



# Bowel & Liver Trust

## The Real Statistics – A Call to action to fight Gut diseases.

*Today 9  
New Zealanders  
were diagnosed  
with Bowel cancer.  
3 of these diagnosed  
will die.*

**However Bowel cancer is one of the most preventable cancers. It is easily treated if caught early. So why do so many New Zealanders die from this disease?**

**We posed this question to Professor Richard Geary and he had this to say.**

*"It is not clear why so many New Zealanders develop bowel cancer. However, there is no doubt that if we can find and remove polyps, the risk of bowel cancer is dramatically reduced. The only way to do this reliably is with colonoscopy, which is invasive and expensive. We would love to develop novel non-invasive tests that accurately diagnose gut diseases such as bowel cancer".*

The Bowel and Liver Trust are focused on assisting with that goal.

New diagnoses of Crohn's disease have recently been found to have increased by 50% over the last ten years in Canterbury. This groundbreaking research has confirmed that Crohn's disease incidence in Canterbury is amongst the highest in the world.

**Why are Cantabrians so affected by this disease and what can be done to help?**

Crohn's disease is a complex disease that has both genetic and environmental risk factors. Local researchers have contributed much to the discovery of these factors through our work with international collaborators and through our own work. The key aspects that we need to understand are around how our environment (such as diet and gut microbes) contributes to disease. We continue to work hard to tease apart the many threads that will lead us to the causes of inflammatory bowel disease.

**We can do something – but we need Funds**

The Bowel and Liver trust are working with Researchers and Medical Practitioner's in Canterbury to fight diseases of the Gut. We are raising money to fund a SIFT-MS machine and the ground-breaking research that will enable both earlier and less intrusive methods of diagnosis.

This Trust was established by the late Mr Thomas P George who wanted to make sure that the people of Canterbury could get the treatment they needed for Gut diseases right here in Christchurch.

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## Bowel & Liver Trust

### Summer 2015

## Imagine... Canterbury leads the world in fighting Gut Diseases.



**Given the latest research showing Canterbury leads the world in having the highest reported rate of inflammatory Bowel disease this is definitely a goal worth having. The Bowel and Liver Trust are working with CDHB Gastroenterologists and researchers at the Canterbury campus of Otago Medical School to find a way to make this happen.**

This is only made possible through the generous support of our Corporate Sponsors, our private major donors and the ongoing support of generous Canterbury people.

One of our corporate Partners, the Abbott Group have over the last three years made a generous

donation to the trust every year to help with this goal. We are extremely grateful for their participation and involvement in the Trust.

The Abbott Group is one of the South Island's leading independent brokerages, highly respected for their professionalism, expertise and commitment to their clients. With offices in Christchurch, Nelson and Wellington, their experienced team can work with you to arrange a full range of Business and Personal insurances, Life and Health Insurance, Financial Management advice, Kiwisaver, and Home Loans.

A big Thanks to the Abbott Group for their support.

## How you can help us

Contact us on (03) 9281535 or (021) 0241 3305 to:

Become a friend of the Bowel and Liver Trust

Become part of our Family of Ten

Donate on line at [www.bowelandliver.org.nz](http://www.bowelandliver.org.nz)

Help organise an event to raise money

Leave us a bequest and keep giving after you have gone or send us a cheque to PO Box 21074, Edgeware, Christchurch 8143.



## Bowel & Liver Trust

## Hepatitis C Breakthrough

**Hepatitis C is a leading cause of liver failure, liver cancer and liver transplantation in New Zealand. Researchers in Christchurch and Auckland have been at the forefront of major new developments in curative treatments for this virus.**

In 2011 Associate Professor Catherine Stedman from Christchurch and Professor Ed Gane from Auckland undertook the ELECTRON trial, the first Hepatitis C clinical trial using a new drug sofosbuvir, where patients were treated without peg interferon. Traditional therapy with interferon is associated with major side effects so many people cannot tolerate it, and it is also less effective in people who most need treatment such as those with more severe liver disease.

