

ANZBMS



2017 ANNUAL REPORT

AUSTRALIAN AND NEW ZEALAND BONE AND MINERAL SOCIETY

AIMS AND GOALS

THE AIMS AND GOALS OF THE SOCIETY ARE TO:

- ACT AS THE PRINCIPAL PROFESSIONAL BODY FOR SCIENTISTS AND CLINICIANS INVOLVED IN RESEARCH AND MANAGEMENT OF PATIENTS IN THE FIELD OF METABOLIC BONE DISEASE AND MINERAL METABOLISM IN AUSTRALIA AND NEW ZEALAND;
- ACT AS THE PREMIER FORUM FOR THE PRESENTATION OF RESEARCH AND DEBATE ABOUT CLINICAL AND METABOLIC BONE DISEASE IN AUSTRALIA AND NEW ZEALAND; AND
- ADVANCE THE EDUCATION OF CLINICIANS, ALLIED HEALTH PROFESSIONALS AND THE PUBLIC IN THE NATURE OF AND MANAGEMENT OF DISEASES IMPACTING UPON THE SKELETON.

REPORT FROM THE **PRESIDENT**

(Presented at the Extraordinary General Meeting held in June 2017 during the Annual Scientific Meeting in Brisbane; updated for the society's Annual General Meeting in September 2017)

Dear Colleagues

In my report to you last year I discussed what I saw as the raison d'etre for ANZBMS, and having concluded that its existence was both justified and a good thing I articulated what I saw as particular challenges and opportunities regarding its long-term survival. This year I would like to present the strategic thinking that has underscored the activities of our society this year, directed towards addressing these challenges and opportunities. In essence, we have focussed on three strategies:

- a) Supporting early and mid-career growth
- b) Continuing and improving good governance; and
- Improving our relationship with other musculoskeletal societies.

Supporting early and mid-career growth

When I first went to university, I had to listen to my room-mate play her Whitney Houston cassette tapes for hours on end, undoubtedly the low point in our many decades of friendship. Perhaps equating our more junior society members to children is unnecessarily patronising; but be that as it may I think the general principle that they are our future is unarguable. The inescapable corollary is that if we do not build and maintain our early career investigators we do not have a future.

So one of my main aims as president was to support early career investigators. Peter Croucher was tasked with setting up the Early Career Investigator Committee (ECIC) and in this he has done a great job. I would like to thank the Garvan Institute who kindly hosted the first meeting of this new committee. Now led by Joshua Lewis and Sabashini Ramchand, the ECICs have been noticeable throughout this meeting and I am delighted to see their confidence and presence grow. This has yet to translate to questions at the microphone and we can discuss what we can do to change the culture here – but one suggestion from Tania Winzenberg (now our society's representative for the Future Global Leaders committee of the International Federation of Musculoskeletal Research Societies [IFRMS]) is that students will be given priority should they come up to the microphone to ask a question, a principle I think all chairpersons will be happy to implement.

Younger investigators also include the registrars training in endocrinology, rheumatology, geriatrics, orthopaedics, general medicine, rehabilitation, and the like. We are still finding gaps with the way information about our society and our educational activities are communicated to trainees - this year, for example, it seems that few endocrinology registrars in Melbourne knew of the registrar training day - but with support of specific ECIC input we will continue to work with the RACP and related colleges to improve awareness of our training programmes. Paul Glendenning, Chris White and Sue Lynn Lau have been our representatives at the RACP (Paul) and the Specialist Advisory Committee in Endocrinology (Chris and Sue Lynn), and I would like to thank them for their work. Chris will be leaving this role at the end of this year; and I would welcome relatively senior members of the society (particularly those who supervise advanced trainees in endocrinology) who might want to volunteer here.

I have been talking with Paul Glendenning and with Rachelle Buchbinder (this year's Australian Rheumatology Association president as well as an ANZBMS Council member) about how to increase the presence (or even just awareness) of ANZBMS in training committees beyond the endocrinology advanced training scheme, given how many fields of medicine we touch.

CONTINUED

REPORT FROM THE **PRESIDENT**

With respect to the Advanced Clinical Training day, I would like to thank Rob Daly and Gustavo Duque who put together a terrific programme and the 50-60 attendees had an incredibly rich day and particularly valued the interactive discussions. Thank you also to Teva who supported this meeting financially and to Lara Birchby for her organisational support.

In addition to supporting the Early Career investigators, Allison Pettit has been particularly passionate at Council about articulating the challenges facing the Mid-Career researchers. Whether or not the revamped NHMRC system and/or the Medical Research Futures Fund [MRFF] will alleviate the acute crisis in mid-career support for scientists and clinician-scientists remains to be seen (on this point, the Research Committee will be considering this issue as more funding details are released, and writing a specific report on this matter for Council to be delivered within the next six months). In the meantime, though, we cannot wait. This year we were able to support two individuals who were both faced with leaving science without our support – Dr Rachel Davey and Dr Nicola Lee. I congratulate them both; and hope that the award of this fellowship not only validates their scientific contribution but also helps them to obtain longer term secure salary support to stay in science.

We have also started a ring-fenced research support fund and you may have noticed the option of making a donation on the membership renewal forms. So far this contains \$1000 to date - an average of \$3/financial member of the ANZBMS. At our ASM dinner we held a silent auction for the wonderful painting "The Creation of Maiwa [the Brisbane River]" by Jared Coolwell, which had been used as our image for the conference. Jared not only donated this beautiful picture for the conference but also another painting ("Rings of Life") which he painted during the conference itself inspired in part by the bone science being presented around him particularly osteons! Prof Richard Prince and myself were the lucky ones - not only able to support this excellent cause but also getting to take home a lovely picture each; and our auction raised \$2300.

Continuing and improving good governance

Governance may sound very boring and bureaucratic but actually it's very important to prevent abuse of process and to ensure clarity of roles. To misquote an Italian proverb, everything goes smoothly until the comb hits the knots. The purpose of good governance structure is to ensure that as far as possible we don't have any knots but when they do arrive we have a means of managing them.

The way our society is structured ensures many features of good governance are already established,

as laid out in our constitution. For example, we have to have representation from all states and New Zealand. Councillors do not have a right to remain on council indefinitely, and indeed must re-nominate for their position every two years. There is also a fixed maximum time that councillors can remain on Council of six years with specific exceptions for the president and treasurer who may serve longer periods.

At this point I would like to thank Markus Seibel, retiring past president for his service to ANZBMS and for his support to me as president. I would like to particularly thank Markus for his vision in bringing about the international meeting of what was then IBMS, now IFMRS, and ANZBMS. Markus in particular was very successful in leveraging support for this meeting from Brisbane City Council and Qld Tourism, which support helped greatly in bringing such a stellar and international faculty to Queensland. Markus has also driven the development of the SOS fracture alliance, and he will continue as ANZBMS delegate to this alliance. This has involved a great deal of negotiation between federal and state governments, multiple health departments and hospitals, and multiple professional societies. The hope is that at the end of all this the first fracture will be the last, for all Australians – or at least that all Australians who experience a low trauma fracture will be assessed and treated appropriately for osteoporosis.

In addition to Markus leaving as he finishes his term as Past President, Nick Pocock has also now served six years as Councillor. I would like to thank Nick for his many years of service, not only with respect to the Bone Densitometry Committee which he has chaired for many years also, but additionally with respect to discussions about ethics in recent times – which of course ensure that he might be subpoenaed for future committee work on these topics.

Where we've had new roles and representation we've adopted a strategy of invited expressions of interest, rather than just approaching the usual suspects – this led to the wonderful appointment of Gustavo Duque as chair of the re-formed Professional Affairs Committee. This is an incredibly important committee and Gustavo has done a magnificent job in supporting me and the society by ensuring representation of the ANZBMS with the many other professional bodies with whom we are asked to interact. His report will be delivered separately.

