LIONS CANCER INSTITUTE INC.

ANNUAL REPORT
2002 ~ 2003

Perth, Western Australia
(ABN 26 521 960 054)

Lions Cancer Institute Inc.

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A Project of Lions Clubs International in Western Australia
Assisted by the University of Western Australia

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2003 Lions Cancer Institute Inc.

CHAIRMAN'S REPORT

PDG Colin Beauchamp JP

We are now entering our thirteenth year since being approved as a Lions 201W2 District Project in 1990.

During that time we have seen many changes, a number of which slowed the progress of Institute research and the Skin Screening program. However with the recent involvement of a new dynamic Medical and Scientific Advisory Committee involving recognised professional researchers headed by Professor Peter Leedman, we have been moving forward rapidly.

We are well established in our new office at Oasis Lotteries House in Nedlands and this has been well utilised by our screening project for data entry activities.

Our research continues in the Pharmacology labs at the University of Western Australia under Dr Elizabeth Williams

In this Annual Report we feature the expansion and progress of the Skin Screening program, together with the current situation with our Molecular Biology research, headed up by Dr. Elizabeth Williams; and details of the progress made by our Lions funded PhD students.

Congratulations to Joyanne Kelly our current PhD.student funded by the Karen and Joshua Chinnery Scholarship. Joyanne, who is in her third year, has been specialising in the area of Crystallography.
As a result of breakthroughs in her research she was invited to present a paper at the world Crystallography conference in Geneva and was later invited on a fully funded trip to the United States to trail her work. As a flow on from those trips Joyanne is now putting together the Crystallography conference here in Australia

Marcus Watkins who was the previous Karen and Josha Chinnery Scholar has now completed his PhD and has been offered a postgraduate teaching position in America

It would seem that the high standard required as part of our selection process for students has paid off. We are now in the process of advertising for up to three more students on a 'top-up funding basis'.

Congratulations once again to DC Mary Gregg on her marvellous success with this year's fund raising raffle. The amount raised, including some donations has exceeded fourteen thousand dollars ($13,000). It takes a great deal of time and effort to organise and run a raffle, especially one that was so successful. A special thank you to Lion Ruth White who again produced another magnificent Paper Tole which formed the major prize, and to all those who assisted with valuable prizes.

What is most disturbing is that we continue to receive requests for skin screenings from clubs who are not prepared to support our fund raising by selling a few raffle tickets. It was also interesting to note that several clubs bought the tickets and at least two have won prizes which they will on-raffle to raise extra money for club projects.

Your Cancer Institute is still looking for a paid part-time Dermatologist and or a Plastic Surgeon with experience in the skin cancer field urgently required to assist with the screenings.

The person sought would initially only be needed for around thirty (30) days per annum, not continuously and would need, at times, to travel with the mobile unit, fly in light aircraft when used and use their own vehicle when we leave or store the unit at country locations. A stipend based on University rates would be negotiated including reimbursement of expenses.

Thank you to our Lions Clubs, private donors, and to our sole corporate sponsors Olympia Diaries & Calendars, for their ongoing support during the past year.

SKIN CANCER SCREENING REPORT

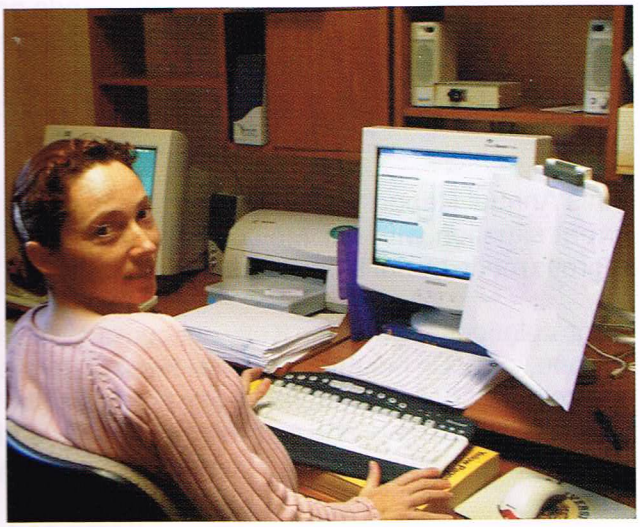
PDG Colin Beauchamp

Since the Institute's first venture into the public arena offering free skin cancer screening we have seen a great number of changes. Our first screening in Mukinbudin on 12th April 1991 was done on an ad-hoc basis with no scientific base; but the incredibly high referral rates from that screening set the direction in which the Lions Cancer Institute would proceed in the future.