The results of this landmark ELECTRON study were highly successful and have transformed Hepatitis C treatment, as an ongoing global Hepatitis C drug development process has continued using sofosbuvir as a backbone of therapy. The trial was challenging in Christchurch as a devastating earthquake struck

during the study, but all patients completed the programme, demonstrating tremendous commitment and dedication from all patients and staff involved.

A huge benefit of the new treatments with sofosbuvir-based regimens is that they are extremely well tolerated with few side effects, so they can be used safely even in people with severe liver disease. Cure rates are typically greater than 90%, compared to rates under 50% for those who could tolerate interferon. Hundreds of patients in Christchurch have benefited from participating in these research trials as their Hepatitis C has been cured, lowering risks of liver cancer and preventing ongoing liver damage and liver failure.

These new drugs are now licenced in New Zealand but are not funded by PHARMAC because of their extremely high cost. However Christchurch is fortunate to have a very active ongoing clinical trial programme so patients continue to benefit from these new therapies in our research programme.

Many New Zealanders do not even know they have been infected with the Hepatitis C virus. Anyone who thinks they may have been exposed should be tested either through their GP or at the free Hep C Community Clinic in Christchurch.



*Professor Catherine Stedman*

# Capsule endoscopy opens new horizons for gut health in Canterbury.

**Imagine swallowing a pill that can take photographs of your intestine and send them wirelessly to a data recorder so that they can be downloaded, like a movie, for your doctor to review at a computer workstation.**

While this may sound like the work of a science fiction novelist, it became a reality in 2002 when The Bowel and Liver Trust raised money for the first capsule endoscopy system available in a public hospital in New Zealand. This work was driven by then Chair of the Bowel and Liver Trust, Mr Martin Howman, who led a team of Trustees to raise the money to provide this important service to Cantabrians.

In the 1970s flexible gastroscopes and colonoscopes had been introduced to examine the stomach and colon, respectively. However, the small intestine, which is between the stomach and colon, has always been difficult to visualise and diagnose diseases in. The advent of Pillcam has changed the way that doctors view the small intestine - the final frontier of gastroenterology. Now patients can undergo a non-invasive test without being admitted to hospital.

The Pillcam was the brainchild of an unlikely combination – an Israeli Astrophysicist and an American Gastroenterologist. Each capsule (the size of a large pill) contains a small camera, a light, a battery and a transmitter. The light flashes twice per second with a photo taken each time. The images are sent wirelessly to a data recorder, which is worn as a belt around the waist.

As Dale Cornelius, Capsule Nurse, explains, “the patient simply swallows a Pillcam capsule in the morning after an overnight fast. The data recorder is fitted to the patient who can then go about their usual activities for the day before returning to the clinic where the data recorder is removed and the images are downloaded to a computer. Software in the computer converts the images into a video, which can be analysed by a

gastroenterologist. Each study takes between 30 and 60 minutes to analyse and report.” Dale Cornelius is currently undergoing training to assist in interpretation of the studies.

Improvements in technology have led to longer battery life with 10 hours now allowing for the entire small intestine to be easily examined. The angle of the lens has also increased allowing more of the intestine to be examined with each picture. It is hoped that improvements in software may improve the identification of abnormalities.

Dr Bruce Chapman, Gastroenterologist and Trustee says that a frequently asked question by patients is, “are the capsules reused?” The answer, to the relief of the patient, is “no” with a new capsule being used for every patient. The Pillcam system can be used for all age groups including children and the elderly. Dale Cornelius recently performed a study in an 88-year patient who completed the study with ease.



*Capsule Nurse Dale Cornelius initiates a capsule study*

**The Pillcam is very helpful for identifying sources of bleeding in the small intestine, defining extent of disease in small bowel Crohn’s disease. More rarely it is used to identify polyps and small intestinal tumours. In a review of local cases 59% of those referred with anaemia had a positive finding and in 77% of patients referred with diarrhoea there was a positive finding.**

While some patients have requested a Pillcam instead of a colonoscopy, unfortunately this is currently not an option. A Pillcam for the colon is under development and prototypes have been tested but there are limitations with the bowel preparation in the colon.

