Faculty of Life Sciences and Computing

Issue 17 March 2014 Edited by Preeti Patel

FLSC

Dean meets StARs

Professor Dominic Palmer-Brown met with Faculty StARs on the 7th March, along with Heads of Schools and lecturers, to discuss any issues students are having and to report on the actions taken to address previously raised issues. The Faculty responded to these previously raised issues by acquiring specialised software for students, organising extra Maths Clinics and posting additional information on WebLearn modules .

StARs were particularly pleased to be informed of the successful BCS (The Chartered Institute for IT) accreditation event for courses in the School of Computing. Students are also happy with the speed of publication of autumn semester results in the Communications Technology subject area.





For your Calendar



Editor's Note

Contributions are welcome from all areas of the Faculty—please send to me by the middle of the month.

Preeti Patel p.patel@londonmet.ac.uk School of Computing

Conference and Funding success

Professor Kebreab Ghebremeskel recently delivered a session at The International Conference on Seafood Safety and Quality and Tracking Systems. The conference and in particular, Prof. Ghebremeskel's participation, was widely reported in the local news media, including Oman News, Oman Observer and Oman Tribune. An excerpt from the article in the Oman News (pictured right) publication of 3rd March:

"Professor Kebreab Ghebremeskel from London Metropolitan University gave a lecture on health and nutritional importance of fish and marine products and the role of the quality assurance for fish and seafood in providing a healthy product that meets food safety standards."

Prof. Ghebremeskel has also successfully obtained £30,000 from Phylax Lts. (UK) for a study into nutritional deficiency in pregnancy complicated with type 2 and gestational diabetes.

News

Oman... International Conference on Seafood Safety and Quality and Tracking Systems Commences



The International Conference on Seafood Safety at Quality and Tracking Systems 'started at the Al Bust Palace Hotel today. The Conference is organized by th Ministry of Agriculture and Fisheries and would confin until March. 5th with the participation of regional ar international organizations, scientific institutions ar

Dr. Ahmed bin Mchammed al-Saeedi, Minister of Health sponsored the opening oeremony of the Conference in the presence of Dr. Fuad bin Jaafar al- Sajvani, Minister o Agriculture and Fisheries and a number of their Highnesses and Ministers undersceretaries, advisers, a number of members of the Majis A'Shura and Walls in the Convenorate of Musicat

Dr. Hamad bin said al- Out, Undersceretary of the Ministry of Agriculture and Fisheries for Fisheries said in the ministry's speech that the Conference stems from the care and attention of the Ministry of Agriculture and Fisheries to improve the safety and quality considerable attention from the Convenment for the sector's role in providing food security to the people of this country, as fisheries remain a cornerstone of the economic development for its renewable resources under a scientific and conscious management.

re abose that the winsky or agriculture and reserves seeks to raise the quality of Unital fisheries through paying alterition to all production operates to ensure that they produced fit in human consumption with high quality is domestic markets, be resure continuity or fisheries produces to all world markets which gains the Sultanute an excellent reputation in fisheries produces to all world markets which gains the Sultanute an excellent reputation in international standards, requirements and legislations related to safely and quality control of seafood, noting that the Conference aims to review policies and strategies for the safely and quality of seafood and tracking systems and to discuss recent scientific achievements in the area of seafood safety and quality and tracking systems.

Professor Kebreab Ghebremeskel from London Metropolitan University gave a lecture of health and nutritional importance of fish and marine products and the role of the quita assurance for fish and seafood in providing a healthy product that meets food safet standards.

we theme of policies and strategies at the national and regional levels and scientific paper in fisheries sector development strategies, 2013-2020. The session contained a number if lectures, including global systems of policies and strategies of safety and quality of eallood, seaflood safety and new policies and strategies for the aquaculture sector in the ultinante.

ESoft gets started





Dr Fang Fang Cai, Academic Leader International Collaboration Coordinator, supported by **Dr Jianming Cai,** Senior Lecturer, returned last week after a successful course induction visit to Esoft College in Sri Lanka.

This newest franchised link commenced their first spring semester, with delivery of the two courses BSc Computing and BEng Software Engineering (top-up) to approximately 80 third year students across two campuses in Colombo and Kandy, Sri Lanka.

