This final 1994 edition of Micro-News offers special messages from Jim Kalmakoff who reflects on some of his experiences as Deputy Chairman of the Department and from Bruce Todd who updates us on technical services over the summer vacation period. A special welcome to our departmental visitor, Gregor Reid, and to the enthusiastic group of Summer Students who are already busily under way with their various research projects. Many thanks to all who have contributed to or in other ways supported our Micro-News venture this year. My special personal thanks to Jim for so enthusiastically supporting the concept of a Departmental Newsletter and to Racheal for her willing assistance.

Best wishes to all for Christmas and may 1995 be a truly Happy Year.

Merry Christmas

-John Tagg

Some words from the chair

Most of you may be counting the number of shopping days left before Christmas, but I am actually counting the number of days until David Jones arrives back (ie 4 pm, Feb 14th). When first approached about being HOD, it felt like my worst nightmare was about to come true.

In retrospect (apart from some more gray hairs and damaged liver cells) it has been an enriching experience and I very much appreciate the support all of you have given me, both from the general and academic staff. Without your cooperation and tolerance it could have become the nightmare I feared. I would especially like to thank Clive Ronson for his loyal support and the extra work he put in both as a friend and as a colleague.

I was fortunate in that there was some 'extra' money in the kitty (don't ask too many questions why) and was able to say: "spend it or lose it". However, this coming year the budget will be much leaner and meaner and Julie and Jones will have a much harder job of keeping to budget. As most of you will know, the big item of purchase has been 100 Olympus student microscopes which are due to arrive in February, in time for next year's practicals. There is also a
retire some of our older items of equipment (if our friend at court, Ronnie can be believed). Next year we will be subjected to a full Departmental Review along with the Biochemistry Department, so there will be some interesting times ahead. We did get some stick from the AMC Medical School Accreditation Report for moving away from areas of medical research; personally I don't necessarily see this as a negative thing. We are a very diverse Department and I think our diversity is our strength. We can foot it with the best and can walk tall as a world-class Microbiology Department.

Thank you once again for being a supportive Department and best wishes for Christmas and the New Year.

-JK.

Thanks from the Department Jim for a job well done -JT

Happy Birthday

Gwen Roderick 24 December
John Tagg 28 December
Clive Ronson 02 January
John Sullivan 07 January
Nancy Ragland 10 January
Anne McCartney 11 January
Lynette Macnicol 14 January
Vera Fantinato 26 January
Lynette Spooner 31 January

A photo of Gwen taken a few years ago - courtesy of the "wee bird"!

* Rachel Elliot is keen to find out if any lab in the department has the following chemicals: cellohiose, erythritol, m-inositol, D-psicose, alaminamide, D, L-carnitine, L-alanine, hydroxybutyric acid, D-glucosaminic acid, p-hydroxyphenylactic acid and thymidine.

* Bovine Haemoglobin Wanted

John Cross is trying to locate a jar of bovine haemoglobin that used to be on the 3rd floor, for use in the 'Hands on Science' course in the last week of January.

If anyone knows of its current whereabouts, please leave a note in his pigeonhole on the 8th floor.

* Video Production.

Following the success of the microscope, automatic pipettor and animated Immunology videos produced by John Cross and used in Biology 115 this year, the team involved has expanded and is working on videos for Microbiology. Currently John and Judith Bateup are working with Heather Brooks, Vernon Ward, Bruce Todd, Karen Daly and Karen Parker producing material for the
HEDC video team to work with in several areas. These include videos on automatic pipettors for 2nd year, Gram stain, aseptic technique and pure colony production (sometimes billed as 'Streaking', but this term could be misconstrued by the regulating authorities, and is best avoided).

Other ones in the pipeline are one for the new microscope, should it ever materialise, and bacterial identification, with additional efforts on preparing mitochondria, oxygen electrodes and Sephadex gel filtration for the Biochemistry section of Biology 115.

* This year the Department is hosting a large number of Summer Students and during the week we attempted to find a time to take a group photo. This was only partially successful so plan B is to wait until towards the end of the Summer to produce a special edition of Micro-News including photos of these students and a brief summary of the results of their research.