The other committee I re-formed was the Meetings Committee. The role of this committee is in one sense obvious. Meeting planning is greatly aided by corporate memory both scientific and political; having previous POC and LOC chairs participate in their retirement means they can pass on their wisdom to incoming POC/LOC

CONTINUED

REPORT FROM THE **PRESIDENT**

chairs and prevent reinvention of the wheel. Other ex officio members of this committee will be the immediate past president as chair – again, for corporate memory and strategic awareness - and the president-elect, who has to live with the consequences of these decisions! This committee will also advise Council regarding future joint meetings, both stand-alone and potential joint meetings, which I discuss below.

ANZBMS has several other committees, all of whom will be delivering their own report to the meeting, but I want to thank all the chairs and the members for their hard work – in addition to those already mentioned, Mark Kotowitz for the Therapeutics Committee; Paul Baldock for the Research Committee; and Nick Pocock for the Densitometry Committee. Nathan Pavlos as Treasurer and Paul Anderson as Secretary/Communications are both operating more one-person shows currently but the workload is considerable and we have discussed ensuring 2ICs and potential evolution of committees to support these figurehead positions in their roles.

Our committee structure is supported by articulated terms of reference – some of these are still being finalised but certainly the Terms of Reference for Professional Affairs and ECIC are completed. Job descriptions for other positions including secretary, president-elect, president and past-president are also important. For example, the ex officio roles for the past president now include chairing the Meetings Committee as well as representing the ANZBMS at the IFMRS. In addition to limitation of time on Council, we have also planned that chairs of committees will be asked to serve for a stated period of time – usually four years. Whilst ensuring that wisdom and corporate memory are maintained, regular turnover of committee membership is important, to ensure all members of our society have the opportunity to learn about governance structure, develop leadership skills, and contribute service always asked for in NHMRC applications. Of course this means that volunteers will be needed, regularly! And I would encourage people to put up their hands. Participating on committees is an excellent way to build career-enhancing networks as well as making friends and providing meaningful service to our professional community.

Our society also has a Strategic Plan originally developed by Matt Gillespie. This is now five years old; so at our February Council meeting we devoted a lot of time to revising this for 2017 forwards. The organisation of the ASM has overtaken our capacity to finish this but it will be completed and circulated soon. Lastly on this issue of governance, it will not be surprising that gender equity in our society is regarded as a priority and people may have noticed that this year's ASM speakers and chair positions were completely balanced in this respect. One day this will no longer be an issue that we need to worry about but until then this principle will be actively observed by our society.

Improving our relationship with other musculoskeletal societies.

There is no better example of this than our outstanding joint meeting with the IFMRS and Japanese Society for Bone and Medical Research. Mark Forwood, Mark Cooper and Mike Rogers will deliver their own reports on this topic but I would like to thank them most sincerely for the magnificent job they have done in putting together a terrific programme both scientific and social. I would also like to thank ASN events formally for their help and wisdom in negotiating this enormous undertaking.

People will have noticed that several sessions have been co-badged with other societies. This is a deliberate strategy to improve integration and engagement with our sister societies, and builds off our joint response to the MRFF last year prompted by David Findlay. We will be similarly cobadging sessions at next year's ARA meeting.

Next year's ASM is going to be in New Zealand and held over 2-5 September. Thank you to Jill Cornish and Ian Reid who have taken on the roles of LOC, and to Rory Clifton-Bligh and Rachel Davey as POC chairs. Meetings beyond this are still in discussion; but we are keen to have the correct balance of joint meetings and stand-alone meetings. Both attendance and pharma support for meetings are dropping globally; thus we need to consider how best to be fiscally prudent and share resources and opportunities where appropriate whilst at the same time maintaining our own identity. This is an ongoing debate; but a balance of about 50:50 looks probable for the next few years.

AGM 2017

Because our conference this year was held before the end of the financial year, we held our AGM by teleconference on 19 September. I was very pleased that we had quorum (21 members on the call and 19 members who sent a proxy) which I thought was a good sign for what may seem a purely administrative meeting. However, this is our collective society. Its ongoing survival depends on our participation and enthusiasm. On which point, I was delighted to be able to announce the results of our election this year: A/Prof Natalie Sims has been elected as president to follow Prof Peter Croucher. We also welcome new counsellors onto the ANZBMS Council: Jillian Cornish, Mark Forwood, Mark Cooper. I am sure they will enjoy the wonderful delights of long and detailed Council discussions!

REPORT FROM THE **PRESIDENT**

Final thanks

Ivone's and Melissa's support in running our society on a day-by-day basis underpins everything our society does. I would like to thank them most sincerely. Ivone was not at our ASM this year because of her broken ankle and I know you all join me in wishing her a speedy recovery.

Thank you again for the honour of being the president of ANZBMS. It has been a great privilege; and I have learned a great deal in this role. Thank you to the very many people who have helped me and our society during my presidency; and a particular thank you to Council members who have provided me with sensible balance and advice both at our scheduled face-to-face meetings and at unscheduled virtual meetings over email. Peter Croucher is our new President, and I wish him all the very best in this role. I have found Peter's considered opinion invaluable in discussions over the last two years; and I am really looking forwards to working with him over the next two years.

Yours with all good wishes – **Emma Duncan**



Professor Emma L Duncan, President

TREASURER'S REPORT

ASSOCIATE PROFESSOR NATHAN PAVLOS ANZBMS TREASURER

General Financial Result

2017 Member's funds = \$1,042,786 2016 Member's funds = \$1,107,226

The society remains in sound but cautious financial position with considerable funds conservatively invested. Reserves have declined marginally in successive years reflecting the introduction of new funding initiatives including the Fracture Liaison Alliance and the continuation ANZBMS Mid-Career Fellowship Scheme, discussed later in this report. Current external support is also significantly down on previous years and will likely remain at reduced levels for the foreseeable future. This inevitably impacts profits from our meetings and we will likely see only small profits (if any) from future ASMs (including joint international meetings).

Overall Loss

\$64,440 Loss (2016= \$51,305 Loss; 2015 = \$79,747, 2014 = \$43,041; profit)

The ESA-SBR-ANZBMS 2016 ASM on the Gold Coast generated a net profit (~\$266,000), of which we realised a profit share of (~\$55,000) following distribution of agreed profit splits (based on ANZBMS membership 20.78% of attendees) with ESA (56.18%) and SRB (23.04%). After adjusting for speaker costs (~ \$22,000), which lay outside of the ordinary meeting budget, our final surplus was (~\$33,000). Following Australian accounting standards the Auditor assigns ASM revenues to the year received, and expenditure to the year when committed. Consequently, the gross income and gross expenditure in respect of each ASM will be reflected in the profit and loss account, as they occur, rather than simply recognizing a 'net profit' of each individual meeting.

Investments (as at May 2017) COMMONWEALTH BANK Balance in Premium Business

Cheque Account \$37,500.96 Balance in Business online saver \$739.19

BOQ SPECIALIST

Invested on: 30 March 2017 Maturity date 30 June 2017 Interest rate is 2.25% p.a. (Compounded at maturity) \$291,021.23

Invested on: 30 March 2017 Maturity date: 30 June 2017 Interest rate is 2.25% p.a. (Compounded at maturity) \$139,565.11

RURAL BANK TERM DEPOSIT

Invested on: 28 February 2017 Maturity date 29 May 2017 Interest rate is 2.55% p.a. (Compounded at maturity) \$614,797.78

TOTAL ACCUMULATED FUNDS \$1,082,885.08

We continue to exercise a conservative investment approach, although this strategy will be subject to revision in 2017/18. Term deposits are at <2.5%, which yielded \$23,620 in 2016-2017 with this income decreasing over (2015-2016 \$33,388).

