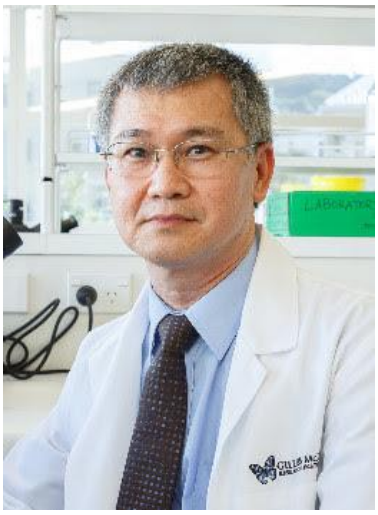
GILLIES McINDOE RESEARCH INSTITUTE
Pioneering future treatment of cancer

Newsletter Issue#23, December 2020

Making valuable progress during a very challenging year



The past 12 months have seen the world face the enormous challenge of dealing with the COVID-19 global pandemic and the resulting health and economic crisis. At the GMRI, we're grateful to work in a country with such strong political and health leadership. We're lucky to have been able to keep working with few interruptions.
Looking back on the year, we wanted to focus on the positives and share the highlights with you. The progress we've made is largely thanks to you. As always, we're very grateful for your support.

Our clinical trials for cancer treatment are ready for the next step

Through this year's clinical trials, we've taken another step toward achieving a more affordable and accessible cancer treatment. So far, our research has shown that cancer stem cells in 14 types of cancer have pathways that can be blocked by commonly available, low-cost, off-patent oral medications.
Our two current trials focus on patients with glioblastoma, a severe brain cancer, and patients with advanced malignant melanoma. These patients have failed conventional cancer treatments and no further conventional treatment options are available for them.
We need more funding to move onto the next phase of our trials. For our glioblastoma trial, the next phase treats patients at an earlier stage in the disease — giving more opportunity for successful treatment. With enough funding, we can extend our clinical trial programme to include other types of cancer.

Read more about our clinical trials

Three new staff members joined our team

As the nature of what we do continually evolves, so does our list of staff members.
We welcomed Dr Sean Hall as our new chief scientist. Sean has been a research scientist at universities in Bern, Rotterdam, and Harvard. He's already adding his expertise to many of our activities.
Dr Sam Siljee is a former summer student who joined us as a research officer in February. Sam will stay with us next year to start his PhD, building on his research into keloid disorders.
Ruth Watson-Black joined us this year as our new clinical trial coordinator. Ruth has managed medical trials in the United Kingdom and New Zealand, and has experience managing clinical trials at a global level. She's our main contact for patients.

Read more about Dr Sean Hall
Read more about Dr Sam Siljee
Read more about Ruth Watson-Black

Leaps forward in our non-cancer research

While we're best known for our work on cancer, our team also carries out world-leading research on disfiguring conditions and life-threatening diseases.
We've made exciting discoveries of stem cells in Dupuytren's disease, which may lead to a new treatment for this common hand affliction.
We continue our research based on our earlier discovery, led by Dr Swee Tan — that strawberry birthmarks originate from stem cells. This work resulted in a new effective treatment. Instead of surgery, patients can now use propranolol — a low-cost oral medicine taken over months with few side effects. Through our research, we aim to achieve similar results for patients who have the conditions we investigate.

Read more about our non-cancer research

Three 2020/2021 summer students investigating new projects

We always look forward to the enthusiasm and new insights our summer students bring to the GMRI. They play an important part in the GMRI developing new treatments for unsolved medical problems.
We recently welcomed our new summer students, who are all medical students at the University of Otago. Min Xin Lee is investigating the expression of the renin-angiotensin system by mucoepidermoid carcinoma, the most common form of salivary gland cancer. Jason Su is investigating cancer stem cell markers in metastatic mouth cancer. And Lachlan Parlane is investigating stem cells markers in parotid pleomorphic adenoma, the most common form of benign salivary gland tumour.
As ever, we're enormously grateful to Sir Roderick and Lady Gillian Deane for supporting our summer student programme through the Deane Endowment Trust.

We're publishing more research papers than ever

Over the last 12 months we continued to publish our ground-breaking research in peer-reviewed journals. We were also invited to publish review articles on cancer stem cells and their therapeutic targeting in a number of leading international journals.
We are pleased to share our findings — the results of hundreds of hours of work by our staff and students. Researchers and other interested people around the world benefit from our work, just as we learn from the published findings of other researchers.

Our handy research helpers — thanks to you!

Thanks to donations and philanthropic support from people like you, our laboratories have a range of high-tech equipment that we would not otherwise have. One of these vital pieces of equipment is our BOND RX Research auto-stainer. In just a few hours this completes what would otherwise take us more than two days.
Most of our research relies on staining tissue samples. We use the auto-stainer in almost all our research. Staining tissue samples helps us identify specific properties that characterise the diseases and cancers we investigate.
Many labs around the world still stain tissue samples by hand. We feel so fortunate that the funding we've received allows us to use the auto-stainer and other equipment like it.

Read more about the BOND RX Research auto-stainer

Thanks for your support — our work is your work

As illustrated by the auto-stainer and our highly qualified and committed people, the advances we make directly result from your financial support. We're deeply grateful for all donations in support of our research, whether small or large, regular or one-off, anonymous or recognised.
Our goals are unashamedly aspirational — the GMRI exists to relieve human suffering and improve lives. As a charity, we have the giant task of securing financial support to reach these goals. Although it's a daunting challenge to keep a pipeline of funding on course, we keep going because we know we're changing lives with our research.
Every bit of support we get is vital to our mission. So we urge you to jump on board again, or contribute for the first time. Make a donation that you'll be proud of and know that your gift will make a difference. Thank you!

We wish you and your loved ones a wonderful holiday season and send our best wishes for 2021.

Dr Swee Tan ONZM, MBBS FRACS PhD

Executive Director