



The PACT Bulletin is posted or emailed to members monthly. This is an edited version of the October 2017 Bulletin. To receive your copy each month – download the membership form and join Parkinson's ACT. You can also see us on Parkinson's ACT Facebook.

It's been quite a year!

It was almost standing room only at the Annual General Meeting on Tuesday 26th September. The change to an evening time-slot saw a record attendance – and two new committee members.



President John Sheldrick thanked retiring committee member **Marilyn Nelson** (left) who has held the position of Librarian for the last four years and was the driving force behind the publication of last year's very successful book, *It's Not Catching*.

Marilyn, her husband Charles, and son Neil (below)



have also sourced and managed the public-address system we have used for all our outdoor activities over the last few years, for which PACT is extremely grateful. The recent rain and wind at our Walk in the Park made this a challenging task to say the least – admirably and ably completed.

The new committee members are **Kristen Pratt** and **Martin Pikler**, very welcome additions to the team.

PARKINSON'S ACT (PACT) – PRESIDENT'S REPORT – 2016-17

I commenced as President Parkinson's ACT in February 2017. This Report therefore essentially covers the period from that time. It has been a pleasure for me to be part of Parkinson's ACT (PACT) and to witness firsthand the tremendous work done for PACT by the all-volunteer members of your PACT Committee and others. In many ways it has been a challenging and busy period but also one with progress and satisfaction. The understandable resignation of my predecessor Michael Dwyer left a large hole to be filled but the Committee have rallied well to pick up the numerous tasks and workload he took on himself. I would like to recognise his work for PACT over several years with considerable thanks and appreciation – he left us in good shape.

Membership As of 1 July 2017 there are 7 life members and 146 current members registered with 49 members yet to return their membership form. Elaine Andersen is to be thanked and acknowledged for the considerable effort she put into the renewal process including the development of a revised membership application form.

Finances and Resources PACT accounts have been audited and continue to be solvent. The Committee has continued providing for *Painting with Parkinsons*, Parkinson's Dancing and all other support groups conducted under arrangements of the Committee.

The Walk in the Park conducted on 27 August 2017 raised significantly more money from donations and walkers than in previous years.

PACT has been promised substantial financial aid to employ a PACT Community Parkinson's Nurse oriented to work closely within the community. It is estimated there are about 1000 people with Parkinson's in the ACT.

Activities The period has provided some challenging matters with some yet to be fully resolved. Some matters of a serious nature arose from sources outside the control of the PACT Committee. All support groups have continued to function well, but there is room to increase attendance at all.

1. SHOUT (Self Help Organisations United Together) For many years PACT has relied on SHOUT to provide substantial and efficient administrative support. However at the end of August owing to the ACT Government refusing to finance its continuance, especially in the form it was constituted, SHOUT was wound up. Some Committee members were able to join Mandy Hudson and Phoebe Saunders at the morning tea to recognise their leaving but also most importantly to thank them for their friendly, courteous, willing and effective support to PACT.

Earlier the ACT Government commissioned a consultancy firm to investigate and report to them on ways that might be adopted to continue to provide support to the organisations supported by SHOUT but without ACT Government financial assistance. The consultant's report was not accepted and without the action taken by the SHOUT Board as outlined below PACT would have been left without essential administrative support. Immediately following the Government's decision on the consultant's report, the Board of SHOUT commenced to reconstitute SHOUT in another form and without direct ACT Government funding. This action has provided PACT with some ongoing administration support which is intended to continue through to November 2017. In the meantime PACT is continuing consultation with the SHOUT Board and the newly employed Change Manager to determine what resources and administration can be provided, and at what cost, through the reconstituted SHOUT. A definitive arrangement is expected by early November. At that time PACT Committee will decide on the continuing support from SHOUT and/or the need to seek elements of administrative support from other sources.

