

# 2021/2022 ANNUAL REPORT



Esther Bolz

## GLADYS M BRAUN MEMORIAL BEQUEST AND FELLOWSHIP

Illustration by Esther Bolz



## Preface

The Gladys M Brawn Memorial Bequest was established to provide a permanent memory of Mr Harold Brawn's late wife Gladys. The Deeds purpose is to grant fellowships to scholars who have demonstrated the potential to become world recognised academics or clinicians in medicine or in disciplines related to medicine in order to promote research and study in that particular field or discipline.

Our Fellows have continued to achieve significant results with grant success and publications in high-ranking journals. They have continued their appointments on boards and societies of international standing and accomplished international reach through their research success and award honours. They have also contributed to the training and mentoring of our new and emerging research leaders, PhD and Research Master students.

Prof Amanda Baker is in the last year of her fellowship and will retire from the University at the end of the year.

Prof Murray Cairns who completed his Brawn Fellowship at the end of last year, has secured a tenured position with the University of Newcastle and continues to apply for fellowships.

At the 2021 Committee meeting, the committee approved the proposal of interest earnings to be allocated to fellows who were yet to secure another fellowship as bridging salary support. Dr Melissa Harris and Dr Jamie Bryant were appointed as Brawn Fellows for 2022 and their progress reports are included in pages 16 and 17 of this report.

The Gladys M Brawn Bequest Rule (pages 4-10 of this Report) review was postponed and will take place in 2023 in accordance with a University Council review of policies and Rules that fall under its governance.

The 2021 interest allocation to The Gladys M Brawn Bequest was \$392,156 (for use in 2022). The final closing balance of the Brawn Bequest was \$10,965,058 as at 31 December 2021.

The 2022 projected interest has been estimated at \$357,460 (for use in 2023). This positive forecast has reflected good investment by the University and subsequent interest earnings. The confirmed interest amount will be notified by the end of the first quarter in 2023.

The gravesite of Gladys M Brawn was last visited on the 9<sup>th</sup> November 2022. Whilst in good condition, it is recommended that a grave cleaning service be secured to revitalise the site.



## Contents

Gladys M Brawn Bequest Rule .....	3
1. Introduction.....	5
2. Rule Intent .....	5
3. Rules .....	5
4. Relevant Definitions .....	12
Summary of Gladys M Brawn Fellowships Awarded 1998 - 2022.....	13
Gladys M Brawn Memorial Fellow Reports.....	19
Professor Amanda Baker .....	20
Professor Geoff Isbister AM .....	23
Professor Murray Cairns.....	26
Gladys M Brawn Bequest Financial Report .....	30
Gladys M Brawn Gravesite .....	32



# Gladys M Brawn Bequest Rule

*(Note: Endorsed by Executive Committee 4 August 2014, pending review and Council approval)*

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## GLADYS M BRAUN BEQUEST RULE – 000136 – TO BE REVIEWED

Date of first edition:	<completion by policy team>	Date this review will take effect:	<completion by policy team>	Date of next Review:	<completion by policy team>
TRIM Folder Ref:	<completion by policy team>	Document Number:	<completion by policy team>	Revision Number:	<completion by policy team>
Approved by, date:	The University Council				
Rule Sponsor:	The University Council				
Governing Legislation:					
Supporting documents, procedures & forms of this Rule:	Deed of the Braun Bequest				
Subordinate Policies:					
Audience:					
Keywords:	Bequest, Fellowship, Memorial, Gift Committee,				
Important Notes:	This Rule replaces the Rules Governing Gladys M Braun Memorial Gift Committee - Rule				

## **1. Introduction**

The Gladys M Brawn Memorial Fellowship Scheme (Scheme) was established in 1995. It provides fellowships to scholars who demonstrate the potential to become world recognised academics or clinicians in medicine or in disciplines related to medicine, in order to promote research and study in that particular discipline. The Scheme is a result of the generous donations to The University of Newcastle, through the Faculty of Health and Medicine, from the late Leslie Harold Brawn in memory of his wife Gladys M Brawn. The terms of the Gladys M Brawn Memorial Bequest (Brawn Bequest) are determined by a Deed (attachment 1) established in 1993 and the conditions of the Deed make it essential that the Brawn Bequest be established in perpetuity.

## **2. Rule Intent**

This Rule is created in accordance with the terms of the Deed of the Brawn Bequest which state that the Council must constitute the Gladys M Brawn Memorial Gift Committee (Gift Committee) (clause 6.2) who has the responsibility to administer the income received from the fund, and must adopt a set of rules for the conduct of its business (clause 6.4) which must be approved by the Council.

## **3. Rules**

### **3.1 The Committees**

#### **3.1.1 The Gift Committee**

##### **3.1.1.1 Establishment**

The Gift Committee was established by the Council at its June 1995 meeting held on 8 December 1995, to administer the income received from the Capital Fund. The composition of the Gift Committee, and its responsibilities are specified in section 6 of the Deed.

##### **3.1.1.2 Purpose and responsibilities**

- a. In accordance with section 6.5 of the Deed, the purpose and responsibility of the Gift Committee are to:
  - i. establish and administer the Fellowship to attract researchers in Medicine or disciplines related to Medicine; and
  - ii. nominate recipients for the Fellowship to the Council.
- b. The Gift Committee will:
  - i. determine the manner in which the availability of the Brawn Fellowship will be advertised, including the vehicles for its announcement, and the country or countries in which such availability will be advertised;
  - ii. determine the criteria to be applied in the selection of the successful candidate for the Brawn Fellowship, having regard to the provision in section 3 of the Deed, that those selected must demonstrate "the potential to become world recognised academics or clinicians in medicine or in disciplines related to medicine in order to promote research and study in that particular field of discipline";
  - iii. determine the duration of the Brawn Fellowship in respect of each candidate recommended to the Council;

- iv. determine the manner in which the availability of the Brawn Fellowship will be advertised, including the vehicles for its announcement, and the country or countries in which such availability will be advertised;
- v. determine the criteria to be applied in the selection of the successful candidate for the Brawn Fellowship, having regard to the provision in section 3 of the Deed, that those selected must demonstrate "the potential to become world recognised academics or clinicians in medicine or in disciplines related to medicine in order to promote research and study in that particular field of discipline";
- vi. determine the duration of the Brawn Fellowship in respect of each candidate recommended to the Council;
- vii. determine the conditions under which a Brawn Fellowship may be held and, if the Brawn Fellowship is to be available to any particular candidate over a specified period subject to the satisfaction of certain criteria, what those criteria are to be.
- viii. In making nominations for award of the Brawn Fellowship, the Gift Committee will take such expert advice as it can reasonably obtain (including consultation by the Pro Vice-Chancellor (Health and Medicine) with the Professors of the Faculty of Health and Medicine, as to the relative merits of the applicants and of the research projects which each applicant proposes.

#### 3.1.1.3 Membership

- a. As provided under section 6.3 of the Deed, the Gift Committee shall comprise the persons for the time being holding the positions of:
  - i. the Vice-Chancellor, the University of Newcastle;
  - ii. the Pro Vice-Chancellor (Health and Medicine), the University of Newcastle;
  - iii. the Mayor of the City of Newcastle;
  - iv. the Member of Parliament for the State Seat of Newcastle (or such electorate that includes the Central Business District of the City of Newcastle);
  - v. the Editor of the leading Newcastle daily newspaper;
  - vi. the Manager of the leading Newcastle commercial television station;
  - vii. the Regional Director or the Deputy Regional Director of the Hunter Region of the New South Wales Department of Health.
- b. The Gift Committee will:
  - ix. decide who the persons are, from time to time, who occupy the positions defined in section 3.1.1.3a. above;
  - x. select a substitute person of near description, near interest or near background in respect of each vacancy arising from time to time caused by any of the office-holders described in section 3.1.1.3a. above being unable or unwilling to accept appointment to the Gift Committee; and
  - xi. decide any dispute as to the membership of the Gift Committee.

