Biomed Benchmark
News from the School of Biomedical Sciences
June 2011, Issue 14

New Director of the Centre for Human Anatomy Education

As the new director of the Monash Centre for Human Anatomy Education, Professor Paul McMenamin recognises that the role of the academic as a source of knowledge is continuously being encroached upon by technology. The ease with which information can be accessed via the Internet means that modern teaching techniques must adapt to provide students with more engaging forms of learning unavailable to them on their own.

Professor Paul McMenamin

"I believe in the philosophy that we as academics are no longer the sole custodians of knowledge, and I see our role as facilitating learning as opposed to professing information," says Professor McMenamin.

Since arriving in February last year, one of Professor McMenamin's strategies to increase students' interest in anatomy has been to emphasise the evolutionary story which underpins it:

"I like to get over to my students that anatomy doesn't just sit in a little vacuum, we are like we are for a reason and it's to do with all the ancestry that we can drag back right through to other primates, amphibians and fish."

Throughout his career, Professor McMenamin has also explored the interactive possibilities of teaching anatomy. Having implemented his own unique method of getting students to locate anatomical structures, such as veins and organs, using body paint, Professor McMenamin has set his sights on more ambitious goals, such as the development of three dimensional cadavers.

In addition to students' enjoyment of the subject, Professor McMenamin is also conscious of the practical importance of anatomy education to future health professionals.

"Anatomy is one of the most applicable subjects to a student's future as a doctor or physiotherapist, or whatever allied health profession they enter. But I think we need to integrate and make anatomy more relevant, so increase students' exposure to imaging techniques and clinical skills."

Having arrived at Monash after 23 years at the University of Western Australia, Professor McMenamin says he is committed to the long-term development of anatomy teaching within the university.

"I think anatomy teaching has been a bit neglected in the past, so I see it as a challenge to create a learning environment here where students want to actually study and spend their valuable time."

The newly refurbished foyer of the Centre for Human Anatomy Education

The refurbished teaching laboratory space including glass fronted cabinets, display pots, specimens, student instruction tables

MONASH University
Medicine, Nursing and Health Sciences

School Student Services Staff:

Joanne Waring

Joanne Waring has spent the majority of her working life advising and guiding students on the best course of action in a given academic situation. From her early experience managing the Monash undergraduate physiology labs to teaching nursing students at Deakin University, Joanne's career has revolved around solving problems for university students in almost every imaginable context. Now the student services manager for the School of Biomedical Sciences, Joanne says it is still the contact with students which, amongst all her administrative duties, sustains her interest in work:

"In this role we get to see the various students from the beginning of their course through to graduation, and it's a real pleasure when we see students doing well who might have had difficulties at one point. For me, I don't think I could spend prolonged periods of time stuck in an office without human contact."

However, while the potential to help students is one of the gratifying aspects of Joanne's work, the process itself can often be a turbulent one.

"There's many things that compete for your attention and you try to prioritise the most urgent. Of course the person trying to get the issue resolved thinks their situation is the most immediate so sometimes the challenge is to keep everybody at least somewhat content about how it's progressing."

Exerting this pacifying influence over students while still upholding university policy is a balancing act Joanne says she has had to adapt to while taking on more senior roles within the university.

"When I first began working in the physiology undergrad labs I took a very tolerant attitude with students and was at times probably taken advantage of. But at some point you have to learn that there are things we've got a bit of leeway with and there's things where we don't."

Now accustomed to her more disciplinarian duties, Joanne says her enjoyment in the job means she can't see herself moving any time soon.

> " I like my role because I work with a good group and have variety in what I do. We try to improve what we provide to the students with the resources that we have and from that perspective the job changes all the time."

Natalie Seng

Without really intending it, Natalie Seng thinks she has found her professional niche as course administrator of the School of Biomedical Sciences. After completing a Science degree at the University of Melbourne and an Honours year at the Monash Biochemistry department, Natalie admits

"I didn't really know what I wanted to do and applied for jobs at Monash and got this one."

Part of the reason for Natalie's uncertainty at the time was her involvement in Taekwondo which she begun during the second year of her undergraduate degree.

"My cousin was a student at Monash and asked me to come and have a go at it and I fell in love with it. I really liked the competitive fighting aspects of it, probably the violent person in me."

During her honours year, Natalie was training almost everyday of the week in preparation for selection to the Australian national team heading to the 2005 world championships in Spain. Unfortunately, during the trials she badly injured her knee requiring a knee reconstruction.

"That was the end of my sporting career, but you know these things happen. My knee's fine now but I think I'm too old for it now, the guys coming up are like 13, 14 year olds, it's no fun getting beat up by kids that age."

Despite this change in plans, Natalie finds herself well suited to her current position in the SOBS office.

> " I really enjoy my job and I think I've found that I'm an administrator, I like to colour code spread sheets and tabulate and all that stuff."

In her role, Natalie is responsible for all administrative aspects of the Bachelor and Masters degrees within the Department of Medical Imaging and Radiation Sciences. Speaking on the challenges of the job Natalie says "Dealing with people who don't get into courses and explaining to them why they didn't can be difficult, as well as chasing applications. In general though all the staff in the office get along so well that it's a really good work environment, I'm not sure I'd enjoy it if it wasn't for them."

