Some reflections on Monash Micro - by an old man. Solly Faine

The professor was well known for his loud voice and abrasive manner. He thumped the table heavily and declaimed dramatically “Vice Chancellor, this is a very difficult decision, we need the wisdom of a Solomon and let’s face it, there’s not one among us”. So I put up my hand and said “yes there is, I am here”. Pomposity deflated. Welcome to the East Meeting Room at Monash Admin in the 1970s, the scene of innumerable committee meetings that absorbed and eroded the time of professors. It was important to be there to try to prevent decisions adversely affecting the department and to be aware of what was going on in the University. Mostly the parameters of formula funding meant that everything – time, money, resources, staff, space - depended on size of department so the game plan had to be to protect our allocation of teaching time and even our students from being stolen- perhaps I mean diverted elsewhere. Reasons included we should not be teaching abstruse stuff like viral replication to medical students, there was no medical application for all that biochemical (and later, molecular) information, (just as in the 1940s neurophysiology and enzymes were an unnecessary and useless imposition on medical students). Until AIDS appeared and the same clinical departments became instant experts on retroviral replication.

I took up appointment as Professor of Microbiology in February 1968, and retired at the end of 1991, having been head of Department for almost all of the 24 years. Now that I’ve been out of the Department nearly as long as I was in it I look back on the early days 45 years ago with inevitably selective and perhaps distorted memory.

University rules then insisted that the chair of a department must be a professor. If there was only one of them, the usual case, he or she had to be chairman, potentially a life sentence.

My job, I believed, was to provide as best I could manage, the facilities and financial underpinning for the teaching and research activities of the staff and students. This role included selecting the best staff available in all categories, always subject to the Matheson Doctrine that a good vacancy is better that a bad appointment. But vacancies, however good, can’t teach. There were many years when academic staff members were obliged to stretch their time teaching undergraduates. Their sometimes reluctant cooperation was rewarded in the quality of the product.

I have a rather patchy recollection of my first visit to the Department. It was probably about August 1963, the Year of the Mud, when I was passing through Melbourne and went to Clayton to meet Barrie Marmion; Tom McAvan, the manager, was the other staff member. I can’t remember how I got there but the department was a room in the Menzies building surrounded by a sea of deep clay mud. I heard about the innovative and interesting curriculum that was being planned and the prospective Monash University Hospital. Tom drove me back to civilization.

In July 1967 I was in Melbourne at the time when Barrie announced his impending departure for Edinburgh that would leave a vacancy in his place at Monash. By now the department was in its premises in the new medical school at Alfred Hospital. On a short visit then Barrie introduced me to an enthusiastic staff and excellent facilities.

After I had accepted the appointment, the Dean, Rod Andrew, invited me to attend a weekend review of the medical course following its first graduation towards the end of the year. There I met a number of future professorial colleagues and received indoctrination from Barrie about the bureaucracy and administrative system. What was it that had attracted me? A brand-new department, with all mod. cons, only slightly used; an enthusiastic group of colleagues excited about an innovative medical curriculum, different from the other place; a forthcoming Campus Hospital that would provide professional credibility for our department by integrating with the diagnostic department; the residential programme for medical students at Fairfield Hospital for Infectious Diseases; a nascent BSc course in Micro., with a staff very well qualified to run it and include virology as well as bacteriology. Student teaching facilities were very good, with excellent purpose built preparation and service areas, and a whole microscope available for every student- monocular, of course, but replaced a few years later with binocular microscopes.

During the time I was there, the department evolved with the Discipline, through major philosophical changes in Microbiology. Initially knowledge was descriptive, then analytical and biochemical, and then all sections moved rapidly into molecular microbiology. The changes were not greeted with universal joy, especially for teaching medical students. We depended on hospital

lab staff to supplement classroom teachers, and for some of them the new curriculum changes were unfamiliar and threatening.

So what really happened? Once some of the founding professors and their driving force left, and second clinical chairs and replacements were filled, some of the new incumbents were nervous about not running a conventional course they had grown up with, so they changed Monash to look more like everywhere. Everywhere was changing to follow the lead from Monash. The Campus Hospital was abandoned following political pressure within the University- "Monash will be known for its Hospital and Medical Faculty, not its Science" screamed the founding Science profs. Little did they know how true that would be. For them biology was the dreaded Medicine in disguise, and any biological science student was really a failed medical student and thus beneath contempt. And State Government politics and antipathy to Monash University from influential sources were the final blows. Fairfield Hospital was closed a few years later also succumbing to pressures in medical and State politics. The science course was not stillborn but was almost stifled by jealousy from another department. It took a visit from the vice-chancellor himself to clear it up, after which the course thrived to produce graduates I'm extremely proud of. It has been a great joy to see them develop in their careers.