2. ACT Parkinson's Nurse Following the return to the UK of the ACT Parkinson's nurse in 2016, the ACT Government (Health Department) has employed another Parkinson's nurse for the ACT. The nurse position has been moved from Community Care to the Department of Neurology at The Canberra Hospital. The Parkinson's nurse will now focus on providing services to patients of the Movement Disorder Clinic at The Canberra Hospital and inpatient care to patients undergoing advanced treatment procedures. The nurse will provide group education sessions and access to a telephone information phone line to people with Parkinson's who are not patients of the clinic and have been referred by their General Practitioner or specialist.

3. PACT Community Parkinson's Nurse In May 2017 the Rotary Club of Hall (RC Hall) again offered substantial financial support to assist PACT and it was decided that the best support would be through the employment of a Community Parkinson's Nurse who could be responsible among other tasks for individual and collective consultation with people with Parkinson's, their carers and families. The RC Hall made an exceedingly generous donation, sufficient to employ a nurse for 3 years. The John James Foundation will also donate funds to provide a car for the Nurse for 3 years, and the RC Belconnen has donated funds to cover some of the estimated start-up costs. These organisations are to be thanked for their generosity and consideration. Together with the CEO of Parkinson's Australia and the RC Hall, PACT Committee members have been in consultation with a health organisation in Canberra to employ the nurse. Negotiations are still in progress and it is expected to have a PACT Community Parkinson's Nurse appointed and operative by early 2018. It is not expected or planned that the PACT Nurse will supplant or compromise the ACT Department of Health nurse.

4. Walk in the Park The Governor General of Australia, His Excellency the Honorable General Sir Peter Cosgrove AK MC (Retd), who is the Patron for Parkinson's Australia, graciously agreed to attend and to open our Walk in the Park for 2017. Accompanied by Lady Cosgrove he made an opening speech, watched with interest the Dancing and other exhibits at the Walk, mingled with those attending and then completed the Walk itself before leaving the function. I am very appreciative of the Governor General's and Lady Cosgrove's interest and contribution to the event. Other important visitors included NSW

Senator John Williams, Ms. Gai Brodtmann, Member for Canberra, Mr. Gordon Ramsay MLA, ACT Attorney General, Ms. Rachel Stephen-Smith MLA, Minister for Community Services and Social Inclusion, and Mr. Steve Sant, CEO of Parkinson's Australia. I offer my sincere thanks to these very busy people for their interest and support.

The Walk has been extensively reported in the PACT Bulletin and through our Facebook page. These reports provide detailed reporting on the Walk and express PACT's recognition and thanks individually and collectively of those who supported the Walk in so many ways. Given those reports, I do not intend to duplicate their reporting in detail here. But, I do wish to note the tremendous success of the Walk in raising funds and in promoting awareness and to express my thanks collectively to those many people (including members of PACT) and organisations who added immeasurably to its success by providing support on the day and before, making financial contributions and providing avenues for awareness within the community. My thanks, whilst general and collective are no less sincere and heartfelt. I wish however to particularly recognise the gracious and very helpful support from our sister organisation, Parkinson's NSW, in assisting PACT to establish a web page and thus an avenue for donations and information for the event.

It remains for me to recognise and to provide utmost thanks to the organising subcommittee led by Sallyann Ducker and comprising Kim Walker and Margaret Healy and ably supported by Meaghan Burnett. The assiduous organising, care and outstanding commitment from these voluntary organisers was the basis of the success achieved on the day. Their effort is to be especially applauded with sincere thanks for an extremely demanding job well done.

5. Dancing The Dancing programme has continued in both Belconnen and Tuggeranong and PACT is deeply appreciative of the very supportive work provided by Philip Piggitt and his staff in this very important and popular program. PACT has recently signed a MOU with the Belconnen Arts Centre Inc. as a commitment of partnership towards delivering dance programmes specifically designed to help people with Parkinson's. PACT subsidises each of the programmes.

6. Painting with Parkinsons This very popular and important programme has continued to be conducted by John Pratt and his volunteer helpers throughout the year. PACT continues to subsidise the work. In April John Pratt worked very hard and most successfully to set up a display of *Painting with Parkinsons* art at the Belconnen Arts Centre. This display, including works from the Art Therapy group in Barcelona, was a great success and viewed with pleasure by many. The Belconnen Arts Centre and John in particular are thanked most sincerely for the display itself and the opportunity to provide further awareness in the community of Parkinson's. It is hoped that arrangements may be established later this year or early next year to be able to accommodate more people in the program.

