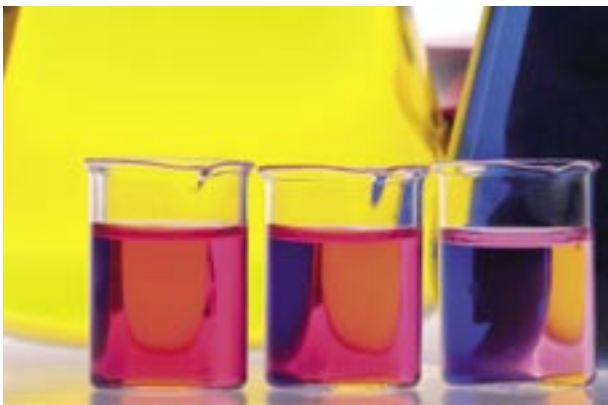


Support to the School



- Grants
- Statistics
- Donors

ACT Health and Medical Research Support Program

Dr Z Kecskes (Canberra Hospital) and **Professor I Hendry**

Protein 14-3-3 in CSF following hypoxia-ischaemia
\$16,592

ANU Major Equipment Grant

Professor MF Shannon, Dr DJ Tremethick, Dr KI Matthaiei, Dr D Webb and Dr SP Hogan

Quantifying gene expression: a realtime PCR detection system
\$86,405

ANU Medical School Research Fund Seeding Grant

Dr Z-M Song

Effects of $\alpha 2$ adrenoceptors on dendritic spine formation *in vitro*
\$50,000

ANU Teaching Equipment Grant

Professor C Hill

\$18,967

Australian Institute of Nuclear Science and Engineering (AINSE)

Dr DO Willenborg

Evaluation of radiolabelled peripheral benzodiazepine receptor (PBR) ligands in the animal model "experimental autoimmune encephalomyelitis".
Potential probes for the diagnosis of "Multiple Sclerosis"
\$15,840

Australian Research Council Centre of Excellence Grant

Professor P Gresshoff, Professor C Beveridge, Dr B Carroll, Professor B Rolfe, **Professor C Parish**, Dr M Djordjevic, Dr G Weiller, Dr U Mathesius, Dr R Rose, Professor M Singh and Dr P Bhalla
Integrated legume research
\$2,000,000

Australian Research Council Discovery Grants

Dr RT Baker

Role of a novel zinc-binding motif in the structure-function of deubiquitinating enzymes
\$75,000

Professor PG Board

Agenomic and phenomic investigation of a mitochondrial glutathione transferase
\$80,000

Professor PG Board, Professor AF Dulhunty and Professor PW Gage

CLICVs and GSTs : New ion channel modulators
\$131,500

Professor S Easteal, Dr GA Huttley, Dr AV Isaev and Dr MJ Wakefield

Adaptive evolution of BRCA1 in ancestral mammals
\$75,000

Professor S Easteal, Dr K North and Dr R Trent (Sydney University)

Discovering genes which modify human physical performance: a means of developing healthier life styles and novel athletic training programs

Dr JE Greedy, Dr PL Cummins, Dr AA Bliznyuk (ANUSF), **Professor U Rothlisberger** (EPFL, Lausanne), **Professor S Ragsdale** (UNebraska)

Towards a complete description of how enzymes work: development of simulation methods and protocols, blind test predictions, and experimental validation
\$85,000

Professor TD Lamb

Suction pipette measurements of mammalian rod photoreceptor recovery following intense bleaching exposures
\$60,000

Dr DJ Tremethick

Mechanisms of higher-order chromatin folding
\$142,000

Professor S R Wilson

Statistical advances in the Post-Genome Era
\$85,000

Grants

Australian Research Council Linkage Grants

Dr HS Booth, Dr GA Huttley, Dr A Isaev and Cray Australia P/L

Bioinformatics Software Development

\$6,250

Dr MG Casarotto

Molecular Interactions of chemical agents with ion channel proteins

\$70,000

Dr CJ Easton and Dr MG Casarotto

Synthetic compounds to specifically activate or inhibit ryanodine receptor calcium ion channels

\$68,000

Professor TJ Andrews (RSBS), Dr JE Gready and Professor G Otting (RSC)

Why is the photosynthetic CO₂-fixing enzyme, Rubisco, so inefficient? Dissection of the catalytic chemistry by computational simulation and experimental testing

\$215,000

Dr B Garner, Professor C Parish, Dr C Freeman, Dr PP Gray, Dr MJ Davies and Dr M Guilhaus

A glycobiology facility for glycoconjugate analysis and oligosaccharide sequencing

\$343,608

Professor M Sheil, Dr S Blanksby, Dr J Beck, Associate Professor M Wilson, Associate Professor RJW Truscott, Associate Professor J Carver, Professor M Walker,

Dr P Keller (Wollongong), Dr NE Dixon, Professor G Otting, Professor B Rolfe (ANU), Professor IG Young, Professor L Mander (Auckland)

