Present: Prof Ross Barnard, Mr Daniel De Voss, Mr Adrian English, Prof Mary Garson (in the chair), Miss Katelin Haynes, Mr Vinay Kakamani Sundar Raju, Mr Alexander Metcalf, Assoc Prof Joe Rothnagel, Mr Mark Starkey (minutes).

Apologies: Miss Ashleigh Croucher, Miss Elizabeth Garrard, Prof Alastair McEwan, Mr David Mogg Dr Simon Worrall. (As chairperson Miss Croucher was not present, members agreed that Prof Garson should chair the meeting.)

Absent: Ms Kavya Thelakkat. (Prof Barnard advised that he thought that Ms Thelakkat had graduated, meaning that there was a vacancy for a postgraduate Biotechnology representative on the Committee.)

Minutes: Minutes of the meeting held 21 April 2009, having been circulated, were taken as read and were confirmed.

Business arising out of the minutes:

Assessment Practices

During discussion of this item at meeting 1-09, Joe Rothnagel had asked student members of the Committee to consider whether the weighting of assessment in courses was appropriate and to consult with fellow students about this.

Joe said that he had felt that the focus of concern at the last meeting had been on the number of assessment items and their scheduling. He said that the School’s Teaching & Learning Committee would be asking course coordinators to look at the number of assessment items in their courses with a view to reducing that number from 2010, and at least the number of items due in the last couple of weeks of semester.

Alex Metcalf and Katelin Haynes said they had found that the assessment in courses they were taking in second semester was appropriately spaced. Katelin added that the School could be proactive and look at common course combinations and coordinate the spread of assessment in those combinations.

Mary Garson said that the window in which to set due dates for items of continuous assessment in most courses was from about Week 5 to Week 13. Any significant assessment prior to Week 5 was difficult, as students needed time to assimilate learning.

Ross Barnard noted that in some of his courses, students could start work earlier on assignments that were due late in the semester, but some students chose to do most of the work close to the due date.

Development of a Stronger Cohort Experience for Students taking the BSc

Members were advised that the idea of casual, self-directed learning spaces for later year undergraduates and honours students based on groupings of majors had not progressed to any firm plans. The demand for building space was constant and priorities changed regularly as research groups expanded and contracted depending on competitive funding success.

Katelin Haynes suggested that if dedicated spaces beyond the Chemistry Podium and Science Learning Centre could not be provided, the next best thing would be discipline- or major-specific events (such as BBQs) which the School could facilitate but students could contribute to the cost of. Staff members observed that the student societies SUSS and Dead Chemists Society had arranged such events in the past but were no longer active.

Mary Garson said that the School would be willing to supply BBQ equipment if students organised the events.

Although Biotechnology students tended to have a greater cohort experience than BSc students, it was suggested that an event for postgraduate Biotechnology students could include postgraduate Molecular Biology students.
Identification of Career Paths for BSc Students

Members were referred to an extract of the minutes of the SCMB Industry Advisory Board (IAB) which had met in May and discussed the topics of work experience and career paths for BSc students.

External members of the IAB had indicated that they placed value on student placements/internships, but that it was not only about the student gaining experience. Businesses wanted people who would be dexterous in the lab and would provide some return, particularly in times of economic downturn. A short-term appointment was likely to be of more use to employers where it was part of a screening process for upcoming vacancies (eg, as part of a graduate recruitment program). The more flexible academic programs were, the more likely meaningful placements could take place – the Engineering model of granting credit for project courses completed with industry over a semester or year was something the Science Board of Studies might consider.

IAB members had felt that it was important to present students with a broad range of career role models, so that they could appreciate that their qualifications could lead in due course to many different roles. A lot of the careers of the future did not yet exist, so the ability to continue learning after graduation and be flexible were as important as the core science skills.

It had been agreed that whilst exemplar graduate testimonials were useful in building aspirations, quantitative data on typical first jobs and earnings was also important information to impart to prospective and current students. The School was attempting to compile such data.

The IAB had noted that some industry groups, such as AusBiotech, offered resources and events to assist students identify career paths, and the School should tap into these resources as well. Ross Barnard had mentioned that Biotechnology program students were made aware of AusBiotech’s activities.

Vinay Kakamani Sundar Raju said that it was unclear to some students in the School’s postgraduate coursework programs what their opportunities after graduation were. Ross Barnard offered to provide advice in this regard to students who made an appointment to see him. Students could also attend an upcoming AusBiotech careers night. [Subsequent to the meeting, Katelin Haynes circulated to members by email information about this event.]

1. Student Company Programs:

Further to the discussion on career paths for students, Adrian English introduced the topic of student companies, such as the Young Achievement Australia (YAA) Biotechnology Entrepreneur Program (BEP). Students who participate in the program set up a company and develop a biotechnology or nanotechnology themed product or service. They develop hands-on commercialisation skills and business experience, selling shares to the public to raise start-up capital and dealing with market research, patent and sales issues.

Adrian said that the YAA dealt with insurance and liability matters and had an ASIC exemption for the raising of limited capital for student companies without all the usual complex legal requirements. Companies were liquidated at the end of the academic year. Student participation was extra-curricular and involved 2 hours a week for 24 weeks from March to October.