Expenses

Our society expenses increased marginally for 2016-2017 (\$~110,000) up from (\$96,000 for 2015-2016). This increase incorporates our financial commitment of to the SOS Fracture Liaison Alliance.

This includes;

Office - \$96,000 (Rent + salaries + office expenses) Audit - \$5,050 Awards - \$20,000 (Christine & T Jack Martin Research Travel Grant (\$15,000 - Amgen funded), Amgen-ANZBMS Outstanding Abstract award (x5, \$1,000 each - Amgen funded), Roger Mellick and Chris & Margie Nordin Young Investigator Awards, Kaye Ibbertson Award, Sol Posen Award (all \$1,000, funded by the society) SOS Fracture Liaison Alliance -

\$20,000

TREASURER'S REPORT

ASSOCIATE PROFESSOR NATHAN PAVLOS ANZBMS TREASURER

The Society remains in a strong financial position.

Income

Sponsorship - \$19,000 Amgen donation - \$20,000 (covers Christine & T Jack Martin Research Travel Grant (\$15,000) and 5 Amgen-ANZBMS Outstanding Abstract awards (\$1,000 each) ANZBMS satellite meetings (post graduate trainee meetings + densitometry courses) - \$70,107 Subscriptions - \$83,000 Interest from term deposits -\$26,500

Subscriptions have continued to increase steadily over the last few years through reviewing unfinancial members and encouraging them to renew. Many thanks to Ivone for managing this. The Society should acknowledge the contributions of the 2016 ASM POC, in particular to Mike Rogers and Mark Cooper and to Nick Pocock and Robin Daly for overseeing the successful Densitometry Course and Postgraduate Meetings, respectively.

Future directions

For 2016-2017 we encountered a consecutive period of downturn in overall profits (~\$64,000). This is partly attributed to declining sponsorship and increased fiscal demands including commitment to the SOS Fracture Liaison Alliance (\$20,000), provision of top-up funds to support Amgen OA ANZBMS Grants and the

continuation of the ANZBMS Mid-Career Fellowship Scheme (\$50,000). The Mid-Career Fellowship outlay increased marginally to (~\$59,000) for the 2015/2016 period. This modest increase was approved by Council to 'future-proof' the careers of two equally deserving Mid-Career ANZBMS members. The fiscal sustainability of these schemes will be closely reviewed for the 2017/18 period pending profit outcomes of the 2017 ASM.

For 2017/18, our standard outgoings are likely to be largely unchanged. We anticipate income from interest to be ~ \$26,000 (at an interest rate of 2.45%), accounting for slightly reduced term deposits due to supporting the Mid-Career Fellowship and Fracture Liaison Alliance in 2017. A foreseeable challenge remains to attract and maintain the level of sponsorship support afforded in previous years.

I would like to offer my thanks to members of the Finance Committee, Ivone Johnson and Melissa Dupavillion who have provided excellent guidance and support to me and Rod Laws of Tinworth & Co Chartered Accounts for overseeing the accounts.



Associate Professor Nathan Pavlos, ANZBMS Treasurer

OUR NEW LIFE MEMBERS



Professor Ego Seeman



Professor John Eisman

RECOGNITION OF ANZBAS MEMBERS

Australian Academy of Health and Medical Sciences Professor Markus Seibel- elected to Australian Academy of Health and Medical Sciences



Professor Markus Seibel

Fellows at AAHMS meeting

OUR MEMBERS

ANZBMS MEMBERS PASSING

Paul Lee

(1977-2017)

Paul was a highly respected and much loved member of ESA [and ANZBMS]. He was a staff specialist Endocrinologist at St Vincent's Hospital, Sydney and research scientist working in the Diabetes and Metabolism Division, Garvan Institute of Medical Research.

Paul was a superb clinician. He had a wide knowledge of clinical endocrinology which he applied to the care of his patients. He was an excellent teacher and mentor of registrars undertaking advanced training within St Vincent's Endocrinology Department. His positive and friendly presence will be greatly missed at St Vincent's.

However, it is as a research scientist that Paul made his greatest mark, as one of the brightest young stars of ESA. He completed a PhD under the supervision of Prof Ken Ho, Garvan Institute and postdoctoral training at the NIH, before establishing a successful career as an independent researcher. Along the way Paul attained a prodigious number of scholarships, fellowships, grants and awards, including the ESA Bryan Hudson award for clinical research in 2009. He published numerous highly cited articles in leading journals including New England Journal of Medicine, Cell Metabolism and Endocrine Reviews. Paul's studies have greatly contributed to the worldwide interest in brown adipose tissue as a potential therapeutic target to treat obesity.

ESA members may best remember Paul as the inspiring public speaker who made you believe his topic was the most interesting thing in the world and as the young man sitting at the back of the room with brightlycoloured shoes who jumped to the microphone at the end of each presentation to ask one or two (or occasionally three) highly pertinent questions.



Paul Lee

THERAPEUTIC COMMITTEE REPORT

Evolve:

Our top five low value procedures/ treatments in the bone and calcium domain have been sent back to the RACP with revisions:

- Do not prescribe high dose vitamin D or calcium supplementation either alone or in combination as the only treatment modality for fracture prevention, particularly in osteoporosis
- Do not prescribe vitamin D for non-skeletal indications – and as a corollary do not screen for vitamin D deficiency unless there is a specific skeletal concern such as osteomalacia or osteoporosis
- Do not recommend anabolic steroids for fracture prevention in osteoporosis
- Do not organise imaging of the parathyroid glands (either by ultrasound and/or sestamibi scanning) for individuals with primary hyperparathyroidism until a decision has been made that surgical management (i.e. parathyroidectomy) is indicated
- Do not prescribe calcitriol as treatment of postmenopausal osteoporosis

It was disappointing to have a draft of our list leaked and misinterpreted as the society being of the view that vitamin D did not have a role in the treatment of osteoporosis. The committee has been invited to comment on the APEG top list as part of the consultative process.

ESA/ANZBMS/MSA/COSA Position Statement:

"Optimising bone health in women with breast cancer on endocrine therapy" continues to progress with the writing group planning to meet at the ESA ASM at the end of August.

SOS Fracture Alliance:

The Steering Committee has proceeded to prepare to hand over to a Governance Committee with elections scheduled for the end of June. There has been considerable debate regarding the best approach to the implementation of fracture liaison services with proponents for both state/hospital-based and primary health network-based services. The current health service delivery environment might favour the latter. The potential savings to be made from successfully implementing services have been estimated and an estimate of the cost of investigation and management of fragility fractures will be made to determine how much might be spent on fracture liaison services. The Alliance is to be officially launched at the end of June concurrently with Osteoporosis Australia's Burden of Disease Report.

We have:

- Endorsed a Cancer Council brochure titled "How much sun is enough
- Endorsed the Victorian Model of Care for Osteoarthritis
- Responded to MSAC Application 1466 – Vertebroplasty expressing the view that there is currently insufficient evidence to support the reintroduction of an MBS benefit for this procedure.
- Declined to endorse the Clinical Guidance on the Diagnosis and Management of Osteoporosis in NZ as there are substantive differences in recommendation in these guideline with the draft Osteoporosis Australia draft guidelines regarding follow-up densitometry in patients on treatment, interruptions to therapy and use of bone turnover markers
- Have been approached by Amgen (Australia) regarding a possible post marketing review for Prolia that could result in restricted access for patients in Australia.
 A meeting with company representatives is to be held during the ANZBMS/IFRMS/JBMS Conference.