### 3.1.2 The Investment Committee

#### 3.1.2.1 Establishment

The Investment Committee is established by the Deed.

#### 3.1.2.2 Purpose and Responsibilities

The Committee recommends the University to:

- a. Invest and administer the Bequest fund in accordance with the UON Investment Policy, as updated from time to time, and
- b. All investment and administration actions be carried out in accordance with the UON Delegation of Authority Policy, as updated from time to time.

#### 3.1.2.3 Membership

As provided under section 9 of the Deed, the Investment Committee shall comprise the persons for the time being holding the positions of:

1. Vice Chancellor of the University of Newcastle;
2. University Secretary of the University of Newcastle;
3. Chief Financial Officer of the University of Newcastle;
4. Dean of the Faculty of Health and Medicine of the University of Newcastle.

### 3.1.3 Common Committee Rules

#### 3.1.3.1 Frequency of Meetings

- a. The Gift Committee shall meet as frequently as is necessary for it to fulfil its purpose and responsibilities, but not less than once in each calendar year.
- b. The Investment Committee shall meet annually and at least one week prior to the Gift Committee.

#### 3.1.3.2 Quorum

The quorum for meetings of the Gift Committee and Investment Committee shall be three.

#### 3.1.3.3 Reporting

The Committees shall report to the Council after each meeting.

## 3.2 The Fellowship

### 3.2.1 General

3.2.1.1 It is a requirement of the Deed that Brawn Fellowships be advertised nationally and internationally each year.

3.2.1.2 Although it is expected that most Senior Fellow candidates will be attracted by personal contact, advertising will raise the profile of the Brawn Bequest and Brawn Fellowship Scheme and reflect the status of the University of Newcastle as a place for high quality research.



- 3.2.1.3 In making recommendations for a Brawn Fellowship, the Gift Committee takes into account expert advice from the Pro Vice-Chancellor Faculty of Health and Medicine concerning the relative merits of the applicant and the projects proposed. The level of funding provided for each type of Brawn Fellowship (See Section 3.2.2) will be reviewed annually by the Gift Committee and adjusted accordingly.

### **3.2.2 Fellowship Funding**

- 3.2.2.1 Yearly expenditure is budgeted based on the annual projected interest earnings from the Capital Fund provided by the Accountant. The annual projected interest is the amount that can be expended in the current year to create and support Brawn Fellowships. The net funds available each year are determined after the deduction of annual grant-in-aid support for eligible Research Fellows and other relevant commitments (for example, gravesite upkeep, advertising).

- 3.2.2.2 The Gift Committee has the discretion to allocate up to 15% of the interest earned for Capital Fund preservation therefore maintaining the Capital Fund.

#### **3.2.2.3 Fixed Term Fellowship**

When an award is made for a fixed term Fellowship (Post-Doctoral or Strategic) the total expenditure for the entire duration of the award (e.g. 2 or 3 years) is committed from the interest earned on the Capital Fund in the year that the Brawn Fellowship is awarded, so that no further financial obligation is required from the Brawn Bequest in subsequent years.

#### **3.2.2.4 Continuing Fellowships**

- a. When an award is made for a continuing Fellowship (Senior Research Fellowship) the grant-in-aid and salary gap top-up allocation is budgeted as an annual commitment from the available funds each year for as long as the Brawn Fellow remains eligible for the grant-in-aid.
- b. When surplus Faculty funding is available, the Gift Committee approved that the Faculty of Health and Medicine will co-support existing Senior Research Fellows in order to free up the interest earned for the recruitment of new Senior Fellows. In this instance, the Faculty of Health and Medicine will fund the grant-in-aid and salary gap top-up for all existing Senior Research Fellows and the automatic recruitment of University of Newcastle staff who achieve a renewable externally funded fellowship (in line with the intent of the Deed). The Brawn Bequest will continue to underwrite the salary Reserve Fund for all Senior Research Fellows.

#### **3.2.2.5 Reserve Fund**

- a. The Senior Research Fellow's salary Reserve Fund (up to \$300,000) is retained within the Capital Fund in order to maximise interest earnings. The commitment of funds to comprise the Reserve Fund can be made at any time as long as the Senior Research Fellow is assured of being able to access the Reserve Fund should circumstances require it.

- b. Senior Research Fellow's requesting access to their Reserve Fund are to make any such requests in writing to the Gift Committee.
  - c. The Reserve Fund is in place for a time determined by the Gift Committee to offset the need to fund the Senior Research Fellow in the event that external funding is no longer made available.
  - d. If a Senior Research Fellow requires the use of the Reserve Fund, the grant-in-aid allocation is suspended until external funding is secured. Full Reserve Fund provisions are to be set aside prior to a Senior Research Fellow needing to access the funds (at end of first renewable period). The committed amounts are held in a separate Brawn 'non-active' account for reporting purposes and/or until required by the Senior Research Fellow.
- 3.2.2.6 To track expenditure for individual Brawn Fellows a separate cost centre is established for each Brawn Fellow with a budget indicated to limit expenditure to the amount awarded. The funds are transferred as at 31 December each year to maximise interest earnings.
- 3.2.2.7 Annual investment earnings which are not committed in any given year are returned to the Capital Fund for further investment.
- 3.2.2.8 If commitments are no longer required (e.g. Reserve Fund provision, funds committed for recruitment of Brawn Fellow(s)), the Gift Committee decides whether to roll the excess funds back into the Capital Fund or utilise them for further recruitment opportunities in the following year.

### **3.2.3 Fellowship Types**

- 3.2.3.1 Senior Research Fellows
- a. The principal aim of the Brawn Bequest is to support Senior Research Fellows of the highest possible calibre who will add strategic value to the research profile of The University of Newcastle. Senior Fellows are expected to either bring their own renewable salary support or obtain renewable external salary support within 5 years. Normally Senior Fellows will be appointed full-time.
  - b. Senior Research Fellows with their own renewable salary support will receive:
    - i. a grant-in-aid of \$35,000 per year (or other amount to be determined from year to year).
    - ii. a Reserve Fund of up to \$300,000 to provide salary support for up to 2 years should their external salary support fail to be renewed.
    - iii. a contribution (up to a maximum of 50%) towards any salary gap between the remuneration provided by the external salary and the University of Newcastle salary rate for the level of appointment of the Senior Research Fellow.
    - iv. and by negotiation may receive a start-up package up to the value of \$500,000.
  - c. Senior Research Fellows who do not initially bring their own salary support but who represent strong potential to do so, and whose appointment would have particular strategic value to the Faculty of Health and Medicine, may be provided with a salary for up to 5 years without the annual grant-in-aid. When external salary support is secured the extra benefits above will apply.

- d. The use of the grant-in-aid funds will be at the discretion of the Senior Research fellow; part or all of it can be used as a non-superannuable salary supplement for the Senior Research Fellow or in any way to advance the research program of the Senior Research Fellow (e.g. salaries for staff, scholarships, travel, equipment). Any equipment purchased must remain the property of the University of Newcastle. The grant-in-aid must be spent in the year that it is committed, unless written permission is granted by the Gift Committee to roll over the funds. However a 10% carry forward is allowable without prior written approval. This carry forward figure is not cumulative.
- e. In the case of strategic recruitment of exceptional senior researchers to a Senior Research Fellow appointment, the Gift Committee has the ability to make decisions on recruitment to attract and retain such individuals. The appointment must be in line with the Deed's intent and enhance the research capacity of the University of Newcastle and the Faculty of Health and Medicine. Where a Fellowship position is created and the recruitment process is ongoing, the Gift Committee has the authority to commit funds to the Fellowship.