* IMPORTANT NOTICE

5th Floor Still

Shutdown

A cursory examination of the headlines on the Departmental noticeboards over the past few weeks may have led visitors to believe that the Tagg, Tannock and Smith laboratories have apparently been closed for quite an extended period. Reading on however, it soon becomes clear that there has not been some infectious agent containment problem on the 5th floor, but that we are to be “still-less” for a period in early January while Greg gives the still its annual clean-up.

The 5th Floor Still will be shutdown from 4.00 p.m. on the 6th January, 1995 until sometime on the 12th January, 1995

TECHNICAL SERVICES OVER THE CHRISTMAS BREAK

Technical services will finish on the eve of the 22nd December and start again on 16th January. This will effect the main door, loading bay and boiler.

Debbie's last glassware pick-up for 1994 will be on the 21st December and the first pick-up for 1995 will be on January 25th If you are working during this period or cleaning out cold rooms you are expected to deal with dirty glassware or material for autoclaving and disposal yourself - it is not acceptable to save it up until Debbie gets back.

Third floor staff would like to remind people that equipment can be borrowed over the summer but see someone about it first. Make sure your name is recorded on the blackboard and make sure it is returned before the start of term cleaned. This especially applies to waterbaths. The third floor does not supply schott bottles, media, chemicals unless it is going to be replaced. Most are involved in research projects but of course are always willing to assist where ever possible.

Greg will be back on January 6th to work on the 5th floor still (one week) build equipment etc. He will only be available for emergency work during this period. Ngaire is back on the 24th Jan, Gwen on the 27th and I will be back on the 23rd.

Finally, thank you to all who have helped in various ways.

Bruce
Dr. Gregor Reid is visiting Dr. Gerald Tannock in the Department, from November, 1994 to April, 1995, as part of a study leave from The University of Western Ontario, in London, Canada. Gregor is currently Director of Research Services, in charge of administration of $60M in grant and contract funding, and also responsible for technology transfer, patenting and licensing. In addition, he has maintained an active research laboratory, funded by the Medical Research Council and other agencies, including the private sector.

Gregor is, in a sense, returning to his second home, as he graduated under Dr. Heather Brooks, with a PhD from Massey in 1982, having originated from Glasgow, Scotland (thus the strange dialect!). He spent time in Calgary then Toronto, primarily continuing with studies related to urinary tract infections. This work has involved molecular, physico-chemical, surface and adhesion aspects of pathogens and lactobacilli, as they pertain to cell (bladder of otherwise healthy females, and spinal cord injured patients) and device (catheter, stents, pads) associated infection.

He and Urologist, Dr. Andrew Bruce, hold a patent on a lactobacillus probiotic used to reduce the incidence of urogenital infections in adult females. The successful treatment of over 100 patients has led to attempts to carry out further clinical trials and make the technology more widely available. Recently, some interest has been shown on using Gregor's lactobacilli to deliver vaccines to the mucosa of the vagina, to prevent sexually transmitted diseases. He has published 110 papers in the field, and is a member of three editorial boards of international journals.

He comes to Otago to learn more about lactobacilli, from Gerald and his group, who are highly regarded in international circles. Experimentally, Gregor will further investigate aspects of growth factors utilized by clinically applicable lactobacillus strains. In addition, he hopes to gain a better understanding of science at Otago, and technology transfer in NZ and the Asia Pacific Rim. The fact that it is -10°C in London and nowhere near that in Dunedin, has nothing to do with the timing of his visit. His better half, Debbie, and twin offspring, Jennifer and Melissa, have been enjoying the Kiwi hospitality and scenery, as well as the occasional visit to Georgie Pie and feeding ducks at the Botanic Gardens!

There is already some evidence to indicate a kiwi accent developing in his daughters. This is of particular concern to Gregor, because he arrived here as "dad" and may leave as "dead".
Virus Research News

More Money: Merilyn Hibma has received notification from the Lottery Board that she has been awarded a grant-in-aid which will cover consumables and equipment over the next two years. This will enable her to continue and expand her work on the E2 protein of human papilloma virus type16 begun in London. Merilyn received a Repatriation Grant from the Health Research Council which allowed her to return to New Zealand this year to continue the HPV work in the Virus Unit.

