**Details**

**Date:** Tuesday June 18th 2013  
**Time:** Registration opens at 9.30am. Forum runs 10am - 4pm.  
**Location:** Royal Society of Medicine, 1 Wimpole St, W1G 0AE London  
**Web:** http://bioscience-nursing-2013.eventbrite.co.uk/  
**Phone or Email:** Penny at 01865 332 050 or p.sullivan@adinstruments.com

**Confirmed Talks**

- **Making Formative Testing Count: The Use of Mastering A and P to Enhance the Teaching and Learning of Anatomy & Physiology in Pre-Registration Nursing Programmes**  
  Penny Goacher, Lecturer, School of Nursing Sciences, University of East Anglia

- **Sharing Content: A Collaborative Approach to Adapting Open Educational Resource**  
  Damion McCormick, University of Nottingham

- **Integrating the Student's Own Data, Real Patient Cases and Simulator Scenarios to Enhance Student Understanding and Learning**  
  Tony Macknight, ADInstruments

- **Biosciences: A Chronology of Issues and a Review of Interventions**  
  Andrew McVicar and Sharon Andrew, Anglia Ruskin University

- **Introducing LabTutor to a Nursing Curriculum**  
  Amelia Swift, University of Birmingham

*Please note the order of these talks may change.*

**Abstracts**

**Making Formative Testing Count: The Use of Mastering A and P to Enhance the Teaching and Learning of Anatomy & Physiology in Pre-Registration Nursing Programmes**  
*Penny Goacher, School of Nursing Sciences, University of East Anglia, Norwich*

Teaching anatomy & physiology (A&P) to large groups of nursing students is challenging, but assessing what students have learnt is even more so. With so many different elements combining to form a nursing programme, there is a risk of fragmented and over assessment. Integrated assessments may provide opportunities for students to apply A&P theory to practice, but how well do these really test A&P knowledge and understanding?

At the UEA, we have piloted the use of regular formative testing of A&P, to consolidate learning of the subject. Engaging students in formative assessments can be problematic, as students prefer to spend time and energy on summative assessments that they have to pass in order to qualify.

This presentation provides feedback from this pilot, outlining how we have used a web based programme to overcome such problems, been able to provide students and their personal advisors with feedback on their A&P learning and used this to change a summative assessment.
Sharing Content: A Collaborative Approach to Adapting Open Educational Resource
Dr Damion McCormick, School of Nursing, Midwifery and Physiotherapy, University of Nottingham

The open educational resource approach to e-learning provision has proved successful within nurse education partly through its ability to empower a wide range of individuals to produce and deliver personalised on-line materials. Nurse education exemplifies the need for a student-centred approach to learning. Student nurses tend to study in large cohorts of mixed ability, whilst the wide course entry gates and high percentage of mature students ensures a diverse range of educational background. Open educational resources have been integrated into many areas of the pre and post-registration programmes over a number of years to support biosciences. They are being deployed in a range of blended learning contexts, including class-based work, self-directed learning and online assessments. Areas where open educational resources are being used effectively include non-medical prescribing, biosciences and clinical skills. Within this presentation we share our experiences in developing and adapting existing open educational resources.

Integrating the Student’s Own Data, Real Patient Cases and Simulator Scenarios to Enhance Student Understanding and Learning
Prof Tony Macknight, Consultant, ADInstruments

A challenge in all health science education is convincing students that it’s important they understand the basic sciences. One way to achieve this is to integrate the study of these sciences with their clinical applications in a way that promotes retention and future utilisation of the knowledge. This principle provides the basis for the design of LabTutor Learning Modules. Patients form the heart of the modules, and students start each module by viewing a short video clip of a patient. The patient’s problems are then used to identify and present the relevant basic sciences in one or more short tutorials. The Hands-On component in each Learning Module empowers students with an understanding of the basic principles underlying common clinical measurements – e.g. blood pressure, pulse, ECGs, respiratory rate and peak flow measurements, etc. With modern, computer-based equipment, students can make these measurements themselves on each other as part of hands-on sessions, during which common errors and pitfalls can be identified and discussed. Having understood the basic science and the disturbances of which underlie the patient’s condition, the students can now ‘meet’ the patient in detail and learn how the illness is assessed and how the patient’s problems can be managed. They also meet the patient’s relatives and a variety of care givers. The use of manikins and simulations can provide a further way that the basic sciences can be shown to be relevant. Educators can use the patient that the students are studying and provide a simulation of the patient’s situation. For example, one of the patients featured in LabTutor Learning Modules, Mrs. M, has COPD. She is admitted periodically with acute exacerbations of her condition. Such an admission can be simulated using data actually obtained from Mrs M, and the students can explore aspects of the presentation and management of her acute condition.

Biosciences: A Chronology of Issues and a Review of Interventions
Dr Andrew McVicar, Anglia Ruskin University, Chelmsford
Prof Sharon Andrew, Anglia Ruskin University, Chelmsford

The bioscience ‘problem’ for student nurses has been with us for at least 30 years. Evaluation studies have provided a list of potential factors ranging from the adequacy of the lecturing staff and the background of students to a variety of issues broadly related to curriculum delivery within a packed pre-registration programme. During that time pre-registration education in the UK has entered Higher Education (1989) initially with the ‘Project 2000 (Dip HE)’ initiative, and now (2012) as a degree programme. It is disappointing that the biosciences remain an issue for student learning despite almost 25 years of nurse pre-registration conducted in higher education, with resolution of the issue still contentious amongst educationalists. This presentation provides a brief overview of published studies to identify how, or if, issues have changed in the UK, compared with those in countries where graduate nursing education is more established, to identify what lessons can be learned. Intervening years have seen initiatives towards resolving the issues and we will also present the findings from an integrated literature review of curriculum interventions published from 1990-2012 which were designed to support or even replace classroom bioscience teaching. We will then introduce a current initiative we are piloting using reusable learning objects to support student self-efficacy in science.
Introducing LabTutor to a Nursing Curriculum  
Dr Amelia Swift, University of Birmingham

Research and anecdotal evidence supports the contention that nurses’ knowledge of anatomy and physiology is not as good as it needs to be to support their role. Like many other education providers, the University of Birmingham Department of Nursing has tried a number of different strategies to improve biosciences education. The latest addition to a range of activities includes the use of LabTutor. This presentation represents the lessons we learned in our first year of use and will provide us with a platform to audit the use of this system so that we can make better use of it, across a wider number of health care disciplines in the future.