7. Support Groups PACT arranges several support groups that meet throughout each month. There is a Thursday morning group, Tuesday evening group, Women with Parkinson's group and two carers groups. Each of these groups meets once per month and their programmes include visiting speakers, discussion meetings and social occasions. PACT is extremely supportive of these groups and so very appreciative of the volunteers who conduct them. Dimitra Campbell and Dominic Lum conduct and coordinate the Tuesday group, Margaret Healy the Women's group, Judith Ducker the Thursday group and with Maruta Pearson the carers group. Without these volunteers and the support of members who attend, these groups would founder and significant support to people with Parkinson's, their carers and families would be limited. I encourage all members to participate in one or more of these groups and thank the volunteer organisers for their hard work in conducting each group.

8. Additional Support

Beyond the support offered directly through PACT, others who play a valuable part in supporting people with Parkinson's in the ACT include the physiotherapy class conducted by Alison Flynn at the University of Canberra Hub and Kirsten Pratt who conducts Nordic walking for people with Parkinson's. PACT has been approached this year from a qualified person with a view to establishing a seated yoga class for people with Parkinson's and by another person interested in establishing an OT programme at the UC Hub. Should either of these programmes eventuate details will be provided in the PACT Bulletin.

PACT Bulletin The PACT bulletin is one of our important support elements. It is always distributed in a timely manner and is well received by members. Judith Ducker has been the editor of the PACT Bulletin again for this year and is continuing in that role although she is seeking someone to assist her with a view to taking over the role after 3 years of consistent and effective service. The PACT Bulletin is full of information each month applicable to people with Parkinson's, their carers and families. Judith does a

sterling effort to publish the Bulletin on time each month with many voluntary hours involved. She is deserving of our utmost thanks. Judith's report on the Bulletin is presented at the AGM.

PACT Committee The committee members are: President, John Sheldrick, Secretary Janet Bedloe, Treasurer Elaine Andersen, Librarian, Marilyn Nelson, Publicity Officer, Sallyann Ducker, Public Officer, Margaret Healy, and members, Margaret Day, Kim Walker and Judith Ducker (who is also the Bulletin editor). The depth of experience and dedication shown by each Committee member in keeping the 'show on the road' is to be applauded and I offer my sincere thanks to them all. I would be remiss not to especially mention our Secretary Janet Bedloe and Treasurer Elaine Andersen for their particular efforts and to all other members for their interest, dedication, advice and sheer willingness to ensure that PACT continues to be well placed and informed to support people with Parkinson's, their carers and families in the ACT and surrounds. A sterling effort from all Committee members.

Membership Kits It has been the practice of PACT to provide a membership kit to new members. This practice is continuing but in the essence of efficiency the documents contained in the Kit have been reduced to provide only those considered essential information. The Kit includes contact references for those who may have special or additional needs.

NDIS This year saw the introduction of the NDIS scheme for support to people under 65 years of age. Some members have joined the scheme to seek appropriate benefits.

PACT Library The Committee resolved to close the PACT library and to send the books to the ACT Library Service where it was considered there would be better access and wider recognition. Marilyn Nelson worked hard to bring about this change which was well accepted by the ACT Library Service and is due our thanks for the considerable work load in assessing all of the books held in the PACT library and completing the arrangements with the ACT Library Service.

World Parkinson's Day With the rest of the world we celebrated the 200th anniversary of James Parkinson's observations and the publication of his Essay on the Shaking Palsy on 11 April which is the anniversary of his birthday. A number of people gathered at the Yacht Club in reasonable weather to participate in the ACT celebrations, the major feature of which was the appearance of and a few words from James Parkinson himself (aka Michael Dwyer). Well done and thanks Michael. Those attending were also entertained by the Parkinson's dancers and most accepted the invitation to join in the final dance which was another highlight of our day.

