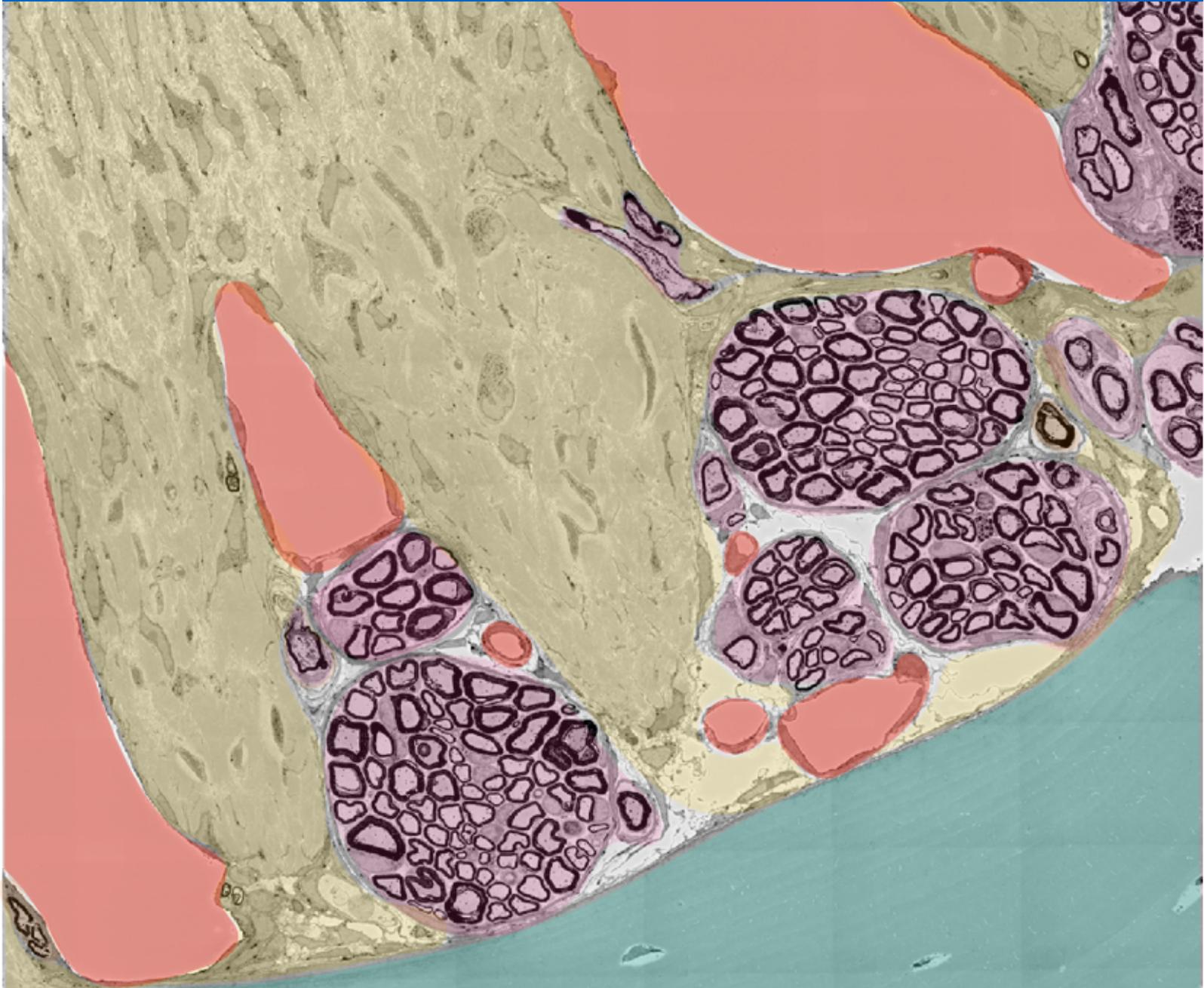


# ANZBMS Newsletter



Bone / Periodontal ligament / Blood vessel / Nerve

**ANZBMS ECI Report and Spotlight**

**ANZBMS Member Awards**

**ANZBMS Member Publication Highlights**

**Calendar of Events**



Cover Image by Dr Kai Chen, Research Fellow, School of Biomedical Sciences, The University of Western Australia. Periodontium – where bone meets ligaments, vessels, and nerves. Captured by scanning electron microscope using a backscattered detector.

