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THE QUIET ACHIEVERS: BEHIND THE SCENES AT SVI

THE NEWSLETTER OF ST VINCENT’S INSTITUTE OF MEDICAL RESEARCH AUTUMN 2015
Medical research attracts broad community support for some very good reasons. It is essential for a high quality health care system - we are lucky in Australia to have healthcare equal to the best anywhere in the world. On an individual level, it provides the hope we all have that science will bring cures for our loved ones with serious illnesses. In addition, it is an important industry for the nation as we carve out a future in advanced technology in addition to our existing strength in mining and agriculture.

We are very grateful for the Federal Government’s support for medical research and the support of the Opposition, the Greens and the Palmer United Party. That is, we have quadripartisan support – even better than bipartisan. Despite this remarkable consensus it has been very difficult for the Medical Research Future Fund to pass through the Senate where in theory increased support for medical research might be welcomed. We really need the Fund in order to ensure Australia’s continuing international success in medical research. We hope you too recognise how crucial this support is.

Recently, Graeme Samuel AC has been Chairing the Review to Strengthen Independent Medical Research Institutes, a process that has provoked much discussion. Perhaps the main conclusion from the most recent meeting was that institutes like SVI should be working closely with hospitals and universities and participate in hubs and other collaborative structures, especially with a view to translating research outcomes. It is very gratifying that we have been so actively engaged in building bridges with St Vincent’s Hospital and The University of Melbourne over the past decade, positioning us well to satisfy these requirements.

The vision for the Aikenhead Centre for Medical Discovery is as a hub on the St Vincent’s Campus that will aid collaboration, clinical translation and relationships with industry. There is very encouraging progress with securing funding for the building and also a great deal of work being done on bringing the existing institutions closer together. I look forward to keeping you updated about this exciting project.

Medical research is a collaborative endeavor. Those working at the coalface do not always get the glory, but Australia’s research assistants, technicians and students are critical to our medical research success.

- There are 44 research assistants and technicians at SVI, representing a quarter of the Institute’s total staff.
- SVI’s research assistants are a loyal bunch: the three longest serving research assistants have 79 years of service to SVI between them.
- SVI has 38 undergraduate and postgraduate students.
- Since 1990, more than 60 PhD students have graduated from SVI. These SVI alumni have gone on to work in labs as far flung as Canada and Germany.
- SVI’s current serving research assistants and technicians have a total of 271 years of collective service to SVI.
THE QUIET ACHIEVERS

Professor Jack Martin attributes part of his research success to a loyal technician who started working for him early in his research career. “Valdo joined me at the Austin in 1970. When I moved to the University of Sheffield in the UK in 1974, Val came along too, set up the labs and helped publish excellent papers over our time there. When we moved back to Melbourne 4 years later, once again Val came with us, helped set up new labs at the Repatriation General Hospital, and contributed greatly to the science over the next 10 years. After completing his PhD, he came with me to SVI in 1987 as Lab Manager. He had a profound influence on my career and that of many who worked with us – postdocs, students and overseas Fellows.”

Although rarely lauded outside of the laboratory, research assistants and technicians are fundamental to medical research. They are multi-tasking, problem-solving, level-headed facilitators. They make order out of lab chaos by collating and managing collections of specimens and complicated data outputs. They are often responsible for the day-to-day training of new people who join the group: the successes of students are often directly attributable to the quality of the oversight they received from the lab’s battle-weary research assistants. They are one of the few constants in laboratories, providing continuity as students and postdocs transit through the lab and move out into the research world, bolstered by the training they have received.

SVI is lucky to have an excellent group of expert research assistants, some of whom have worked at the Institute for the majority of their careers. Here we highlight the importance of their role by focusing on just four of SVI’s 44 hard-working research assistants.

Pat Ho joined the Bone Unit in the late 1980s, having been a highly regarded technician working in Hong Kong, at Prince Henry’s and at the Royal Melbourne Hospital. Professor Jack Martin says that Pat has been an instrumental part of the lab’s advances. She played a major role in developing and applying a new assay that has been used in the lab and elsewhere for years. Jack says, “Pat has shown enormous skill and versatility in her 25 years working with us. She has contributed to virtually every aspect of the Bone Unit’s research, predominantly in cell and molecular biology. The expansion of her skills reflects the fact that she always wants to learn new methods. Pat has co-authored at least 24 papers and has been rightly acknowledged on many more.”

Stacey Fynch is a lynchpin in the Immunology and Diabetes Unit. An animal technician, Stacey has worked at SVI since 2005 after gaining experience at Melbourne University. A/Prof Natalie Sims. Natalie says, “Ingrid prepares, cuts and stains bone sections, a very specialised skill because of the difficult medium – bone is obviously tough and cutting through it to give meaningful slices that can be used for research is technically very challenging. Ingrid is one of the best there is. Her work is essential for the high standard of bone analysis at SVI, and she is the one who teaches the many national and international visitors who come here to learn those methods.”