Associate Professor Mark Kotowicz

RESEARCH SUB-COMMITTEE REPORT

Committee: Natalie Sims, Jacqueline Center, Dorit Naot, Sharon Brennan, Jiake Xu, David Findlay, Mark Forwood. I'd like to thank all of the Research Sub-committee members for their contributions and support. Their thoughtful and timely responses have made my job much easier. I would suggest that the composition of the committee needs to adjusted to include greater clinical perspective.

Medical Research Future Fund Priorities submission.

 Alerted by David Findlay after the MRFF Road Show in Adelaide, Burden of Disease estimates for musculoskeletal disease was an order of magnitude lower than actual. BoD is a fundamental component of the funding priority matrix for the MRFF Advisory Board. One submission was driven by Arthritis Australia, including all musculoskeletal disease, a specific paragraph addressing osteoporosis was written by the ANZBMS and included in the submission.

- A second submission driven by ANZBMS and focussing upon improved health outcomes and secular changes was drafted and submitted.
- It is important to note the enthusiasm shown by the entire MSK sector in responding to the MRFF.
- Happy to submit final report to the Council if requested

Annual Scientific Conference/ Awards

 ASM: The committee contributed to scoring of abstracts, and conferred as to the appropriateness of awards allocated based upon these scores. Additionally, applications for the Sol Posen, Kaye Ibbertson and Christine and T Jack Martin Travel Awards were judged. Members of the Research Subcommittee also actively participated in the review of several high quality applications for this year's Amgen GSK/OA ANZBMS awards.

The committee is currently conducted an audit of the number of applications we receive for each of the awards. Final numbers are not in, but for student-based awards, the average is around 4, however there are often multiple submission across these awards by the same individuals. This process will continue after the AGM.



Paul Baldock

PROFESSIONAL AFFAIRS COMMITTEE

The mission of our Professional Affairs Committee is to engage with other Scientific Societies, non-governmental organizations (NGOs), and Professional Colleges sharing a similar interest in promoting high quality research, strong scholarship and professional development in areas directly or to some extent associated with musculoskeletal diseases. Several members of the Committee have represented ANZBMS at activities and meetings organised by our partner Organisations, NGOs and Colleges.

This report, which summarises our activities, is also linked to the member(s) of the Committee representing ANZBMS and the outcome(s) of the specific activity.

- RACP AMD, Council, Evolve
- Osteoporosis Action Plan
- Fracture Alliance
- Hip Fracture Registry
- Inclusion of MSK Diseases in the training programs
- ASMR Council meeting
- Osteoarthritis of the Knee Clinical Care Standards



Professor Gustavo Duque

EARLY CAREER INVESTIGATOR COMMITTEE (ECIC) REPORT

The ECIC committee consists of two co-chairs Dr Sabashini Ramchand and Dr Joshua Lewis, Dr Ashika Chhana, Mr Feitong Wu, Mr Alexander Rodriguez, Dr Audrey Chan, Dr Renee Ormsby, Dr Christina Vrahnas, Dr Jasna Aleksova, Ms Athena Brunt.

Events at the 2017 annual conference: To identify and engage with ANZBMS early career investigators the ECIC have a booth and promotional material for display in the Poster Hall. At this year's annual scientific conference, the ECIC organised two events, the first a panel discussion "It's going tibia alright" consisted of outstanding mid-career and senior clinical and basic researchers including Professor Jillian Cornish,

Professor Belinda Beck, Dr Paul Baldock, Professor Sakae Tanaka, and Associate Professor Rachel Davey. The event focussed on providing early career investigators with tips and advice on how to successfully transition from being a PhD student to a post-doctoral researcher. The second event was a "Meeting of the Minds" BBO -The purpose of this social event was to engage with other early career investigators and student members of the Society and take the opportunity to introduce the ECIC members personally. During this session a bone themed trivia will also be run.

Ongoing initiatives outside of the annual conference: Combined ANZBMS/ADS/ESA webinar seminars – pilot sessions underway. Future initiatives and events: The ECIC is currently preparing and prioritising a list of future short and long-term initiatives to meet its stated objectives as well as identifying potential sponsors for future initiatives/annual meetings events.

We would like to thank all members of the ECIC for their contributions and support in 2017.



Sabashini Ramchand and Joshua Lewis



Lunch time ECIC seminar



Bones and brews

PROGRAMME ORGANISING COMMITTEE 2017

The 2017 annual scientific meeting (ASM) is the first to be held as a joint meeting with the newlyformed International Federation of Musculoskeletal Research Societies (IFMRS, formerly IBMS). The Japanese Society for Bone & Mineral Research (JSBMR) were also invited to participate in order to create a truly international scope. The scientific programme was developed by three Programme Organising Committees representing ANZBMS (co-chairs Mike Rogers & Mark Cooper; committee members Jillian Cornish, Natalie Sims, Gustavo Duque), IFMRS (co-chairs John Eisman & Roland Baron) and JSBMR (co-chairs Seiii Fukumoto and Riko Nishimura), together with a steering committee representing ANZBMS (Emma Duncan, Peter Croucher, Nathan Pavlos, Mark Forwood, Ivone Johnson), IFMRS (Bente Langdahl, Markus Seibel, Amanda Sherwood), JSBMR (Sakae Tanaka) and ASN Events (Jim Fawcett, Mike Pickford, Jennifa Vo, Phil McShane). In the early stages each POC contributed suggestions for symposia topics and key speakers via lengthy teleconference meetings. A programme soon emerged that covered a diverse range of basic, translational and clinical research topics that we considered would appeal to a broad audience of ANZBMS members as well as the expected delegates from overseas. To foster and strengthen existing links with other societies, emphasis was also placed on engaging with the Australian & New Zealand Orthopaedic Research Society (ANZORS) and the Australian Rheumatology Association (ARA). Discussions with these societies about topics and speakers led to the development of co-badged symposia with ANZORS and ASR and these are a key feature of the

2017 ASM, with the expectation that future meetings of those societies will also involve symposia co-badged with ANZBMS.

In contrast to the usual 2 or 3 international speakers at the ASM, this year's meeting has 20 international speakers from eight different countries on 3 continents. In addition to the speakers supported by the meeting's financial budget, the constituent member societies of IFMRS (ASBMR, ECTS, ORS and ICMRS) each generously sponsored at least one speaker to attend and present an invited lecture at the meeting. This enabled the creation of a panel of truly outstanding international, national and local speakers for an Australian meeting. Whilst the number of registered delegates fell somewhat short of expectations, this is a feature of recent meetings by other national societies including ECTS and ASBMR. Nevertheless, the number of submitted abstracts was almost double the number submitted to the 2016 ASM. Interestingly, the proportion of clinical:basic abstracts changed from the usual 1:2 to marginally more clinical than basic. We see this as a sign of success in attracting more clinicians than usual to the ASM, perhaps encouraged by a programme designed to focus clinical topics on osteoporosis in the first 2 days. Abstracts were scored anonymously by panels of at least 5 reviewers each and we are grateful to all of the abstract reviewers for their diligence and rapid submission of scores. More than 25% of the submitted abstracts were incorporated into the programme as oral presentations in the usual Outstanding Abstract, Clinical, Basic, New Investigator and Late-Breaking Abstract sessions. We are particularly pleased that the newly-formed ANZBMS Early Career Investigator Committee organized two events during the meeting, to

promote networking and interactions among the more junior membership of the society. We were delighted at the enthusiasm of pharma, who generously supported four industry-sponsored lunchtime or breakfast sessions during the meeting. We are grateful to the Sponsorship Committee (Nathan Pavlos, Markus Seibel, Ivone Johnson/ ANZBMS, Amanda Sherwood/IFMRS, Jim Fawcett, Phil McShane/ASN Events) for their hard work in negotiating these arrangements. To complement the main programme, we are very grateful to John Kemp and Egon Perilli for organizing the satellite workshops on Genetics of Bone Disease and Bone Quality, respectively. Together with the Clinical Workshop on Osteoporosis organized by Mark Cooper, these informal and interactive sessions proved extremely popular and registrations were sold-out well in advance.