George Webb Memorial Prize The PACT George Webb Memorial Prize was presented to Jennifer Robinson, a medical and PhD student at the ANU School of Medicine. We were very pleased to congratulate her on her success. Jennifer has written an article for the Bulletin, spoken to the Thursday morning session, participated in the Walk and has been generally supportive of PACT despite her very demanding studies. We wish Jennifer well in her future work.

Web Site and Facebook The PACT web site www.parkinsonsact.org.au and the Facebook entries on <https://www.facebook.com/search/top/?q=parkinson%27s%20canberra%20act> continue to provide a good source of information and our thanks go to those responsible over the years for their introduction and maintenance. The Committee is planning to investigate if the web site might be further developed.

Conclusion

I can only reiterate my absolute admiration for the commitment and expertise of our volunteer committee and helpers who participate, lead and operate throughout the activities of Parkinson's ACT. I remain astounded at such commitment and am thankful personally and on behalf of PACT as a whole, for their advice and endeavours.

May I encourage all of our members to try to expand our membership through acquaintances who might need our help, to participate within their capacity in the PACT activities and where possible seriously consider accepting a management or leadership role within the organisation.

In this report I have tried to encompass the breadth of PACT involvement and activities and give recognition where due, mainly in the broad, and any omissions are not intended.

I am pleased to be "in this together."

John Sheldrick, President, Parkinson's ACT

24 September 2017

After delivering his Report John was reminded of Michael Robbins and his Men Who Care group and was pleased to apologise for this discrepancy and to verbally acknowledge this important support group and thank Michael.

The Walk in the Park



Richard Newman (seen at left dancing in his warm winter beanie) has sharp eyes as well as twinkling feet, and has pointed out that in the September bulletin, the Editor not only thanked “Western Creek Rotary” instead of “Weston Creek Rotary”, but also called our wonderful dancers the Upbeat Dancers – instead of the Offbeat Dancers! Many thanks for drawing attention to these slip-ups, Richard – and apologies to Weston Creek Rotary and all the Offbeat Dancers.

Photos

Our wonderful volunteer photographer, Daniel Spellman, has kindly provided a link to all the photos he took at the Walk in the Park. https://drive.google.com/file/d/0ByNWwLc_vBw1WUhnUG12c0dpWDA/view?usp=sharing If Daniel took a photo of you or your family, you might like to save a copy.

Daniel’s contact details are: Daniel Spellman, **Web:** www.danielspellman.com **Mobile:** 0406 569 967

Prize Winners

Donations are still coming in (the Everyday Hero website will be open until November) but the prizewinners were judged on totals to hand at 5 pm on **Wednesday 23rd August 2017** so that prizes could be presented at the walk. The totals included the amounts listed on the Everyday Hero website plus those monies received by the Treasurer – some people preferred to give a cheque or cash.

Highest amounts raised by individuals at the cut-off date:

- 1st Claus Ducker - \$2,872.86 Fitbit, donated by **Tony Hutchison** from Super Wealth Advisors.
- 2nd Kim Walker - \$2,444.70 A three-month gym membership at **Next Gen Gym**
- 3rd Kristen Pratt - \$1,898.73 Bread board, made and donated by **Tim Healy**

Other major individual fund raisers were Elizabeth Reid - \$1,731, Madeline Bellett - \$1,268.12 and Leanne Randall - \$1,026.20

Highest amounts raised by teams at the cut-off date:

- 1st Team Ducker (Claus, Judith and Sallyann Ducker) - \$4,684.74 (Team Ducker re-donated their prize.)
- 2nd Capital Nordic (Kristen Pratt, Elizabeth Reid, Anne Cronin, Jenny Loader, Margaret Callan, Margo Lawson, Marilyn Nelson) - \$4,450.53.

Total raised by everyone: almost \$40,000 (to date)

Clare Taylor, Advanced Practice Nurse – Parkinson's.

The newly-appointed Canberra Hospital Parkinson's Nurse, Clare Taylor, was the guest speaker at the September Thursday Support Group meeting, and the large number of members who took the opportunity to come and meet Clare is indicative of the importance members place on having access to a Parkinson's nurse to help monitor and manage this condition.



