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# **BOOKLET INDIGENOUS ARTWORK 'LOST BUT NOT FORGOTTEN'**

# 'Lost But Not Forgotten' Artwork Created By: Jared.L.Coolwell 2022 ©

# Style: Modern Australian Aboriginal Art.

Firstly I would like to acknowledge the Yugambeh people and the Kombumerri tribe whose land we preside on and all past, present and future elders. Gowanda Many years before, their world would change, there was a man named Gowanda, amongst the tribe who was famous for his great training of dogs, that would help the men hunt wallaby, kangaroo, emu and other animals. When it was his time to pass, due to his great teaching ways, he was turned in to a dolphin. Then one day many years later a boy from the tribe saw a dolphin swimming amongst the waves, he knew it was Gowanda so he fun to tell the rest of the tribe. They knew it must be him as he had a white top fin so he could be recognised by them. He had become a dolphin to teach the younger dolphins lore for helping their land brothers and sisters. On Quandamooka country it is taught that when you slap your spear or sticks on the water, dolphins when available, will drive the fish into the spears of men or the nets of women and children. Then in return the tribe would give thanks and share. This is the lore Gowanda teaches the younger dolphins even to this day. He waits to hear again the songs of his tribe, the slaps of the spear and sticks, calling to him for his help once more from his land brothers and sisters. This painting is representation of recorded significant sites around the convention centre. Campsite with the fire in the centre and multi-colour U shapes represent us at the convention centre and the many different people you will find here. The site with a red line and Mirrabooka (southern cross) is a recorded burial site. The area is called Kombumerri Park and is the closet site to the convention centre. It was recorded as a site after 1965 the Broadbeach residents there found human bones appearing in soil sold by a local landscaper excavating the Broadbeach wetlands. Further excavation of the park done by Laila Haglund, who had testing done, dated the bones to be 1,200 years old. When the local elders were asked what they wished to be done with the bones they asked if they could be placed back from where they come from and are now located unmarked in the park placed back as close to their original sites that permits. Thanks to Laila Haglund and her recordings. The site with yellow line was recorded as a large gathering area for the local tribes. Every so often other tribes would come from great distances and visit here for feasting, dancing, sharing news, celebration of marriages, etc. This was also supported by a large mitten that's was recorded, found in the early 1900's when John Elliot built a sugar mill on the location which was called the Bundall Sugar Mill and is now a historical museum. The campsite with with U shapes with white feet was recorded in the 1900's, by early settlers of the area, as where the local tribe would do dancing. The campsite with with U shapes, white feet and a campfire is Jebbribillum Bora Ring. This was a place for initiation, ceremony, dancing and feasting. The Bora Ring is still there fenced off with a war memorial dedicate to serving indigenous men and women from 1914 to 1991. The dolphin is Gowanda, who even to this day, watches over all who reside on his country. They may be gone and some maybe lost but we will never forget them. 'Lost but not forgotten'

We would like to take a moment to say thank you all for inviting us back. We love sharing indigenous art, culture and knowledge with you all. Jared and Letitia.

Please take note spelling of names may vary due to dialect or the use of the English alphabet. Based on the Yungambeh language.

Written By Jared Coolwell (artist) and Letitia Lennon (manager) Co-Owners of J.L.Coolwell & L.M.Lennon Est.2016 ©2022 Jared Coolwell Aborignal Arts

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# WELCOME FROM THE ANZBMS - MEPSA - ANZORS COMMITTEE

The Program and Local Organising Committee Chairs, and the Presidents of the Australian and New Zealand Bone and Mineral Society (ANZBMS), the Molecular & Experimental Pathology Society of Australasia (MEPSA) and the Australian & New Zealand Orthopaedic Research Society (ANZORS) extend the warmest welcome to you at our first ever combined Annual Scientific Meeting on the stunning Gold Coast, Australia, from the 1<sup>st</sup> to the 4<sup>th</sup> of August, 2022.

Whether you are a young investigator, clinician, basic scientist, allied health professional, or industry representative, there is much for you at this year's meeting.

The Program Organising Committee, co-chaired by Ayse Zengin, Peter Simm and Hong Zhou, have put together an exciting program of cutting-edge science in musculoskeletal health and tissue pathology that will appeal to both clinician and basic scientists.

Key session themes include:

- Comparative Biology
- Infection, Immunity and Inflammation
- Models of Human Disease
- Photobiology
- Insights from allied health and consumer groups
- Therapeutics
- Lifecourse managements of musculoskeletal health
- Musculoskeletal and Regenerative Biology
- Biomechanics
- Musculoskeletal Imaging
- Innovation in Bioengineering and Orthopaedics
- Translational Orthopaedics
- Vitamin D

Come along and pick a team at the Therapeutics versus Exercise debate – sure to spark some fireworks.

On the social, networking and career development front, we'll have the traditional Bones and Brews networking event, a speed networking session, a Clinical Cases in Metabolic Bone Diseases Seminar dinner, and a career development lunch 'Building Resilience in STEM'. Along with the always popular Welcome Function with plenary posters, the Conference Gala Dinner is always a meeting highlight where you can catch up with friends and colleagues, celebrate award recipients, and dance the night away to a live band.

We can't wait to re-establish face-to-face connections, networks and alliances for scientific discourse – the true purpose, indeed *definition*, of a scientific meeting.

Welcome all.

Belinda Beck

LOC Chair

# SOCIETY SECRETARIATS

# ANZBMS

Ivone Johnson ijohnson@anzbms.org.au www.anzbms.org.au

# MEPSA

Katie Dixon katie.dixon@sydney.edu.au www.mepsa.org ANZORS

Martina Barzan m.barzan@griffith.edu.au www.anzors.org.au

Conference Secretariat – ASN Events Jim Fawcett Jim.f@asnevents.net.au www.asn.events

# **ANZBMS – MEPSA – ANZORS 2022 COMMITTEES**

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**Miss Kaitlyn Flynn** 

**Dr Amy Harding** 

Griffith University

University of Queensland

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**Dr Grant Parnell** 

ANZORS POC

A/Prof Egon Perilli

**ANZORS POC Co-Chair** 

University of Sydney

**MEPSA POC Co-Chair** 

A/Prof Nathan Pavlos

University of Western Australia

Flinders University Adelaide

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**Dr Martina Barzan** *Griffith University* ANZORS

**Prof Belinda Beck (Chair)** *Griffith University* ANZBMS

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# EARLY CAREER COMMITTEE MEMBERS

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**Dr Niloufar Ansari** Monash Institute of Pharmaceutical Sciences ANZBMS

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**Dr Bridie Mulholland** University of Wollongong ANZBMS

**Dr Pamela Rufus-Membere** Deakin University ANZBMS

**Dr Hanh Nguyen** *Monash Health & Western Health* ANZBMS PAST ANZBMS OFFICE BEARERS 1988-2022

# ANZBMS President

ANZBMS President Elect ANZBMS Honorary Secretary ANZBMS Treasurer ANZBMS Past President Prof Mark Forwood Prof Gustavo Duque Prof Mark Cooper A/Prof Rachel Davey Prof Natalie Sims

# **ANZBMS Councillors**

Dr Melissa Cantley, A/Prof Cherie Chiang, A/Prof Dawn Coates, A/Prof Josh Lewis & Dr Michelle McDonald

### VICE PRESIDENT YEAR PRESIDENT SECRETARY TREASURER COUNCILLORS PRESIDENT ELECT A.Need, R.Prince, J.Eisman, I.Reid, 1990 -T.J.Martin M.Hooper K.Ibbertson, D.Fraser, P.Sambrook, Steering Group E.Seeman 1991-93 -J.Eisman, A.Goulding, D.Perry-Keen, T.J.Martin M.Hooper M.Hooper Inaugural Council J.Wark, A.Need, N.Kent P.Sambrook, A.Need, R.Prince, 1993-95 J.Eisman I.Reid N.Kent J.Wark D.Perry-Keene, E.Seeman P.Sambrook, A.Need, R.Prince, 1995-97 I.Reid N.Kent J.Moseley P.Ebeling D.Perry-Keene R.Prince, I.Reid, M.Hooper, 1997-99 N.Kent P.Ebeling J.Moselev P.Ebeling H.Morris, M.Forwood J.Moselev, H.Morris, E.Mackie, 1999-01 P.Ebeling M.Hooper J.Cornish M.Forwood M.Zheng R.Mason, R.Price, D.Findlay, M.Hooper 2001-03 E.Seeman J.Cornish M.Forwood G.Nicholson R.Mason, R.Price, G.Nicholson, 2003-05 E.Seeman J.Cornish D.Findlay M.Forwood P.Sambrook R. Mason, G. Nicholson, P. Nash, M. 2005-07 J. Cornish P. Sambrook D. Findlay R. Price Gillespie P. Nash, N. Fazzalari, M. Kotowicz, T. 2007-09 P. Sambrook R. Mason M. Gillespie R. Price Cundy P. Sambrook, N. Sims, M. Seibel, G. 2009-11 R. Mason M. Gillespie N. Fazzalari R. Price Thomas, N. Gilchrist N. Sims, M. Bolland, C. Inderjeeth, 2011-13 M.Gillespie M. Seibel G. Atkins G. Thomas N. Pocock, R. Mason N. Sims, M. Gillespie, N. Pocock, N. 2013-15 G. Atkins M. Seibel F. Duncan G. Thomas Pavlos, E. Dennison R. Daley, R Buchbinder, N. Pocock, P. Anderson 2015 - 17 P. Croucher N. Pavlos F. Duncan A. Pettit, E. Dennison A.Pettit, R.Daly, M.Cooper, 2017 – 19 P.Croucher N.Sims P.Anderson N.Pavlos J.Cornish, M.Forwood, E.Duncan A. Pettit, R. Davey, M. Cooper, J. 2019 - 21 N. Sims M. Forwood P. Anderson N. Pavlos Cornish, G. Duque, P. Croucher M. Cantley, C. Chiang, D. Coates, J. 2021 - 22 M. Forwood G. Duque M. Cooper R. Davev Lewis, M. McDonald

# SPONSORS & AWARDS OF THE AUSTRALIAN & NEW ZEALAND BONE & MINERAL SOCIETY

ANZBMS AWARD SPONSOR



# ROGER MELICK YOUNG INVESTIGATOR AWARD



This award is presented to commemorate the contribution of Dr Roger Aziz Melick to endocrinology and student education. Roger Melick died in November 1986 after a long battle with cancer. He trained in endocrinology with Fuller Albright, in Boston, and joined The Royal Melbourne Hospital as the third member of the foundation Department of Medicine. He was appointed Dean of the Clinical School in April 1979 and he was forced to retired because of his illness during 1986. Roger Melick was particularly known for his kindness, consideration and empathy for both patients and students. The prize is awarded annually to young members of the Society working towards a higher degree (including FRACP).

| 1996 | Vicky Kartsogiannis  | 2005 | James Doecke     | 2014 | Hua Ying          |
|------|----------------------|------|------------------|------|-------------------|
| 1997 | Linda Crofts         | 2006 | Yosuke Kawasaki  |      | Irina Kulina      |
| 1998 | Janelle Barry        | 2007 | Stella Foley     | 2015 | Niloufar Ansari   |
| 1999 | Liza-Jane Raggatt    |      | Garry Williams   | 2016 | Christina Vrahnas |
| 2000 | Sandra Iuliano-Burns | 2008 | Jonathan Gooi    | 2017 | Mahmoud Bakr      |
|      | Nathan Pavlos        | 2009 | Nicola Lee       | 2018 | Jun Li            |
| 2001 | David Good           | 2010 | Irene Zinonos    | 2019 | Amy Harding       |
| 2002 | Kun Zhu              | 2011 | Chiaming Fan     | 2020 | James Smith       |
| 2003 | Agatha Labrinidis    | 2012 | Farzin Takyar    | 2021 | Ruby Oberin       |
|      | Xiaofang Wang        |      | Audrey Chan      |      |                   |
| 2004 | Susan Allison        | 2013 | Asiri Wijenayaka |      |                   |
|      | Kirk Ho Man Yip      |      |                  |      |                   |

# CHRISTOPHER AND MARGIE NORDIN YOUNG INVESTIGATOR POSTER AWARD



This Award is named in honour of the outstanding and major clinical investigations into disorders of bone and mineral metabolism made by Professor Christopher Nordin and his contributions to the ANZBMS. Professor B.E Christopher Nordin was a senior specialist at the Institute of Medical and Veterinary Science in Adelaide, and the man credited with drawing the medical community's attention back to the link between calcium deficiency and osteoporosis (brittle bones).

| 1997 | Anne Nelson       | 2005 | Mark Bolland      | 2013 | Yu Wen Su             |
|------|-------------------|------|-------------------|------|-----------------------|
|      | Hidenori Murata   |      | Catherine Wang    | 2014 | Masato Koike          |
| 1998 | Marianne Holzherr | 2006 | Andrew Hattam     | 2015 | Dzenita Muratovic –   |
| 1999 | Tanya Uebergang   |      | Estabelle Ang     |      | Clinical,             |
| 2000 | Josef Kaplan      | 2007 | Taksum Cheng      |      | Scott Youlten – Basic |
| 2001 | Rebecca Jackson   | 2008 | Hasnawati Saleh   | 2016 | Audrey Chan           |
| 2002 | Nathan Pavlos     | 2009 | Ee-Cheng Khor     | 2017 | Scott Youlten         |
| 2003 | Nicole Walsh      | 2010 | Kylie Alexander   | 2018 | Alexander Rodriguez   |
|      | Rouha Granfar     | 2011 | Shek Man Chim     | 2019 | Amy Ribet             |
| 2004 | Laura Gregory     | 2012 | Alvin Ng          | 2020 | Ruby Oberin           |
|      | Mark Bolland      |      | Marie-Luise Wille | 2021 | Amy Ribet             |
|      |                   |      |                   |      |                       |

# CHRISTINE AND T JACK MARTIN RESEARCH TRAVEL GRANT



This grant is offered by the ANZBMS in memory of Christine Martin and to honour the outstanding and major scientific contributions of Professor T Jack Martin to bone and mineral research and his contributions to associates and trainees in teaching, research, and administration.