### 3.2.3.2 Career Development Fellows

#### a. *Fellowship Category 1*

- a. The Career Development Fellowship scheme supports early and mid-career researchers who hold non-renewable external fellowships by providing the security of a salary Reserve Fund (1st year guaranteed and 2nd year based on performance) and a grant-in-aid of \$20,000 for each year of the Career Development Fellowship, to use towards research expenses.
- b. The grant-in-aid is funded from the Faculty of Health and Medicine's annual budget and must be spent in the year in which it is committed to the Career Development Fellow, unless written permission is granted by the Pro Vice-Chancellor (Health and Medicine) prior to year end.

#### b. *Fellowship Category 2*

- i. To support and foster early- to mid-career researchers (less than 15 years post-doc) to build research trajectory, the Brawn will provide a 'buy-out' scholarship that assists in reducing teaching commitments so recipients can concentrate on research outputs.
- ii. The Fellowship will provide a maximum of \$30,000 per annum (actual amount will be dependent on interest earnings from year to year) to assist with this buy-out over a three (3) year period. Any unused funds cannot be rolled over to a future year.
- iii. It is expected that after the three years of support from the Brawn Trust, the Fellow will remain as a UON research academic for at least a further three year period.
- iv. Reporting during the fellowship period will be required and yearly renewal will be contingent on sufficient outputs being achieved.
- v. Subject to performance, this fellowship category can be renewed for one (1) further funding period. Requests must be made in writing to the Brawn Gift Committee.

#### c. General

- a. Previously appointed Career Development Fellows may apply for a Senior Research Fellowship.

### 3.2.3.3 Post-Doctoral Fellows

- a. Whilst the funding of Senior Research Fellows is a priority, funds may also be used to support high quality Post-Doctoral researchers. Post-Doctoral Fellows will receive up to 3 years salary support (at an Academic Level A or Level B Salary rate) plus a grant-in-aid of \$10,000 per annum towards research expenses. Post-Doctoral Fellows must have the potential to obtain external salary support and will be expected to apply for this support in the first and subsequent years of the fellowship and sacrifice the Brawn Fellowship if and when successful.
- b. The grant-in-aid must be spent in the year that it is committed, unless permission is granted by the Gift Committee to roll over the funds.
- c. A current Post-Doctoral Fellow whose fellowship is less than 3 years can apply, as part of a normal competitive application round, to have the Post-Doctoral Fellowship extended up to a maximum of 3 years. Researchers who have previously held a Post-Doctoral Fellowship cannot apply for a second Post-Doctoral Fellowship.
- d. Previously appointed Post-Doctoral Fellows may apply for a Career Development Fellowship and/or a Senior Research Fellowship.

### 3.2.4 Reporting

- 3.2.4.1 Each Brawn Fellow must acknowledge support from the Gladys M Brawn Memorial Fellowship Scheme in all publications arising from and during the tenure of the fellowship and be prepared to promote the memory of Gladys M Brawn in relevant media when required.
- 3.2.4.2 Each Brawn Fellow must submit an annual report through the Faculty of Health and Medicine to the Gift Committee.
- 3.2.4.3 The Faculty of Health and Medicine will prepare a composite Brawn Fellowship Annual Report every year. This Report will be provided to the Council.
- 3.2.4.4 In accordance with the Rules Governing Gladys M Brawn Memorial Gift Committee 000136, the Gift Committee will report to the Council following each meeting.

## 3.3 Fellow Leave Arrangements

### 3.3.1 Leave Arrangements

- 3.3.1.1 As a University of Newcastle academic staff member all Brawn Fellows are entitled to leave arrangements in accordance with The University of Newcastle Academic Staff Workplace Agreement found at <http://www.newcastle.edu.au/service/leave-management/leave-management-resources.html>.
- 3.3.1.2 Returning to work on a part-time basis is also allowable subject to approval by the Gift Committee following the submission of a written request that:

- a. Specifies the proposed period of part-time Brawn Fellowship;
- b. Describes how the research program of the Brawn Fellow can still meet its objectives despite the Brawn Fellow being part-time; and
- c. Outlines the arrangements made to ensure that research program meets its objectives while the Brawn Fellow is part-time.
- d. The Brawn Fellowship and grant-in-aid will be suspended whilst leave is taken and will be reactivated when the Brawn Fellow returns to work. The duration of the Brawn Fellowship will remain as awarded or adjusted on a pro-rata basis if the Fellow returns to work part-time.

#### **4. Relevant Definitions**

In the context of this document:

**Accountant** - the University of Newcastle financial services staff member assigned the responsibility of administering the financial operations of the Gladys M Brawn Trust Account.

**Brawn Fellow** - individual awarded a Fellowship established in accordance with the provisions of the Deed.

**Brawn Fellowship** - Gladys M Brawn Memorial Fellowship awarded in accordance with the provisions of the Deed.

**Capital Fund** - original gift donation from the late Leslie Harold Brawn and accrued amounts held in a trust account by the University of Newcastle.

**Commitment/committed** - funds allocated by the Gift Committee and awarded to the successful Fellow or Fellowship for the purposes of the Fellowship.

**Council** - the University of Newcastle Council.

**Deed** - the Gladys M Brawn Memorial Trust Deed signed and sealed on 12 February 1993.

**Reserve Fund** - commitment of funding set aside for the salary of Fellows in the event that external funding is no longer made available.

**Trust** - wishes of the late Leslie Harold Brawn relating the amounts donated which are held and managed by the University of Newcastle.



# **Summary of Gladys M Brawn Fellowships Awarded**

**1998 - 2022**

## Summary of Fellowships Awarded 1998 – 2022

Senior Brawn Fellows - Current					
Name	Year Commenced	External Fellowship title	Total Research Income for Fellowship Period (HERDC figures)	Indicative Research Earnings 2011-2021 (Derived from HERDC Income)	Total Fellowship Payments to date (Grant in Aid, Salary Contribution, Reserve Fund)
Professor Amanda Baker	2009	NHMRC Senior Research Fellow	\$5,237,334	\$1,967,847	\$700,000
Professor Geoff Isbister	2014	NHMRC Senior Research Fellow	\$4,426,010	\$2,206,337	\$400,000
Professor Murray Cairns	2017	NHMRC Senior Research Fellow	\$3,569,534	\$1,434,879	\$250,000

Previous Senior Brawn Fellows					
Name	Period	External Fellowship title	Total Funding Awarded (to end of Fellowship period)	Total Publications (to end of Fellowship period)	Total Fellowship Payments
Professor Derek Laver	2001 – 2008	ARC Research Fellow	\$3,188,212	160	\$268,663
Emeritus Professor Leonie Ashman	2002 – 2011	NHMRC Principal Research Fellow	\$11,518,101	231	\$302,329
Professor David Pow	2004 – 2007	NHMRC Senior Research Fellow	\$2,376,534	<i>Data not available</i>	\$60,000
Conjoint Professor Wayne Smith	2006 – 2007	NHMRC Senior Research Fellow	\$5,866,872	221	\$184,630
Professor Michael Nilsson	2012 – 2016	HMRI Director	\$6,261,510	220	\$1,416,756
Professor Xu Dong Zhang	2011 – 2017	NHRMC Senior Research Fellow	\$18,602,572	158	\$425,000
Professor Dirk van Helden	1998 - 2019	NHMRC Principal Research Fellow	\$10,596,663	110	\$713,800
Professor Phil Hansbro	2015 - 2018	NHMRC Senior Research Fellow	\$22,418,160	251	\$200,000

