



Faculty of Health Sciences (FHS) Monthly Newsletter

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FHS Monthly Newsletter: October 2011

NEW RECRUITS

Dr Dr Vasilis Valdramidis, Food Studies and Environmental Health Department, FHS



Dr Vasilis Valdramidis graduated from the Aristotle University of Thessaloniki at the Department of Food Science and Technology (Greece). Part of his degree was held at Nottingham University, UK and ATO-DLO, Wageningen, the Netherlands. He was awarded his PhD at Catholic Leuven University, Belgium (Department of Chemical Engineering) for research on Predictive Modelling in Foods. He undertook research at the Agricultural University of Athens (Greece) in Predictive Modelling, the Agri-Food and Bioscience Institute (Northern Ireland) in non-thermal technologies and the French National Institute for Agricultural Research (France) in food equipment Hygiene.

During the last three years Dr Valdramidis was Research and Teaching Fellow at the Dublin Institute of Technology (Ireland) and the University College Dublin (Ireland) in non-thermal technologies, bioenergy and disinfection technologies of food products before joining the University of Malta as a Senior Lecturer in Food Science at the Department of Food Studies and Environmental Health.

RESEARCH, PUBLICATIONS & PRESENTATIONS

Professor Angela Xuereb, Dean & Head, Applied Biomedical Science Department, FHS

Two publications:

- Professor Angela Xuereb has contributed a chapter entitled *Family Based Studies in Complex Disorders: The use of Bioinformatics Software for Data Analysis in Studies on Osteoporosis*, in the book *Selected Works in Bioinformatics*, edited by Xuhua Xia and published by InTech. ISBN 978-953-307-281-4.
- Professor Angela Xuereb has a paper entitled *Functional polymorphisms within the TNFRSF11B (osteoprotegerin) gene increase the risk for low bone mineral density*, accepted for publication in the *Journal of Molecular Endocrinology*.

Abstract: Polymorphism within the TNFRSF11B gene have been studied and associated with osteoporosis and fracture risk. Osteoprotegerin, the product of this gene, is a key negative regulator of osteoclast genesis and is secreted by osteoblasts / stromal cells. A previous study in Maltese post-menopausal women showed positive association of low BMD with a polymorphism found within the promoter region of this gene (C950T). In the present study, direct DNA sequencing revealed 12 variants with polymorphisms C950T, G1181C and rs4876869 observed to be in strong linkage disequilibrium. The constructed haplotype T-G-T was found to increase the risk for a low BMD, while C-G-T and C-C-C have a protective role, thus we investigated the functional role of both C950T and rs4876869 in vitro. The promoter region, including the C950T alleles, was amplified by PRC, cloned into pGL3 enhancer vector, transfected into HeLa, COS-7 and RAW264.7 cell lines. After incubation luciferase activity was measured. The T/C (rs4876869) change was tested for its possible effect on pre-mRNA splicing, using an exon-trapping vector. A statistical significant difference in gene expression was observed between the alleles for T950C, with the T allele showing a lower luciferase expression in all cell lines ($p < 0.01$). For rs4876869, exon skipping was observed for the C allele, while only transcript harbouring the whole exon was observed for the T allele. Our findings suggest that the T-G-T haplotype might be increasing the risk for osteoporosis due to lower quantities of the full OPG transcript being expressed resulting in a higher bone resorption.

Dr Joseph Borg, Applied Biomedical Science Department, FHS

Dr. Joseph Borg has co-published a peer reviewed research article and an important finding on the response to lithium in bipolar disorder patients from Sardinia. This study was possible through the collaboration between the Department of Applied Biomedical Science and the Department of Neuroscience from the University of Cagliari, Italy. Bipolar disorder is a lifelong psychiatric illness with patients presenting themselves with both manic and depressive episodes. Not all patients respond the same to lithium therapy, probably owing due to their genetic makeup. The study published analysed 204 Sardinian patients. Fifty two patients were further selected for deeper genetic profiling using microarrays. A top candidate gene - ACCN1 - was associated with the patients and may very well be responsible for the

difference in patient response to lithium therapy. This finding alongside others in the future, will help us provide a better patient management and therapeutics.

The paper is published in the journal Pharmacogenomics - part of the Future Medicine journal collection. The abstract of the manuscript is available at <http://www.ncbi.nlm.nih.gov/pubmed/21961650>. For full article access you can contact directly Dr. Borg on joseph.borg@biotech.um.edu.mt.

Dr Sandra Buttigieg, Head, Health Services Management Department, FHS

Dr Sandra Buttigieg had a paper entitled “*Well-structured Teams and the Buffering of Hospital Employees from Stress*” published in the *Health Services Management Research* by the Royal Society of Medicine Press.

Summary: Membership in well-structured teams, which show clarity in team and individual goals, meet regularly, and recognize diverse skills of their members, is known to reduce stress. This study examined how membership of well-structured teams was associated with lower levels of strain, when testing a work stressors-to-strains relationship model across the three levels of team structure, namely well-structured, poorly structured (do not fulfill all the criteria of well-structured teams) and no team. The work stressors tested, were quantitative overload and hostile environment, whereas strains were measured through job satisfaction and intention to leave job. This investigation was carried out on a random sample of 65,142 respondents in acute/specialist National Health Service hospitals across the UK. Using multivariate analysis of variance, statistically significant differences between means across the three groups of team structure, with mostly moderate effect sizes, were found for the study variables. Those in well-structured teams have the highest levels of job satisfaction and the least intention to leave job. Multi group structural equation modelling confirmed the model’s robustness across the three groups of team structure. Work stressors explained 45%, 50% and 65% of the variance of strains for well-structured, poorly structured and no team membership, respectively. An increase of one standard deviation in work stressors, resulted in an increase in 0.67, 0.70 and 0.81 standard deviations in strains for well-structured, poorly structured and no team membership, respectively. This investigation is an eye-opener for hospitals to work towards achieving well-structured teams, as this shows weaker stressor-to-strain relationships for members of these teams.

