



# HEADLINES

Shining a Light on Schizophrenia



SCHIZOPHRENIA  
RESEARCH  
INSTITUTE

FEBRUARY 2009

## Australia's first Chair in Schizophrenia Epidemiology and Population Health

After a global headhunting campaign, the University of New South Wales has selected our very own schizophrenia expert, Professor Vaughan Carr, as Australia's first Chair in Schizophrenia Epidemiology and Population Health. Professor Carr will undertake the new five year position at the beginning of May whilst continuing his role as CEO of the Institute. This appointment recognises the leading expertise of the Institute alongside its key partners such as UNSW in mental health research.

Pinpointing the risk factors associated with schizophrenia and tracking health outcomes across communities will be Professor Carr's focus. His 30 years of experience in mental health research and his continuing drive of the Institute's research program will bring many positive benefits to the new position.

The Chair will be based at the Mental Health Unit at St Vincent's Hospital, Sydney, and is a joint project between the Institute and UNSW, with funding from NSW Health of \$2.125million over 5 years.

Professor Carr will be working closely with health and education departments to set up record linkage through their databases, a smart way of using existing information, without identifying personal information, to determine risk factors and track health outcomes over time.

"What we can achieve on a large scale is the capacity to link various steps in a person's life, birth, early childhood medical



Professors Vaughan Carr and Philip Mitchell celebrate a big step forward in Australian schizophrenia research.

records, educational and behavioural milestones," explained Professor Carr. "From this information we could uncover new risk factors, potential relationships between them, such as between pregnancy complications, school performance and behaviour problems, and the subsequent development of schizophrenia or other health problems."

Professor Carr already oversees a feasibility project for the Schizophrenia Research Institute including a longitudinal study of children, using existing information in education databases to determine risk and resilience in adolescence.

Head of UNSW's School of Psychiatry, Scientia Professor Philip Mitchell, said a sound understanding of all risk factors - genetic, psychological and social - will be necessary to tackle this most debilitating disease.

"This is a very exciting partnership that will achieve great results in the prevention, diagnosis and treatment of schizophrenia," said Professor Mitchell.

## Give it up for Schizophrenia!

To raise awareness and funds this May we will launch a fun online campaign called 'SwearStop'. It's simple: just get your friends to sponsor you online to **give up swearing for Schizophrenia Awareness Week!**

Or if you are one of the good people who never lets a naughty word slip, just nominate the person you know who swears the most and get them to set up a fundraising page with us. It's easy and will create raucous laughter as well-intentioned swearers try to think up replacement words of frustration!!

Everyone should get involved: the cost for the Australian Schizophrenia Research Bank to collect and process cells from a single

**SwearStop**  
GIVE IT UP FOR  
SCHIZOPHRENIA  
18-24 May 2009  
[www.schizophreniaresearch.org.au](http://www.schizophreniaresearch.org.au)

blood sample is \$80. So if everyone can get just 8 sponsors giving just \$10 each, this will make a huge impact on what we do.

### How to get involved

We already have organisations such as Macquarie Group Foundation, Deutsche Bank, Ramsay Health Care, NSW Health and Singleton Ogilvy & Mather taking part. All you have to do is register online then email your friends, colleagues and family to

sponsor you for the week to give it up. You don't have to collect the donations yourself as all your sponsors will donate online.

You just forward your personalised webpage to your contacts.

Thanks to Ramsay Health Care for sponsoring this campaign.

### FIND OUT MORE!

Register online at [www.everydayhero.com.au/event/swearstop](http://www.everydayhero.com.au/event/swearstop)



Prof. Vaughan Carr  
Chief Executive Officer

## Why epidemiology?

Epidemiology is the scientific study of health and disease in populations. It includes the study of factors that affect the health of populations such as risk and protective influences, preventative interventions and treatment effects.

In schizophrenia, epidemiological research has expanded our understanding in many ways. It has:

- revealed important regional differences in incidence and prevalence
- highlighted gender differences
- confirmed the effects of migrant status, season of birth, urban rearing and cognitive impairments as risk factors
- identified the role of cannabis as a component cause of schizophrenia.

## Record linkage

Record linkage is a powerful epidemiological tool in which various health and other databases such as birth registers can be combined to study population cohorts prospectively and measure health outcomes in the long-term.

Such record linkage methods underpinned the recent high-profile Swedish study that reported the common genetic determinants of schizophrenia and bipolar disorder.