# Welcome to the ANZBMS Newsletter

## In this issue

- President's Comment (3-4)*
- Committee Updates (5, 6)*
- ECIC Report (7)*
- ECI Seminar Series: ECI Engage (8)*
- ECI Spotlight (9)*
- ECI Funding Opportunities (10)*
- New member spotlight (11)*
- Lab spotlight (12, 13)*
- Member Awards & Achievements (14)*
- HubLe update (15)*
- Member Publications (16-18)*
- Calendar of Events (20, 21)*

Welcome to the June/July 2024 issue of the ANZBMS newsletter!

In this issue, we present a comment from ANZBMS president Professor Mark Cooper (pages 3 and 4) and updates from the Program Organising Committee (page 5) and Clinical Practice Committee (page 6). The ECIC co-chairs present their plans for the second half of the year (page 7). Find new ANZBMS members and labs highlighted (page 11-13).

Many Australian researchers have attended the ECTS 2024 in Marseille, France and their excellence in research has been recognised by the society. We congratulate all ECTS and other award recipients on their achievements in the past months (page 14). We also want to congratulate ANZBMS members on their publications highlighted in this issue (page 16-18). Don't forget to check out the HubLe news (page 15) and future events highlighted on page 20 and 21, and add them to your calendar.

We are recruiting editorial board members! Email us with a short biography, at [newsletter@anzbms.org.au](mailto:newsletter@anzbms.org.au) if you'd like to join our fantastic team!

All the best and happy reading from the ANZBMS Newsletter Editorial Board!

## ANZBMS Newsletter Editorial Board



**Dr Martha Blank**



**Dr Pholpat Durongbhan**



**Dr Haniyeh Hemmatian**



**Dr Mícheál Ó Breasail**



**Jacob Harland**



**Dr Michelle Maugham-Macan**



**Dr Jakub Mesinovic**



**Dr Lucy Collins**



**Dr Shejil Kumar**

*Next Issue: September 2024*

 [newsletter@anzbms.org.au](mailto:newsletter@anzbms.org.au)

 @ANZBMSoc



# President's Comments



## Professor Mark Cooper

BMBCh PhD FRCP (London) FRACP, GAICD

ANZBMS President  
Head of Clinical School, Concord Clinical School  
Faculty of Medicine and Health  
Patyegarang Precinct

I start my President's report by reflecting on the important developments in the clinical bone setting. Following a recent Pharmaceutical Benefits Advisory Committee (PBAC) recommendation we are set to see a new indication for romosozumab. This is an osteoanabolic drug that works through inhibiting sclerostin, leading to stimulation of the wnt signalling pathway. Later in the year this drug will be available through the Pharmaceutical Benefits Scheme (PBS) as a first line treatment for patients with severe osteoporosis. Being on the PBS will substantially decrease the cost of this medication to the patient. This was an application that ANZBMS heavily supported through the PBAC submission process since it builds on all the science and clinical studies examining how these drugs work. Aligning with these developments the Clinical Practice Committee have organised a further set of online talks for ANZBMS members. The first one of these discussed issues around the use of romosozumab specifically. Others will focus on the role of exercise and lifestyle and skeletal health in some special settings.

ANZBMS has also been advocating for wider access of burosumab, a drug to treat hypophosphataemia that works through inhibiting FGF23. This has been through the development of an online calculator to estimate phosphate clearance. This calculation is a requirement for access to the medication on the PBS and is currently only available through the ANZBMS website. We are also working with another government body (MSAC) to try to obtain public funding for blood measurement of FGF23. This again is an important requirement for giving burosumab on the PBS. Hopefully this application will be successful. I thank the Clinical Practice and Therapeutics Committees for these initiatives which will have a positive impact on the wellbeing of patients with bone disease.