Finally, we wish to thank ASN Events, particularly Jim Fawcett and Jennifa Vo, for all their hard work and efficiency behind the scenes, including taking care of the invited speakers, logistics, registrations, abstract reviews and the meeting website. We sincerely hope that you enjoyed this

We sincerely hope that you enjoyed this historic meeting.



Mike Rogers & Mark Cooper ANZBMS POC co-Chairs

2017 LOC REPORT

Registration Breakdown

Registrations: 401* Abstracts: 255 Students: 70 (only students, not ECI's) Aus and NZ contingent: 336 International Delegates (non Aus or NZ): 65

Membership breakdown

ANZBMS Members: 199 IFMRS Affiliates: 85 (24 JSBMR) Satellite Symposiums & Workshops Osteoporosis: diagnosis, management and therapy: 68 Current approaches to study the genetics of osteoporosis: 37 Bone quality: what is it and how do we measure it?: 52 AMGEN - Fracture liaison service model of care: make the first fragility fracture the last: 90 TEVA - Treating Osteoporosis – a personalised approach: 29 LILLY - Treating Patients with Severe Osteoporosis - What's New?: 63 ALEXION - Differentiating hypophosphatasia (HPP) from other skeletal dyslasias in adults & children: 46

Social Functions:

Welcome Reception: 242 Meeting of Minds – Bones and Brews function: 76 Conference Dinner: 184

Sponsorship:

Total: \$392,000

Budget: The conference is showing a surplus of just under \$54,000. There are additional catering discounts still to come off the bottom line and I expect the conference surplus will be around \$60k.

Other Points to note: Conference Satchel – Design is based on artwork supplied by Jared Coolwell, a local indiegous artist who is exhibiting at the conference. Morning Fitness Classes are running at the Brisbane TAFE from 7.00am. All catering provided for the meeting is locally sourced and will be healthy options.



Mark Forwood

ADVANCED CLINICAL POSTGRADUATE MEETING

Specialist training in the management of bone and mineral diseases is an expanding field with clinical significance across numerous disciplines including endocrinology, rheumatology, rehabilitation and geriatric medicine, orthopaedic surgery as well as general medicine. Topics to be covered:

- The latest information on best practice in the diagnosis and treatment of bone and mineral disease;
- Critical evaluation of current management strategies and their underlying scientific evidence;
- Coalface perspectives on current progress in bone and mineral disease.

18 March 2017 Australian Institute for Musculoskeletal Science (AIMSS), Sunshine Hospital, St Albans, Vic (Convenor: Professor Robin Daly) <u>Programme</u>



DENSITOMETRY SUB-COMMITTEE

ANZBMS Training Course

The course in Melbourne in April was very successful with over 70 registrants. The next course will be held in Brisbane in September 2017. The one day registrar course has been discontinued for the time being pending discussion with the Endocrinology JSAC.

DXA Medicare Item No.

The review of Medicare service provision, including the DXA item, is progressing. The changes to item numbers for DXA are expected to be implemented in November 2017. These changes however have not yet been announced although it is expected that a rescan interval will be introduced for item 12323 (patients over 70), and there will be some adjustment of the intervals for re-imbursed DXA under the other existing Medicare item numbers.

COMMITTEE SOME SERVICE SERVICE

INTERNATIONAL FEDERATION OF MUSCULOSKELETAL RESEARCH

The ANZBMS is a founding member of the IFMRS (International Federation of Musculoskeletal Research Societies), which was officially incorporated as a non-profit organisation in 2016. The ANZBMS was delighted to join with the newly-formed IFMRS for their first joint meeting, in collaboration with the Japanese Society for Bone & Mineral Research, which took place 17-21 June 2017. The event proved to be a truly international meeting and a stunning success.

SUMMARY OF BENEFITS TO THE ANZBMS

FUNDING

 IFMRS Grants and Fellowships available to ANZBMS members

COLLABORATION

- IFMRS can identify and/or sponsor international speakers for member society's meetings
- IFMRS is developing a training programmes for PhD students and Postdocs, which can be delivered by each member society

 Reciprocal marketing arrangements are in place to raise the profile of each member society, taking advantage of the IFMRS website and social media to extend reach internationally

PARTICIPATION

- ANZBMS representation on the IFMRS Board of Directors and take part in forming the future of our field
- ANZBMS representation on the Big Data Working Group
- ANZBMS representation on the IFMRS Future Global Leaders group – a new group of New Investigators to advise on future requirements of researchers in the field

EDUCATION

- Facilitate training for PhD students, Postdocs, Basic Scientists and Clinicians
- Link to on-line resources (e.g. webinars)
- IFMRS Knowledge Environment

 currently under development and will include BoneKEy and BoneKEy Reports archives, protocols, mini reviews and PhD thesis reports

RACP - ESA, ADS AND ANZBMS WEBINAR

6 November 2017 Assoc Prof Morton Burt - Topic: Diagnosis and Management Options in Growth Hormone Deficiency 26 September 2017

Professor Emma Duncan -Topic: Osteoporosis in unusual populations – premenopausal women, transplant patients, and osteogenesis imperfecta

11 October 2017 A/Prof Anthony Russell

Management of Obes

6 June2017 Prof Susan Davies - Prescribing for menopause

• Big Data Inventory - an inventory

to assist members in accessing

is divided into the following

four categories: Epigenetics,

Genomics, Transcriptomics:

New activities to be announced

coding RNA

in 2018.

and utilizing existing databases

for musculoskeletal research. The IFMRS Big Data Website Inventory

Coding and Transcriptomics: Non-

of websites has been generated

1 May 2017

Prof Joseph Proietto- Update on the Management of Obesity

Please find the link below to the recording that has now been published on the College website. Only fellows of the college can access the webinar. <u>link to the recording</u>

16

CHRISTINE AND T.J. MARTIN RESEARCH TRAVEL GRANT 2017

Audrey Chan

Throughout the course of my PhD, I have focused on characterising the signalling and trafficking kinetics of parathyroid hormone receptor type 1 (PTH1R) in both HEK293 cells and primary osteoblasts. PTH1R is a class B G protein-coupled receptor (GPCR) and plays crucial roles in regulating skeletal development and mineral ion metabolism, through actions that are mediated through chondrocytes, osteoblasts and osteocytes. PTH1R responds to two endogenous ligands – PTH and PTH-related protein (PTHrP), where ligand-induced receptor activation predominantly leads to the activation of adenylyl cyclase and generation of cyclic AMP (cAMP) at the cell surface. PTH has been shown to induce receptor endocytosis, where unlike most GPCRs, cAMP production continues, an event referred to as 'non-canonical' or endosomal signalling. I recently published the requirement of the sorting nexin 27 (SNX27)retromer trafficking complex as a crucial modulator in terminating non-canonical signalling by directing internalised PTH1R into retromer-mediated recycling tubules that deliver the receptor back to the plasma membrane (Chan et al., 2016). Though this provided significant contributions to the knowledge of PTH1R signalling and trafficking, the role of SNX27retromer following PTHrPstimulation has not yet been investigated. It is known that PTH and PTHrP elicit different cellular responses; PTH functions as a circulating hormone while PTHrP functions as a paracrine/ autocrine factor in a variety of tissues, including bone.

