BIPOLAR DISORDER RESEARCH FEEDBACK

Newsletter **May 2017**

Letter from Principal Investigator

We would like to thank all our participants in this research project, because without your participation our research would not be possible. Thanks to your involvement, we continue to do important research on Bipolar Disorder with collaborations here in the Department of Psychiatry (at UCT), as well as leading researchers, internationally.

The area of psychiatric genetics has undergone remarkable progress in the last 10 years. This has had to do with development of technologies in the area of 'mining' our genetic material due the 'human genome project'. This internal project and developments therein now enable us to investigate large numbers of individuals with the same disorder – in an attempt to see what parts of their genomes may be shared, or have common origins historically.

In this way, the shared areas of the genome between affected individuals are deemed to be contributing to the disorder. Looking into those shared regions in more detail allows genetics researchers to identify possible genes which may be altered and implicated in the causation of the disorder. It is also in this way – i.e. identifying what genes may be giving rise to the disorder, that researchers further investigate what the genes actually do in the body: do they make enzymes that are meant to transport nutrients or messages to the brain – that allows researchers then to design some means of intervening or treating the biological cause of the disease.

The encouraging thing is that there are a growing number of researchers (geneticists, psychiatrists, and others) currently working on bipolar disorder, schizophrenia and a number of other psychiatric diseases. So, although no stunning new treatment has recently emerged; there is hope that new insights from this genomic work will lead to improved treatment and management of these disorders in the next 1 to 10 years. Our research outputs to date have included many PhD's, Masters and Honours projects. Numerous papers have been published as well. For full details, please refer to our website http://www.humangenetics.uct.ac.za/hg/research/neuropsych_disorders/bipolar

Human Genetics Mission Statement

The Division of Human Genetics undertakes research into inherited disorders which are a major cause of childhood handicap in the populations of South Africa. These include blindness and neuromuscular disease. Our investigations include clinical, genealogical and laboratory molecular studies. The projects interlock with our outreach genetic clinics and our aim is to bring the benefits of these service orientated developments to all sections of the community.

Prof Raj Ramesar : Principal Investigator and Head of the Division of Human Genetics

Psychiatric Genomics Consortium

The purpose of the Psychiatric Genomics Consortium (PGC) is to unite investigators around the world to conduct meta- and mega-analyses of genome-wide genomic data for psychiatric disorders.

The PGC began in early 2007 and has rapidly become a collaborative confederation of most investigators in the field. The PGC includes over 800 investigators from 38 countries. There are DNA samples from more than 900,000 individuals currently in analysis, and this number is growing rapidly. The PGC is the largest consortium and the largest biological experiment in the history of psychiatry.

The PGC is passionate about open, inclusive, participatory, and democratic science. Given the importance of the problems we study, we are committed to rapid progress.

From 2007-11, the PGC focused on autism, attention-deficit hyperactivity disorder, bipolar disorder, major depressive disorder, and schizophrenia. They now include large studies of eating disorders (ED), substance use disorders (SUD), obsessive-compulsive disorder (OCD)/Tourette's Syndrome (TS), and post-traumatic stress disorder (PTSD). Initially, the PGC focused on common single nucleotide polymorphisms (SNPs). Their focus has expanded to include copy number variation (CNVs) and uncommon/rare genetic variation.

http://www.med.unc.edu/pgc

Bipolar Research Project

The Bipolar research project, based in the Division of Human Genetics at the University of Cape Town (UCT) was first approved on the 30 May 1996. The UCT Ethics Research Committee approved the research. The focus was on the molecular basis of Bipolar Disorder. The project was planned over several distinct phases:

Phase 1: Clinical archival and confirmation of clinical diagnosis
Phase 2: Family tracing/Genealogical study
Phase 3: Canvassing families and sibling pairs for blood samples for DNA.
Phase 4: DNA Genotyping studies

Recruitment to date
No of Families-250
No of Individuals-948
Research Papers published– 33

