

is part of the Academic Exchange Program supported by the Fund. Ms Chayat has worked at the Rothberg School for Overseas Students for 30 years, and has taken leave to work full time on a new high school Hebrew program NETA which was introduced this year into a number of high schools in Australia.



Ms Shlomit Chayat

Ms Yona Gilead, lecturer in Modern Hebrew who has been involved with the introduction of NETA in Sydney says, " Ms Chayat's teaching in the Department for Semester I 2005 will strengthen innovations in Hebrew teaching introduced in 2001 and 2002 following the visit of an earlier SZCUF Academic Exchange Scholar from the HU, Ms Esti Simons. Resulting from innovations introduced through that exchange, our enrolments have risen from 17 in the Modern Hebrew program 3 years ago, to over 50 this year."

Recently, the Department of Hebrew, Biblical and Jewish Studies also initiated a proposal to make the Hebrew University's *Center for the Teaching of Jewish Civilization to Universities from Abroad* its benchmarking partner to ensure that its teaching programs conform to the highest international standards. While in Sydney, Ms Chayat, will be involved in establishing this important program.

**• SZCUF STUDENT EXCHANGE PROGRAM**

**Moria Lehman** a student from the Faculty of Humanities at the Hebrew University majoring in Theatre Studies participated in the University of Sydney's Student Exchange program with the Fund's support in Semester I, 2004.

As a student of theatre studies in her home university, Moria made use of the opportunity to look at this area of study from a different point of view embarking on a course entitled "Performing Australia".

Reporting on the course, Moria said, "For me, as an international student, the course was especially interesting as it gave me a look at local cultural life which I was not familiar with, and also introduced general methods of interpretation and connection between art and society, which I will be able to use to investigate any given culture."



Moria Lehman

Moria also undertook a number of other courses during her stay which gave her further insights into Australian culture as well as providing new perspectives. Commenting on her overall experience in Sydney Moria said, "The exchange program was a great opportunity for me to widen my horizons, to get to know the unfamiliar, and to gain new perspectives. As I have finished my undergraduate degree. I have decided during this semester to enrol in postgraduate studies in theatre at Tel Aviv University, where I hope to make use of this important experience."

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**NEWSLETTER**

Issue 10# May 2005

**Fund supports Australian & Israeli scientists in joint venture to improve treatment for malaria victims**

Malaria is a disease that causes major health, economic and emotional burdens for the 40% of the world's population who live in areas where the disease is prevalent. Travellers to those areas are also at risk. There are over 400 million cases of malaria each year and 2 million deaths.

During a malaria infection, usually the body's own immune response will eliminate the parasite, but in certain people that response may also exacerbate the symptoms of malaria, in some cases leading to death.



Prof Nick Hunt  
University of Sydney



Prof Jacob Golenser  
Hebrew University of Jerusalem

This project will examine a number of strategies by which anti-malarial drug treatment, which boosts the body's ability to kill the parasite, could be combined with other treatments to eliminate the harmful side-effects of the immune response. This is predicted to prevent the severe complications of malaria disease and tip the balance towards a healthy outcome. The precise biological mechanisms underlying these actions also will be studied in detail.

The project is a collaboration between the laboratories of Prof Nicholas Hunt, Professor of Pathology, at the University of Sydney and Professor Jacob Golenser, Professor of Parasitology, at the Hebrew University of Jerusalem. The complimentary skills of malaria researchers working in these two laboratories will be used to tackle this important human health issue.

At their November, 2004 meeting the Trustees of the Fund undertook to support this project over the next 3 years

with costs shared between the two universities.

Taking on the project, the Trustees were mindful of the need to find improved therapy for this disease in light of the growing resistance of certain strains of malaria to currently available antimalarial drugs. In addition, the Trustees appreciated the opportunity presented by the project to expand the skill base of both laboratories through the exchange of skills and personnel which will be involved over the next 3 years.

It is hoped that the project will lead to a practical research outcome that will influence clinical practice in treatment of this enormously important infectious disease.

**IBR Project Report  
Fund continues support to IBR**

In June 2001 the Fund established a grant to support the work of the Institute for Biomedical Research (IBR) at the University of Sydney, over a period of 3 years.

After reviewing the work facilitated by this grant, the Fund's Trustees have resolved to extend funding for a further 2 years. These funds will continue to support the position of the IBR's Molecular Biology Officer (MBO), Dr Katie Jones, who has made a significant contribution in maintaining and upgrading the technical skills of members of the Institute, in particular early career researchers and students, and in managing the technical infrastructure of the Molecular Biology Facility (MBF).

The MBO has also been successful in raising over \$70,000 in grants for equipment for the MBF and over \$90,000 for the IBR's Microscopy Facility.

In addition, the one-on-one assistance the MBO has provided to researchers has given a real boost to many of their projects. A number of these are now approaching publication as theses or in scientific journals. Subject areas include neuroscience, bone structure and function, cardiovascular disease, and malaria.

The skills and equipment acquired through the MBF

allow the IBR's scientists to access the most up-to-date information in the field of molecular biology which has been opened up so significantly by the sequencing of the human genome.

In his report to the Trustees, IBR Director, Prof Nick Hunt, summarised the work of the Institute over the past 12 months as having been marked by good progress. "In particular," he said, "the centralised infrastructure provided by the MBF has been boosted by successful grant applications. The Molecular Biology Officer has played a key role in this. The Institute greatly values the support received from the Trustees of the Sir Zelman Cowen Universities Fund and looks forward to the continuation of this very productive relationship."