Dr Rosienne Farrugia, Applied Bio Medical Science Department, FHS

A collaborative work carried out by Dr Rosienne Farrugia and Dr Suthesh Sivapalaratnam from the Department of Vascular Medicine, AMC, Amsterdam is now available on line at BMC Medical Genomics (<http://www.biomedcentral.com/content/pdf/1755-8794-4-64.pdf>). The project investigated the effect of an in vivo infusion of LPS (endotoxin) in human subjects, and identified possible candidate genes which may link systemic inflammation and atherosclerosis.

Research Seminar 2011/2012

The FHS will once again be organising a series of lectures during this academic year. Please find below a complete schedule.

Members of staff who would like to participate are kindly requested to contact Dr Stephen Lungaro Mifsud on Tel: 2340 1161.

No	Date	Presenter	Study	Department
1	2 nd Nov 2011	Dr Stephanie Bezzina Wettinger		Applied Biomedical Science
2	16 th Nov 2011	Ms Dorothy Aquilina	Masters	Radiography
3	30 th Nov 2011	Dr Vasilis Valdramidis		Food Studies and Environmental Health
4	14 th Dec 2011	Dr Vicky Sultana	PhD	Nursing
5	11 th Jan 2012	Dr Donia Baldacchino & Dr Paul Galea		Nursing
6	25 th Jan 2012	Dr Helen Grech		Communication Therapy
7	8 th Feb 2012	Dr Michael Galea	PhD	Mental Health Nursing
8	22 nd Feb 2012	Mr Alfred Gatt	PhD In Progress	Podiatry
9	7 th Mar 2012	Mr Tonio Agius	PhD In Progress	Physiotherapy
10	21 st Mar 2012	Ms Josephine Attard	PhD In Progress	Midwifery
11	28 th March 2012	Dr Carmel Caruana		Radiography
12	18 th Apr 2012	Dr Sandra Buttigieg		Health Services Management
13	2 nd May 2012	Ms Claire Sillato Copperstone	PhD In Progress	Food Studies and Environmental Health
14	16 th May 2012	Mr Martin Ward	PhD In Progress	Mental Health Nursing
15	30 th May 2012	Mr John Xerri de Caro	PhD In Progress	Physiotherapy

Venue & Time: FHS Board room - 1.00 p.m. – 2.00 p.m.

FORTHCOMING EVENTS

Graduation Ceremonies 2011

Monday 21st November 2011 at 4.30 p.m.

Faculty of Health Sciences	Master of Health Science in Health Services Management Master of Science
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Thursday 1st December 2011 at 6.30 p.m.

Faculty of Health Sciences	Diploma in Health Science Bachelor of Science (Honours) Postgraduate Diploma in Nutrition and Dietetics Postgraduate Certificate in Radiography
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Please refer to UOM website for latest updates.

ANNOUNCEMENTS

Dr Mark Sacco and Mr John Xerri de Caro, Physiotherapy Department, FHS

During the annual conference held in Estoril (Portugal) in September 2010, Dr Mark Sacco, Head of Department, Physiotherapy Department, has been elected on the Executive Board of The *European Network for Physiotherapy in Higher Education*.

Mr John Xerri de Caro, Assistant lecturer, Physiotherapy Department, was chosen as a Focus *Group Leader relating to Life Long Learning*.

Well done Mark and John!

Links to Lists of Universities

- American Universities: <http://www.clas.ufl.edu/au/index.html>
- Universities World Wide: <http://univ.cc/>
- International Higher Education Search Engine & Directory: <http://www.4icu.org/>

Sound and Vision Assistant Technical Officer at FHS

Mr Raymond Vella has been appointed Sound and Vision Assistant Technical Officer. Raymond will be responsible all audio equipment including overhead projectors, LCDs and data projectors. Raymond can be contacted on Tel: 23401227 E-mail: audiovisual.MD@um.edu.mt (Office 22, Administration Block).

UNIVERSITY SEMESTER DATES FOR ACADEMIC YEAR 2011/2012

FIRST SEMESTER

Monday 3rd October 2011 to Wednesday 8th February 2012
Opening Ceremony - Monday 3rd October 2011

Christmas Recess

Wednesday 21st December 2011 to Wednesday 4th January 2012

Examinations

Saturday 21st January to Wednesday 8th February 2012

SECOND SEMESTER

Thursday 9th February 2012 to Saturday 30th June 2012

Easter Recess

Monday 2nd April to Sunday 15th April 2012

Examinations

Thursday 31st May to Saturday 30th June 2012

Supplementary Examinations

Monday 3rd September to Friday 14th September 2012

SUMMER SEMESTER (for postgraduate courses spread over 3 semesters)

Monday 18th June to Saturday 20th October 2012

Summer Recess

Saturday 4th to Sunday 19th August 2012

Examinations

Monday 8th to Monday 15th October 2012

Please refer to UOM website for latest updates.

Mr Charles Borg, Promotion to Visiting Senior Lecturer

During last Council meeting, Mr Charles Borg, Department of Applied Biomedical Science, has been promoted to Visiting Senior Lecturer.