The Relevance of Academic Research: Demolishing the Ivory Tower

Dr. Janet Mifsud

Anna's story …

Anna is in her twenties and has had epilepsy since she was 13 years old. For her, just as it is for many people, having epilepsy has been not a medical problem, since modern treatment with drugs can achieve full or partial control of seizures in about 85 percent of cases, but rather one of overcoming negative attitudes about her intellectual and physical abilities and social integration. This led to her being a rather reserved person.

Yet in the last 12 months Anna's life has changed completely. She is now an active member of the EYIE project (Epilepsy Youth in Europe), has travelled to Germany and Spain and has learned how to design websites and posters. She is also active locally mobilising a group for youths with epilepsy in Malta, and hopes to organise an international meeting here next year.

The ivory tower… does it exist?

All this is just one concrete example of the direct output of the research activities and international contacts of the Department of Clinical Pharmacology. Pharmacology is the study of the understanding of drug action in molecular terms, in order to gain further insights and to develop new drugs with which to combat disease in a more effective and selective manner. Clinical Pharmacology combines pharmacological and clinical expertise, on a scientific basis with the ultimate goal of improving efficacy and safety in the clinical use of drugs.

The University of Malta has often been labelled an ivory tower far away from the reality of Maltese society. Yet, not many may be aware that the academic staff at the university, due to the very nature of their research, reach out to the community and are very heavily involved at many levels of Maltese society. This research being carried out in epilepsy is studying the interaction between objective and subjective aspects of the illness and measuring the effects of different pharmacological treatments. This research is being carried out in conjunction with the Departments of Medicine and Paediatrics, the Epilepsy Society of Malta and the local support group, the *Caritas Malta Epilepsy Association*, which has over 150 members and to whom it is a matter is of direct relevance. The data from these studies is also aiding in the audit management of the condition and plans for the future health service provision for this disorder. A PEKTUR grant from the National Commission for Persons with Disability (KNPD) as well as UNESCO funding have been obtained to further our research.

Recently, the Maltese research group was given the task of coordinating the proposal for a Network of Excellence, involving over 60 partners from research institutes from all over Europe, under an Expression of Interest call for the next Framework Programme of the European Union.

Several of our colleagues are also involved in a number of commissions and committees ranging from the Malta Standards Authority, the Bioethics Consultative Committee, Medical Commission of the Malta Sports Council, Malta Council for Science and Technology as well as many NGOs such as Caritas Malta, and other patient organisations.

Why Research?

Resources in research and education are the most important growth stimulating instruments today. It is one of the most important ways in which societies can be connected. The scholarship of engagement redefines our research and teaching missions to include studies that address real-world problems. This will also aid to promote service-learning as an effective method for enhancing student learning and civic responsibility and increase understanding of the development of the abilities required in a diverse social environment.