Professor Kypros Kypri	2013 - 2019	NHMRC Senior Research Fellow	\$6,109,745	119	\$529,000
Professor Clare Collins	2016 - 2021	NHMRC Senior Research Fellow	\$11,114,746	310	\$300,000
Professor Frances Kay-Lambkin	2016 - 2021	NHMRC Senior Research Fellow	\$10,361,293	126	\$275,000

### Career Development Fellows - Category 1

Name	Period	External Fellowship title	Total Research Income for Fellowship Period	Indicative Research Earnings for Fellowship Period	Total Fellowship Payments to date
					(Grant in Aid, Reserve Fund)
Associate Professor Billie Bonevski	2013 – 2017	NHMRC Career Development Fellow	\$3,568,109	\$692,232	\$187,000
Professor Mark Parsons	2014 – 2016	National Heart Foundation Fellow	\$3,457,955	\$803,332	\$40,000
Associate Professor Luke Wolfenden	2015 – 2017	NHMRC Career Development Fellow	\$5,041,535	\$832,633	\$80,000
Dr Chenchen Jiang	2015 – 2018	NSW Cancer Council Career Development Fellow	\$1,311,342	\$151,210	\$147,000
Dr Vanessa Murphy	2017 – 2019	NHMRC Career Development Fellow	\$2,578,477	\$246,532	\$40,000
A/Prof Christopher Williams	2018 – 2020	NHMRC Career Development Fellow	\$1,611,408	\$293,892	\$40,000

### Career Development Fellows - Category 2

Name	Period	Research Area	Research Outputs for Fellowship Period		
			Grants Submitted	Publications	HDR Supervision
Associate Professor Tracy Burrows	2016 – 2019	Food Addiction	18	68	11
Dr Susan Hua	2016 – 2019	Nanotechnology	15	9	6
Dr Natalie Johnson	2016 – 2019	Health Behaviour	5	20	4



Associate Professor Simon Keely	2016 – 2019	Digestive disease and infection	29	35	11
Dr Yolanda Surjan	2016 – 2019	Radiation Therapy treatment of OSCC/POSCC in horses	6	6	5
Dr Amanda Wilson	2016 – 2019	Media Doctor	22	31	8
Dr Kirsti Haracz	2017 - 2020	Multimodal program to address lifestyle behaviours associated with obesity and poorer health outcomes for people living with severe mental illnesses (SMI).	6	14	7
Dr Liz Holliday	2017 - 2020	Medical Statistics (biostatistics), epidemiology, and genetic epidemiology	35	115	9
Associate Professor Jay Horvat	2017 - 2020	Role of iron in respiratory disease	32	21	14
Dr Melinda Hutchesson	2017 - 2020	Development, delivery and evaluation of interventions (nutrition and physical activity) for young adults to prevent weight gain and reduce the risk of chronic disease risk factors	39	45	3
Dr Janet Wallace	2017 - 2020	Senior Smiles program	8	6	9

<b>Bridging Fellows</b>					
<b>Name</b>	<b>Period</b>	<b>Research Group</b>	<b>Comments to Committee</b>	<b>Outputs – Grant Submitted, Publications and HDR Load (during fellowship period)</b>	<b>Brawn Fellowship Payments</b>
Dr Melissa Harris	01/02/22 to 31/12/22 (11 months)	Centre for Women's Health Research	I am grateful to the Gladys M Brawn Trust for funding me this year. This grant has kept me	7 grant applications submitted - 2 successful, 5 awaiting outcome	\$112,000

			employed in research and facilitated the advancing my program of work and career.	7 Papers accepted for publication 9 Publications drafted or currently under review	
				HDR Supervision: 3 current and 1 conferred	
Dr Jamie Bryant	01/06/22 to 31/12/22 (7 months)	Health Behaviour	The grant has provided me with an opportunity to submit grants that will hopefully result in continued funding in 2023. It has also provided significant opportunity to focus on writing up data, establishing new networks and collaborators.	7 grant applications submitted (co-investigator) awaiting outcome 2 Papers accepted for publication 3 Papers submitted for publication and 12 in preparation	\$59,000
				HDR Supervision: 2 and 1 conferred	

#### Research Higher Degree Scholarships

Candidate	Year awarded	Supervisor(s)	Thesis title	Outcome
Ms Susan Reid	2004	A/Professor Darren Rivett Dr Robin Callister	Are sustained natural apophyseal glides an effective treatment for cervicogenic dizziness?	Masters awarded in 2005
Ms Jacqueline Turton	2000	Professor Rodney Scott	Investigating the role of mycobacterium avium subspecies paratuberculosis (MAP) in patients with Chron's Disease	PhD awarded in 2012. Student left studies due to illness and then re-enrolled in 2008
Ms Suvipa Kosumwatcharapoma	2000	Professor Richard Heller	Why has the contraceptive role among Thalaesseima couples been low?	Student did not complete studies
Ms Kelly Cunningham	1999	Dr Darren Shafren	Virus-cell Interactions	PhD awarded in 2003

#### Strategic Short-Term Fellowships

Fellow	Period	Fellowship purpose
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Professor Carolyn Mountford	2011/2012	Salary package support – partially funded for 2 years.
Professor Eugenie Lumbers	2009	To fund travel costs and incidentals for the Fellow. The Brawn Fund commitment is matched by the Mothers & Babies Research Group.
	(1 year Part-time)	
Associate Professor Julie Byles	2000	Fellowship to establish the Hunter Institute of Ageing Research
	(1 year Full-time)	
Associate Professor John Rostas	1999	To investigate international models for organising multidisciplinary neuroscience research programs adaptable to Newcastle.
	(9 wks)	

<b>Visiting Fellowships</b>			
<b>Name</b>	<b>Period</b>	<b>Research Group</b>	<b>Project title</b>
A/Professor Jessie Berlin, University of Pennsylvania	1999	Systematic Review Group	Methodological developments in applying meta-analysis to clinical and policy decision making
	3 months		



# **Gladys M Brawn Memorial Fellow Reports**

## **Senior Fellows**

Professor Amanda Baker

Professor Geoff Isbister

Professor Murray Cairns

## Professor Amanda Baker

Senior Brawn Fellow  
Commenced 2009



The major focus of my research has been to develop and evaluate psychological treatments for substance use disorders, including among people experiencing severe mental health problems. My research program has significantly improved cognitive behaviour therapy clinical practice and health service delivery, with implementation nationally (Quitline, Salvation Army, NEAMI National, MIND, and DoH national workshops for alcohol and other drug counsellors), in North America, Europe and Iran.

I am currently in the fifth and final year of my fourth consecutive NHMRC Research Fellowship and am taking a voluntary separation from The University of Newcastle at the end of this year. These fellowships are highly competitive and awarded to researchers considered to be within the top 10% internationally in their field. My randomised controlled trials have been highly cited, and treatments have been widely disseminated. The Senior Brawn Fellowship has greatly assisted my success in attaining consecutive Fellowships and providing ongoing support for research assistance.

### Key Achievements

In the last year, my key achievements have been:

1. Commencement of a Centre of Research Excellence as a CI (2022-2026).
2. Conclusion of my final NHMRC Project Grant as CIA, with promising results informing further NHMRC applications.

### HDR Supervision

I am currently supervising 5 PhD students.

