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WELCOME FROM THE MINISTER FOR TOURISM, MAJOR EVENTS AND THE COMMONWEALTH GAMES

It is my pleasure to welcome you to a joint meeting of The Australian and New Zealand Bone and Mineral Society and the International Federation of Musculoskeletal Research Societies in conjunction with the Japanese Society for Bone and Mineral Research.

Meetings like this help to grow Queensland's business tourism industry, while at the same time provide visitors from around the world an opportunity to enjoy the world-class experiences on offer in South East Queensland.

The Palaszczuk Government is proud to support this joint meeting in partnership with the Australian and New Zealand Bone and Mineral Society, through Tourism and Events Queensland, as part of our Business Events portfolio.

I hope you enjoy your time at the retreat and make the most of the exciting visitor experiences available in Brisbane.

The Hon. Kate Jones MP

Minister for Tourism, Major Events and the Commonwealth Games

WELCOME FROM THE INTERNATIONAL STEERING COMMITTEE

The Programme and Local Organising Committee Chairs, and the Presidents of the IFMRS, ANZBMS and JSBMR, extend their warmest welcome to you at our inaugural combined meeting of the Australian and New Zealand Bone and Mineral Society (ANZBMS) and the International Federation of Musculoskeletal Research Societies (IFMRS), in conjunction with the Japanese Society for Bone and Mineral Research (JSBMR), in Brisbane, Australia, over 17-21 June 2017.

This meeting will highlight the shared mission of all three societies - to raise global awareness of the importance of musculoskeletal research, foster integration of clinical and basic science, and facilitate the translation of science to health care and clinical practice.

Our scientific programme includes invited plenary presentations, symposia and seminars, basic and clinical abstract presentations, young investigator awards, and interactive poster sessions. Our speakers are drawn from a truly international profile, including Australia, Asia, Canada, Japan, New Zealand, Europe, the United Kingdom and the USA. Key themes in contemporary musculoskeletal science being presented include:

- Genomics and the skeleton
- The future of osteoporosis management
- Cancer and bone metastasis
- Muscle, mechanical forces and bone
- Biology and treatment of rheumatic diseases
- Live imaging of bone cells
- Infection, the immune system and bone
- Innovations in orthopaedics
- Therapeutic advances
- Rare/childhood bone diseases
- Fracture prevention and fracture care
- Advances in bone biology

We hope you enjoy being welcomed to the beautiful city of Brisbane by Australia's traditional owners, with a wonderful opening function to follow. The Local Organising Committee will also be organizing student and young investigator barbeques, a gala dinner-dance, and early morning exercise sessions each day in the beautiful Southbank Parklands of Brisbane, on the edge of the river.

Over the next few days, there will be many opportunities to network and discuss science and medicine, ensure equity of opportunity, find new funding and research opportunities, and build collaborations and contacts with international colleagues. We are sure that you will find this to be a truly exciting meeting presenting both the breadth and depth of clinical and basic musculoskeletal research.

We hope you enjoy the meeting!

Mark Forwood

LOC Chair

Mark Cooper & Mike Rogers

ANZBMS POC Co-Chairs

John Eisman & Roland Baron

IFMRS POC Co-Chairs

Seiji Fukumoto & Riko Nishimura

JSBMR POC Co-Chairs

Emma Duncan
ANZBMS President

Roland Baron and Bente Langdahl
IFMRS Co-Presidents

Sakae Tanaka JSBMR President

SOCIETY SECRETARIATS

ANZBMS

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Contact person: Ivone Johnson

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Conference Secretariat - ASN Events Pty Ltd

Unit 9/397 Smith Street, Fitzroy VIC 3065 Phone 03 8658 9530 Fax: 03 8658 9531 jf@asnevents.net.au Contact person: Jim Fawcett

www.asnevents.com.au

Other Meetings of Interest

The 35th Annual Meeting of the JSBMR

27 – 29 July 2017 Hotel Nikko Fukuoka http://jsbmr.umin.jp/en/basic/

ESA Clinical Weekend

25 – 27 August 2017 Esplanade Hotel by Rydges, WA www.esaclinicalweekend.org.au

ESA-SRB Joint Annual Meeting

27 – 30 August 2017 Perth Convention and Exhibition Centre www.esa-srb.org.au

ANZBMS-IFMRS-JSBMR 2017 COMMITTEES

ANZBMS-IFMRS-JSBMR 2017 INTERNATIONAL STEERING COMMITTEE



Emma Duncan ANZBMS President Queensland University of Technology, Australia

Prof Emma Duncan is Eminent Senior Staff Specialist in Endocrinology at Royal Brisbane and Women's Hospital, Adjunct Professor, Institute of Health and Biomedical Innovation, Faculty of Health, Queensland University of Technology, and Professor of Medicine, School of Medicine, Faculty of Health Sciences, University of Queensland. She is also the current president of the Australian and New Zealand Bone and Mineral Society.

Prof Duncan graduated in medicine with first class honours from the University of Sydney in 1992. After moving to the UK in 1994, she undertook her doctorate studies into the genetics of osteoporosis at the Wellcome Trust Centre for Human Genetics, Oxford. She returned to Australia in 2005 and moved to her current clinical position in 2010.

Since her undergraduate days, Prof Duncan has been fascinated by the skeleton. Research in bone diseases has formed the bulk of her basic and clinical research for over two decades, and she has published multiple research papers in osteoporosis and skeletal dysplasias. She is also interested in the genetics of other heritable endocrine disorders, such as MODY, phaeochromocytoma/paraganglioma, thyroid cancer and other endocrine tumours. Prof Duncan has broad practical experience in gene mapping, including genetic epidemiology, linkage, and genome-wide association studies; and more recently has played a strong role in gene discovery using massively parallel ("next-generation") sequencing.

In addition to her genetic research, Prof Duncan also contributes to clinical research in endocrinology and obstetric medicine. She is particularly interested in translating the genetic revolution into clinical practice.



Bente Langdahl *IFMRS Co-President Aarhus University Hospital, Denmark*

Bente Langdahl graduated from the medical school at Aarhus University in 1988 and did clinical training in internal medicine and endocrinology at Aarhus University Hospital. Bente Langdahl received her PhD at Aarhus University in 1995: "Investigations on a possible pathogenic role of thyroid hormones in postmenopausal osteoporosis" and received a DMSc at the same university in 2004: "The genetics of bone mass and risk of osteoporotic fractures". In 2004 Bente Langdahl was appointed consultant at the

department of Endocrinology and Internal Medicine at Aarhus University Hospital and research lecturer at Aarhus University. In 2012 Bente Langdahl was appointed professor at Aarhus University. Bente Langdahl's main research interests are identification and further investigation of genetic variants that imply increased risk of osteoporotic fractures, osteogenesis imperfecta in adult patients, interactions between fat and bone tissues, the impact of thyroid diseases and diabetes on bone health, the effects of vitamin D and K on bone metabolism, and the development of new treatments for osteoporosis. Bente Langdahl is co-chair of the Internal Federation of Musculoskeletal Research Societies.