| 2002 | Catherine Middleton- | 2008 | Roger Zebaze      | 2015 | Christina Vrahnas   |
|------|----------------------|------|-------------------|------|---------------------|
|      | Hardie               | 2009 | Bich Tran         | 2016 | Audrey Chan         |
| 2003 | Vicky Kartsogiannis  | 2010 | Garry Williams    | 2017 | Alexander Rodriguez |
| 2004 | Kerrie Sanders       | 2011 | Julie Quach       | 2018 | Thao Ho-Le          |
| 2005 | Susan Allison        | 2012 | Ashika Chhana     | 2019 | Sabashini Ramchand  |
| 2006 | Mark Forwood         | 2013 | Yohann Bala       | 2020 | *Not Awarded        |
| 2007 | Brya Matthews        | 2014 | Michelle McDonald | 2021 | *Not Awarded        |

# ANZBMS BONE HEALTH FOUNDATION GRANT

2021 Michelle McDonald, Fran Milat

# AMGEN / ANZBMS OUTSTANDING ABSTRACT AWARD

The Council of ANZBMS wishes to recognise the high standard of bone and mineral research presented at the Annual Scientific Meeting. The Program Organising Committee will award a prize to the basic and clinical abstracts receiving the highest scores.

| 2003<br>2004 | Rob Will, Amanda Devine<br>Roger Zebaze         |      | Brennan, Jasreen Kular,<br>Markus Seibel |      | Natalie Hyde, Michelle<br>McDonald       |
|--------------|---|------|--|------|--|
| 2004         | Christine Rodda                                 | 2011 | lan Reid, Asiri Wijenayaka               | 2017 | Victoria D Leitch, Emma M                |
| 2005         | Markus Seibel, Julian<br>Quinn                  | 2012 | Ego Seeman, Rachelle<br>Johnson          |      | Wade, Michelle M<br>McDonald, Ego Seeman |
| 2006         | Yosuke Kawasaki, Julie                          | 2013 | Peter Ebeling, Rossana                   | 2018 | Ian Reid, Nathan Pavlos                  |
|              | Kuliwaba, Stella Foley,                         |      | Nogueira, Simon                          | 2019 | Kai Chen, Robin Daly                     |
|              | Dana Bliuc, Jonathan Gooi,                      |      | Junankar, Narelle                        | 2020 | Sandra Iuliano, Peter                    |
|              | Hugh Zhang                                      |      | McGregor, Jinwen Tu                      |      | Ebeling, Audrey Chan,                    |
| 2007         | Colin Dunstan, Richard                          | 2014 | Allison Pettit, Paul                     |      | Victoria Leitch, Tsuyoshi                |
|              | Prince, Maria Chiu, Natalie                     |      | Baldock, Jinwen Tu, Roger                |      | Isojima                                  |
|              | Sims, Paul Baldock, Ian                         |      | Zebaze, Kirtan Gandaz                    | 2021 | Dana Bliuc, Ryan Chai,                   |
|              | Parkinson, Hong Zhou                            | 2015 | Michelle McDonald,                       |      | Alexander Corr, Albert                   |
| 2008         | Robert Kalak, Andrew                            |      | Allison Pettit, Audrey                   |      | Kim, Alexander Rodriguez                 |
|              | Grey  |      | Chan, Le Phong Thao Ho,                  | 2022 | Charles Inderjeeth,                      |
| 2009         | Vicky Kartsiogiannis,                           |      | Ayano Nakayama                           |      | Michael J Rogers,                        |
|              | Nguyen Nguyen                                   | 2016 | Nicola Lee, Steven                       |      | Minghao Zheng, Brya                      |
| 2010         | Markus Seibel, Emma<br>Walker, Iris Wong, Sarah |      | Watson, Emma Walker                      |      | Matthews, John Eisman                    |

## ANZBMS CLINICAL RESEACH EXCELLENCE AWARD

MSD, through the Merck Research Labs have a long history in bone research and continue to achieve clinical innovations in this field. While the scientists at Merck are dedicated to exploring new ways to address health problems, they also recognize that the best scientific discoveries often emerge from collaboration with clinical researchers outside Merck laboratories. This award is offered to recognise and support clinicians in or within 10 years of postgraduate training who are contributing to clinical research in the field of bone-related disorder.

| 2012 | Belal Khan      | 2015 | Hanh Nguyen | 2018 | Jasna Aleksova      |
|------|-----------------|------|-------------|------|---------------------|
| 2013 | Syndia Lazarus  | 2016 | Thach Tran  | 2019 | Alexander Rodriguez |
| 2014 | Masakazu Kogawa | 2017 | Weiwen Chen |      |                     |

# ANZBMS KAYE IBBERTSON AWARD FOR BONE AND MINERAL MEDICINE

This Award is named in honour of the outstanding career and major investigations into skeletal disorders made by Professor Kaye Ibbertson, and his contributions to the ANZBMS.

| No. of | 2005<br>2006<br>2007<br>2008<br>2009<br>2010<br>2011 | Roger Zebaze<br>Julie Pasco<br>Tania Winzenberg<br>Paul Baldock<br>Mark Bolland<br>Kun Zhu<br>Susannah O'Sullivan | 2014<br>2015<br>2016<br>2017<br>2018<br>2019 | Nicole Yu<br>Joshua Lewis<br>Rachelle Johnson<br>Michelle McDonald<br>Feitong Wu<br>Dawn Aitken<br>Fran Milat |
|--------|--|---|--|---|
| 4      |  |   |  |   |
|        | 2012<br>2013   | Emma Duncan<br>Tara Brennan-Speranza  | 2020<br>2021                                 | David Scott<br>John Kemp  |

# SOL POSEN RESEARCH AWARD

This Award is named in honour of Professor Sol Posen who was one of the pioneers in the field of bone and mineral endocrinology in this country. Sol Posen's contributions span the range from basic biochemistry – his citation classic in Clinical Chemistry described the first means of distinguishing alkaline phosphatase of bone origin - to clinical studies in metabolic bone disease, including Paget's disease, osteoporosis, hyperparathyroidism and tumour-induced osteomalacia. He attended meetings and journal clubs, where his presence was marked, as ever, by his propensity to ask incisive questions.



| 2006 | Nathan Pavlos   | 2014 | Heath McGowan  |
|------|-----------------|------|----------------|
| 2007 | Aaron McDonald  | 2015 | Dana Bliuc     |
| 2008 | Haotian Feng    | 2016 | Paul Lee       |
| 2009 | Ming-Kang Chang | 2017 | Thao P. Ho-Le  |
| 2010 | Tak Sum Cheng   | 2018 | Nicola Lee     |
| 2011 | Kylie Alexander | 2019 | Kai Chen       |
| 2012 | Julie Quach     | 2020 | Jungie Gao     |
| 2013 | Farzin M Takyar | 2021 | Niloufar Ansar |

# PHILIP SAMBROOK AWARD

The Professor Philip Sambrook Award is presented annually to an outstanding early career researcher to honour the major



clinical and scientific contributions by Professor Philip Sambrook to the field of rheumatology and osteoporosis. Successful applicants must be passionate about bone research, results driven and committed to giving back to the community.

| 2012 | Gustavo Duque        | 2017 | Jansa Aleksova     |
|------|----------------------|------|--------------------|
| 2013 | Emma Duncan          | 2018 | Feitong Wu         |
| 2014 | Kirtan Ganda         | 2019 | Sabashini Ramchand |
| 2015 | Sharon Brennan-Olsen | 2020 | *Not Awarded       |
| 2016 | Jinwen Tu            | 2021 | *Not Awarded       |

# ANZBMS INTERNATIONAL TRAVEL AWARD

This award is offered by the ANZBMS to support travel to attend the IBMS Herbert Fleisch Workshop.

The objective of this workshop is to provide a Gordon-conference style forum for students, post-docs and early stage principal investigators to present work in progress, discuss thoroughly and network with peers, and get constructive feedback from experienced senior scientists.

| 2014 | Tara Brennan-Speranza,    | 2015 | Campbell Macgregor, | 2018 | Babtunde Ayodele, |
|------|---------------------------|------|---------------------|------|-------------------|
|      | Ashika Channa, Christina, |      | Megan Thomas, Scott |      | Dzenita Muratovic |
|      | Vrahnas                   |      | Youlten             |      |                   |

# ANZBMS CAREER ACHIEVEMENT AWARD

This esteem award recognises outstanding and major scientific or clinical contributions, and excellence in teaching and service to and within the bone and mineral field. The award will be widely publicised and presented annually during the society's Annual Scientific Meeting. The awardee will receive free registration to the Annual Scientific Meeting and invitations to the annual and the president's dinner the year the award is received.

| 2014 | Jillian Cornish, Ego Seeman | 2016 | Jack Martin | 2019 | lan Reid      |
|------|-----------------------------|------|-------------|------|---------------|
| 2015 | Howard Morris               | 2018 | John Eisman | 2021 | David Findlay |

# ANZBMS GAP FELLOWSHIP

In recent years, funding for mid-career researchers has become increasingly difficult to obtain, jeopardising the future career of many of our colleagues in bone and mineral research. The ANZBMS has therefore created a new Fellowship Award with the intention to bridge shortfalls in salary funding for outstanding mid-career scientists.

| 2016 | Allison Pettit | 2017 | Nicki Lee    | 2018 | Dana Bliuc |
|------|----------------|------|--------------|------|------------|
|      |                |      | Rachel Davey |      |            |

# ANZBMS HIGHEST RATED STUDENT ABSTRACT AWARD

The prize, of a single free registration, will be awarded to the student first author of the abstract that receives the highest score from the scoring committee.

| 2017 | Junjie Gao   | 2019 | Kotaro Tanimoto | 2021 | Shoichiro Tani |
|------|--------------|------|-----------------|------|----------------|
| 2018 | Marija Simic | 2020 | Lena Batoon     | 2022 | Tian Nie       |

# **ANZBMS LIFE MEMBERS**

| Professor Henry Kaye Ibbertson    | Professor Thomas J. Martin  | Professor John Elsman     |
|-----------------------------------|-----------------------------|---------------------------|
| (deceased)                        | Dr Donald Gutteridge        | Professor Ego Seeman      |
| Associate Professor Jane Moseley  | Dr Ailsa Goulding           | Professor Jillian Cornish |
| Professor B.E.C Nordin (deceased) | Associate Professor Michael | Professor Rebecca Mason   |
| Dr Solomon Posen (deceased)       | Hooper                      |                           |

# ANZBMS INTERNATIONAL TRAVEL AWARD

2018 Babtunde Ayodele, Dzenita Muratovic

## **B.O.N.E PROGRAM**

2019 Michelle McDonald

2020 Kylie Alexander

# SCAN BEFORE OR AFTER A BREAK? THEIR FUTURE IS IN YOUR HANDS.

6 out of 10 Patients with osteoporosis aren't being treated for it.<sup>1-6</sup> **DEXA Scan all your at-risk patients over 50 without delay.**<sup>7</sup>



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Refer to full Product Information before prescribing; available from Amgen Australia Pty Ltd, Ph: 1800 803 638 or at www.amgen.com.au/Prolia.Pl

For more information on Prolia<sup>®</sup> or to report an adverse event or product complaint involving Prolia<sup>®</sup>, please contact Amgen Medical Information on 1800 803 638 or visit www.amgenmedinfo.com.au.

PROLIA® MINIMUM PRODUCT INFORMATION. INDICATIONS: Treatment of osteoporosis in postmenopausal women (PM0) to reduce risk of vertebral, non-vertebral and hip fractures. Treatment to increase bone mass in men with osteoporosis at increased risk of fracture. Treatment to increase bone mass in women and men at increased risk of fracture due to long-term systemic glucocorticoid therapy. CONTRAINDICATIONS: Hypocalcaemia. Hypersensitivity to denosumab, CHO-derived proteins or any component. Pregnancy and in women trying to get pregnant. PRECAUTIONS: Correct hypocalcaemia prior to initiating therapy. Monitor calcium in patients predisposed to hypocalcaemia. Adequate intake of calcium and vitamin D is important. Severe renal impairment. Concomitant use of calcimimetic drugs may increase risk of hypocalcaemia. Skin infections. Evaluate patients for risk factors for osteonecrosis of the jaw; use with caution in these patients. Rare reports of atypical femoral fractures. Multiple vertebral fractures may occur following discontinuation. In glucocorticoid-induced osteoporosis, fractures occur at higher BMD than PMO. Hypercalcaemia in paediatric patients with osteogenesis imperfecta; Prolia is not indicated in paediatric patients. ADVERSE EFFECTS: Common: hypercholesterolaemia, eczema, fracture, back pain, arthralgia, nasopharyngitis, pain in extremity, osteoarthritis, hypertension, headache, dyspepsia, urinary tract infection, upper abdominal pain, bone pain and alopecia. DOSAGE AND ADMINISTRATION: Single subcutaneous injection of 60 mg, once every 6 months. Ensure adequate intake of calcium and vitamin D. No dose adjustment required in the elderly or in renal impairment. PRESENTATION: Pre-filled syringe with automatic needle guard. Minimum PI Version 5. Refer to full Product Information before prescribing – available from Amgen Australia Pty Ltd. Ph: 1800 803 638 or at www.amgen.com.au/Prolia.PI

REFERENCES: 1. Watts JJ, et al. Osteoporosis costing all Australians - A new burden of disease analysis 2012 to 2022. Osteoporosis Australia, 2013. 2. Amgen Australia, Data on File, 2020 (patients not treated). 3. Australian Bureau of Statistics. Estimated Resident Population, 2018. Available at www.abs.gov.au/AUSSTATS/abs@.nsf DetailsPage/3101.0Jun%202018?OpenDocument. Accessed 30 January 2020. 4. Henry MJ, et al. Med J Aust 2011; 195: 321–22. 5. Australian Bureau of Statistics. 2017-18 National Health Survey. Available at www.abs.gov.au/ausstats/abs@. nsf/mf/4364.0.55.001. Accessed 30 January 2020. 6. Medicare Australia dataset up to Oct 2020 extrapolated (2020/MI8392), received 12/20. 7. Healthy Bones Australia. Bone density testing in general practice. Available at: https://healthybonesaustralia.org.au/wp-content/uploads/2021/03/HBA-GP-Bone-Density-brochure-v1.pdf. Accessed 5 December 2021. 8. Torring 0. Ther Adv Musculoskelet Dis 2015;7: 88–102. 9. Bone HG, et al. Lancet Diabetes Endocrinol 2017;5:513–23.



Amgen Australia Pty Ltd, Sydney NSW 2000. ABN 31 051 057 428. Medical Information: 1800 803 638. Phone: +61 2 9870 1333. www.amgen.com.au. AU-16752. Approved: March 2022. AMG3840\_RACGP\_A4\_Kitchen.