Outside of work, Natalie got married last year and has recently begun renovating her first house with her husband.

Leanne Sultana

As student services officer at the Biomedical Science front office, Leanne Sultana is the first point of call for all student enquires regarding the BMS and Radiography courses, whether it be by phone or in person.

It's a role which obviously requires an extremely broad knowledge of course structure and protocol, which Leanne, after a year in the job, says she's only just fully grasping.

"Working in a similar position at Victoria University before this, it was the same principles but here the course is more refined and specialised. Especially not coming from a science background at all it's been quite challenging but I'm starting to connect the dots now."

However, despite her recent University positions, most of Leanne's working life has been spent in the music industry. After leaving school, Leanne got a job working for a small record company called 'Stomp', which was involved in importing and distributing music. "I went straight into working in music because at the time that was what I was really interested in and I thought my career would be working at a record company. It turns out that it really wasn't what I wanted to do, and especially now with the music industry is basically dying it's really hard to work your way to a good job."

Nowadays, Leanne's aspirations reside much more outside of her work, in travelling and photography.

"I'm incredibly passionate about travelling, it's the thing that I live for to be honest, so whenever I've got some spare time or money I will get up and go. I just got back from south India and it was fabulous."

Leanne's other interest, photography, goes hand in hand with her travelling.

Evidence of this can be found in the Lonely Planet guide to Vietnam which recently accepted one of Leanne's photos taken from her travels there.

> " I take loads of photos while travelling, and I do a bit of band photography as well. It's probably my main hobby and it's always been one of the things I suppose I've had a talent for."

Leanne has also won a number of photography awards, including the Ilford State Award. Looking to the future, Leanne hopes to maintain both her hobbies on a planned trip to Europe in 2012.

New Lecturer: Colin McHenry

Whether presenting it as subject matter to students or researching its various properties, Dr Colin McHenry believes anatomy should always be viewed in terms of the historical story it represents. As a newly appointed lecturer in the Monash Department of Anatomy it is this evolutionary focus which has directed Dr McHenry's career in the field.

"There's this historical component to anatomy which is the relationship between structure and function. It's something people have talked about forever, Aristotle, Darwin, because as soon as you look at biology you realise that different animals, and plants, look the way they do because they live the way they do."

Dr McHenry's research applies this relationship between structure and function by producing three dimensional scans of fossilised anatomical structures. By testing the functional strength of these structures using engineering programs, an idea of how the animal once lived can be grasped. Such information about the intended, evolved function of biological organisms has direct relevance to modern medicine says Dr McHenry.

"The human animal evolved to live in small groups of one or two hundred people, move a lot every day, and eat a range of different food types. So when you feed it McDonalds and surround it with strangers and stresses, bad things are going to happen. Doctor's are constantly confronted with the fact that the human body is just not quite working properly so it's going to help if you understand what the animal was built to do."

Appreciating this evolutionary context is also of great benefit in teaching situations, says Dr McHenry, as it integrates individual biological facts into a cohesive story.

"So often medical anatomy is taught with no context at all, you're just giving students a load of facts which is just so inefficient as well as not being a lot of fun, yet the evolutionary approach is a fantastic story which allows you to hang so much information off it."

Having arrived from Newcastle University this February, Dr McHenry says that one of the reasons for his move was Monash's willingness to incorporate this evolutionary approach into its teaching.

"I know we're all sort of individualists, scientists, but it's great fun working as a larger team who are all bringing different expertise together towards the same fundamental questions."

Transition Program

On the 17 February, 160 Biomedical Science students attended the Transition Program. This day focused on introducing students to the campus, university life and new friends in order to facilitate their transition from secondary school. Many of the activities involve students working as teams to solve a common problem, and in doing so, encourage new friendships to form.

The overall feedback from the students was very positive. Our survey revealed an apparent decrease in the anxiety felt towards starting university, an increase in the number of students thinking they would be able to organise and work effectively in study groups and an increased understanding of university procedures (including where to seek assistance from if they encounter problems). When asked whether they were happy to have been accepted into the Bachelor of Biomedical Science, 93 per cent of them agreed or strongly agreed that they were. A selection of feedback from students is listed below.

- Today was fun. It's a great opportunity for students to meet new people and make some friends when they don't have any. Really easy to make new friends as the barriers are broken down. Keep doing what you are doing – it's great! I enjoyed today had a great feel of university life. Thank you!
- Really fun and enjoyable.
- It was awesome!
- Amazing! Had loads of fun, had great leaders and met great people!
- It was really useful as I was able to meet people in the course and ask questions.
- Overall the day was organised well and was great fun for the students I believe.
- Great for meeting people, orientation was a bit boring but that was probably because our group was last and thus tired. Overall it was an extremely successful day!

Special thanks to Jane Sun for organising this fabulous day, our undergraduate and postgraduate student volunteers and to Yvonne Hodgson for her support in the lead-up to this event.

Students partaking in team orientated Transition Program activities

Contact us:

School of Biomedical Sciences, Ground Floor, Building 77, Monash University, Clayton, Victoria 3800

Editor/Writer: Thomas Dillane
Telephone: +61 3 9902 9407
Email: *Biomed.Communication@med.monash.edu.au*
Website: **www.med.monash.edu.au/sobs**