LIONS CANCER INSTITUTE (Inc.)
ANNUAL REPORT
1994 - 1995

LIONS CANCER INSTITUTE (Inc)
Perth, Western Australia

" A commitment to the fight against Cancer....."

The *Lions Cancer Institute (Inc.)* was established in September 1990 by Lions in District 201W2, Western Australia, as a commitment to the fight against Cancer. The Institute remains a project of that District, but also enjoys considerable support from clubs in the sister District 201W2 - the Lions Clubs of W.A. have provided a guarantee of ongoing support for the Institute for the years ahead.

The *Lions Cancer Institute* is situated on Level 2 of the Medical Research Foundation building of Royal Perth Hospital, and is an incorporated body with charitable trust exemption - this means that all donations are fully tax deductable.

Cancer is the second most common cause of death in Australia with approximately 30,000 people dying annually. While the death rates from heart and cardiovascular disease have continued to fall in recent years, the rate for cancer has risen by approximately 10% in the last ten years. It has been estimated that, in Australia, 1 in 3 males and 1 in 4 females will develop Cancer by the age of 75.

Research is the only way to find the answers that will allow us to overcome this disease. To make a meaningful contribution towards achieving this goal, Lions Clubs joined forces with a team of Scientists and Medical personnel from the University of Western Australia and Royal Perth Hospital to establish the Lions Cancer Institute (Inc.). Our Institute staff continue to liaise with other groups throughout the world. The record of achievement of our group of scientists and medical personnel is now widely recognised, and there is no doubt that the Institute will continue to develop into a world class facility.

Our 1994-1995 Annual Report contains outlines of our progress in a number of fields during the year. It is important to stress that the *Lions Cancer Institute (Inc.)* has minimal administration staff, with a large percentage of administration work provided on a voluntary basis by Lions Club members - all donations are directed to the research effort.

We are delighted to show interested groups around the facilities, and we are happy to provide speakers for interested groups. Facilities are also available for Lions Clubs to hold Dinner meetings incorporating a tour of the Institute.

Further details may be obtained from:

Lions Cancer Institute (Inc).
Level 2, Royal Perth Hospital Medical Research Foundation Building,
50 Murray Street, Perth 6000

(Postal) GPO Box F308, Perth W.A. 6001

Telephone (09) 224 0201 Facsimile (09) 224 0279

CHAIRMAN'S REPORT - 1994-95

Vice District Governor Colin Beauchamp J.P.

Thank you for your attendance here tonight, I believe it shows the growing recognition of your Lions Cancer Institute that is so richly deserved . We are still very young as a Lions project but I firmly believe we are years ahead in the progress that this institute has made in scientific contributions world wide, compared to other such organisations.

Competition within the Lions organisation for club funds is still quite fierce. The fact that a number of clubs continue to send letters and donations to the correct address but cheques are made out to the Cancer Foundation or the Lions Cancer Foundation would suggest that we have a long way to go with our public relations. This situation becomes very evident when we visit clubs, especially those in the country, we often receive a commitment of financial support for the future and sometimes come away with a donation cheque.

To further this support I have already booked a number of visits to country clubs to present our cause and the Institute will be mounting a display at the forthcoming Denmark convention

This is the fifth year of operations and the situation that existed last year regarding the competition for funding has probably increased. The SightFirst Campaign although officially finished is still attracting funds as is the Save Sight building fund, although that push is now for equipment for the new laboratories.

Donations to the Institute from Lions Clubs continue to improve and this year donations from 201W2 clubs totalled $52,463, included in which were 25% of the funds raised by W2 entrants in the Personality Quest ($12,500); those from 201W1 clubs totalled $10,852, and from the public sector $6,172, which includes funds from the Williams River donations. We also received $27,000 from the MD 201 Melanoma Project Committee.

Additional funding received included grants from Healthways ($55,000), the Cancer Foundation ($38,000) and $10,000 from the Clive and Vera Rama Ciotti Foundation.