Initial research centred on the design, trial and testing of an 'at risk' criteria in order to increase the number of persons referred as a percentage of the total numbers screened. The trial methodology required that two similar areas or towns would be chosen, one as a control area, and the other as a test. Advertising for the control group would be general suggesting that anyone interested should attend, whilst advertising in the test group area would quote, and require, patients to meet the 'at risk' criteria to gain an appointment.

Data obtained through interviews by Lions staff and registered nurses provided the basis for a paper confirming the success of the 'at risk' criteria (details published Australia - New Zealand Journal of Medicine).

Ongoing analysis of the data is continuing, we currently employ a data entry clerk.who is entering the information collected into a purpose written data entry application program. The program was written with the help of Dr. Lin Fritschi and two of her PhD students at a most reasonable cost of $3,500.



Lisa van der Vlugt

Trialing of the 'at risk' selection criteria continues with each screening. The percentage of persons referred that do not meet the criteria continues to be less than eleven per cent (11.0%), whilst for those who meet the criteria the average referral rate is ove

The next step in the research included double blind trials using non-specialist staff in preparation for the expansion of the screening program. These trials set out to test the ability of such staff to diagnose problem areas of skin rather than specific lesions. Patients would then be referred to a specialist for further diagnosis, and these trials have resulted in the publication of a paper in medical journals.

We then moved on to stage three of the research which included the design, production and testing of a self-screening kit (see illustration below). The kit included a number of photographs using a model to demonstrate how you should check yourself and a double-sided spot card that showed a number of different lesions together with two measuring scales. Only two trial screenings have been conducted to date using this kit. The first returned a referral rate of 64.7% for those who self diagnosed using the kit, and the second 67.3%. Further tests are required before the publication of further research papers can be considered. that we have a number of skin specialists currently using the self-screening kit in their surgeries and that we have had an order for some 2000 copies from a GP in Queensland. that we have a number of skin specialists currently using the self-screening kit in their surgeries and that we have had an order for some 2000 copies from a GP in Queensland.

It is interesting to note that we have a number of skin specialists currently using the self-screening kit in their surgeries and that we have had an order for some 2000 copies from a GP in Queensland.

Early in 2001 the Institute received a grant from Lions Clubs International Foundation (LCIF), which covered the initial costs of building our first mobile screening unit. This was launched by the Hon Eric Ripper in August 2002 and has been to a number of centres such as Bencubbin, Merredin, Kalgoorlie, Nannup, Bridgetown, Wagin and Mingenew. By the time this report goes to print we will have visited some twenty centres with the unit staff. We now have the problem of ongoing funding and the funding needed to train full time operating staff.

The Lions Cancer Institute Mobile Skin Cancer Screening Facility

Operating estimates excluding paid specialists are around $200,000 per year with a potential to screen between 15,000 and 18,000 persons each year. Our current operating methods using all volunteer staff is limited to around 1500 per year.

Medical director Prof. Peter Leedman (UWA), Dr Lin Fritschi (School of Population Health, UWA) and Lions Cancer Institute Screening Director Colin Beauchamp have, during June and July of 2003, been working on a submission to the Health Dept of Western Australia.

The submission is seeking funds for an evaluation of the skin screening program using past patients and the current valuable data base held by the Lions Cancer Institute. The evaluation will necessitate employing specialised trained staff who will travel to areas screened to interview both those patients diagnosed with lesions, cross referencing the melanoma lesions with the Cancer Registry, looking at the methodology used in the screening and trying to establish whether the screening program is cost effective.

In the interim, the Lions Cancer Institute Inc., together with the Lions Clubs of Western Australia will continue to provide this unique free screening service to the public of Western Australia.