Accreditation success

The School of Computing is very pleased to announce that it has achieved accreditation from BCS, The Chartered Institute for IT, for all 11 of its programmes submitted subject to minor conditions. The accreditation is expected to be confirmed later in 2014.





Head of School, **Peter Chalk**, thanks and congratulates **Dr Stan Zakrzewski** for leading the process and staff for their achievement .

Getting BCS accreditation means so much to the students and staff. The students will have graduated from a BCS accredited course which will enhance their employability and career prospects. They will be able to "fast track" membership of the BCS The Chartered Institute for IT, gain access to all the

resources the institute can offer and network with others with the same academic interests. For the School of Computing it means that we have received recognition from the BCS The Chartered Institute for IT for the programmes that we offer because they satisfy the BCS criteria for excellence.

Undergraduate Programmes	Postgraduate Programmes
BSc (Hons) Business Information Technology	MSc Computer Networking
BEng (Hons) Computer Networking	MSc Information Technology
BSc (Hons) Computer Science	MSc Information Technology (Distance Learning)
BSc (Hons) Computing	MSc Computer Forensics and IT Security
BSc (Hons) Computer Forensics and IT Security	MSc Software Development
	MSc Computer Science

BEng (Hons) Computer Networking and MSc Computer Networking will have a dual accreditation as these two programmes have already obtained IET accreditation. **They will be 1 of only 3 programmes in the country to have obtained dual recognition.**

On the 6th March the BCS Panel, consisting of:

Dr Alastair Irons (Chair) - University of Sunderland, Dr Phil Brooke - Teesside University, Dr Colin Smythe - Nettonics Ltd & Dunelm Service Ltd, Dr Adrian Jackson – formerly of Open University, arrived at the university in the morning and immediately set up camp.

The Panel initially met with 20 students behind closed doors. The feedback received from the Panel immediately after their meeting with the students was very complimentary. What particularly impressed them was the diversity of the students and that they all made a significant and interesting contribution to the discussions that took place.

The BCS Panel then met with senior staff of the school and asked about our quality assurance processes and procedures, the support given to students, how issues concerning employability and the world of work are integrated into the curriculum, the staffing profile within the school and how research activity influences programme design.

The Panel then met with undergraduate and postgraduate programme teams. All programme and module leaders made valuable contributions to matters relating to the theoretical underpinning of our modules, how we teach and assess professional, ethical and social issues , how we support our students on undergraduate and postgraduate projects, how we implement security controls on our DL programmes and what contributions we, as academic staff, have made to the production of software used by real clients in the Computing and IT industry. The questions were challenging and probing and the academic staff responded to them very well.

Student Horizon launches





The Dean, **Prof. Dominic Palmer-Brown** opened the first Student Horizon—a student-led conference on Learning, Employability and Research, which is set to become an annual or perhaps even biannual event. **Peter Chalk,** Associate Dean for Student Experience, Head of SoC, organised the day in the Graduate Centre on 21st March.

The conference speakers presented informative, personal and inspiring accounts of their experiences of business start-ups, PhD research, work-related learning, academic publishing, student societies, return to HE and research projects.

Panel sessions were chaired by Peter Chalk, Shara Lochun, Nick Gardiner along with students:









Speakers included Alex Wong, Jodine Williams, Gabriele Butkute, Jekaterina Rogaten, Andrei-Alexandru Puiu, Khurram Majeed, Obiageli Okpala, Daniel Parsa, Sean Sexton, Syed Amaris Hussain, Tahir Ozkan, Matt Collison, Najifa Islam, Colin Shore, Jocelyn Hall, Vicky Houchin, Courtney Thompson and Daniel Aarons.



Royal Institution Masterclasses 2014

The Faculty of Life Sciences and Computing hosted the 2014 Mathematics Masterclasses which are typically arranged in series of six Saturday classes, led by experts from academia and industry for keen and talented young people.

Masterclasses are designed to inspire and engage young people in the art and practice of mathematics. This year, the highly interactive sessions introduced students to a wide range of topics and applications in areas of mathematics that are not usually covered in the school curriculum.