Roland Baron *IFMRS Program Organising Committee Co-Chair Harvard School of Dental Medicine, USA*

Dr. Roland Baron received his DDS and his PhD in oral biology at the University of Paris (France). Upon receiving his degrees, Dr. Baron remained at the University of Paris, where he went on to become a member of the dental faculty. He was first appointed as an assistant professor in physiology, was soon promoted to an associate professor of physiology, and became chief of the Physiology Section. Dr. Baron has taken office as the new president of the American Society for Bone and Mineral Research (ASBMR), the world's leading

scientific organization for bone health research. Dr. Baron will served as President of ASBMR until October 2015.



Sakae TanakaJSBMR President
The University of Tokyo Hospital, Japan

Sakae Tanaka MD, PhD graduated from University of Tokyo in 1987. He learned osteoclast biology in Department of Biochemistry, Showa University School of Dentistry from 1990 to 1993 (Professor Tatsuo Suda) and worked as a postdoctoral associate in Department of Cell Biology, Yale University School of Medicine from 1993 to 1995 (Professor Roland Baron). He became Professor in the Department of Orthopaedic Surgery, Faculty of Medicine, University of Tokyo in 2012. He has more than 200 international

publications, 30 international presentations in international congresses and more than 2,000 citations in indexed international scientific journals. He was awarded a Young Investigator Award from American Society for Bone and Mineral Research in 1992, and an Academic Award from Japanese Society for Bone and Mineral Research in 2002. His clinical specialty

is joint surgery and clinical interest includes rheumatoid arthritis and osteoporosis. His scientific fields of interest are osteoclast biology, signal transduction, apoptosis and epigenetics. He has been serving as a president of JSBMR since 2015.



Mark Forwood

ANZBMS Local Organising Committee Chair Griffith University, Australia

Mark Forwood was appointed as the Foundation Chair of Anatomy at Griffith University in 2009, and Head, School of Medical Science in 2013. He was a NHMRC Fellow at Indiana University with David Burr and Charles Turner from 1991-1994, studying skeletal biology and bone tissue consequences of suppressing bone remodeling using bisphosphonates. Following his Fellowship, he returned to the Department of Anatomy at The University of Queensland, where he continued his research in skeletal biology and taught gross and

musculoskeletal anatomy. His laboratory continues to study skeletal biology, bone remodeling in stress fracture repair and optimization of sterilization conditions for bone allografts. Prof Forwood has been continually funded by NHMRC since 1996, holding 10 project grants as Principal Investigator and 4 as Co-Investigator. He was a member of the Board of Directors of the International Bone and Mineral Society from 2011-2016, the Editorial Board of Bone and a Co-Section Editor for Current Osteoporosis Reports.



Mark Cooper

ANZBMS Program Organising Committee Co-Chair The University of Sydney, Australia

Mark Cooper is the Professor of Medicine and Head of the Discipline of Medicine at the Concord Clinical School, University of Sydney. Until 2012 he was a Senior Lecturer in Endocrinology at the University of Birmingham, UK. He was also metabolic bone physician at the Royal Orthopaedic Hospital, Birmingham, one of the largest orthopaedic hospitals in Europe. His clinical and research interests include adrenal steroid physiology and metabolic bone disease. In particular, he has examined the role that glucocorticoid

metabolism plays in normal physiology and glucocorticoid induced osteoporosis. He is currently an Editor for BONE and an editorial board member for CTI. He was previously the Bertram Abraham's Lecturer in Physiology at the Royal College of Physicians of London. He continues to combine a clinical practice with a basic/translational research group.



Mike Rogers

ANZBMS Program Organising Committee Co-Chair Garvan Institute of Medical Research, Australia

Mike Rogers relocated to Sydney in 2012 and heads the Bone Therapeutics Lab at the Garvan Institute of Medical Research. He is also a conjoint Professor at St Vincent's Clinical School at UNSW Sydney. He graduated with a degree in Biochemistry in 1989 and a PhD in bone pharmacology in 1994 from the University of Sheffield, UK. He moved to the University of Aberdeen, Scotland in 1997, where he led the Musculoskeletal Research Programme, recognised as a EULAR Centre of Excellence. He was twice the first

recipient of prestigious young investigator awards - the ECTS lain T. Boyle Award and the IBMS Herbert Fleisch Award - in recognition of his breakthrough research that identified the molecular mechanisms of action of bisphosphonate drugs used to treat metabolic bone diseases. Mike's interests now focus on immune regulation of bone metastasis and pharmacological interventions, as well as inflammatory diseases involving the mevalonate-cholesterol pathway.



John Eisman

IFMRS Program Organising Committee Co-Chair Garvan Institute of Medical Research, Australia

John Eisman AO (MB BS, PhD, FRACP, FAHMS) is Director of Clinical Translation and Advanced Education at Garvan. From 1984 to December 2011 he was Garvan's Director of Osteoporosis and Bone Biology. He is a Senior Staff Specialist Endocrinology, St Vincent's Hospital Sydney, Associate Dean for Clinical Leadership and Research, School of Medicine Sydney, University of Notre Dame and Adjunct Professor, School of Medicine, UNSW Australia.

His medical and basic science training was in Sydney and Melbourne with post-doctoral studies in Madison, Wisconsin and Bern, Switzerland. Professor Eisman initiated and has run the Bone and Calcium clinic at St Vincent's Hospital and the Dubbo Osteoporosis Epidemiology Study since their inception more than 20 years ago.

Professor Eisman was Editor-in-Chief of the Journal of Bone and Mineral Research and past-member of the Council of the American Society for Bone and Mineral Research. He is a co-founder and past-President of the Australia and New Zealand Bone and Mineral Society.

Professor Eisman chaired the inaugural Australian National Health Priority Action Council's National Arthritis and Musculoskeletal Conditions Advisory Group and co-chaired its successor, the Australian Better Arthritis and Osteoporosis Expert Advisory Committee. He was co-chair of the NSW Health Agency for Clinical Innovation in Musculoskeletal conditions and chair of the American Society for Bone and Mineral Research (ASBMR) International Task Force on Osteoporotic Fracture.

In 2013, he was awarded the William F. Neuman Award by the ASBMR, the most senior award of the Society. He is currently President of the International Bone and Mineral Society. He was appointed a Fellow of the Australian Academy of Health and Medical Sciences in 2015.

The focus of Professor Eisman's research is the epidemiology and genetics of osteoporosis, encompassing population, family and twin studies as well as molecular and cellular mechanisms for gene effects. His major commitment and focus is translating osteoporosis research findings to real improvements in health care delivery to the general community through the education of patients and their doctors.