The Pillcam platform is available in Christchurch in both public and private health sectors and serves the upper half of the South Island. About 100 capsule endoscopy studies are performed at Christchurch Hospital each year, with more than a thousand studies since the system was established in Canterbury in 2002.

Another great success for the Bowel and Liver Trust, improving the gastrointestinal health of New Zealanders.



*Angiodysplasia in the small bowel can bleed leading to anaemia*



**A study in 2006 by Associate Professor Richard Gearry showed Canterbury to have high rates of inflammatory bowel disease (IBD), which includes Crohn's disease and ulcerative colitis. IBD has shown a rapid increase in incidence and prevalence worldwide, especially in developed nations.**

Unlike some diseases, the diagnosis is not straightforward and requires colonoscopy with biopsies. For mainly this reason, IBD often goes months or even years undiagnosed. Fortunately, IBD is treatable with medication, diet, surgery, and stress management and these treatments are always improving.

The Canterbury Crohn's and Colitis Support Group meets between two and four times per year and has speakers, such as Gastroenterologists, Dietitians, and Paediatricians talk to the group in a variety of community locations.

Andrew McCombie, the president of CCSG Christchurch, is a board member of Crohn's and Colitis New Zealand (CCNZ), a national body that works tirelessly to promote issues surrounding IBD in New Zealand. This organization, along with regional support groups, provide a framework to represent patients nationally and support patients through difficult times in their illness. Recently Andrew attended the European Parliament in Brussels to represent CCNZ at an international IBD forum. Interactions with other national groups provide the basis for exchange of ideas and promotion of IBD knowledge amongst patients internationally.

Andrew is also a PhD student studying the psychological factors surrounding IBD and has a special interest in the role that stress and psychological coping have to play in IBD. He believes support groups have a hugely important role to play in helping patients psychologically because they can meet, share information, and feel less alone in their challenges with IBD.

## Inflammatory Bowel Disease Nursing – making a real difference to patients in our community

**I have been employed at Christchurch Hospital in the role of Inflammatory Bowel Disease (IBD) Nurse Specialist since February 2013. Together with my colleague Ady Leigh we provide care to the increasing number of people diagnosed with IBD within the Canterbury region.**

Inflammatory Bowel Disease (IBD) is a chronic incurable disease of the bowel and is made up of two types; Crohn's disease which can affect any part of the gastrointestinal tract and ulcerative colitis which only affects the colon or the large bowel. These diseases cause ulceration and inflammation of the lining of the bowel resulting in pain, bleeding, diarrhoea as well as more serious complications if left untreated. Medication is aimed at achieving and maintaining remission in these patients. If the disease is not able to be controlled with medication the patient may require surgery to remove parts of their bowel. The peak age of onset for IBD is 15 – 35 years old and it can be very disruptive to the lives of those who are diagnosed with it.

The role of the IBD nurse specialist within the hospital is to provide support, education and monitoring of these patients. For patients who are newly diagnosed I will meet with them in clinic to give information about IBD and answer any questions they may have. I discuss the medications that they may be prescribed and outline the benefits and potential side effects of these. Some of the medications that we prescribe require regular blood tests to detect adverse effects and I will ensure that patients have these done at the appropriate intervals. Ady keeps track of all the patients who require special authority from Pharmac for their medication and ensures that all the necessary paperwork is done and their supply runs smoothly.

I attend the outpatient clinics along with the doctors and assess IBD patients and formulate a plan of treatment in conjunction with their Gastroenterologist. I am also available to meet with patients who may require more support due to problems with drug side effects, aggressive disease and emotional/social issues. We have special clinics that are specifically for young people who are transitioning from the paediatric service to be cared for by us in the adult gastroenterology clinic.

One of my most important roles is to provide rapid telephone advice and access into the hospital system if required. Patients can phone me if they are having a flare of their symptoms and I can do some assessments over the phone to decide what needs to be done. If it is appropriate I will advise the patient to see their GP however if necessary I will arrange for them to be seen in the next available outpatient clinic. If symptoms are severe I will advise them to come into hospital for further assessment by a Gastroenterology registrar, and possible admission for treatment.

