



Richelle Koller, Arrow CEO

Welcome to the first edition of Arrow's *Transplant Talk* for 2021.

In our last edition of *Transplant Talk* we covered the realities of life on a

CEO Report

bone marrow transplant ward during COVID-19. In this edition, I was expecting that COVID-19 would have little mention. However unfortunately as I write this, most of Australia is in lockdown due to the COVID-19 pandemic with an unknown end date.

It is amazing how our plans can change so quickly. Similar to when a patient falls ill; diagnosed with cancer or some other serious illness and their world is turned upside down, seemingly overnight.

Despite all that is happening in the world, we do have some good news stories to tell.

At Arrow we have continued to be the vital support and strength for many transplant patients with our emergency funding, grocery support and travel and accommodation assistance. We have awarded a number of valuable scholarships to outstanding cancer care nurses to further their education, the details of which are all included in this newsletter.

I hope you all continue to stay safe and well, and thank everyone who has supported Arrow during these uncertain times, allowing us to be that reliable source of strength for so many patients and their families.

A brush with Dr Kerry Atkinson

With a 50% chance of survival in the first six months after the transplant, at the age of 16, Lisa Cuthbertson could barely have imagined, 36 years later, she'd be interviewing the very doctor who looked after her. But she did know she was at one of the world's best hospitals for bone marrow transplantation, with one of the very best doctors by her side.

Here, Lisa speaks with Professor Kerry Atkinson, who oversaw her bone marrow transplant at St Vincent's Hospital, Sydney in 1985.

Lisa: You joined St Vincent's Hospital in the early 1980s. What was happening in bone marrow transplantation?

Kerry: The first bone marrow transplants in Australia were done by Professor Jim Biggs at St Vincent's Hospital in Sydney. When I joined the Department in 1981, Jim had already done six transplants. He took me on to help expand and grow the program, which we did.

Lisa: What changes/advances in treatment have been made since then?

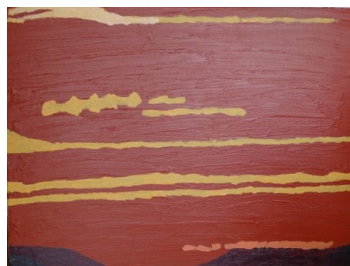
Kerry: There have been many improvements in BMT over the last 20 years. One of the biggest innovations is the use of mobilised peripheral blood stem cells instead of bone marrow as the source of stem cells for the transplant.

It was discovered that giving the donor a protein called G-CSF (granulocyte colony-stimulating factor, which occurs normally in the body) had two effects: it increased the number of neutrophils in the blood (the white cells that fight bacterial and fungal infections) and it cleaved the bonds that keep marrow stem cells in the bone marrow and they poured out into the bloodstream. There they could be collected in huge numbers by using a cell separator machine.

In this process, a needle is put into a vein on one arm of the donor which takes the blood to the machine where the blood is centrifuged and separated into its component parts – plasma and platelets, white blood cells and red blood cells. The machine can be programmed to syphon off any of these components: in the case of peripheral blood stem cells, the white cell layer is collected and the rest of the blood is returned to the donor through a needle in the other arm.

Lisa: What does this mean for the patient?

Kerry: The advantage of this to the recipient is that engraftment of the donor stem cells is much more rapid because of the increased number of marrow stem cells collected. The advantage to the donor is that there is no need for a general anaesthetic and they do not have the postoperative pain which results from multiple needle



"Whale Beach Red Dawn No. 3"
Original artwork by Dr Kerry Atkinson

aspirations from the pelvis during a bone marrow harvest.

Lisa: Let's needle in on you now: what is your life motto?

Kerry: Good health is number 1. After that, a code of moral integrity. After that, tertiary education. I never believed in good luck or bad luck but I read a good definition of good luck recently: opportunity preceded by information. Apart from that, be nice to people but be firm. If you have an issue with something address it proactively.

Lisa: And finally, knowing your newfound passion for painting: if your life were a painting what would it be called and why?

