Research Proposal:
Saving athletes from sudden death.

Researcher: Dr. Andre La Gerche
Laboratory: Sports Cardiology

THE PROBLEM
Heart arrhythmias are irregular heartbeats that can result in death. Whilst there is no doubt that exercise is good for the heart, in athletes that have developed heart arrhythmias has their intensive exercise been a contributor?

When irregular heartbeats are present over a prolonged period of time the heart’s ability to work is reduced and life threatening cardiac arrests can occur.

THE RESEARCH
Baker IDI’s Dr. Andre La Gerche is researching whether high levels of exercise can have unwanted effects on the hearts of athletes.

Researchers have found that the right side of the heart is a potential ‘weak link’ in athletes having to work harder than the left side during exercise.

In normal healthy athletes, the right side of the heart was able to manage the increased work requirements.

In athletes with irregular heartbeats, the right side of the heart was weak during exercise. It could not handle the increase in work and problems were detected that were not evident at rest. This heart damage has the potential to be life threatening and can result in death.

THE SOLUTION
Dr. Andre La Gerche is working on a groundbreaking new study that is assessing the hearts of athletes over a 30 year period.

The study will recruit a minimum of 320 athletes in Australia and through the use of world-leading techniques will analyse athletes’ hearts regularly for 30 years, concluding in 2045.

This will allow Dr. La Gerche to assess whether the extreme exercise undertaken by athletes has had an impact on their hearts for the duration of their life. Researchers will then be able to work out which athletes are at risk – reducing deaths.

The research findings will also be able to be extended to non-athletes and help patients with high blood pressure as well as a range of other health conditions.

Help us keep families together this Christmas. Please donate today.
Losing a loved one to heart disease is a tragedy. Donate generously today to keep families together at this special time of year.

WHY WE URGENTLY NEED YOUR SUPPORT

Your kind donation today will support Dr. La Gerche in conducting this ground-breaking new research project which will save lives.

$500 Medical Ultrasound
Medical ultrasounds will allow researchers to analyse athletes’ hearts in motion.

$500 will provide one medical ultrasound.

$1000 Cardiac Genetic Test
Cardiac genetic tests will allow researchers to study all the genes that are associated with heart problems, such as enlargement and weakness.

$1000 will provide one cardiac genetic test.

$50,000 Implantable Cardioverter Defibrillator (ICD)
Defibrillators are battery-powered devices placed under the skin that keep track of a patient’s heart rate, delivering an electric shock if the heart is beating much too fast.

Patients with heart arrhythmias often require defibrillators to prevent sudden death.

$50,000 will provide one defibrillator for a patient suffering from a heart arrhythmia.

Heart arrhythmias mean that even the healthiest and fittest amongst us are at risk of sudden death. Please donate generously today as research saves lives.

RESEARCH TIMELINE

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<tr>
<th>Year</th>
<th>Event</th>
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<tr>
<td>2014</td>
<td>Dr. La Gerche had 10 publications published on exercise and the heart.</td>
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<tr>
<td>2015</td>
<td>Year one of 30 year “Lifetime of an Athlete” study.</td>
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<td>2016</td>
<td>320 Australian athletes will be recruited and testing begins.</td>
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<tr>
<td>2045</td>
<td>“Lifetime of an Athlete” trial concludes.</td>
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WE ARE HERE

Baker IDI
HEART & DIABETES INSTITUTE