



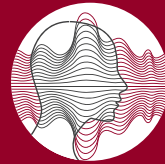
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## THE CORE TEAM



Dr Lourdes Farrugia is the Chair of COST Action 17115. She is a Lecturer and researcher at the Department of Physics, University of Malta, with her main research interests being aspects of instrumentation and measurement of dielectric

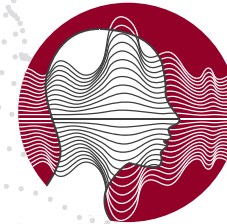
properties for biomedical applications. She is currently focusing her research on addressing gaps in the knowledge of dielectric properties of biological tissues relevant to microwave medical devices.



MyWAVE



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MyWAVE

European Network for Advancing  
Electromagnetic Hyperthermic  
Medical Technologies

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## WHO ARE WE?

A group of researchers at different stages of their careers specialising in a variety of fields such as Electronics Engineering, Biophysics and Chemical Engineering, from Europe and beyond, working together with clinicians and industry members, in order to make electromagnetic hyperthermic therapies more effective and to bring these technologies closer to the patient bedside.

**Working group 1** will support studies of the response of human tissues to electromagnetic radiation and introduce robust and repeatable methods of measuring tissue properties. Both thermal and dielectric properties will be of interest. The group will provide standards for the measurement of tissues that can be easily applied to create a global database accessible to all.

**Working group 2** will develop the technologies that use electromagnetic radiation for hyperthermic treatment, such as RF and microwave hyperthermia and ablation. The group will work towards the development of protocols as well as the quality control of devices and treatments.

**Working group 3** will focus on overcoming the barriers for these novel technologies to reach the patients. This group will analyse clinical needs and commercialisation routes, to provide strategies to bring these devices to market and clinical practice.

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## MyWAVE COST ACTION

This COST Action aims to accelerate the design and development of hyperthermic technologies to treat new clinical conditions including those in oncology, in order to reach patients in a timely manner. This will be done by addressing scientific, clinical, and commercialisation challenges of these novel electromagnetic technologies.

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## WHY IS THIS RESEARCH IMPORTANT?

The primary beneficiaries will be the scientists who are working on similar fields, physicians, as well as medical device companies. There will be important societal benefits through this collaborative work of more than 160 principal investigators. The outcomes of this project will aid the development of novel healthcare technologies; ultimately, the long term beneficiaries will be the patients and their families.

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## WHAT ARE THE POSSIBLE APPLICATIONS?

The network will prepare an open source database and present novel findings in international conferences.

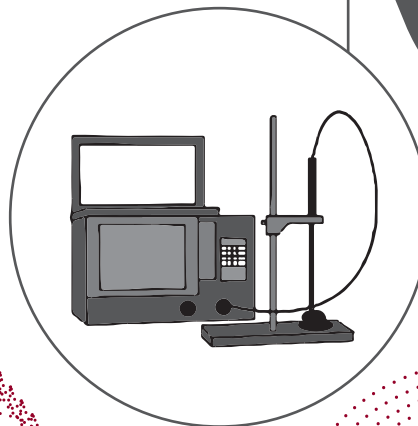
The network will have reached both the public and scientific community.

The optimal treatment techniques and protocols will be identified for further translation and commercialization.

1st year:

2nd year:

3rd year:



Scientific data collection and reporting standards will be set that will benefit all scientists, globally.