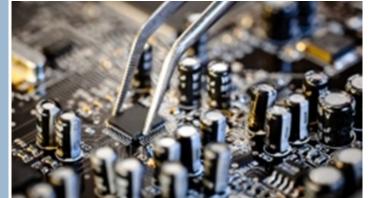
Three of the lectures in this series were presented by colleagues from the Mathematics group. On February 1st, **Dr. Zhanuyuan Hou** presented his lecture under the title 'Introduction to Dynamical Systems', followed by a practical session led by **Mehryar Adibpour. David Brown's** talk on March 1st was on Application of Matrices and the practical session was assisted by **Amir Khossousi.** The topic of the lecture by **Prof. Mikis Stasinopoulos** on March 15th was 'A Gentle Introduction to Statistical Modelling: Regression and Centiles' and **Dr Robert Rigby** assisted Mikis in the workshop. The Saturday morning sessions are ar-

ranged by Renzo Veschini, Summer Schools and Widening Participation Officer. These very well organized and highly successful sessions were enjoyed by around 100 students from schools across London.

International Workshop on Semiconductor Technology

The Centre for Communications Technology, based in the School of Computing, has organised an international MOS-AK Workshop on semiconductor technology and device modelling. This event will be held for the first time in the UK at London Metropolitan University.

This forum will enable practitioners in the field from industry and academia to discuss the frontiers of electron device modelling with emphasis on simulation-aware models. The content of the workshop will be beneficial for anyone who needs to learn what is really behind the integrated circuit simulation



in modern device models.

The event is endorsed and sponsored by leading microelectronic design and fabrication companies like Agilent, MOSIS and Tanner. The IET and EDA Solutions are also supporting the event in the UK. Participants include: Agilent, ELMOS, STM, Cascade, XMOD, Rohde & Schwarz, CEA/Leti, École Polytechnique Fédérale de Lausanne (EPFL), University of Cambridge, and University of Crete. Attendance to the workshop is FREE and delegates will have an opportunity to network.

Date: 28-29 March, 2014.

Venue: London Metropolitan University, North Campus, GC1-08

Focus on Learning and Teaching

Presented by Shara Lochun (FLSC Learning and Teaching Coordinator)

Look/Make/Learn: Visual Transformations in Learning, Teaching and Assessment

On January 28th the Association for Learning Development in HE (ALDinHE), hosted by LondonMet's CELT, presented a one-day conference on the subject of visual learning in higher education. The audience, including several colleagues from FLSC, were treated to presentations and practical activities including suggestions for the use of drawing, collage, and



cartoon story-boards in teaching learning and assessment. According to Associate Professor Digby Warren, Head of CELT, creative and visual practices can foster student reflection, creative thinking and insight.

One point made during the conference was that visual learning methods have an important role to play in every discipline, not just those such as art and design with which they are usually associated. For example, it was argued that draw-

ing has many potentially positive functions. Observational drawing, for instance, can help to sharpen perception, and can support the making of rapid and accurate records of key data in almost any situation. Equally, conceptual drawing and diagramming can help students to visualise ideas and processes, review and evaluate their understanding, and reinforce their memory for key information. To ex-

plore how drawing might be used in higher education across a range of disciplines, including science, technology, engineering, maths, social science, and health and social care, please explore the booklet produced by Learn Higher which can be found at http://

www.brighton.ac.uk/visuallearning/drawing











One highlight of the event for me was a presentation by Dr Debbie Holley & Dr Philip Howlett from



Anglia Ruskin University of their Visual Science Project. They demonstrated how groups of students had, in a single afternoon, created short stop-motion animations using modelling clay and free iPad software to explain ecological processes such as the water cycle.

If you would like to learn more about using visual practices in your learning, teaching and assessment please visit http://learning.londonmet.ac.uk/epacks/

<u>look make learn/</u> to see some of the presentations from and products of this conference. For more information about ALDinHE, visit http://www.aldinhe.ac.uk/

Focus on Learning and Teaching—contd.

Meet Chris O'Reilly - an untapped resource for FLSC?