Ross Barnard felt that students should acquire particular skills before embarking on a YAA program. BBiotech students should complete at least a particular second year, second semester course. Ross added that he would prefer to see students do an industry placement (available for credit via BIOC3007 and its postgraduate equivalent).

Ross said that the BEP could conceivably be integrated into BIOC3004, but this was complicated by the fact that the BEP was a whole-year exercise.
1. Student Company Programs: (cont’d)

Vinay Kakamani Sundar Raju suggested that a project shell could exist that different cohorts of students continued to work within from one year to the next.

Mary Garson suggested that the School could assist students wishing to take the BEP by providing academic mentors who assist with development of business ideas.

Adrian was thanked for bringing the program to the attention of the Committee.

Mary asked if SCMB students were aware of internship opportunities. One member said that they were aware that they could seek an internship themselves but were unaware of any assistance provided by the School. Ross Barnard foreshadowed that a new academic appointment in Biotechnology would coordinate placements in Biotech programs. Mary added that the School had a relationship with Kelly Scientific to place students, particular chemists, in industry, and that this was mentioned on the School’s website. It was agreed that students needed to be aware of such opportunities in first year so that they could plan for them.

Mary suggested that the Teaching & Learning Committee (TLC) look at the topic of industry experience for SCMB students generally. Students with industry placement experience (Biotechnology and Kelly Scientific) could be invited to the TLC to speak about their experience.

2. Peer Assisted Study Sessions (PASS):

Members were advised that an informal review of PASS was being undertaken by the School. PASS provides voluntary tutorials to first year Science students in particular courses, facilitated by later year students.

Daniel De Voss and Alex Metcalf said that they had been PASS leaders. Daniel, who also had experience as a PASS tutor in the School of Economics, said that the academic staff who coordinate the program, Valda Miller and Elwyn Oldfield, make a great contribution and that a good number of students are employed as tutors. He felt that one efficiency that might be considered is the employment of fewer tutors to deliver the same number of Chemistry tutorials in a given week, as there was significant preparation for each weekly session. A tutor could repeat a session across a week, provided they were available to do so.

Daniel and Alex reported that the sessions were generally unstructured – leaders were expected to know the lecture content (and were encouraged to attend the lectures in their own time) – with the students attending the session indicating to the leaders what they needed. Attendances varied with 15-40 students per session. Attendances increased when assessment items such as CMTs were due, but there was always a solid core of students. Data on the kind of students who attend and measurement of the impact on those students was available from the PASS office.

In response to a question from Mary of what motivates PASS leaders, Daniel and Alex said that the pay is good, but that there is also reward in assisting fellow students and reinforcing one’s own learning.

Members with experience as PASS leaders or attendees said that they would be concerned if PASS were to be discontinued. It was felt that the frequency of the sessions was right and that reducing them to, say, fortnightly would be difficult – leaders would be trying to deal with the content of six hours of lectures instead of three, and the lectures would get too far ahead.

Adrian English said that his experience as a PASS attendee was there was variability in the quality of facilitation – some sessions were better structured than others. In relation to training, Daniel reported that a TEDI-facilitated session on teaching and learning practice was offered to PASS leaders at the start of each year.

Student members of the Committee agreed that there could be scope for more direction to be provided on what a given PASS session should cover and scope to provide feedback to leaders on whether they were on the right track.
3. IGE M Competition and Conference Opportunities:

Katelin Haynes reported that she was a member of a UQ team competing in the International Genetically Engineered Machine (iGEM) competition. Sponsorship was coming from a number of quarters in UQ and the team was being supported by the School of Biomedical Sciences, even though this year’s project was microbiology-based. She encouraged the School of Chemistry & Molecular Biosciences to support its students participating in the competition in future.

Mary added that requests sometimes came from the scientific academies to nominate students for sponsored places at conferences, but that it was difficult to know how best to identify such students in a fair way. An email to all students was often not appropriate. Mary suggested that circulating such opportunities to the School’s Student Consultative Committees for members to pass on to their networks might be a suitable solution.

Ross Barnard pointed out that two Biotechnology students in 2007 had been selected as the sole Australian nominees to attend a Novartis Biotechnology leadership camp in Japan. The camp was offered annually in a different country. Applications for 2009 had closed, but the opportunity should be promoted next year.

4. Undergraduate Analytical Chemistry Teaching:

Daniel De Voss said that there was concern amongst some students that with the demise of courses CHEM2001 and CHEM3009, analytical chemistry was disappearing from the Chemistry majors. He was unsure of the extent to which practical skills in analytical chemistry were being integrated into the new lab-based courses such as CHEM2054.

Mary Garson replied that the review of the BSc had required a reduction in the number of course offerings and that a shift to lab-based courses, where the intent was to teach practical skills, was designed to improve the employability of graduates. The new second and third year curriculum would be reviewed once the courses had been offered once or twice, to ensure the objectives were being met. The Chemistry majors were also subject to accreditation by the Royal Australian Chemical Institute.

It was acknowledged that all Chemistry courses had an analytical component, but that it was possible that employers might like to see a course entitled ‘Analytical Chemistry’ on a student’s Studies Report.

5. Date of next meeting:

Members agreed to schedule a meeting for mid-October.