Schizophrenia Research

Genetic research on schizophrenia (SCZ) has been going on since the 1980s with no conclusive results to show. This is because SCZ falls into a category of diseases known as “complex diseases” where more than one gene/genetic variant plays a role in the disease mechanism. Researchers therefore have to identify the single variants and how they work together (genetic architecture) to cause the disorder. The current method of investigation is genome-wide association studies (GWAS). This is a hypothesis-free approach, where the whole genome (instead of individual genes) is interrogated to identify the causative variants . The most successful GWAS study thus far was conducted by the Psychiatric Genomic Consortium (PGC) which identified 108 independent loci associated with SCZ . This was followed by another where eight copy number variants loci with genome-wide significance were identified as contributing to disease risk. The next step would be to determine how these loci interact with each other in genetic networks. This will allow researchers to identify possible therapeutic targets to make new more effective medication.

The Division of Human Genetics and Department of Psychiatry in collaboration with Washington University, are conducting research that aims to investigate the genetics of Schizophrenia in the Xhosa-speaking population of South Africa (also known as the “SAX” project).

Support

SADAG
South African Depression and Anxiety group
24hr Helpline 0800 12 13 14
SMS 31393 (and we will call you back)

Lifeline

Contact: (011) 728-1331; Fax: (011) 728 3497;

Crisis Number: (011) 728-1347
No. 2, Seventh Avenue
Cnr Henrietta Str & Grant Ave
Norwood
2192
E-mail: lifeline@lifelinejhb.org.za
Gauteng

Johannesburg Bipolar Association
(011) 485 2406 Linda Trump
Parkhurst Recreational Centre
Cnr 5th Avenue and 14th Street
Parkhurst
2193
E-Mail: ltrump@telkomsa.net

Pretoria Bipolar Association
(012) 348-6057
Colleen Deacon
PO Box 915-1063
Faerie Glen
0043
E-Mail:
bipolar@freemail.absa.co.za

The Schizophrenia & Bipolar Alliance
(011) 463 9901
72 Mackay Avenue
Blairgowrie
2194

Durban Bipolar Support Group
Lynda Walker (031) 205 8915 (h)
073 301 2691
50198 Musgrave Road
4062

Western Cape Bipolar Association - Southern suburbs
Jay: 072 424 1812
E-Mail: info@bipolar.co.za
Website: www.bipolar.co.za

Fountain House South Africa
(021) 447-7409; (021) 447-4415
227 Lower Main Road
Observatory
Cape Town
7925
Email:
coordinator@fountainhouse.org.za

Cape Support for Mental Health
Heather McKenzie (021) 671-1573
Ruby Ward (021) 674-1419
Joyce Brandt (021) 788-8071(h); (021) 788-8951(w)
E-mail: capesupport@eject.co.za
Web-site:
www.capesupport.org.za

Living with Bipolar

How can I help myself if I have bipolar disorder?

You can help yourself by getting treatment and sticking with it. Recovery takes time, and it's not easy. But treatment is the best way to start feeling better. Here are some tips:

- Talk with your doctor about your treatment.
- Stay on your medication.
- Keep a routine for eating and sleeping.
- Make sure you get enough sleep.
- Learn to recognize your mood swings.
- Ask a friend or relative to help you stick with your treatment.
  Be patient with yourself. Improvement takes time.

How can I help someone I know with bipolar disorder?

Help your friend or relative see a doctor to get the right diagnosis and treatment. You may need to make the appointment and go to the doctor together. Here are some helpful things you can do:

- Be patient.
- Encourage your friend or relative to talk, and listen carefully.
- Be understanding about mood swings. See our Bipolar Fact sheet
- Include your friend or relative in fun activities.

Remind the person that getting better is possible with the right treatment.

I know someone who is in crisis. What do I do?

If you know someone who might hurt himself or herself, or if you're thinking about hurting yourself, get help quickly. Here are some things you can do:

- Do not leave the person alone.
- Call your doctor.
- Call 107 or go to the emergency room.
- **Akeso Psychiatric Response Unit 24 Hour**
  0861 435 787
- **Suicide Crisis Line**
  0800 567 567
  SMS 31393

How does bipolar disorder affect friends and family?