Seiji Fukumoto

JSBMR Program Organising Committee Co-Chair The University of Tokushima, Japan

Dr. Fukumoto is a Project Professor of the Department of Nuclear Receptor Ligands and Vitamins Research, Fujii Memorial Institute of Medical Sciences, Tokushima University. He received his MD degree in 1982 and PhD degree in 1990 from the University of Tokyo. After receiving PhD degree, he spent a couple years in the laboratory headed by Prof. T.J. Martin in Melbourne. His areas of interest include homeostatic control and derangements of mineral metabolism, and pathogenesis and treatment of metabolic bone diseases. He has

contributed to the cloning of FGF23, the development of assay for FGF23 and the clarification of mechanisms of actions of FGF23. He is now involved in the clinical, educational and research works in Tokushima University.



Riko Nishimura

JSBMR Program Organising Committee Co-Chair Osaka University, Japan

Riko Nishimura, DDS, PhD, graduated from Osaka University Faculty of Dentistry in 1985 and from Osaka University Graduate School of Dentistry in 1990. He worked as an instructor in New York University Medical Center with Prof Joseph Schlessinger and learned molecular biology and intracellular signaling mechanisms (1992-1994), and worked as a faculty associate in University of Texas Health Science Center at San Antonio with Profs Gregory R Mundy and Toshiyuki Yoneda and (1994-1998). He became a professor and chair of

Department of Molecular & Cellular Biochemistry, Osaka University Graduate School of Dentistry in 2012. He is also an associate executive director of Osaka University and a vice dean of Osaka University Graduate School of Dentistry from 2015. He was awarded a Young Investigator Award from American Society for Bone and Mineral Research in 1995, Academic Award from Japan Society for Bone and Mineral Research in 2006, and Academic Award from Japanese Association for Oral Biology in 2014. His scientific interest is the signal transduction and transcriptional regulation that conduct differentiation and function of osteoblasts, osteoclasts, chondrocytes and adipocytes.

LOCAL ORGANISING COMMITTEE

Mark Forwood (Chair)

Griffith University

Belinda Beck Griffith University Andy Wu

Mater Research Institute

PROGRAM ORGANISING COMMITTEE

Mark Cooper (ANZBMS POC Co-Chair)

University of Sydney

Mike Rogers (ANZBMS POC Co-Chair)

Garvan Institute of Medical Research

John Eisman (IFMRS POC Co-Chair)

Garvan Institute of Medical Research

Roland Baron (IFMRS POC Co-Chair)

Harvard School of Dental Medicine

Seiji Fukumoto (JSBMR POC Co-Chair)

The University of Tokushima

Riko Nishimura (JSBMR POC Co-Chair)

Osaka University

Jillian Cornish

The University of Auckland

Gustavo Duque

University of Melbourne & Western Health

Vaida Glatt

University of Texas Health Science Center San Antonio

Bente Langdahl

Aarhus University Hospital, Denmark

Christa Maes

Skeletal Biology and Engineering Research Center

Michael McClung

Oregon Osteoporosis Center

Natalie Sims

St Vincent's Institute & University of Melbourne

Sakae Tanaka

The University of Tokyo

Yoshiya Tanaka

University of Occupational and Environmental Health

Hong Zhou

The University of Sydney

FINANCE & SPONSORSHIP COMMITTEE

Nathan Pavlos

The University of Western Australia

Markus Seibel

The University of Sydney

Amanda Sherwood

IFMRS

Ivone Johnson

ANZBMS

ANZBMS OFFICE BEARERS 2017

President Emma Duncan
President Elect Peter Croucher
Secretary Paul Anderson
Treasurer Nathan Pavlos
Past President Markus Seibel

Councillors Rob Daly

Rachelle Buchbinder Nicholas Pocock Allison Pettit Elaine Dennison

PAST ANZBMS OFFICE BEARERS 1988-2015

YEAR	PRESIDENT	VICE PRESIDENT PRESIDENT ELECT	SECRETARY	TREASURER	COUNCILLORS
1990 - Steering Group	T.J.Martin		M.Hooper		A.Need, R.Prince, J.Eisman, I.Reid, K.Ibbertson, D.Fraser, P.Sambrook, E.Seeman
1991-93 - Inaugural Council	T.J.Martin		M.Hooper	M.Hooper	J.Eisman, A.Goulding, D.Perry-Keen, J.Wark, A.Need, N.Kent
1993-95	J.Eisman	I.Reid	N.Kent	J.Wark	P.Sambrook, A.Need, R.Prince, D.Perry-Keene, E.Seeman
1995-97	I.Reid	N.Kent	J.Moseley	P.Ebeling	P.Sambrook, A.Need, R.Prince, D.Perry-Keene
1997-99	N.Kent	P.Ebeling	J.Moseley	P.Ebeling	R.Prince, I.Reid, M.Hooper, H.Morris, M.Forwood
1999-01	P.Ebeling	M.Hooper	J.Cornish	M.Forwood	J.Moseley, H.Morris, E.Mackie, M.Zheng
2001-03	M.Hooper	E.Seeman	J.Cornish	M.Forwood	R.Mason, R.Price, D.Findlay, G.Nicholson
2003-05	E.Seeman	J.Cornish	D.Findlay	M.Forwood	R.Mason, R.Price, G.Nicholson, P.Sambrook
2005-07	J. Cornish	P. Sambrook	D. Findlay	R. Price	R. Mason, G. Nicholson, P. Nash, M. Gillespie
2007-09	P. Sambrook	R. Mason	M. Gillespie	R. Price	P. Nash, N. Fazzalari, M. Kotowicz, T. Cundy
2009-11	R. Mason	M. Gillespie	N. Fazzalari	R. Price	P. Sambrook, N. Sims, M. Seibel, G. Thomas, N. Gilchrist
2011-13	M.Gillespie	M. Seibel	G. Atkins	G. Thomas	N. Sims, M. Bolland, C. Inderjeeth, N. Pocock, R. Mason
2013-15	M. Seibel	E. Duncan	G. Atkins	G. Thomas	N. Sims, M. Gillespie, N. Pocock, N. Pavlos, E. Dennison

SPONSORS, AWARDS AND LECTURERS OF THE AUSTRALIAN & NEW ZEALAND BONE & MINERAL SOCIETY

ANZBMS AWARD SPONSORS





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

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

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-Hardie	2010	Garry Williams
2003	Vicky Kartsogiannis	2011	Julie Quach
2004	Kerrie Sanders	2012	Ashika Chhana
2005	Susan Allison	2013	Yohann Bala
2006	Mark Forwood	2014	Michelle McDonald
2007	Brya Matthews	2015	Christina Vrahnas
2008	Roger Zebaze	2016	Audrey Chan
2009	Rich Tran		

