intake psychology	Hoensbroek
Step 1 Intake Audiology	Hoensbroek
Travel to Maastricht to work on Guidelines	Maastricht
Finish	
2 May 2017	
Meet Rilana at Universiteitssingel 40	Maastricht
Travel to Adelante	Hoensbroek
Step 2: C treatment session	Hoensbroek
Step 2: B treatment session	Hoensbroek
Travel to Maastricht to work on Guidelines	Maastricht
Finish	Maastricht
3 May 2017	
Weekly clinical team-meeting at Adelante	Hoensbroek
Travel to Maastricht to work on Guidelines	Maastricht
4 May 2017	
Weekly meetings with research groups	Maastricht
Work on guideline	Maastricht

## 01MAY2017

After a morning spend working on the Guideline I met with Dr Cima at the University and immediately travelled to Hoensbroek to meet the clinical team there over lunch. This was an excellent introduction to the work of the clinic and we discovered many mutual interested and potentials for collaboration, e.g. work on hyperacusis I was unaware of, common interests in misophonia, and aspects of tinnitus assessment protocols that would benefit from the collection of normative data. We discussed immediate value and then plans to collaborate on the collection of high-frequency audiometry in their clinic.

Following lunch, I was privileged to observe a clinical psychology intake assessment of a patient refereed with severely bothersome tinnitus. Despite a language barrier this session was most enlightening and much of the detail of the assessment was interpretable. Following this, I joined a senior audiologist for discussion of our respective research interests, and I also had the opportunity to observe a follow-up audiology appointment. We discovered an opportunity to collaborate on paediatric tinnitus, an area I am so to start work in; the team at Adelante use self-devised paediatric questionnaires which will be valuable to my research plans.

The remainder of the day was spend working on the Guideline. A number of aspects of the Guideline were to be informed by the WG1 survey of clinical practice. As I was not involved in WG1 at that time I needed to spend some time understanding this dataset, which I did on this evening.

### 02MAY2017



I returned to Hoensbroek and observed two group treatment session (to see how patients with quite different degrees of tinnitus severity are treated). This was an amazing insight into the multidisciplinary treatment in Adelante which involves clinical psychologists, audiologists, and movement therapists. Movement therapy is not something I am familiar with and so I was fortunate to spend time with the clinics lead movement therapist (pictured centre above). She talked me through the group treatments as they happened in real time and we had follow-up discussions on what might be the benefit for tinnitus that is specific to movement therapy within the overall benefit that is observed for the therapy (Cima et al., 2012). The movement therapy component of the treatment is used to facilitate exposure, but the movement therapist are hypothesising an as yet intangible benefit is associates with the specific movements they use. Because of these discussions Dr Cima and I discussed the possibility of training clinic therapists to design small scale studies to start developing and exploring testable hypotheses. This is a potential activity for us to pursue together.

On our car journeys between Maastricht and Hoensbroek Dr Cima and I had great opportunity to discuss existing and newly emerging opportunities for collaboration, some of which have been initiated since the STSM. We were already actively working on a scoping exercise to prioritise new Cochrane systematic reviews on tinnitus, and on discovering a mutual interest in misophonia, Dr Cima agreed to join a scoping review being led by one of my research staff in the UK; this manuscript is to be submitted imminently and will help set the research agenda in this field.

Again, the remainder of the day was spend writing on the TINNET survey and Guideline.

#### 03MAY2017

This day was an intensive effort to write up the TINNET survey data in a manuscript for publication. At the same time Dr Cima drafted outstanding sections of the Guideline such that we addressed each other's queries immediately as they arose. By the end of this day we have two well progressed documents and I enjoyed a laugh-filled evening and superb vegetarian meal with Dr Cima and members of the clinical team who were free to join us in Maastricht.

#### 04MAY2017

I attend the weekly research meeting of the Behavioural Medicine section at Maastricht University. The section has extensive research expertise in behavioural medicine and health psychology. I enjoyed an excellent PhD student presentation on fear of pain and met with senior colleagues of Dr Cima including Prof Johan Vlaeyen whose work I strongly admire.

The remainder of the day was spent revising content to the survey manuscript and the Guideline.

#### 05MAY2017

After an early morning spent further revising the Guideline content I travelled back to the UK.

Cima, R. F., Maes, I. H., Joore, M. A., Scheyen, D. J., El Refaie, A., Baguley, D. M., ... & Vlaeyen, J. W. (2012). Specialised treatment based on cognitive behaviour therapy versus usual care for tinnitus: a randomised controlled trial. *the Lancet*, *379*(9830), 1951-1959.

# Future collaboration and publications supported by the STSM

A MULTIDISCIPLINARY EUROPEAN TINNITUS GUIDELINE: DIAGNOSTICS, TREATMENT, AND **OUTCOMES** 6 **Authors** Rilana Cima, Thomas Fuller, Christopher Cederroth, Haula Haider, Dimitris Kikidis, Alec Lapira, Birgit 7 Mazurek, Arnaud Norena, Derek J Hoare 9 10 11 Acknowledgements Thanks to Thanos Bibas and Sarah Rabau for their contribution to the survey of clinical practice in 12 Europe, and Sara Rabau, Rachelle Lardinois, Niklas Edval, Petra Bruggemann, Suzanne Nemholt, 13 Anestis Kapandais and Dorte Lungaard for their contribution to a systematic review of existing 14 clinical practice guidelines. Thanks also to David Stockdale and Magdalena Sereda for comments on 15 an initial draft of Chapter 5. 16 17 A COST Action grant (BM1306) supported collaboration between the authors and the formation of A COST Action grant (BM1306) supported collaboration between the authors and the formation of an initial draft of Chapter 5.

In addition to the Guideline, which is now out to TINNET member consultation, there are journal manuscripts that have progressed because of this STSM including:

**Cima, R.F.F.,** Kikidis, D., Mazurek, B., Haider, H., Cederroth, Rabau, S., C., Norena, A., Lapira, A., Bibas, T, **Hoare, D.J.** (in preparation) A lack of clinical standards, patients suffer: The case of heterogeneous tinnitus management across Europe.

Sereda, M., Mead, M., Hall, D.A., **Cima, R.F.F.,** Baguley, D., McFerran, D., **Hoare, D.J.** (in preparation) Scoping a suite of priority reviews: Tinnitus

Potgieter, I., MacDonald, C., **Cima, R.F.F.,** Sheldrake, J., Partridge, L., **Hoare, D.J** (in preparation) Misophonia: a scoping review of research