When a friend or relative has bipolar disorder, it affects you too. Taking care of someone with bipolar disorder can be stressful. You have to cope with the mood swings and sometimes other problems, such as drinking too much. Sometimes the stress can strain your relationships with other people. Caregivers can miss work or lose free time.
If you are taking care of someone with bipolar disorder, take care of yourself too. Find someone you can talk to about your feelings. Talk with the doctor about support groups for caregivers. If you keep your stress level down, you will do a better job, and it might help your loved one stick to his or her treatment.

https://www.nimh.nih.gov/health/publications/bipolar-disorder/index.shtml

BOOK CORNER

Finding Sanity

by Greg de Moore and Ann Westmore
tells the remarkable story of pioneering psychiatrist Dr John Cade, who put his own health on the line in his quest to find a treatment for bipolar disorder.

6 Steps of Stress Management

By LaRae LaBouff

Stress management is vital when dealing with bipolar disorder and other mental illnesses.

Chronic stress or stressful events have a hugely negative impact on both the mind and body, which can trigger mood episodes. People with bipolar disorder are more prone to stress than the average population. The experience of having bipolar disorder is enough to elevate stress levels over time. Add to it the consequences of bipolar disorder, such as regretful actions during manic phases, and both the anxiety and stress levels only increase.

The human body works to create balance, both mentally and physically. When there is stress, whether internal or external, hormones are released to help the body deal with the stress and return to homeostasis. Chronic stress causes the body to keep producing and over-producing stress hormones. This is called the allostatic load.

Chronic stress can lead to other health problems including:

· Trouble sleeping
· Headaches
. Irritable mood and being easily frustrated
. Digestive problems
· Feeling overwhelmed or helpless
. Poor concentration
· Bad judgement -
-Increased risk of suicide

Handling stress is a difficult process, but it is possible to learn strategies to help reduce chronic stress.

1.Identify the stressor

When stress is overwhelming, it can feel like it's coming from everywhere at once. Most of the time this isn't the case and it's possible to determine the source. Work problems, relationship issues, moving, getting married, sensory over-stimulation, and grief are a few examples of stressors. Remember that positive events can cause stress as well.

2.Determine the threat level

Anxiety can make stressful events seem bigger than they really are. Don't discount feelings, but acknowledge that situations can be easier to deal with after taking a closer look.

3.List possible solutions

Some solutions may be as simple as taking a break or getting more sleep, but chronic stress often involves multiple stressors, with their own possible solutions. Each situation is different and may require a lot of thought to find a resolution.

4.Put a plan into action

Motivation can be hard to muster with bipolar disorder. The problems with the prefrontal cortex brought about by the stress are the same problems that make putting a plan into action difficult, even in manic phases, when planning and activity can be at their highest.

5.Ask for help

This doesn't need to be Step 5. It can and should happen at any point during stressful periods. Support systems are a necessity. People outside the situation can provide different perspectives and ideas on how to diffuse situations and alleviate stress. Helpers can be friends, loved ones, doctors, therapists, or social workers.

6.Practice self-care

Self-neglect is a risk with bipolar disorder. Establish a routine that includes showering, wearing clean clothes, eating well, sleeping well, and adhering to treatment plans. Having a routine provides predictability, which can help lower stress.

Excessive stress and anxiety may be signs of oncoming mood episodes, so it's important to track triggers, medications, and mood changes. Being prepared for a mood swing and being able to manage stress can help make dealing with an episode as easy as possible.

https://blogs.psychcentral.com/bipolar-laid-bare/about/

The Neuropsychiatric team 2017: (L-R) Sr Gameda Benefeld, Ms Lerato Majara, Ms. Maryanne Mufford, Prof Raj Ramesar, Ms Hannah-Ruth Engelbrecht, Dr Shareefa Dalvie and Dr Celia Van Der Merwe (absent-Ms Smangele Malema)

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USEFUL WEBSITES

https://www.patientslikeme.com/

http://www.rcpsych.ac.uk/

https://www.nimh.nih.

https://psychcentral.com/