A number of special projects are now under way to provide additional funding and these are, not necessarily in any order,

- The beach walk for cancer organised by the Lions Club of Whitfords
- The Albany Barrowthon.
- The jet boat racing at Narrogin
- Christmas cards, Lion Phil Chinnery will be telling us about these later in the evening.
- The community calender
- The community fair in Busselton

plus many others organised by individual clubs, all just as important because they recognise the dedicated work carried out by the scientists at this Institute.

The composition of your board following the AGM in 1994 was as follows:

Chairman	VDG Colin Beauchamp
Deputy Chairman	PDG Garry Irvine
Director	PDG Bob Thompson
Director	PDG Ron Vaughan
Director	DG Tony Zajer
Medical Director	Lion Prof Bruce Gray
Staff Director	Dr Stephen Jones
Chairman, Medical and Scientific Committee	Dr Jim Codde

Professor Norman Palmer was our U.W.A appointed Director, but unfortunately, he had to withdraw due to other commitments early in the year.

For the 1995/96 Lions year, Lion Malcolm McFarlane, has been appointed as District Chairman by DG Jeff Needham. Lion Jenny Rogers has offered to fill the post of financial administrator, an appointment that will require board ratification at our next meeting.

Ladies and Gentlemen, I must make mention at this time of a very special Lion and that is PDG John Roberts, Lion John resigned from the board during 1994, in his own words he wanted to continue to assist but also wanted to reduce his commitment, John you really didn't reduce your commitment to the Institute, you are still working very hard keeping the accounts and looking after the administration, Jenny's appointment will I am sure take the pressure of PDG. John. John on behalf of all involved our warmest thanks.

STAFFING

Staff continue to have problems with renewal of research grants, however staff levels will increase as funding becomes available.

The Cancer Research Institute (CRI) is now funding Dr Stephen Jones, and laboratory assistant Gillian Winter . Ph.D student Angela Hartnett, is employed through a LCI scholarship. Psychologist Paul Katris is funded through an LCI Healthways grant. Dr Elizabeth Williams is funded by LCI. Angela Lumsden, a Ph.D student at the time of out last AGM is now Dr Angela Lumsden (congratulations Angela) is funded by a LCI Cancer Foundation grant. We also share the services of our secretary Wendy Corbitt with CRI .

AFFILIATION WITH U.W.A

We are now currently assessing a new draft of the proposed affiliation agreement with the University of Western Australia. I am able to report that apart from minor changes the document is ready to sign and the affiliation process should be completed within a few weeks.

RESEARCH

The Lions Cancer Institute continues to be involved directly in major areas of research.

The skin screening program funded by Healthways which employs our psychologist Paul Katris. This research now includes two clinical nurses in Gail and Kathryn and also includes several other members of the scientific staff at the Institute on a volunteer basis.

Of course much of the credit for the success of the skin screening project must go the West Australian Society of Plastic Surgeons and especially Alistair Turner; without the support of that body the program could not exist.

Another area of major research is the molecular oncology (biology) programme under the supervision of Dr Elizabeth Williams supported by Dr. Angela Lumsden and Ph.D scholarship recipient Angela Hartnett. As I keep telling groups at which I attend as a guest speaker; when the Institute first engaged Dr Elizabeth her credentials showed that she was the best available scientist in her field. I am sure that all will now agree that Elizabeth and her team have proved they are at the top with recent breakthroughs in the molecular research area

Other research in the Institute which is jointly funded by CRI and LCI involves targeted hypertherapy.

I will leave the detailed descriptions of the scientific work being undertaken to our Medical Director Professor Bruce Gray in his report.

At this time I feel that I must mention our Liaison Lions. What started out as a means of having a direct contact in each club has developed under the guidance of PDG Bob Thompson and the board into a number of very efficient hard working committees who's chairmen report directly to the board. These committees are involved in fund raising, public relations, club awareness and club visitations.

Again I am going to take this opportunity to recognise one of those Liaison Lions and that is Lion Phil Chinnery. Phil, thank you and the Armadale/Kelmscott Lions Club for the efforts you are putting behind the Christmas Card fund raising venture.