Building schizophrenia epidemiology capacity in NSW will strengthen our research profile. It will do this by generating new hypotheses to be tested in the neurobiology laboratories and clinical research settings and by testing the impact of various factors such as vulnerability indicators, protective influences and innovative approaches to treatment on the development, course and outcome of schizophrenia.

# NHMRC makes 2009 a top year for schizophrenia research

The Schizophrenia Research Institute is proud to announce that our scientists were recently awarded five National Health and Medical Research Council (NHMRC) grants, totaling an investment of approximately \$3 million. This was by far the best result in the Institute's history and reflects the quality and relevance of the Institute's research program.

The NHMRC is Australia's peak body for supporting health and medical research, and to receive an NHMRC grant is seen as a measure of excellence in the medical research community. To the recipients it means that their Australian research peers have assessed their research proposals as among the most likely to produce significant benefit to the community.

The grant recipients and research projects are:

*Schall U, Michie P, Stain H, Ward P, Langdon R, Todd J, Rasser P, Carr V, Weickert T.*

### **Understanding emerging severe mental illness in young people.**

Bringing together three Institute research centres in Newcastle, Orange and Sydney, this 5-year project will investigate the changes in the brains of young people when they are developing a severe mental illness. State-of-the-art brain imaging and brain function data will be collected from more than 500 young people considered at 'ultra' high risk of developing schizophrenia. The aim is to identify early brain changes, and thus enable more effective early interventions.

*Weickert T, Weickert CS, Schofield P, Kulkarni J, Carr V.*

### **Cognitive and affective schizophrenia symptom intervention.**

Impaired thinking and planning ability in people with schizophrenia is often not alleviated by present antipsychotic treatment and is associated with poor social skills, community functioning, and quality of life. In spite of the widely appreciated magnitude of this problem, development of medications to improve thinking and social skills in schizophrenia has been severely limited. This 3-year research project will test a new application of an existing brain hormone receptor stimulating medication to assess its effectiveness in stimulating brain activity to improve planning, social skills and daily functioning in people with schizophrenia.

*Huang XF, Newell K.*

### **NMDA receptor/neuregulin1 signalling in response to phencyclidine administration.**

Phencyclidine is the best known pharmacological agent that can induce schizophrenia-like symptoms in humans and animals. Recent research has strongly suggested that neuregulin1 and ErbB4 signalling are involved in schizophrenia pathology. Based at the University of Wollongong, this 3-year study will be the first to determine whether neuregulin1 is altered by phencyclidine, which will further our knowledge by re-evaluating the causal role of neuregulin1 in schizophrenia.

*Karl T.*

### **How genetic and environmental risk factors interactively impact on animal models for schizophrenia.**

Dr Tim Karl has received a Biomedical NHMRC Career Development Award to pursue his 4-year research project using animal models to investigate the interactions of genetic and environmental factors leading to the development of schizophrenia.

*Wong, J.*

### **Molecular mechanisms leading to schizophrenia – the role of estrogen and estrogen receptor alpha**

There is evidence that schizophrenia arises from a derailment of normal brain development where the brain fails to respond to the pubertal surge in sex steroids. Dr Jenny Wong received a 4-year NHMRC Postdoctoral Training Fellowship to investigate the molecular pathogenesis of schizophrenia, aimed at determining how two susceptibility pathways (estrogen receptor alpha and the neuregulin-ErbB4) converge to control gene expression in neurons. The project aims to provide important insights into how novel therapeutics and preventative agents could work to halt disease onset and progression.



# NEW INSIGHTS FROM INTEGRATED RESEARCH

Achieving the aim of prevention and cure for schizophrenia will necessarily involve extensive research across a wide range of disciplines. A recent review of research based at the University of Newcastle has outlined how integrating data from various brain imaging techniques and perception, cognition and behavioural measures has achieved new insights into schizophrenia.