New directions in biomolecular mass spectrometry

\$555,910

Centre for HIV Virology

Professor IA Ramshaw

Novel approaches for HIV-1 vaccination

\$150,000

Clive & Vera Ramaciotti Foundation

Professor JA Whitworth and Dr Y Zhang

\$10,000 - equipment

Diabetes Australia Research Trust Grants

Professor MF Shannon and Dr CJ Simeonovic

Molecular mechanisms for the survival of islet tissue allografts and xenografts: a role for the transcriptional factor c-Rel

\$40,000

Dr CJ Simeonovic, Professor IA Ramshaw, Dr G

Hoynes and Clinical Associate Professor JD Wilson

Dendritic cell-based immunotherapy for the re-establishment of self-tolerance to islet beta cells in NOD mice

\$40,000

Flexible Learning Fellowship

Dr HS Booth

Postgraduate course development - Bioinformatics

\$37,248

Hellenic Republic, Ministry for Development

Professor CE Vorgias and Dr MG Casarotto

Solution Structure of a 40 kDa thermostable TIM barrel type chitinase: mechanistic insights. Molecular recognition and substrate hydrolysis of chitin related enzymes

\$100,452

Howard Hughes Medical Institute, USA

Dr G Karupiah

Immune response to viral infection

\$93,000

Human Frontiers Science Foundation

Professor SJ Redman, Professor T Jessell (University of Columbia), Professor R Brownstone (Dalhousie University), Professor L Ziskind-Conhaim and Professor M Jackson (University of Wisconsin) and A Todd (University of Glasgow)

Physiological functions of genetically distinct classes of ventral spinal interneurons

\$50,000

ICE-EM grant Bioinfosummer 2004 Symposium in Bioinformatics

Dr C Burden, Dr HS Booth and Dr L Santoso

Genome to phenome modelling

\$25,000

Grants

International Union against Cancer

Professor A Sobolev (Moscow State University),
Professor I Young and Dr A Oakley (RSC, ANU)
 Crystallization of a multi-domain transporter
 developed to kill cancer cells
 \$3,163

National Health and Medical Research Council Capacity Building Grant

Professor T Dwyer, Dr G Jones, Dr A Venn, Dr L
 Blizzard, **Professor S Easteal**, Dr A-L Ponsoyby,
 Professor P Zimmet
 Building Australia's capacity to study preventable
 causes of common diseases through epidemiological
 research
 \$500,000

National Health and Medical Research Council Equipment Grant

Dr M Hulett
 Amaxa Nucleofector Device
 \$32,000

National Health and Medical Research Council Program Grants

Professor C Chesterman (UNSW), Dr R Andrews
 (Monash), Dr M Berndt (Monash),
 Professor B Chong (UNSW), Professor P Hogg (UNSW),
Dr M Hulett, Associate Professor L Khachigian
 (UNSW) and **Professor C Parish**
 Vascular Biology
 \$2,000,000
 Professor P Doherty, **Professor IA Ramshaw**,
 Professor D Cooper and Associate Professor S Kent
 Studies of HIV-1 infection and vaccination
 \$350,000

National Health and Medical Research Council Project Grants

Dr J M Bekkers
 Synaptic integration and plasticity in the rat piriform
 cortex
 \$80,000
Professor PG Board
 The role of Zeta and Omega class glutathione
 transferases in endobiotic and xenobiotic metabolism
 \$160,000

Dr G Chaudhri and Dr G Karupiah

Pathophysiological significance of reverse signalling
 through membrane TNF
 \$50,000

Dr G Chaudhri and Dr G Karupiah

Critical role of TNF in host-virus interactions and
 outcome of infection: Involvement of reverse
 signalling through mTNF
 \$165,000

Professor AF Dulhunty, Professor PG Board and Dr MG Casarotto

Protein/protein interactions between two calcium
 channels
 \$130,000

Professor AF Dulhunty, Professor GD Lamb, and Dr MG Casarotto

Specific modification of RyR activity
 \$130,000

Dr R Kumar and **Professor PS Foster**
 Cytokines regulating airway inflammation,
 remodelling and hyperreactivity in chronic asthma
 \$114,000

Professor PS Foster, Dr SP Hogan, Dr KI Matthaei, Dr PI Thompson and Professor IG Young

Molecular mechanisms in the regulation of allergy
 and inflammation
 \$970,000

Professor C Goodnow

Genetic and biochemical mechanisms dysregulating
 CD4 T cell tolerance
 \$145,000

Professor C Goodnow and Dr C Vinuesa

Mechanisms controlling antibody production and B
 cell signalling
 \$150,000

Professor I Hendry

The proteins associated with the neurotrophin
 retrograde transport signalling endosome
 \$95,000

Professor C Hill and Dr T Grayson

Myoendothelial gap junctions: their composition and
 role in vasodilator responses attributed to EDHF
 \$85,000

Professor D Hirst and Dr F Edwards

Involvement of ICC in control of gastric antral motility
 \$300,000

Grants

Dr G Karupiah

Control of influenza virus infection by gamma interferon induced mediators

\$25,000

Dr NJC King, **Dr G Karupiah**, Dr AM Kesson and **Dr G Chaudhri**

Critical soluble effector molecules causing immune damage in a model of West Nile virus encephalitis

\$87,500

Professor TD Lamb

Electroretinogram recordings of human scotopic dark adaptation following intense bleaching exposures

\$119,000

Professor SJ Redman and Dr C Raymond

The contributions of different sources of calcium to the induction of long-term potentiation

\$85,000

Professor MF Shannon

The role of c-Rel in T cells gene transcription: a model of chromatin remodeling.