One of the many positive notes from this year is the improved liasion between the Cancer Research Institute and Lions Cancer Institute. After a shaky start to the year, both aiming for the same targets, running parallel but without coordination of our efforts, we now seem to have an excellent working relationship in place. My thanks to the executive officer of CRI Dominic O'Neil who has been a regular invited guest at our board meetings; one step in a much needed improvement in our joint cooperation.

I think that our past chairman, PDG John Roberts, summed it up last year when he said that it is your institute, undertaking research the results of which may well benefit you and/or your family in the future. All I ask as Chairman is that you get behind the scientists here and support their dedicated efforts to beat this terrible disease, talk to your clubs, your friends and everyone you come in contact with, encourage them to support our work in some tangible way and together we will win this fight.

Before I close, there are some special people in the audience I would like to recognise.

Dr Stephen Jones	Certificate of appreciation
Dr Elizabeth Williams	Certificate of appreciation
Paul Katris	Certificate of appreciation
Gillian Winter	Certificate of appreciation
Kathleen Brown	Plaque

Thank you all for your support during this year. My thanks to my board of directors and especially PDG Garry Irvine who has had to put up with me continually bouncing ideas off him before they go to print.

Report from the Medical Director - Prof. Bruce Gray.

(Professor of Surgery - Royal Perth Hospital)

It is a pleasure to report on a further year's activities of the Lions Cancer Institute Inc.

We continue to make slow, but real progress with a number of notable events that have occurred in the past year, all of which support our base as a major research institute.

Firstly, the Institute is becoming formally recognised by The University of Western Australia as a major contributor to research. We are now finalising the terms of affiliation of the Institute with the University. This is good recognition of the Institute's importance in University activities, and we hope that the affiliation will promote increased awareness within the educational sphere of our role in research. Affiliation with the University brings with it many obligations as well as benefits, but we welcome these as part of our commitment to a long-term future. Unfortunately the problem of cancer is going to be with us for many years yet and our ability to interact with other major educational research centres is an integral part of our future.

The Skin Cancer Screening Program has performed exceptionally well over the past year. We have now screened in excess of 5,000 persons in the community and referred more than 600 people for treatment of skin cancers. The majority of these have been the minor forms of skin cancer, however they all require treatment and this is a tremendous service that we are providing to the community.

Equally important as the service to the community, is the fact that we are providing the vital information for Governments to act on in the future. During 1994 over 1,500 people were provided with a cost-free, full body screen for skin cancer. In that time we diagnosed 13 persons with melanoma. Our ability to diagnose early melanoma is certainly going to prevent people from dying of this disease. The screening program is supported by the WA Society of Plastic Surgeons who have provided an enormous resource to assist Lions in this endeavour.

As the Skin Cancer Screening Program becomes recognised for its scientific worth as well as community service, we have been able to attract grants from both Healthways and the National Lions Screening Program. More recently we have made application to the National Health and Medical Research Council for ongoing funding of this program. However, it is the contribution made from the individual Lions Clubs and the support of Lions Colin and Sue Beauchamp who really underpinned the success of the program.

The Molecular Biology Research Program has also made good progress. This is a difficult area, but is vital in our search for clues regarding the cause of cancer. The program is directed by Dr Elizabeth Williams and supported by Dr Angela Lumsden and Ms Angela Hartnett. The program is developing well and we are now in a position to be able to make application for ongoing funding from such organisations as the National Health and Medical Research Council. It is only with the assistance of the Lions Clubs over the past several years that we have been able to place ourselves in a position to be able to apply for national competitive funds.

It's a pleasure to introduce Dr Stephen Archer, a Surgical Oncologist, to the Institute as Deputy Medical Director. Dr Archer is a well trained surgical oncologist who is now introducing a number of new treatment programmes to patients with cancer. We look forward to being able to provide Dr Archer with the necessary support for these programmes in the future. The benefits of course are ultimately patients suffering from cancer, a point we should not lose sight of.