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	Rob Will, Amanda Devine	2009	Vicky Kartsiogiannis,	2014	Allison Pettit
2004	Roger Zebaze		Nguyen Nguyen		Paul Baldock, Jinwen Tu,
2004	Christine Rodda	2010	Markus Seibel, Emma		Roger Zebaze, Kirtan
2005	Markus Seibel,		Walker, Iris Wong		Ganda
	Julian Quinn		Sarah Brennan, Jasreen	2015	Michelle McDonald,
2006	Yosuke Kawasaki, Julie		Kular, Markus Seibel,		Allison Pettit, Audrey
	Kuliwaba, Stella Foley,		Hugh Zhang		Chan, Le Phong Thao Ho,
	Dana Bliuc, Jonathan Gooi	2011	lan Reid, Asiri Wijenayaka		Ayano Nakayama
2007	Colin Dunstan, Richard	2012	Ego Seeman, Rachelle	2016	Nicola Lee
	Prince, Maria Chiu, Natalie		Johnson		Steven Watson
	Sims, Paul Baldock, Ian	2013	Peter Ebeling, Rossana		Emma Walker
	Parkinson, Hong Zhou		Nogueira, Simon		Natalie Hyde
2008	Robert Kalak, Andrew		Junankar, Narelle		Michelle McDonald
	Grey		McGregor, Jinwen Tu		

MSD / 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
2013	Syndia Lazarus	2016	Thach Tran
2014	Masakazu Kogawa		

KAYE IBBERTSON AWARD ON METABOLIC BONE DISEASE

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.

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2005	Roger Zebaze	2012	Emma Duncan
2006	Julie Pasco	2013	Tara Brennan-Speranza
2007	Tania Winzenberg	2014	Nicole Yu
2008	Paul Baldock	2015	Joshua Lewis
2009	Mark Bolland		Rachelle Johnson
2010	Kun Zhu	2016	Michelle McDonald
2011	Susannah O'Sullivan		

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	2013	Farzin M Takyar
2007	Aaron McDonald	2014	Heath McGowan
2008	Haotian Feng	2015	Dana Bliuc
2009	Ming-Kang Chang	2016	Paul Lee
2010	Tak Sum Cheng		
2011	Kylie Alexander		

Julie Quach

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 2015 Sharon Brennan-Olsen

2013 Emma Duncan 2016 Jinwen Tu

2014 Kirtan Ganda

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 Ashika Channa Megan Thomas

Christina Vrahnas Scott 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 2015 Howard Morris Ego Seeman 2016 Jack Martin

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 & Rachel Davey

ANZBMS LIFE MEMBERS

Professor Henry Kaye Ibbertson Associate Professor Jane Moseley Professor B.E.C Nordin (deceased) Dr Solomon Posen (deceased) Professor Thomas J. Martin
Dr Donald Gutteridge
Dr Ailsa Goulding
Associate Professor Michael Hooper

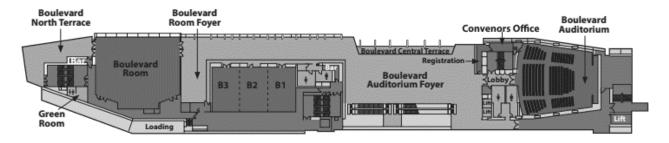
DELEGATE INFORMATION

VENUE

Brisbane Convention and Exhibition Centre Merivale St & Glenelg Street South Brisbane, QLD 4101

Phone: +61 7 3308 3000

VENUE LAYOUT



THE REGISTRATION DESK

The registration desk is located on the Boulevard Level next to the Boulevard Auditorium. Any enquiries can be directed to ASN staff there other than those about accommodation which should be dealt directly with your hotel.

The registration desk office hours are:

 Saturday 17 June
 8:00 AM - 5:30 PM

 Sunday 18 June
 6:30 AM - 5:30 PM

 Monday 19 June
 6:30 AM - 5:30 PM

 Tuesday 20 June
 6:30 AM - 5:30 PM

 Wednesday 21 June
 6:30 AM - 12:30 PM

THE SPEAKER PREPARATION ROOM

Presentations are to be loaded direct to the PC in the speaker preparation room (B3) on the Boulevard Level at least a full session in advance of your session (please note, if you are presenting on Saturday 17 June 2017, you will need to load your talk directly into the Boulevard Auditorium which you can access via the registration desk). You should bring your talk on a USB, saved in a format for display on a PC within the room. A technician will be on hand to assist with any transfer / loading issues and to help you check your presentation. There are both PCs and Macintosh computers in the speaker preparation room but please note there are no Macintosh computers in the presentation rooms.

REGISTRATION

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

- Access to the sessions of your choice
- Conference satchel complete with 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 (Saturday 17 June)

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 Exhibition (Boulevard Foyer) and general posters are displayed within the Boulevard Room, both located on the Boulevard Level. Use the program reference (or ANZBMS-IFMRS-JSBMR smart phone APP) to identify your abstract number and poster position. Presenters should stand next to their poster during allocated poster sessions. Plenary posters (located in Exhibition) can be mounted on Saturday afternoon and must be removed by morning tea on Wednesday. General posters (located in Boulevard Room) can be mounted on Sunday morning and must be removed by the end of lunch on Tuesday.

POSTER SESSIONS

There are four official poster sessions at this year's meeting:

Plenary Poster session – 5:00 PM – 7:00 PM, Saturday 17 June, Exhibition (Boulevard Foyer) Poster Session I (Odd Numbers) – 12:30pm – 2:00pm, Sunday 18 June, Boulevard Room Poster Session II (Even Numbers) – 12:30pm – 2:00pm, Monday 19 June, Boulevard Room Poster Session III (All Posters) – 12:30pm – 2:00pm, Tuesday 20 June, Boulevard Room

SOCIAL FUNCTIONS

Welcome Function

Date: Saturday 17 June 2017 **Time**: 5:00pm - 7:00pm

Venue: Exhibition Area, Brisbane Convention and Exhibition Centre

Cost: Included with registration **Additional ticket**: \$60.00

*Additional tickets for partners can be purchased in advance or at the registration desk.

'Bones & Brews - Meeting of the Minds' Networking Dinner

Date: Monday 19 June 2017 **Time**: 7:00pm - 10:00pm

Venue: Soleil Bar, Rydges Southbank

Cost: \$55.00

Student/ECR cost: \$25.00

*This is a ticketed function, tickets can be purchased in advance or at the registration desk.

ANZBMS-IFMRS-JSBMR Conference Dinner

Date: Tuesday 20 June 2017 **Time**: 7:30pm - 11:30pm

Venue: Boulevard Room, Brisbane Convention and Exhibition Centre

Cost: \$50.00

Additional ticket: \$110.00

*This is a ticketed function, tickets can be purchased in advance or at the registration desk.

SMOKING

Smoking is not permitted in the venue.

MOBILE PHONES

Please ensure your mobile phone is turned off or to 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

- 1. Ensure your wireless enabled laptop or device is turned on and you have enabled the wireless switch/button
- 2. Open your wireless connection list.
- 3. Navigate to **BCEC Link** from the list of available wireless networks. Validate you have connected to the BCEC wireless network by opening your browser.