# **MEPSA President**

MEPSA Secretary MEPSA Treasurer MEPSA Past President Prof Scott Byrne Dr Katie Dixon Dr Wayne Reilly A/Prof Terry Piva

# PAST MEPSA OFFICE BEARERS 1999-2022

| YEAR        | PRESIDENT      | VICE PRESIDENT/ PRESIDENT ELECT | SECRETARY         | TREASURER       |
|-------------|----------------|---------------------------------|-------------------|-----------------|
| 1999 - 2000 | Vivienne Reeve | Geoff Grigg / Don MacPhee       | Sue Thomas        | Geoff Dandie    |
| 2000 - 2001 | Vivienne Reeve | Geoff Grigg / Don MacPhee       | Jack Dempsey      | Geoff Dandie    |
| 2001 - 2002 | Vivienne Reeve | Geoff Grigg / Don MacPhee       | Gary Halliday     | Geoff Dandie    |
| 2002 - 2003 | Vivienne Reeve | Geoff Grigg / Don MacPhee       | Gary Halliday     | Geoff Dandie    |
| 2003 - 2004 | Vivienne Reeve | Liza Snow                       | Gary Halliday     | Geoff Dandie    |
| 2004 - 2005 | Geoff Dandie   | Liza Snow                       | Michael Davies    | Tim Rayner      |
| 2005 - 2006 | Geoff Dandie   | Liza Snow                       | Michael Davies    | Tim Rayner      |
| 2006 - 2007 | Geoff Dandie   | Liza Snow                       | Terry Piva        | Tim Rayner      |
| 2007 - 2008 | Geoff Dandie   | Liza Snow                       | Terry Piva        | Tim Rayner      |
| 2008 - 2009 | Liza Snow      | Des Richardson                  | Terry Piva        | Munif Alllanson |
| 2009 - 2010 | Liza Snow      | Des Richardson                  | Terry Piva        | Munif Alllanson |
| 2010 - 2011 | Liza Snow      | Scott Byrne                     | Terry Piva        | Wayne Reilly    |
| 2011 - 2012 | Terry Piva     | Scott Byrne                     | Shalini Muthusamy | Wayne Reilly    |
| 2012 - 2013 | Terry Piva     | Scott Byrne                     | Shelley Gorman    | Wayne Reilly    |
| 2013 - 2014 | Terry Piva     | Scott Byrne                     | Shelley Gorman    | Wayne Reilly    |
| 2014 - 2015 | Terry Piva     | Scott Byrne                     | Shelley Gorman    | Wayne Reilly    |
| 2015 - 2016 | Scott Byrne    | Shelley Gorman                  | Katie Dixon       | Wayne Reilly    |
| 2016 - 2017 | Scott Byrne    | Shelley Gorman                  | Katie Dixon       | Wayne Reilly    |
| 2017 - 2018 | Scott Byrne    | Shelley Gorman                  | Katie Dixon       | Wayne Reilly    |
| 2018 - 2019 | Scott Byrne    | Shelley Gorman                  | Katie Dixon       | Wayne Reilly    |
| 2019 - 2020 | Scott Byrne    | Shelley Gorman                  | Katie Dixon       | Wayne Reilly    |
| 2020 - 2022 | Scott Byrne    | Shelley Gorman                  | Katie Dixon       | Wayne Reilly    |

# AWARDS OF THE MOLECULAR AND EXPERIMENTAL PATHOLOGY SOCIETY OF AUSTRALIA

# THE KUMAR AWARD

Named in honour of Prof Rakesh K Kumar, is for the best oral presentation by a postgraduate research student at the conference.

| 2000 | Terrence Poon, Suzanne     | 2006 | Heidi Lim, Heather        | 2012 | Gabriella Brown, Royce Ng |
|------|----------------------------|------|---------------------------|------|---------------------------|
|      | Sime                       |      | McGee, Keryn Simons,      | 2013 | Katharine Herbert         |
| 2001 | Bernadette Bellette, Ritu  |      | Eleni Yiasemiddes         | 2014 | Felix Marsh-Wakefield     |
|      | Gupta                      | 2007 | Katie Dixon, Geetha       | 2015 | Artur Shariev             |
| 2002 | Nita Agar, Munif Allanson, |      | Sivapirabu                | 2016 | Clara Choi                |
|      | Samantha Mead              | 2008 | Heather McGee, Vanessa    | 2017 | Amanda Patchett           |
| 2003 | Louise Dunn, Lisa          |      | Sequeira                  | 2018 | *Not Awarded              |
|      | Kaminskas, Matthew Knox    | 2009 | Georgia Frost, Paul Sou,  | 2019 | *Not Awarded              |
| 2004 | Michael Stapelberg         |      | Cesar Tovar               | 2020 | Rachael Ireland           |
| 2005 | Cristan Herbert, Karen     | 2010 | Megan Whitnall, Gabriella | 2021 | *Not Awarded              |
|      | Tsang, Gemma Williams      |      | Brown                     |      |                           |
|      |                            | 2011 | Sula Thanos, Amy Suthers, |      |                           |
|      |                            |      | Shruti Saptarshi          |      |                           |

# THE MULLER AWARD

Named in honour of Prof H Konrad Muller, is for the best oral presentation by a postdoctoral researcher at the conference, dependent on the number of eligible presentations.

| 2002 | Michelle Grimbaldeston | 2009 | *Not Awarded     | 2016 | Angela Ferguson       |
|------|------------------------|------|------------------|------|-----------------------|
| 2003 | Scott Byrne            | 2010 | Elke Hacker      | 2017 | Katharine Herbert     |
| 2004 | *Not Awarded           | 2011 | *Not Awarded     | 2018 | Felix Marsh-Wakefield |
| 2005 | Louise Dunn            | 2012 | *Not Awarded     | 2019 | *Not Awarded          |
| 2006 | *Not Awarded           | 2013 | Vanessa Sequeira | 2020 | Anneliese Gorman      |
| 2007 | Roslyn Malley          | 2014 | *Not Awarded     | 2021 | *Not Awarded          |
| 2008 | *Not Awarded           | 2015 | *Not Awarded     |      |                       |

# THE MACPHEE AWARD

Named in honour of the late Prof Donald G MacPhee (obituary), is for the best poster presentation at the conference, dependent on the number of poster presentations.

| 2002 | *Not Awarded  | 2008 | James Musyoka       | 2014 | *Not Awarded      |
|------|---------------|------|---------------------|------|-------------------|
| 2003 | *Not Awarded  | 2009 | Gabby Brown         | 2015 | *Not Awarded      |
| 2004 | Heather McGee | 2010 | Cesar Tovar         | 2016 | Terence McGonigle |
| 2005 | *Not Awarded  | 2011 | Andrew Farrell      | 2018 | *Not Awarded      |
| 2006 | *Not Awarded  | 2012 | Natasha Kolesnikoff | 2019 | *Not Awarded      |
| 2007 | *Not Awarded  | 2013 | *Not Awarded        |      |                   |

# **MEPSA LIFE MEMBERS**

| 2002 | Konrad Muller  | 2017 | Gary Halliday | 2017 | Gregory Woods |
|------|----------------|------|---------------|------|---------------|
| 2005 | Geoff Grigg    | 2017 | Rakesh Kumar  | 2020 | Rebecca Mason |
| 2008 | Vivienne Reeve | 2017 | Liza Snow     |      |               |

# **ANZORS OFFICE BEARERS 2022**

# **ANZORS** President

- Secretary Treasurer Immediate Past President New Zealand Representative
- A/Prof Nathan Pavlos Dr Martina Barzan Dr Dane Turner A/Prof Egon Perilli Dr David Musson

## **Committee Members**

A/Prof David Ackland, A/Prof Dominic Thewlis, Prof Hala Zreiqat, Prof Bogdan Solomon, A/Prof John Costi, A/Prof Justin Fernandez, Dr Zufu Lu, A/Prof Saulo Martelli, Prof Gerald Atkins, Prof Jiake Xu, Dr Pazit Levinger, Prof Peter Pivonka, Prof Thor Besier, Prof Cory Xian, Dr Ramin Rohanizadeh, A/Prof Tania Crotti

# PAST ANZORS OFFICE BEARERS 1996-2024

| YEAR        | PRESIDENT       | SECRETARY       | TREASURER      | IMMEDIATE PAST PRESIDENT | NEW ZEALAND<br>REPRESENTATIVE |
|-------------|-----------------|-----------------|----------------|--------------------------|-------------------------------|
| 1996        | David Wood      |                 |                |                          |                               |
| 1997        | David Wood      |                 |                |                          |                               |
| 1998 - 2000 | Peter Choong    | David Findlay   | David Findlay  | David Wood               |                               |
| 2001 - 2003 | David Findlay   | Ming Hao Zheng  | Ming Hao Zheng | Peter Choong             |                               |
| 2004 - 2005 | Bill Walsh      | David Haynes    | S Cool         | David Findlay            |                               |
| 2006        | Bill Walsh      | David Haynes    | Jiake Xu       | David Findlay            |                               |
| 2007 - 2009 | David Haynes    | Hala Zreiqat    | Jiake Xu       | Bill Walsh               |                               |
| 2010 - 2012 | Hala Zreiqat    | John Costi      | Jiake Xu       | David Haynes             |                               |
| 2013 - 2015 | Jiake Xu        | Dominic Thewlis | Nathan Pavlos  | Hala Zreiqat             |                               |
| 2016 - 2018 | Dominic Thewlis | Egon Perilli    | Nathan Pavlos  | Jiake Xu                 |                               |
| 2019 - 2021 | Egon Perilli    | Tania Crotti    | David Ackland  | Dominic Thewlis          |                               |
| 2022 - 2024 | Nathan Pavlos   | Martina Barzan  | Dane Turner    | Egon Perilli             | David Musson                  |

# AWARDS OF THE AUSTRALIAN AND NEW ZEALAND ORTHOPAEDIC RESEARCH SOCIETY

# DAVID FINDLAY ECR AWARD WINNERS

| 2015<br>2016<br>2017         | Geoffrey Handsfield<br>Rami Al-Dirini<br>Claudia di Bella        | 2018<br>2019                 | Junje Gao<br>Dale Robinson   | 2020<br>2021         | *Not Awarded<br>Carina Blaker               |
|------------------------------|--|------------------------------|--|----------------------|---|
| ECR AV                       | VARD WINNERS   |                              |  |                      |   |
| 2011<br>2012                 | Egon Perilli<br>Pazit Levinger                                   | 2013<br>2014                 | Mariana Kersh<br>John Arnold, Claire Jones                           |                      |   |
| PHD ST                       | UDENT AWARD WINNERS  |                              |  |                      |   |
| 2011<br>2012<br>2013<br>2014 | Diana Perriman<br>Melissa Cantley<br>Jiao Jiao Li<br>Bay Sie Lim | 2015<br>2016<br>2017<br>2018 | Audrey Chan<br>Vonne M van Heeswijk<br>Bryant Roberts<br>Jacob Kenny | 2019<br>2020<br>2021 | Sophie Rapagna<br>*Not Awarded<br>Amy Ribet |
| MINGH                        | IAO ZHENG ORTHOPAEDIC INNOVA                                     | ATION AV                     | VARD WINNERS   |                      |   |
| 2018<br>2019                 | Jacob Kenny<br>Martina Barzan                                    | 2020<br>2021                 | *Not Awarded<br>Scott Bolam  |                      |   |

# YOUNG INVESTIGATOR AWARD

| 1997 | Andrew Zannettino | 1998 | Scott Mackie | 1999 | John Costi |
|------|-------------------|------|--------------|------|------------|
|      |                   |      |              |      |            |

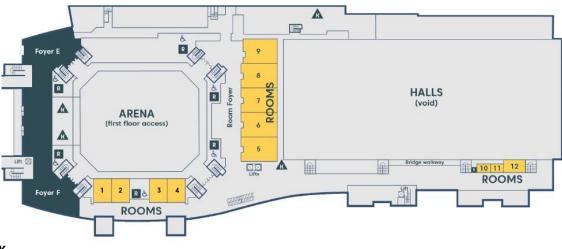
# THE ONE TO WATCH AWARD

2018 Sophie Rapagna

# VENUE

Gold Coast Convention and Exhibition Centre 2684 – 2690 Gold Coast Highway Broadbeach, QLD 4218 Phone: +61 7 5504 4000

# VENUE LAYOUT



# THE REGISTRATION DESK

The registration desk is located in Foyer G located on the first floor. Any enquiries can be directed to ASN staff located at the registration desk except those regarding accommodation which should be dealt directly with your hotel. The registration desk office hours are:

| Monday 1 <sup>st</sup> August    | 12:00PM - 6:00PM |
|----------------------------------|------------------|
| Tuesday 2 <sup>nd</sup> August   | 7:00AM – 6:30PM  |
| Wednesday 3 <sup>rd</sup> August | 8:00AM – 7:00PM  |
| Thursday 4 <sup>th</sup> August  | 8:30AM – 4:00PM  |

# LOADING YOUR ORAL PRESENTATION AT THE CONFERENCE

Oral presenters should bring their talk on a USB, saved in a format for display on a PC within the room (i.e. PowerPoint). You will need to load your presentation directly into the room in which you are presenting. A technician will be on hand to assist with any transfer / loading issues and to help you check your presentation. Please note there are no Macintosh computers in the presentation room – please format your USB drives appropriately (FAT32).

# REGISTRATION

Conference delegates receive the following services as part of their registration:

- Access to the sessions of your choice
- Conference book
- Use of the Conference App
- Morning and/or afternoon tea for the days of nominated attendance
- Lunches on the days of nominated attendance
- Welcome Function (Monday 1<sup>st</sup> August)
- Conference Dinner (Wednesday 3<sup>rd</sup> August)

# NAME TAGS

Delegates are required to wear their name tags to all scientific and catered sessions. Delegates should note that within their name tag pouch will be the specific function tickets they have purchased.