The past year has seen us consolidate our research projects, expand in some areas and continue to make a real contribution in the fight against cancer. All members of the Institute and the scientists and students who undertake the work are immensely grateful for the support given by Lions in Western Australia. Your Institute is alive and well.

AUDITORS REPORT
TO THE DIRECTORS OF LIONS CANCER INSTITUTE (Inc)

G.R. WINTER FCPA

57 Corinthian Road
Shelley WA 6148

Scope

I have audited the accounts, being the Income and Expenditure Statement and the Balance Sheet of the Lions Cancer Institute of Western Australia Inc for the year ended 31 March 1995.

The Financial statements have been prepared by me from financial records prepared and maintained by the organisation. I have conducted an independent audit of those accounts in order to express an opinion on them to the members.

My audit has been conducted to provide reasonable assurance as to whether the accounts are free of material misstatements. My procedures included examination on a test basis of evidence supporting the amounts and other disclosures in the accounts.

I have undertaken these procedures in order to form an opinion as to the financial position and results of the operations.

Audit Opinion

In my opinion the accounts of Lions Cancer Institute of Western Australia Inc are properly drawn up so as to give a true and fair view of the state of affairs of the Institute as at 31 March 1995 and the income of the Institute for the year ended on that date.

G.R. WINTERS FCPA **July 1995**

BALANCE SHEET

ACCUMULATED FUNDS

1994		1995
$137,203	As at 31 March 1994	$130,204
$ (6,999)	(Deficit) Surplus for year	$ 15,143
$130,204	Funds as at 31 March 1994	$145,347

Represented by:

CURRENT ASSETS

$ 35,621	Cash at Bank	$ 45,342
$ 94,583	Term Deposit	$100,005
$130,204	Nett Assets	$145,347

Income and Expenditure Statement for the period 1 April 1994 to 31 March 1995

INCOME

1994		1995
$ 53,459	Donations - Lions Clubs	$ 63,315
$ 11,302	Donations - Public	$ 6,261
$ 6,814	Interest	$ 6,709
$ 160	T-Shirt Sales	$ 313
		$ 76,598
	Special Grants	
$ 44,744	Telethon	--
$ 47,214	Healthways	--
$163,693		$ 76,598

EXPENDITURE

$ 803	Administration	$ 2,586
$ 1,252	Postage	$ 401
$ 302	Printing & Stationery	$ 85
$ 1,237	Advertising	$ 464
$ 45,016	Equipment	$ 19,837
$ 3,670	Travel Costs	$ 6,334
$102,397	Research Projects	$ --
$ 5,404	Fundraising Expenses	$ --
$ 10,611	Scholarships	$ 27,000
	Conference Costs	$ 4,748
$170,692		$ 61,455
($ 6,999)	(Deficit)/Surplus	$ 15,143

BIOCHEMISTRY AND MOLECULAR BIOLOGY LABORATORY

Dr Elizabeth A. Williams - Research Fellow, Lions Cancer Institute

This year we have been pleased to see continuing development of the Laboratory so that, with the exception of a cold room, the facility is essentially complete in terms of the major equipment required to pursue our programme.

Scientifically our work is progressing rapidly. In late 1994 unique reagents developed by Ms Angela Hartnett as a part of her doctoral studies enabled us to describe a novel behaviour in the suc1/CKS proteins that we are developing as our primary target in a new anti-tumour strategy. This year, using one of these reagents, we have detected in human cells a previously unknown suc1 protein likely to play a pivotal role in cellular viability and proliferation. We are now pursuing detailed characterisation of this protein with a view to cloning the gene that encodes it. This will enable us to make a critical assessment of both its physical properties and its physiological function.

In 1995 Dr Angela Lumsden is being funded by a Cancer Foundation of Western Australia grant to construct and clone a gene that will cause cells into which it is placed to die if they attempt to proliferate. This is an entirely new approach whereby cytotoxic events are triggered by the cancer cell itself becoming susceptible to the biological activity of an intracellular antibody. The first candidate gene is currently undergoing cloning in preparation for assessment of its utility in "Lethal-Only-In-Division" (or "LOID") gene therapy.