Ankita Goradia was one of the first members to join the Stem Cell Regulation Unit when it was established at SVI in 2008. In addition to managing the laboratory and overseeing more than 12 other members of the Unit, she has been centrally involved in a number of projects related to bone cancer. Dr Carl Walkley says “Since 2008 the group has grown and is in a continual state of flux as students and post-docs start and finish their studies: Ankita has provided continuity over that time. She is highly efficient and can be relied on to successfully complete complex and intricate experiments. She keeps the day-to-day running of the lab on track and ensures everyone has what they need to get their experiments done.”

Next time you hear of a medical breakthrough in the media, take a moment to think of the people who may not front the press conference, but whose work behind the scenes is indispensable.
Michelle said, “It can be difficult to stay motivated during a PhD, especially when you work incredibly long hours on tough experiments with only a minimal salary. I am extremely grateful that I received the SVI Foundation Top-up Scholarship, which eased financial burdens and enabled me to save money for overseas travel in order to search for my next employment opportunity.”

Dr Hayley O’Neill is currently an NHMRC Peter Doherty Early Career Fellow at Bond University, Faculty of Health Science and Medicine, Bond Institute of Health and Sport (BIHS) in Queensland. Hayley said, “Getting an SVI Foundation Top-up Scholarship meant I did not have to work during my Honours and PhD and could focus 100% of my time on my research project. It reduced the financial burden associated with being a student.”

Dr David Ascher is currently working with Professor Sir Tom Blundell in the Department of Biochemistry at the University of Cambridge. When asked what receiving the SVI Top-up Scholarship meant to him, David replied, “I really valued my regular interactions with the SVI Support Group and SVI supporter Colin North—they are amazing people who readily welcomed me into their circle, and I believe that these interactions helped me become a better rounded researcher. The support that they offered allowed me to get a state-of-the-art computer (a necessity these days!), and provided a financial buffer that allowed me to focus on my research and take up voluntary roles in leading scientific bodies—an incredible and valuable opportunity.”

As these testimonials demonstrate, the SVI Support Group’s fundraising efforts to support PhD students go a long way to providing these young Australians with the best foundation upon which they can build life-changing discoveries.
Both of my grandmothers had knotty, uncomfortable hands yet both women worked uncomplainingly. My mother played beautiful Chopin and Beethoven on the piano, stretching her arthritic fingers an octave or more.

My time came when I was 45 years old. The first indication was a strange clicking sensation in one finger, then another. Over the next 10 years the unmistakable Heberden’s nodes of osteoarthritis appeared. Further down the track my feet began to manifest the same misshapen form. Both hands and feet developed stiffness on top of deformity. Some loss of function, or at least reduced function, then began to challenge me.

As I have always loved and lived an active, outdoors life, I have not been deterred, until a spinal condition was added to the skeletal scene in 2011 – spinal stenosis and a disc problem.

All in all I had to accept that I was diagnosed with degenerative processes. Not so acceptable when one has a rural existence and when manual activity is my daily choice and routine.

I have had foot and spinal surgery. I am on anti-inflammatory medication. It provides some relief, but I am constantly reminded of that term – ‘degenerative’. However, I intend to be active, to ride my horses, prune my roses, run with the dog and clean my own gutters for as long as I can.

I have strong links to science and have always been interested in how to manage my own health. It would be wonderful if medical research could deliver a means to halt the progress of, if not to reverse, my arthritis.”

By studying the cells whose job it is to build and destroy bone, and the way these cells interact with each other, researchers in SVI’s Bone Cell Biology and Disease Unit are working to find new treatments for arthritis and osteoporosis.
The Jack Holt Society Morning Tea was held on Friday December 5 in the Bourke Room of Melbourne’s The Hotel Windsor, also known as the “Duchess of Spring Street”. The event was attended by over 50 guests, including members of the Jack Holt Society, as well as other SVI supporters.

The Society was only launched at the end of 2012, so this event was just the third formal gathering organised to allow the group to learn more about research at the Institute.

SVI’s Associate Professor Jock Campbell spoke about his heart disease research at the Institute and highlighted how it would not be possible without philanthropic support.

Chair of the SVI Foundation and long-term supporter Susan Alberti shared her passion for type 1 diabetes research, and told the story of how she first became involved with SVI over 11 years ago.

Kathy Wilson, a Special Counsel in Aitken Partner’s Wills, Estates and Succession team, addressed the basic steps of including a charity in your will.

The Patron of the Jack Holt Society, Gerald Snowden, shared some of his personal story and explained how he took over 40 guests on tours through the Institute in 2014 alone.

Over the past 12 months, SVI has had 10 confirmations from people indicating they are including SVI in their Will, raising the Jack Holt Society membership numbers to twenty.

If you are interested in leaving a bequest to SVI and joining The Jack Holt Society please contact the SVI Foundation on (03) 9231 2480.

The Jack Holt Society at the “Duchess of Spring Street”
SVI is proud to present our fourth annual Food Matters Event on Tuesday March 31. This event focuses on the role of food and diet in our society and its impact on disease.