# POSTER VIEWING

Delegates with posters can find the correct position for their poster by locating the appropriate abstract number on the display panels. The Plenary posters are displayed within the Foyers E & F and general posters are also displayed within the Foyers E & F, both located on the first floor. Use the program reference (or ANZBMS – MEPSA – ANZORS smart phone APP) to identify your abstract number and poster position. Presenters should stand next to their poster during allocated poster sessions. **All posters** (located in Foyers E & F) can be mounted on **Monday afternoon** and must be removed by **lunch on Thursday.** 

# ANZBMS – MEPSA – ANZORS POSTER SESSIONS

There are three official poster sessions at this year's meeting: **ANBZMS Plenary Poster session** – 6.00PM – 7.30PM, Monday 1<sup>st</sup> August, (Foyers E & F) **Poster session 1 – EVEN NUMBERS** – 4.00PM – 5.00PM, Tuesday 2<sup>nd</sup> August, Foyers E & F (During Afternoon Tea) **Poster session 2 – ODD NUMBERS** – 10:00AM – 11:00AM, Wednesday 3<sup>rd</sup> August (During Morning Tea)

# SOCIAL FUNCTIONS

Welcome Function Date: Monday 1<sup>st</sup> August 2022 Time: 6.00PM – 7.30PM Price: Complimentary with Full Conference Registration Location: Gold Coast Convention and Exhibition Centre Additional ticket: \$70.00 \*Additional tickets for partners can be purchased in advance or at the registration desk.

# ECIC Career Development Lunch

Date: Tuesday 2<sup>nd</sup> August 2022 Time: 12.30PM – 2.00PM Price: \$25.00 Location: Room 7 & 8. Lunch provided.

# ECIC - 'Bones & Brews' Networking Dinner Date: Monday 1<sup>st</sup> August 2022 Time: 7.30PM – 10.30PM Location: Kurrawa Surf Club – "Beachside"

**Cost**: \$40.00 **Student/ECR** cost: \$25.00 \*This is a ticketed function; tickets can be purchased in advance or at the registration desk.

Clinical Cases in Metabolic Diseases Seminar Date: Tuesday 2<sup>nd</sup> August 2022 Time: 7.30PM – 8.00PM Price: \$35 (Trainee or Student), \$50 (others) Location: Room 7 & 8. Dinner and drinks provided

# ANZBMS – MEPSA – ANZORS Conference Dinner

Date: Wednesday 3<sup>rd</sup> August 2022 Time: 7.30PM - Late Price: \$80 (Student/ECR), \$120 (Other)

# Location: Central Room A

\*This is a ticketed function; tickets can be purchased in advance or at the registration desk. Pre-dinner drinks served from 7.15pm.

# **RECORDING & STREAMING OF SESSIONS AT ANZBMS – MEPSA – ANZORS 2022**

All sessions within rooms 5 & 6 and 7 & 8 will be recorded and live streamed at the conference. If you do not wish to have your presentation recorded, please advise ASN Staff at the registration desk. Details on accessing the live stream and recordings have been previously sent to your email.

# LECTURE ROOMS

All lectures for the joint meeting will run on level 1 at the Convention Centre. Rooms 4, 5 -6, 7 & 7-8 will be used for the duration of the conference.

The conference lecture rooms are supported by

# DIETARY REQUIREMENTS

If you requested a special meal, please make yourself known to the venue staff and advise your name and special request.

# SMOKING

Smoking is not permitted in the venue.

# MOBILE PHONES

Please ensure your mobile phone is turned off or on silent during any session you attend.

# INSURANCE

The hosts and organisers are not responsible for personal accidents, any travel costs, or the loss of private property and will not be liable for any claims. Delegates requiring insurance should make their own arrangements.

# DISCLAIMER

The hosts, organisers and participating societies are not responsible for, or represented by, the opinions expressed by participants in either the sessions or their written abstracts.



# **WI-FI INTERNET**

Gold Coast Convention and Exhibition Centre provides complimentary Wi-Fi and signage will be placed around the venue and at the registration desk for access.

# **CONFERENCE APP**

The App is displayed in a simple and easy to read format on your phone, iPad, or even your computer. To get the 'App', please open the following link in your internet browser on your phone, iPad or laptop: http://anzbms-mepsa-anzors-2022.m.asnevents.com.au/

Alternatively, scan the QR code below.



You will be prompted to add an icon onto your device home screen. The Smartphone/Mobile Device 'App' will allow you to:

- View the full conference program
- View all abstracts for the conference
- View the author listing
- Save your favourite sessions and plan your day
- Take notes which will then be saved and downloaded from your registration profile.
- To use most of these functions, you will be prompted to 'log in' each day.

# **ANZBMS PLENARY SPEAKERS**

**Dr Andrew Burghardt** University of California, USA

# **MEPSA PLENARY SPEAKERS**

**Prof. Robert Scragg** School of Population Health, University of Auckland, New Zealand **Dr Timo Damm** University of Kiel, Germany

Em. Prof Antony Young

King's College London,

United Kingdom

**Dr Monika Frysz** University of Bristol, United Kingdom

# INVITED SYMPOSIUM SPEAKERS

# ANZBMS SYMPOSIUM SPEAKERS

**Prof. Belinda Beck** *Griffith University, Australia* 

Ms Sandy Bevc XLH Australia

**Prof Mark Cooper** University of Sydney, Australia

**Prof. Robin Daly** Deakin University, Australia

# **MEPSA SYMPOSIUM SPEAKERS**

**Dr Anneliese Ashhurst** University of Sydney, Australia

**Prof. Ronald Sluyter** Illawarra Health and Medical Research Institute, Australia

# **ANZORS SYMPOSIUM SPEAKERS**

**Prof. Thor Besier** University of Auckland, New Zealand

**Dr Nathalie Bock** *Queensland University of Technology, Australia*  **Prof. Peter Ebeling AO** *Monash University, Australia* 

**Dr Jenny Harrington** Adelaide Women's and Children's Hospital, Australia

**Prof. Anne-Marie Hill** *The University of Western Australia, Australia*  A/Prof Joshua Lewis Edith Cowan University, Australia

**A/Prof Michelle McDonald** *Garvan Institute of Medical Research, Australia* 

Mrs Anne Trinh Monash Health, Australia

**Dr Jazmina Gonzalez Cruz** University of Queensland Diamantina Institute, Australia

Mr Furkan Ince The University of Sydney, Australia **Dr Angela Ferguson** The University of Sydney / Centenary Institute, Australia

**Ms Jacqueline Marshall** University of Technology Sydney, Australia

**Prof. Ross Crawford** Queensland University of Technology, Australia

A/Prof Claudia di Bella University of Melbourne, Australia **Prof. David Findlay** University of Adelaide, Australia

**Dr Kathryn Stok** University of Melbourne, Australia

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| 7:30pm – 10:00pm                       | 6:00pm – 7:30pm                              | 4:00pm – 5:30pm   | 3:30pm | 2:00pm    | 1:00pm | 12:30pm | 12:00pm           | TIME         |
|--|--|---|--------|-----------|--------|---------|-------------------|--------------|
|  | Welcome Function +<br>ANZBMS Plenary Posters |   |        |           |        |         | REGISTRATION OPEN | Foyers E & F |
|  |  |   |        | MEPSA AGM |        |         |                   | Room 4       |
|  |  | ECIC Session: Science at Speed<br>Networking Session<br>Bridging the gap between EMCRs<br>and Seniors |        |           |        | I       |                   | Room 7       |
| Bones and Brews – Kurrawa Surf<br>Club |  |   |        |           |        |         |                   | Offsite      |

# TUESDAY 2<sup>ND</sup> AUGUST 2022

|         | 7:30pm – 10:00pm       |                        | 5:00pm – 7:00pm   | 4:00pm – 5:00pm                  | 2:00pm – 4:00pm  |                          |                            | 13-30pm - 2-00pm              |                            |                      | 11:00am – 12:30pm   | 10:30am - 11:00am |             | mc02.01 – mc00.0            |                   | 7·30am _ 0·00am     | THAT           | TIME           |
|---------|------------------------|------------------------|---|----------------------------------|--|--------------------------|----------------------------|-------------------------------|----------------------------|----------------------|---|-------------------|-------------|-----------------------------|-------------------|---------------------|----------------|----------------|
|         |                        |                        |   | Afternoon Tea and Posters (Even) |  |                          |                            | Linch                         |                            |                      |   | Morning Tea       |             |                             |                   |                     | i oyeis L ex i | Enviore E 9. E |
|         |                        |                        | ANZBMS/MEPSA/ANZORS Plenary -<br>Musculoskeletal Management:<br>Insights from Consumer Groups and<br>Allied Health + ANZBMS Oral<br>abstracts |                                  | ANZBMS Roger Melick Young<br>Investigator Award Symposium +<br>ANZBMS Oral Abstracts                           | 12:35pm – 1:45pm         | romosozumab in Australia   | Clinical experience with      | Amgen Lunchtime Symposium: | Abstract             | ANZBMS/AMGEN Outstanding<br>Abstracts + Highest Rated Student |                   | MSK Imaging | ANZBMS/MEPSA/ANZORS Plenary |                   |                     | LIVESTREAM 1   | Rooms 5 & 6    |
| Seminar | Metabolic Bone Disease | ECIC Clinical Cases in | ANZORS Symposium:<br>Innovation in Bioengineering<br>and Orthopaedics<br><i>Concludes at 6:30pm</i>   |                                  | ANZORS Symposium: ECR<br>Award talks + Minghao Zheng<br>Orthopaedic Innovation<br>Award Talks + Oral Abstracts | just back from adversity | STEM: Bouncing forward not | Lunch: Building Resilience in | ECIC Career Development    | Regenerative Biology | ANZORS-MEPSA Symposium:<br>Musculoskeletal and                |                   |             |                             | Breakfast Session | ANZBMS Therapeutics | LIVESTREAM 2   | Rooms 7 & 8    |
|         |                        |                        |   |                                  | MEPSA Symposium:<br>Infection, Immunity and<br>Inflammation I  |                          |                            |                               |                            |                      |   |                   |             |                             |                   |                     |                | Room 4         |

# **PROGRAM AT A GLANCE**

|                           | Speaker  |              | 2.00pm - 4.00pm   |
|---------------------------|--|--------------|-------------------|
|                           | ANZBMS Oral Abstracts + B.O.N.E                    |              | J-00mm //00mm     |
|                           |  | Lunch        | 1:00pm – 2:00pm   |
|                           | The Great Debate                                   |              | 111don'7T         |
| ANZORS Symposium: Imaging | ANZBMS Therapeutics vs Exercise:                   |              | 10.00mm           |
|                           | ANZBMS Oral Abstracts                              |              | 11:00am           |
|                           |  | Morning Tea  | 10:30am – 11:00am |
|                           | Health   |              |                   |
| ANZBMS Oral Abstracts     | <ul> <li>The Essential Vitamin for Bone</li> </ul> |              | 9:00am – 10:30am  |
|                           | ANZBMS/MEPSA/ANZORS Vitamin D                      |              |                   |
|                           | LIVESTREAM 1                                       | ruyeis e œ r | TIME              |
|                           | Rooms 5 & 6  |              | TIME              |

# THURSDAY 4<sup>TH</sup> AUGUST 2022

| 6:30pm – 7:00pm<br>7:00pm – 7:30pm<br>7:30pm – 11:30pm | 6:00pm – 6:30pm               | 5:00pm – 6:00pm       | 4:30pm – 5:00pm | 2:30pm – 4:30pm   | 1:30pm – 2:30pm  | 11:00am – 1:30pm   | 10:00am – 11:00am             | 9:00am - 10:00am       | 8:00am – 9:00am                                     |                        | TIME                        |
|--|-------------------------------|-----------------------|-----------------|---|--|--|-------------------------------|------------------------|---|------------------------|-----------------------------|
|  |                               |                       | Afternoon Tea   |   | Lunch  |  | Morning Tea and Posters (Odd) |                        |   |                        | Foyers E & F                |
|  | ANZBMS AGM                    | ANZBMS Oral Abstracts |                 | ANZBMS/ANZORS Symposium<br>Session 3 Lifecourse<br>Management of MSK Health:<br>Paediatrics to Adulthood +<br>ANZBMS Oral Abstracts |  | ANZBMS/ANZORS/MEPSA<br>Plenary: Cancer and Bone +<br>ANZBMS Oral Abstracts |                               | ANZORS PhD Award Talks | Margie Nordin Young<br>Investigator Award Symposium | ANZBMS Christopher and | Rooms 5 & 6<br>LIVESTREAM 1 |
|  | Translational<br>Orthopaedics | ANZORS Symposium:     |                 | ANZORS Symposium:<br>Biomechanics   | Kyowa Kirin Lunchtime<br>Symposium: Introducing<br>Crysvita - A new era in<br>the management of XLH. |  | 1                             |                        |   |                        | Room 7<br>LIVESTREAM 2      |
| Cicros   | Models of Human               | MEDSA Symposium       |                 | MEPSA Symposium:<br>Infection, Immunity<br>and Inflammation II  | ANZORS AGM   |  |                               |                        |   |                        | Room 4                      |
| Conference Dinner                                      |                               |                       |                 |   |  |  |                               |                        |   |                        | Central Room A              |

# WEDNESDAY 3<sup>RD</sup> AUGUST 2022

# PROGRAM

# MONDAY 1<sup>ST</sup> AUGUST 2022

| Registration Opens<br>12:00PM - 6:00PM   | Foyer G           |
|--|-------------------|
| <b>MEPSA AGM</b><br>12:30PM - 3:00PM<br>Lunch boxes provided for attendees of this session inside Rooms 4. | Room4             |
| ECIC Speed Networking: bridging the gap between EMCRs and Seniors<br>4:00PM - 5:30PM                       | Room 7            |
| Welcome Function + ANZBMS Plenary Posters<br>6:00PM - 7:30PM   | Foyer E & F       |
| <b>Bones &amp; Brews</b><br>7:30PM - 10:30PM   | Kurrawa Surf Club |

# TUESDAY 2<sup>ND</sup> AUGUST 2022

# **Registration Opens**

7:00AM - 6:30PM

7:30AM - 9:00AM

Foyer G

Rooms 7 & 8

Chairs: Belinda Beck & Richard Prince

**ANZBMS Therapeutics Breakfast Discussion Session** 

7:30 AM Belinda Beck The role of high intensity supervised exercise intervention in osteoporosis therapy.

7:55 AM **Madhuni Herath** A local (ANZ) perspective on the management of primary hyperparathyroidism.