In order to use toxic genes such as these safely in the clinical situation it is necessary for us to develop very specific ways to deliver them to tumour tissue and to control them so that the therapeutic intracellular antibody molecule is produced only in cells we wish to eliminate. To this end we have embarked on collaborative work aimed at the development of a specific gene delivery system for malignant melanoma with the Nuclear Signalling Laboratory at John Curtin School of Medical Research in Canberra.

In the past year results of our work have been presented at

- The annual conference of the Australian Society for Biochemistry and Molecular Biology and in invited seminars at
- John Curtin School of Medical Research in Canberra,
- Biochemistry Department, Cambridge University, U. K.
- Cell Cycle Control Group at Imperial Cancer Research Fund in London.

This year, in addition to funding from the Lions Cancer Institute, we are fortunate to have been awarded grants from]

- Cancer Foundation of W. A.,
- Royal Perth Hospital Medical Research Foundation
- Institute of Advanced Studies-Australian Universities Research Collaboration Scheme

Treatment of Cancer by Immunotherapy

Dr. Angela Lumsden
Lions Cancer Institute Research Officer

In 1989 I graduated from the University of Canterbury, in Christchurch New Zealand, with an Honours degree in Biochemistry, a strong desire to become involved in cancer research and the typical post-graduation urge to travel or live somewhere else! A letter on a notice board at Canterbury University, advertising postgraduate scholarships in cancer research in the University Department of Surgery, Royal Perth Hospital, University of Western Australia, seemed the perfect solution. So I submitted an application for a scholarship to do a Ph.D degree, and six years later, here I am, still in Perth.

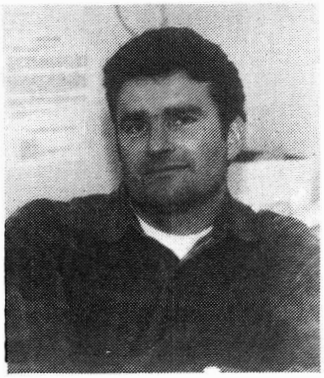
My Ph.D research, completed in November 1993, was conducted with the supervision of Dr. J.P. Codde and Professor B.N. Gray and was centred on a comparatively new method of cancer treatment, termed immunotherapy. One approach to immunotherapy is to administer cytokines, which are a group of molecules naturally produced in the human immune system, in much larger quantities than would normally be present, to increase the capacity of the immune system to fight cancer. But, for a majority of cancers, immunotherapy alone proved insufficient. This situation led to the idea that immunotherapy may be more useful in combination with other conventional anti cancer treatments, such as radiotherapy or chemotherapy. It was the latter combination that we were interested in. The principle rationale behind the chemo-immunotherapy approach was that the two treatment modalities have quite distinct mechanisms for attacking the cancer and could therefore be expected to generate a multipronged attack on the cancer. The technique of chemo-immunotherapy therapy was already being investigated, generally based upon one cytokine and one chemotherapeutic drug. However, studies as to the effectiveness of triple agent combinations are rare. For this reason, I chose to evaluate the anti cancer effectiveness of two cytokines combined with a chemotherapeutic drug, using an experimental rat tumour model. Briefly, the results showed that the triple agent therapy had greater therapeutic activity than any of the single or double agent regimens, and importantly, this was not associated with any increase in the toxicity of the therapy.