Clare told the meeting that she is employed by Canberra Hospital and works under the direction of the Canberra Hospital Neurologists. She runs a nurse-led clinic for patients who are referred to her by the Canberra Hospital Neurologists. General Practitioners can refer patients to the Canberra Hospital Neurology Department to see the nurse and obtain group education, general advice and referrals to other practitioners, but not for medication reviews or condition monitoring. As Clare pointed out, the GPs themselves can refer their patients to services such as physiotherapy and speech pathology, rather than sending them to her to make the referrals.

Clare plans to establish a phone-in clinic – a block of time during which patients with a current referral from their medical officer can phone her for advice rather than coming to the hospital.

She is developing a brochure outlining the services she can provide, which will be available after it has been approved by the relevant review processes at the

Canberra Hospital.

Clare also monitors admissions to the Canberra Hospital, looking for people who have Parkinson's, whether or not their admission is related to Parkinson's. She then visits them to ensure that their care plan covers their Parkinson's needs, and that staff are aware of those needs.

All present agreed with Clare when she said that she thought allowing Parkinson's patients who self-medicate at home to self-medicate in the hospital was the best policy, and that she will be advocating for this practice to be introduced.

It is disappointing that the role of the Canberra Hospital Parkinson's Nurse is now so far divorced from the original vision of Parkinson's ACT when they successfully lobbied for the establishment of the position some years ago – that of a nurse whose accessibility and expertise would support people living with Parkinson's and reduce the need for hospital admissions.

To help achieve the important fundamentals of the original vision, PACT is in the process of employing a community based Parkinson's nurse.

Judith Ducker

Anyone for BIG?

PACT member Leone Oxley is looking for other people interested in participating in LSVT BIG exercises at the Active Recovery Physiotherapy Service in Phillip. Debbie Douglas is a qualified and experienced BIG instructor and is happy to hold classes for the BIG programme but needs at least 2 participants.

Leone writes "We could also do some other gym work if we wanted to. The cost would be \$45 per session which could be done weekly or fortnightly on a Monday or Thursday. There is also the possibility for a coffee afterwards. These exercises are very beneficial, so if anyone is interested or needs more information, please feel free to contact me."

If you are interested, please contact:

Leone Oxley Mobile: 0409 886 493

Home: 02 6288 0465

Email: leoneoxley@bigpond.com

National Carers Week, 15-21 October.

Australia's 2.7 million unpaid carers are saving our economy a staggering \$60.3 billion a year in informal care – more than one billion per week. This is often at their own financial and emotional expense. They deserve to be acknowledged, celebrated and supported.

If carers would like support with their caring role or with their own health and wellbeing, they can call Carers ACT on 1800 052 222 or visit the website www.carersact.org.au

RATING YOUR PARKY'S CONDITION

Tony Fearnside

Since my diagnosis with Parkinson's in 2008, I have often wanted to know how the condition was progressing. To do this, I made a list of some 40 symptoms associated with Parkinson's and worked through the list from time to time (six monthly intervals, or longer). This enabled me to view the continuing onset with a degree of equanimity. The other day, I had another look at the Unified Parkinson's Disease Rating Scale (UPDRS) which I have been told is the "gold standard" for neurologists and other medical practitioners. However, the UPDRS is far too detailed for my purposes and I prefer to use my own list of symptoms. *(The UPDRS is owned and licensed by the International Parkinson and Movement Disorder Society.)*

I made and used a similar list to the one below to track Parky's progress. Do not forget to put the date on the list!