Furthermore, studies directed at investigating the kinetics of PTHrPinduced PTH1R trafficking have largely focused on the aminoterminal fragment (PTHrP(1-36)) as opposed to the full-length protein found endogenously as PTHrP(1-141). Though PTHrP(1-36) has been shown to be sufficient for ligand binding and eliciting the generation of cAMP, this fragment omits several functional domains of PTHrP that are not shared with PTH and have known functions in placental calcium transfer and nuclear translocation. Therefore, the paracrine/autocrine action in bone is most likely to be driven by full-length PTHrP(1-141). This travel grant gave me the opportunity to work closely with E/Prof TJ (Jack) Martin and A/Prof Natalie Sims and their lab at St Vincent's Institute in Melbourne to gain invaluable knowledge in the field of PTHrP physiology and action in bone, and to apply my skills in confocal microscopy to thoroughly investigate the differences in PTH1R signalling and trafficking in HEK293 cells and established bone cell lines. This laboratory houses numerous of in-house-generated resources, and is the only possessor of the in-house generated and validated full-length form of PTHrP(1-141) and its truncated variants, as well as numerous anti-PTHrP antibodies and established bone cell lines. I first began my journey by attending the 42nd Lorne Protein Structure and Function Conference at Lorne, Victoria. I presented the findings from our recent publication that described the role of critical glutamic acidic residues within the carboxy-terminal tail of PTH1R in mediating its interaction with SNX27 and thus, prevent the misrouting of PTH1R for lysosomal degradation (Clairfeuille et al., 2016).

By attending this conference, I also gained invaluable insight into the study of protein structure and function and has further enhanced my current knowledge in protein trafficking in the context of the living cell. I was also able to meet current collaborators as well as establish new contacts in varving fields with the potential of new collaborations in the future. Soon after, I started my placement at St Vincent's Institute under the guidance of the entire Bone Cell Biology and Disease Unit. Having focused most of my PhD in PTHmediated PTH1R signalling and trafficking, I investigated any differences that full-length PTHrP or its truncated variants may have in gene expression in the context of bone. Unpublished findings of the SVI group have shown that PTHrP(1-141) but not its truncated variants, can induce the persistent activation of adenylyl cyclase in the osteosarcoma cell line, UMR106. I found that this did not occur in the MC3T3 osteoblastic cell line: there was no significant differences observed in the expression of cAMP-response genes between PTH(1-34), full-length PTHrP or its truncated variants. Next, I utilised confocal microscopy to visualise whether these apparent cell-limited differences in persistent generation of cAMP were due to any differences in the trafficking of activated PTH1R. For this, I used the HEK293 cell line expressing GFP-tagged PTH1R that I had previously established as a model for visually tracking the trafficking itinerary of PTH1R (Chan et al., 2016). After optimising a series of in-house-generated anti-PTHrP antibodies, I identified one that was capable of detecting PTHrP(1-141) in HEK293 cells. I used this antibody to show that,

CHRISTINE AND T.J. MARTIN RESEARCH TRAVEL GRANT 2017

similar to tetramethylrhodaminelabelled PTH(1-34) (PTH-TMR), PTHrP(1-141) binds PTH1R, they are internalised together into retromer-positive endosomes and remain in complex for up to 30 minutes. However, while PTH-TMR remained in complex with its receptor for up to 60 minutes post-agonist stimulation, PTHrP(1-141) was not detected after 30 minutes following agonist exposure. These findings provide strong new evidence that full length PTHrP-PTH1R does internalise into early endosomes, in contrast to the previous report showing rapid dissociation of PTHrP(1-36) from PTH1R at the cell membrane (Ferrandon et al., 2009). To validate these findings in bone cells, I therefore attempted to visualise these events in MC3T3, UMR106 and the osteoblastic/osteocytic cell line, OCY454. I was able to confirm the time-dependent internalisation of PTH-TMR and PTH1R into early endosomes in these cells, however the PTHrP antibody used in the HEK293 cells

was unfortunately incapable of accurately detecting the presence of PTHrP(1-141). By providing me with the opportunity to work with E/Prof TJ (Jack) Martin, A/Prof Natalie Sims and their experienced laboratory, they have welcomed be as a new member of their laboratory family. Through this experience, mv work has contributed to the field of PTHrP, PTH1R and their laboratory, however this is relatively small compared to the amount of invaluable knowledge and experience that they have bestowed upon me during my short time at St Vincent's. I am forever grateful to the AMGEN Christine and TJ (Jack) Martin Travel Award, ANZBMS and SVI's Bone Cell Biology and Disease Unit for providing me with this wonderful opportunity to share and discuss with like-minded scientists and clinicians leading the forefront of skeletal biology and research, where I believe I will continue to contribute to the field of PTH1R in bone and how we may continue to elucidate and therapeutically

manipulate PTH1R-mediated signalling in different cell types to favour certain cellular outcomes.



Audrey Chan

RACP/OSTEOPOROSIS AUSTRALIA RESEARCH ENTRY AWARD

Dr Angela Sheu

"The relationship between osteoporosis and diabetes: exploring the bone-metabolism interface"

Osteoporosis and diabetes are two common conditions that affect many Australians. Despite having relatively normal bone density, paradoxically diabetes patients experience more fractures. However, the underlying mechanisms that account for this increased fracture risk is unknown. Further, a commonly used osteoporosis medication may affect the development of diabetes, strengthening the link between these two hormonal pathways. Using data from the Dubbo Osteoporosis Epidemiology Study (DOES), the longest running cohort of osteoporosis in Australia,

Dr Sheu will explore the factors that link bone and metabolic health. She will also conduct a trial investigating how osteoporosis medications may affect the risk of developing diabetes. This will be the first study to examine in detail the interaction between metabolic factors and bone health. The clinical goal is a greater understanding of how these processes interact, in order to identify high risk patients for both conditions, and to minimise the serious and costly complications of each of these diseases. Understanding mechanistic interactions between bone and glucose metabolism allows the potential for future therapeutic interventions to be utilised beyond their current clinical use.



Angela Sheu

ANZBMS MID-CAREER FELLOWSHIP REPORT

Nikki Lee

I would like to express my appreciation to the ANZBMS for awarding me a mid-career fellowship. This award came at a time when my previous salary support from Diabetes Australia was coming to an end and I had been unsuccessful at obtaining funding from competitive fellowship schemes. Thus, combined with support from the Garvan Institute, this award enabled the continuation of my contract and allowed me to significantly progress my research. Recently, my research has been mainly focused on identifying and characterising a novel pathway by which bone tissue regulates glucose homeostasis, mediated via osteoglycin.

Associate Professor Rachel Davey

I was honoured and privileged to be the 2017 recipient of the Mid-Career ANZBMS Fellowship. This fellowship provided me with the opportunity to continue my research into the hormonal control of the musculoskeletal system in a full time capacity. This salary support provided by the ANZBMS Mid-Career Fellowship has enhanced my track record and greatly increased the productivity of my laboratory in 2017. It has enabled us to continue our investigations into 1) the actions of androgens via the androgen receptor in bone marrow progenitor cells to negatively regulate fat mass; 2) the actions of androgens via the brain to positively regulate skeletal muscle mass and 3) to further characterise the actions of calcitonin via the calcitonin receptor to inhibit

I am pleased to report that during this fellowship tenure, I have been able to progress this research to the point where it has now been submitted to a high impact journal for consideration for publication and is currently under review. In addition, I have a second research article in the second stage of review for which I am also the first author, and a third in preparation. I was honoured to be able to present some of my work in an oral at the 2017 ANZBMS meeting in Brisbane. None of this would have been possible without this award and the support of the Garvan Institute.