# 8:20 AM **Richard Prince** The pharmaceutical prescription for prevention of fracture in Australia 2022.

# **ANZBMS-MEPSA-ANZORS Plenary: MSK Imaging**

9:00AM - 10:30AM Chairs: Ayse Zengin & Kathryn Stok

# 9:00 AM Andrew Burghardt

Emerging approaches to investigate musculoskeletal health from HR-pQCT imagery abs# 1

# 9:30 AM Joshua Lewis

VFA's: You "aorta" look beyond vertebral fractures. *abs# 2* 

# 10:00 AM Timo Damm

Al-driven image classification of radiographic data for prospective fracture prediction – global state and current work at the  $l^2$ Lab. *abs# 3* 

Morning Tea 10:30AM - 11:00AM

Foyer E & F

Rooms 5 & 6

# **ANZBMS/AMGEN Outstanding Abstracts**

11:00AM - 12:15PM Chairs: Natalie Sims & David Scott

### 11:00 AM **Charles Inderjeeth**

Treating osteoporosis and dementia with anti-dementia medication acetylcholinesterase inhibitors may have therapeutic benefits on osteoporotic bone by attenuating osteoclastogenesis and bone resorption abs# 4

### 11:15 AM **Michael J Rogers**

Bisphosphonates may boost immune responses to pulmonary infection by acting on tissue-resident macrophages in the lung abs# 5

### 11:30 AM **Minghao Zheng**

Endothelial cells require mitochondrial transfer from osteocytes to promote vascularization in cortical bone abs# 6

### 11:45 AM **Brya Matthews**

Epidemiology of fractures in different ethnic groups across the lifespan in New Zealand abs# 7

### 12:00 PM John Eisman

Fracture risk in women with osteoporosis treated with gastro-resistant (ec) risedronate versus immediate release risedronate or alendronate: a claims data analysis in the United States abs# 8



**ANZBMS Highest Rated Student Abstract** 12:15PM - 12:30PM Chairs: Natalie Sims & David Scott

# Rooms 5 & 6

### 12:15 PM **Tian Nie**

Estradiol increases bone mass and strength in a pre-clinical mouse model of male-to-female transition during adulthood abs# 9

# ANZORS-MEPSA Symposium: Musculoskeletal and regenerative biology

11:00AM - 12:30PM Chairs: Nathan Pavlos & Rachel W. Li

11:00 AM

**David Findlay** 

# RANKL discovery: a model for basic science research? abs# 10 11:30 AM **Amy Ribet** Sugar transporter Slc37a2 regulates bone metabolism via a dynamic tubular lysosomal network in osteoclasts abs# 11 Dzenita Muratovic 11:42 AM Structural and cellular characterisation of the osteochondral tissue in hip and knee osteoarthritis. abs# 12 11:54 AM **Kieran J Bennett** Strain Distributions Within the Proximal Tibia Calculated Using Digital Volume Correlation of Micro-CT Images abs# 13 **Carina Blaker** 12:06 PM

Functional group differences in the biomechanical and biochemical properties of human hand tendons abs# 14

Lunch 12:30PM - 2:00PM

| Amgen Lunchtime Symposium: Clinical experience with romosozumab in Australia |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| 12:35PM - 1:45PM   |  |  |  |  |  |  |
| Chair: Dr Cherie Chiang  |  |  |  |  |  |  |

**Prof Jackie Center** Endocrinologist, Garvan Institute of Medical Research, St Vincent's Hospital, Sydney

# **Clinical Prof Charles Inderjeeth** Rheumatologist & Geriatrician, North Metropolitan Health Service and University of Western Australia, Perth

Lunch boxes provided for attendees of this session outside of Rooms 5 & 6.

Foyer E & F

Rooms 5 & 6



### ECIC Career Development Lunch: Building Resilience in STEM: Bouncing forward not just back from adversity 12:30PM - 2:00PM Rooms 7 & 8

Chairs: John Kemp, Bridie Mulholland & Melissa Cantley

Identify your response to adversity in these tough times *Learn the 4-step Resilience method to regain control* Develop a simple plan to take back control and thrive in your career and life.

Lunch boxes provided for attendees of this session outside Rooms 7 & 8.

Session sponsored by





| INSTITUTE |
|-----------|

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| 2:00PM - 3 | <b>oger Melick Young Investigator Award Symposium</b><br>:36PM<br>an Cornish & Andrew Burghardt  | Rooms 5 & 6         |
|------------|--|---------------------|
| 2:00 PM    | <b>Martha Blank</b><br>EphrinB2 and lysosomes in osteocytes are essential for collagen arrangement in the ex<br>matrix <i>abs# 15</i>  | tracellular         |
| 2:12 PM    | Ahmed AA AI Saedi<br>MicroRNA cargo of extracellular vesicles released by skeletal muscle negatively regulat<br>quality in obese mice <i>abs#</i> 16                             | es the bone         |
| 2:24 PM    | Kaitlyn A Flynn<br>Identifying genes involved in hip osteoarthritis and describing the cells in which they a<br>differentially expressed <i>abs# 17</i>                          | re                  |
| 2:36 PM    | <b>Eugenie Macfarlane</b><br>Skeletal glucocorticoid signalling plays a critical role in bone loss driven by circadian rh<br>disruption <i>abs# 18</i>                           | ythm                |
| 2:48 PM    | <b>Ruth Frampton</b><br>Asymptomatic vertebral fractures predict subsequent clinical fracture in both men and<br>19  | l women <i>abs#</i> |
| 3:00 PM    | Huy G Nguyen<br>Identification of asymptomatic vertebral fracture using Artificial Intelligence (AI) abs#  | 20                  |
| 3:12 PM    | Alexander H Seeto<br>Bayesian Network Meta-Analysis of All-Cause Mortality in Trials of Osteoporosis Thera   | pies abs# 21        |
| 3:24 PM    | <b>Elisabeth Ng</b><br>A low serum alkaline phosphatase may signal the presence of hypophosphatasia in par<br>reduced bone mineral density or fragility fractures <i>abs# 22</i> | tients with         |

# **ANZBMS Abstracts**

3:36PM - 4:00PM Chairs: Jillian Cornish & Andrew Burghardt

# 3:36 PM Grahame J Elder

Patients on dialysis are at lower risk for mortality when treated with non-calcium-based phosphate binders. *abs# 23* 

# 3:48 PM Jeffrey Hassall

The proportion of patients who reach the BMD surrogate threshold effect on romosozumab: a post hoc analysis of the randomised FRAME and ARCH phase 3 trials *abs# 24* 

# **ANZORS ECR Award talks**

2:00PM - 2:36PM Chairs: Carina Blaker & Dane Turner

# 2:00 PM Peilin Chen

Fabrication of bio-textile collagen rope for ACL regeneration abs# 25

# 2:12 PM Azadeh Nasseri

Comparative Effects of Surgical And Non-Surgical Therapy on Hip Contact Force For Femoroacetabular Impingement Syndrome *abs# 26* 

# 2:24 PM Javad Tavakoli

Intervertebral disc-on-a-chip: a precision-engineered platform for low back pain studies abs# 27

# Minghao Zheng Orthopaedic Innovation Award talks

2:36PM - 3:00PM Chairs: Scott Bolam & Dane Turner

# 2:36 PM Jiao Jiao Li

On stem cell therapy for osteoarthritis: An *in vitro* investigation to explain clinical outcomes abs# 28

# 2:48 PM Megan J Roser

Vertebral Body Tethering Functions as an Internal Brace for Patients with Adolescent Idiopathic Scoliosis *abs# 29* 

# **ANZORS Oral Abstracts**

3:24PM - 4:00PM Chair: Dermot O'Rourke

# 3:24 PM William S du Moulin

Mechanical effects of semitendinosus tendon harvesting on knee function *abs# 30* 

# 3:36 PM Ashvin Thambyah

Stribeck curves of cartilage-on-cartilage shearing: a comparison of healthy versus mildly degenerate tissue *abs# 31* 

# 3:48 PM Hans A Gray

A six-dimensional envelope to describe failure in an amputated femur with an osseointegrated implant under external loads *abs# 32* 

Rooms 7 & 8

Rooms 7 & 8

Rooms 7 & 8

# **MEPSA Symposium: Infection, Immunity and Inflammation I**

2:00PM - 4:00PM Chairs: Rachael Ireland & Scott Byrne

# 2:00 PM Scott Byrne Harnessing peptide-based therapy to control inflammatory disease abs# 33

### 2:30 PM **Jack W Rawlings**

Immunomodulatory human peptide RP23 alleviates atopic dermatitis-like inflammation in an oxazolone-induced murine model of disease abs# 34

### 2:50 PM Zhen Zeng

Understanding CD8<sup>+</sup> T cell killing mechanisms in UV-induced tumour models abs# 35

### 3:10 PM Wendong Gao

Targeting hematoma regulation via platelet membrane coating for advanced clotimmunomodulation abs# 37

### 3:40 PM **Rouha MS Granfar**

The effects of GCSF in human and murine osteoclast differentiation and mature function models abs# 214

# Afternoon Tea + Even Numbered Poster Session

4:00PM - 5:00PM

# ANZBMS-MEPSA-ANZORS Plenary: Musculoskeletal Management: insights from consumer groups & allied health

5:00PM - 6:00PM Chairs: Albert Kim & Belinda Beck

### 5:00 PM Sandy Bevc

Understanding the burden of disease for those living with X-Linked Hypophosphatemia: a consumer perspective. abs# 38

### 5:30 PM **Anne-Marie Hill**

Fall prevention – how to translate into client management of bone health abs# 39

Session sponsored by **GYOWA KIRIN** 

Rooms 5 & 6

Foyer E & F

# **ANZBMS Abstracts**

6:00PM - 7:00PM Chairs: Albert Kim & Belinda Beck

# 6:00 PM Craig F Munns

Understanding the burden of disease for those living with X-Linked Hypophosphatemia: a consumer perspective *abs# 40* 

# 6:12 PM Agnieszka Arthur

Mice lacking ephrinB1 in the osteogenic lineage display craniomaxillofacial abnormalities abs# 41

# 6:24 PM Charles Inderjeeth

Lupus patients have increased fracture risk, recurrent fracture risk and 5 year mortality abs# 42

# 6:36 PM Kylie A Alexander

Gram negative bacterial infections drive neurogenic heterotopic ossification after spinal cord or brain injury in mice and humans *abs# 43* 

# 6:48 PM Liyan Wang

A case of hypophosphatasia treated with asfotase alfa abs# 44

# ANZORS Symposium: Innovation in Bioengineering and Orthopaedics

5:00PM - 6:30PM

Chairs: Jillian Cornish & Mark Taylor

# 5:00 PM Nathalie Bock

Bioengineering humanized bone microenvironment models for cancer research applications. *abs#* 45

# 5:30 PM Faseeh Zaidi

Wearable sensors show differences in functional outcomes between robotic and conventional total knee arthroplasty *abs# 46* 

# 5:42 PM Praveen Krishna

Comparing statistical shape modelling and contralateral mirroring in regenerating hemipelvis surface geometry *abs# 48* 

# 5:54 PM Lan Xiao

Gold Nanocluster-induced Immunomodulation for Tissue regeneration via Mitophagy Regulation: A Perspective on Materiobiology *abs# 49* 

# 6:06 PM Katrina Browne

Translation from bench to bedside: testing a novel antimicrobial bone allograft in a standard rabbit distal femoral defect model *abs# 50* 

Rooms 7 & 8

| 7:30PM - 1<br>Chairs: Albo | 0:00PM<br>ert Kim & Hanh Nguyen   | Rooms 7 & 8   |
|----------------------------|---|---------------|
| 7:30 PM                    | Mawson Wang<br>Skin and bones: systemic mastocytosis and osteoporosis <i>abs# 51</i>  |               |
| 7:50 PM                    | <b>Emma Croker</b><br>The RANK-L's with Polyostotic Fibrous Dysplasia Treatment in Adulthood <i>abs# 52</i>                             |               |
| 8:10 PM                    | <b>Lucy Collins</b><br>An unusual cause of hypercalcemia in two siblings <i>abs# 53</i>   |               |
| 8:30 PM                    | <b>Louise S Goodall</b><br>Multiple vertebral fractures in a patient with severe COVID-19 treated with lung trans<br><i>abs# 54</i>     | plantation    |
| 8:50 PM                    | <b>Christopher Preston</b><br>Diagnostic dilemma: progressive femoral lesion in a young woman <i>abs# 55</i>                            |               |
| 9:10 PM                    | <b>Tomasz J Block</b><br>A RUNX1 germline mutation as a novel cause of previously unexplained severe os<br>a young male <i>abs</i> # 56 | teoporosis in |

# MINIMUM PRODUCT INFORMATION CRYSVITA® (burosumab) solution for injection

THERAPEUTIC INDICATION: CRYSVITA® (burosumab) is indicated for the treatment of X-linked hypophosphataemia (XLH) in adults, adolescents and children 1 year of age or older. DOSE AND ADMINISTRATION: The recommended starting dose regimen for paediatrics (children 1-11yrs and adolescents 12-17yrs) is 0.8 mg/ kg of body weight, rounded to the nearest 10 mg, every 2 weeks, up to a maximum dose of 90 mg. The recommended dose regimen in adults (18yrs and older) is 1 mg/ kg of body weight, rounded to the nearest 10 mg up to a maximum dose of 90 mg, administered every 4 weeks. Treatment should be initiated and monitored by specialist medical practitioners experienced in the management of patients with metabolic bone disease. Fasting serum phosphate concentration should be below the reference range for age prior to initiation of treatment. CRYSVITA® is administered by subcutaneous injection and should be administered by a healthcare provider. The maximum volume of CRYSVITA® per injection site is 1.5 mL. If multiple injections are required, administer at different injection sites. CONTRAINDICATIONS: Hypersensitivity to CRYSVITA® or to any of the excipients. Concurrent administration with oral phosphate and / or active vitamin D analogues. Serum phosphate level within or above the normal range for age at initiation of treatment. Severe renal impairment or end stage renal disease. **PRECAUTIONS:** Discontinue oral phosphate and active vitamin D analogues at least 1 week prior to initiating CRYSVITA® treatment. Monitor for signs and symptoms of nephrocalcinosis, hyperphosphatemia, ectopic mineralisation, and serious hypersensitivity reactions. Administration should be interrupted in any patient experiencing severe injection site reactions. Discontinue if serious hypersensitivity reaction occurs. Monitoring for signs and symptoms of nephrocalcinosis due to ectopic mineralisation, e.g. by renal ultrasonography, is recommended at the start of treatment and every 6 months for the first 12 months

ECIC Clinical Cases in Metabolic Bone Disease Seminar

of treatment, and annually thereafter. Monitoring of urine calcium and phosphate is suggested every 3 months. Monitoring of plasma alkaline phosphatase, calcium, parathyroid hormone (PTH) and creatinine is recommended every 6 months (every 3 months for children 1 - 2 years) or as indicated. INTERACTIONS: Concurrent administration of CRYSVITA® with oral phosphate and active vitamin D analogues is contraindicated as it may cause an increased risk of hyperphosphatemia and hypercalcaemia. Caution should be exercised when combining CRYSVITA® with calcimimetic medicinal products. ADVERSE EFFECTS: Very common adverse reactions (>10%) reported in paediatric patients (≥1-17yrs) during clinical trials who had received at least 1 dose of CRYSVITA® were: injection site reactions, cough, headache, pyrexia, pain in extremity, vomiting, tooth abscess, vitamin D decreased, diarrhoea, rash, nausea, constipation, dental caries and mvalgia. Common adverse reactions ( $\leq 10\%$ ) reported in paediatric patients  $\geq 1$  year of age during clinical trials who had received at least 1 dose of CRYSVITA® were: dizziness and blood phosphorus increased. Very common adverse reactions (>10%) reported in adult patients (≥18yrs) who had received at least 1 dose of CRYSVITA® during clinical trials were: back pain, headache, tooth infection, restless legs syndrome, muscle spasms, vitamin D decrease and dizziness. Common adverse reactions ( $\leq 10\%$ ) reported in adult patients who had received at least 1 dose of CRYSVITA® during clinical trials were: constipation and blood phosphorus increased. Content based on full CRYSTVITA® Product Information. Date Approved: 10 Sept 2021.

