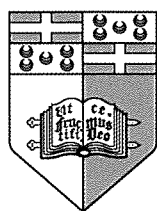


UNIVERSITY OF MALTA



Institute of Health Care

BIENNIAL REPORT
2006/2007



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INSTITUTE OF HEALTH CARE

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Chairman's Address

This is the sixth report in the series started on the initiative of our present Director, Dr Sandra Buttigieg. I wish to thank and congratulate her on the very informative report for the two years 2006 and 2007. These Annual or Biennial Reports are important because they give us an opportunity to reflect on what has happened during the period covered by the Report and also try to anticipate and address future problems and challenges that are likely to occur. These Reports will also serve as historical documents on the early life of the Institute of Health Care, which embarked on the first B.Sc. (Hons) Degree Course in Nursing Studies in 1988.

The Director has outlined some of the important events that occurred during the two years under review and the achievements of the various divisions. This is a great credit indeed to all the past and present members of the Institute of Health Care that over the years have contributed to the growth and development of the academic stature of the Institute that has become an established and respected entity within the University.

These last two years have been very exciting in preparation for the migration of The Institute of Health Care from our location in the former School of Nurses at St. Luke's Hospital, Guardamangia, to the new facilities at the Mater Dei Hospital situated near the University of Malta. The smooth and safe migration of the Institute of Health Care required a great deal of hard work and careful planning by the staff of the Institute of Health Care in close collaboration with the Foundation for Medical Services, the University Administration and Mater Dei Hospital administration. The migration process started in February/March 2008 and is now practically completed and we should be working normally with the start of the Academic year 2008/2009. Special thanks are due to the Director and Mr Joe Mark Gatt who was the Technical Officer overseeing the process of change to our new premises at Mater Dei; also the Administrative Office and the Coordinators of the various Divisions for taking the many complications, that might have occurred during the migration, in their stride. Special thanks are also due to Mr Edward Francalanza who has supervised the emptying of our former I.H.C. building at St. Luke's Hospital and the storage and/or disposal of so many items and furniture left behind.

The facilities at the 'new' Institute of Health Care, in particular the various laboratories of the various divisions, are indeed remarkable and a great improvement over the ones that we had to work with at Guardamangia both as regards space and equipment. It has been a great pleasure for me to go round the Laboratories that we have available for our students.

Our students are now working and carrying out their clinical duties and studies in the 'state of the art' Mater Dei hospital. Medical and surgical knowledge is changing rapidly and we should all be thankful that we have so many excellent clinical specialists that are carrying out highly difficult and technical procedures on a daily basis that were not possible a decade or two ago. As a result our students are being exposed to this new clinical knowledge during

their practice in the various wards and units of the hospital. This is a great challenge to our various teachers and tutors to keep abreast of the various advances that are happening in the clinical areas of medicine and surgery.

One great advantage of our new location is the proximity of the building to the Medical School. Our students are now sharing the various lecture theatres with the medical students and it is certainly no coincidence that the first Interdisciplinary Seminar, which was held at Mater Dei on 23rd February 2008, was dedicated to the Health Care Team approach to Medical and Surgical care. During the introductory speech for this Seminar I emphasised the necessity of the Health Care Team approach to medical care. I wish to end my contribution to this Biennial Report by quoting from my Introductory Speech at this Seminar:

“The practice of Medicine has changed dramatically during the last fifty years. It is now an established fact that more and more health care professionals with different health care qualifications are becoming involved in the caring of patients following the considerable and remarkable advances that have been made in scientific and medical knowledge and treatment during the last few decades. As a result a Health Care Team concept has become established.

The ‘interdisciplinary’ Health Care Team approach to medical care implies that the professionals caring for a particular patient meet regularly to communicate and plan the rehabilitation programme together. Each member of the team knows the techniques being used by other members and there is overlap in the approach. The individual members of the team are therefore, bringing their own skills to a group effort. As the patient’s condition changes then the emphasis and role played by different members of the team will also change”.

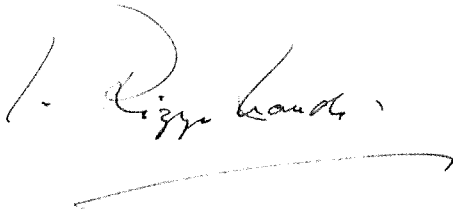
This Health Care Team approach has already been applied successfully in the nineteen nineties to Geriatric care at Zammit Clapp Hospital. The further development and extension of this concept to all areas of medical care should be the ‘Mission’ of the Institute of Health Care with its many Divisions in Health Care by propagating this concept in Seminars and Degree Programmes such as the Community Health Care, the Health Services Management and the Community Mental Health Care, Masters Degree programmes for the greater benefit of all our patients.

Throughout the last twenty years we have worked very closely at all levels with our principal client, the Department of Health and we shall continue to do so for the mutual benefit of the Institute and the Health Department. It is important to stress that adequate funding for all the activities must be made available for the Institute to be able to function and continue its growth and development.

Whilst the University is obviously providing the main funding for the administration and running of the various courses and projects of the Institute of Health Care, we also rely on a special Training Vote from the Ministry of Health for our special developmental programmes. This Training Vote has been our ‘Life Support’ throughout the last twenty years. I wish to thank, in this regard, the Ministry of Health, which has kept up its financial support through the ‘Training Vote’ allocated to the Institute.

In conclusion I wish to thank the Director, for her dedication and enthusiasm, the Coordinators and staff of the various divisions for their work and commitment, and, last but certainly not least our highly efficient Administrative Office and our Technical Team for their support to our continued success.

Indeed we can look forward to the future with great confidence!

A handwritten signature in dark ink, appearing to read "J. Rizzo Naudi", with a long horizontal flourish extending to the right.

Professor John Rizzo Naudi
Chairman
Institute of Health Care

Director's Address

This report covers the years 2006 and 2007, and therefore the final two years, in which the Institute of Health Care was based at St Luke's Hospital, G'Mangia. It goes without saying that migration to a new hospital is a once in a lifetime experience and requires meticulous preparation by all concerned. I must say that the smooth and safe migration of the Institute of Health Care was made possible thanks to the hard work and careful planning of I.H.C. staff, in close collaboration with the Foundation for Medical Services, University Administration, and Mater Dei Administration. The migration process is now over and our students now attend lectures, clinical placements, seminars, and tutorials at Mater Dei Hospital. However, we are still going through some fine-tuning work to ensure full functioning of laboratories, computing and lecturing facilities. Hopefully, we will be fully functioning by the start of the academic year 2008/2009.

The Institute of Health Care plays a key role in providing most of the human resources, in terms of nursing, midwifery, health services management, and all the professions allied to medicine, that are needed for the functioning of Mater Dei Hospital. As the number of health care courses and students continue to increase, and as we are constantly being challenged to prepare our graduates for changing environments, newer ways of working and technologies, then the Institute of Health Care must invest well and continue to expand and grow. A state-of-the-art hospital gives us a better chance of honouring our academic and professional commitments in terms of education and training not only to Maltese students but also to international students. Despite its short lifespan, the Institute of Health Care has managed to expand and consolidate both the undergraduate, as well as the postgraduate programmes in all the disciplines.

Our Institute's strategic vision is to achieve a firm position within tertiary level education and research in health sciences and to be instrumental in the development of a professional health care team that enhances an integrated and holistic service. The team approach to health care goes beyond the tenet of various professionals interfacing with the patient and family. This approach represents a true partnership between the health services and the University. This partnership is further strengthened through our Continuing Professional Development programmes, which are designed to support professionals in their current practice by assisting them in keeping their knowledge and skills up to date.

The Institute of Health Care has continued to grow in stature within the University and internationally. Our international contacts have been strengthened year after year. One should also remark that, within the University, the I.H.C. has remained at the fore front as regards participation in E.U. programmes with a steady increase in staff/student exchanges through the Socrates and Leonardo programmes, now involving all disciplines.

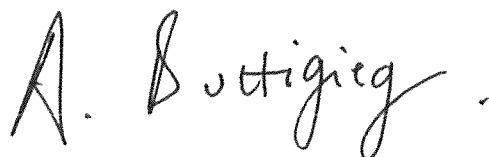
Advances in Health Care are happening every day and health care delivery is continually undergoing change. We have been pro-active in not only updating curricula in the various

divisions, but we have also introduced new courses and programmes for today's and tomorrow's needs. These include B.Sc. in Podiatry, B.Sc. in Mental Health Nursing, and B.Sc. Community Nursing & Midwifery. The introduction of more interdisciplinary courses has also become necessary. In this regard we are considering starting interdisciplinary postgraduate courses in rehabilitation that would cut across disciplines involved.

In all this it is highly important that the Institute of Health Care remains close to its stakeholders. The cooperation and coordination of efforts with our principal client the Department of Health is not only necessary but also crucial for the continued success and relevance of the Institute of Health Care and the efficient and effective health care delivery in Malta. The future of health care education in Malta promises to be even more challenging and exciting than ever before. The state-of-the art premises of I.H.C. and that of Mater Dei Hospital, as well as the dedication of I.H.C. staff will undoubtedly stand us in good stead in continuing our roadmap to excellence in Health Care Education.

In this report I am pleased to introduce the contribution on "Brucellosis" by Professor John Rizzo Naudi. Professor Rizzo Naudi published the book "Brucellosis" in 2006. The second contribution is by Mr Dave Dunning with his article entitled "The Profession of Podiatry – The Staffordshire Malta link". The third contribution by Dr Carmel J. Caruana is entitled "The Role of Biomedical Physics-engineering in the Development of Medical device education for the Healthcare Professions". These contributions are a reflection of I.H.C.'s plans to capture innovation in Health Care education, as well as our endeavour in strengthening our international contacts.

In conclusion, I would like to express my gratitude to all the staff at I.H.C., being academic or support staff, for their hard work and achievements, as well as, for the full co-operation in the smooth transition from St Luke's Hospital to Mater Dei Hospital. Last but not least, I would like to thank Professor John Rizzo Naudi for his great support.



Dr Sandra Buttigieg
Director
Institute of Health Care

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The role of biomedical physics-engineering in the development of medical device education for the healthcare professions

Dr Carmel J. Caruana

Introduction

Biomedical physics-engineering involves the development of medical devices and their effective, safe and efficient application in the clinical milieu. Modern healthcare relies heavily on the twin pillars of pharmaceutical and medical device technology. Unfortunately, whilst pharmaceutical education has been given a lot of attention in healthcare professional curricular development, medical device education has been sorely lacking. Meanwhile, the array, variety and complexity of medical devices have been increasing rapidly with the swift advances in technology. On the other hand, as device education has not kept pace so have underutilization of devices and the number of instances of improper and unsafe use.