If you consider that we have seen over 20,000 people since inception, and that an average referral rate is over 30%, then the Lions Cancer Institute, supported by the Lions clubs of WA may have saved up to 700 lives. In addition, many families and friends may have been saved the trauma of looking after a loved one dying from skin cancer.

As previously stated ongoing funding continues to be a major problem. Olympia Diaries & Calenders still continue to support us as our only corporate sponsor.
We now have an excellent video produced by Channel Nine which went to air on Channel Nine and Win TV, based on the work at the Institute, and shortly we should be well under way with the design and production of an Institute web page

My thanks to all of those specialists, nurses and Lions who have assisted me during past screenings and a special thank you to Sue Goddard RN for thirteen continuous years, (three of which were before she joined Lions) attendance at all screenings.

Skin Cancer Screening Data Collection And Analysis

Assoc. Prof. Lin Fritschi

The skin cancer screening project has been collecting questionnaires on every person screened since the program began. In April 2002, Assoc. Prof. Lin Frischi of the University of Western Australia School of Population Health was asked by the Lions Cancer Institute to evaluate the data collected by their skin cancer screening project, and to provide recommendations on what the next steps might be with these data.

In my opinion, they are very valuable data which can tell us a lot about the type of people who attend for screening, the types of lesions detected by the doctors, the accuracy of the doctors in a screening program, and whether melanomas detected by screening are at an earlier stage than the average melanoma (and therefore have a better prognosis). The Lions Cancer Institute Board agreed to go ahead with two of my suggestions.

Entering and analysing the data from the questionnaires

Aqif Mukhtar developed a database that allowed speedy and accurate entry of the information from all the questionnaires Thanks to funding by the Lions Cancer Institute, Lisa van der Vlugt has been entering the data and this task is expected to be complete by the end of 2003. We will then start to analyse these valuable data. We have applied for grants to support the entering of data and for a research assistant to do the work on the analysis that is required.

Evaluation of the screening program

Evaluation is the examination of all aspects of the program to see whether they are meeting the program goals. This includes the eventual outcome of detecting skin cancers early so lives are saved, as well as the processes which go to make up the eventual outcome (eg an efficient service, appropriate equipment, etc). With Christina Mills, an evaluation expert, a proposal was developed to evaluate the whole program. The entering and analysing of data (as above) will help to evaluate the outcome of the program, and we also put together a proposal to examine every aspect of how the program worked using surveys and interviews of volunteers and the people screened. The result of the evaluation would allow us to say which aspects of the program are working well, which could be improved, and how effective the program is in saving lives. The proposal is currently being revamped for presentation to various possible funding bodies.

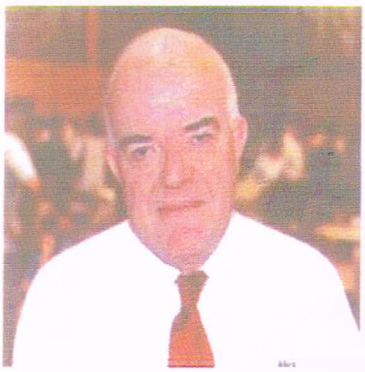
Melvin Jones Fellowship for Chairman Colin

It was a great pleasure to see the two stalwarts of our screening program, PDG Colin Beauchamp JP *(Chairman, Lions Cancer Institute Inc.)* and Lion Sue Goddard R.N, recognised for some twelve years of work on our screening program at the recent Lions District 201W2 Awards night. Colin received the prestigious Melvin Jones Fellowship and Sue a District Governor's Star Award for their continuous hard work since our first screening in 1991.

In our picture (left), D.G. Bob Huey is seen presenting the Melvin Jones Fellowship to PDG Colin.

Secretary/Treasurers Report

PDG Ron Vaughan



Once again it is my task to report on the administration of the Lions Cancer Institute together with its financial situation. These days, the administration of an charitable Institute such as ours is becoming more of a task than it was a few years ago, with increasing governmental controls being added to combat some of the less reputable bodies that exist in the community.

As part of those controls, our auditor now has to investigate whether we have complied with the regulations of the Charity commissioners, and supply them with a specific declaration to this effect, and more work for our auditor unfortunately means more cost to us. I have to report that the Institute has complied with the requirements of existing Charities legislation and that our auditor has so reported.