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 below link in your internet browser on your phone, iPad or laptop.

http://anzbms-ifmrs.m.asnevents.com.au/

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
- 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.

To use most of these functions, you will be prompted to 'log in" each day. Simply enter the same email & password which you used to register.



CHEERS TO SUNSHINE

With year-round sun and a subtropical climate, Brisbane's rooftop bars are never off limits. Dress up nice and taste the view from *Eleven*.

ISLAND TIME

Visitors fly from around the world in search of islands as idyllic as those on our coastline. Feed wild dolphins, whalewatch and snorkel or kayak around old ship wrecks.

FOLLOW THE ART TRAIL

Within a 1km radius there are 14 small, independent galleries to discover between Fortitude Valley and New Farm.

HUNGRY FOR FUN

Eat Street is a feast in every sense - the sights, smells, tastes and sounds. The street food market has just reopened and it's more epic than before.

AUSTRALIA'S TOP BAR

a feast couches, rich mahogany, s, tastes top staff and a library of whiskey won thas just tries more before.

Leather chesterfield couches, rich mahogany, top staff and a library of whiskey won The Gresham top bar awards from Gourmet Traveller and the Australian Bar Awards.

WORLD CLASS EVENTS

Brisbane offers a blockbuster year round calendar of major events to make the heart sing and the pulse-rate climb.

CLOSE ESCAPE

Twenty minutes from the CBD, stop for lunch at paddock-to-plate cafe Wild Canary before treating yourself to a spa treatment at the lush One Wybellena.



ANZBMS-IFMRS-JSBMR SPEAKERS

PLENARY SPEAKERS



Professor Masahiro Abe

Tokushima University Graduate School, Japan

Masahiro Abe is professor of Department of Hematology, Endocrinology and Metabolism at Tokushima University Graduate School, and chief of Division of Hematology at Tokushima University Hospital. He graduated from Tokushima University School of Medicine in 1984, and belonged to the First Department of Internal Medicine in Tokushima University Hospital. In 1989-92, he studied the biology of multiple myeloma and AL amyloidosis as a visiting scientist at Human Immunology and Cancer Program at University of Tennessee Medical Center, Knoxville, TN, USA. Thereafter, he worked as a hematologist, and became clinical

professor of Tokushima University Hospital in 2009 and professor of Tokushima University Graduate School in 2015. He has been studying to dissect the molecular mechanisms for formation of bone disease in myeloma and drug resistance in myeloma cells and their progenitors, and trying to develop innovative therapeutic strategies. He hosted as a president the 41th Annual Meeting of the Japanese Society of Myeloma in 2016.



Professor Teresita Bellido

Indiana University School of Medicine, USA

Teresita Bellido, Ph.D., is a graduate of the Universidad Nacional del Sur, Argentina (1988); performed postdoctoral studies at Indiana University, USA (1990-1993); and was a faculty member of the Center for Osteoporosis and Metabolic Bone Diseases and the Division of Endocrinology, Department of Internal Medicine, University of Arkansas for Medical Sciences, USA (1994-2008). She is currently a Professor of Anatomy and Cell Biology and a Professor of Medicine in the Division of Endocrinology, at Indiana University School of Medicine; a member of the Indiana Musculoskeletal Research Center; and a Senior Research

Scientist at the Roudebush Medical Center of the Veterans Administration, USA. Dr. Bellido is an expert in signal transduction in bone cells and the regulation of bone cell function by systemic hormones. Her current research focuses on understanding the mechanisms that regulate bone biology and pathophysiology driven by osteocytes.



Professor Dennis Black

School of Medicine, University of California San Francisco, USA

A recognized expert in the field of osteoporosis, Dr. Black has over 20 years of experience in designing, managing and reporting results from large randomized trials and observational studies of osteoporosis. He has served as the overall study principal investigator for several landmark osteoporosis trials including the FIT/FLEX trials of alendronate, the PaTH trial (NIAMS-funded study of PTH combination) and the HORIZON trial of zoledronic acid. He has a PhD in Biostatistics from UC Berkeley and has worked as a Professor in the Department of Epidemiology and Biostatistics at the University of California, San Francisco since 1987. He is

also Head of the Division of Chronic Diseases at UCSF. He has published over 250 papers and has been first author on several landmark randomized trials in the area of osteoporosis in such journals as New England Journal of Medicine (6 articles), Lancet and JAMA. He was first author on a New England Journal Clinical Practice review of post-menopausal osteoporosis published in January of this year.



Professor Carolyn Crandall

University of California, Los Angeles, USA

Dr. Crandall is a Professor of Medicine at the University of California, Los Angeles (UCLA). Her research focuses on osteoporosis screening strategies among postmenopausal women. She is an investigator in several large prospective cohort studies, including the Women's Health Initiative and the Study of Women's Health Across the Nation. She is the Scientific Chair of the Women's Health Initiative Bone Scientific Interest Group.

Her clinical practice has been based at the Iris Cantor-UCLA Women's Health Center at UCLA, where she

provides osteoporosis consultations. She frequently lectures to physicians and medical students regarding osteoporosis.

Speaker supported by the American Society for Bone and Mineral Research (ASBMR)

Associate Professor Charles Farber

University of Virginia, USA

Dr. Charles R. Farber received his Ph.D. in genetics from the University of California, Davis. He then performed postdoctoral research in systems genetics at the University of California, Los Angeles. Currently, Dr. Farber is an Associate Professor of Public Health Sciences and Biochemistry and Molecular Genetics in the School of Medicine at the University of Virginia (UVa). He is also the Associate Director of the UVa Center for Public Health Genomics.

Dr. Farber's research is focused on the systems genetic analysis of bone strength and other complex skeletal traits. His work includes the application of systems genetics in genetically diverse mouse populations to identify genes and gene networks impacting bone. Dr. Farber's lab is also combining systems genetics and genome-wide association studies in humans to improve our understanding of bone biology and identify novel therapeutic targets for osteoporosis. **ASBMR**

Speaker supported by the American Society for Bone and Mineral Research (ASBMR)



Professor Theresa Guise

Indiana University School of Medicine, USA

Dr. Theresa A. Guise, Jerry and Peggy Throgmartin Professor of Oncology, Medicine and Pharmacology at the Indiana School of Medicine, directs translational research on the musculoskeletal effects of cancer and cancer treatment. Dr. Guise received the Fuller Albright Award and the Paula Stern Achievement Award from the ASBMR. She has been elected to the ASCI, the Association of American Physicians, chaired the NIH study section of Skeletal Biology, Structure and Regeneration, and served in leadership roles for ASBMR, IBMS, ASCI. Her laboratory funding includes NIH, DOD, Komen, Prostate Cancer Foundation, V-Foundation

& Mary K. Ash.