Our Annual Scientific Meeting continues to take shape and looks to be a meeting not to miss. We are meeting jointly with ESA and SRB which means we will have our own independent meeting program but with the opportunity to have joint sessions and for delegates to dip into the sessions of the other societies. I look



# President's Comments

forward to meeting everyone in person in Adelaide in November.

As a society we continue to maintain high standards of governance. In addition to addressing our long term strategic objectives we also have to anticipate and respond to new regulations and requirements. Examples of issues we are working through as a Council include responding to new not for profit (NFP) organisation requirements from the Australian Tax Office. These requirements have made us reflect on whether we should apply to be recognised as a Health Promotion Charity. We are working through the pros and cons of this but are likely to bring this discussion to the AGM in November. Such a change would require changes to our current constitution. If members have

perspectives on this issue please let us know.

Another important issue for our society is to ensure that it maintains adequate cybersecurity. We are determining what changes might make our systems safer and you might see some changes to the way our website works or how we communicate with you. This will be a continuing work in progress.

Finally, I'd like to thank those of you that completed our Membership Survey. We had over 60 responses. Our communications committee are currently analysing the responses prior to a report being considered by Council.

Best wishes,

Professor Mark Cooper



# ANZBMS Committee Updates

## Program Organising Committee

The ANZBMS POC are excited to announce the ANZBMS clinical plenary speaker, **Prof Heide Siggelkow, Endokrinologikum, Germany**. Prof Siggelkow will be speaking about calcium disorders, including the management of hypoparathyroidism.

Broad themes for the meeting include Macro- and Microscopic Imaging in Bone Health, Secondary Fracture Prevention, Bone Health in Chronic Kidney Disease, Multidisciplinary Care in Bone Health, Stem Cells and their Application, Immune Cell Behaviour, Bone Health and Cancer Management.

We have confirmed several national speakers including **Prof Allison Pettit** (University of Queensland), **A/Prof Kathryn Stok** (University of Melbourne), **Prof Christopher Little** (University of Sydney), **Dr Jakub Mesinovic** (Deakin University), **Prof Grahame Elder** (University of Notre Dame), **Dr Melissa Cantley** (University of Adelaide), **Dr Peter Wong** (Westmead Hospital), **A/Prof Paul Mitchell** (Synthesis Medical, NZ). Please refer to the <https://www.esa-srb-anzbms.org.au/anzbms-invited-speakers-live> for more information on our speakers.

ANZBMS POC have partnered with the Bone Health Foundation (BHF) to present the BHF symposium, which will be held on Sunday 10th November, just prior to the welcome event. Currently, our speakers include **A/Prof Paul Anderson** (University of South Australia), and previous ANZBMS/ BHF grant awardees **Dr Jiao Jiao Li** (University of Technology Sydney), **A/Prof Fran Milat** (Monash Health) and **Dr Sandra Iuliano** (Austin Health).

This year ANZBMS are collaborating with SRB and ESA to deliver an interesting and timely debate on artificial intelligence in medical research and clinical practice. Our debaters include **A/Prof Kathryn Stok** (University of Melbourne), **Prof Ralph Müller** (ETH Zurich), **Dr Jodie Avery** (University of Adelaide), and **Prof Chris Gilfillan** (Eastern Health).

We will update you on our B.O.N.E symposium speakers and ECR networking sessions in the next newsletter.



# ANZBMS Committee Updates

## Clinical Practice Committee

### ANZBMS Clinical Challenges in Bone Webinar Series 2024

By popular demand, the Clinical Practice Committee continues its clinician education program in 2024.

This year, we're holding 4 webinars on key clinical themes in the management of bone and mineral disorders.

Sessions will be recorded, held over 4 evenings throughout the year and offer pragmatic, case-based discussions around areas of clinical practice in the management of bone conditions.

Key opinion leaders and experts from the society will lead these sessions with the opportunity for discussion and Q/A.