Legal definition of a ‘medical device’

The EU medical device directives define a medical device as “any instrument, apparatus, appliance, material or other article, whether used alone or in combination, including the software necessary for its proper application intended by the manufacturer to be used for human beings for the purpose of:

- diagnosis, prevention, monitoring, treatment or alleviation of disease,
- diagnosis, monitoring, treatment, alleviation of or compensation for an injury or handicap,
- investigation, replacement or modification of the anatomy or of a physiological process,
- control of conception,
- and which does not achieve its principal intended action in or on the human body by pharmacological, immunological or metabolic means, but which may be assisted in its function by such means” (EC, 1993).

This definition is very broad and the list of medical devices ranges from simple tongue depressors and thermometers, to stethoscopes, hepatitis test kits, contact lenses, breathalyzers, heart valves and pacemakers, physiological monitoring devices, x-ray imaging machines and the complex intricacies of MRI scanners and radiotherapy accelerators.

The role of biomedical physics-engineering in the development of medical devices - a historical perspective

The importance of the contribution of physics-engineering to healthcare has a long history. As long ago as 1856, Fick edited a book called ‘Medizinische Physik’ whilst Brockway published a book with the title ‘Essentials of Medical Physics’ in 1891. However the influence of physics in medicine registered a quantum leap after the discovery of x-rays by Roentgen (1895) and radioactivity by Becquerel (1896). Stieve (1991) reports that the first two x-ray laboratories were established in Berlin in 1896, one at the Institute of Orthopedics and Pneumotherapy of a certain

Dr Max Immelmann - only one year after the discovery of x-rays. Immelmann also promoted the 'Roentgenvereinigung' consisting of 14 medical doctors, physicists and engineers. The first chairperson of this first 'Roentgen society' was Walter Wolf, a physicist (Stieve, 1991, citing Goerke, 1980). The first radiological society in England was formed in 1897 - that is only 2 years after the discovery of x-rays, and the first president was Silvanus Thomson, a professor of physics. The developments in the first ten years were mostly in radiodiagnosis. The involvement of physicists in radiotherapy started in 1910 (Stieve, 1991). Stieve citing Cook (1972) states that the first full time physicist in radiotherapy was employed in 1912 in the radiotherapy department of a hospital in Munich. From then onwards, the involvement of physicists-engineers in medicine increased rapidly. The first society of medical physicists (the Hospital Physicists' Association, UK) was set up in 1943. The first comprehensive medical physics text was the three volume encyclopedia 'Medical Physics' by Glasser (1944 -1960) who listed 23 domains of medicine which required close collaboration between physicists-engineers and medical specialists. Laufman (2002) who has reviewed the role of engineering in medical progress cites in detail the milestone contributions of Roentgen in radiology, Bovie in electrosurgery and Greatbatch in implantable cardiac pacemakers. Today medical physics and engineering play a part in all areas of medicine. Established areas are continuously being developed and new areas emerging (Sharp & Perkins, 2000). The future holds devices for biomolecular, cell, tissue and organ engineering, optical imaging, nano-instrumentation and lab-on-a-chip systems for laboratory and home diagnostics (Griffith & Grodzinsky, 2001). Indeed medical physics and engineering have come a long way since those early days of radiodiagnosis and radiotherapy! The advice of a biomedical physics-engineer is today considered essential in ensuring effectiveness, safety and efficiency in the adoption of new medical devices (Bergmann, 2003), and regulatory bodies are increasingly making the presence of a biomedical physics-engineer mandatory in various areas of healthcare. For example, EC Directive 97/43/Euratom regarding the use of ionizing radiation in healthcare states that:

"In radiotherapeutic practices, a medical physics expert shall be closely involved. In standardized therapeutical nuclear medicine practices and in diagnostic nuclear medicine practices, a medical physics expert shall be available. For other radiological practices, a medical physics expert shall be involved, as appropriate, for consultation on optimization including patient dosimetry and quality assurance including quality control, and also to give advice on matters relating to radiation protection concerning medical exposure, as required."

Scales (1965) emphasized the importance of collaboration between the disciplines of biology, medicine, physics and engineering, whilst Adelstein (2001) in describing the development of radioiodine studies of the thyroid makes the remark that "the cooperation between physicists and physicians that made their accomplishments possible stands as a model example for interdisciplinary collaboration".

The role of biomedical physics-engineering academics in the development of medical device education for healthcare professionals

Although there have been many instances of interdisciplinary collaboration between biomedical physics-engineering practitioners on one side and healthcare professionals on the other in the clinical and research environments, and although most biomedical physics-engineering

organizations e.g., European Federation of Medical Physics (1984), European Society for Engineering in Medicine (2006) do speak of the importance of the educator role with regard to the healthcare professions within their policy documents, there is very little published evidence regarding such activities. The references that do exist are mainly confined to undergraduate medicine, radiography, radiation therapy, and the postgraduate medical specializations of radiology and radiotherapy. There are very few instances of published work for the other healthcare professions and such studies are long overdue. For example, although there is a biomedical physics-engineering component in most physiotherapy undergraduate courses in Europe, curriculum development in the area is practically inexistent. Again Wilkes & Batts (1996) acknowledge that nurses' understanding of the physical science component of the knowledge underpinning nursing competences is very inadequate.

Biomedical physics-engineering curricula in courses of medicine

Biomedical physics-engineering education for medical students has had a long and chequered history. Hayter (1996) describes the work of J. K. Robertson, professor of physics teaching at the Queen's University Faculty of Medicine in Canada in the years 1909 to 1951. Robertson started teaching medical students in 1909 at a time when the physics component in the medical curriculum was minimal. The number of lectures was two per week for a single term and concerned general non-applied physics (mechanics, properties of matter, heat, light, sound, electricity and magnetism) with some laboratory work added in 1911. Robertson considered this inadequate and following an intra-mural report regarding the inadequacy of instruction in the uses of radiation and radioactivity in medicine instituted a course entitled 'X-Rays and the Physics of Electro-Therapeutics' as an option for final-year medical students also with a frequency of two sessions per week. A second objective of the course according to the same report would be to ensure that future physicians would be able to make informed decisions regarding the purchase and use of such equipment. The course was very comprehensive and also included radiation doses, radiation protection and a comparison of various forms of devices. However this course was not a success. The reasons given by Robertson were two. First, he found that students who had learned their electricity and magnetism in the first year course of physics had forgotten everything by the final year. Secondly, final year students perceived that this final year course would be similar to the non-applied first year course and preferred to attend classes in areas directly relevant to their clinical practice. Robertson solved the problem by convincing the faculty to move the final year course to the second year of the course. He then transformed this second year course into a combination of scientific principles with clinical practical application in a single course. Robertson stressed the applications of physics as opposed to pure theoretical principles and used a lot of demonstrations as opposed to chalk-and-talk methods. Hayter considers that Robertson's second year course combining pure and clinically applied physics in one course "challenged the linear, rigidly structured medical curriculum of the day, with its strict separation of basic and applied science" and that Robertson himself considered his work as an experiment in medical education. Hayter quotes Robertson's advice to fellow physicists:

"The physicist who teaches medical students should recognize that the mental approach to a scientific subject by those whose primary interest is medicine is not the same as that of the physicist and he should govern himself accordingly"
(Robertson, 1954).

Hayter finally affirms that:

“Robertson’s success in this endeavour was based largely on two factors: his sympathetic understanding of the needs of medical students and his innovative combination of basic and applied science in one course - factors that are as important to medical teaching today as they were 50 years ago”.

Fasce et al. (2001) report an interesting attempt at introducing problem-based-learning and team-teaching in the physics teaching of medical students. First year medical students were separated into two groups, one group being taught in the traditional manner and the second group using problem-based-methods by a team of physicists, a biochemist and three medical doctors.

The European Federation of Medical Physics has published a syllabus for medical undergraduates. This syllabus, confined in scope to radiation protection issues only (Dendy, 2005), was the response of the federation to a call by the European Commission that “Member states shall encourage the introduction of a course on radiation protection in the basic curriculum of medical and dental schools” (EC Directive, 97/43/Euratom, Article 7).

Of particular significance is an appeal by Mornstein (2005) for biomedical physics-engineering educators to include many more lectures on medical devices apart from established topics like molecular biophysics, biophysics of perception, and microscopy in their curricula for medical students. The author particularly is of the opinion that principles of biosignal instrumentation and processing should be considered as fundamental.

At the moment there is a biomedical physics-engineering component in medical student curricula in practically all European countries (the only exceptions being the UK and Malta).

Biomedical physics-engineering curricula in radiography programmes

Physics has been included in the curriculum for radiographers since the beginning of formal radiography education. Snelling (1963) speaks of “an estimation of the necessity for physics in the training of the radiographer”. This seems to have led to a symposium on the subject (Franklyn, 1964) and finally a basic syllabus (Mussell, 1965). The College of Radiographers, United Kingdom (2003) includes sections on ‘physical sciences’ and ‘technology’ in its curriculum framework for radiography. However given the of necessity broad nature of the document further specification is required to produce learning outcome competence statements that are directly usable in the educational environment. Most schools of Radiography publish a locally developed physics syllabus under such diverse names as ‘radiation physics’, ‘principles of radiation science’, ‘imaging equipment’, ‘imaging science and instrumentation’, ‘radiation protection’ and others (Price, High, & Miller, 1997) but there is no evidence of a systematic and studied approach. At the moment there is a strong biomedical physics-engineering component in radiography curricula in all European countries.

Biomedical physics-engineering teaching in radiation therapist programmes

Radiotherapy is an area in which physicists and other healthcare professions have worked together in a concerted and systematic manner and on a European scale to produce curricula and educational

materials. An extensive curriculum development programme has been carried out as part of the project ESQUIRE (Education, Science and Quality Assurance for Radiotherapy) which is run under the auspices of the European Society for Therapeutic Radiology and Oncology (ESTRO) and financed by the EC (Europe Against Cancer initiative). Important outcomes of the project included endorsed guidelines for European core curricula for all three professions within radiation therapy i.e., medical physicists, radiotherapists and radiation therapists (Heeren, 2005). The project led to a European core curriculum for radiation therapists which included a physics component (Coffey, Vandervelde, Van der Heide, Adams, Sundquist & Ramalho, 1997). A revised version has an improved biomedical physics-engineering component under the headings of 'physics' and 'equipment' (Coffey, Degerfalt, Osztavics, Van Hedeld, & Vandervelde, 2004). A weakness of the curricula is that they are not outcome competence based (as required by the Bologna process) but simply present a list of topics to be covered. At the moment there is a very strong biomedical physics-engineering component in radiation therapist curricula in all European countries.