One unexpected benefit of attending the Look / Make / Learn conference was connecting with Chris O'Reilly. Chris is an Educational Technologist working with ISS and is a University Teaching Fellow. He has been involved in the development of multimedia interactive learning materials (such as interactive videos learning activities, and quizzes) across a variety of topics. For example Chris has created a resource teaching students about health and safety issues: something which is of concern to all of us who have students engaged in lab-based or public-facing research. The potential for creating useful and engaging learning teaching and assess-

ment resources for use with students is extensive. Chris told me that in his experience some of the most effective resources involve students themselves as presenters (for example, a video entitled "Six steps To success: a student's

guide to successful study strategies"). However there are many approaches possible. For example, Chris has combined an audio recorded script about loan sharks with a speeded up film illustrating that script through a hand drawn cartoon in the style of RSA Animate series (http://www.thersa.org/events/rsaanimate). Don't worry Chris is happy to draw the cartoons!

Chris is keen to work with FLSC colleagues, and would love to talk to you about any ideas you have (c.oreilly@londonmet.ac.uk). To see some examples of the kind of projects that Chris has facilitated for other Faculties and Professional Service Departments, visit chrisoreilly.weebly.com/index.html, or scan the QR code below.



Get in touch

Do you have your own examples of innovation or best practice in learning, teaching and assessment in FLSC? Do you have any suggestions for learning and teaching events or articles that you would like to see? Share these with Shara at flsc-ltc@londonmet.ac.uk

Mental Health Q & A



Mehryar Adibpour (Academic Leader for Student Support) organised a Q and A session on issues relating to students' Mental Health on 5th March along with guest speaker Mr James Lewis (Mental Health Coordinator, Disability Dyslexia Service).

The Mental Health Q&A along with the comments and guidelines will be made available shortly, on MH related disclosure, risk and students of concern. In the meantime, queries in relation to any MH support issues can be directed to James (james.lewis@londonmet.ac.uk).

Royal Institution Engineering Masterclasses

Dr Saeed Taghizadeh (AGL, Communications Technology) reports on the Group's hosting of the Spring 2014 Royal Institution Engineering Masterclasses, at which 30 of the top students from London schools attended the University.



Three Masterclasses were held:

Saturday 1st March: **Designing and Building a Simple Radio Receiver** – Students designed and build a radio receiver using household items.

Saturday 8th March: **Robotic Engineering** – Students programmed a number of Robots to perform a variety of tasks from Object detection, Line Tracking, Accelerometer to light sensing.

Saturday 15th March: **Network Engineering** – Students designed and simulated a simple network.

The team involved in the above were: Dr. Saeed R Taghizadeh, Dr. H. Nabijou, Mr. M. Onadim, Mr. Harry Benetatos, Mr. Tarik Molalign, Mr. James King and Dr. Shahram Salekzamankhani. The feedback from students has been highly positive, which Saeed attributes to the hard work put in by the team to make the masterclasses so successful.



New Industrial Collaboration in Comms Tech



Dr. Shahram Salekzamankhani has successfully managed to provide a collaboration with one of the world's largest consulting organizations: Accenture UK. The first of these with 35 clients started on Monday 17th March providing support and consultancy for Accenture to run on-line Cisco, CCNA courses under London Met's Cisco Academy.

Daniel at the House of Commons

Daniel Amund, PhD student (supervised by Dr Hamid Ghoddusi) entered the SET competition with a poster entitled 'Can gastrointestinal stress impact on the functional properties of probiotic bacteria?', which he presented on 17th March at the House of Commons.

The SET for Britain is a poster competition for early stage researchers with cash prizes of up to £3000. http://www.setforbritain.org.uk/index.asp Below is an excerpt from the SET for Britain Press Release (4th March 2014):



Islington scientist takes his science to Parliament

Daniel's poster on research about evaluating the impact of stressful gastrointestinal conditions on some functional properties of probiotic bacteria will be judged against dozens of other scientists' research in the only national competition of its kind.

Daniel was shortlisted from hundreds of applicants to appear in Parliament. He first arrived in the UK in 2007, after winning a London Metropolitan University scholarship to study for his Master's degree in Food Science. He was subsequently awarded a Vice Chancellor's scholarship to commence his PhD studies, in 2010.

On presenting his science in Parliament, he said, "I enjoy taking opportunities to communicate my research and science in general. I feel privileged to be given the chance to communicate my work and represent my university in Parliament. I'm really looking forward to the experience."

Andrew Miller MP, Chairman of the Parliamentary and Scientific Committee, said, "This annual competition is an important date in the parliamentary calendar because it gives MPs an opportunity to speak to a wide range of the country's best young researchers.