The sessions will be held on the following themes:

- Osteoporosis therapies and cardiovascular risk, with a focus on sclerostin inhibitors (12<sup>th</sup> June, 6-7:30PM)
- The role and evidence behind exercise, nutrition and lifestyle intervention in osteoporosis (20<sup>th</sup> August, 6-7:30PM)
- Skeletal health in transgender people (11<sup>th</sup> September date, 6-7:30PM)
- Managing skeletal disorders during growth and transition to adulthood - October TBA

To register, click here: <https://www.anzbms.org.au/ccbw/>

### Healthy Bones Australia/ RACGP Position Statement on the Management of Osteoporosis 2024

The new osteoporosis guidelines are now available on the ANZBMS website.

To locate them, click here: <https://www.anzbms.org.au/policies.asp>



# ANZBMS ECIC Report

## ECIC Co-Chairs Report

This year has taken off with a flying start here at the ANZBMS ECIC. Our sub committees have been super busy delivering on their initiatives for the year, and we have collectively been busy planning for another great annual scientific meeting in November!

Our events committee held an 'ECI Engage' series on the 12<sup>th</sup> of April on "Research Without Borders: Why ECIs Should Explore International Opportunities". Our ECI's were lucky enough to hear from 3 invited speakers from our ANZBMS community: Dr Lena Batoon, Dr Ahmed Al Saedi and Dr Ayse Zengin, who shared with us their international experiences. Watch this space, as we are now planning another 'ECI Engage' series for August which is sure to be another hot topic of interest!

Our career development committee are well on the way with the facilitation of the 'Fellowship Coaching Program' - a fantastic and invaluable program for mentees to receive feedback and learn from MCR coaches as well as senior researchers on their Investigator Grant applications. A big thank you to the mentors who are contributing their time to this.

Our clinical subcommittee were successful for all 6 topics proposed to the RACP webinar series, keep an eye on this space with presentations taking place in the latter half of this year - a big thank you to the speakers who have agreed to present.

The ANZBMS ECIC have been working closely with the Endocrine Society of Australia early career committee for the planning of all ECIC events at the upcoming

annual meeting in Adelaide - we highly encourage all ECIs to register for these events. They are a fantastic opportunity to meet and greet your peers, as well as networking opportunities with mid-career and senior researchers and clinicians. It is sure to be a fun meeting, and we can't wait to meet you all in Adelaide in November 10<sup>th</sup>-13<sup>th</sup>, 2024.

On the annual meeting - the ECIC will be facilitating another great year of international speakers under our B.O.N.E program - be sure to keep a close eye on the program schedule so that you can attend our awardee presentations.

As always, if you would like to share anything with us e.g., your successes or ideas for new ECI initiatives, we would love to hear from you. Please contact us at [ecic@anzbms.org.au](mailto:ecic@anzbms.org.au)

Otherwise, happy abstract preparations!



Cassandra Smith and Madhuni Herath  
ANZBMS ECIC Co-Chairs 2024



# *ECIC Seminar Series: ECI Engage*

## **Save the date!**

The next installment in the ECI engage seminar series is coming soon. Be sure to keep your schedules clear so you can take part in another informative session.

The seminar will explore seed funding and the importance of generating pilot data.

Date: Friday 19<sup>th</sup> July

Time: 12:00pm AEST

Speakers: TBD

Be on the lookout for further information from the ECIC.



**Dr Jason Talevski**  
*ECIC Events lead*



# ANZBMS ECI Spotlight



## Dr Jakub Mesinovic

Research Fellow, Institute for Physical Activity and Nutrition (IPAN),  
School of Exercise and Nutrition Sciences  
Deakin University, Melbourne, Victoria

### Can you briefly describe what your research is about / what are your research interests?

My research focusses on further understanding the relationship between metabolic and musculoskeletal health and examining how they are influenced by different exercise and dietary interventions. During my PhD, I conducted randomised controlled trials to explore the following research questions in older adults with obesity: whether (1) vitamin D supplementation influences exercise responsiveness and calcium-phosphate metabolism in individuals with vitamin D deficiency (2) high-intensity resistance and impact exercise (Onero™/LIFTMOR) mitigates weight loss-related muscle and bone loss (3) lifestyle-integrated functional exercise can reduce fall risk. Since commencing my postdoctoral fellowship in 2022 my research interests have broadened to explore the effectiveness of evidence-based exercise and weight loss prescriptions delivered via digital technologies (e.g. smartphones), for improving the abovementioned health outcomes, in various older adult populations.