The European Dimension: ERA

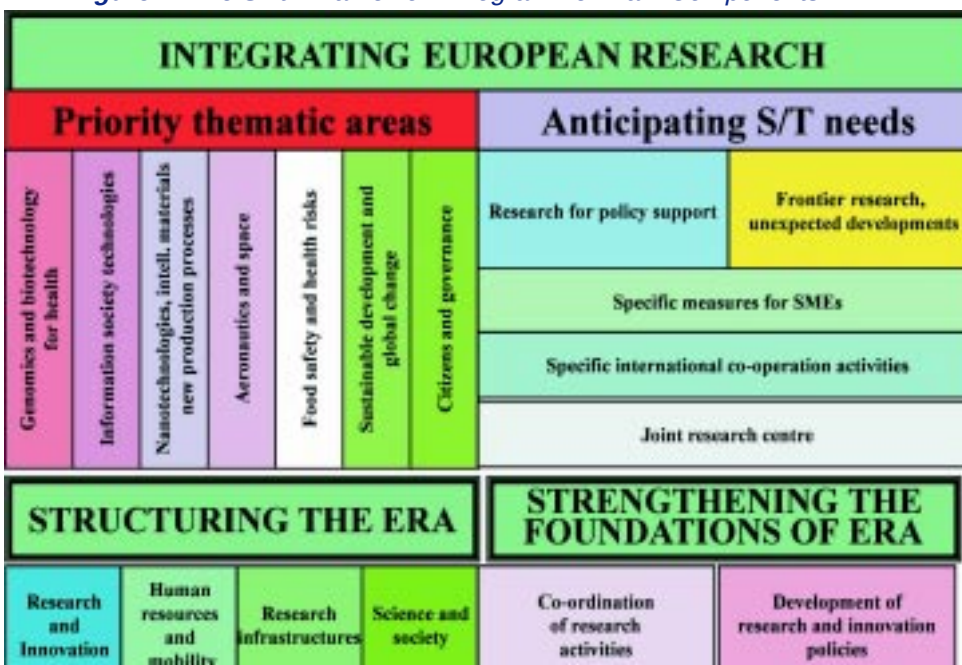
Even on a European scale the concrete results expected from funded research have been emphasised in the Sixth Framework Programme which was launched in November 2002. This will be organised in such a way as to establish a *European Research Area* (ERA) *(Figure 1)*, concentrating on priority transnational research areas, maximum dissemination of results, full participation of candidate countries, increased participation of women, links to national R&D and to other R&D fora, and specific measures for SMEs *(Figure 2)*.

Figure 1 The European Research Area

FP6 will focus on putting *science back into the heart of society*: going from research policy to a science policy, without undermining ethical values of society. This will ensure that scientific progress is carried out in a responsible fashion: analysing risk, expertise, ethics, and stepping up the science/society dialogue.

Malta should be able to face these challenges if we continue to improve our national research infrastructures, increasing the flow of knowledge from university and academia to society, by tackling skill shortages, and by exploiting our diversity and entrepreneurship in the region. There should

Figure 2 *The Sixth Framework Programme: Main Components*



be a deeper dialogue between the local scientific community and institutions, political decision makers, citizens and industrialists. This will allow us more opportunities to make the most of FP6, and thus be able to access the best research facilities in Europe, forming strategic business relationships across Europe and promoting flexible human centred work methods.

Science back into the heart of society

Every day, scientific and technological progress contributes new innovations essential to our quality of life and international competitiveness. However, there are indications that the immense potential of our achievements is out of step with European citizens' current needs and aspirations. The October 2001 *Eurobarometer Survey of European Attitudes towards Science* gave a mixed picture, ranging from confidence and hope to lack of interest in scientific activities or even fears regarding some of their impacts. Industrial hazards and ethical issues were widely highlighted, raising questions and reinforcing the public's desire for progress to be more closely monitored. Some people feel that science and technology are changing their lives too quickly.

Anna's example

Anna's example is just one of many which shows concretely that academic research at the University of Malta has immense social relevance. Celebrating progress in large and small steps is crucial to advancing engaged research. However, the focus must always be on high-quality work that significantly advances our understanding of key concepts, the relevance of the work to society, and produces significant outcomes. To do otherwise runs the risk of damaging perceptions of research and only serves to build imaginary towers at Tal-Qroqq.

Dr. Mifsud is a Senior Lecturer in the Department of Clinical Pharmacology and Therapeutics, Faculty of Medicine and Surgery and has published extensively in the area of anti-epileptic drug therapy.

The Department is responsible for coordinating all the pharmacology modules and related practical sessions for undergraduate B.Pharm, MD and B.Ch.D. students in the Faculty. In addition, the services of the department are also requested by the Institute of Health Care and the Faculty of Education. The research activities of the Department focus strongly on the pharmacology of drugs used in asthma, epilepsy and immunopharmacology and a number of papers have been presented at overseas conferences. On the international scene, the Department has collaborated with the University of Minnesota in organising an International Pharmacokinetics School and has strong research links with the University of Pisa, Italy, Queen's University of Belfast, N. Ireland and Queen's Medical Centre, Nottingham. The Department also forms part of the Erasmus Thematic Network in Pharmacology (EpharNet) and the GALENOS pharmaceutical sciences network.