Name Date Key: √ = present; √√ = pronounced; X = absent

1. Intellectual impairment		9. Cutting food & handling utensils	
Poorer CONCENTRATION	√	Less DEXTERITY	√
Poorer JUDGEMENT	X	Less capable of MINOR TASKS	√√
Poorer SHORT TERM MEMORY	√		
		10. Dressing	
2. Thought Disorder		Assistance appreciated	X
VIVID DREAMS	X	Assistance required	X
HALLUCINATIONS	X		
		11. Hygiene	
3. Depression		Assistance appreciated	X
ANXIETY (may be anticipatory) & panic	√	Assistance required	X
APATHY/lack of motivation	√		
MOOD CHANGES	√	12. Turning in bed & adjusting bed clothes	
DEPRESSION	X	Assistance appreciated	X
		Assistance required	X
4. Handwriting change			
SLOWER/SMALLER	√√	13. Balance and Falling	
Less DEXTERITY	√	"Near misses"	√
MICROGRAPHIA	√√	Actual falls	X
Cannot always write signature	√		
		14. Freezing of Gait (FOG)	
5. Speech		While walking	X
Difficulty FINDING WORDS	√	When starting to walk	X
Slurred/soft SPEECH	√		
		15. Urinary Incontinence	
6. Salivation		Mild (inconvenient)	√
DROOLING	√	Established	X
TENDENCY TO CHOKE if resting	√		
		16. Faecal Incontinence	
7. Swallowing		Mild (inconvenient)	√
SWALLOWING difficult (lack of saliva)	√	Established	X
8. Motivation/Initiative			
Less assertive	X		
Loss of interest/disinterest	X		

Of mice and men: why animal trial results don't always translate to humans

Throughout the era of modern medicine, animals have been used extensively to develop and test therapies before they are tested in humans. Virtually every medical therapy in use today – including drugs, vaccines, surgical techniques, devices such as pacemakers and joint prostheses, radiation therapy – owes its existence, at some level, to animal experiments.

Animals have played a pivotal role in countless life-saving discoveries in the modern era. For example, in crude experiments in the 1800s, dogs were injected with extracts made from the pancreases of other animals, which led to insulin therapy for human diabetes. Much more recently, genetically modified mice were used to develop revolutionary cancer immunotherapy drugs, such as that credited with curing advanced melanoma in AFL footballer Jarryd Roughead.

In developing and testing drugs for human use, animal trials give us extremely valuable information that is impossible to get from test tube or petri dish experiments alone. They tell us how a drug is absorbed and spread around the body in a living animal and how it affects the targeted, and other, tissues. They also tell us how the body processes and eliminates a drug – for most drugs, this is primarily done by the liver and kidneys.

These studies help decide whether to progress the drug to human trials and, if so, what a reasonable starting dose for a human might be. However, because of species differences, something that is effective and safe in an animal might not be so in a human.



What's the strike rate?

The late Judah Folkman, a cancer researcher at Children's Hospital in Boston, discovered a compound in the 1990s that eliminated a range of tumours in laboratory mice. Unlike traditional chemotherapies, there were no apparent side effects and the tumours developed no resistance to the treatment. Mass media outlets heralded a miracle cancer cure, but Folkman knew that what happens in the laboratory often fails to translate to the bedside. He famously quipped: "If you have cancer and you are a mouse, we can take good care of you".

The compound, endostatin, went on to human trials and was well tolerated in patients. But its effect on tumour growth was minimal and inconsistent, and results were described as "lukewarm". Endostatin has since been reformulated and shows some promise in managing certain cancers, especially when combined with

other therapies, but it's not the wonder drug that it first appeared to be.

Scientific journal publications on animal studies usually include a disclaimer along the lines of "this effect has only been demonstrated in animals and may not be replicated in humans". And with very good reason. A 2006 review looked at studies where medical interventions were tested on animals and whether the results were replicated in human trials.

It showed that of the most-cited animal studies in prestigious scientific journals, such as *Nature* and *Cell*, only 37% were replicated in subsequent human randomised trials and 18% were contradicted in human trials. It is safe to assume that less-cited animal studies in lesser journals would have an even lower strike rate.

Another review found the treatment effect (benefit or harm) from six medical interventions carried out in humans and animals was similar for only half the interventions. That is, the results of animal and human trials disagreed half the time.

Costs of failure

The mismatch between animal trials and human trials can cause big problems. Developing a drug to the animal trial phase is already incredibly expensive, but taking it to human clinical trials adds enormous costs, often tens or hundreds of millions of dollars. If a promising drug fails to impress in human trials, it can mean a lot of money, time and effort wasted.