Biomedical physics-engineering curricula in the postgraduate specializations of radiology and radiotherapy

In 1989, The Committee on Training of Radiologists of the American Association of Physicists in Medicine, published the results of a survey conducted among recently certified radiologists regarding their perceptions of radiological physics training and the importance of the various physics topics included in the radiological physics curricula at the time. The most important results of the survey for this study were the following:

- (a) 72% of the respondents had a negative opinion of physics as presented in their programs at the time, however, the same percentage continued to attend physics training even after graduating and notwithstanding the fact that they were not obliged to do so for certification reasons! This clearly indicated that "radiologists actually do consider physics to be a worthwhile endeavor".
- (b) The respondents indicated that they would have liked to have "an emphasis on subjects that are directly relevant to everyday practice" as they felt that "although they acknowledged the need for an understanding of basic physics principles, they clearly perceived that theory had been overemphasized". The respondents wanted a greater emphasis on those topics relevant to the production of quality images and means of reducing radiation doses to patients.

The results of the survey triggered a discussion that has gone on unabated in some form or another since then. Saba & Poller (1999), argued that it is indeed the superior knowledge that radiologists have of physics that gives radiologists an edge over other clinicians who attempt to read medical images, as medical images are "a combination of both anatomical and physical information" and that the "anatomic and physical information form an inseparable unit". Moreover:

"It is the job of the radiologist to combine his knowledge of anatomy, disease, and image production in formulating an interpretation. If one of these elements is missing, the interpretation is at best incomplete, if not incorrect. This is what

happens when a clinician who has a thorough knowledge of the specific anatomy and disease process attempts to interpret radiologic images without an understanding of image production”.

Saba & Poller then go on to give several convincing examples of the misdiagnoses that can occur through an inadequate knowledge of imaging physics. Balter (1992) echoes similar sentiments in saying that “radiologists may be able to use their equipment in a safer and more effective manner than would be possible without such knowledge”.

Frey (Frey, Dixon, & Hendee, 2002) in a point-counterpoint discussion argued that owing to the pressures on radiologists’ learning time only physics knowledge that is derived from the clinical practice should be taught. This has the advantage of demonstrating directly the relevance of physics knowledge. The best educators of physics for radiologists and by extension all healthcare professions are those who have both physics and clinical knowledge, as the physicist must “translate” the physics to the clinical situation. Another advantage of this approach is that the student is more likely to retain the material after graduation. But perhaps the greatest advantage is that this approach “preserves the image of the physicist as possessing valuable and occult knowledge” and that when complex situations arise in their practice the radiologists would feel the “need to consult with their medical physics colleagues”. Dixon countered these arguments by saying that it is more important to use the time available to build firm broad conceptual foundations as there are physical concepts which though not relevant at the time of learning could become relevant later in particular with the rapid expansion of technology. He cites as example the case of magnetic resonance imaging (MRI) by saying “in the 70s who would have thought that nuclear spins would play any role in radiology?”

Current developments in biomedical device education for the healthcare professions at the IHC

Biomedical Physics at the IHC is taking a leading role in researching and developing biomedical device physics curricula for the healthcare professions at the European level. Our research programme over the last four years has resulted in seven research papers (Caruana & Plasek, 2006a, 2006b, 2006c, 2005a, 2005b, 2004a, 2004b) and several presentations at international meetings. Learning outcome competence inventories (in the format required by the Bologna process) for biomedical device physics education in Europe have already been published for diagnostic radiography, nursing and medicine (Caruana & Plasek, 2006a, 2006c, 2005a). These were developed following a survey of healthcare professional curricula across Europe and an in-depth study of associated themes gleaned from the professional literature (e.g., role development in the various professions). Inventories for other health professions are in the pipeline. The European Federation of Medical Physics has invited the author of this article to set up a European Special Interest Group to work with other healthcare professional groups to produce suitable European curricula for them. Through a collaboration with the Faculty of Medicine and Healthcare, University of Brno, Czech Republic (which houses all the healthcare professions under one roof) the unit ‘Principles of medical device science’ offered at the IHC and currently undertaken by B.Sc. Radiography and B.Sc. Medical Laboratory Science students will this year be further developed so that it can be offered as a shared cross-disciplinary unit to the other healthcare professions at both the IHC and the Faculty of Medicine. The Department of

Biomedical Physics at Brno has one of the best-developed student medical device laboratories in Europe. This collaboration would lead to the first systematically researched shared cross-disciplinary medical device curriculum in Europe. The resulting papers will be presented at the first European Conference on Medical Physics organized by the European Federation of Medical Physics in Pisa, Italy in September 2007.

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The profession of Podiatry – The Staffordshire Malta link

Mr. David Dunning

Historical perspective

Frederick Wood Jones an eminent surgeon and thinker of the middle of the last century stated that *“Man’s foot.....is the most distinctly human part of the whole of his anatomical make up....”* The foot is the main organ of locomotion and as such it is a very specialised structure. It contains 26 bones, 30 plus joints, 107 ligaments and 19 muscles. Not only is it flesh and blood, sited as far away from nourishment as possible, but it is also a sophisticated system of levers and pullies giving it a mechanical role way beyond any other part of the human body. Leonardo DaVinci (1452-1519) showed a clear understanding of this when said that *“The foot is the most marvellous of machines – and a work of art”*.

The history of foot care dates back as far as walking upright. The tomb of Ankhmorh in Egypt, known as the physicians tomb, dating back 4,400 years depicts him giving close attention to a patients foot. Socrates is attributed with the saying *“to him whose feet hurt everything hurts”* and his contemporary Hippocrates, he of the hippocratic oath, is also well known for his work on Tyaloma and Talipes. A French surgeon, Rousselot, wrote the first book on the treatment of foot conditions in 1755 *“Menoire sur les cors des pieds”* establishing the profession of podiatry as a branch of surgery. It took until 1854 for the first professional association to be instigated under the direction of Lewis Durlacher with nationally recognised societies appearing later in New York in 1895 and in Britain in 1912.

Podiatry now

Modern podiatry now has many facets. It is a highly technical and demanding profession. Podiatry is one of the few professions in and around medicine that have independence of diagnosis. Podiatrists are expected to make their own clinical decisions. Also, there are well established clinical specialisms within the profession for example in surgery, wound care, rheumatology and biomechanics. Podiatrists in the English speaking world are required to have successfully completed a Bachelor of Science level degree before they can practice though this is not yet the European standard. I am happy to say that Malta has adopted this bench mark. Not only offering a well researched and comprehensive four year course at undergraduate level but also a parallel conversion course for diplomats in podiatry. This puts Malta in the fore front of European countries in terms of education in foot health matters.

Perhaps one of the areas that podiatry can play a vital role is in the treatment and prevention of foot problems in diabetes. Malta has a disproportionate number of diabetics and this is an area where there is much evidence that the use of podiatry skills reduces the incidence of foot problems and treatment times. The St. Vincent declaration (1989) provides for greater emphasis on foot care world wide. Armstrong D.L. and Lavery L.L. (1998) writing in the journal The American Family Physician reinforced this by stating that *“Careful inspection (and treatment) of the diabetic foot on a regular basis is one of the easiest, least expensive and most effective measures for preventing foot complications”* No only do these complications greatly disrupt

normal lifestyle and they have massive financial implications for both the patient and the health care provider. A situation recognised by the National Health Service of Great Britain in the National Service Framework compiled in 2002 to develop and target the skills of all clinical staff. It strongly recommended the annual screening of diabetic patients' feet, which it said "... is considered key to the prevention of long term foot problems..."

The destructive nature of Rheumatoid arthritis that results in joint deformation and deterioration also illustrates the value of podiatric practice. The traditional skills are invaluable in lessening the affects of the consequential increased pressure on delicate structures of the foot whilst the use off advanced techniques in foot orthoses and footwear are becoming more valuable in controlling the rheumatoid foot. Thus helping to keep the patient mobile and pain free allowing them to lead an active and productive life (Korda J, Balint G.P. 2004).

Podiatry tomorrow

Underpinning podiatric practice is a firm knowledge of biomechanics and gait. The foot is the "base plate" of all activity. The study of the kinetics and kinematics of human movement provides the podiatrist with a understanding of the forces acting on the body and an ability to change them. This is podiatric biomechanics. Most of the treatment and management pathways used by podiatrists are based on altering foot and lower leg mechanics. The study of kinetics and kinematics is fundamental in the assessment of lower limb injury and disease. Assessment and treatment clinics full of technically advanced equipment need highly trained and motivated clinicians to utilise them to the full.

Staffordshire University is the host to the first Masters degree on the subject of Clinical podiatric Biomechanics. It was set up in 2001 and was quickly followed by a Post Graduate Certificate in Musculo-skeletal Diagnosis and latterly a Post Graduate Certificate in Footwear in Diagnosis and Therapy. The whole programme has now had over 240 participants. The University gait lab is well known for its high level of equipment and the research it produces under the guidance of Dr Nachiappan Chockalingam.

Staffordshire University is a community based university that has close links with the community it serves. There are over 160 podiatrists working within a thirty mile radius of the University serving a population of over 1.1 million people. This equates to over 250,000 contacts per year. The team are mainly clinical podiatrists working within the local podiatry departments and have access to a high level of clinical expertise. Podiatrists in the area are heavily involved in nearly all departments of health care with many staff trained at master's level. As a result of these strong local links the Staffordshire University has a pool of clinical expertise, including visiting professors, fellows and lecturers. The University has run an innovative and successful Continuing Professional Development (CPD) programme locally for the last two years.

Links

Already staff from both Universities have exchanged visits. Lecturers from Staffordshire have delivered modules on the BSc course and there are plans for this to continue. Suggestions for joint validation of a Masters Degree and CPD programmes and for opportunities at PhD level

are also being pursued. There is also the possibility of several forms of research collaboration to be considered.

In July this year eight Maltese podiatry students will visit Staffordshire to experience the practice of podiatry in all its forms in the UK setting. Thanks to the good will of South Staffordshire PCT, Salts Healthcare and the University itself these students will have a day in a gait lab, visit an orthoses and surgical footwear manufacturer, be present during foot surgery theatre sessions and observe “normal” podiatry clinics both in NHS and private practice.

I hope that all this will be the start of a long and fruitful relationship between the two institutions.