The Barbeque: A very successful end-of-year barbeque was held on Saturday 10th December at the home of Andy Mercer. Twenty three staff, spouses, partners and children enjoyed the late sun in a very attractive bush-lined garden, while Andy and Cathy McCaughan demonstrated their talents on the barbie.

Other pastimes such as bush-walks, taking light liquid refreshments, cricket wrestling (a new close-contact sport which involves fighting for the best position on the mattress from which to watch the cricket on TV), washing dishes, eating toast and marmite at midnight (because there was no cheese and no vegemite), all made for a memorable and enjoyable night.

Thanks Andy!

The Second Great 1994 VRU Tramping Expedition: On Friday morning the 2nd of December, a party of seven intrepid explorers (two male and five female) set out for the second VRU tramp for 1994, this time heading for the Greenstone and Caples valleys. Two car loads headed off several hours apart, but managed to meet up in Glenorchy, thence to Kinloch by about 5.30pm. A three-hour tramp to the first hut, the Mid-Caples, allowed the party to prepare an evening meal before dark. The main excitement of that first evening concerned a couple of members of the party learning all about the ins and outs of stoat hunting from a pair of visiting experts (male). The next morning saw the start of the hardest day, an arduous nine-ten hour haul over the pass to the McKellar hut at the top of the Greenstone valley. Blisters and bruises all round - even for the more experienced members of the party. The evening started with a touch of class with avocado and crackers, ham steaks and cheesecake, topped off with the best chateau white, but ran on a little longer than perhaps it should have (leading to slightly strained international relationships). The weather held fine for Sunday for the five-hour walk to the Mid-Greenstone hut, and on arrival, the warmth of the day led the lady members of the party to take a dip in a nearby watering hole.

Lack of clothing did not seem to matter much among friends until a helicopter crew spotted the group and made several close circuits, the occupants apparently taking a keen interest in one unclothed lady member who did not seem to mind the scrutiny. She may yet appear in some Japanese tourist's video as an
example of the native fauna. The evening disintegrated as usual, helped no doubt by the 'dead opossum in the sleeping bag affair', perpetrated by the hut warden on a certain young lady who had been giving him a hard time. Attempts to photograph the reaction of said lady when she discovered the beast were partly successful, and offers are being accepted for the negatives. The last laugh must go to the team though, as a slowly fermenting and skilfully hidden dead opossum will haunt the hut for some weeks. The final morning comprised a five-hour walk out to Kinloch, with one car-load heading back to Dunedin and work, while the other group took another day off to recover in Wanaka.

For some the adventure was both physically taxing and mentally demanding, but the fine weather, the fun times and the good company might yet attract them back for another trip. For the hard core trampers, there is no known cure.

-T.M.

Recent Publications:


This paper describes a seroepidemiological study of incident cervical cancer and the disease association of IgG and IgA antibodies against six human papilloma (HPV) type 16 virus antigens, using 94 cases and 188 controls. Nine responses were positively associated with cervical cancer. The authors concluded that antibody responses to several linear and conformational HPV epitopes are independently associated with cervical cancer and that combined analysis of several HPV antibody responses can result in better predictive values for HPV-associated cancer.


This paper describes the use of an ELISA-based assay for the determination of HPV 16 E2 protein.

Maguire T. (1994) 'Do Ross River and dengue viruses pose a threat to New Zealand?' New Zealand Medical Journal 107, 448-50

The regular introduction of these two viruses by viraemic travellers and reports of the presence of potential new vector mosquitoes in New Zealand both suggest that dengue and Ross River could pose a public health threat to this country. To test whether or not local mosquitoes could transit these viruses, vector competence studies were carried out on two indigenous New Zealand species, *Aedes notoscriptus* from Auckland, and *Aedes australis* from Otago. The former was able to transmit dengue, but not Ross River virus, while the latter could transmit both, under laboratory conditions. Changes to the distribution of vector species resulting from global warming will require continued surveillance of mosquitoes near ports and airports to guard against the introduction and establishment in New Zealand of the really efficient vectors of these viruses, *Aedes aegypti* and *Aedes albopictus*. 