Kerry: Enjoy

Events

- **Roy's Sutherland 2 Surf Walk**
Sunday 29 August 2021
Roy, a bone marrow transplant survivor, is participating in this community event and raising funds for Arrow. Like to support him? Find out how:
<https://www.givenowcom.au/crowdraiser/public/royssutho2surfwalk>
- **Hawkesbury Canoe Classic**
Saturday 30 & Sunday 31 October 2021
One of the world's premier overnight paddle ultra marathons and a major fundraiser for Arrow for over 30 years
111 kilometres of moonlight madness along the beautiful Hawkesbury River
Entries open now!
www.canoeclassic.net



- **Arrow Annual General Meeting**
Friday 19th November 2021
at 6pm Kinghorn Cancer Centre

Note: all event details subject to change given evolving COVID-19 restrictions

Announcements

Arrow is on the lookout for passionate and experienced directors to join our volunteer Board as we review our strategic direction and set our future priorities. If you are an experienced director and have an interest in Arrow's mission, we encourage you to apply at:
<https://www.ethicaljobs.com.au/members/AIMSAustralia/non-executive-company-director>

For the full interview, and to hear more about Dr Atkinson's life, see our website at <http://www.arrow.org.au/latest-news-personal-stories-events>.

Note all information contained in this article is considered personal in nature and is not sanctioned by Arrow or St Vincent's Hospital. You should always seek your own medical advice in relation to your individual circumstances.



MAKE A DONATION TODAY!

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OR COMPLETE THE FORM OVERLEAF

PATIENT SUPPORT



Pay it forward

Previous transplant patients often contact us looking for ways they can give back and help future transplant patients. They are grateful for their treatment and care, particularly for the nurses, doctors and specialists who looked after them.

A recent donor Jeff, who received a transplant at St Vincent's Hospital, said: "Having recently returned home from my bone marrow transplant I wanted to thank all

the amazing nurses, doctors, allied health workers, cleaners, food service staff, and everyone else who were so attentive, amazing and caring throughout my stay.

Your kindness, attentiveness and obvious passion for what you do really made my stay much more comfortable than I could have possibly imagined.

My wife, also appreciated everything you did for us. She

already had sent a couple of boxes of chocolates however I today made a donation to the Arrow Foundation, which hopefully will provide some further assistance to Ward 9 South."

Thank you Jeff for your support and we wish you all the best in your recovery.

Transplant Kids

Each year in Australia approximately 150 children under the age of 16 receive a haematopoietic stem cell transplant. Receiving treatment at one of the specialist Children's Hospitals across the country, the families of these children face significant financial and logistical challenges.

Arrow aims to help these families through our patient support program offering accommodation, travel, grocery and petrol card assistance.

In the past year, Arrow has supported 37 families in Australia, each of whom have had a child undergoing transplant treatment, and many of whom have had to

relocate from home for months on end.

We are able to provide this support thanks to our kind sponsors and our strong relationship with the social work teams at the Children's Hospital.

A spokesperson from the Queensland Children's Hospital, which received help for 12 of its patient families this year, said:

"The welfare team at Queensland Children's Hospital is grateful for the support Arrow provides to families undergoing a bone marrow transplant or stem cell transplant. Families undergoing this treatment are impacted financially, with additional costs associated with

lengthy hospital attendance, usually on top of a significant reduction of income. Arrow's support makes a huge difference to families by allowing them to stay together and support each other through treatment".

Arrow wishes all transplant patients, including the littlest of patients, strength to them and their family during this tough time.



RESEARCH



Liverpool Catholic Club

We give our heartfelt thanks to long term supporter Liverpool Catholic Club who have made an additional donation of \$60,000 to continue the study of blood mutations in patients undergoing haematopoietic stem cell transplants (HSCT).

Liverpool Catholic Club have donated \$197,500 over the past 6 years towards important medical research, this being the latest research project conducted by St Vincent's Centre for Applied Medical Research, aimed at improving the safety of HSCT.

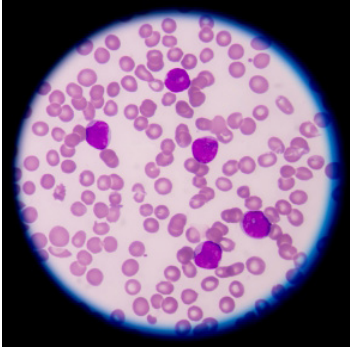
With this ongoing funding support, genome sequencing of HSCT patients before and after their transplant is being performed to determine how HSCT affects the accumulation of new mutations in their blood, and whether specific mutations are associated with subsequent post-treatment complications.

Dr Tim Molloy, senior Research Scientist at St Vincent's Centre for Applied Medical Research says "Liverpool Catholic Club's funding has been instrumental in enabling us to pursue these important goals, which we hope will translate into improved patient care and save lives in the not too distant future".

ARROW RECEIVES NO GOVERNMENT FUNDING



GAMBIT



AML cells

This exciting project, known as GAMBIT, studies the “Genomics of Aging-acquired Mutations in Blood to Identify Therapeutics for Cancer, Cardiopulmonary, Metabolic and Blood Disorders in Australia”. It is an ambitious project that looks at the acquired gene mutations that accumulate in blood and bone marrow cells during aging.