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Brucellosis: The Malta Experience

A Celebration 1905 - 2005

Professor John Rizzo Naudi

This 380 page Monograph describes in some chronological order the progress made in the study of this worldwide disease of animals that also affects humans. Most of the important discoveries regarding this disease were made by English and Maltese investigators working in Malta during the nineteenth and twentieth century. In the words of Dr Kennedy one of the members of the Mediterranean Fever Commission, "The History of Malta Fever (Brucellosis) is practically the history of its study in the Mediterranean and more especially in Malta". This Book is an account of these important discoveries and the subsequent efforts to control and eradicate this disease in Malta, which are very interesting from a historical and social point of view.

The Introductory chapter is an interesting historical study on 'Fevers' going back to the time of Hippocrates, who described this disease, and to the important advances made in the study of Fevers during the 19th century when Malta Fever was differentiated from Typhoid and Typhus and other fevers by Jeffrey Allen Marston, a doctor in the Royal Artillery, who as a result of his observations on the thousands of troops in Malta suffering from fever from the Crimean War published a 35 page document in 1861 entitled "Report on Fevers (Malta)".

The second half of the 19th century was dominated by Louis Pasteur with his observations on fermentation (1850-1877) and Robert Koch who discovered and published his work on the pure culture of bacteria in 1881. This was followed by the two 'golden' decades of bacteriology (1880-1900) when the bacterial cause of most of the important diseases was discovered. During this period the Sacra Infermeria at Valletta was packed with young soldiers who were suffering and dying from this mysterious fever. David Bruce, a young medical officer in the British Army who had been posted to Malta was spurred by his wife, Mary Elisabeth Bruce, an adept laboratory technician, trained in Robert Koch's laboratory in Berlin set about discovering the cause of this fever that was plaguing the British Military in Malta. It must be recorded that at that time there was no bacteriology laboratory at the Sacra Infermeria. At this stage Bruce sought the help of the Maltese analyst and bacteriologist Dr. Giuseppe Caruana Scicluna who was one of the first doctors to study and train under Louis Pasteur in Paris. The analyst Caruana Scicluna in the Public Health Laboratory carried out most, if not all of the bacteriological work.

David Bruce eventually got all the credit for the discovery of the *Micrococcus melitensis*, the cause of Malta Fever, in 1887. Very little credit was given to Caruana Scicluna who presumably carried out all the work in his laboratory of isolating the *Micrococcus melitensis*. Prominence in this chapter is given to Caruana Scicluna's work as a bacteriologist and to another young army medical officer Dr. Mark L. Hughes whose parents resided in Malta for his work on the description and bacteriology of Mediterranean Fever (brucellosis) in 1897.

The second chapter includes the appointment of the Mediterranean Fever Commission and some of the more important and decisive discoveries such as:

1. Zammit's papers and his discovery in 1905 of the responsibility of the ubiquitous goat and its milk in the spread of Mediterranean Fever.

2. Another important discovery was Zammit's modification of Wright's Agglutination Test on the milk of goats – The Zammit Test.
3. Work by other members such as Horrocks and Kennedy who together with Zammit tested goats from all over Malta and carried out various experiments.
4. Work by Eyre, Zammit and Kennedy on the infectivity of Milk products containing *Brucella melitensis*, including the local cheese (the 'gbejna').
5. Work by Shaw who discovered that a number of 'normal' persons were in actual fact suffering from brucellosis and excreting the micrococcus in their urine. Shaw at Bighi Hospital on the other side of the Grand Harbour was working in isolation and failed to make the connection of brucellosis with the Maltese goats, which were spreading the disease through their milk to the many families in their homes in the Maltese Islands.
6. On the other hand, Themis Zammit, the only Maltese member of the Mediterranean Fever Commission, was working in the laboratory of the Mediterranean Fever Commission in the Department of Health where Caruana Scicluna, who had played a very important role in the discovery of the *Micrococcus Melitensis* as a bacteriologist, was the Chief Government Medical Officer. As a matter of fact, Caruana Scicluna had drawn the attention of Themis Zammit to the fact that there had been several cases of Mediterranean Fever amongst goat breeders in the Sliema area. Zammit eventually made the 'fundamental' and highly important discovery that Mediterranean Fever was primarily a disease of goats and that the goat and its milk was the cause of the spread of Mediterranean Fever in the Maltese Islands.

The third chapter (1907 – 1922) describes the follow up after the discovery of the goat's responsibility of the spread of Mediterranean Fever and the reactions of the civil population to this discovery. The military banned goats' milk from all their establishments with a resultant dramatic disappearance of the disease amongst the soldiery. In strong contrast the civil authorities were faced by indifference and obstruction from the civil population resulting in a persistent and increasing prevalence in the civil population.

The great 'Goats Controversy' lasted for about ten years up to 1916. Certain public persons and newspapers refused to acknowledge that the common goat that had always been present in the Maltese Islands was responsible for the disease and continued to blame the bad sanitation and 'dirt' for this disease. Goat's milk was very popular, particularly with the English residents, and was preferred to cow's milk after the discovery in 1897 of tuberculosis in the cow by Bang in Denmark. The public in general preferred goat's milk since the goats used to come to people's houses and milked there and then. In this way the people were assured that they were getting unadulterated milk. Another general belief was that 'to boil is to spoil' and so many people preferred to drink milk fresh from the goat without boiling.

Kennedy left Malta at the end of his term of military service in Malta and for some years was based in London. Following his experience in Malta, Kennedy decided to test the cows in England and discovered that a good number of these reacted to *Brucella melitensis* antigen sent to him by Zammit. He published his results in the Journal of the Royal Army Medical Corps in the January issue of 1914 before he left for India. A few years later Dr. Alice Evans working in the United States solved this problem by discovering *Brucella abortus*, which

was very similar to *Brucella melitensis*, as the cause of Bovine Brucellosis. The prevalence of brucellosis continued unabated in the Maltese Islands during the nineteen twenties and thirties and reached a high incidence during the 1930's with a peak of 1,909 notifications in 1934.

It became very obvious that the measures that were being taken by the civil authorities (which consisted mainly of testing 'suspected' herds and slaughter when possible) were ineffective in controlling the disease in goats and humans. The public in general was indifferent to the problem and continued to consume 'raw' milk and milk products. Other solutions to the problem had to be sought and these solutions included Vaccination of goats and Pasteurisation of the milk.

1938: Milk Pasteurisation

The Milk Pasteurisation Plant in Hamrun was officially opened in 1938 and the Pasteurised Milk Scheme was introduced in May 1938. It was at first limited to Valletta, Floriana, Msida, and Sliema but World War II (1939-45) disrupted the Scheme while the Pasteurisation Plant was also damaged. As a result we had the highest peak ever of 2,410 notifications in 1946. In 1940 the introduction of unpasteurised goats' milk into the towns of Msida, Sliema, Gzira and St. Julian's was forbidden. Owing to the war, it was not possible to extend these bans further but from 1946 onwards such extensions were made until by the beginning of 1964 it was illegal to supply raw milk for consumption anywhere in Malta. The ban on the consumption of raw milk in the island of Gozo, which is intensely agricultural, did not come into effect until the 1st March 1964.

"The Pasteurised Milk Regulations, 1938," published by Government Notice No. 504 of the 23rd December, 1938, established that on and after the 1st February 1939, no milk other than pasteurised milk shall be sold or offered or kept for sale in any town or village specified by the Regulations and also prohibited the entry of goats into these areas."

1949: Antibiotic (tetracycline) treatment of brucellosis

The discovery of antibiotics in the late 1940's and in particular the tetracyclines proved a godsend for the Maltese people. Professor J. E. Debono the professor of Medicine, who had a vast experience of the disease with a worldwide recognition, was given supplies of this antibiotic for trial. The results were dramatic with a rapid improvement in the signs and symptoms of the disease accompanied by an equally dramatic drop in mortality from the disease. Later studies conducted by Rizzo Naudi et al. on 504 cases of brucellosis concluded that tetracycline has to be given for a minimum period of three weeks or more to minimise these relapses.

1955-1964: Development of Vaccination of Goats

The Brucellosis Research Laboratory which was set up in 1936 for studying ways of eradicating the disease from the goats of the Maltese Islands ceased functioning at the outbreak of World War II and was not reopened until almost twenty years later when Dr G.G. Alton an FAO/WHO expert worked at the Experimental Farm in Ghammieri, Malta for a period of more than ten years carrying out research on brucellosis in goats and their immunisation by vaccination with the, then new, Rev 1 vaccine. His studies revealed that the Rev 1 Vaccine developed by

Elberg and Faunce in 1956 was superior to all the other vaccines then available as regards safety and efficacy. 'Whilst this work was carried out in the 1950's, it is important to note that fifty years later (in the year 2005), it is the general view that, despite the rapid development of new approaches in the field of vaccination, it is anticipated that in the near future the Rev 1 vaccine would remain the only accepted vaccine in national control programs'.

It is a great pity that, after an initial campaign of vaccination of goats, Malta failed to conclude it successfully; on the other hand, The authorities concerned continued to rely mainly on registration, testing and slaughter, presumably as a result of the continued and persistent lack of cooperation from the goat, sheep and cow breeders. This has led to considerable financial losses over the years and a great delay in the eradication of the disease.

The annual incidence of Brucellosis decreased quite dramatically after the 1950's, while the mortality from the disease practically disappeared. The introduction of milk pasteurisation gave the Maltese public a false sense of security. By the 1980's several campaigns to eliminate/eradicate Brucellosis conducted by the government in goats and cows had failed to produce the desired results and a small number of cases of brucellosis continued to occur every year on account of an increasing consumption of the small cheeselets (gbejniet) by the public in general and at receptions such as weddings. The cheeselet production industry had become a multimillion Malta pound industry.

The sanitary authorities were predicting that we were due to have another explosive outbreak. This happened in 1995/96 when over 230 cases occurred. This time the Government launched an extremely aggressive campaign and confiscated millions of stocks of these cheeselets (gbejniet) combined with a similarly aggressive campaign by the veterinary department in detecting breeders who were breaking the law. The industry lost £Millions but the breeders were finally brought to their senses and started to cooperate. This produced the desired result of 'elimination' of this historic disease from the Maltese Islands. Since 1995 there have been no cases of brucellosis except for the occasional case imported from abroad.

Have we finally eradicated brucellosis? A word of caution is needed. Following the 1988 outbreak, intensive efforts brought the numbers of notified human brucellosis down to an almost negligible level. Was it complacency or overconfidence that contributed to the 1995/96 epidemic? If so we need to redouble our prevention efforts to ensure we learn from and not repeat history. Brucellosis in animals and man is still present worldwide and all around us in the Mediterranean.