Upon completion of my Ph.D thesis I started working with Dr. Elizabeth Williams of the Lions Cancer Institute, firstly as a Research Assistant, and then, upon graduation, as a Research Officer. The ultimate aim of this work is to develop a gene therapy for the treatment of rapidly growing tumours. The key to the development of such gene therapy is the construction and cloning of a novel gene that, when expressed in tumour cells, will interfere with cell division control mechanisms and induce cell death. Cell division is controlled by a complex series of biochemical interactions between a diverse group of proteins known as cell cycle proteins. Most of the cell cycle proteins are essential for cell division, such that their removal, or prevention of their activity, leads to inhibition of the cell division process. However, one type of cell cycle protein, termed CKS protein, has been identified as being essential for not only cell division, but also for cell viability when division is interrupted. Removal of the CKS protein, or inhibition of its activity, prevents cell division and induces cell death. Accordingly, regarding cancer treatment, ablation of CKS protein function represents a promising means of not only preventing tumour cell proliferation, but also of inducing tumour cell death, particularly in rapidly growing tumours, which are characterised by increased rates of cell division.

We are currently employing a recently developed technology to construct a gene encoding an antibody that recognises and binds to the CKS protein. Introduction of this gene into a cell will result in the production of anti-CKS protein antibodies within the cell. The antibodies produced should bind the CKS protein, preventing its interaction with other cell cycle proteins and inducing cell death. Accordingly, a gene encoding such an antibody could form the basis of a new gene therapy for cancer. Development of this gene, which we have termed the LOID gene (for lethal only in division) may represent a new and exciting approach to anti cancer gene therapy. In future work, LOID gene therapy will be investigated in combination with new delivery methods, which are being investigated in Dr. Williams laboratory, to restrict gene expression solely to tumour cells. This should provide a means of minimising the normal tissue toxicity that remains a serious limitation to all current forms of cancer treatment.

The Targeted Hyperthermia Project

Dr Stephen Jones



The past year has seen some exciting progress in this project thanks in large part to the support of the Lions Cancer Institute. Up until recently the research has been confined to the laboratory bench top with a large amount of effort put into optimising the various operational parameters of the system. In the latter half of 1994 a major piece of equipment was purchased to enable us to commence biological testing of our ideas for the first time. The central component of this equipment was a 15 kilowatt induction heating power supply purchased from Inductoheat in Victoria. Several other critical and unique pieces of apparatus have been made for us by personnel in the mechanical workshop in the Physics Department at U.W.A, with whom we have a close working relationship.

An animal model of liver cancer has been established in rabbits to give us the means by which to test the basic therapeutic efficacy of our new cancer therapy. At the same time we can refine procedures and establish optimum dose regimens and protocols. It is still early days but already we have demonstrated excellent targeted heat deposition localised to the region of the cancer with the healthy functioning liver tissue being left virtually untouched. This is a very exciting early result. Still a large number of experiments must be completed before definitive statements can be made about the effectiveness of this new hyperthermia therapy in fighting cancer, however, early signs are encouraging. Following this phase of the research it will be time to set up systems to begin trials in human patients.

During the period 1994-5 several students have been involved in various aspects of this project as a result of the collaborative association between The Lions Cancer Institute and the University of Western Australia. Susan Farrant has been working towards a PhD in the Department of Physics and is now into her third and final year. Her work is intended to investigate a means by which we can have even greater control of the heating process. Simon Harrison completed his physics Honours year working on a project to investigate the heating potential of several new materials that have been developed by the magnetism group in the Physics Department. He obtained a first class Honours degree for his efforts. Simon intends to join us here later in 1995 to begin a PhD at the Lions Cancer Institute. Paul Gouteff is currently in the process of finishing his Honours year also in the Physics Department. The collaboration between us and U.W.A, specifically the Department of Physics, continues to be a very fruitful one for this project.

Momentum continues to gain as the mounting weight of experimental data shows just how effective this new technology will be in providing a highly effective localised treatment for cancer. The point at which clinical trials of our targeted hyperthermia therapy can begin is largely contingent on available funding. To this end the Lions Cancer Institute is to be commended for their continued support for this project to expedite progress so that we can begin clinical evaluations as soon as possible.

The Lions Cancer Institute and the Western Australian Society of Plastic Surgeons Community Skin Cancer Screening Program.

Prepared by Paul Katris
LCI Research Officer

A Year of Progress.