Please review full Product Information before prescribing. Product Information is available at: <u>https://www.kyowakirin.com/australia/our\_medicines/doc/crysvita\_product\_information\_leaflet.pdf</u>

PBS INFORMATION: This medicine is not available through the PBS

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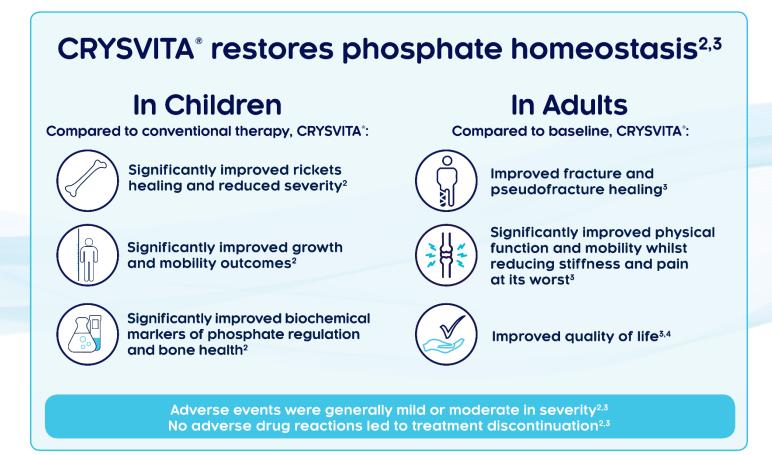




**CRYSVITA**<sup>®</sup>

(burosumab)

INTRODUCING



# PBS INFORMATION: This medicine is not available through the PBS

# Recommended for inclusion on the PBS at the May 2022 PBAC Intracyle Meeting.<sup>5</sup> Visit us at ANZBMS booth 8/9 for further information.

Please review full <u>Product Information</u> before prescribing. Minimum Product Information is available from the adjacent page. CRYSVITA<sup>\*</sup> (burosumab) is indicated for the treatment of X-linked hypophosphataemia (XLH) in adults, adolescents and children 1 year of age or older.<sup>1</sup>

▼ This medicinal product is subject to additional monitoring in Australia. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse events at <u>www.tga.gov.au/reporting-problems</u> Adverse events can be reported at pv.kkau.2r@kyowakirin.com \* XLH: X-Linked Hypophosphataemia **References: 1.** Australian Product Information for Crysvita® (burosumab) approved 2021. Available at: https://www.kyowakirin.com/australia/our\_medicines/doc/crysvita\_product\_information\_ leaflet.pdf. Last accessed June 2022. **2.** Imel EA et al. Lancet 2019;393:2416-2427 **3.** Portale AA, et al.Calcif Tissue Int.2019;105:271–84 **4.** Ruppe M, Gene Reviews.2017 https://www.ncbi.nlm. nih.gov/books/NBK83985/ **5.** Department of Health. PBAC Outcomes. Available at: https://www.pbs.gov.au/industry/listing/elements/pbac-meetings/pbacoutcomes/2022-05/May-2022-PBAC-Web-Outcomes.pdf. Accessed 17 June 2022.

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# WEDNESDAY 3<sup>RD</sup> AUGUST 2022

# **Registration Opens**

8:00AM - 7:00PM

Foyer G

| 8:00AM - 9: | <b>ristopher and Margie Nordin Young Investigator Award Symposium</b><br>00AM<br>c Sim & Rachel Davey   | Rooms 5 & 6     |
|-------------|---|-----------------|
| 8:00 AM     | <b>Delin Liu</b><br>Regulation of blood-brain barrier by a subset of astrocytes that express osteocyte mar<br><i>abs# 244</i>   | ker DMP-1       |
| 8:06 AM     | <b>Ensieh Hajimotallebi</b><br>Identification of epigenetic factors deregulated in skeletal stem cells during high fat/gl mediated inhibition of bone formation. <i>abs# 245</i>                                  | ucose           |
| 8:12 AM     | <b>Yuqing Mu</b><br>The osteoinductive potential of the nutrient inorganic components from the bone<br>microenvironment for <i>in situ</i> bone tissue engineering <i>abs# 246</i>                                |                 |
| 8:18 AM     | <b>Dinh-Tan Nguyen</b><br>Automated Grading System of Radiographic Knee Osteoarthritis Severity Using Deep L<br>247   | earning abs#    |
| 8:24 AM     | <b>Selwin Gabriel Samuel</b><br>Pathogen-associated molecular patterns produced by infectious microbes worsen Neu<br>Heterotopic Ossifications after spinal cord injury <i>abs# 248</i>                           | rogenic         |
| 8:30 AM     | Abadi Kahsu Gebre<br>Clinical cardiovascular disease and long-term falls risk: The Perth Longitudinal Study of<br>Women <i>abs# 249</i>   | Ageing in       |
| 8:36 AM     | <b>Navira Samad</b><br>Poor alignment of a smaller femur with the upper body may contribute to increased fr<br>women with POI <i>abs# 250</i>   | acture risk in  |
| 8:42 AM     | Jun Yuan<br>Elevated bone-derived sclerostin in plasma is associated with high brain amyloid- $\beta$ loa<br>cognitively normal older adults <i>abs# 251</i>  | d in            |
| 8:48 AM     | Anuj Shah<br>Changes in body composition are associated with incident vertebral deformities over 1<br>252   | .0.7 years abs# |
| 8:54 AM     | <b>Carrie-Anne Ng</b><br>Associations of Mechanical Loading from Physical Activity with Bone Mineral Density, I<br>Function and Knee Impairment in Older Adults: the Tasmanian Older Adult Cohort (TA<br>abs# 253 | •               |

# **ANZORS PhD award talks**

9:00AM - 10:00AM Chairs: Amy Ribet & David Ackland

# 9:00 AM Kieran J Bennett

Ex vivo assessment of surgically repaired tibial plateau fracture displacement under axial load using large-volume micro-CT *abs# 57* 

# 9:12 AM Beichen Shi

Development of predictive statistical shape models for paediatric lower limb bones abs# 58

# 9:24 AM Lauren S Wearne

Anterior lift-off of implanted press-fit tibial tray during deep knee bend: a time-elapsed micro-CT and digital volume correlation analysis. *abs# 59* 

9:36 AM Samantha A Hefferan

Histological characterisation of different tendons of the human hand abs# 60

# 9:48 AM Nicholas J Gunn

Examination of the interaction of autophagy and antibiotics in *Staphylococcus aureus* persistent infection of osteocytes *abs# 61* 

# Morning Tea + Odd Numbered Poster Session

10:00AM - 11:00AM

# ANZBMS/ANZORS/MEPSA Plenary: Cancer and bone

11:00AM - 12:30PM Chairs: Melissa Cantley, Ross Crawford & Scott Byrne

# 11:00 AM Michelle McDonald

Bone microenvironment regulation of tumour outgrowth abs# 62

# 11:30 AM Claudia Di Bella

Bioengineering solutions for articular cartilage regeneration abs# 63

# 12:00 PM Ronald Sluyter

The ATP-P2X7 signalling axis in graft-versus-host disease: Recent insights from humanised mouse studies *abs# 64* 

# **ANZBMS Abstracts**

12:30PM - 1:30PM Chairs: Melissa Cantley & Hong Zhou

# 12:30 PM Emma J Buckels

Transient lipodystrophy protects against high-fat diet-induced bone volume loss in male mice *abs#* 65

# 12:42 PM Thach Tran

Multimorbidity compounds excess mortality following proximal fractures: A nationwide cohort study *abs# 66* 

# 12:54 PM Ming-Hao Zheng

Osteocytes regulate organismal senescence of bone and bone marrow abs# 67

Foyer E & F

Rooms 5 & 6

Rooms 5 & 6

|  | Spatially resolving the bone marrow microenvironment in MGUS and multiple myeloma   | abs# 68     |
|--|---|-------------|
| <b>Lunch</b><br>1:30PM - 2:3                       | 30PM  | Foyer E & F |
| <b>Kyowa Kirin</b><br>1:40PM - 2:2<br>Chair: Peter |   | Room 7      |
| 1:40 PM  | Topic 1. Welcome from the Sponsor<br>Dr Tiffany Bamford, Kyowa Kirin Australia Medical Affairs  |             |
| 1:43 PM  | Introductions & learning objectives from the Chair<br>Prof Peter Ebeling (Chair), Head Dept of Medicine, School of Clinical Sciences at Monas<br>Faculty of Medicine, Nursing and Health Sciences   | sh Health,  |
|  | Topic 2. X-Linked Hypophosphataemia   |             |
| 1:45 PM  | XLH: Looking back, looking forward<br>Prof Craig Munns, Head of Mayne Academy of Paediatrics and Director of Child health<br>Centre, University of Queensland; Paediatric Endocrinologist, Queensland Children's H                              |             |
|  | Topic 3: Introducing CRYSVITA <sup>®</sup> (burosumab) - a new treatment option for XLH   |             |
| 1:50 PM  | The safety and efficacy of CRYSVITA <sup>®</sup> in paediatrics<br>Prof Craig Munns, Head of Mayne Academy of Paediatrics and Director of Child health<br>Centre, University of Queensland; Paediatric Endocrinologist, Queensland Children's H |             |
| 1:58 PM  | The safety and efficacy of CRYSVITA <sup>®</sup> in adults<br>Dr Syndia Lazarus, Endocrinologist, Queensland Health   |             |
|  | Panel Discussion  |             |
| 2:06 PM  | The practical use of CRYSVITA <sup>®</sup> in Australia<br>Prof Peter Ebeling, Prof Craig Munns & Dr Syndia Lazarus   |             |
| 2:18pm   | Close<br>Prof Peter Ebeling (Chair)   |             |

Lunch boxes provided for attendees of this session outside of Room 7.

Session sponsored by **GYOWA KIRIN** 

**ANZORS AGM** 1:30PM - 2:30PM

1:06 PM

**Melissa D Cantley** 

Room 4

Lunch boxes provided for attendees of this session outside of Room 4.

# ANZBMS/ANZORS Symposium: Lifecourse management of MSK health: paediatrics to adulthood

2:30PM - 3:30PM

Chairs: Peter J Simm & Hanh Nguyen

# 2:30 PM Jenny Harrington

Transitioning adolescents with osteogenesis imperfecta to adult care: challenges and opportunities. *abs# 69* 

# 3:00 PM Anne Trinh

Transition services for bone health in adolescents and young adults abs# 70

# **ANZBMS Abstracts**

3:30PM - 4:30PM Chairs: Peter J Simm & Hanh Nguyen

# 3:30 PM Dermot O'Rourke

Geometry and bone mineral density determinants of femoral neck strength changes following exercise *abs#* 71

# 3:42 PM Elaine M Dennison

What impact have therapeutic advances for musculoskeletal health had on mortality risk – do we see differential relationships for muscle and bone? *abs# 72* 

# 3:54 PM Ngoc Huynh

Association Between Lifestyle Factor and Bone Loss in Elderly Women abs# 73

# 4:06 PM David Scott

A 6-month digital health osteoporosis self-management intervention delivered via Amazon Alexa improved osteoporosis knowledge and falls self-efficacy in postmenopausal women with osteoporosis *abs# 74* 

# 4:18 PM Tuan V Nguyen

An individualized approach for assessing change in bone mineral density abs# 75

# **ANZORS Symposium: Biomechanics**

2:30PM - 4:36PM Chairs: Belinda Beck, David John Saxby & Geoffrey Handsfield

# 2:30 PM Thor Besier

All models are wrong, but some are useful: The challenge of model complexity for orthopaedic application *abs# 76* 

# 3:00 PM Ryan Tiew

Finite element modelling to predict femoral fractures in transfemoral amputees with osseointegrated implants *abs#* 77

# 3:12 PM Sarah Woodford

Three-dimensional kinematics of the jaw following unilateral and bilateral prosthetic TMJ surgery *abs#* 78

# 3:24 PM Ziming Chen

Overload-induced extracellular mitochondria releasing from tendon organoid leads to inflammation *abs# 79* 

Rooms 5 & 6

Room 7

# BREAK 3:54 PM **Yihang Yu** A pipeline to morph the finite element model of lumbar spine abs# 81 4:06 PM Hossein Mokhtarzadeh A nonlinear controller algorithm to design a self-paced treadmill based on the real-time center of mass data abs# 82 4:18 PM **Alexis Brierty** Surgical outcomes following tibialis anterior tendon transfer for recurrent congenital talipes equinovarus (CTEV). abs# 83 **MEPSA Symposium: Infection, Immunity and Inflammation II** 2:30PM - 4:30PM Room 4 Chairs: Anneliese Ashhurst & Angela Ferguson 2:30 PM **Anneliese s Ashhurst** Mucosal protein-based vaccination with a TLR2-stimulating adjuvant induces potent local immunity against SARS-CoV-2 in mice abs# 84 3:00 PM **Angela L Ferguson** High-dimensional spatial analysis of the tumour-microenvironment to determine metastatic disease progression and response and resistance to therapy. abs# 85 3:30 PM **Jacqueline Marshall** Tuft cells regulate inflammation in the lung during influenzaA virus infection abs#86 **Rachael A Ireland** 4:00 PM Local and systemic effects of narrowband UVB irradiation in mice abs#87 Afternoon Tea 4:30PM - 5:00PM Fover E & F **ANZBMS Abstracts** Rooms 5 & 6 5:00PM - 6:00PM