"These early career engineers, mathematicians and scientists are the architects of our future and SET for Britain is politicians' best opportunity to meet them and understand their work."

Daniel's research has been entered into the Biological and Biomedical Sciences session of the competition, which will end in a gold, silver and bronze prize-giving ceremony.

Judged by leading academics, the gold medalist receives £3,000, while silver and bronze receive £2,000 and £1,000 respectively.

The Infinity Lecture Series

The Faculty's Infinity Lecture Series launches this month with the first of three lectures (one from each School) being delivered by mathematician Nino Folic (SoC), followed next month by a lecture on the future of medicine by Samir Nuseibeh.



Do you know what infinity is?

This lecture will centre on the contradictions and paradoxes of the concept of infinity. A historical background of the idea of infinity will be given from the ancient Greek philosophers up to Immanuel Kant. The main ideas behind Cantor's work will also be presented, followed by a consideration of the consequences of his work in relation to Philosophy.

Speaker: Nino Folic, Senior Lecturer in the School of Computing

Venue: Graduate Centre GC1-08 Date: Thursday 27th March 2014

Time: 6pm for 6.15pm start.

Duration: 1 hour

The future of medicine—where we are now and where we are going

Advances in medicine are historically made at a phenomenal rate and coupled with technological innovations across the board, what direction is medicine heading in now? We've come a long way since the advent of the first antibiotics - but what are the key advancements that will genuinely make an impact on our lives? From regenerative medicine to nanomedicine and from gene therapy to personalised medicine, what does the future have in store us in the field of medicine?

Speaker: Dr Samir Nuseibeh, Lecturer in the School of Human Sciences

Venue: Graduate Centre GC1-08 Date: Tuesday 29th April 2014 Time: 6pm for 6.15pm start.

Duration: 1 hour

IET's 'Present Around the World'







Femi Olushola (IET Representative)

IET's 'Present Around the World' competition was recently hosted by the faculty. The competition is for students, recent graduates, apprentices and young professionals. The competition is open to both IET members and non-members alike. Individual competitors gave a 10 minute presentation on a subject related to engineering and technology and answered questions posed by the audience.

The turn-out on the day, Wednesday 5^{th} February, was good despite the tube strike. Several students from various London Universities took part in the competition including four from London Met. The three judges included **Professor Bal Virdee, James King** and Femi Olushola who is an IET representative. The winner was Robert Woodward, a PhD student from Imperial College London, and the runner-up was Siva Dharmanlingam, a third year BSc Computer Networking and IT Security student from London Met. They were both awarded a cash prize. Robert Woodward will now progress to the next stage of the competition. Winners of the regional finals go on to compete in a global final and have a chance to win a cash prize of £1,000. We wish Robert Woodward every success!



Victoria Critchlow from IET visited London Met on 21 Feb 2014 to talk to some of our final year students in the Communication Technology subject area. She explained how IET can support them during the final year and after graduation. She talked about the requirements for professional registration to become a Chartered Engineer (CEng), the facilities our students will have access to after graduation like the IET online library, having access to advice from a dedicated IET mentor, etc. The after graduation support should enhance the employability opportunities of our students as well as ensure that they are the best equipped for the professional challenges ahead. London Met is an IET Academic Partner.

Informatics research on Air Quality in China



Dr. Yong Xue recently attended the Kick-off meeting of the FP7 Collaborative Project "Monitoring and Assessment of Regional air quality in China using space Observations, Project Of Long-term sino-european co-Operation ("MarcoPolo")" in KNMI, the Netherlands. Dr. Yong Xue will work on two work packages "WP2: Integration of aerosol data with AATST-retrieved aerosol and NASA MODIS-retrieved aerosol data" and "WP3: PM emission estimates from satellite data". This project will promote the University's reputation worldwide, and enhance the research atmosphere in the Informatics Research

Centre.

Leading the Informatics Research Centre, Yong and colleagues, Peiyuan Pan and Hassan Kazemian, have published two peer-reviewed journal papers in 2014. One of Yong's publications has been cited over 110 times worldwide. From 2014, the IRC has been awarded a European Space Agency project "ESA Climate Change Initiative - Aerosol_cci" together with sixteen other partners from European countries, which should start soon.