2022 Completions: 2 PhD

### Publications (since last report)

#### Journal Articles (Students supervised by Amanda Baker names in italics)

1. *Jackson, M.A., Buykx, P., Brown, A.L., Baker, A.L., Dunlop, A.J., Gould, G.S.* (2022). Using mixed methods to establish tobacco treatment acceptability from the perspective of clients and clinicians of antenatal substance use services. *Addiction Science & Clinical Practice*, 17, 56.  
doi:10.1186/s13722-022-00337-y
2. *Beck, A.K., Larence, B., Manning, V., Hides, L., Baker, A.L., Deane, F.P., Shakeshaft, A., Raftery, D., Kelly, P.J.* (2022). Online SMART Recovery mutual support groups: Characteristics and experience of adults seeking treatment for methamphetamine compared to those seeking treatment for other addictive behaviours. *Drug and Alcohol Review*. doi:10.1111/dar.13544

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8. Bonevski, B., Rich, J.L., Skelton, E., Garfield, J., **Baker, A.L.**, Segan, C., Gartner, C., Walker, N., Borland, R., Daghli, M., Dunlop, A., Oldmeadow, C., Bauld, L., Bullen, C., Ezard, N., McCrohan, R., Jacka, D., White, S., Lubman, D.I., Manning, V. (2022). NEAT (NicotinE As Treatment) Trial: Protocol of a randomised controlled trial of vaporised nicotine products compared with nicotine replacement therapy following discharge from residential withdrawal services. *medRxiv*. doi:10.1101/2022.05.15.22275118
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11. McCarter, K., **Baker, A.L.**, Wolfenden, L., Wratten, C., Bauer, J., Beck, A.K., Forbes, E., Carter, G., Leigh, L., Oldmeadow, C., et al. (2022). Smoking and other health factors in patients with head and neck cancer. *Cancer Epidemiology*, 79, 102202. doi:10.1016/j.canep.2022.102202
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14. Kelly, P.J., Coyte, J., Robinson, L.D., Deane, F.P., Russell, S., Clapham, K., Dale, E., Longbottom, M., Solley, R., **Baker, A.L.** (2022). Evaluating an Aboriginal community controlled residential alcohol and other drug service: use of benchmarking to examine within treatment changes in wellbeing. *Drug and Alcohol Review*, 41, 953-962. doi:10.1111/dar.13432
15. Rahman, T., **Baker, A.L.**, Gould, G.S., Palazzi, K., Lambkin, D., Kennedy, M. (2021). Factors associated with smoke-free pregnancy among Aboriginal and Torres Strait women and their experience of quitting smoking in pregnancy: A mixed method cross-sectional study. *International Journal of Environmental Research and Public Health*, 18(21), 11240. doi:10.3390/ijerph182111240
16. McCarter, K., Carlson, M.A., **Baker, A.L.**, Paul, C., Lynam, J., Johnston, L., Fradgley, E. (2021). A qualitative study investigating Australian cancer service outpatients' experience of distress screening and management: what is the personal relevance, acceptability and improvement opportunities

from patient perspectives? *Supportive Care in Cancer*, 30(3), 2693-2703. doi:10.1007/s00520-021-06671-2

## **Professor Geoff Isbister AM**

Senior Brawn Fellow

Commenced 2014



I lead the Clinical Toxicology Research Group at the University of Newcastle. The group includes five staff including research administration and laboratory staff one post-doctoral researcher and three PhD students. I also supervise 2 other PhD students off-site, one MPhil and two PhDs in Sri Lanka (University of Peradeniya). Ongoing major areas of research include: studies into the efficacy and effectiveness of treatments for envenomed patients and multicentre research into the effects of drugs in overdose. I also undertake research in emergency medicine, principally on sedating aggressive patients.

I am the chief coordinator of the Australian Snakebite Project (ASP) and associated studies on snakebite in Australia, and coordinate studies in Sri Lanka on snake bite with Prof Anjana Silva (previous PhD student). ASP has changed the treatment of snake bite in Australia and the way that antivenom is used. We have published 29 research papers on snakebite based on data collected over 18 years. ASP continues to investigate other treatments for snake bite, including thrombotic microangiopathy, acute kidney injury, antivenom for red-bellied black snake bites, assays for early diagnosis and interventions for myotoxicity. It has been funded by an NHMRC Centre for Research Excellence, which finishes this year. In November 2015 I was the CIA on a successful NHMRC Centre for Research Excellence – Translational Venom and Antivenom CRE. Over the last four years I have published editorials in the Lancet, Medical Journal of Australia and PLoS Neglected Tropical Diseases. I have also now established research into the transcriptomics and proteomics of Australasian snake venom, focusing on the variation in venom that effects envenomed patients and also the possibility of developing assays for detection of venom.

I continue work on the treatment of redback spider bite following the Redback Spider Antivenom Evaluation (RAVE II) Study that found antivenom did not improve outcomes in redback spider bites. We are now focussing on novel analgesics for the pain of redback spider bite, including ketamine, which was published in the British Journal of Clinical Pharmacology, and will commence a study on clonidine.

I am the principal investigator on a long term ongoing multicentre project investigating the time course and effects of drugs in overdose, using patient blood samples and clinical data. This is a collaboration with Prof Stephen Duffull at the University of Otago. The study aims to develop clinical guidelines for treatment using novel drug modelling techniques. These studies have rationalised the treatment for particular drug overdoses, streamlining the care of patients. This includes research into the effects of drugs on the heart and associated fatal heart arrhythmias. We have developed a model of paracetamol poisoning and published a series of papers on the changes in paracetamol overdose and why it is so dangerous. We have extended the modelling to snake venom and have focussed on the pharmacokinetics and pharmacodynamics of red-bellied black snake venom and the effectiveness of antivenom in a completed PhD, with papers published over the last 2 years.

I continue as one of the chief investigators for the Australian Toxicology Monitoring (ATOM) study, including studies on paracetamol, digoxin, beta-blockers, metformin, valproate and anticoagulants. The funding also supports the Hunter Area Toxicology Service database which is a large cohort of poisoned patients used to investigate the toxicity of drugs in overdose; this year we have published studies on duloxetine and presented a study on the effect of COVID on deliberate self-poisoning.



I was the Senior Editor of the British Journal of Clinical Pharmacology from 2015 to 2020 and have played an active role in the ongoing development of the journal, including producing an issue on Therapeutics in Clinical Toxicology in March 2016. I am also an Associate Editor for PLoS Neglected Tropical Diseases. I have recently become an Associate Editor for Toxicology Communications. I was elected to the Board of the Asia Pacific Association of Medical Toxicology in 2019 and am now the Chair of the Scientific Committee for the Association. I have been part of the Therapeutic Guidelines that produced the 3rd Edition of the Toxicology and Toxinology guidelines.

### **Publications, seminars (since June 2021)**

Since June 2021 I have co-authored 21 original research papers and have been an invited speaker at four conferences.