Professor Hal Hoffman

University of California, San Diego, USA

Hal M. Hoffman, M.D., is Professor of Pediatrics and Medicine at the University of California, San Diego. Dr. Hoffman obtained his M.D. degree from the University of Texas Medical Branch in 1990, his residency in pediatrics at the Medical University of South Carolina, and fellowship in allergy and immunology at the UCSD. His current clinical practice is at Rady Children's Hospital in San Diego.

Dr. Hoffman's main research interests are genetics and inflammation. He has identified five genes involved in rare diseases. One of these, cryopyrin associated periodic syndrome is characterized by rash, fever, and joint and bone findings. The identification of the gene that codes for cryopyrin for has led to a better

understanding of normal regulation of inflammation. These studies have also led to the discovery of novel treatments and other rare inherited autoinflammatory disorders with implications for more common inflammatory diseases.



Professor Masaru Ishii

Osaka University, Japan

Masaru Ishii, M.D., Ph.D. (Professor of Immunology and Cell Biology, Graduate School of Medicine and Frontier Biosciences, Osaka University) graduated from the Osaka University Medical School in 1998, and then worked as a physician specializing in rheumatology and internal medicine. He studied in the National Institutes of Health as a research fellow supported by the Human Frontier Science Program (2006-2008), as a laboratory chief in Osaka University Immunology Frontier Research Center (Associate Professor; 2008-2011, Professor; 2011-2013), and then appointed as a professor and chairman of the Department of

Immunology and Cell Biology, Graduate School of Medicine, Osaka University, since 2013. The bulk of his studies have so far elucidated the cellular dynamics in live bone tissues, with a special focus on bone-resorbing osteoclasts, by using intravital multiphoton-based bone imaging that he has originally developed. His study is not limited in the field of bone biology, but is currently covering diverse research topics where cells are dynamically moving, such as immune cell migration in inflammatory sites and cancer invasion/metastases.



Dr Michaela Kneissel

Novartis Institutes for BioMedical Research, Novartis Pharma AG, Basel Switzerland

Michaela Kneissel is Global Head of the Musculoskeletal Disease Area (MSD) at the Novartis Institutes for BioMedical Research. MSD consists of 110 scientists based in Basel, Switzerland and Cambridge, Massachusetts, United States. The mission of MSD is to restore mobility in disease and old age by targeting musculoskeletal diseases and injuries. Thus MSD pursues the identification of therapies for muscle wasting and weakness, neuromuscular diseases, bone disorders as well as for tendon and joint degeneration and

injury.

Michaela Kneissel received her doctoral degree from the University of Vienna, Austria. She performed part of her Ph.D. work at the Hard Tissue Research Unit, University College London, UK and was postdoctoral fellow at the Radiobiology Division, University of Utah, Salt Lake City, USA before joining Novartis in 1996 where she has held positions of increasing responsibility.

Michaela Kneissel currently serves on scientific and industrial advisory and editorial boards of societies and journals in the field musculoskeletal research.



Professor Timothy Kwok

The Chinese University of Hong Kong

Dr Timothy Kwok graduated from University of Leicester in the UK and received specialist training in Geriatric and Internal Medicine in St George's Hospital in London before returning to Hong Kong, to join the Department of Medicine & Therapeutics in the Chinese University of Hong Kong (CUHK). He obtained his MD in 2004. He was promoted to professorship in 2006. At CUHK, he is director of Jockey Club centre for osteoporosis care and control and Jockey Club Centre for Positive Ageing (a comprehensive care centre for people with dementia). He is also deputy director of Jockey Club Institute of Ageing. His research interests

include osteoporosis, dementia, nutrition, palliative care and health services.



Professor Bente Lomholt Langdahl

Aarhus University Hospital, Denmark

Bente Langdahl graduated from the medical school at Aarhus University in 1988 and did clinical training in internal medicine and endocrinology at Aarhus University Hospital. Bente Langdahl received her PhD at Aarhus University in 1995: "Investigations on a possible pathogenic role of thyroid hormones in postmenopausal osteoporosis" and received a DMSc at the same university in 2004: "The genetics of bone mass and risk of osteoporotic fractures". In 2004 Bente Langdahl was appointed consultant at the department of Endocrinology and Internal Medicine at Aarhus University Hospital and research lecturer at

Aarhus University. In 2012 Bente Langdahl was appointed professor at Aarhus University. Bente Langdahl's main research interests are identification and further investigation of genetic variants that imply increased risk of osteoporotic fractures, osteogenesis imperfecta in adult patients, interactions between fat and bone tissues, the impact of thyroid diseases and diabetes on bone health, the effects of vitamin D and K on bone metabolism, and the development of new treatments for osteoporosis.

Bente Langdahl is co-chair of the Internal Federation of Musculoskeletal Research Societies.



Professor Ling Qin

The Chinese University of Hong Kong

Dr. Qin is Professor and Director of Musculoskeletal Research Laboratory in the Department of Orthopaedics & Traumatology, the Chinese University of Hong Kong (www.ort.cuhk.edu.hk). He received his Ph.D. at the German Sports University, Cologne, Germany and postdoc in AO-Research Institute, Davos, Switzerland. Dr. Qin was research scientist in the Department of Trauma & Reconstructive Surgery, Charite Medical University, Germany, before joining CUHK in late 1994.

Dr. Qin has been working on diagnosis, prevention and treatment of bone metabolic disorders, in collaboration with research and clinical scientists and engineers in medicine, traditional medicine, and biomaterials. Dr. Qin is the past President of the International Chinese Musculoskeletal Research Society (ICMRS) (www.icmrs.net) and member of a number of journal editorial boards, including Editor-in-chief of Journal of Orthopaedic Translation (http://ees.elsevier.com/jot) and editorial member of Journal of Bone and Mineral Research (www.jbmr.org). He is collage fellow of American Institute of Medical and Biological Engineering (http://www.aimbe.org) and Fellow of International Combined Orthopaedic Research Society (http://i-cors.org/events). Dr. Qin also holds 9 new invention or new utility patents and received over 30 research awards.

Dr. Qin published 9 monographs and over 400 journal papers in English, German, and Chinese, including 320 SCI articles in Nat Med, Biomaterials, Acta Biomaterialia, JBMR, Osteoporosis Int, Bone, etc. with a citation >6500 and H-index of 44.



Dr Anna Simon

Radboud Institute for Molecular Life Sciences, Netherlands

Anna Simon is an Associate Professor at the Department of Internal Medicine, Radboud University Medical Centre, Nijmegen, the Netherlands, and holds a position as Junior Principal Investigator at the RIMLS Research Institute, Nijmegen, the Netherlands. She specializes in autoinflammatory disorders. She is a cofounder of the Radboud clinical expertise centre for Immunodeficiency and Autoinflammation in Nijmegen. Anna Simon received her MD from Utrecht University, The Netherlands, in 1999. In 2004, she completed her PhD, cum laude, on the subject of hereditary autoinflammatory syndromes. In 2006-2007 she spent 2

years as a postdoc at the National Institute of Health (NIH), Bethesda, MD, USA, in the lab of Dan Kastner. In March 2016, she became a fellow of the Royal College of Physicians Edinburgh.