### What motivates your research / what are your goals for the future?

I am motivated by the goal of improving health and wellbeing in the growing population of older adults with obesity and poor metabolic health (i.e. type 2 diabetes). This population often faces unique health issues and barriers to diet and exercise that require personalised solutions, and I am dedicated to finding effective strategies to address these challenges. I want to establish an international reputation for expertise and leadership in developing, implementing, and increasing the uptake of evidence-based lifestyle interventions to enhance metabolic and musculoskeletal health in older adults with obesity.

### Do you have tips that would help ECIs in this stage of their career?

**Collaborate, collaborate, collaborate!** This is at the top of my list as an ECI. Working in silos prevents people and teams from performing at a level necessary to remain competitive for funding in the long term. Five people each contributing one-fifth of the effort you're putting into a project can sustain the intensity much longer than you can, and they have more time to dedicate to other projects that can help with career progression. As the saying goes, 'many hands make light work'. Collaborating with others enhances productivity and innovation, provides additional resources, facilitates interdisciplinary research, and opens more doors.



# ECI Funding Opportunities

Grant/Fellowship Scheme*	Application Period
<a href="#"><u>MRFF 2024 Early to Mid-Career Researchers Grant</u></a>	Deadline: 24 July 2024
<a href="#"><u>Other MRFF grant opportunities</u></a>	Closing date varies
<a href="#"><u>Arthritis Australia Grants</u></a>	Closing date: 12 July 2024
<a href="#"><u>ANZBMS Bone Health Foundation Grant</u></a>	Closing date: 17 July 2024
<a href="#"><u>Christine and T. Jack Martin Research Travel Grant</u></a>	Closing date: 2 August 2024
<a href="#"><u>ANZBMS Travel Grant</u></a>	Closing date: 2 August 2024
<a href="#"><u>NHMRC Investigator Grants</u></a>	Closing date: 15 August 2024
<a href="#"><u>Professor Philip Sambrook Young Investigator Travel Award</u></a>	Closing date: 20 September 2024
<a href="#"><u>The MJA Award for Excellence in Medical Research</u></a>	Deadline: 31 December 2024

\*Clicking on the scheme name will redirect you to the grant/fellowship website.



# ANZBMS New Member Spotlight

## Mystica Jude

Bachelor of Biomedical Science Honours student, Monash University

**Research Category:** Clinical

**Research interests:** Further understanding the muscle-bone strength relationship across the adult life course using DXA and HR-pQCT.

**What I hope to gain from joining ANZBMS:** I hope to enhance my knowledge and skills in the field of bone and mineral research and complete the ANZBMS clinical densitometry course which will help me excel in my Honours year.



## Dr Yuandan Zhang

Senior Medical Officer, Mater Research and Mater Research Institute, University of Queensland

**Research category:** Basic

**Research Interests:** My current project focuses on genetic/genomic investigation of abdominal aortic calcification (AAC) and its associations with other health risk factors.

**What I hope to gain from joining ANZBMS:** To build a network and communicate with other professionals. I am keen to learn from other experts about genetic aspects of bone and mineral disorders.





# ANZBMS Lab Spotlight

**It takes a team to make science happen. Here's a snapshot of members from a young lab, and what they're up to!**

## **Li Lab, University of Technology Sydney**

*Featuring: Dr Jiao Jiao Li (Lab Head) and Dr Ye Zhang (new post-doc)*

### **Dr Jiao Jiao Li, Lab Head**

**How long have you been in this lab/group?** I started our young lab since joining UTS in 2020, now almost at 4 years.

**What topics are researched in your lab?** Our lab has several project streams under the broad umbrella of regenerative medicine, currently focusing on musculoskeletal tissues and diseases but also expanding into other chronic diseases affecting the lung, liver, brain etc. We are looking into stem cells and extracellular vesicles as regenerative therapies, new biomaterial and hydrogel platforms for therapeutic delivery, and organ-on-a-chip models.