#### **Refereed Journal Articles**

1. Isoardi KZ, Henry C, Harris K, Isbister GK. Activated charcoal and bicarbonate for aspirin toxicity: a retrospective series. *J Med Toxicol.* 2022;18(1):30-37.
2. Wijewickrama ES, Mohamed F, Gawarammana IB, Endre ZH, Buckley NA, Isbister GK. Serum and urinary biomarkers for early detection of acute kidney injury following Hypnale spp. envenoming. *PLoS Negl Trop Dis.* 2021;15(12):e0010011
3. Noutsos T, Currie BJ, Wijewickrama ES, Isbister GK. Snakebite Associated Thrombotic Microangiopathy and Recommendations for Clinical Practice. *Toxins (Basel).* 2022 14;14(1):57.
4. Tasoulis T, Pukala TL, Isbister GK. Investigating Toxin Diversity and Abundance in Snake Venom Proteomes. *Front Pharmacol.* 2022 Jan 14;12:768015.
5. Silva A, Hodgson WC, Tasoulis T, Isbister GK. Rodent Lethality Models Are Problematic for Evaluating Antivenoms for Human Envenoming. *Front Pharmacol.* 2022 Feb 3;13:830384
6. Silva A, Scorgie FE, Lincz LF, Maduwage K, Siribaddana S, Isbister GK. Indian Polyvalent Antivenom Accelerates Recovery From Venom-Induced Consumption Coagulopathy (VICC) in Sri Lankan Russell's Viper (*Daboia russelii*) Envenoming. *Front Med (Lausanne).* 2022 Mar 7;9:852651.
7. Huynh TM, Silva A, Isbister GK, Hodgson WC. Isolation and Pharmacological Characterization of  $\alpha$ -Elapitoxin-Oh3a, a Long-Chain Post-Synaptic Neurotoxin From King Cobra (*Ophiophagus hannah*) Venom. *Front Pharmacol.* 2022 Mar 7;13:815069.
8. Priyankara S, Rathnasiri V, Mihiran T, Premawansa G, Isbister GK, Silva A. Mild venom-induced consumption coagulopathy associated with thrombotic microangiopathy following a juvenile Russell's viper (*Daboia russelii*) envenoming: A case report. *Toxicon.* 2022 Jun;212:8-10.
9. Johnston CI, Tasoulis T, Isbister GK. Australian Sea Snake Envenoming Causes Myotoxicity and Non-Specific Systemic Symptoms - Australian Snakebite Project (ASP-24). *Front Pharmacol.* 2022 Mar 21;13:816795.
10. Huynh TM, Silva A, Isbister GK, Hodgson WC. Isolation and Characterization of Two Postsynaptic Neurotoxins From Indian Cobra (*Naja Naja*) Venom. *Front Pharmacol.* 2022 Mar 28;13:815079.
11. Huynh TM, Hodgson WC, Isbister GK, Silva A. The Effect of Australian and Asian Commercial Antivenoms in Reversing the Post-Synaptic Neurotoxicity of *O. hannah*, *N. naja* and *N. kaouthia* Venoms In Vitro. *Toxins (Basel).* 2022 Apr 13;14(4):277.
12. Thakshila P, Hodgson WC, Isbister GK, Silva A. In Vitro Neutralization of the Myotoxicity of Australian Mulga Snake (*Pseudechis australis*) and Sri Lankan Russell's Viper (*Daboia russelii*) Venoms by Australian and Indian Polyvalent Antivenoms. *Toxins (Basel).* 2022 Apr 26;14(5):302.
13. Tasoulis T, Wang CR, Sumner J, Dunstan N, Pukala TL, Isbister GK. The Unusual Metalloprotease-Rich Venom Proteome of the Australian Elapid Snake *Hoplocephalus stephensii*. *Toxins (Basel).* 2022 Apr 28;14(5):314.
14. Lay M, Liang Q, Isbister GK, Hodgson WC. In-Vitro Toxicity of Chinese Russell's viper (*Daboia siamensis*) Venom and Neutralisation by Antivenoms. *Toxins* 2022 Jul 20;14(7):505.

15. Isbister GK, Noutsos T, Jenkins S, Isoardi KZ, Soderstrom J, Buckley NA. D-dimer testing for early detection of venom-induced consumption coagulopathy after snakebite in Australia (ASP-29). *Med J Aust.* 2022 Aug 15;217(4):203-207
16. Isbister GK, Polanski R, Cooper JM, Keegan M, Isoardi KZ. Duloxetine overdose causes sympathomimetic and serotonin toxicity without major complications. *Clin Toxicol (Phila).* 2022 Sep;60(9):1019-1023
17. Chan BS, Mirabella J, Allen K, Berling I, Chiew AL, Isoardi K, Brown J, Isbister G. Tapentadol exposures and poisonings in Australia. *Clin Toxicol (Phila).* 2022 Sep;60(9):1063-1066.
18. Isoardi KZ, Parker L, Harris K, Rashford S, Isbister GK. Acute Opioid Withdrawal Following Intramuscular Administration of Naloxone 1.6 mg: A Prospective Out-Of-Hospital Series. *Ann Emerg Med.* 2022 Aug;80(2):120-126.
19. Waidyanatha S, Silva A, Weerakoon K, Siribaddana S, Isbister GK. Long-term health effects perceived by snakebite patients in rural Sri Lanka: A cohort study. *PLoS Negl Trop Dis.* 2022 Sep 1;16(9):e0010723
20. Wedasingha S, Sarathchandra C, Weerawansa P, Rathnasekara T, Karunaratna S, Isbister GK, Silva A. Kounis syndrome following an anaphylactic reaction to antivenom in a patient with Russell's viper (*Daboia russelii*) bite: A case report. *Toxicon.* 2022 Oct 30;218:66-69
21. Isoardi K, Learmont B, Horan B, Isbister G. Dedicated nursing care pathway improved management of opioid-poisoned patients in the emergency department: A before-after observational study. *Emerg Med Australas.* 2022 Aug 15. doi: 10.1111/1742-6723.14056. Online ahead of print.

#### Editorials/Letters

1. Isbister GK, Isoardi K. Treating painful envenoming – searching the bath water of cloudy evidence for the baby. *Emerg Med Australas.* 2022 Aug;34(4):482-483

#### Invited Seminars

1. Toxicology and Poison Network Association (TAPNA), Scientific Meeting, Newcastle 2022, Invited Talk: Snakebite problem.
2. International Conference of Emergency Medicine 2022, Melbourne invited talk: “Snakebite” and Toxicology Workshop: “The poisoned patient in the ED; key aspects of assessment and management.”
3. European Association of Poisons Centres and Clinical Toxicologists (EAPCCT) XXXXII International Congress, Tallin, 2022: Invited Lecture: Rhabdomyolysis in Toxinology.
4. International Congress for Tropical Medicine and Malaria, Bangkok, 2022: Invited talk: “The trouble with antivenom”

#### Current Grants

- **NHMRC Senior Research Fellowship (B).** “Multicentre studies of interventions in clinical toxicology and envenoming, including antivenoms, antidotes and decontamination” **Isbister G.** \$739,515
- **NHMRC Clinical Centre for Research Excellence.** “Translational Venom and Antivenom Research.” **Isbister G,** Buckley NA, de Silva HJ, Brown SGA, Hodgson WC, Lalloo DG, de Silva A, Gawarammana I, Dawson AH, Graudins A. \$2,499,702

#### Awards

1. Order of Australia, Member 2019

#### Research Higher Degree Graduates

Primary Supervisor: primary supervisor for 7 current PhD candidates and two MPhil.



## Professor Murray Cairns

Senior Brawn Fellow  
Commenced 2017

My research is exploring the molecular systems that regulate complex traits particularly in the context of neural development, circuitry and plasticity. These mechanisms provide the biological foundation for learning and cognition but are also sensitive to genetic and environmental challenges that can lead to neurocognitive and neuropsychiatric disorders, such as schizophrenia. By investigating the molecular neurobiology of these complex systems and the syndromes that arise from their disruption, we have the potential to better understand human brain development and function. These steps also provide a strong basis for developing genetic and epigenetic biomarkers of complex traits that can inform novel therapeutic strategies to defeat the most pervasive chronic disorders through precision medicine.