Round - Up 2006

January – March

As part of the Socrates Erasmus Project Staff exchange the Communication Therapy Division hosted a staff member from Lessius Hogeschool, Belgium for a period of one week. Over the two semesters there were exchanges with three students from the Katholieke Universiteit Leuven, Belgium and one from the Universidad de Valladolid, España.

In January Joseph Agius and Helen Grech both gave presentations at conferences in Belgium.

The Marie Curie Host Fellowship FP6-2002-Mobility-3 project entered its third year of implementation. The development of specific assessments for the Maltese bilingual population was completed during the second part of the project. The assessment booklets and score sheets include a speech test (with sub-categories for articulation, phonology and oro-motor assessment), language test (with tests of receptive and expressive language ability, pragmatic skills, sentence imitation test and phonological awareness), voice and fluency checklists. Data was set to kick off in July.

Three members of staff of the Division are continuing their doctoral research studies on a part-time basis, whereas another member of staff is completing his Ph.D. studies full-time. They are all registered with universities in the UK.

Ms Rachael Xuereb, past student of the Communication Therapy Division, has been awarded a scholarship by the Malta Government Scholarship Scheme to facilitate her Ph.D. studies with the Communication Therapy Division. The Division was also forwarded a grant to assist with implementing the doctoral programme.

The Biomedical and Rehabilitation Technology steering committee ([www.eng.um.edu.mt~iBERG](http://www.eng.um.edu.mt/~iBERG)), composed of representatives from the Faculty of Engineering, Health Division and Institute of Health Care, met regularly. The Communication Therapy Division is represented by Helen Grech.

The Communication Therapy Division is now involved as a partner in the development of European Clinical Specialization Course on Fluency and Fluency Disorders. This is an Erasmus project partly funded by the European Commission. Mr Joseph Agius is the Division's delegate for this project.

In March, practising speech-language pathologists, employed by the Health Division were invited to participate in a course provided by visiting lecturer, Mr Piet Ceuppens, Belgium.

Dr Anna McElhatton, from the Environmental Health Division attended various conferences and seminars including: Evaluation of NOE projects under the TP5 heading of the then current Work Programme for the EU Commission. On site evaluation occurred at Square Frère Orban, n° 7-9, Brussels; Single Subject and Case Study Research: Tools for Clinical Decision Making and Evidence-Based Practice, Pamela Richardson, PhD, OTR/L, FAOTA, Associate Professor, San Jose State University, Presented to the University of Malta Institute of Health Care, March 13-15, 2006; EU Funding Programmes & Project Management Seminar, 24th March 2006, Conference Room, University of Malta and USAEE TN (University Studies of Agricultural Engineering in Europe; a Thematic Network) 31.03.06 to 04.04.06, Vilnius, Lithuania.

As part of the continuing professional development of staff from the Nursing and

Midwifery Division, Ms Joanna Depares completed the first M.Sc. in Nursing course which was offered by the Nursing and Midwifery Division, Institute of Health Care, University of Malta. Mr Charlie Bezzina, a full time University member of staff and Ms Charmaine Attard, a part time University member of staff completed the M.Sc in Nursing with the Royal College of Nurses in collaboration with the University of Manchester. Ms Maria Navarro and Ms Roberta Sammut attended the International Research Conference organized by the Royal College of Nursing held in York, UK.

Dr Mary Gobbi, Ph.D., M.A.(Ed.), Diploma in Nursing (Ed.), RGN, Senior Lecturer at the University of Southampton, School of Nursing and Midwifery, Southampton, was the visiting examiner for the B.Sc (Hons) Nursing 2005/2006. This was the 3rd and last time that Dr Gobbi was nominated as an external examiner.

For the B.Sc. (Hons) Midwifery 2005/2006 the visiting examiner was Ms Eileen Russell Roberts, RN, RM (Zimbabwe), RM (England), Midwife Teachers Diploma, B.Sc. Nursing Education (Huddersfield), PG. Cert. Professional Education and Training (Surrey), M.Ed. (Bradford) a former lecturer at the Division of Midwifery and Women's Health, University of Bradford, England. This was the first time that Ms Russell Roberts was nominated as external examiner.

Ms Roberta Sammut attended a course in factor analysis held between the 9th and the 10th February 2006 at King's College, University of London as part of the MPhil/PhD studies. Moreover Ms Sammut attended a lecture by Prof. K. Dracup on 'Advanced Nursing Practice: The evolution of nurse practitioners in the US' held on the 6th February at King's College, University of London.

The visiting examiner for the B.Sc. (Hons) Diploma to Degree Mental Health Nursing 2005/2006 was Dr Mary Chambers, RMN, RGN, Dip.N. (London), RCNT, RNT, B.Ed.(Hons) (Garnett College London), PGCE (London), Ph.D. (University of Ulster). This was the first time that Dr Chambers was nominated as an external examiner.

For the M.Sc. in Nursing and Midwifery Dr Peter Draper, RGN (Registered General Nurse), ENB Certificate 249 Cardiothoracic Nursing, B.Sc. Nursing Studies (CNAAB) (Awarded with commendation), Cert. in Education (University of Leeds), Ph.D. (Nursing Studies) (University of Hull), Diploma in Theology and Ministry (University of Durham), Director of Research and Reach Out from the Faculty of Health and Social Care, University of Hull, England, was the visiting examiner. This was the first time that Dr Draper was nominated as an external examiner.

The Nursing and Midwifery Division hosted Dr Joe Cortis from the University of Leeds as part of the Erasmus Exchange Programme. Dr Cortis with the collaboration with Dr Charles Pace from the Faculty of Economics, Management and Accountancy, gave lectures on 'Transcultural Nursing' to the M.Sc. Nursing students.

Mr Paul Pace organized and presented a paper on 'Occupational Health' held in February 2006 at the Coastline Hotel for Doctors and Nurses; he also organized and presented a paper on 'Women's Health' held in February 2006 and organized the European Federation of Nurses Association held in March 2006 in Malta. Mr Vince Saliba presented a paper on 'The Philosophy of Unconditional Positive Regard' 24th March 2006 at the 'Developing Nursing Strategy through Consultation' conference organized by the Directorate Nursing Services.

The Division of Occupational Therapy hosted Associate Professor Pamela Richardson PhD, OT R/L, from San Jose State University, who gave an interdisciplinary workshop entitled

“Single Subject and Case Study Research: Tools for Clinical Decision Making and Evidence-Based Practice”. This workshop, which was very well attended by staff from all the various Divisions within the Institute of Health Care, introduced single subject and case study designs, discussed the rationale for their use in clinical decision making and clinical research. It also highlighted how these can provide the opportunity for practitioners for rigorous and objective data collection that provides specific information about the effectiveness of interventions on individuals over time. The workshop also provided instruction in all aspects of this research method including selection of appropriate research questions/clinical problems, variables, data collection, analysis and application of the results.

Associate Professor Pamela Richardson’s intense professional commitments during the week she spent at the Institute of Health Care, continued with two days of teaching with the third year undergraduate occupational therapy students. The first day consisted of an overview of research principles and review of literature. This was followed by presentation of the student’s undergraduate project proposals. Associate Professor’s Richardson’s contribution to staff and students were of immense benefit and it is hoped that the innovative knowledge which she introduced will continue to be applied by practitioners, lecturers and students.

Marjorie Bonello, from the Occupational Therapy division, delivered a seminar on Clinical Education to the undergraduate Podiatry group.

In the Physiotherapy Division, student intake was of fifteen students. Two members of staff are in different stages of completion of their Ph.D. studies.

The Division is currently carrying out research into the Physiotherapy Curriculum and the Treatment of Stroke in the Home Environment. Another research project which is at the proposal stage deals with the correlation between the entry qualifications and the final degree classification for Physiotherapy students.

The Physiotherapy Division provided consultation to past students who are reading for masters’ degrees with emphasis placed on methodology in qualitative and quantitative research. These students are all attending courses at universities in the United Kingdom.

During the academic year 2005/2006 the B.Sc. in Podiatry was introduced for the first time as one of the courses being offered by the IHC. This undergraduate programme in Podiatry has eight students.

During the same academic year, the Podiatry division also offered for the first time a Continuing Professional Development course to all registered Podiatrists. This CPD course was entitled ‘The Health Professional as a Clinical Educator’ and was delivered by various lecturers, experts in this field. This course had a large attendance of healthcare professionals all coming from the Podiatry sector and was offered by the Podiatric Division inside the IHC with the aim of preparing all the podiatric staff with sufficient skills as clinical educators in order to offer the best clinical supervision to all future podiatric students.

The Podiatry Division also engaged itself in preparing a course programme for the diploma to degree course in Podiatry envisaged to commence in October 2007.

The Radiography Division, for the 10th consecutive year, hosted nine ERASMUS students who came from the Netherlands, Ireland, UK and Norway. As in the previous year the course programme offered was integrated with the B.Sc. (Hons) Radiography course and all the credits were weighted in ECTS. As part of the exchange the students undertook clinical placements at various institutions such as St Luke’s and Boffa Hospitals. The students also undertook clinical experience in theatre imaging at St Philip’s Hospital. A social and cultural programme was also

organised in order to provide the students with an insight into Maltese history and culture. The students also had the opportunity to visit the new hospital, Mater Dei.

At the end of the exchange the transcripts were presented to the students by the Director at a reception to mark the end of the exchange. During the evaluation programme the students remarked very positively about their experience in Malta.

April – June

During the month of April Helen Grech, from the Communication Therapy Division, attended conferences in Cairo and in Alexandria in Egypt, whilst in June Daniela Gatt, attended one in Croatia.

In April, The Environmental Health Division hosted a visiting lecturer in Food Policy, Dr Charles Clutterbuck, who lectured to PQ Diploma in Nutrition and Dietetics students. Dr Clutterbuck is a lecturer and consultant in Food Policy and works closely with Professor Tim Lang, the Division's previous Food Policy lecturer.

Ann McElhatton attended the 9th World Congress on Environmental Health, Trinity College Dublin in June.

Dr N. Azzopardi Muscat and Dr K. Grech were Chair and member respectively of the Ministry Task Force entrusted with the organisation of a national consultation process for the preparation of the National Action Plan on Health and Long-term Care. A national consultative seminar was held on the 16th May 2006. The Health Services Management Division was also involved in the preparation of the write up for the report which appeared as Chapter 4 in the "Strategies for Social Protection and Social Inclusion in Malta 2006-2008". This report was published by the European Commission.

In June, Dr N. Azzopardi Muscat and Dr K. Grech attended the preparatory meeting for the EUPHA Scientific meeting of 2006 in Montreux. The work involved the selection of abstracts and workshops for the scientific meeting that was to take place in November 2006.