Whilst on administrative matters, I would like to mention that we have this year been audited on our major fundraising raffle by the responsible Government Department.

In that connection I would like to congratulate District Chairman Mary Gregg and her husband Micheal on the excellent records provided to me as part of their work on our fundraising raffle project. When that project raises over $15,720 in raffle proceeds and donations for the Institute, their industry is doubly welcome a really magnificent effort and our thanks to Mary, and to all the clubs who participated.

District Chairman (Cancer) Mary Gregg

We did not have a fundraising raffle in the last financial year but after warning you in our last report we went ahead this year. Sadly, there are still a number of clubs who choose not to support raffles as a policy, but can I again suggest that they simply compromise by purchasing the books from their Activities account? By assisting us in that way this year, two Lions clubs won excellent prizes that they can now utilise for club fundraising. You do not have to sell tickets, and yet stand a chance of winning a prize for use by the club in fundraising for other projects! If you do not win, you have made a donation to Lions Cancer if you do, then everyone wins.

District Chairman (Cancer) Mary Gregg

This year I can report an increase in gross income over last year from $43,064.48 to $96,464.39 and also an increase in total expenses from $93,104.18 to $103,406.54.

Apart from our successful raffle, some of the increase in our income was due to the sale of surplus research equipment to Sirtex Ltd for $20,000 (inc GST). The equipment concerned was on loan to enable that company to proceed with research work transferred to Sirtex just over three years ago, when our previous medical director commercialised the targeted hyperthermia project. Since the equipment concerned was no longer of use to Lions Cancer, your board decided that it should be offered for sale to Sirtex Ltd.

Another reason for increased income was that our sole commercial sponsor, Olympia Diaries and Calenders made two donations to us in the financial year under consideration, one of those being in respect of the 2001-2002 financial year. Olympia have generously supported us for some years, and we look forward to continuing that association in the future.

Donations from Lions Clubs increased, and on that subject we continue to be grateful for the support we receive from our sister District 201W1 and the clubs of that District. In our own District, Armadale-Kelmscott club has made a substantial commitment to support our Karen and Joshua Chinnery Scholarship with staged donations over the next two years. Our current awardee will complete her PhD studies towards the end of 2003, and it is proposed that we then alter the present arrangements with the University of WA so that we "top up" the standard University scholarship with our contribution, rather than pay the complete costs as we have with the present incumbent. This means that we shall be able to offer additional support to three excellent students for the next period.

We also received a large number of donations from other clubs during the year, sadly, a number of those donations came to us as a result of the concerned clubs ceasing operation. Whilst the funds are very welcome, we would rather have seen those clubs continue in operation.

As may be expected in the present conditions, our income from bank interest is slightly reduced even though the cash at bank and in our term deposit has increased, this is of course due to the prevailing reduced term deposit interest rates during the year.

We still require to raise sufficient funds to implement the next stage of our screening project. Whilst our resources have been slowly climbing over the last two years, we are still a long way from being able to get full utilisation from our mobile screening unit. We ask all clubs to do what they can to assist in the fight against cancer basically, we need an income of about $220,000 per year to run our screening program full time with specially trained nurses. This is a difficult call, but whilst we are constantly seeking external funding, most such requests expect us to demonstrate that we have also tried to raise funds ourselves!

Although we have not yet been able to fully adopt our new screening protocol for the reasons stated above, we have been operating an increased screening program during the year, and as a result of the increased activity and the use of the mobile unit, our screening expenses have increased. We are continuing to have difficulty in securing appropriately qualified medical specialists on a volunteer basis, and we are now seeking a part time paid arrangement with, possibly, a retired specialist. This arrangement will, when it comes about, inevitably bring about yet a further increase in costs in the future.

Our overall expenses for the year increased by just over $10,000, with a new expense for the current year being office leasing and ancillary costs arising from setting up our office at Nedlands. Only about half of the total operating staff expenses, (cost of keypunching staff) appears in the accounts for the year under consideration, with the remaining costs (approximately $10,000) having been recently been paid in the new financial year.