Research Inside Out

The Society of Life Sciences has organized its annual research event "Research Inside Out" for next month. Chair and event organizer, Gabriele Butkute, is particularly excited at the prospect of hosting a line-up of excellent speakers:

Roberta Freezor

"What it takes to be a PhD student?"

Dr Gary McLean (topic: a rhinovirus vaccine)

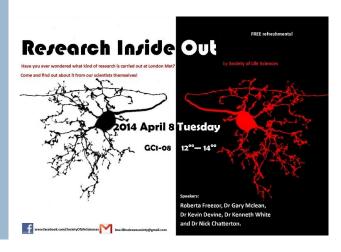
Dr Kenneth White

"Phyto-solutions for Diabetes: harnessing ancient remedies for an ancient problem"

Dr Kevin Devine

"Plasmodium Falciparum GDH inhibitors as potential new anti-malarials?"

Dr Nick Chatterton (topic: general health applications of nanomaterials)



Date: 8th April (Tuesday), 2014

Time: 12pm – 2pm Venue: GC1-08

Faculty Enterprise

A print brochure showcasing the Faculty's range of enterprise initiatives is ready for distribution. If you would like copies to send to your industry contacts, please collect from Preeti Patel T10-01c.



DECIBEL

"The KTP with London Met has opened up a new business opportunity. We have been able to create software that will enable us to compete and grow internally. Pre-launch we have had 300 expressions of interest from companies around the world. We are extremely grateful for London Met's on-going input and support" CEO, Decibel Insight

RELIEF

'Over the years
WoW have provided
us with invaluable
feedback, enabling
us to deliver and
improve upon
user journeys that
raise money to help
make the world of
difference to people
in the UK and
across Africa"
Donations & Special Projects
Product Owner, Comio Belief

Imperial College London

"We have used the Elemental Analysis Service at London Metropolitan University for over six years and have been impressed by the quality of the analysis and rapid turnaround time"

Researcher from Imperial College, London

ORACLE

"I was looking for a new career path but lacked the skills and the confidence to try something new - taking the short course helped." Oracle DBA short course participant

> POTS &CO

"Having food safety accreditation in a food business is a pre-requisite for growth. The London Metropolitan University helped Pots & Co to develop food safety and quality management systems that led to an expedited SALSA qualification, which was key to getting a wider listing for Pots & Co at Waitrose"

■Lloyds TSB

"We have always believed in the quality of work and services that London Met and its students offer to our institution. The academics have demonstrated extensive knowledge which will make an advantageous contribution to the Bank's services using advanced technologies"

Head of Digital Transformation Fraud and Security Lloyds TSB



Faculty Enterprise Development

Associate Professor Yanguo Jing (Academic Leader Faculty Enterprise Development) reports:

HEA workshop on "Developing Student-Run Software Houses"

On 12 March 2014, the Faculty and the WOW Agency hosted a HEA workshop on "Developing Student-Run Software Houses". The Dean of the Faculty – **Prof. Dominic Palmer-Brown** opened the workshop and welcomed the delegates from 20 HE institutions around the country.

Associate Professor **Dr Yanguo Jing** gave a presentation on the Faculty's experience in running the WOW agency and how it has impacted our student employability, industry collaboration and enterprise devel-









opment. The presentation generated a lively discussion. Many university delegates have expressed an interest in learning about our experience of running such an agency. Following the presentations in the morning session, a lively group discussion session took place with the aid of Lego and flip charts where issues such as the challenges and future direction of running student-run software

houses were explored.



Elemental Analysis Services

Mr. Stephen Boyer and his colleagues from the Faculty are currently operating an elemental analysis service for the determination of carbon, hydrogen, and nitrogen (%CHN analysis). It is equipped with a modern Carlo Erba Flash 2000 Elemental Analyser and highly qualified staff. The services have attracted clients from over 40 universities and businesses from USA, Holland, Cyprus, Australia, France, Denmark, New Zealand and the UK. Its clients include University of St Andrews, University of Oxford, and Imperial College London, and so on. Monash University from Australia said: "The microanalytical service provided by London Metropolitan University is the best I have encountered. If I courier samples from Australia, I



typically have the results by email within 5 days. The cost of the service is highly competitive and the results I obtain are excellent. I wouldn't use any other service."