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Professor Rick Sumner

Rush University Medical Center, USA

D. Rick Sumner, PhD was trained in biological anthropology and anatomy. He was a post-doctoral fellow at Rush University Medical Center, working with Jorge Galante, MD, DMSc and is currently professor and chair of the Department of Anatomy and Cell Biology at Rush. His primary areas of interest are bone regeneration and implant fixation. He is best recognized for work on bone remodeling around orthopedic implants and developing strategies to improve implant fixation by promoting bone regeneration. Dr. Sumner has been funded through the NIH, the Department of Defense, NASA, several foundations and industry. He has served

on numerous grant review panels and has won several international and national awards, including the Kappa Delta Award, from the American Academy of Orthopaedic Surgeons. He is a member of numerous scientific societies, including the Orthopaedic Research Society (president in 2017) and International Federation of Musculoskeletal Research Societies (secretary, 2016-2018).

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Dr Hanna Taipaleenmäki

University Medical Center Hamburg-Eppendorf, Germany

Dr. Hanna Taipaleenmäki is a group leader in the Molecular Skeletal Biology Laboratory (MSB-Lab) at the University Medical Center Hamburg-Eppendorf in Hamburg, Germany. During her PhD studies at the University of Turku, Finland, and at the Endocrine Research Unit, Odense University Hospital, Denmark, she developed a strong interest in post-transcriptional regulation of osteoblast differentiation and bone formation by non-coding RNAs. During her post-doctoral training at the University of Massachusetts Medical School, USA, and at the University Medical Center Hamburg-Eppendorf, Germany, she further elucidated

the contribution of microRNAs in pathological bone remodeling with specific focus on cancer-induced bone disease. Currently her research group is investigating the role of osteoblasts in breast cancer-induced metastatic bone disease. Hanna is an active member of scientific societies including the ECTS and the ASBMR and her work has been awarded several awards, fellowships and grants.



Speaker supported by the European Calcified Tissue Society (ECTS)



Professor Hiroshi Takayanagi

The University of Tokyo, Japan

I was born in 1965 and graduated from the Faculty of Medicine, The University of Tokyo in 1990. I was initially trained as an orthopaedic surgeon and rheumatologist in the Department of Orthopaedic Surgery, The University of Tokyo. I began my basic research career in 1996 and discovered that bone destruction in arthritis is attributable to the enhanced expression of osteoclast differentiation factor, RANKL, in 2000. I was awarded Ph.D in 2001 and became Assistant Professor at the Department of Immunology, The University of Tokyo. I studied the regulation of bone metabolism by the immune system and explored the

interdisciplinary field, osteoimmunology. For the period from 2003 through 2012, I fulfilled responsibilities as a Professor at Tokyo Medical and Dental University. In 2012, I was promoted to Professor, Department of Immunology, Graduate School of Medicine and Faculty of Medicine, The University of Tokyo.



Professor Matthew Warman

Harvard Medical School, USA

Dr. Warman is the Harriet M. Peabody Professor of Orthopaedic Surgery and Genetics at Harvard Medical School. He attended college at Brown University and medical school at Cornell University. While in medical school, he performed research with Dr. Adele Boskey at The Hospital for Special Surgery. After medical school he trained in Pediatrics at the Children's Hospital in Washington, D.C., in Genetics at the Children's Hospital in Boston, and he performed post-doctoral research with Professor Bjorn R. Olsen at Harvard Medical School. In 1994, Dr. Warman established an independent laboratory and clinical program in the

Department of Genetics and Center for Human Genetics at Case Western Reserve University and University Hospitals of Cleveland. In 2006, he returned to Boston to become director of the Orthopaedic Research Laboratories at Boston Children's Hospital. Dr. Warman is also an investigator with the Howard Hughes Medical Institute.

The patients and families, who Dr. Warman has come to know through his clinical work as a pediatrician and geneticist, have often served as the impetus for his research. In addition to working with patients and families, members of Dr. Warman's lab try to understand and treat human disease by studying cultured cells, purified proteins, and other organisms. Having benefited from superb mentoring throughout his career, Dr. Warman enjoys introducing students (from high school to professional school) to the importance and excitement of Human Genetics. He is proud to have mentored students at all levels, who have gone on to become excellent scientists, physicians, and educators.



Professor Jennifer Westendorf

Mayo Clinic, USA

Dr. Westendorf is the Margaret Amini Professor in Orthopedic Regenerative Medicine Research. She is a Professor of Orthopedics and Biochemistry and Molecular Biology (BMB) and vice-Chair of BMB. She received her PhD from Mayo Graduate School and joined to Mayo Clinic in 2007 to join the consulting staff. She has served on many NIH panels and the boards of several journals and professional organizations, including the Orthopedic Research Society. Her research focuses on the molecular

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and epigenetic mechanisms of bone and joint formation, degeneration,

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regeneration, and tumorigenesis.





Cornelia M. Weyand, M.D., Ph.D., is Professor of Medicine and the Chief of the Division of Immunology and Rheumatology at Stanford University School of Medicine. Previously, Dr. Weyand has been the Barbara Woodward Lips Professor of Medicine and Immunology at Mayo Medical and Graduate School and from 2001-2004 she directed the Clinical Immunology and Immunotherapeutics Program in the Department of Medicine at the Mayo Clinic. In 2004, Dr. Weyand moved to Emory University in Atlanta, Georgia, where she held the David C. Lowance Chair in Medicine and was the Director of the Lowance Center for Human

Immunology and Rheumatology.

Dr. Weyand is leading a research team in translational immunology supported continuously through funding from the National Institute of Health. She has a special interest in tissue-damaging immune responses in rheumatoid arthritis, atherosclerosis and large vessel vasculitis. Dr. Weyand's research team has defined the role of T cells and dendritic cells in deviating immunity from protective to destructive and over the last decade, she has devoted special emphasis to the remodeling of the immune system with aging, how chronic disease ages the immune system, and how aged immune cells cause inflammation. She has defined molecular defects underlying the premature aging process in patients with rheumatoid arthritis, implicating deficiencies in telomere capping and the DNA damage sensor Ataxia Telangiectasia Mutated (ATM) in T cell dysfunction. Together with her fellows and students, Dr. Weyand has identified and characterized immune cells that mediate medium vessel vasculitis and has defined the molecular underpinnings of the immunostromal interactions that cause arterial inflammation.

Dr. Weyand has authored more than 350 manuscripts and delivered more than 260 invited presentations around the world; including more than 20 named lectures. She is an editor on two textbooks and has contributed more than 40 book chapters on vasculitis and rheumatoid arthritis. Dr. Weyand has served as a mentor to more than 100 students and fellows, many of whom have pursued a career as physician-investigators. She has received numerous awards and honors including the Henry Christian Award for Excellence in Research, the Henry Kunkel Young Investigator Award, the Carol Nachmann Award for Rheumatology, the Mayo Foundation Department of Medicine Outstanding Investigator Award, the Emory University School of Medicine Outstanding Research Citation Award, the Paul Klemperer Award from the New York Academy of Medicine. She has been named a Notable Woman in Science and Medicine by the Max-Delbrueck Centrum fuer Molekulare Medizin, Helmholz Gemeinschaft, Germany.