The LCI has been successful in securing research funds from Healthway to the tune of $47,500 and $55,000 for 1994 and 1995 respectively. Lions International have also provided competitive research funds for an investigation of enhancing methods of individualised self screening by lay persons. This project is funded with $27,500. Ego Pharmaceuticals also have donated $3,000 towards the preparation of a definitive self screening manual for distribution to screening participants prior to the screening events. Prof Bruce Gray and Paul Katris attended an interview for the NH&MRC for the Public Health Research and Development Committee.

In the year 1994-95 eleven LCI skin cancer screenings were held in the following locations: Norseman, Bencubbin, Collie, Jurien, Kalgoorlie, Booragoon, Margaret River, Busselton, Fremantle, Mandurah Waters, Bull Creek.

One major achievement for the year was the completion of data analyses regarding the use of the targeted advertising for screening events used by the LCI. It was found that targeted advertising does in fact reliably and validly enrich samples attending for screening with individuals exhibiting higher risk factor profiles thus leading to higher referral rates for those with lesion lesions suspicious of being skin cancer. Table 1. shows the different risk factor profiles obtained from the different advertising mediums. Hence the LCI can now begin to further enhance the targeting efforts with the objective of discovering more lesions suspicious of being melanoma in the participating locations.

Table 1. Risk Factor Profiles of Targeted and Non-Targeted Screenees

Risk factor	Total	Target	Non-Target	Sig
	N=1556	N = 884 (%)	N = 672 (%)	
Experienced blistering sunburn as a child	61.1	63.2	58.3	*
Moles or freckles changing in size or colour	36.2	39.7	31.6	**
Previous removal of non-malignant moles	30.3	32.3	27.4	*
Previous skin cancer removal	25.1	28.3	20.8	***
Five or more palpable moles on forearms	20.3	23.5	16.4	***
Inflamed skin sores that do not heal	19.2	20.3	17.8	NS
Fair skin that burns	17.0	19.2	14.1	***
Family member had a malignant melanoma	15.6	17.9	12.9	**

*** $p < .001$, ** $p < .01$, * $p < .05$, NS - not significant

The summary statistics in Table 2. show that 1628 individuals attended the LCI skin cancer screening events and that 215 (13.8%) individuals were clinically diagnosed as having a skin lesion requiring attention and subsequently referred to their primary care practitioner. By far the most commonly occurring diagnosed skin lesions were Basal Cell Carcinomas (BCC) with 148 (68.8% of total lesions and 9.5% of the total sample screened).

Table 2. ***Clinically Suspicious Lesion Case Data***

Summary data	*No.*
Total No. of participants	1556
Persons clinically diagnosed as having lesions suspicious of BCC	148
Persons clinically diagnosed as having lesions suspicious of SCC	16
Persons clinically diagnosed as having lesions suspicious of DN	18
Persons with lesions clinically suspicious of MM or HMF	33
Lesions histopathologically confirmed as MM or HMF	13
Total No. of individuals referred to GP	215

It is noteworthy that overall the LCI skin cancer screenings are on average detecting one melanoma lesion for every 120 persons that are being screened. These results are very encouraging and will provide utility focussed data for all those interested in undertaking population screenings for melanoma/skin cancer.

Presentations

Paul Katris is in regular contact with major players in public health community who are grappling with various issues related to skin cancer/melanoma research into early detection and control. Much of this contact is made through the WA Melanoma Group, an informal multi-disciplinary team that meets regularly at the offices of Dr Peter Heenan's Cutaneous Pathology. Presentations have been made to this group on three occasions.

A paper entitled *The use of targeted and non-targeted advertising in a skin cancer screening program* was presented in March 1995 at the 4th National Symposium of Behavioural Research in Cancer at the Anti Cancer Council of Victoria.

Similar presentations were also made at the Sydney Melanoma Unit and the offices of Polartechnics in Sydney during July.

Publications

Two papers in press include a summary of pilot studies conducted between 1991-93 in the Australian and New Zealand Journal of Surgery and the targeted vs non-targeted advertising data in the American Journal of Public Health.