**What was your career trajectory leading to this moment?** I worked in casual teaching and industry roles for a little bit immediately after my PhD, which was focused on tissue engineering and biomaterials. I was fortunate to have then landed a NHMRC early career fellowship, through which I trained at the Kolling Institute and developed research interests into stem cells and osteoarthritis. Following the fellowship, I was fortunate to have the opportunity to start my own lab at UTS as a Lecturer in the School of Biomedical Engineering, and was promoted to Senior Lecturer in 2023. Also in 2023, I was promoted to becoming the mother of a very special little girl after a long journey.

**What's your mentorship style?** My mentorship values are based around individuality and inclusion. I like to listen to each of my team members and understand their short- and long-term goals (or develop these with them if they're unsure), and draw on my resources to help each in an individual way to realise their goals. I also mentor my team with the ground values of diversity and inclusion, so each member can respect their peers within and outside the group as scientists and as individuals. I hope to be doing what I can to help my team members reach their aspirations, be it in research, industry, clinical roles, or other career paths.

**What's a fun fact about your lab?** Every now and then we make our lab meeting into a social event, and make sure everyone is well fed with good food and coffee before the ideas flow in. I am proud of the diverse expertise of our team members! Including hobbyist psychologist, musician, sports coach, chef, and carers of multiple species of companion animals.



# ANZBMS Lab Spotlight



Li Lab Christmas get-together: (left to right) Jasmine (PhD), Janey (postdoc), Lu (PhD), Joseph (PhD), JJ, Devina (PhD), Evelyn (Honours), Rosie (Honours)

## Dr Ye (Janey) Zhang, new postdoc

### How long have you been in this lab?

I joined Li Lab in February 2024 after I got my PhD in mechanical engineering, so I've been here for about three months now.

### What inspired you to choose the lab?

I chose the Li lab for several compelling reasons. Firstly, I am very interested in the cutting-edge research being conducted in the lab. The opportunity to further develop my expertise in organ-on-chip technology while acquiring new skills and knowledge in the bioengineering and biomedical field is very appealing to me. Moreover, the leadership of Dr. Li and the remarkable team members have been a significant source of inspiration for me. Their exceptional achievements both professionally and personally create a supportive and motivating environment that I am eager to be a part of.

### What are you excited to do?

I'm genuinely excited about utilising my interdisciplinary background to offer new insights to our ground-breaking research projects. Integrating knowledge from diverse fields allows me to craft innovative and comprehensive solutions, which is incredibly fulfilling. This passion fuels my continuous growth and drives me to become a valuable asset for our team.

### What's a fun fact about your lab?

Our lab is just a blast to be in! It's like a big family full of diverse personalities, and everyone's awesome in their own way. With all these different perspectives, you're always getting fresh ideas that make you see things in a whole new light, making our vibe super inclusive and fun.



# ANZBMS Member Awards



**Kai Chen**

**University of Western Australia**

2024 ECTS New Investigator Award



**Martha Blank**

**St Vincent's Institute of Medical Research**

2024 ECTS Travel Award



**Marc Sim**

**Edith Cowan University**

2024 ECTS Nurses & Allied Health Award



**Jack Dalla Via**

**Edith Cowan University**

2024 Best Clinical Article Award



**Peter Ebeling**

**Monash University**

2024 IOF Presidents Award



# ANZBMS Committee Updates

## *HubLe (IFMRS Learning Environment)*

### **IFMRS June Spotlight on... Bone Up podcast**

Bone Up is a podcast launched by Dr Richard Abel, PhD and Prof David Armstrong, MD from the UK's Imperial College that's about all matters of bone health. Each episode includes interviews and discussions on bone health, bone disease, and how we and our bones can live longer happier, and healthier lives. The podcast is aimed at all, with patients, clinicians, and scientists alike tuning in monthly to find out about all things bone-related.

Last month, Richard and David conducted several interviews at the ECTS Congress, including some of the young prize winners and Jeroen Guerts and Alex Ireland about the [ECTS Academy](#) and their research supporting young scientists.

**Have a listen:** <https://tinyurl.com/26ydnpz>

They also interviewed IFMRS CEO Federico Moscogiuri, IFMRS Secretary Ralph Müller, and HubLE Editor-in-Chief Aline Bozec, which will be available in a week – so follow IFMRS on [Twitter](#) and [LinkedIn](#) and be the first to listen – [LINK](#).