The usual taxation reasons for depreciation do not apply to this Institute (we are exempt from taxation), but our auditors recommend that we depreciate our assets in the standard prime cost manner using ATO recommended rates, and this has again been done for the assets held at the end of the year under report, this action appears as an increase of $33,890 in the Equipment (depreciated) deduction on the Balance sheet.

CHEMISTRY AND MOLECULAR BIOLOGY LABORATORY

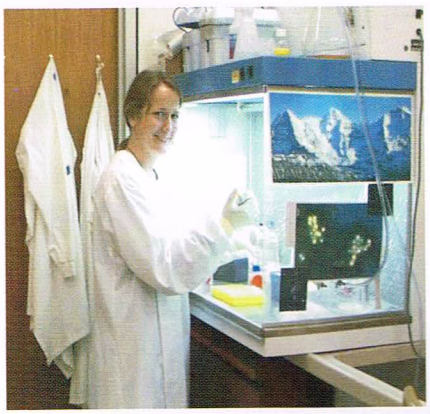
Dr Elizabeth Williams, Research Fellow

Dr Elizabeth Williams

2002-2003 has been a year of consolidation with the Biochemistry and Molecular Biology Laboratory now well settled in the Structural Biology Laboratory led by Associate Professor Matthew Wilce within the School of Medicine and Pharmacology at the University of Western Australia. The greater opportunities for interaction with scientists working in a diverse range of areas is very stimulating and provides a valuable forum for the development of ideas.

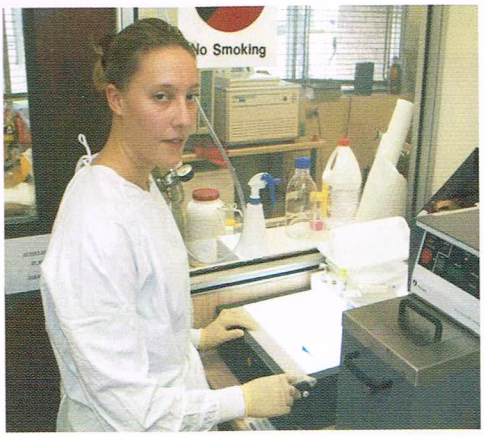
During this year the research assistant position that was shared by Ms Danka Halas and Mr Ambrose Scafidi with support from the Cancer Foundation of Western Australia finished. We were able to retain Ambrose's services for some additional months with income derived from consulting services we provided to Solbec Pharmaceuticals PL and Kelsi Chemicals.

Happily we are able to maintain contact with Danka as she is now employed as a research assistant in the School of Surgery and Pathology which has its laboratories in the same building.



Ms Joyanne Kelly, our second Karen and Joshua Chinnery Memorial Scholar, has been focussing her investigations on the part of the CKS proteins that undergoes shape changes. She has engineered mutant versions of the CKS protein that are altered in this "hinge" region in a manner that is predicted to modify the stability of the differently shaped forms. After purifying and crystallising the modified proteins, Joyanne spent a week at the Argonne National Laboratory's Advanced Photon Source in Chicago collecting data from these crystals. She is currently engaged in solving the structures of the modified proteins using these data. The structures will provide, we hope, details of the CKS protein in its alternative shape which we expect, from results obtained by Ms Angela Carrelo and Mr Marcus Watkins, will be vital to our future drug design process

Over the past four months a biotechnology student, Ms Nina Sturges, from Murdoch University has been with us pursuing a spin-off project from Marcus's results. He showed that the impossibility of using bacteria to produce his synthetic anti-CKS antibody was likely due to the unexpected fact that the antibody bound to a protein within the bacterium that is essential for either protein production or bacterial viability, or both these processes.