The full momentum of research had not yet developed when I arrived. Three graduate students well into their PhD work came with me, transferring to Monash degrees. The big ground-breaking problem was a BMedSc student. Which University's degree would he get? Who would be paying for him? Which University would get the dollars for his sustenance? Not insoluble, but for the administrators it seemed, again quoting Louis Matheson, like the thin end of a white elephant.

It was a major policy decision not to encourage a monoclonal department where everyone worked in the same field. Each senior academic staff had his or her specialty and research group, and was responsible for the requisite grant funding. Inevitably some were more successful than others but it provided the necessary breadth of expertise for undergraduate teaching and sharing of that expertise in research cooperation. I can recall only one laboratory infection, but it proved Koch's postulates for Hepatitis A virus, a serendipitous proof of viral identity.

The Micro building (Building 53), opened in 1982, was the culmination of years of repeated submissions for premises at Clayton. Early, about 1969 or 1970 a suggestion that we share a new building with Genetics, whose interests were closely allied to ours, was not supported in Canberra. Late in 1978, when I was at a conference in Munich, I was woken in the middle of the night by a phone call with the news that new building had been approved. Planning had to be completed within a few months. The position and general shape were dictated by the University, but that did not protect me from a humiliating session of bullying at a later meeting of the Building Committee comprising mainly professors from the science faculty who just didn't want our building adjacent to theirs, in "their" territory. It was at that and similar meetings that led me to "Prejudice protects itself from Reason".

Once there was agreement about teaching, service and research areas, and the regulation spaces were calculated, the next step was to develop a plan, which I did with paper cut-outs of the areas laid on the floor of my office. Despite the potential for strong disagreement planning was civil, as I recall it, and the building was generally successful. A major omission was air-conditioning, approved by Canberra in those days only for instrument rooms and animal houses, provided the animals were not two-legged humans. The summer of the first months after we moved in was one of the hottest. The temperature in my lab was 45°C late in the afternoon one day. I lost several cultures. The student classrooms were intolerably hot. One student fainted. The university came up with a heat-removal plan, to install exhaust hoods, fish and chip shop style, in a teaching laboratory. Of course it didn't work and eventually an air-conditioning unit was loaded into the basement with great difficulty and expense, to fit space and ducting originally designed for it. Final cost, roughly twice what it would have been if installed during construction.

Many recollections are not pleasant. The constant battles against a rigid bureaucracy, where formula funding meant that size of department was the main, almost only thing that determined budget from the University, with the consequent stealing of student time and falsification of contact hours by some departments- not ours, of course. Degree structures were also rigid and immutable. There was almost no cooperation between different faculties or with outside bodies such as CSIRO.

The Science faculty forbade graduate student research in CSIRO laboratories because they were afraid “they will steal our best students”. Microbiology was domiciled administratively in Medicine, but active also in Science. Far from belonging in both we were often made to feel we didn’t belong in either. I had to front up personally to the young officious upwardly-mobile deputy VC to justify the need for a replacement secretary for the department. He sent me off to produce a “profile”, even though that exercise had been completed shortly before. Very angry, I had a heart attack next day.

There were some disappointing failures, apart from the collapse of the Monash Hospital project that left the department without a substitute base for professional credibility. The M Biotech was short-lived, because we were not allowed to charge fees to Australian students- hard to believe 30 years later. The closure of Fairfield Hospital removed an important link with clinical infectious diseases, which had undergone a revolutionary change in emphasis in the 1980-1990s. The split department, between the Alfred Hospital Medical School and Clayton, was not easy to manage academically or administratively. But we did manage to avoid an even further split when an unwise plan to relocate some of the medical faculty to the western suburbs was rejected. There were constant political battles, but only one or two rare internal attempts at sabotage- a senior staff member refused to participate in a non-traditional programme, with the threat “if you insist I’ll resign and you won’t be able to go on your (impending) sabbatical”. I went, and there was no resignation.

Overall the department flourished. We had excellent senior staff (some of them still glued in place). We produced many leading academics and researchers. We established a year of study, teaching and research as an acceptable part of the training for microbiologists for Fellowship of the Royal College of Pathologists (FRCPA). Some of our trainees became directors of major diagnostic services. We became a pre-eminent microbiology department among Australia’s universities, with a significant scientific and professional status. The Recombinant DNA Course and Micromon are well established contributors to postgraduate training and microbiological services. Of all these things I am very proud. They could be achieved only with cooperation and extra work by staff, who ultimately benefited from it. The short-lived Dip. Micro. was a means of circumventing the rigidity of Masters degree structures in Science; there was no such structure available in Medicine. Our graduates were rapidly placed in jobs.

I look with pride at the evolved department today. It was a special privilege and responsibility to have been able to steer the vital years of development from 1968 to 1991 that defined the shape and character of the department, and ensured its academic and professional recognition and survival, its public face, as an active part of the university as well as the medical school. Its former students can be found as workers and leaders everywhere.