There are now IBD nurses in all the main centres and many smaller regions in New Zealand, which is in line with what has been happening overseas for some time now. IBD is unfortunately becoming increasingly common and we still do not have a clear understanding of why this is. What we do know is that these diseases are often complex and occur relatively early in the patient's life so they will have a lot of contact with health services. The role of the IBD nurse is important in ensuring that these patients get the care that they need in a timely fashion and in doing so hopefully minimise the risk of more serious complications, or the need for surgical intervention and prolonged hospital stays.

*Kirsten Rosser, IBD Nurse Specialist*

# Inflammatory bowel disease (IBD)



**Inflammatory bowel disease (IBD) is well known in the scientific community for its devastating effects on the small and large intestines. Just as important, however, is the effects it has on the mind. As an experiencer of this illness, I can speak first hand of these effects. There are many questions you ask of yourself when you have this disease:**

- What do I tell my friends?
- What do I say in a job interview?
- What if the steroids give me osteoporosis?
- When is my next flare?
- Should I go to my best mate's wedding in that faraway country?
- Should I tell her on the 1st, 2nd, 4th, or 10th date?

Without wanting to downplay the effects of other diseases, some (or many) would argue it would be easier dealing with like joint pain (arthritis), back pain, or migraines because at

least you wouldn't be dealing with the stigma of the fact that you always need to use the toilet (before breakfast then after breakfast then before morning tea then after morning tea etc.). Perhaps I am being unfair to other diseases, but it does cross my mind that this could be one of the hardest diseases in the world to deal with! This is not something many people find easy to talk about but something we need to get better at because raising awareness can (1) raise more money for research, (2) get prompter diagnosis in people wondering about their bowel symptoms, and (3) break down the barriers the stigma of the illness brings to those who do have it.

For me, there is light at the end of the tunnel with my colectomy. A colectomy is a radical procedure wherein the large intestine is removed surgically. I got most (but not all) of my life back. I have become a better person because of my experience with this disease: I am more empathetic, spend less time sweating the small stuff, and appreciate the good times more than before I had IBD. I may never be rich or famous,

but I will be alive and enjoying life through doing what I love!

What I love is academia and research. I completed my PhD in IBD last year and am starting my career in research. I achieved my PhD on the psychological impact of IBD within the normal time of three and a half years despite my IBD diagnosis coming long before starting my PhD. Having IBD does not have to hold you back from achieving something significant with your life; I am only getting started.

There are always people you come across who are inspiring and it is through this disease that I have come to know Professor Dr Richard Gearry the Gastroenterologist at Christchurch Hospital, and have learnt of the voluntary work he does for the Bowel and Liver Trust here in Canterbury. This organisation is working hard to raise funds for research and equipment that will help in the management and potentially one day a cure for this debilitating disease.



*Andrew achieving his PhD*



# Common Symptoms of IBD

## Ulcerative colitis

- diarrhoea
- rectal bleeding (bleeding from the bowel)
- passing mucus
- abdominal pain & discomfort

## Crohn's disease

- abdominal pain
- diarrhoea and fever
- malaise
- nausea & vomiting
- loss of appetite and weight loss
- poor growth in children
- anal fistulae
- fissures and abscesses

**In both Ulcerative Colitis and Crohn's disease, symptoms outside the bowel may occur:**

- arthritis
- skin & eye problems
- liver disease
- mouth ulcers



# Inaugural Trustee Dr Bramwell Cook to retire from Trust.

**Its no surprise to the people involved in The Bowel and Liver Trust that Dr Bramwell Cook was awarded a Companion of the New Zealand order of merit in 2003 for services to medicine and community. We have been extremely grateful for the time and expertise he has shared with us.**

I asked Dr Cook to talk about the early days of the trust. He had met Tom as a patient before he went to Sydney for his liver transplant and said he was a very sick man. He has a vivid memory was of the launch of campaign to raise funds to pay for the operation, attended by Walter Hadlee, Stan (Tiny) Hill and many others of note: apologies were received from apologies from the then Prime minister Rob Muldoon and Finance minister Ruth Richardson. His life renewed, Tom called upon his many friends to form a trust: his way of saying thank you to those who had guided him through his journey from sickness to health, especially Dr Bruce Chapman another of the team at Christchurch Hospital who also contributes as a trustee for the trust.