Lumbar spinal canal occlusion due to bulging of intervertebral disc abs# 80

5:00PM - 6:00PM Chairs: David Findlay & Cassandra Smith

# 5:00 PM Hanh H Nguyen

3:36 PM

**Dale L Robinson** 

Artificial Intelligence Based Diagnostic Software for Atypical Femur Fractures abs# 88

# 5:12 PM Ali Ghasem-Zadeh

Variance in Estimated Strength Along the Femoral Neck and Radius is Accounted for Differences in Macro- and Micro-architecture, not Bone Mass *abs# 89* 

# 5:24 PM Marc Sim

Association between automated abdominal aortic calcification 24 scoring obtained from lateral spine images with long-term fracture risk: the Perth Longitudinal Study of Ageing Women *abs# 90* 

# 5:36 PM Jakub Mesinovic

Agreement and associations between bone variables assessed via standard and high-resolution peripheral quantitative computed tomography *abs# 91* 

# 5:48 PM

Andrew J Burghardt

|                               | Contribution of local density variation to micro-finite element analysis in ped   | natric HR-pQC1 <i>abs# 92</i> |
|-------------------------------|---|-------------------------------|
| <b>ANZBMS A</b><br>600PM - 6: |   | Rooms 5 & 6                   |
| 5:00PM - 6                    | <b>ymposium: Translational Orthopaedics</b><br>5:30PM<br>er Lee & Claudia Di Bella  | Room 7                        |
| 5:00 PM                       | <b>Ross Crawford</b><br>Translational orthopaedics from an academic surgeons perspective <i>abs# 93</i>   |                               |
| 5:30 PM                       | <b>Stuart Callary</b><br>Development of a patient specific workflow for the corroboration of FE mode<br>migration data: A case study of the implanted acetabulum <i>abs# 94</i> | els with clinical             |
| 5:42 PM                       | Sanaa Zaki<br>Sex differences in a pre-clinical model of injury-induced osteoarthritis abs# 9   | 5                             |
| 5:54 PM                       | <b>Chan Hee Cho</b><br>Can RSA measurements predict long-term acetabular implant loosening earli<br>year time point? <i>abs# 96</i>   | er than the current two-      |
| 6:06 PM                       | <b>Anja R Zelmer</b><br>Evaluating the effectivity of treatment options for intracellular <i>S. aureus</i> infer<br><i>abs# 97</i>  | ctions in osteomyelitis       |
| 6:18 PM                       | Aaron Hammat<br>The Increased Hospital Cost of Treating Septic Revision Total Hip Arthroplast   | y abs# 98                     |
| 5:00PM - 7                    | mposium: Models of Human Disease<br>7:00PM Room 4<br>nes Wells & Jazmina-Libertad Gonzalez-Cruz   |                               |
| 5:00 PM                       | Jazmina L Gonzalez-Cruz<br>Making personalization of cancer treatment a reality with Spatial transcriptor   | mics <i>abs# 99</i>           |
| 5:30 PM                       | James W Wells<br>Development of a novel compound for the treatment of SCC in organ transpl  | ant recipients abs# 100       |
| 6:00 PM                       | <b>Shoaib Anwaar</b><br>Is there a role for regulatory T cells in the establishment of Cutaneous Squam<br><i>abs# 101</i>   | nous Cell Carcinoma?          |
|                               |   |                               |

# **Conference Dinner**

7:30PM - 11:30PM \*Pre-dinner drinks served from 7:15pm Central Room A

# THURSDAY 4<sup>TH</sup> AUGUST 2022

# **Registration Opens**

8:30AM - 4:00PM

Foyer G

| 9:00AM - 1  | MEPSA-ANZORS Plenary: Vitamin D - the essential vitamin for bone health<br>L0:30AM<br>ecca Mason                                  |
|-------------|---|
| 9:00 AM     | <b>Antony R Young</b><br>Physical determinants of vitamin D synthesis <i>abs# 102</i>   |
| 9:40 AM     | <b>Robert Scragg</b><br>Vitamin D and Health – where is the research heading? <i>abs# 103</i>                                     |
| ANZBMS A    | Abstracts   |
| 9:00AM - 1  | L0:30AM Room 7  |
| Chairs: Jas | on Talevski & Joshua Lewis  |
| 9:00 AM     | <b>Takayuki Nabeshima</b><br>Delayed cortical bone healing due to inactivated Nrf2 signaling pathway in COPD mice <i>abs#</i> 104 |
| 9:12 AM     | Kara B Anderson<br>Can alternative bone measures improve prediction of fracture in individuals with osteopenia or                 |

penia or individuals with osted e prediction of fracture normal BMD? abs# 105

### 9:24 AM **Vasilios Panagopoulos**

Plant-derived soybean peroxidase stimulates osteoblast collagen biosynthesis, matrix mineralization, and accelerates bone regeneration in a sheep model abs# 106

### 9:36 AM Weiwen Chen

Ankle fractures increase subsequent fracture risk and mortality: The 45 and Up study, a populationbased cohort study of New South Wales, Australia abs# 107

### 9:48 AM **Brya Matthews**

Identifying Adult Human Skeletal Stem/Progenitor Cells in the Periosteum abs# 108

### 10:00 AM Jayde A Collier

Is chronic peripheral vestibular dysfunction associated with bone-related and fall-related indices of fracture risk in community-dwelling older women? abs# 109

### 10:12 AM **Yinghong Zhou**

The Regulatory Effect of Macrophages on Osteocytes abs# 110

# **ANZORS** Abstracts

9:00AM - 10:30AM Chairs: Gerald Atkins & Nathalie Bock

# 9:00 AM Stephanie Khuu

A multi-scale mechanobiological model of skeletal muscle regeneration in typical and pathological conditions *abs# 111* 

# 9:12 AM David Musson

The effect of saturated fatty acid exposure on tenocyte health *abs# 112* 

# 9:24 AM Boopalan Ramasamy

Comparative analysis of human migratory and fibronectin adhesion assay derived chondroprogenitors to assess superiority for cartilage repair *abs# 113* 

# 9:36 AM Scott M Bolam

A high-fat diet has negative effects on tendon resident cells in an in vivo rat model abs# 114

# 9:48 AM Rachel W. R Li

A Novel Material Evidences a Great Potential in Future Orthopaedic Implant abs# 115

## Morning Tea

10:30AM - 11:00AM

## **ANZBMS Abstracts**

11:00AM - 12:00PM Chairs: John Kemp & Julie Pasco

## 11:00 AM Jiake Xu

ADR3, a next generation i-body to human RANKL, inhibits osteoclast formation and bone resorption *abs# 116* 

## 11:12 AM Jeff Hassall

Long-term Effect of Denosumab on Bone Microarchitecture as Assessed by Tissue Thickness– Adjusted Trabecular Bone Score (TBS) in Postmenopausal Women with Osteoporosis: Results from the FREEDOM and Open-Label Extension (OLE) *abs# 117* 

## 11:24 AM Natalie Wee

Osteoblast precursor or osteoblast? Tracking cell differentiation in vivo and in vitro abs# 118

# 11:36 AM lan Reid

Zoledronate Reduces Height Loss Independently of Vertebral Fracture Occurrence in a Randomized Trial in Osteopenic Older Women *abs# 119* 

## 11:48 AM Peter Dr Pivonka

Assessment of strategies for safe drug discontinuation and transition of denosumab treatment in PMO - insights from a mechanistic PK/PD model of bone turnover *abs# 120* 

Rooms 5 & 6

Foyer E & F

## **ANZORS Symposium: Imaging**

11:00AM - 12:30PM

Chairs: Thor Besier, Egon Perilli & Azadeh Nasseri

#### 11:00 AM Kathryn Stok

A in vivo microCT imaging protocol for reproducible quantitative morphometric analysis of joint structures *abs# 121* 

# 11:30 AM Xiaolong Fan

Time-elapsed micro-CT imaging of humeral implant failure in reverser shoulder replacement *abs#* 122

## 11:42 AM Geoffrey Handsfield

Muscle and Fascia Structural Changes Following Ankle Sprain Injury and Immobilization abs# 123

# 11:54 AM Rachel Chalmers

Current challenges of 3D-printing spinal orthoses abs# 124

# 12:06 PM Jingrui Hu

Linking the Ultrastructure and Micromechanics of Articular Cartilage abs# 125

## ANZBMS Therapeutics vs Exercise: the Great Debate

12:00PM - 1:00PM Chair: Craig Munns

Panel: Team Therapeutics: Peter Ebeling & Mark Cooper VS Team Exercise: Belinda Beck & Robin Daly

# MEPSA Symposium - Vitamin D in Human Disease

11:00AM - 1:00PM Chairs: Grant Parnell & Katie Dixon

# 11:00 AM Paul H Anderson

Mammary-specific ablation of Cyp24a1 reduces mammary density and inhibits tumour development in MMTV-PyMT breast cancer mice *abs# 126* 

# 11:30 AM Grant P Parnell

Defining how vitamin D promotes tolerogenic dendritic cells to enable its use in combined therapy for multiple sclerosis and other autoimmune diseases. *abs# 127* 

## 11:55 PM Katie M Dixon

Photoprotection by vitamin D compounds: finding the missing pieces to the photocarcinogenesis puzzle. *abs# 128* 

# 12:20 PM Furkan A. Ince

Photoprotection by vitamin D compounds: uncovering markers that predict efficacy in reducing photocarcinogenesis. *abs# 129* 

## 12:45 PM Kun (Kathy) Zhu

Tracking of vitamin D status and its association with bone loss in middle-aged Australians: Busselton Healthy Ageing Study. *Abs# 209* 

Rooms 5 & 6

Room 4

## **ANZBMS Abstracts** 2:00PM - 3:24PM Rooms 5 & 6 Chairs: Richard Prince & Monika Frysz 2:00 PM Yea Rin Olivia Lee Mass spectrometry imaging spatially identifies complex-type N-glycans as putative cartilage degradation markers in human knee osteoarthritis tissue abs# 130 2:12 PM **Itamar Levinger** A meta-analysis examining the impact of wait time for orthopaedic consultation on pain levels in individuals with osteoarthritis abs# 131 2:24 PM **Dzenita Muratovic** Compromised Osteocyte Viability and Connectivity: a Key Contributor to the Pathogenesis of Human Hip Osteoarthritis. abs# 132 2:36 PM **Zubeyir Salis** Loss of body mass index (BMI) reduces the need for knee replacement: a multi-cohort survival analysis abs# 133 2:48 PM Jiao Jiao Li Unveiling the role of microRNA-1 in chondrocytes and osteoarthritis abs# 134 3:00 PM **Thach Tran** Fracture risk assessment: does competing risk adjustment make a difference? abs# 135 3:12 PM Xiwei Fan Advanced Mass Spectrometry imaging technique provides novel approaches to understanding the

# B.O.N.E Speaker Presentation

3:24PM - 3:54PM Chairs: Richard Prince & Monika Frysz

# 3:24 PM Monika Frysz

Observational and genetic relationships between hip shape and hip osteoarthritis: findings from UK Biobank *abs# 137* 

lipid fingerprinting of osteoarthritis progression abs# 136

Rooms 5 & 6

## **PLENARY POSTERS**

#### **Kara Anderson**

Parental fracture in early life predicts early life fracture risk in offspring abs# 200

#### Yosuke Mano

The effect of astaxanthin on the structural alterations in muscles of elastase-induced emphysema mouse models *abs# 201* 

#### Anoohya Gandham

Associations of body mass index, body fat percentage and sarcopenia components with bone health estimated by second-generation high-resolution peripheral quantitative computed tomography in older adults with obesity *abs# 202* 

#### Asrar Elahi

Development of Optimised Sintered Bovine Bone Block for Oral Grafting: Physio-chemical, mechanical and biological characterisation *abs# 203* 

**Duy K. Hoang** Gender-related differences in bone architecture in Vietnamese *abs# 204* 

#### Alexander H Seeto

Bayesian Network Meta-Analysis of Cancer Events in Trials of Osteoporosis Therapies abs# 205

#### Hoo Young Lee

Discordance in paretic and non-paretic hips bone density in hemiplegic stroke patients – a cross-sectional multicenter retrospective study *abs# 206* 

#### Alexander J. Rodriguez

Coronary stenosis scores in a cohort of osteoporosis medication users undergoing cardiac computed tomography at a single tertiary centre *abs# 207* 

#### Dana D Bliuc

Fracture does not exist in isolation: What do commodities contribute to subsequent fracture and mortality risk? *abs# 208* 

## Kun (Kathy) Zhu

Tracking of vitamin D status and its association with bone loss in middle-aged Australians: Busselton Healthy Ageing Study *abs# 209* 

#### **BASIC SCIENCE**

#### Hui Yi Chew

Targeting cancer cells through arginine starvation abs# 210

#### **Krisel De Dios**

Association between genotypes of the fat mass and obesity-associated gene (FTO) and osteoporosis phenotypes *abs# 211* 

## Ngoc Huynh

Association Between Polymorphisms in the Collagen Type 1 Alpha 1 (*COLIA1*) Gene and Bone Phenotypes *abs#* 212

#### **Itamar Levinger**

Osteocalcin and glucose regulation, show me the evidence abs# 213

#### Rouha MS Granfar

The effects of GCSF in human and murine osteoclast differentiation and mature function models abs# 214

#### BIOMECHANICS

#### **Richard Prince**

Assessment of measures of bone distribution within DXA image cross sections improves prediction of femoral neck fracture independent of aBMD *abs# 216* 

#### Mélody Labrune

Validation of a musculoskeletal human shoulder model using advanced computational modelling abs# 217

#### **Geoffrey Handsfield**

Statistical Shape and Vector Field Model for Gastrocnemius Muscle Architecture Characterisation abs# 218

#### CARCINOGENESIS

#### Michelle L Maugham-Macan

A retrospective analysis of obesity, fracture risk and overall survival in breast cancer bone metastasis abs# 219

## CLINICAL

#### Khuong-Duy Hoang

Prevalence of and risk factors for sarcopenia community-dwelling: Vietnam Osteoporosis Study abs# 220

#### Alexander J. Rodriguez

Acute ECG changes in patients receiving intravenous bisphosphonates: A systematic review and meta-analysis *abs# 221* 