The research has been highly productive in the current reporting period with several publications in high impact journals including: *Nature*, *Nature Reviews Genetics*, *Nature Genetics*, *Nature Communications*, *Science Advances*, *JAMA Psychiatry*, *Molecular Psychiatry*, *Biological Psychiatry* and *Nucleic Acids Research*.

### Key Achievements

I am an editorial board member of *Epigenomics*, *Scientific Reports*, *American Journal of Medical Genetics*, *MicroRNA*, *Frontiers in Non-Coding RNA*, *Journal of RNAi and Gene Silencing*, *Open Journal of Genomics*, *Genomics*, *Proteomics & Bioinformatics*, *International Journal of Molecular Sciences* and *Recent Patents on Anti-Infective Drug Discovery*. I have over 180 career publications including many in the highest-ranking journals in this field, with major publications in *Nature*, *Science*, *Cell*, *Nature Reviews Genetics*, *Nature Biotechnology*, *Nature Genetics*, *Nature Neuroscience*, *Nature Communications*, *Science Advances*, *JAMA Psychiatry*, *American Journal of Psychiatry*, *EMBO Reports*, *Biological Psychiatry*, *Molecular Psychiatry*, *Schizophrenia Bulletin*, *Human Molecular Genetics*, *American Journal of Pathology*, and *Pharmacology Reviews*. Collectively these have attracted more than 11,000 citations (H-index=56, i10=123) with the top 10 papers having more than 9869 citations. I have 25 publications >200 citations, 37 with >100 citations and 60 with >50 citations. These high-impact studies are highlighted by recent work in the translational genomics of complex disorders where I am a leading authority on genomics, systems biology, epigenomics and precision medicine.

During 2021/22 my group made further progress in developing a framework for precision medicine using personalised common variant systems biology. In this approach, the group use genome-wide association data for complex trait disorders as a scaffold for the pharmacological annotation of individual variant profiles captured by polygenic risk. I have also had the opportunity to be involved in several global collaborations in brain and behavioural genomics, including the genetics working group of the ENIGMA consortium for brain imaging; the CHARGE (Cohorts for Heart and Aging Research in Genomic Epidemiology) consortium and the schizophrenia and PTSD working groups of the Psychiatric Genomic Consortium. Collaborative work in these research consortiums has led to a recent publication in the journal

*Science* which adds to a list of several other high-profile publications in *Science*, *Nature Genetics*, *Nature Neuroscience*, *Molecular Psychiatry* and *Biological Psychiatry*. I was awarded \$982,622 from an NHMRC (CIA Ideas grant) to investigate the architecture of non-coding variation in schizophrenia. I am also member of a team awarded an MRFF grant (CIB) to investigate the polygenic architecture cutaneous neurofibromatosis. I also secured an industry contract to investigate the utility of epitranscriptomic biomarkers to predict the treatment response to an RNA anti-tumour with potent RNA de-methylating activity. I am currently a Professor in the School of Biomedical Sciences and Pharmacy, Chair of the HMRI Precision Medicine Research Program and Chief Executive Officer and Co-Founder of PolygenRx Pty Ltd. I was an NHMRC Senior Research Fellow until the end of 2021.

#### **Competitive Grants and Fellowships:**

1. MRFF grant: Sverdlov A, Ngo D, Cairns M, Lee H, Verrills N, Gedye C, Jhong Haw T, Attia J, Kelso M, Tillett D, Lynam J, Enjeti A, Doyle K, Dent S. Cardiovascular disease and cancer: identifying shared disease pathways and pharmacological management. \$999,998 (2022-2025).
2. Contract research. Genome-wide epitranscriptomic analysis of N6-methyl-adenosine modification at nucleotide resolution using RNA sequencing to identify biomarkers of aberrant tumour RNA methylation. \$218,525 Race Oncology Ltd (2022).
3. MRFF grant: Dudding T, Cairns MJ, Attia J, Evans G, Scott R, Lovell B. The Neurofibromatosis type 1 (NF1) Cutaneous Neurofibroma Consortium: Identifying Genetic modifiers of disease burden to inform treatment pathways. (APP2011006) **\$1,607,737** (2021-2024).
4. NHMRC Ideas Grant: Cairns MJ, Glatt S. Dysregulation of the RNA regulatory matrix in schizophrenia. (APP1188493) **\$982,622** (2020-2023).
5. NHMRC Project Grant: Cairns MJ, Green MJ, Carr V. Complete genomics for mechanistic insight and precision treatments of schizophrenia. (APP1147644) **\$1,149,208** (2018-2021).
6. NHMRC Project Grant: Cairns MJ, Glatt S. Network biomarkers of traumatic stress resilience and sensitivity. (APP1147894) **\$647,345** (2018-2021).
7. NHMRC Senior Research Fellowship: Cairns MJ. Personalised genomics in precision medicine of psychotic illness. (APP1121474) **\$631,370** (2017-2021).

#### **Publications:**

1. Pertile AN, Kiltchewskij RD, Geaghan M, Barnett M, Cui X, Cairns MJ and Eyles D (2022). Developmental vitamin D-deficiency increases the expression of microRNAs involved in dopamine neuron development. *Brain Res* 1789: 147953.
2. Geaghan MP, Reay WR, and Cairns MJ (2022). MicroRNA binding site variation is enriched in psychiatric disorders. *Hum Mutat*. doi: 10.1002/humu.24481. Online ahead of print
3. Greco LA, Reay WR, Dayas CV, and Cairns MJ (2022). Pairwise genetic meta-analyses between schizophrenia and substance dependence phenotypes reveals novel association signals with pharmacological significance. *Transl Psychiatry* 12: 403.
4. Kiltchewskij DJ, Reay WR and Cairns MJ (2022). Evidence of genetic overlap and causal relationships between blood-based biochemical traits and human cortical anatomy. *Transl Psychiatry* 12: 373.
5. Marin FR, Dávalos A, Kiltchewskij D, Crespo MC, Cairns MJ, Andrés-León E and Soler-Rivas C (2022). RNA-Seq, Bioinformatic Identification of Potential MicroRNA-like Small RNAs in the Edible Mushroom *Agaricus bisporus* and Experimental Approach for Their Validation. *Int J Mol Sci* 23:4923
6. Quidé Y, Watkeys OJ, Girshkin L, Kaur M, Carr VJ, Cairns MJ and Green MJ (2022). Interactive effects of polygenic risk and cognitive subtype on brain morphology in schizophrenia spectrum and bipolar disorders. *Eur Arch Psychiatry Clin Neurosci* 272: 1205-1218.
7. Reay WR, Geaghan MP, Atkins JR, Carr VJ, Green MJ and Cairns MJ (2022). Genetics-informed precision treatment formulation in schizophrenia and bipolar disorder. *Am J Hum Genet* 109: 1620-1637.