But far more problematic is a drug that seems safe in animal trials, but turns out to be unsafe in humans. The consequences can be tragic. For instance, thalidomide (a drug to treat morning sickness) does not cause birth defects when given to pregnant rats and mice, but in humans it caused an international epidemic of birth defects, including severe limb malformations, in the 1950s and 1960s.

More recently, a drug designed to treat leukaemia, TGN1412, was tested in monkeys – in many senses the closest laboratory model to humans – and was well tolerated. But when just 1/500th of the safe monkey dose was given to six healthy young men in the first phase of clinical (human) trials in 2006, they immediately developed fever, vomiting and diarrhoea. Within hours, they were in an intensive care unit with multiple organ failure. They only narrowly escaped death.

Another drug, fialuridine, developed to treat people with hepatitis B, tested well in mice, rats, dogs, woodchucks and primates. But a subsequent human trial in 1993 caused seven people to develop liver failure. Five died and the other two were saved through liver transplants.

Mice and men differences

So, why do human and animal drug trials sometimes disagree so spectacularly? It boils down to the way the body absorbs and processes the drug and the way the drug affects the body. Often these processes are the same or very similar across species, but occasionally they are different enough that a substance that is benign in one species is deadly in another.

This will not surprise pet owners, who know a block of chocolate can kill a dog. Dog livers are poor at breaking down the chemicals caffeine and theobromine, found in chocolate, so it doesn't take much for toxic levels to build up in a dog's bloodstream.

Similarly, a cat that ingests even a small amount of paracetamol is a veterinary emergency, as cats lack the liver enzymes required to safely break down paracetamol. Instead, they convert it to a chemical that is toxic to their red blood cells.

Hindsight has taught us where the human and animal differences lie for thalidomide, TGN1412 and fialuridine, too. Rats and mice not only break down thalidomide much faster than humans, but their embryos also have more antioxidant defences than human embryos.

In the case of TGN1412, at least part of the problem was that the drug's target – a protein on certain immune cells – differs slightly between the monkey and human versions. The drug binds more strongly to the human immune cells and triggers a rapid release of massive amounts of chemicals involved in inflammation.

And the reason fialuridine is toxic to humans is because we have a unique transporter molecule deep in our cells that allows the drug to penetrate and disrupt our mitochondria, which act as cells' internal energy generators. So fialuridine effectively switches off the power supply to human cells, causing cell death. This transporter is not present in any of the five test animal species, so the drug did not affect their mitochondria.

Despite the shortcomings of animal models, and the profound ethical questions around subjecting animals to suffering for human benefit – an issue that concerns all researchers despite their commitment to improving human well-being – animal experimentation remains an invaluable tool in developing drugs.

The challenges, and indeed the obligations, for medical researchers are to use animals as sparingly as possible, to minimise suffering where experimentation is required and to maximise their predictive value for subsequent human trials. If we can increase the predictive value of animal trials – by being smarter about which animals we use, and when and how we use them – we will use fewer animals, waste less time and money testing drugs that don't work, and make clinical trials safer for humans.

The author of this article is Ri Scarborough, Manager, Cancer Research Program, at Monash University. The article was published in The Conversation of August 30, 2017 under a Creative Commons – Attribution/No derivatives, license and can be accessed at: <http://theconversation.com/of-mice-and-men-why-animal-trial-results-dont-always-translate-to-humans-73354>



Many thanks to Tony Fearnside for sourcing and editing this article.

CARERS COFFEE

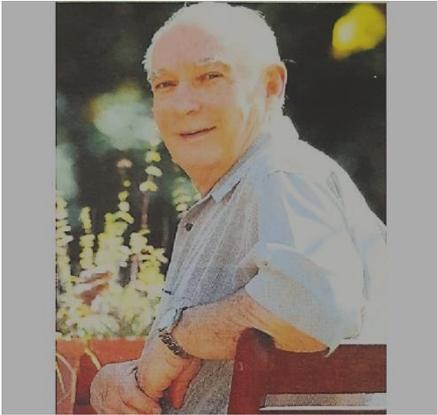
OCTOBER – BEAVER GALLERIES AS USUAL

NOVEMBER – YARRALUMLA GALLERY AND THE OAKS BRASSERIE

CLIVE MONTY - A LOVER OF ART

From childhood Clive had learnt to appreciate art. All his life he had frequented art galleries as often as possible and owned numerous books on the subject. He himself had never (except in early childhood) taken up any art activity, yet what he eventually accomplished may be equally important.