\$152,000

Professor MF Shannon and Dr A Holloway

A functional proteomics approach to the study of inducible gene transcription in a chromatin context

\$150,000

Dr CJ Simeonovic and Professor A Gibbs

Major xenoantigens for neovascularised porcine xenografts: the role of PERV and MHC in rejection and tolerance

\$160,000

Dr GJ Stuart

Dendritic mechanisms underlying synaptic plasticity

\$95,000

Dr D Tremethick and Dr P Ridgway

The function of an essential histone variant during early development

\$145,000

Professor B Walmsley

Synaptic transmission in the central nervous system

\$145,000

Dr HS Warren

Receptors and ligands regulating human NK cell proliferation

\$136,242

Dr DO Willenborg

The role of interferon-gamma and nitric oxide in the downregulation of central nervous system inflammation

\$160,000

National Health and Medical Research Council Senior Research Fellowships**Dr G Karupiah**

\$112,500

Dr HS Warren

\$109,750

National Heart Foundation**Professor C Hill and Dr T Grayson**

Grant-in-Aid

\$49,833

National Institutes of Health, USA**Dr EM Bertram and Professor C Goodnow**

Genes for tolerance and immunity consortium supplement: Screening a unique library of mouse genome variants for genes and mechanisms necessary to enhance CD8 T cell responses in anti-viral immunity

\$284,064

Professor MV Anders and Professor PG Board

The metabolism and toxicity of halogenated hydrocarbons

\$103,630

Professor C Goodnow

Genes for tolerance and immunity consortium

\$795,798

Professor IA Ramshaw and Dr SA Thomson

HIV vaccine design and development program

\$376,000

NSW Cancer Council

Professor C Parish, Dr J Altin (BaMBi, ANU) and Dr P Hogg and Professor C Chesterman (UNSW)

Tumour angiogenesis

\$196,000

Praxis Pharmaceuticals**Dr WB Cowden and Dr B Charlton**

Investigation of phosphosugars as anti-inflammatory drugs

\$375,000

Grants

The Canberra Hospital Private Practice Fund

Dr D Croaker and Dr P Overliet (Canberra Hospital) and Dr Z-M Song

Modifying the aganglionic phenotype in rats and men: investigations into the role of genes and lipids in the aetiology of Hirschsprung's disease
\$50,000

Dr DO Willenborg, Dr H Warren, Dr M Cook and Dr N Petrovsky

A multiscan plate reader
\$21,388

Viertel Senior Medical Research Fellowship

Dr M Hulett

Regulators of cell invasion and angiogenesis
\$165,000

Wellcome Trust

Professor C Goodnow

Molecular analysis of pathways in diabetes
\$660,000

Staff Numbers	2004	2003	2002
Academic staff	96	85	76
General Staff – administration, technical & support	212	172	176
Postgraduate students	76	77	84

The number of JCSMR staff has increased significantly in response to our continued success in attracting external research funding. In addition the Australian Phenomics Facility was completed in 2004 and is now fully operational.

Income	
Base Allocation	\$13,942,000
IGS, RTS, RIBG	\$3,905,000
Adjustments	\$413,000
Other Income	\$2,154,000
Special Purpose Funds (SPF)	\$15,815,000
TOTAL INCOME	\$36,229,000



Expenditure	
Staff Costs	\$13,291,000
Scholarships	\$1,186,000
Equipment	\$1,588,000
Travel	\$704,000
Expendable Research Material (ERM)	\$2,150,000
Other	\$2,284,000
Special Purpose Funds (SPF)	\$15,815,000
TOTAL EXPENDITURE	\$37,018,000



Special Purpose Funds	
Overseas Grants	\$1,468,000
Government Grants	\$12,841,000
Australian Business	\$74,000
Other	\$1,432,000
TOTAL	\$15,815,000



Donors 2004

The Director, staff and students of the John Curtin School of Medical Research are extremely grateful for continued support from our donors.

We would particularly like to thank in 2004

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Gifts and bequests to the School are used to fund vital research projects in areas such as asthma, cancer, diabetes, high blood pressure, hearing loss and vision, as well as providing scholarships and purchasing specialised equipment. Your support can be provided in a number of ways. These could include a gift or bequest that may assist in funding a particular area of research, or a scholarship or prize.

If you would like to discuss options for supporting The John Curtin School of Medical Research, please contact:

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