This mid-career fellowship award has boosted my track record both directly and indirectly which will make me more competitive in

osteocytic osteolysis during lactation. Significant progress in these investigations has resulted in two senior author publications (see below) with an additional manuscript submitted for publication, and a manuscript in preparation to be submitted early next year. In addition, this fellowship has allowed me to continue to be a serving member of our scientific community participating in the NHMRC review process, peer-review of journal manuscripts, and mentoring early career researchers by being a member of the Dean's Fellowship Review Panel in the Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne. During the latter half of this Fellowship, I was privileged to be able to contribute to our Society as co-chair of the scientific program organising committee. I would like to express my gratitude to the ANZBMS Council for

future funding applications. Not only does it attest to my competitiveness in my field but it has given me another year to create new collaborations and improve my track record by other means as well has progress my research. I am extremely grateful to the ANZBMS for their support at a stage of my career where obtaining funding has become increasingly difficult.



Nikki Lee

continuing this Fellowship Scheme. It is a testament to the commitment of the ANZBMS to support and foster the research of mid-career scientist in the bone and mineral field within Australia and New Zealand. Publications arising from this fellowship:

Cheung AS, de Rooy C, Levinger I, Rana K, Clarke MV, How JM, Garnham A, McLean C, Zajac JD, Davey RA*, Grossmann MG* (*Equal senior authors). Actin alpha cardiac muscle1 gene expression is upregulated in the skeletal muscle of men undergoing androgen deprivation therapy for prostate cancer. The Journal of Steroid Biochemistry and Molecular Biology, 2017, 174:56-64. Davey RA, Clarke MV, Russell PK, Rana K, Seto J, Roeszler KN, How JMY, Chia LY, North K, Zajac JD. Androgen action via the Androgen Receptor in neurons within the brain positively regulates muscle mass in male mice. Endocrinology, 2017, 158(10):3684-3695.



Associate Professor Rachel Davey

AMGEN OUTSTANDING ABSTRACT AWARD

Victoria Leitch Institute: Imperial College London



Emma Wade Institute: Dunedin School of Medicine, New Zealand



Michelle McDonald Institute: Garvan Institute of Medical Research, NSW



Ego Seeman Institute: Austin Health, VIC





KAYE IBBERTSON AWARD

Feitong Wu Institute: Menzies Institute for Medical Research, TAS



Feitong Wu

SOL POSEN AWARD Thao P. Ho-Le

Institute: Garvan Institute of Medical Research, NSW



Thao P. Ho-Le

NORDIN YOUNG

INVESTIGATOR POSTER AWARD

Scott Youlten Institute: Garvan Institute of Medical Research, NSW



Scott Youlten

CHRISTINE AND TJ MARTIN TRAVEL GRANT

Alexander Rodriguez Institute: Monash University, VIC



Alexander Rodriguez

ROGER MELICK YOUNG INVESTIGATOR AWARD Mahmoud Bakr Institute: Griffith University, QLD



Mahmoud Bakr

MSD-ANZBMS CLINICAL

RESEARCH EXCELLENCE

Weiwen Chen Institute: St Vincent's Hospital, NSW



Weiwen Chen

AMGEN OA-ANZBMS CLINICAL GRANT PROGRAM

Professor Emma Duncan Royal Brisbane and Women's Hospital

'Determining bone health without bone biopsy in patients with chronic kidney disease.'

Patients with chronic kidney disease have very poor bone health, with extremely high fracture rates and higher risk of death after fracture. Osteoporosis is a key component of these bone problems. Knowing how best to manage osteoporosis in a patient with kidney disease is very difficult without a bone biopsy.

Professor Duncan and her coinvestigators will compare the information seen on a bone biopsy (an uncomfortable and expensive test not widely available) with the results from blood tests and stateof-the-art imaging. They hope to find a link between the main cause of osteoporosis seen on the biopsy and the results from blood tests and imaging, which could then help doctors to plan the most appropriate and targeted medical management for osteoporosis. Knowing the main contribution to osteoporosis in patients with chronic kidney disease means treatment can be targeted more accurately to treat the main cause and prevent fracture, also avoiding the current need for painful bone biopsy.



Professor Emma Duncan

Dr Catherine Connaughton Australian Catholic University

'Understanding health and community services that improve recovery from fracture in older adults.'

Quality of life (QoL) is reduced for at least 12-18 months after an osteoporotic fracture. Dr Connaughton and her team aim to identify health and community services associated with rapid improvement of QoL. The team will use data from over 6000 patients worldwide to find out which health and community services improves QoL, both 4 months and 12 months after fracture. Hip, wrist, vertebral, and arm fractures will all be studied. The influence of age, gender and socio-economic circumstances will also be analysed.

The findings of this project will benefit the 141,000 Australians who suffer fragility fractures each year. Improved recovery may reduce the cost to the economy of osteoporosis and the impacts on quality of life osteoporosis.



Dr Catherine Connaughton

PROFESSOR PHILIP SAMBROOK YOUNG INVESTIGATOR TRAVEL AWARD 2017

Dr Jasna Aleksova, Hudson Institute of Medical Research: Reducing the bone health impacts of kidney dialysis

People with chronic kidney disease are at much higher risk of developing osteoporosis and fractures than the general population. PhD student Dr Jasna Aleksova is conducting research at Melbourne's Hudson Institute of Medical Research to understand why this happens, and investigating ways to more easily detect poor bone health in these patients.

A large study conducted by Dr Aleksova and her colleagues has found that low levels of the sex hormone oestradiol, a common effect of dialysis in men, is strongly linked to low spinal bone strength. This important finding may lead to new treatments to help preserve bone strength in these patients.

Further research by Dr Aleksova's group has found that highly detailed analysis of bone density x-ray images to reveal the microscopic 'architecture' inside bones is a highly sensitive and convenient way of predicting fracture risk in patients with advanced kidney disease. The usual way of assessing bone health in dialysis patients is to remove a tiny piece of bone for examination under the microscope. Dr Aleksova's work may help to reduce the need for this invasive and difficult procedure.

Dr Aleksova is presenting her findings at the American Society of Bone and Mineral Research annual meeting in Denver, USA, in September 2017.

Photos for above awards available from here: https://www. osteoporosis.org.au/awardees



Dr Jasna Aleksova

AMGEN/GSK GRANT RECIPIENTS

Clinical Associate Professor Amanda Vincent Monash Centre for Health Research and Implementation (MCHRI), Monash University, Victoria

'Improving awareness and management of bone health and fracture prevention in women with premature menopause.'

Up to 10% of women experience premature menopause (before the age of 40), which puts them at increased risk of developing osteoporosis. Both medical professionals and patients lack awareness of this increased risk, and action that could reduce osteoporosis and fracture risk is often not taken. Professor Vincent's project will focus on identifving knowledge gaps via a consultation process with women, health professionals and support groups. This will inform the development of evidence based information for both women and health professionals, which will be made freely available on the Osteoporosis Australia website. Another arm of the project will investigate the ability of a new bone strength measurement technique, trabecular bone score, to improve the identification of women with premature menopause who are at risk of fracture. Lastly, the project will compare different methods of bone

density testing in women with premature menopause due to Turner syndrome, a group in whom the usual method of bone density testing can be inaccurate.