During the month of May, the Medical Laboratory Science Division's CPD programme was held on "Avian Influenza – The Next Pandemic?" in conjunction with the Pathology Department, St. Luke's Hospital, and the Malta College of Pathologists. The foreign guest speaker was Dr Tim Brooks from the UK. Various local speakers contributed to this programme. These included Dr Chris Barbara, Dr Charles Savona Ventura, Dr Dennis Vella Baldacchino and Dr Michael Borg.

In May, Professor Angela Xuereb presented research work conducted in her DNA Laboratory entitled "A genomewide linkage scan in a family with a highly penetrant form of osteoporosis" at the 33rd Symposium of the European Calcified Tissue Society held in Prague between the 10th and 14th May. This work was subsequently published in the journal *Calcified Tissue International*.

The Nursing and Midwifery Division hosted, visiting lecturer, Professor Inga Rahm Hallberg RNT, FEANS, who is the Former Deputy Dean of the Medical Faculty Deputy, Head of Unit for Caring Sciences, Coordinator at the Vardal Institute at The Swedish Institute for Health Sciences and the Department of Nursing, Lund University, Sweden. Her clinical specialty is Psychiatric Nursing and Geriatric Care. Professor Hallberg's thesis was entitled 'Vocally Disruptive Behaviour in Severely Demented Patients in Relation to Institutional Care Provided', which can be found at Umea University Medical Dissertations, New Series No 261-

ISSN 0346-6612, Umea, 1990.

Professor Hallberg has published various articles and her current research fields are: Older People's Health, Quality of Life, Complaints, Public and Informal Care, Aging Well and Good Aging in Skane (SNAC, GAS), The aging well study, The Sub Study Good Aging in Skane (GAS) of the Swedish National Study on Aging and Care (SNAC)

During her visit in May Professor Hallberg delivered the following lectures to staff, students and the general public on "Research in care of the elderly" and "Developing Research Capacity and Capabilities". She also delivered a lecture to the M.Sc. students on 'Writing for Publications' and had a discussion with the nursing and midwifery staff currently following Doctoral Studies.

Several staff members attended local seminars, workshops and conferences. Amongst these,

Mr Noel Abela, a part timer attended a: a one day conference 'Developing Nursing Strategy through Consultation' organized by the Directorate Nursing Services and a three-day course on 'Wound Care' organized by the Primary Health Care.

Ms Roberta Sammut, attended the European Ph.D. Summer School organized by the Network of European Doctoral Nursing Programme held in Maastricht between the 19th and 24th June 2006, where Ms Sammut presented a poster and paper on 'Developing a tool to measure nursing students' psychosocial development: A Delpi study.

Ms Antoinette Attard, Ms Charmaine Attard, Ms Claire Farrugia and Ms Salvina Bonanno attended a one day conference 'Developing Nursing Strategy through Consultation' organized by the Directorate Nursing Services.

A four-day local workshop on 'Strategic Planning in Health Care Organizations' was attended by Ms Isabelle Avallone whilst, in May, Ms Norma Buttigieg attended a local seminar on 'Pjan ta' Azzjoni Nazzjonali – Sahha u Kura tul 2006 – 2008.

Ms Grace Jaccarini and Ms Michelle Camilleri participated in the Bologna Promoters conference in March 2006 organized locally by the European Unit University of Malta.

Ms Grace Jaccarini also attended a one-day conference 'Developing Nursing Strategy through Consultation' organized by the Directorate Nursing Services and had a further meeting of the Tuning Programme in June 2006 in Brussels, Belgium.

The 2nd International week was organised between 8 and 12 May 2006 at the Institute of Health Care, University of Malta. All Erasmus partner institutions were invited to participate. Nine lecturers from six institutions attended. These lecturers gave six hours of lectures on the theme "Mental Health Nursing" to mental health and general nursing students. A one-day seminar in conjunction with academics and practitioners was held on one day, in which key and innovative issues pertaining to mental health in Europe were presented by the foreign lecturers and discussed together with mental health practitioners.

During May, Ms Charmaine Attard, from the Nursing and Midwifery Division, participated in the first European conference organized by the International Association of Homes and Services for the Ageing (IAHSA) held in Brussels regarding 'Multiculturalism in European Aged Care: Consumer, Provider, Workforce and Technological Perspectives'.

Mr Martin Camilleri attended the 29th Annual Canadian Orthopaedic Nurses Association National Conferences – Orthopaedics across the Generations, Canada and 4th Annual Health Research Symposium- Broadening the Definition of Health at Cape Breton University, Canada in May.

Ms Antoinette Attard presented a paper on 'Breast Care Awareness' in a local conference entitled Women's Health: Improving Outcomes organized by the Educational Executive Committee of the Malta Nurses and Midwives Union.

Ms Rita Borg Xuereb, as part of the Midwives Association of Malta organized a conference on 5th May 2006 on 'Emotional Well being during pregnancy and after childbirth' where Ms Borg Xuereb presented a paper on the 'Transition to Parenthood'.

The Division of Occupational Therapy Studies hosted two students from Dalhousie University, Halifax, Nova Scotia (Canada) on a six-week clinical internship which was held in May at the occupational therapy clinic of St. Luke's Hospital. This clinical placement was organised within the framework of the bilateral agreement in existence between this Canadian university and the University of Malta.

Also in May, the Division hosted Jennifer Creek who taught a course in Advanced Psychosocial Clinical Skills. Ms Creek is the foremost authority in Psychosocial Occupational Therapy in the United Kingdom and is the author of a number of books in this area of practice. She is also a researcher for the College of Occupational Therapists (UK) as well as a freelance practitioner. Ms Creek gave an important contribution to the students and her continuing support as well as accessibility were greatly appreciated, especially considering her very busy international schedule.

In June, Mr René Mifsud and Ms Marjorie Bonello attended the 30th Annual Conference and Exhibition of the College of Occupational Therapists (UK) held in Cardiff, Wales. This is the key conference for occupational therapists in the United Kingdom and possibly the major conference of this discipline in Europe. It provides a wide range of CPD opportunities for occupational therapists in clinical practice, research and education including paper presentations, seminars, workshops, roundtables, poster presentations and exhibitor workshops. The conference afforded the attendees the possibility of networking and meeting prominent figures in the field. Most notable was the meeting held with Anne Lawson-Porter who is head of Education and Learning.

Ms Nathalie Buhagiar gave a presentation, during a workshop in June on Dyspraxia, on "Developmental Coordination Disorder - A framework for evaluation and intervention". This workshop, which was held at the Institute of Health Care, was part of the Continuing Medical Education Seminars.

The Final Comprehensive Examination of the Physiotherapy Division was moderated by Dr James Selfe from the University of Central Lancashire. His report with regard to examination procedures and certain management policies helped the Division in the process of the continuous development of the Physiotherapy Course.

The Physiotherapy Division staff-complement, now strengthened by three new members of staff employed in 2005, is placing emphasis on the improvement of the clinical and academic level of the course of studies through sharing of teaching subjects. Other members of staff undertook clinical teaching in association with ward staff and other members of the interdisciplinary team.

Students from overseas are making use of the facilities offered by the Physiotherapy division to attend clinical placements in Malta under the Erasmus agreement. The Physiotherapy Division has received various students from European countries who spent time in Malta mostly in the clinical field. Countries of origin were Finland, Germany, Holland, Italy, Norway and Sweden. These clinical placements were spread throughout the year.

July – September

Within the Socrates Erasmus Project there was the Communication Therapy Division Staff /Student mobility intensive programme continued in the summer months with seven outgoing CT students and 2 CT members of staff participating at the Faculty of Medicine, Strasbourg for a fifteen-day visit.

Data Collection for the Marie Curie Host Fellowship FP6-2002-Mobility-3 project kicked off in July 2006 since the design and printing of the tests took several months to complete. Data collection involved two home visits per child. Consent forms were collected from each child's parent/carer during the home visits. Approximately, 300 children had been visited up till submission of this report.

Under the professional development initiative of the Communication Therapy Division, in September supervising clinicians were invited to a half-day seminar organised by the Division in connection with clinical placements of students.

In July the Health Services Management Division hosted a visit from the University of Brno in which the possibility of collaboration between the two institutions was discussed.

Dr N. Azzopardi Muscat attended a high level expert conference in September organised by the Finnish Presidency on the theme of "Health in all Policies" in Kuopio. Dr Azzopardi Muscat was the rapporteur for the workshop on Strategies to reduce Alcohol related harm.

The HSM Division hosted Dr Sushma Aquila from Imperial College London who was the visiting external examiner for the Division.

Professor Clive Mulholland from the University of Ulster, UK, was visiting external examiner for the Final Comprehensive Examinations in the Medical Laboratory Science Division held in 2006. Sixteen students completed the MLS course successfully.

Dr Donia Baldacchino presented a paper on the 'Stress of Albanian and Maltese Students' and a paper on 'Nursing Competencies: Tuning Project' in February 2006 in the RCN Nursing Education Conference. Another paper was presented in February 2006 by Ms Jaccarini in the HENRE conference on 'Challenges of the Nursing Developments in the Tuning Project'.

Ms Nathalie Buhagiar, from the Occupational Therapy Division attended a workshop on "Integrating Neurodevelopmental treatment and Sensory Integration principles: A hands on approach", at Chertsey, Surrey, UK. This workshop would enable therapists expand treatment options using Sensory Integration and Neurodevelopmental treatment frames of reference.

The course coordinator –Mark Sacco attended conferences organized by the Association of European Physiotherapists in Higher Education (ENPHE) that served as a bridge between European countries and Institutes and cemented the interchange of ideas to improve the Physiotherapy course.

Continuous fine-tuning and revision of course objectives for the B.Sc. (Hons) (Physiotherapy) in alignment with proposed curricular changes facilitated the adoption of a new teaching framework on the Physiotherapy studies course that now is in conformity with ECTS. The course objectives started being rewritten in December and are in the process of completion.

The external examiner for the Radiography course was Dr Patrick Brennan, from University College Dublin, Ireland. Dr Brennan had previously visited the IHC before as a visiting lecturer in Digital Imaging. This was his second visit as external examiner to the Division. In his report Dr Brennan commented about the high standards achieved by the Division.

Two visiting lecturers were invited by the Division to lecture on the pre-registration courses.

Mr Willi A. Kalender, Institute of Medical Physics, Germany; Mr Jaromir Plasek, Charles University, Prague. The Division commenced CPD courses for qualified radiographers. These were: The administration of Prescribed Medicinals by Radiographers and Digital Imaging

October – December

As part of the Communication Therapy Division Staff exchange there were two outgoing placements at Lessius Hogeschool, Belgium and Fontys Hogeschool, Eindhoven, The Netherlands.