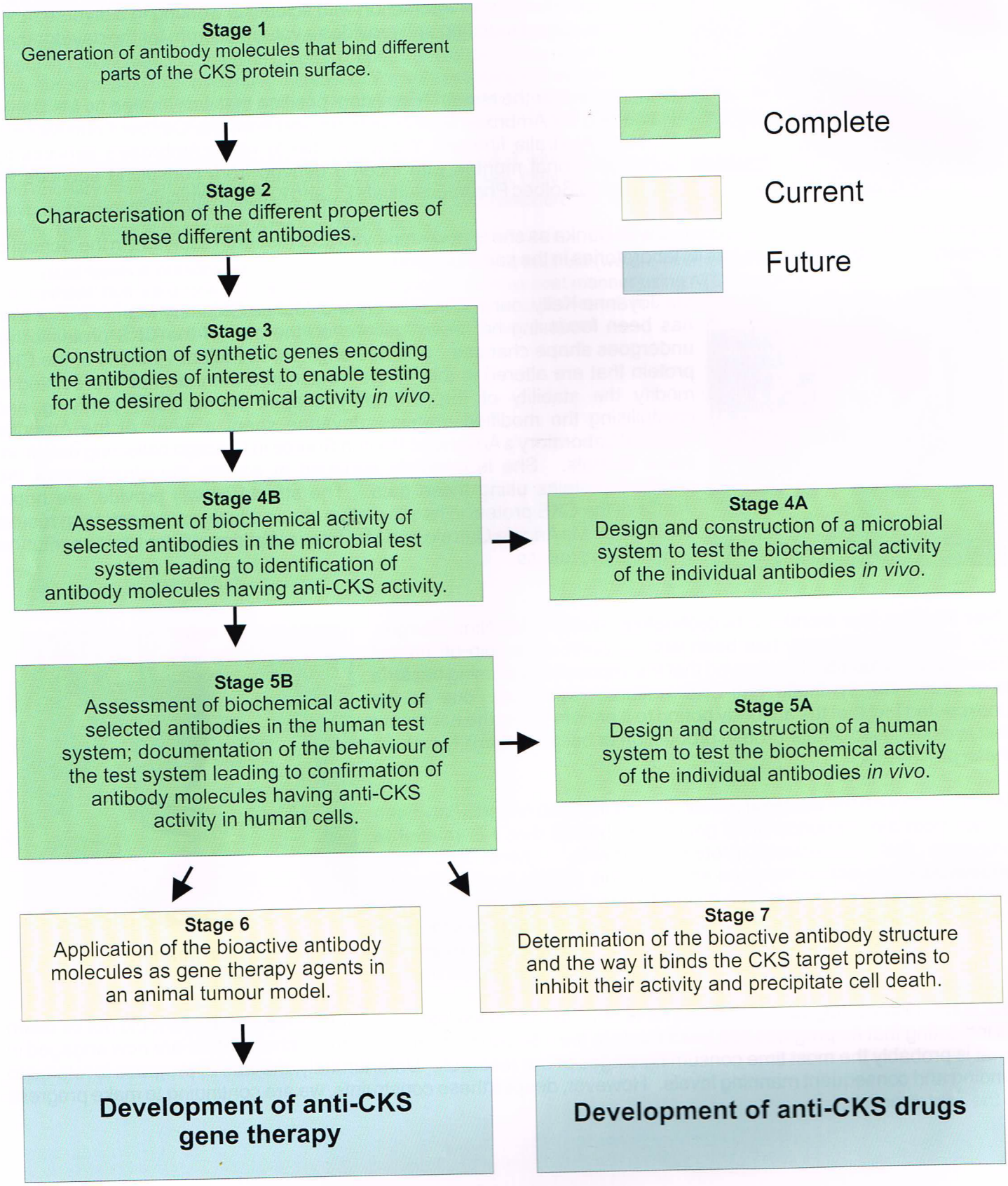
Nina Sturges Murdoch University

Marcus identified the bacterial protein as one that had hitherto only been known from the presence of its gene and showed that it is related to enzymes that orchestrate protein synthesis. Nina has been endeavouring to isolate the gene encoding this protein in order that we might characterise it further with a view to possibly developing drugs to stop it functioning within the bacterium. Such drugs would have application in antibacterial treatments. Marcus has now been examined for his PhD, and will soon be leaving us to take up a research post overseas.

Our current status diagrams that follow have not changed since last year's annual report. This should not be taken as indicating that no progress has been made in the intervening twelve months, rather that we are now engaged in what is probably the most time consuming stages of our research. Unfortunately, the rate of progress is related to funding and consequent manning levels. However, despite these constraints, we are continuing to make progress in the right direction.