Amanda Vincent



ANZBMS/IFMRS/JSBMR JOINT MEETING 17-21 JUNE, BRISBANE















ANZBMS FUTURE ASM

ANZBMS ASM 2018 2-5 SEPTEMBER, RYDGES HOTEL, QUEENSTOWN

The 28th annual scientific meeting of the ANZBMS will be held in Oueenstown from the 2nd to the 5th of September 2018. Chaired by Rachel Davey and Rory Clifton Bligh, together with members David Findlay, Jill Cornish, Tim Cundy, Jackie Centre and Christina Vrahnas, the POC have put together a varied program of cutting-edge science that will appeal to both clinician and basic scientists in the musculoskeletal field. Topics to be presented by our invited speakers from France, the USA, Australia and New Zealand include bone and vascular biology, osteoarthritis, fracture healing and 3D printing, exercise, nutrition and sarcopenia, designing the skeleton, bone cell biology, as well as an update on anabolic and anti-resorptive therapies. Our scientific program also includes basic and clinical abstract presentations, young investigator awards and an interactive poster tour session. The Early Career Investigator Committee will be hosting a 'Building your research profile" symposium and an evening networking event. There will be ample time in the scientific program for networking and discussion including a free afternoon allowing delegates to make the most of our beautiful location, with the local organising committee organising a trip to one of Queenstown's nearby ski slopes. The depth and breadth

of the scientific program, together with Queenstown's breath taking scenery, ensures for a vibrant and valuable meeting for all attendees.

International speakers: Marie-Hélène Lafage-Proust, MD, PhD

Marie-Hélène Lafage-Proust, MD, PhD, was trained as a physician and rheumatologist at the Medical School of Bordeaux University. She graduated in Cell Biology at the University Jean Monnet, member of "Université de Lyon", Saint-Etienne, France. She joined the INSERM 1059 team in 1994, now directed by Dr L Vico, after a postdoctoral Research Fellowship at Merck Res Lab (West Point, PA, USA, 1991-1993) were she studied the effects of bisphosphonates on bone. Her lab focused on in vivo effects of mechanical strain on bone, developing unloading or physical exercise models in rodents, as well as on more fundamental aspects of mechanical stimulus signal transduction in bone cells. More recently, her main research aimed at further understanding of the role of bone microvascularisation in the bone response to anabolic signals such as mechanical load or PTH and the involvement of VEGF in the remodelling of vasculature and bone. In parallel, she participated to the research led by Dr L Malaval, in her group, on the role of the extracellular matrix Bone Sialo-Protein, a member of the SIBLINGs family.

David W. Dempster, BSc (Hons), PhD, FRMS

David W. Dempster, BSc (Hons), PhD, FRMS is Professor of Clinical Pathology and Cell Biology at Columbia University in New York and a Senior Research Fellow at the Regional Bone Center of Helen Hayes Hospital, West Haverstraw, New York. He received a First Class Honors degree and a PhD from the University of Glasgow in Scotland and completed postdoctoral studies in Switzerland and France.

ΡΟΟ

Co-Chairs: Rachel Davey, Rory Clifton-Bligh Members: Jill Cornish, David Findlay, Jackie Centre, Christina Vrahnas, Tim Cundy

LOC and Organising Committee:

Jill Cornish, Ian Reid, Peter Croucher, Nathan Pavlos, Athena Brunt, Ivone Johnson, Doreen Presnall, Malcolm Blakey



ANZBMS Annual Scientific Meeting

2ND-5TH, SEPTEMBER 2018 | Queenstown

ANZBMS COUNCIL

OFFICE BEARERS 2017

President

Professor Emma Duncan President (Until 19.09.17) Past-President (From 19.09.17) MBBS (Hons) FRCP, FRACP, PhD Senior Staff Specialist in Endocrinology, Royal Brisbane and Women's Hospital Department of Endocrinology Royal Brisbane and Women's Hospital Butterfield St Herston. QLD. 4029 Tel: +61 7 3646 8111 Email: e.duncan@uq.edu.au



Treasurer Associate Professor Nathan J. Pavlos B.Sc (Hons), Ph.D. Head, Cellular Orthopaedic Laboratory Faculty of Medicine, Dentistry and Health Sciences The University of Western Australia 35 Stirling Highway, Crawley WA 6009 Nedlands, WA 6009 Tel:+61-8-9346-2083 Fax: +61-8 9346-3210

Fax: +61-8 9346-3210 Email: nathan.pavlos@uwa.edu.au



President-elect

Professor Peter Croucher President-elect (Until 19.09.17) President (From 19.09.17) BSc PhD Head of Division Bone Biology Laboratory Bone Biology Division Garvan Institute of

MedicalResearch 384 Victoria Street,Darlinghurst, NSW 2010 T:+ 61 (0) 2 9295 8243 F:+61 (0)2 9295 8110l E:p.croucher@garvan.org.au



Honorary Secretary Associate Professor Paul H Anderson BSc (Hon), PhDMusculoskeletal Biology Research Sansom Institute University of South Australia Frome Road Adelaide SA 5001 Tel: 61 08 8222 3244 Fax: 61 08 8222 3518 Email:paul.anderson@unisa.edu.au

President-elect

Assoc. Professor Natalie Sims President-elect (From 10.09.17) St Vincents' Institute Fitzroy. VIC. 3065. T: 03/9231 2555 E: nsims@svi.edu.au



anzems COUNCIL

OFFICE BEARERS 2017

Council Member

Associate Professor Nicholas Pocock MB BS, MD, FRACP (Until 19.09.17) St Vincent's Hospital Dept of Nuclear Medicine Victoria Street Darlinghurst NSW 2010 Tel: 61 02 8382 2216 Fax: 61 02 9361 2619 Email: n.pocock@unsw.edu.au



Council Member Dr Allison Pettit BSc (Biotech), BSc (Hons), Ph.D. Mater Research Institute-UO

Translational Research Institute-OQ Translational Research Institute Level 4, 37 Kent St Woolloongabba. QLD. 4102. P: 073443 7575 E: allison.pettit@mater.uq.edu.au



Council Member

Professor Robin Daly B.Appl. Sci(Hon), PhD Deakin University Centre for Physical Activity & Nutrition Research 221 Burwood Highway Burwood. VIC. 3125 P: 03 9244 6040 F: 03/9244 6017 E: rmdaly@deakin.edu.au



Council Member

Professor Mark Forwood (From 19.09.17) Griffith University Gold Coast School of Medical Science Griffith University QLD. 4222. P: 61 07/5552 7305 E: m.forwood@griffith.edu.au





Council Member

(From 19.09.17)

Private Bag 92019

Auckland, 1142

New Zealand

of Medicine

Professor Jillian Cornish

E: j.cornish@auckland.ac.nz

Department of Medicine, School

University of Auckland

Council Member

(Until 19.09.17)

SBS Department

Tel: 44 023 8077 7624

FRACP

Professor Elaine Dennison

MB BChir MA FRCP MScPhD

Victoria University Wellington,

Wellington. 6140. New Zealand

Email: Elaine.Dennison@vuw.ac.nz

ANZBMS COUNCIL

OFFICE BEARERS 2017

Council Member

Professor Mark Cooper (From 19.09.17) University of Sydney, Anzac Research Institute Concord Repatriation General Hospital Hospital Road Concord. NSW. 2139. P: 0413 783 888 E: mark.cooper@sydney.edu.au

Council Member

Past President Prof Markus J. Seibel MD PhD FRACP FGABJD Bone Research Program ANZAC Research Institute The University of Sydney at Concord Campus Sydney NSW 2139 Tel: 61 2 9767 5000 Fax: 61 2 9767 7472 Email: Markus.Seibel@sydney.edu.au





ANZBMS OFFICE

ANZBMS Secretariat

Ms Ivone Johnson Executive officer 145 Macquarie Street Sydney. NSW. 2000. Ph: +61 2 9256 5405 Fax: +61 2 9251 8174 Email: ijohnson@anzbms.org.au



Administrative Assistant

Mrs Melissa Dupavillon 145 Macquarie Street Sydney. NSW. 2000. Ph: +61 2 9256 5405 Fax: +61 2 9251 8174





145 MACQUARIE STREET SYDNEY, NSW 2000 PHONE: +61 2 9256 5405 FAX: +61 2 9251 8174 EMAIL: ijohnson@anzbms.org.au

ABN: 69 072 086 894