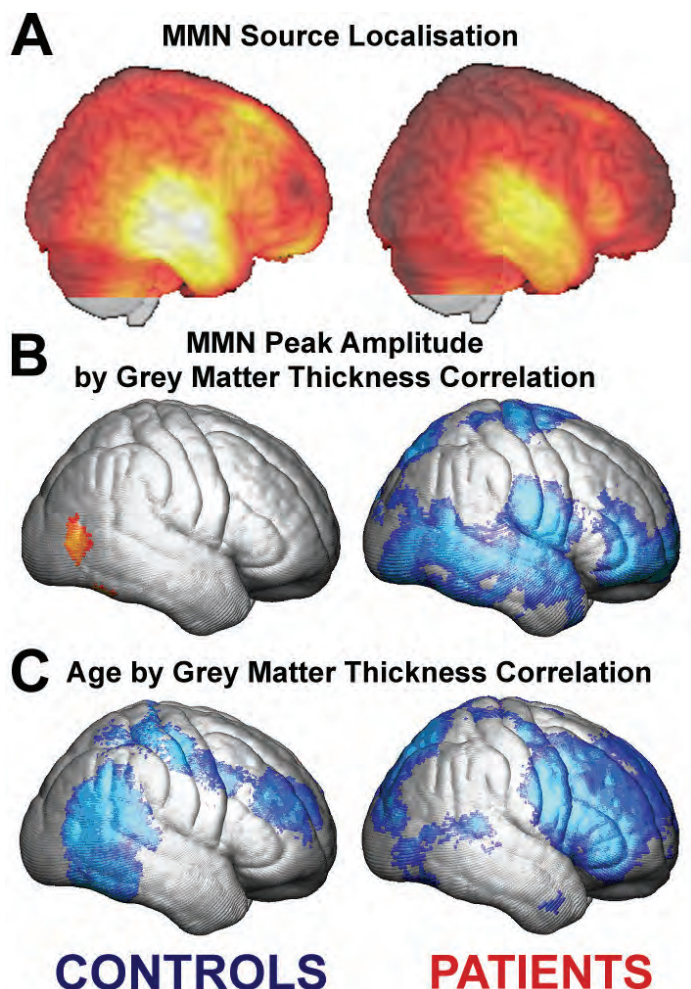
The team linked psychological measures of perception and cognitive performance with MRI, EEG and other imaging data from the Institute's 'Virtual Brain Bank' - the prototype for the Australian Schizophrenia Research Bank now in nationwide development.

In one example of their success, MRI scan data revealing thinner cortex in those affected by schizophrenia were examined together with mismatch negativity (MMN), a measure of early auditory processing. By integrating the two sets of information, the team found preliminary evidence that reductions of regional grey matter in the auditory cortex of those with schizophrenia is associated with impaired auditory processing.

The research team is continuing to investigate how these changes in brain structure and function affect sensitivity to different sound characteristics in those with schizophrenia, unravelling the specific components of the auditory processing system affected by the disorder.

This successful collaboration between scientists in separate research areas is continuing to shed light on how schizophrenia affects brain function and cognitive abilities.

Michie PT, Budd T W, Fulham WR, Hughes ME, Jamadar S, Johnston P, Karayanidis F, Matthews N, Rasser PE, Schall U, Thompson PM, Todd J, Ward PB, Yabe H. The potential for new understandings of normal and abnormal cognition by integration of neuroimaging and behavioural data: Not an exercise in carrying coals to Newcastle. *Brain Imaging and Behaviour* (2008)



## A Hat Trick of Awards for Jack and Judy Gibson

Jack and Judy Gibson's lifetime dedication to schizophrenia research has deservedly won them three awards in the last couple of months. The Institute announced the Inaugural Jack and Judy Gibson Fellowship for Schizophrenia Research at the annual supporters' event, Cocktails & Consciousness in October. The Fellowship will be awarded to outstanding young scientists to support their early careers and Dr Elisabeth Frank from the University of Wollongong is the first Institute fellow to be appointed.

Jack Gibson, a hero to so many, dedicated much of his life with his wife Judy to raising funds and awareness for schizophrenia research, resulting in over \$1.5 million in just over 10 years. The tragic death of their son in 1988 and his struggle with this disease, motivated the couple to create awareness of the need for better treatments and a cure.

As Judy continues their work the Institute also announced her as Life Governor alongside Don McDonald. The Institute is not alone in celebrating the success of the Gibsons. Research Australia presented the Macquarie Group Foundation Great Australian Philanthropy Award to Judy at its recent Thank You Day Awards Ceremony at Doltone House, Sydney. The award is in recognition of the tireless work that Jack and Judy undertook with scientists and parents to help establish the Schizophrenia Research Institute.



Judy Gibson with Dr Elizabeth Frank and Institute Chairman Peter Mayer at Cocktails & Consciousness 2008.

Accepting the awards, Judy commented: "I am delighted to receive these awards. Jack would have been so proud - he never considered us philanthropists but this was about our son - and this disease didn't just affect him but all our family. Schizophrenia is a terrible disease and mental illness has not been given the attention that it deserves. It has been a great experience over the last 12 years to watch the growth of the Schizophrenia Research Institute and to see this year, the start of its first clinical trial in an effort to improve patients' lives. Thank you for this award and I hope you will join me in continuing supporting this great cause."

