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## **REPORT TO THE LIONS CONVENTION** **MONASH RHEUMATOLOGY RESEARCH SUPPORT 2015**

The Department of Rheumatology at Monash Medical Centre and its associated Research activities in the Centre for Inflammatory Diseases Monash University benefit greatly from the input of the Lions donations to rheumatology research.

Monash Health is the largest health network in Victoria, and serves a catchment equal to the whole of Adelaide or Auckland. The Monash Rheumatology unit continues to grow its services to the region providing high quality public clinical services through running seven weekly clinics at Monash Medical Centre Clayton and Casey Hospital Berwick. Monash Rheumatology also provides inpatient and consulting services at Monash Health campuses. We have continued to grow our junior and senior medical staff in order to serve these growing needs. We are very proud that all services are provided free of out-of-pocket charges to patients. Monash Health does not provide direct support for the research aspects of these clinics, which continue to require funding from donations such as those of the Lions and other charities, as well as national competitive grant funding.

Although no rheumatic disease is currently curable, recent breakthroughs worldwide have shown that quality of life can be dramatically improved, and in some cases disease progress completely arrested, with optimum use of research-based therapeutics. Our clinical services are therefore linked closely to research, including basic laboratory research, clinical research, and translational research such as clinical trials. In fact, apart from our two general rheumatology clinics, all of our clinical services are now directly connected to active research programs and are lead by research-active clinicians.

In 2014 the Department was humbled to receive a generous donation in support of much needed and highly valuable research equipment. This equipment has been in heavy use since its installation, enhancing the speed, quality and accuracy of the team's research. This new device permits us to measure proteins in test samples such as patient blood and cells very fast and with high precision. It helps us to our goal, which is to develop new treatments for arthritis and other rheumatic diseases.

Examples of the success of our research in 2014-15 include:

- Rheumatoid arthritis. Steroids are drugs widely used to treat arthritis; they are effective but have severe side effects. This year we have published novel findings in two relevant areas, including two studies that demonstrate novel actions of steroid-



regulated proteins. Although neither of these is the 'magic bullet', both these studies highlight the importance of a particular protein called GILZ on which we are working hard. In fact, in 2014 Monash was awarded a NHMRC Development Grant to push our work on GILZ towards clinical testing, and this work is going well.

- Lupus. Monash has Australia's largest Lupus Clinic, which combines best-practice clinical care with a longitudinal data collection and tissue bank. , now with over 3500 episodes of care in its database, and this rich data set is beginning to bear fruit. Multiple publications have arisen from this work. We have this year launched the Australian Lupus Registry, bringing our skills in clinical data collection to multiple centres in Australia. We have also published two papers on potential new treatments for lupus tested in mice, as well as studies on vitamin D and improving usual medication use in lupus. We have Iso

Part of vouchsafing the health of future generations is training the future doctors and researchers. Monash is one of the largest trainee sites for rheumatologists in Australia. A particular source of pride for the department is that currently four rheumatologists are enrolled in PhD research studies at Monash. This is, we believe, the largest research student team of physicians in any Rheumatology department in Australia.

In my third report as Director of Rheumatology at Monash I can reflect on the benefits to Australian science and Australian patients of the funds that have been generously contributed over the last 25-plus years. The relationship between Monash Rheumatology and the Lions has greatly enhanced rheumatology research in Australia, and thereby continues to enhance the care of patients with these disabling disorders. On behalf of my team I sincerely look forward to an ongoing and fruitful relationship.

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