Dr Cook talked about how important the money raised for research is here in New Zealand and how all his colleagues are passionate about the work of the trust.

In 2002 Dr Cook retired as full time consultant gastroenterologist to Christchurch Hospital after a lifelong career in the Public Health sector but as a man with the keen intellect he enjoys learning and research and so began writing books. Firstly, The history of the Salvation Army Christchurch City Corps (church), another on medical instruments memorabilia, and also penned his families' history. Whilst completing these he taught himself to use new professional publishing software. Not stopping there he went on to learn how to use web- publishing

software, Dreamweaver, and created his own family web site [www.moneyscreek.co.nz](http://www.moneyscreek.co.nz)

So whilst Dr Cook is retiring as a Trustee from the Trust we have no doubt that he will continue to be involved and willing to offer guidance at any time. He is excited about the latest project that is raising money for research coupled with a SIFT-MS machine. In his words "What each of us expel in our breath has a unique profile and that's why this machine has the possibility to provide new understandings' and noninvasive diagnosis.

Thank you Dr Cook for giving so willingly of your time and expertise to Canterbury. The Trust and the people of Canterbury will thank you by continuing to raise money for the work you have given your life to.



*Dr Bramwell Cook*

# Research “The Gift That Keeps On Giving”

**These were the words of Gabrielle Budd one of the summer students sponsored by the Bowel and Liver Trust this summer. When you talk with Gabrielle you see the passion she has for acquiring new knowledge – she does say that this is partly due to her competitive nature. However we were delighted that the Trust was in a position through the donations that we receive to support these inspiring and keenly intelligent young people who have a passion to achieve better medical outcomes for New Zealanders.**

This year the Trust sponsored two students, Vikesh Gupta and Gabrielle Budd who were awarded Summer Studentships.

Vikesh a 5th year medical student applied for a studentship to undertake research into IBD (Inflammatory Bowel Disease) incidence in Canterbury. This research follows up on research undertaken by Professor Richard Geary in 2004 to ascertain if the incidence of IBD has changed.

Research from a decade ago showed that Canterbury had one of the highest incidence rates of Crohn’s disease reported worldwide. However, the Studentship carried out by Vikesh has shown that Crohn’s disease is now even more common in Canterbury with a 50% increase in the number of patients being diagnosed in 2014 compared with 2004. The Graph below provides a clear view of the changing statistics.

The research undertaken by Gabrielle is closely related, also concentrating on Crohn’s disease. She explored how dietary factors relate to innate immune mechanisms in Crohn’s disease. Her results indicated that aspects of a nutritional formula may play a central role in improving the inflammation that underlies Crohn’s disease.

Gabrielle intends to undertake an Honours year in 2015 and will be involved in further studies

into this debilitating disease that affects so many Cantabrians.

Along with these highlights, the Summer Studentship program offers many other students the opportunity to be involved in research and make contributions that inspire our brightest and best to enter the field of medical research.

It is each of us, and future generations who will benefit from this increased knowledge and ultimately, new cures and improved care.