This 6-year, multi-centre study with collaborating research groups in New South Wales, South Australia, Queensland, and Victoria and will be among the largest studies of its type, with blood samples and detailed clinical records already collected from several thousand older Australian adults. Importantly, this sample analysis, will be directly coupled to a massively-parallel drug development pipeline capable of identifying new drugs with the ability to target the candidate disease-causing mutations. Michael and Vicki Quigley, major donors of the project, are keen

to support this area of medical research in an effort to develop new and better treatments. “We are very happy that we can help to fund the GAMBIT project which, if it succeeds in its aims, will make a significant contribution to developing treatments for a variety of diseases that are caused by deleterious mutations to haematopoietic stem cells.”

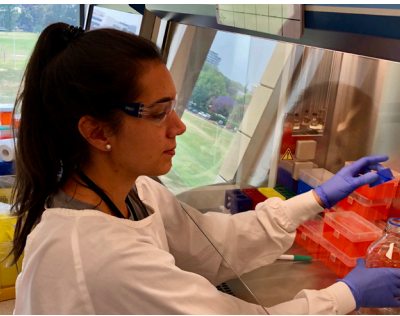
Such diseases include a broad range of common, debilitating disorders that affect older adults, including blood disorders (anaemia, cytopenia, myelodysplasia), malignancies (leukaemia, lymphoma), autoimmune disorders, cardiovascular and pulmonary diseases, and metabolic diseases (type II diabetes). Recent genomics studies have shown these diseases are strongly associated with these aging acquired mutations. Cumulatively, these diseases account for almost a third of health care expenditure in those aged >60 years in Australia.

Of particular contemporary relevance, age-associated blood mutations are also the likely drivers of immune failure and mortality in COVID-19 patients and may explain the strong link between age and disease severity in infected individuals.

The research program has attracted both strong philanthropic and industry support, with an increasing number of private donors contributing to the project. Further funding will however be required to achieve the ambitious goals of such a large-scale project.

If you would like to support this important research project aimed at improving the health outcomes of Australia’s aging population, please contact us for further information on how you can donate.

The Blood Stem Cell and Cancer Research Unit at St Vincent’s Hospital, Sydney, will receive a boost of funding in the coming 12 months, as Arrow donates nearly \$1 million received from a number of key donors, passionate about the prospects of a new nation-wide research programme on the St Vincent’s Hospital campus.



Hawkesbury Canoe Classic PHD Scholarship

Congratulations to Natalia Pinello from the Epigenetics and RNA Biology Program at the Centenary Institute, this year’s recipient of the Arrow Hawkesbury Canoe Classic PHD Scholarship. Natalia was first supported by Arrow in 2019 for her research into the role of Ribonucleic Acid (RNA) modifications in normal bone marrow development and acute myeloid leukaemia. Having made remarkable progress in her research towards understanding new mechanisms of gene expression control in the development of blood cells that originate from the bone marrow, Arrow is proud to support Natalia during her third and final year of her PhD. We look forward to sharing with you the outcomes of her research later this year.

NURSE EDUCATION

Masters of Cancer and Haematology Nursing

The Masters of Cancer and Haematology Nursing, provided by global leader in health education the University of Sydney, enables registered nurses to build on the knowledge they have already gained, giving them the skills required to move into a specialist role and take their career to the next level.

Arrow proudly provides one Trace Richey scholarship per year for a registered nurse to pursue this

invaluable opportunity, learning from experts in cancer care and haematology nursing at one of the world’s top nursing schools.

The scholarship program is a competitive process and with the high calibre of applicants this year, we are proud to announce we have awarded two nurses this amazing learning opportunity - Susan Hall and Phoebe Forrester, both of whom work at St Vincent’s Hospital.

“I am a passionate haematology nurse, and am grateful to The Arrow Bone Marrow Transplant Foundation for assisting me in continuing my studies so that I can become the best possible clinician for my patients, said Phoebe. “I hope that completing this degree will help me to become a much more competent, caring, knowledgeable, and diligent cancer care nurse.”



Phoebe Forrester



Leading Patient Care through Sharing

Mrs Jan Driscoll and her family have pledged to continue their support of nurse education in cancer care and haematology, awarding five Professor Geoffrey Driscoll Nursing Scholarships for this 2021-22 financial year.