8. Tonini E, Watkeys O, Quidé Y, Whitford TJ, Cairns MJ and Green MJ (2022). Polygenic risk for schizophrenia as a moderator of associations between childhood trauma and schizotypy. *Prog Neuropsychopharmacol Biol Psychiatry* 119: 110612.
9. Reay WR, Geaghan MP; 23andMe Research Team, Cairns MJ. (2022) The genetic architecture of pneumonia susceptibility implicates mucin biology and a relationship with psychiatric illness. *Nature Communications* 13:3756.
10. Marin FR, Dávalos A, Kiltschewskij D, Crespo MC, Cairns M, Andrés-León E, Soler-Rivas C. (2022) RNA-Seq, Bioinformatic Identification of Potential MicroRNA-like Small RNAs in the Edible Mushroom *Agaricus bisporus* and Experimental Approach for Their Validation. *Int J Mol Sci.* 23:4923.
11. Reay WR, Haslam R, Cairns MJ, Moschonis G, Clarke E, Attia J, Collins CE. (2022) Variation in cardiovascular disease risk factors among older adults in the Hunter Community Study cohort; a comparison of diet quality versus polygenic risk score. *J Hum Nutr Diet.* 35: 675-688.
12. Trubetsky V et al (2022) Mapping genomic loci prioritises genes and implicates synaptic biology in schizophrenia. *Nature* 604:502-508.
13. Di Biase MA, Geaghan MP, Reay WR, Seidlitz J, Weickert CS, Pébay A, Green MJ, Quidé Y, Atkins JR, Coleman MJ, Bouix S, Knyazhanskaya EE, Lyall AE, Pasternak O, Kubicki M, Rathi Y, Visco A, Gaunac M, Lv J, Meshulam-Gately RI, Lewandowski KE, Holt DJ, Keshavan MS, Pantelis C, Öngür D, Breier A, Cairns MJ, Shenton ME, Zalesky A. (2022) Cell type-specific manifestations of cortical thickness heterogeneity in schizophrenia. *Molecular Psychiatry.* 27:2052-2060.
14. Pardiñas AF, Smart SE, Willcocks IR, Holmans PA, Dennison CA, Lynham AJ, Legge SE, Baune BT, Bigdeli TB, Cairns MJ, Corvin A, Fanous AH, Frank J, Kelly B, McQuillin A, Melle I, Mortensen PB, Mowry BJ, Pato CN, Periyasamy S, Rietschel M, Rujescu D, Simonsen C, St Clair D, Tooney P, Wu JQ, Andreassen OA, Kowalec K, Sullivan PF, Murray RM, Owen MJ, MacCabe JH, O'Donovan MC, Walters JTR; Genetics Workstream of the Schizophrenia Treatment Resistance and Therapeutic Advances (STRATA) Consortium and the Schizophrenia Working Group of the Psychiatric Genomics Consortium (PGC), Ajnakina O, Alameda L, Barnes TRE, Berardi D, Bonora E, Camporesi S, Cleusix M, Conus P, Crespo-Facorro B, D'Andrea G, Demjaha A, Do KQ, Doody GA, Eap CB, Ferchiou A, Di Forti M, Guidi L, Homman L, Jenni R, Joyce EM, Kassoumeri L, Khadimallah I, Lastrina O, Muratori R, Noyan H, O'Neill FA, Pignon B, Restellini R, Richard JR, Schürhoff F, Španiel F, Szöke A, Tarricone I, Tortelli A, Üçok A, Vázquez-Bourgon J. (2022) Interaction Testing and Polygenic Risk Scoring to Estimate the Association of Common Genetic Variants With Treatment Resistance in Schizophrenia. *JAMA Psychiatry* 79:260-269.
15. Cullen M, Meiser B, Barlow-Stewart K, Green M, Appelbaum PS, Carr VJ, Cairns MJ, Lebowitz MS, Rajneesh Kaur. Perceptions of causal attribution and attitudes to genetic testing among people with schizophrenia and their first-degree relatives. *European Journal of Human Genetics.* 30:1147-1154.
16. Reay WR, Kiltschewskij DJ, Geaghan MP, Atkins JR, Carr VJ, Green MJ, Cairns MJ. (2022) Genetic estimates of correlation and causality between blood-based biomarkers and psychiatric disorders. *Science Advances* 8:eabj8969
17. Reay WR, Cairns MJ. (2021) Advancing the use of genome-wide association studies for drug repurposing. *Nat. Rev. Genet.* 22:658-671.
18. Reay WR, El Shair SI, Geaghan MP, Riveros C, Holliday EG, McEvoy MA, Hancock S, Peel R, Scott RJ, Attia JR, Cairns MJ. (2021) Genetic association and causal inference converge on hyperglycaemia as a modifiable factor to improve lung function. *eLife* 10:e63115.
19. Mullins N, .....Cairns MJ. et al (2021) Genome-wide association study of more than 40,000 bipolar disorder cases provides new insights into the underlying biology. *Nature Genetics* 53:817-829.
20. Mahmoudi E, Green MJ, Cairns MJ. (2021) Dysregulation of circRNA expression in the peripheral blood of individuals with schizophrenia and bipolar disorder. *J Mol Med* 9:981-991.

21. Mahmoudi E, Atkins JR, Quidé Y, Reay WR, Cairns HM, Fitzsimmons C, Carr VJ, Green MJ, Cairns MJ. (2021) The MIR137 VNTR rs58335419 is associated with cognitive impairment in schizophrenia and altered cortical morphology. *Schizophr Bull.* 47:495-504.
22. Blokland GAM et al (2022) Sex-Dependent Shared and Non-Shared Genetic Architecture Across Mood and Psychotic Disorders. *Biol Psychiatry.* 91:102-117.
23. Hess JL, Tylee DS, Mattheisen M; Schizophrenia Working Group of the Psychiatric Genomics Consortium; Lundbeck Foundation Initiative for Integrative Psychiatric Research (iPSYCH), Børglum AD, Als TD, Grove J, Werge T, Mortensen PB, Mors O, Nordentoft M, Hougaard DM, Byberg-Grauholm J, Bækvad-Hansen M, Greenwood TA, Tsuang MT, Curtis D, Steinberg S, Sigurdsson E, Stefánsson H, Stefánsson K, Edenberg HJ, Holmans P, Faraone SV, Glatt SJ. (2021) A polygenic resilience score moderates the genetic risk for schizophrenia. *Mol Psychiatry.* 26:800-815. doi: 10.1038/s41380-019-0463-8.
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### **Research Higher Degree Supervision**

I have supervised 20 PhD students to completion and am currently supervising 8 PhD students. I have had two PhD completions in the previous year.



# **Gladys M Brawn Bequest Financial Report**

## Gladys M Brawn Bequest Financial Report



As at 31<sup>st</sup> October 2022

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Opening Balance 1/1/2022	<b>\$10,965,058</b>
Interest Available for Expenditure (2022)	<b>\$392,156</b>
Projected Total Expenditure 31/12/2022	<b>\$392,156</b>
Projected Opening Balance 1/1/2023*	<b>\$10,805,505</b>
Projected Interest Available for Expenditure (2023)	<b>\$357,460</b>

*\*Includes CPI amount retained from interest earnings.*





# **Gladys M Brawn Gravesite**

## Gladys M Brawn Gravesite

In keeping with the Deed's request, annual site visits occur to ensure that Gladys Brawn's gravesite is in good upkeep and any necessary maintenance is organised. The gravesite is located in Kurri Kurri Cemetery and was last visited on the 9<sup>th</sup> November 2022. Whilst there was no issue with the structure, the headstone and base could do with a clean and revitalisation. The services of a mason will be secured to undertake the work during 2023.



## Glossary of Terms

**CI and CIA** – Chief Investigator

**Grant Funding** – total grant amount awarded over its lifetime.

**HERDC** - Higher Education Research Data Collection.

**IF** – Impact Factor of the Journal where publication has been published. The Impact Factor is a measure reflecting the average number of citations to recent articles published in the journal. It is frequently used as a proxy for the relative importance of a journal within its field, with journals with high impact factors deemed to be more important than those with lower ones.

**Indicative Research Earnings** - income the University earns from grants awarded and Higher Degree Research (HDR) completions, notionally allocated to the researcher.

**Research Income** – HERDC reportable research income.