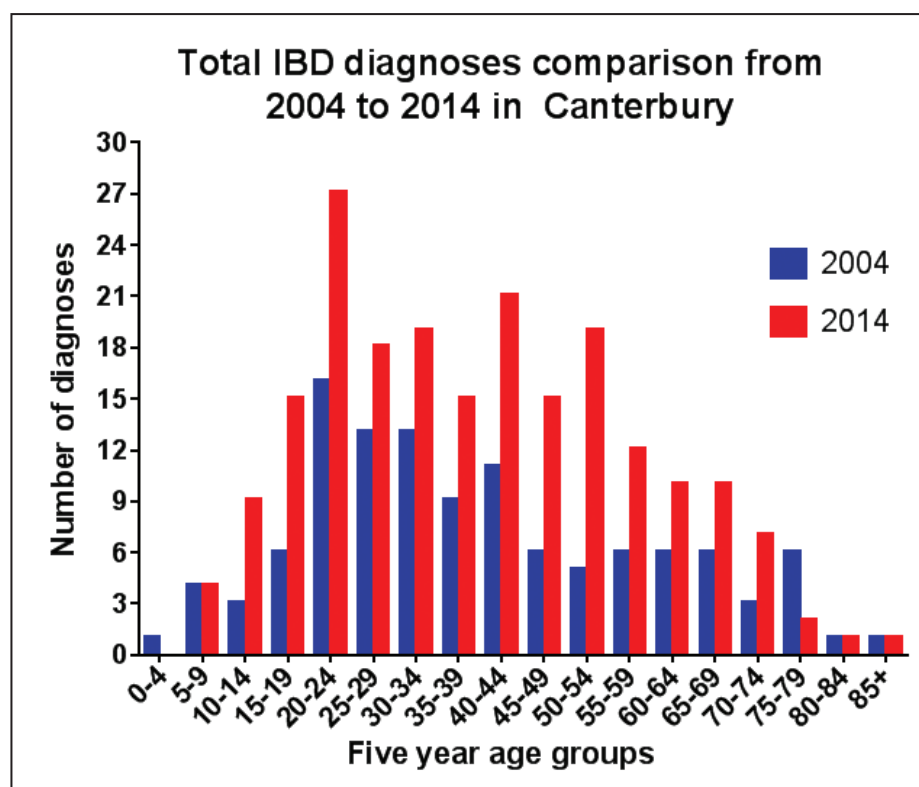
Research truly is a gift that keeps on giving for generations to come.

The Bowel and Liver Trust can sponsor a studentship for \$5000 and as a Canterbury trust the people of Canterbury will directly benefit from your gift

You can donate on line at [www.bowelandliver.org.nz](http://www.bowelandliver.org.nz) or by cheque to PO Box 21074 Edgeware Christchurch 8143 or directly into our Westpac account 03 1703 0043327 00



*Professor Andrew Day, Paediatric Gastroenterologist and Trustee of the Bowel and Liver Trust supervising research students Vikesh Gupta and Gabrielle Budd*



# Fully Funded office a great step forward for the Trust

**Having a place to call home is a dream come true for The Bowel and Liver Trust due to the generous sponsorship of Cuesko.**

When the trust was looking for an office Cuesko had no hesitation in stepping up to help us out.

In the Christchurch market since January 2014, and with offices in Auckland and Wellington, Cuesko provide national and international best practice cost management and advice for the commercial and civil construction sectors. Cuesko provides the full spectrum of pre and post contract quantity surveying expertise, including feasibility studies, tender documentation / analysis, value engineering, risk management, procurement strategy and building life cycle analysis.

Cuesko is currently working on a number of high profile projects and can add value to other projects in the same manner.

I spoke with Kean Mitchell the Director based here in Christchurch to find out who they are working with currently.

"Our Christchurch office is currently working with Kathmandu to deliver the fit-out of their new head office and we are assisting the Christchurch

Heritage Trust that is restoring the Trinity Church on Manchester Street, which will be the oldest building in Christchurch if the Anglican Cathedral is not saved. Cuesko also works successfully with MOE, Canterbury University, and is on the Panel of the same, as well as Auckland City Councils, Auckland Transports, NZTA and panels for ANZ, BNZ and ASB".

They would welcome the opportunity to discuss or provide cost consultancy services to you and your business. You can contact their South Island Director Kean Mitchell on 03 928154

Chairman of the Trust Derrick Abbot of the Abbot group was delighted that the Trust has acquired such a generous benefactor in Cuesko, "Office space is still at such a premium in Christchurch that to have someone provide accommodation for the Trust is magnificent and the central location is fantastic."

If you would like to know more about the Trust and its work or to talk about leaving a bequest or making a donation please call our General Manager, Margaret Fitzgerald on 03 9281536 or 021 0241 3305



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*The team in the Christchurch office of Cuesko - all smiles enjoying the work that is helping rebuild Christchurch.*



Summer 2015