During the month of October 2006, Helen Grech joined Barbara Dodd at the School of Clinical Speech and Language Studies (SCSLS) at Trinity College, Dublin, Ireland. During her stay at the SCSLS Helen Grech, under the guidance of Barbara Dodd, set up the data base to carry out the analysis of the Maltese data. She also inputted samples of the data and discussed criteria for resolving emerging difficulties with Professor Dodd and staff from the SCSLS.

Professor Barbara Dodd returned to Malta in November 2006 to continue with assisting in the initial analysis of the data collected related to the standardization of the assessments for use with bilingual Maltese children.

Ms Daniela Gatt completed a fifteen day study visit at the University of Zagreb, Croatia in November 2006. This Short Term Scientific Mission (STSM) was related to her ongoing doctoral research project and was funded through the Cost Action Project in which the Communication Therapy is a partner. Dr Helen Grech is Malta's Governmental representative in the management committee of this ongoing Cost Action A33 project related to language acquisition and disorders.

In October, Dr Grech participated in the Annual Board meeting of the Executive Board of the International Association of Logopedics and Phoniatrics, as General Secretary. This was held in Groningen, The Netherlands.

During the month of October, Mr Mario Zarb, Subject Coordinator of Dental Technology participated in the Annual Dental Conference.

In November, Claire Sillato Copperstone, from the Environmental Health Division, was invited to join the Thematic Network in Dietetics as well as to join The British Nutrition Society's Pilot Scheme Questionnaire. She was also guest editor for Nutrition special edition of the journal for the Malta College of Pharmacy Practice.

ForSociety ERA-NET Future Dialogue on Food Safety and Biotechnology and Healthy Nutrition "Factors and Actors" Berlin, held in Germany, was attended by Ann McElhatton in November.

A CPD programme with the Medical Laboratory Science Division, on "The Laboratory Science of Immunological Disorders" was held in November. The foreign guest speaker was Mr Peter Charles from the Rheumatology Division at Charing Cross Hospital, UK. Local speakers included Professor Carmel Mallia and Dr. Franco Camilleri Vassallo. This programme was held in collaboration with the Pathology Department, St. Luke's Hospital, and the Malta College of Pathologists.

The MLS Division had a re-accreditation visit in December by a panel from the Institute

of Biomedical Sciences (IBMS), UK. The panel included Professor David Holmes, Ms Alison Geddis and Mr. Alan Wainwright. Professor Alfred Vella acted as Chairman. During the visit, the IBMS panel met with Professor Angela Xuereb and Dr Joseph A. Borg, the MLS Board of Studies, the MLS lecturing staff and students. A tour of the Hospital Pathology laboratories, the IHC Teaching Laboratory and Library was conducted. The visit had a positive outcome with accreditation being granted for another five years.

Ms Michelle Camilleri, from the Nursing/Midwifery Division, presented a paper on 'Becoming a nurse: developing professional and personal identities' at 4th International Researching work and Learning Conference organized by the University of Technology Sydney, Australia in December 2005.

The academic year 2005 – 2006 was a busy and dynamic one for international student and teacher exchanges within the nursing and midwifery division. The international team increased in number helping with the distribution of responsibility of foreign students. There were more outgoing students than incoming in Erasmus and Elective student placements. Five lecturers utilised Teacher Mobility. A total of nine Erasmus bilateral agreements were renewed with current partner institutions. Four new agreements were signed during the year.

Three nursing/midwifery lecturers joined the international team this academic year, thus reducing slightly the workload on the other members.

The current bilateral agreements with the Nursing and Midwifery Division include four midwife and twenty-six nurse student placements in the listed institutions. One bilateral agreement at postgraduate level was signed with Glamorgan University Wales. Teacher mobility and the exchange of 2 students each way was negotiated.

During Academic year 2005 – 2006 the Division received fifteen nursing students and four midwifery students through the Erasmus exchange programmes. This year there was a good response to the Erasmus applications. A total of forty-one students applied. All except two students (who had previously gone on an Erasmus exchange as diploma students) were eligible. Eleven midwifery students applied this year, however there were only 4 midwifery places available. Twenty two nursing students and four midwifery students participated in the Erasmus exchange programme.

Several academic staff from overseas visited the Nursing and Midwifery Division at IHC through Erasmus & Leonardo programmes. These include Mrs Melanie Stephens who made her first visit on behalf of the University of Salford, England through Leonardo funding in May 2006 and Dr Joe Cortis – Senior Lecturer, University of Leeds who contributed to the Masters Degree programme teaching about transcultural nursing through Erasmus funding.

In view of renewing bilateral agreements, it is very important that lecturing staff visit as many partner institutions as possible. Relying on student evaluation alone is not adequate. Staff will be given a checklist form with specific questions regarding services and facilities, level of academic courses and so on, to complete, together with any other documentation so as to be able to evaluate the partner institutions.

Mrs Grace Jaccarini and Ms Vicky Sultana went on a teacher mobility programme to the Università degli Studi di Verona, Italy in May whilst Ms Dorianne Colerio and Ms Charmaine Attard went on a teacher mobility programme to Savonia Polytechnic, Kuopio, Finland, in April visiting Trento and Verona. Ms Angela Formosa and Ms Therese Bugeja went to the Escola de Enfermagem D. Ana Guedes, Porto, Portugal, in May.

Requests were made from various nursing, midwifery and medical students from other

European institutions with whom we do not have any bilateral agreements. All wanted to carry out nursing clinical placements in Malta. These students paid the standard University of Malta International fees as set by the International Office.

Three diploma students carried out Elective placements at the Queen's Medical Centre in Nottingham during the month of July, One B.Sc. Nursing student carried out a placement at the School of Medicine in New York between June and July, while another B.Sc. Midwifery student carried placement at the University of Hertfordshire in July.

Five students were successful and completed the diploma course in Radiography and graduated in November 2006.

The degree course in Health Science Radiography (October 2005) was offered and fourteen students registered for the course. Another eleven students registered to join the diploma to degree course after they successfully completed the diploma course.

Round - Up 2007

January – March

In March, Joseph Agius, from the Communication Therapy Division, participated in collaborative meetings with the Socrates Programme on the development/ harmonisation and state of the art specialisation module in the field of fluency and fluency disorders at Leuven Belgium whilst, in the same month, Helen Grech joined the 2nd International IALP Composium in Brazil.

Mario Zarb, Coordinator Diploma Dental Technology, attended the annual conference of the Society University Dental Instructors (UK) in March.

In 2006-2007 Professor Ferrito was involved with and participated as a member on the IHC and Council for Health Boards; on the Board of Studies (Environmental Health Division and the Examinations Board (Environmental Health Division) as Chair and on the IHC Ethics Committee.

Ann McElhatton attended the ISEKI Food 2 2nd Overall meeting held at the University of Valencia at the beginning of March and the ForSociety ERA-NET Future Dialogue on Food Safety and Biotechnology and Healthy Nutrition “Factors and Actors” 3rd meeting in Berlin, Germany.

Dr McElhatton was involved with and participated in the Board of Studies Environmental Health (Diploma, Degree and PQND) and the Degree, PQND and Diploma Examination Boards.

Ms Copperstone was involved with the general teaching and tutoring and participated in the Board of Studies (Degree and PQDiploma) and Degree, PQDiploma and B.Pharm. (Hons) Examination Boards.

During 2007, Ms Ellul participated in the general teaching and tutoring activities within the division.

In January, Mr Carmelo Bezzina and Ms Charmaine Attard graduated with a Masters degree in Nursing from the Royal College of Nursing, University of Manchester, U.K.

Ms Norma Buttigieg attended a local conference on ‘Psychiatric Nursing: The Change Agent in Mental Health’ whilst Ms Victoria Sultana attended the Permeable Bodies conference held at the Mc Donald Institute for Archaeological research at the Department of Archaeology, in Cambridge, UK.

In February, there was the launch of the first Bachelor of Science (Hons) Diploma to Degree in Community Nursing.

Ms Norma Buttigieg attended a local conference on ‘Art and Health Care’ and one on ‘Questioning our community health care’ whilst Ms Joanna Depares participated in the 1st Masterclass in Oncology Nursing organized by the European School of Oncology.

Mr Paul Pace, a part timer within the Nursing and Midwifery Division, presented a paper on ‘Infections related to IVI care’ at the Commonwealth Nursing Conference held in London, U.K. in March.

Twelve nursing students participated in the Erasmus programme and were hosted by universities in Ireland, Sweden, Finland, Italy, Spain, Portugal and Belgium. Nine nursing students and four midwifery students from Finland, Ireland, Belgium, Italy and Sweden were hosted in Malta as part of the Erasmus programme.

Mr Martin Ward on behalf of the Nursing and Midwifery Division successfully joined the Mental Health Intensive Programme (IP) (MENTHE) funded by the European Union. This is a three-year project coordinated by the University of Applied Sciences, Tampere, Finland with the participation of the following universities: Karlstads University, Sweden; Dublin City University, Ireland; Hedmark University College, Norway; Kingston University Higher

Corporation, England; University of Malta, Malta and the Catholic University College, Bruges, Belgium. The aim of this project is to enable students from the participating countries to share educational and clinical developments within chosen themes.

April – June

Joseph Agius, from the Communication Therapy Division, attended the 8th World Congress for People who Stutter in Croatia in May 2007 whilst Daniela Gatt participated in the 6th International Symposium on Bilingualism held at the University of Hamburg, Germany.

Anna McElhatton, from the Environmental Health Division, attended the CIHEAM, Zaragosa, Spain in June on the Quality and Safety of Fish. A five day residential course organised by CIHEAM in collaboration with IMAZ and FAO.

In April, Professor Steven J. Ersser, came to Malta. During his visit he delivered two lectures entitled: 'What is in the black box? Past and future perspectives on nursing as a therapeutic activity' and 'Undertaking a Cochrane Systematic Review: an illustration of nursing involvement'. Dr Ersser also delivered a lecture to the M.Sc. students and had a discussion with the nursing and midwifery staff currently following Doctoral Studies. Professor Ersser is RGN, Ph.D. (Lond.), B.Sc. (Hons), CerTEd and trained as a registered general at Guy's Hospital London and then took joint clinical/academic posts in Oxford in medical, elderly care and dermatology, including the Oxford Nursing Development Unit, the National Institute for Nursing and the Department of Dermatology. Professor Ersser has held honorary clinical appointments in at the Southampton Dermatology Department and Southampton Primary Care Trust, having recently run a nurse-led chronic illness management clinical for those living with psoriasis.