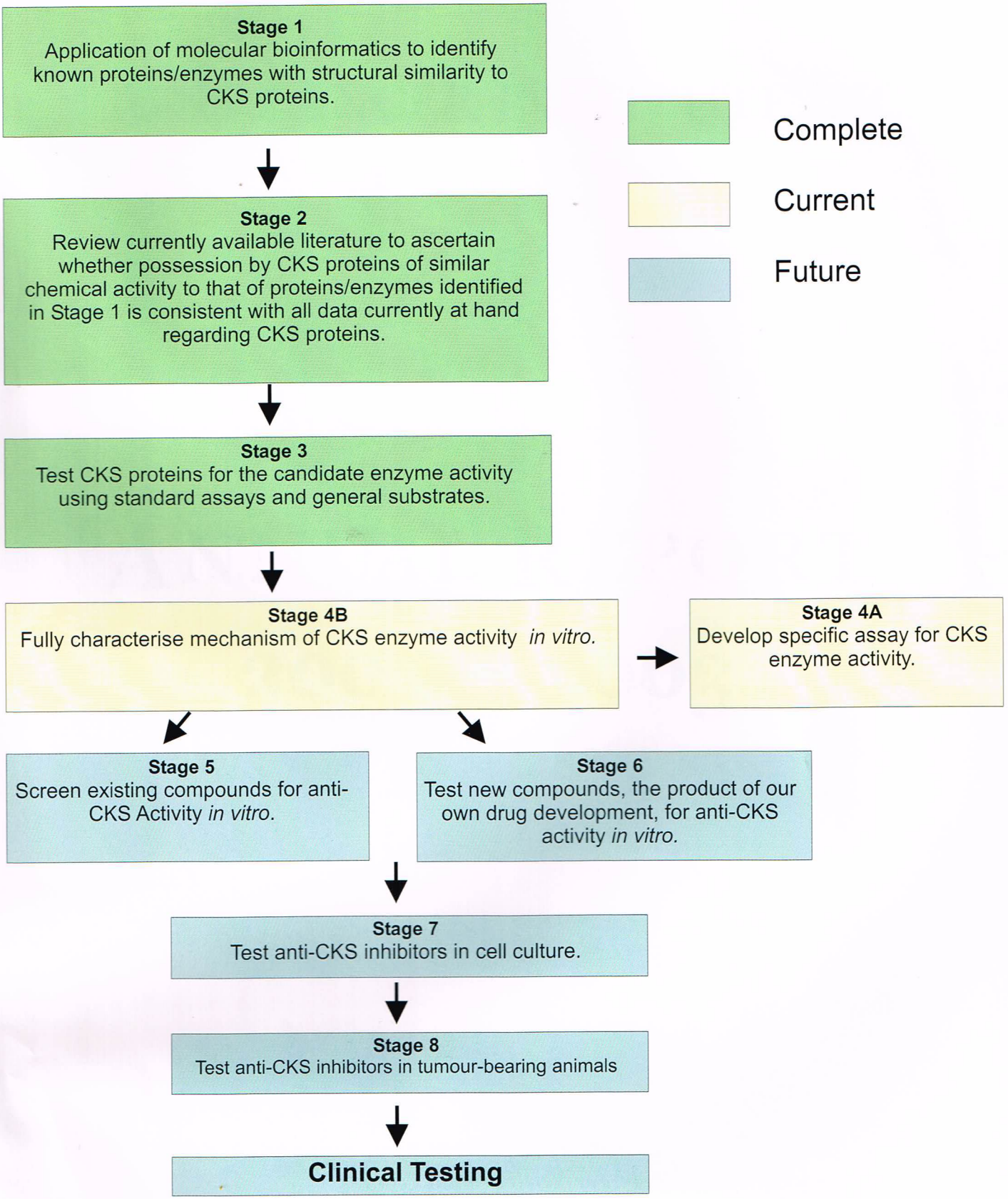
The Lions Cancer Institute Biochemistry and Molecular Biology Programme *Current Status*

Structure-Based Programme



The Lions Cancer Institute Biochemistry and Molecular Biology Programme *Current Status*

Function-Based Programme



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