The Institute currently has six Fellowships, two of which are already named. For further information on sponsoring a fellowship please contact Helen Connealy on 9292 8362

## New directions - Shining a light

We are delighted to launch our new website this month, with thanks to Singleton, Ogilvy and Mather for developing our new look. We know we have a huge mission, in finding ways to prevent and cure schizophrenia and we are convinced that by working together we will make an impact. One ray of light may not give immediate help to those with the disease but the combination of many gives us a full beam of hope.

Please visit our website and let us know what you think. Our aim is to be the most visited website for schizophrenia in Australia. We know that we have a variety of visitors – families, philanthropists and the medical research community – everyone will want different information so we aim to get a healthy balance. Email us with your feedback to [contact@schizophreniaresearch.org.au](mailto:contact@schizophreniaresearch.org.au)



## Cocktails and Consciousness

Our annual supporters' thank you event, Cocktails and Consciousness, was held on Tuesday, October 28 at the Garvan Institute Galleria. Around 150 guests were treated to canapés and cocktails, as ASRB volunteer Katrina Clutterbuck described her experience with schizophrenia and her involvement in research.

The Institute's new promotional DVD was launched on the night and the audience received a sneak preview of the new Institute website.

Judy Gibson was announced as a Life Governor of the Schizophrenia Research Institute, in recognition of her, and husband Jack's extensive fundraising support and promotion of the Institute over many years. To acknowledge and honour their support, the Institute also announced the Jack & Judy Gibson Fellowship for Schizophrenia Research, which was awarded to Dr Elisabeth Frank, University of Wollongong.

The evening drew to a close with music from the King's School Senior Choir. Our thanks to all those who attended Cocktails. This evening provides an important opportunity for us to acknowledge our supporters, and for these people to meet with the scientists who are working hard to develop our understanding of schizophrenia.

## Circle of Friends

*Please become a regular donor to the fight against schizophrenia*

The institute has many good friends who donate regularly. Michael Roper has given over almost 150 gifts since 2003. His regular contribution allows the Schizophrenia Research Institute to plan for the future and invest in much needed medical research. Michael is passionate about the cause and feels that schizophrenia doesn't get the amount of funding it deserves.

Janet Sprigge of Cowra NSW has a son Michael who was diagnosed with schizophrenia in 1985 aged 21. Despite the fact that her husband worked in the medical world, she had no idea about mental illness.

*"Michael is very intelligent but now he's a recluse – it's such a waste. We need to come close to a cure and avoid this hardship. If we can give a regular donation, it will be quicker and there will be less heartache."*

Janet is very active in raising awareness and funds for mental illness in her local area and gives monthly to the Institute.

Please join her by signing up for a regular donation today.







## SPECIAL OFFER TO SRI SUPPORTERS

*"Inside Out is a deeply moving play that provides a remarkably accurate portrayal of the experience of schizophrenia and its shattering impact on the family. Every mental health clinician should see this play to be reminded of the daily acts of heroism that living with schizophrenia entails. But take care; it could break your heart"* Vaughan Carr, CEO, Schizophrenia Research Institute

**SEYMOUR CENTRE** Cnr City Road & Cleveland Streets, Chippendale  
13th – 30th May 2009. Monday 6.30pm. Tuesday & Wednesday 11am.  
Wednesday-Friday 8pm. Saturday 5pm & 8.30pm

NORMAL PRICES – Full: \$45 Concession: \$40

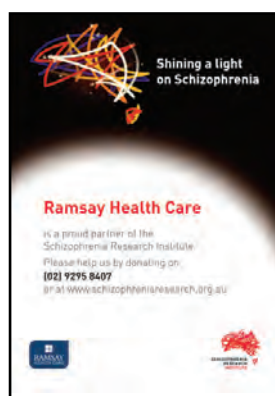
**SRI Supporters Tickets: \$38 (quote SRI)**

Bookings by phone on 02 9351 7940 or [www.seymourcentre.com.au](http://www.seymourcentre.com.au)

**Offer expires 15 April 2009**

*'Inside Out' is the full staging of the play '1 in 100', which was generously previewed by its Producers, Director and Actors at an earlier Institute Cocktails & Consciousness event.*