The results of a Roy Morgan Research “state of the nation” report last year revealed that:

- Australians are carrying a combined total of 180,000 tonnes of excess weight, an increase of 30,000 tonnes since 2008.
- Australians are gaining 5,000 tonnes per year.
- Around 11 million Australians are overweight by an average of 16.5 kilograms, which can have a dramatic effect on health and wellness.

People who are overweight are at higher risk of heart disease, type 2 diabetes, stroke, cancer and osteoarthritis, among other health conditions.

Your body mass index (BMI) is a measure of body fat, based on your height and weight. Generally speaking, the higher your BMI, the higher your risk for certain diseases. However, BMI may overestimate body weight in athletes and those with a muscular build and may underestimate body fat in older people. So what exactly is healthy?

At the event, Jane Martin, Executive Manager of the Obesity Policy Coalition and Professor Jo Salmon, Deputy Director Centre for Physical Activity & Nutrition Research (C-PAN), Deakin University will examine the question “Can a person be overweight but still be fit and healthy?”

Following their presentations, they will be joined for a Q&A session by researchers from SVI’s Protein Chemistry and Metabolism Unit.

SVI Board member and renowned Melbourne dietitian Karen Inge will be the MC for the evening.

The event kicks off on Tuesday, March 31 with a tour of SVI from 5.30 to 6.15pm. Drinks, canapés and speakers will follow with proceedings closing at 8pm.

For more information contact Lara on (03) 9231 2480. RSVPs close Monday March 17.

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For the last 2 years, the Susan Alberti Medical Research Foundation’s Mother’s Day Luncheon has raised vital funds to support the careers of women in research at SVI.

Money raised at the Luncheon supports the Susan Alberti Women in Research Award. The Award supports the work of an outstanding female scientist at SVI, by helping to alleviate the adverse impact on her research caused by the family responsibilities that come with having a baby.

The most crucial years in a female researcher’s career often coincide with childbearing and raising small children. The Award provides funds to pay a research assistant or postdoctoral fellow to continue the recipient’s work in the lab while she is on maternity leave or working part-time.

Now in its third year, the event is further evidence of Susan Alberti’s untiring support of medical research and addresses an issue close to her heart: helping outstanding women to excel.

“I’m delighted to be associated with this Award,” said Sue. “As one of the few women in the building and construction industry in the 1970s and 80s, I have great respect for any women trying to raise a family and pursue a career. Medical research is demanding, particularly for those researchers trying to balance their work with family life. I hope that this Award will help see more women reach higher positions in the medical research sector.”

Dr Sophie Broughton was the 2014 recipient of the Women in Research Award. Sophie is the proud mother of Alexander, 15 months. We sat down with Sophie to discuss what receiving the Women in Research Award meant to her.

**Why is the Women in Research Award unique?**

The Award gave me the opportunity to keep up with my research career without sacrificing time with Alexander when he was a baby.

**What did receiving the award mean to you?**

I was concerned that during my time off my career would suffer. Maintaining momentum in your career is so important during the early years of a postdoc. This award has given me an advantage in that my work was able to continue in my absence and when I returned I could just jump straight back in. It was great that I could just enjoy motherhood and know that I was still able to progress in my career.

**What are the challenges of working in medical research?**

Generally speaking I think job security is a key issue. Most researchers are funded for only 1-5 years and there is constant effort required to secure funding for the future, and the competition for funding is fierce. This is why it is important for researchers to be consistently producing results and not have a significant gap in their productivity.

**What has been the highlight of your career?**

I was able to solve the three-dimensional structure of an antibody bound to an important protein involved in leukemia. This antibody is now in clinical trials and my structure gave important information on how the antibody was able to function. As a result of this work I have won three prizes over the last year or so (mainly while on maternity leave!) and been invited to give two presentations. I’m proud that I might have contributed to treatments that will improve patient outcomes.

**What keeps you motivated in your role as a researcher?**

I like finding answers to questions. I love it when I have new data and can finally see the three-dimensional structure of a protein for the first time. It’s a great feeling and can give you so much new and exciting information. Yes, I know, I’m a total nerd!

This year’s event will be held on Thursday May 7th, with guest speaker Dr Judith Slocombe. As a successful businesswoman, CEO of the Alannah and Madeline Foundation and mother of nine children, Dr Slocombe understands the issues faced by women with careers and children.

*See flap for details.*
Mother’s Day Luncheon

With special guest speaker, Dr Judith Slocombe, CEO of The Alannah and Madeleine Foundation, and mother of nine.

DATE: Thursday May 7th 2015
VENUE: The Ballroom, Leonda by the Yarra
2 Wallen Road Hawthorn
TIME: 12:00noon – 2:30pm
DRESS: Lounge Suit
TICKETS: $140 per person or $1400 per table
For tickets, telephone (03) 9560 1595, or visit susanalbertifoundation.org.au
Funds raised support the SVI Women in Research Appeal