#### Shane Patella

IPN60130 for the treatment of fibrodysplasia ossificans progressiva: Methodology of the randomized, doubleblind, placebo-controlled phase II FALKON trial *abs# 222* 

#### Shane Patella

Palovarotene for the treatment of Fibrodysplasia Ossificans Progressiva: Methodology of the phase III open-label PIVOINE rollover trial *abs# 223* 

#### Shane Patella

Joint function and quality of life in Fibrodysplasia Ossificans Progressiva: Results from an international burden of illness survey of patients and family members *abs# 224* 

## **Carlie Bauer**

Increased circulating levels of lipocalin-2 are associated with increased risk of metabolic syndrome the Perth longitudinal study of aging women *abs# 225* 

## Albert S Kim

Assessing the effect of Asian ethnicity on bone microarchitecture in patients with Atypical Femoral Fractures using 3D Dual X-Ray Absorptiometry (DXA) *abs# 226* 

#### Pamela Rufus-Membere

Healthy reference intervals for bone impact microindentation: a multi-centre international study. abs# 227

#### Paul Bao Duy La

Osteoporosis and fracture risk assessment in adults with ischaemic stroke abs# 228

#### Anne Trinh

Reduced body mass index and reduced total lean mass but not cirrhosis are independent predictors of reduced bone mineral density and osteoporosis in chronic liver disease *abs# 229* 

#### **Caitlin Corkhill**

Atypical anecdotes: three cases of stress fracture associated with denosumab use for osteoporosis abs# 230

#### **Cassandra Smith**

Extent of abdominal aortic calcification is associated with increased risk of rapid weight loss and cachexia: the Perth Longitudinal Study of Ageing Women *abs# 231* 

#### S. Jade Barclay

Factors affecting pain management in adults with hypermobility-related multimorbidity abs# 232

#### **CLINICAL CASES**

#### Jessica M Del Gigante

Teriparatide used for bisphosphonate-associated atypical femoral fracture in multiple myeloma abs# 233

#### Joanna Gong

Hypophosphatemic osteomalacia with suppressed bone turnover abs# 234

## Elaine Jayadiwangsa

Management of osteoporosis in end stage renal disease what to do when treatment fails abs# 235

## Ruveena Kaur

The smile of an angel *abs# 236* 

## **Thomas R Nicholls**

Treatment refractory post-operative hypocalcaemia abs# 237

# Emma Croker

A cracking case abs# 238

# IMAGING

## Kay Hau Aaron Choy

Rapidly progressive Charcot neuroarthropathy requiring below-knee amputation: an unfortunate outcome in a man with type 2 diabetes mellitus *abs# 239* 

#### MUSCULOSKELETAL AND REGENERATIVE BIOLOGY

#### Shejil Kumar

Serum sclerostin concentrations using the Diasorin assay correlate with renal function and physical activity *abs#* 240

#### Scott M Bolam

A Maternal High Fat Diet Leads to Sex-Specific Programming of Mechanical Properties in Supraspinatus Tendons of Adult Rat Offspring *abs# 241* 

#### **Bailey Deverell**

Methotrexate and diet's effect on trabecular long bone in a rat model of breast cancer abs# 242

#### TRANSLATIONAL ORTHOPAEDICS

#### Simon Thwaites

Intramedullary nailing of tibial shaft fractures: a scoping review abs# 243

#### CHRISTOPHER AND MARGIE NORDIN YOUNG INVESTIGATOR AWARD POSTERS

## Delin Liu

Regulation of blood-brain barrier by a subset of astrocytes that express osteocyte marker DMP-1 abs# 244

#### Ensieh Hajimotallebi

Identification of epigenetic factors deregulated in skeletal stem cells during high fat/glucose mediated inhibition of bone formation. *abs# 245* 

#### Yuqing Mu

The osteoinductive potential of the nutrient inorganic components from the bone microenvironment for *in situ* bone tissue engineering *abs# 246* 

#### Dinh-Tan Nguyen

Automated Grading System of Radiographic Knee Osteoarthritis Severity Using Deep Learning abs# 247

#### Selwin Gabriel Samuel

Pathogen-associated molecular patterns produced by infectious microbes worsen Neurogenic Heterotopic Ossifications after spinal cord injury *abs# 248* 

#### Abadi Kahsu Gebre

Clinical cardiovascular disease and long-term falls risk: The Perth Longitudinal Study of Ageing in Women *abs#* 249

#### Navira Samad

Poor alignment of a smaller femur with the upper body may contribute to increased fracture risk in women with POI *abs# 250* 

#### Jun Yuan

Elevated bone-derived sclerostin in plasma is associated with high brain amyloid- $\beta$  load in cognitively normal older adults *abs# 251* 

#### Anuj Shah

Changes in body composition are associated with incident vertebral deformities over 10.7 years abs# 252

## Carrie-Anne Ng

Associations of Mechanical Loading from Physical Activity with Bone Mineral Density, Physical Function and Knee Impairment in Older Adults: the Tasmanian Older Adult Cohort (TASOAC) Study *abs# 253* 

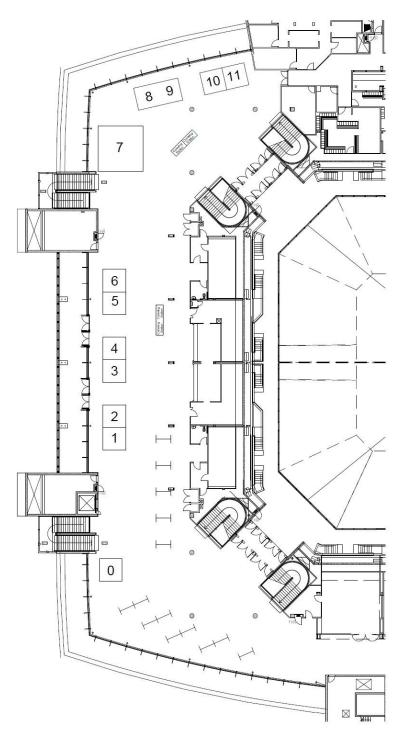
# Infection, Immunity and Inflammation

## Xiaoyu Hou

Understanding the contribution of immature myeloid cells to early melanoma establishment abs#254

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#### **EXHIBITION FLOOR PLAN – FOYERS E & F**



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Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology. Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology pioneer since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies, has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

#### Booth 7

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#### **EXHIBITORS**

#### Australia and New Zealand Bone and Mineral Society (ANZBMS)

#### www.anzbms.org.au

ANZBMS is a professional medical / scientific society established in 1988 to bring together clinical and experimental scientists and physicians actively involved in the study of bone and mineral metabolism in Australia and New Zealand. The mission of the ANZBMS is to be the premier Australasian society in the field of bone and mineral metabolism through promoting excellence in bone and mineral research, fostering the integration of clinical and basic science, and facilitating the translation of our science to health care and clinical practice. Key objectives to achieve these goals include the nurturing and development of the future generations of basic and clinical scientists, and the dissemination of new knowledge in bone and mineral metabolism through our Annual Scientific Meeting. The ANZBMS will be proactive in shaping research and health policies based on scientific advances in our field.

#### Ecolight / Cortex Health

#### www.echolightmedical.com.en

Echolight (distributed by Cortex Health) is new technology using Radiofrequency Echographic Multi Spectrometry (REMS) via ultrasound through scanning of central reference sites of lumbar vertebrae (L1-L4) and the femoral neck. This assessment determines a T-score, Z-score and BMD (g/cm2) values and give a diagnosis of normal/osteopenia/osteoporosis. TGA approved medical device.

#### **GE Healthcare**

As a leading global medical technology, diagnostics and digital solutions innovator, GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience and around 50,000 employees globally, the company operates at the centre of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity and improve outcomes for patients, providers, health systems and researchers around the world. We embrace a culture of respect, transparency, integrity and diversity.

#### **Gedeon Richter**

#### www.gedeonrichter.com.en

Headquartered in Hungary, Gedeon Richter Plc. is an innovation-driven specialty pharmaceutical company. The activities of the Hungarian-directed multinational company are vertically integrated and involve pharmaceutical manufacturing, research and development, sales and marketing. Gedeon Richter's goal is to help patients with innovative products to improve the quality of human life.

# Booth 11

Booth 6

#### Booth 2

#### Booth 8 & 9

# Getz Healthcare

www.getzhealthcare.com

Getz Healthcare has represented the Lunar brand for over thirty years. Partnering with the manufacturer, GE Healthcare, Getz offers advanced DEXA solutions including Prodigy and iDXA for use in clinical and research applications. To support our customers we provide comprehensive sales, applications and technical support across Australia and New Zealand.

#### Hologic

www.hologic.com

Hologic's purpose is to empower people to live healthier lives everywhere, every day. This is achieved by bringing The Science of Sure® to life. As a leading innovator and champion for women's health, Hologic helps healthcare professionals around the world diagnose and treat their patients with precision, certainty, and confidence. With ground-breaking technology at the core, Hologic innovations across breast & skeletal health, diagnostic solutions and GYN surgical solutions are designed to achieve exceptional clinical results, making it possible to detect, diagnose and treat illnesses and other health conditions earlier and more effectively.

## **Jared Coolwell Art**

www.facebook.com/jaredcoolwellaboriginalart

Jared Coolwell is displaying some of his artwork within the exhibition at the ANZBMS MEPSA – ANZORS Conference. Feel free to make contact with Jared if you are interested in purchasing some of his artwork.

## Materialise

www.materialise.com/en/medical

Materialise Medical, which has pioneered many of the leading medical applications of 3D printing, enables researchers, engineers and clinicians to revolutionize innovative patient-specific treatment that helps improve and save lives. Materialise Medical's open and flexible platform of software and services, Materialise Mimics, forms the foundation of certified Medical 3D printing, in clinical as well as research environments, offering virtual planning software tools, 3D-printed anatomical models, and patient-specific surgical guides and implants.

#### Theramex

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Theramex Australia is a specialty pharmaceutical company solely committed to supporting the health needs of women. By working closely with our partners and healthcare professionals, Theramex Australia provides a diverse portfolio of treatments that help women through life's stages. Our key therapy areas, Osteoporosis, Menopause, Contraception and Overactive Bladder.

Booth 3

# Booth 4

#### Booth 5

Booth 10

#### **ATTENDEES**

David Ackland University of Melbourne VIC

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Kara Anderson Deakin University VIC

Paul Anderson University of South Australia SA

Niloufar Ansari Monash Institute of Pharmaceutical Sciences VIC

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Thor Besier University of Auckland New Zealand

Sandy Bevc XLH Australia VIC

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Robert Blank Garvan Institute NSW

Dana Bliuc Garvan Institute of Medical Research NSW

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Scott Byrne University of Sydney NSW

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Hayley Cameron Wellington Hospital New Zealand

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Jackie Center Garvan Institute of Medical Research and St Vincent's Hospital NSW

Rachel Chalmers Queensland University of Technology QLD

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Chan Hee Cho The University of Adelaide SA

Kay Hau Choy Barwon Health VIC

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Lucy Collins Western Hospital VIC

Jared Coolwell Jared Coolwell Aboriginal Art QLD

Mark Cooper University of Sydney NSW

Caitlin Corkhill The Canberra Hospital ACT

Jillian Cornish University of Auckland New Zealand

Ross Crawford Queensland University of Technology QLD

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Tania Crotti University of Adelaide SA

Jun Dai Cghs VIC

Jack Dalla Via Edith Cowan University WA

Robin Daly Deakin University VIC

Timo Damm University-Hospital Schleswig-Holstein Germany

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Claudia Di Bella University of Melbourne VIC

Peng Ding Shanghai Jiao Tong University Affliated Sixth People's Hospital China

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William du Moulin Griffith University QLD

Gustavo Duque Australian Institute for Musculoskeletal Science (AIMSS) -The University of Melbourne VIC

Anthony Earp Kyowa Kirin NSW

Peter Ebeling Monash University VIC

John Eisman Garvan Institute of Medical Research NSW

Asrar Elahi University Of Otago New Zealand

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Sue Lyn Goh Eastern Health VIC

Joanna Gong Melbourne Health VIC

Jazmina-Libertad Gonzalez-Cruz The University of Queensland Diamantina Institute QLD

Louise Goodall St Vincent's Hospital Sydney NSW

Rouha Granfar Griffith University QLD

Hans Gray The University of Melbourne VIC

Nicholas Gunn University of Adelaide SA Jenny Gunton University of Sydney NSW

Donald Gutteridge Gairdner Hospital NSW

Thomas Hadwen Sunshine Coast Health QLD

Ensieh Hajimotallebi The University of Adelaide SA

Aaron Hammat The University of Adelaide SA

Geoffrey Handsfield Auckland Bioengineering Institute New Zealand

Rita Hardiman University of Melbourne VIC

Amy Harding Menzies Health Institute Queensland, Griffith University, Gold Coast, Qld, Australia QLD

Jenny Harrington Women's and Children's Hospital, Adelaide SA

Jeffrey Hassall Amgen Australia NSW

Emily Hatton Gedeon Richter NSW

David Haynes University of Adelaide SA

Tina Heath Theramex ACT

Sam Hefferan Kolling Institute NSW

Madhuni Herath Monash Health VIC

Salindi Herath Flinders University SA

Anne-Marie Hill The University of Western Australia WA

Khuong-Duy Hoang University of Technology Sydney NSW Mike Hollis Getz Healthcare QLD

Daniel Hopkins University of Melbourne VIC

Xiaoyu Hou UQDI/TRI QLD

Thaw (Thaw Dar) Htet Macqurie University Hospital NSW

Jingrui Hu University of Exeter United Kingdom

Xin Huang IHBI,QUT QLD

Yichen Huang The University of Melbourne VIC

Ngoc Huynh University of Technology Sydney NSW

Furkan Ince The University of Sydney NSW

Charles Inderjeeth North Metropolitan Health & University of Western Australia WA

Rachael Ireland University of Sydney NSW

Sarah Jahfali UQDI/TRI QLD

Elaine Jayadiwangsa SA Health SA

David Je Launceston General Hospital QLD

lvone Johnson Australian and New Zealand Bone and Mineral Society NSW

Graeme Jones University of Tasmania TAS

Jeongwan Kang CHA UNIVERSITY ILSAN MEDICAL CENTER South Korea

Ruveena Kaur Middlemore hospital New Zealand John Kemp The University of Queensland QLD

Stephanie Khuu The University of Auckland New Zealand

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