### More Interesting Science from the IBR

#### • Cataracts - Lens Research Laboratory forges the way to better therapy

Cataract is the most common cause of blindness in the world today. Although surgery is generally effective, in many countries it cannot keep pace with the growing demand. Moreover, complications such as the development of secondary cataracts some time after the initial operation, require further specialised treatment and add to the cost of cataract management. Because of its clinical significance, it is vital to understand how specific molecules in the eye are involved in the development and progression of cataracts and most importantly how these molecules are tightly regulated. This information is fundamental to understanding the molecular basis of cataract and devising strategies for its prevention.

To gain a better understanding of lens biology and pathology, research currently underway in the Lens Research Laboratory of the IBR is focussing on the biology of normal lens development. It is hoped that a better understanding of normal lens development will provide the key to preventing lens cells from developing the abnormal growth patterns that eventually contribute to cataract formation.

As part of the work of the Lens Research Laboratory (LRL), Dr. Frank Lovicu has adopted a genetically modified (transgenic) mouse that has a predisposition to develop cataracts. These cataracts have been shown to have features closely resembling the cataracts which develop in humans. This mouse model allows researchers of the LRL to make close observations of conditions prevailing in the lens as cataracts develop. These observations could ultimately help to develop means of early detection and non-surgical therapies to slow down and potentially block cataract growth. Moreover, the precision of the mouse-model will also allow such

therapies to be tested with significant accuracy before they go to human clinical trials.



Dr Frank Lovicu

To carry out their ground-breaking research, the scientists of the LRL also utilise the facilities of the IBR's Molecular Biology Facility (MBF) which is supported by the Fund. Essential to their current work is the FPLC (fast protein liquid chromatography) machine housed in the Facility. This allows various protein components to be separated out from the ocular fluids that normally surround the lens to provide a better means to study their specific roles in lens development. Understanding the role of these specific proteins could provide vital clues to maintaining lens health and preventing the conditions which contribute to cataract formation.

Commenting on the value of the MBF to the work of his group, Dr Lovicu said, "Much of the equipment housed in the Molecular Biology Facility is highly specialised and very costly. Having this joint facility within the Anderson Stuart Building where a large proportion of the IBR's scientists are working, has been tremendously valuable. It has made this equipment both easily accessible and available to all labs of the IBR, many of which like my own, may otherwise not be able to purchase such equipment in their own right and would need to delay many of the very sophisticated projects this equipment can be used for."

*The Lens Research Laboratory is comprised of two teams of researchers, one headed by Dr. Frank Lovicu in the Dept. of Anatomy & Histology, Anderson Stuart Building on the main University campus and the other headed by Prof. John McAvoy at the Save Sight Institute, Sydney Eye Hospital on Macquarie Street.*



### NEW INITIATIVES FOR 2005

*Watch this Space*

#### • The Sir Zelman Cowen Universities Fund Prize for discovery in Medical Research

To recognise and encourage medical research in Australia and Israel, the Fund will later this year launch the *Sir Zelman Cowen Universities Fund Prize for Discovery in Medical Research* to be awarded for achievement in medical research at the University of Sydney, or at the Hebrew University of Jerusalem.

It is envisaged that the Prize will be awarded annually for work done at the University of Sydney, or at the Hebrew University, in alternate years. The award will be made by the Trustees on the recommendation of a Prize Committee which will include eminent scientists from several universities.

Particularly keen to encourage the work of young scientists, the Trustees have determined that the Prize will be for scientists aged 40 years or younger.

"The Prize will recognise both the discovery and the scientist", says the SZCUF's Managing Trustee, Professor Jonathan Stone. "Young scientists work in a demanding, uncertain environment. Moments of discovery – when their ideas and work gel into new understanding of a disease – should be celebrated".

#### • SZCUF Public Seminars

Also in planning for 2005 is a series of seminars for the interest of our supporters and the general public on a number of health issues. The seminars will be sponsored by the Fund and presented by eminent scientists who are leaders in their field. The speakers will present information based on latest research findings in an easily accessible mode on topics of significant interest to us all.

While the seminars will be advertised to the general public, special invitations will go out to our supporters to attend as our guests.

It is hoped that the seminars will not only give you, our supporters access to valuable health information, but will also provide an opportunity for you to hear about some of the research that your generosity is supporting and to meet some of the people carrying out this invaluable work.

We will be mailing you about the seminars and sending you your special invitation later in the year when details have been finalised.

### Other Fund Initiatives

#### • SZCUF ACADEMIC EXCHANGE PROGRAM

In February, 2005 **Dr Yitzhak Reiter**, Director of the Truman Forum for Public Debate at the Truman Institute, Hebrew University of Jerusalem, was a visiting scholar in the Department of Hebrew, Biblical and Jewish Studies at the University of Sydney as part of the Academic and Student Exchange Program between the two Universities supported by the Fund.

While in Sydney he was also the keynote speaker at the 17<sup>th</sup> Annual Conference of the Australian Association for Jewish Studies. The theme of this year's conference was *Jews as a Minority; Minorities Among the Jews*. Launching this theme Dr Reiter presented a paper entitled, *Parallel Narratives and Adverse Strategies: The Arab Minority in the Jewish State*. Outlining the perspectives held by governments in Israel over time regarding the Arab minority living in Israel, Dr Reiter's paper provided many valuable insights into how the current positions held by Arabs and Israelis living in Israel today have been arrived at.



Dr Yitzhak Reiter

Dr Reiter was one of several international speakers presenting at this exciting conference which also featured Rachael Kohn, of ABC Radio and Television in conversation with Israeli cultural icon, actress and author, Gila Almagor.

The Fund was pleased to have had an opportunity to extend a special invitation to its supporters to attend the conference and in particular, Dr Reiter's presentation.

**Ms Shlomit Chayat** from the Hebrew Language Division of the Rothberg School for Overseas Students at the Hebrew University has been a visiting scholar during Semester I, 2005 in the Department of Hebrew, Biblical and Jewish Studies at the University of Sydney. Her visit