We will soon be making all Bone Up podcasts available on [HubLE](#).

In the meantime, you can listen to all previous episodes [here](#).

The newest [episode is available here](#).



[Kim AS](#), [Taylor VE](#), [Castro-Martinez A](#), [Shakal S](#), [Zamerli A](#), [Mohanty S](#), [Xiao Y](#), [Simic MK](#), [Wen J](#), [Chai R](#), [Croucher PI](#), [Center JR](#), [Girgis CM](#), [McDonald MM](#). Temporal patterns of osteoclast formation and activity following withdrawal of RANKL inhibition. *J Bone Miner Res.* May 2024;39(4):484-497.

## Featured author:

### Albert Kim

PhD Candidate, Bone Biology Unit, Garvan Institute of Medical Research, Sydney, NSW  
E:a.kim@garvan.org.au

## What is the background of the study?

Denosumab discontinuation leads to bone loss and increased fracture risk, which is driven by increased bone resorption by osteoclasts. Current treatment strategies targeting osteoclasts are unable to prevent this rise in bone resorption. Our study utilised a mouse model to examine the changes in osteoclast behaviour during this phenomenon.

## What did you find?

Consistent with real-world observations, our model demonstrated BMD gains on treatment and loss following discontinuation and longer treatment led to increased rate of bone loss following treatment withdrawal. We found that the processes that drive the formation of osteoclasts following denosumab discontinuation, such as changes in Rankl gene expression, occurs earlier and before we can detect bone loss by DXA.

We showed that the marker of osteoclast activity, serum TRAP rises before bone loss is observed and before there is a rise in serum P1NP and CTX, which are markers we use in clinical practice to guide treatment decisions.

## What is the application of these findings?

Currently we wait until denosumab has worn off, or there is bone loss. We wait until there is evidence of bone loss as measured by serum CTX, a product of bone breakdown. Our findings show that this may be too late as the processes that drive osteoclast formation and bone loss occurs before we can observe bone loss. This provides exciting new opportunities to explore different approaches to sequential therapy following denosumab discontinuation. Our findings support the need for trials examining earlier intervention following denosumab discontinuation and using alternative markers such as serum TRAP to guide sequential therapy.



[Nie T.](#), [Venkatesh VS.](#), [Golub S.](#), [Stok KS.](#), [Hemmatian H.](#), [Desai R.](#), [Handelsman DJ.](#), [Zajac JD.](#), [Grossmann M.](#), [Davey RA.](#) **Estradiol increases cortical and trabecular bone accrual and bone strength in an adolescent male-to-female mouse model of gender-affirming hormone therapy.** *Bone Res.* Jan 2024;**12(1):1.**

## Featured author:

### Tian Nie & Varun Venkatesh

Department of Medicine, Austin Health, University of Melbourne, Melbourne, VIC  
E:varun.ventakesh@unimelb.edu.au

## What is the background of the study?

Adolescent transgender girls commonly undergo pubertal suppression with gonadotropin releasing hormone analogues (GnRHa) followed by gender affirming hormone therapy (GAHT) to align their physical characteristics with their gender identity. Despite it being well established that alterations in sex steroid concentrations can have a profound effect on skeletal integrity there is a paucity of data related to the effects of GAHT on bone microstructure and fracture risk, particularly in adolescent trans girls.

## What did you find?

To address this key knowledge gap, we generated a male-to-female mouse model of pubertal suppression and feminising GAHT. We showed that a sustained, high dose of estradiol, equivalent to the peak estradiol concentrations observed during the estrus cycle in female mice, in the pubertally suppressed male-to-female mice was anabolic for bone, ameliorating the deficit in bone mass and strength following puberty suppression. Estradiol treatment in pubertally suppressed male-to-female mice markedly increased cortical bone in the diaphysis leading to an increase in bone strength and stiffness. In the metaphysis, trabecular bone increased the newly formed trabeculae arising from the growth plate, mineralising surface/bone surface and bone formation rate consistent with an anabolic action of estradiol to stimulate osteoblast proliferation.