We are pleased to announce that so far this year we have awarded scholarships to the following outstanding nurses:

Frances Burns from Royal Melbourne Hospital will be furthering her knowledge in Bone and Marrow Transplants in Cancer Care through study at the Australian College of Nursing.

Ward 7B at the Royal Melbourne Hospital where Frances works is a busy

ward, with 32 beds for allogeneic bone marrow transplant and haematology patients. Combined with the Peter McCallum Cancer Care Centre, the Royal Melbourne Hospital accounts for over 200 transplants in Australia each year.

Frances is a registered nurse having worked in cancer care and transplants for the past five years. She is keen to develop her knowledge in bone marrow transplants and share that information with her fellow colleagues.

“I want to be able to assimilate what I learn from this course into my day-to-day clinical practice and educate others on the ward with the new information I gain, explained Frances. “Bone marrow transplants can be such

complex and intense procedures and I strive to deliver care that is expertly tailored and based on current best practice and guidelines” Cameron Grant, Nurse Unit Manager of Ward 7B, supports Frances’ ambition to further her studies recognising her as a great asset to the ward and haematology nursing.” A leader in her field, Frances has always been willing to share her knowledge with her fellow colleagues and has supported them to be better nurses on our ward,” said Cameron.

Arrow wishes Frances all the best in her studies and look forward to Frances expanding her knowledge and those around her, for the better of all transplant patients.



Frances Burns

We also congratulate **Tegan Rudwick** from Riverina Cancer Care Centre in Wagga Wagga who has been awarded a scholarship to further her knowledge in Chemotherapy and Other Systemic Treatments in Cancer Care.

ARROW APPRECIATES



Pam surrounded by her family at an Arrow fundraising ball featuring left to right – Wayne, Yvette, Pam Neate, Kath, David, Cathy

Vale Pam Neate

Arrow passes on their sincere condolences to Pam Neate’s family on the passing of Pam on July 15, 2021.

Pam was a director of the Arrow board from 2009 to 2012 and an active volunteer of Arrow for many years.

Pam first became involved in Arrow when her own son Greg was diagnosed with leukaemia and received a bone marrow transplant. Pam “paid it forward”, helping others diagnosed with the

disease through her time at Arrow.

Pam was an enthusiastic attendee at many of our fundraising events, always the life of the party! Her ability to gain friendships and respect were second to none and everyone spoke very highly of Pam and her devotion to helping others.

A true Arrow supporter, a kind friend, an astute board member and a lovely person all round, Pam will be greatly missed.

In memory of Karen and Elsie



“Greg Bugden his wife Karen and son Mark on a family holiday, just prior to Karen’s first bone marrow transplant”

Greg Bugden credits Arrow as being a “source of inspiration and assistance” to he and his wife during her not one, but two bone marrow transplants. Greg shares his story here.

It is now 24 years since my wife Karen died from Multiple Myeloma after a five year battle with the disease; she also underwent two bone marrow transplants. This was when our 14 month old son was part of this very stressful journey; with him losing his Mum the day after he turned six. **During this difficult time Arrow was a source of hope and assistance to both Karen and myself.**

My mother-in-law, Elsie, sadly passed away just prior to Christmas 2020 and I

have made a donation to Arrow Bone Marrow Transplant Foundation in honour of my wife and my mother-in-law’s memories.

I have asked for this donation of \$15,000 to be allocated to medical research and patient care/nursing education and support. I know through my wife’s time in hospital at St Vincent’s that the nursing staff were fantastic and so caring to her and also a great support to me as a husband and father. Any assistance with their training will be an ongoing legacy to Karen and her mother Elsie.

Arrow thanks Greg for his most generous gift on behalf of his family; may their memory continue to live on.

Nutrition Management for BMT Patients

Jessica Cheng is a Senior Dietician at St Vincent’s Hospital, Sydney, specialising in haematology and bone marrow transplant patients. Jessica recently attended a virtual workshop run by the Academy of Nutrition and Dietetics in America to learn more about nutrition management of Graft vs Host Disease (GVHD) from an American perspective.

Being able to attend this workshop via live webinar provided Jessica with access to an international professional development opportunity, rarely provided in Australia. It also offered the convenience and safety of remote learning during a time of COVID. Arrow supported Jessica in attending this course thanks to our **Shaun Rosen Nursing Scholarship**. Jessica found the course very insightful and educational, saying “it was a wonderful learning experience. It spurred on much thought and inspiration and I hope to be able to reflect and share learnings with fellow dieticians.”

With nutrition management playing such an important role in a patient’s treatment and recovery, Arrow is proud to have assisted learning in this specialist area.

Support the work of ARROW

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