## F U N D R A I S I N G N E W S



### Ramsay Appeal

Ramsay Health Care showed great innovation in December in an effort to spread the word on schizophrenia and our need for funds. CEO, Chris Rex included an appeal for help in his Christmas letter to staff – a wonderful opportunity for the Institute. As Australia's largest private hospital group, the team at Ramsay are sympathetic to our cause and we

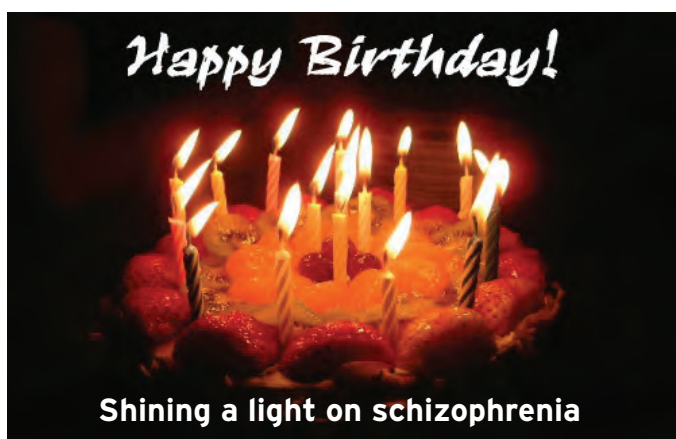
are delighted to welcome all our new Ramsay supporters to our circle of friends. Thank you.

### In Celebration

Gifts come to the Institute in many ways. Many more people are choosing to ask friends to donate instead of giving birthday presents – this is a very generous and selfless act.

Thanks to everyone for thinking of us, and particular thanks go to Norbert Schweizer whose birthday in 2008 raised over \$7,000.

Happy Birthday.



### In Memoriam

It is sad that so many have lost loved ones to this disease. We offer our condolences and send thanks to the following families who have asked mourners to donate to the Institute in lieu of flowers and in memory of their loved ones.

- ◆ Mark Springgay
- ◆ William Lewis
- ◆ Anne Bolton
- ◆ Kristian Burfield-Mills
- ◆ Scott David Shannon
- ◆ Cameron Burley

### Schools Support

A feel good story for anyone who feels that their donation doesn't make a difference.

Children teach us lots of lessons. For those of us who feel we have little to give, take note. A 10 year old girl (whose parent works at this Institute) made hundreds of paper toys with her friends, approached her school principal and sold them at assembly during December. A pink box under the tree on Christmas day contained multiple coins amounting to almost \$200 – a gift for the Schizophrenia Research Institute.

Many thanks to the principal, Louise Green, and all the children and teachers at Artarmon Public School.

### Central Office Move

Our Central Office has moved to a new office space:

**Schizophrenia Research Institute**

**Central Office**

**405 Liverpool Street**

**Darlinghurst, NSW 2010**

**Tel: 02 9295 8688 Fax: 02 9295 8689**

Mail with the old address will continue to be forwarded for the next few months.

*For privacy reasons we have chosen not to list all our individual supporters but would like to take this opportunity to thank and acknowledge these kind people who have given us gifts - this generosity and commitment of the community is vital to our ongoing success.*

*Many thanks to our government and major corporate supporters who have renewed their commitment to us and donated recently (Jul-Dec 2008).*

#### OUR PARTNERS:

NSW HEALTH



#### DONORS:

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The Schizophrenia Research Institute is the only national medical research institute solely dedicated to discovering the ways to prevent and cure schizophrenia. A registered charity throughout Australia, we rely on donations to continue our work - [www.schizophreniaresearch.org.au](http://www.schizophreniaresearch.org.au) or (02) 9295 8688.

**Please help by completing and mailing this form to Schizophrenia Research Institute, 405 Liverpool Street, Darlinghurst, NSW 2010, or fax to (02) 9295 8689, or simply call (02) 9295 8688.**

Name: \_\_\_\_\_ Address: \_\_\_\_\_  
Postcode: \_\_\_\_\_

☐ I would like to give a REGULAR MONTHLY donation of \$ \_\_\_\_\_

☐ I would like to give a ONE OFF donation of \$ \_\_\_\_\_

☐ Please debit my credit card. Amount \$ \_\_\_\_\_ ☐ Bankcard ☐ MasterCard ☐ Visa ☐ Amex

Card No: \_\_\_\_\_ Cardholder's Name: \_\_\_\_\_

Expiry Date: \_\_\_\_\_ Signature: \_\_\_\_\_

☐ Please include me on the mailing list to receive free HeadLines

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