## What is the application of these findings?

Our findings indicate that maintaining bone health and preventing long-term fractures in transgender adolescent girls receiving pubertal suppression and feminising hormone therapy may be achievable by identifying a suitable estradiol dosage that protects bones without causing harmful side effects. Our data aligns closely with a recent clinical study by Boogers et al., 2023, which showed that standard doses of 2mg of estradiol were inadequate for preserving bone health in trans girls, while a higher dose of 6mg of estradiol proved to be more effective. Together, our findings underscore the value of utilising animal mouse models to understand the impact of GAHT on skeletal health, an insight not attainable through human studies alone. Moreover, they emphasise the necessity of further investigations into tailoring estradiol doses to individual transgender individuals to mitigate fracture risks.



[Liu B, Ng CY, La PBD, Wong P, Ebeling PR, Singhal S, Phan T, Trinh A, Milat F.](#) Osteoporosis and fracture risk assessment in adults with ischaemic stroke. *Osteoporos Int.* May 2024.

## Featured author:

### Anne Trinh

Hudson Institute of Medical Research, Monash Health, Monash University, Melbourne, VIC

E: [anne.a.trinh@hudson.org.au](mailto:anne.a.trinh@hudson.org.au)

## What is the background of the study?

Stroke is a risk factor for osteoporosis and fracture due to a number of factors including bone loss from immobility, balance difficulties and vitamin D deficiency. Previously, a bedside assessment tool called the FRAC-stroke score had been developed to predict risk of fracture post ischaemic stroke and included: modified rankin score, age, sex, previous history of falls, fracture and osteoporosis, diagnosis of rheumatoid arthritis.

## What did you find?

We validated this score in an Australian population and found that a score of 12 or more was highly predictive of fracture. In the 12 months following stroke, over 30% of our cohort had a fall and 8.4% had a minimal trauma fracture. Those who fractured had a higher FRAC stroke score (20.4) than those who did not (8.9).

## What is the application of these findings?

Stroke should be considered as a risk factor for imminent fracture and timely management is critical. The FRAC-stroke score can be easily calculated by the bedside, with a score of  $\geq 12$  predicting those at high risk of fracture in the next 12 months.

## ***ANZBMS Researchers: We want to share & celebrate your wins!***

We are on the lookout for members who have celebrated success (awards and publications) to be highlighted in the Spotlight or Publication sections for the upcoming editions of the newsletter. If you know of someone or want to self-nominate, please email us at [newsletter@anzbms.org.au](mailto:newsletter@anzbms.org.au)



**WE WANT  
YOU!**

***The ANZBMS Newsletter Editorial Board is  
searching for new members!***

Open to all ANZBMS members at any stage in their career. For more information and to apply, please e-mail [newsletter@anzbms.org.au](mailto:newsletter@anzbms.org.au) with up to 150 words explaining why you would be a good addition to the newsletter team.

# Calendar of Events

Join us at **CABS 2024** in  
Sheffield, England  
July 12-14, 2024



2024  
**ASBMR  
ANNUAL  
MEETING**



SEPTEMBER 27-30, 2024  
METRO TORONTO CONVENTION CENTRE  
TORONTO, ON, CANADA

# ISBM 2024

MaRS Center • Toronto, ON, Canada  
Sept 30th to Oct 3rd, 2024



XVIth Congress of the International Society  
of Bone Morphometry

<https://www.bonemorphometry.org/isbm-2024/>





# Calendar of Events

We are excited to invite you to the 24th International Workshop on  
Quantitative Musculoskeletal Imaging

# QMSKI 2024

The Barossa Valley  
South Australia  
November 3-8 2024



REGISTRATION & ABSTRACT  
SUBMISSIONS OPEN  
FEB 2024



ABSTRACT SUBMISSION  
CLOSES  
12 APRIL 2024



EARLYBIRD REGISTRATION  
CLOSES  
10 MAY 2024



QMSKI BEGINS!  
3 - 8 NOV 2024

**SAVE THE DATE**

# ESA-SRB ANZBMS 2024

in conjunction with ENSA

10-13 November 2024  
Adelaide Convention Centre, South Australia