Ms Carmen Camilleri and Mr Martin Camilleri took part in the Erasmus Teaching Mobility Programme at the Katholieke Hogeschool Kempen in Belgium. Lectures were delivered on the following topics: Activities of Daily Living, Communication in Nursing, Nurse's Role and Concept of Care to Nursing Students.

Mr Noel Abela, a part-timer with the Nursing and Midwifery Division, delivered a speech at the Infectious & Endemic Diseases Scientific Conference held in Tripoli, Libya in May 2007.

Mr Paul Pace presented a paper on 'Needle Stick Injuries' at the International Nurses Conference (ICN) held in Yokohoma, Japan whilst Dr Donia Baldachhino participated in the international Nursing Doctoral Education in Nursing (INDEN) workshop held in Tokyo, Japan.

Mr Martin Camilleri attended the 30th Annual Canadian Orthopaedic Nurses' Association 'Pan Pacific Conference on the Orthopaedic Patient in Victoria, Canada.

Michelle Camilleri, Grace A. Jaccarini, Maria Navarro and Roberta Sammut attended the International RCN Research Conference organized by the Royal College of Nurses, London, UK.

In May, the Occupational Therapy Division hosted Dr Anne Roberts who is course leader of the M.Sc. Occupational Therapy programme at the University of Plymouth. Dr Roberts taught the course Professional Issues in Occupational Therapy to the undergraduate course intake 2003. She also gave a study afternoon/public lecture "Clinical Reasoning: Knowing More Than You Can Say" on 2 May 2007 in collaboration with the Malta Association of Occupational Therapists.

Nathalie Buhagiar lead a workshop, in June, entitled "Responding to Diverse Needs of Student with Attention and Sensory Processing Difficulties" at the International Conference on Teacher Education, Dolmen Hotel Malta.

Mr Alfred Gatt and Ms Cynthia Formosa, from the Podiatry Division, were invited to visit the University of Staffordshire between the 25th - 29th April. The aim of this visit was to start discussions between both universities for a possible collaboration. Several possible joint projects were discussed including CPD's in Malta, Joint Master's Degree and possible research to be conducted by both Universities.

July – September

Daniela Gatt, from the Communication Therapy Division, attended the 27th World Congress of the International Association of Logopedics and Phoniatrics in August 2007 whilst Helen Grech participated in the 27th World Congress of the International Association of Logopedics & Phoniatrics, Copenhagen, Denmark.

Daniela Gatt received the IALP Student Award Winner for the best submitted scientific article.

Helen Grech was re-elected, General Secretary, of the International Association of Logopedics & Phoniatrics (IALP) for period August 2007 – July 2010.

As part of the professional development strategy, practising speech-language pathologists, employed by the Health Division were invited to participate in several courses provided by visiting lecturers.

Supervising clinicians were invited to a half-day seminar organised by the Division in connection with clinical placements of students.

As part of the Tuning IV EU project, Ms Grace Jaccarini, from the Nursing/Midwifery Division, attended the Tuning Validation Conference Health Care and Tuning Educational Structures in Europe IV – Subject Area Group Meeting. These meetings were held in Brussels.

The visiting examiner for the B.Sc.(Hons) Nursing for the academic year 2006/2007 was Dr Joanne Fitzpatrick, B.Sc.(Hons) Nursing Studies, Ph.D. Nursing Studies, PGCEA, Senior Lecturer, Deputy Head Graduate Research Programmes, Florence Nightingale School of Nursing and Midwifery, King's College London. This was the first time that Dr Fitzpatrick was nominated as external examiner.

This was the second visit for the B.Sc.(Hons) Midwifery external examiner, Ms Eileen Russell Roberts, RN, RM (Zimbabwe), RM (England), Midwife Teachers Diploma, B.Sc. Nursing Education (Huddersfield), PGCert. Professional Education and Training (Surrey), M.Ed. (Bradford), a former lecturer at the Division of Midwifery and Women's Health, University of Bradford, England.

It was also the second visit for the M.Sc. in Nursing and Midwifery external examiner, Dr

Peter Draper, RGN (Registered General Nurse), ENB Certificate 249 Cardiothoracic Nursing, Bachelor of Science Nursing Studies (CNAA) (Awarded with commendation), Certificate in Education (University of Leeds), Doctor of Philosophy (Nursing Studies) (University of Hull), Diploma in Theology and Ministry (University of Durham), Director of Research and Reach Out from the Faculty of Health and Social Care, University of Hull, England.

Three diploma students carried out Elective placements at the Queen's Medical Centre in Nottingham during the month of July. One Midwifery student went to the University of Hertfordshire UK and one degree in nursing student went to New York University's School of Medicine in the United States of America.

Five diploma nursing students, Eliza Bonnici, Jennifer Oakley, Melissa Sultana, Marisa Zerafa and Rose Zerafa, traveled to Lourdes, France for three weeks to carry out voluntary work with the sick. This visit was organized by the Chaplaincy of the University of Malta.

In July, the Occupational Therapy Division once again hosted Professor Anne MacRae, graduate course leader at San José State University, California, USA, as external examiner for the course programme 2003 Intake. Apart from her participation in the Board of Examiners of the Division, Prof. MacRae participated in several activities including a seminar for occupational therapy practitioners entitled 'Demystifying Research: Incorporating a Clinician's Perspective' and 'Cultural Issues in Practice' which was a public lecture given at the Institute of Health Care Conference Room open to all staff and students. Professor MacRae also joined in a round table discussion for staff of the Division of Occupational Therapy Studies entitled 'Research Methodologies and Supervision of Undergraduate Research'.

Eight podiatric students visited the University of Staffordshire under the Elective Programme. During their one-week stay, students had the opportunity to visit Podiatric clinics under the South Staffordshire NHS Primary Care Trust, to experience Podiatric Surgery in Cannock Chase Hospital, and also visited an orthotic and shoe company in the U.K. [Salts Footwear Company].

All members of staff attended several conferences organised by the Association of Podiatry, Malta and other organisations during the year.

During 2007, a total of 20 Radiography students were successful and completed the degree course. Eleven of these students had followed the diploma to degree programme. One student successfully completed her diploma students. The diploma programme has now been discontinued.

The external examiner for the Radiography course was Dr Patrick Brennan, from University College Dublin, Ireland. Dr Brennan had previously visited the IHC before as a visiting lecturer in Digital Imaging. This was his third visit as external examiner to the Division. In his report Dr Brennan commented about the high standards achieved by the Division.

Foreign visiting lecturers were invited by the Radiography Division to lecture on the pre-registration courses. These were: Mr Eric Sundquist, Oslo University College, Oslo, Norway and Dr Alan Castle, School of Health Sciences and Social Work, Portsmouth, England.

In preparation for the move to Mater Dei Hospital and the use of digital equipment the Division organised and delivered two CPD courses for qualified radiographers. These were: "The administration of Prescribed Medicinals by Radiographers" and "Digital Imaging". For this course, as this was a first for Malta at the time, two visiting lecturers were invited to contribute to the theoretical component of the course. These were Dr Patrick Brennan, University College, Dublin, Ireland and Mr Leslie Eddowes, Ipswich, England.

October – December

Helen Grech, Coordinator of the Communication Therapy Division, attended the 1st Conference of the International Association 2007 of Maltese Linguistics, Bremen, Germany, a Meeting of European research network for first-language acquisition with emphasis on semantics/pragmatics and language impairment (SLI). Cost Action A33, Cyprus, and was keynote invited speaker at the X1 Nordic Child Language Symposium, University of Oulu, Finland in November 2007.

The degree course in Health Science Radiography was offered and 22 students registered for the course. Another 9 students registered to join the diploma to degree course after they successfully completed the diploma course. The course was offered for the last time since the diploma programme has now been discontinued and only the graduate level course is now offered by the University.

Student Statistics

Admissions - October 2006 Intake

Course	Applied Commenced Course	
Master of Health Science:		
• Nursing	16	14
Post Qualification Diploma in Health Science:		
• Health Service Management	26	19
• Nutrition and Dietetics	14	6
Bachelor of Science (Honours):		
• Community Nursing/Midwifery	39	20
• Communication Therapy	45	18
• Medical Laboratory Science	32	12
• Mental Health Nursing	22	15
• Midwifery	27	10
• Nursing Studies	69	26
• Nursing Studies (Diploma to Degree)	83	20
• Physiotherapy	43	15
• Podiatry	27	12
• Radiography	46	15
Preparatory Course for Diploma in Health Science:		
• Environmental Health	17	7
• Nursing	49	33

Graduation - November/December 2006

Course	Females	Males
Master of Health Science:		
• Nursing	8	-
• Midwifery	1	-
Post Qualification Diploma in Health Science:		
• Health Service Management	6	8
• Nutrition and Dietetics	4	1
Bachelor of Science (Honours):		
• Communication Therapy	14	1
• Medical Laboratory Science	9	7
• Mental Health Nursing	9	2
• Midwifery	7	-
• Nursing Studies	37	12
• Physiotherapy	10	4
Bachelor of Science:		
• Medical Laboratory Science	-	1
• Physiotherapy	-	1
Diploma:		
• Nursing	58	22
• Radiography	5	1

Admissions - October 2007 Intake

Course	Applied	Accepted
Master of Health Science:		
• Health Service Management	34	21
Post Qualification Diploma in Health Science:		
• Nutrition and Dietetics	17	13
Bachelor of Science (Honours):		
• Medical Laboratory Science	29	15
• Midwifery	31	10
• Nursing Studies	92	69
• Nursing Studies (Diploma to Degree)	101	21
• Occupational Therapy	25	15
• Physiotherapy	34	15
• Podiatry (Diploma to Degree)	10	6
• Radiography	53	37
• Radiography (Diploma to Degree)	10	10
Preparatory Course for Diploma in Health Science:		
• Dental Technology	17	7
• Environmental Health	27	27
• Nursing	85	49

Graduation - November/December 2007

Course	Females	Males
Master of Health Science:		
• Health Service Management	6	5
• Nursing	5	1
Post Qualification Diploma in Health Science:		
• Health Service Management	1	2
• Nutrition and Dietetics	10	2
Bachelor of Science (Honours):		
• Medical Laboratory Science	7	4
• Midwifery	19	-
• Nursing Studies	24	8
• Occupational Therapy	8	1
• Physiotherapy	14	2
• Radiography	13	7
Diploma:		
• Nursing	60	15
• Radiography	2	-

Institute of Health Care
University of Malta
G'Mangia MSD07
Tel.: +356 2125 0230; +356 2124 7256
Fax.: +356 2124 4973
Website: <http://www.um.edu.mt>