In 1974 Clive was appointed principal of The Woden School, for pupils with intellectual disabilities. Clive impressed the selection panel with, among other things, his vision for special education – to build self-confidence in the students by focussing on the things they could achieve rather than on fixing the things they couldn't. To this end, Clive encouraged every creative initiative his staff members presented to him – be it in the classroom, the workshop, the gym, the kitchen – and particularly in the art room!



In 1976 Lola de Mar was appointed art teacher. This is how she describes her experience:

“When I arrived at the Woden School some staff members at first believed that a period of art was the light relief between the real learning of reading writing and number skills. Clive Monty took it seriously; we were in step. What wonderful support for an art teacher to have. Clive had been a Latin teacher – he understood that I was a language teacher too. I was teaching a visual language.

A classroom teacher does not have the power to make the changes that occurred at The Woden School over a period of eight years, years during which a purpose-built art studio was built, an artist-in-residence programme was established, craft work was sold and commissions were accepted and a senior annexe – The Craft Cottage – was established off campus. Clive Monty and I

worked together to make this happen.

The students were experiencing success – that was a new experience for young people who only came to the Woden School after they had experienced utter failure elsewhere. It is amazing how success changes attitudes.

I was so very fortunate to work at Clive Monty's Woden School. For a man of relatively small stature and fragile health I still see him as a giant.”

In 1982 Clive had a fall at the school which permanently injured his back. After extended leave it became apparent he would need to retire aged only 48 - but you can't keep a good man with a bad back down!

Clive still had another major contribution to make to people with special needs in Canberra.

Clive was drawn to the work of L'Arche – communities of people with special needs, living together with their assistants sharing their common humanity – established internationally by Jean Vanier.

Soon it came to his attention that such a community was being established in the Canberra region. No sooner had he made some enquiries than he was invited to join the Board of L'Arche Genesaret Community. Soon after he was appointed President and remained in that position for 23 years!

In the early 1990s Therese Brennan became Community Leader. She too found Clive to be “a great encourager of new projects”. Together with Phil Cooper, an artist and assistant, they began setting up an art studio in the James Street Curtin community home. Artist Tonina Harvey came to their notice and was soon appointed Coordinator of what became known as the Hands On Studio. Once again Clive had found someone whose passion was to see people with special needs enjoy and produce art of a very high quality.

The Studio was opened up to the wider community of people with special needs. It moved to Marymead where it was operating 5 days a week with 2 sessions a day being offered. Around 90 people availed themselves of this unique opportunity! – some of them from the original art programme of The Woden School.

Senator Margaret Reid and Governor General Sir William Deane took great delight in being patrons.

Exhibitions were held regularly at the end of each term. Works in a wide variety of art mediums, including wood carving and pottery, were displayed. Many were sold and commissions received. Eventually works from the Studio could be seen at the NRMA, the Tuggeranong Health Centre, Tuggeranong Library, Canberra Airport, CMAG, Actew AGL and Woden Plaza. Often some particularly imaginative pieces were displayed at Floriade.

The history and significance of the Hands On Studio is currently being researched. It still operates under Catholic Care and some members of the L'Arche Community still participate.

In 2012 Clive was diagnosed with Progressive Supranuclear Palsy (PSP). Now the carer of those with special needs became the one with special needs in need of care! With his ability to communicate now so compromised, what better place to discover than the *Painting with Parkinsons* Group! Here Clive was given all that he had been striving to achieve for others – with the addition of music, his other great love. This became the highlight of many weeks. We were both extremely grateful to all involved in enabling such a quality life enhancing activity for Clive who had enabled so much art work in the Canberra community.

Ruth Monty, Lola de Mar and Tonina Harvey