She is currently an Honorary Carnegie Centenary Professor at the University of Glasgow.



Professor Graham Williams

Imperial College London, UK

Graham Williams is Professor of Endocrinology at Imperial College London. He graduated from St. Thomas's Hospital, was an MRC Training Fellow at the University of Birmingham, Howard Hughes Medical Institute Fellow at Harvard Medical School and MRC Clinician Scientist Fellow at the University of Birmingham before moving to Imperial College. He will be President of the UK Society for Endocrinology from November 2016 and is a past President of the British Thyroid Association (2011-2014). His research focuses on (i) molecular mechanisms of thyroid hormone action in the skeleton and (ii) the identification of genetic determinants of

bone and cartilage disease. His work has been recognised by several awards including the Society for Endocrinology Medal (2011), Bermuda Hospitals Board Edwin Astwood Memorial Lectureship (2011), European Thyroid Association Merck Serono Prize (2012), Danish Thyroid Association Distinguished Annual Lectureship Award (2014), American Thyroid Association Sidney H. Ingbar Distinguished Lectureship Award (2014) and British Thyroid Association Pitt-Rivers Medal (2016).



Professor Hong Zhou

The University of Sydney, Australia

Professor Hong Zhou is a Senior Principal Research Fellow at the University of Sydney and Head of the Molecular Bone Biology Laboratory at the ANZAC Research Institute, Sydney. She got her medical degree in

1983 from Ningxia Medical University, China and and did a Ph.D. with Professor Jack Martin at the University of Melbourne, Australia (1992). Her scientific interests include glucocorticoid action on bone in the use and analysis of animal models of normal and abnormal bone metabolism, skeletal development, bone and cartilage

biology, bone regulated systematic matabolic metabolism, autoimmune arthritis, surgically induced osteoarthritis.

Speaker supported by the International Chinese Musculoskeletal Research Society (ICMRS)



SYMPOSIUM SPEAKERS

Professor Belinda Beck *Griffith University, Australia*

Professor Matt Brown *Queensland University of Technology, Australia*

Professor Peter CroucherGarvan Institute of Medical Research, Australia

Professor Emma Duncan *Queensland University of Technology, Australia*

Professor Mark Forwood *Griffith University, Australia*

Dr Tony Kenna *The University of Queensland, Australia*

Professor Suresh Mahalingam *Griffith University, Australia*

Dr Michelle McDonaldGarvan Institute of Medical Research, Australia

Paul MitchellSynthesis Medical, NZ

Associate Professor Nathan Pavlos *The University of Western Australia, Australia*

Dr Joseph PowellThe University of Queensland, Australia

Dr Carl Stephan *The University of Queensland, Australia*

Dr Kathryn Stok *The University of Melbourne, Australia*

Professor Jennifer Stow *The University of Queensland, Australia*



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PBS Information: Restricted Benefit. Actonel EC Combi, Actonel EC Combi D. Authority Required (STREAMLINED). Refer to PBS schedule for full restricted and authority information.

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ACTONEL® EC, ACTONEL® EC COMBI & ACTONEL® EC COMBI D. PRESENTATIONS: Actonel EC is available as 4 x 35mg risedronate sodium tablets. Actonel EC Combi contains: 4 Actonel EC 35 mg tablet and 24 calcium carbonate 1250mg (equivalent to 500mg elemental calcium) tablets. Actonel EC Combi D contains: 4 Actonel 35 mg tablets and 24 sachets containing 2500mg calcium carbonate and 22µg cholecalciferol, equivalent to 1000mg elemental calcium and 22µg (880IU) vitamin D3 respectively. INDICATIONS: Actonel EC 35mg tablet, Actonel EC Combi, Actonel EC Combi D: Treatment of osteoporosis, treatment of glucocorticoidinduced osteoporosis, preservation of bone mineral density in patients on long term corticosteroid therapy. **CONTRAINDICATIONS**: *Risedronate*: Hypersensitivity to the drug or ingredients, hypocalcaemia, inability to stand or sit upright for at least 30 minutes. *Calcium carbonate*: Hypersensitivity to the drug or ingredients; hypercalcaemia; hyper hypervitaminosis D; diseases associated with hypercalcaemia and/or hypercalciuria; pregnancy and lactation; severe renal impairment. PRECAUTIONS: Risedronate: Hypocalcaemia, bone and mineral metabolism dysfunction; calcium and vitamin D if dietary intake is inadequate; severe renal impairment; oesophageal reaction, inflammatory bowel disease; osteonecrosis of the jaw; osteonecrosis of the external auditory canal; dental examination with preventive dentistry; avoid invasive dental procedures; atypical stress fractures; pregnancy (Category B3); certain medications (e.g. calcium supplements, antacids) should not be taken with Actonel EC; patients with a history of oesophagitis, gastritis, oesophageal ulcerations and gastroduodenal ulcerations. Calcium carbonate and/or Cholecalciferol: Impairment of renal functions; monitoring of serum calcium levels and renal function; other drugs containing vitamin D; sarcoidosis; immobilised patients due to the increased risk of hypercalcaemia; disease associated with unregulated overproduction of calcitriol; malabsorption. Actonel EC Combi/Actonel EC Combi D presentations only: for patients with mild-moderate renal impairment, absorptive or renal hypercalciuria, nephrocalcinosis, kidney stone formation, hypophosphataemia, renal function, serum and urinary calcium and phosphate should be monitored. INTERACTIONS: Risedronate does not induce or inhibit CYP450 enzymes. Calcium Carbonate/Cholecalciferol; serum calcium should be regularly monitored during concomitant use of thiazide diuretics; systemic corticosteroids reduce calcium absorption; may interfere with tetracycline absorption; may reduce bisphosphonate and sodium fluoride absorption; calcium absorption may be inhibited by oxalic acid and phytic acid; concomitant treatment with ion exchange resins (e.g. cholestyramine) or laxatives may reduce vitamin D absorption. Not recommended for concurrent use with antacids containing aluminium hydroxide in patients on haemodialysis. Hypercalcaemia may increase the toxicity of cardiac glycosides during treatment with calcium combined with vitamin D. Such patients should be monitored with regard to electrocardiogram (ECG) and serum calcium levels. ADVERSE EVENTS: Risedronate: Very Common: nasopharyngitis. Common: abdominal and musculoskeletal pain, influenza, urinary tract infection, bronchitis, diarrhoea, constipation, vomiting, nausea, arthralgia, back pain, hypertension, hypercholesterolaemia. Uncommon: glossitis, irritis, and duodenitis, abnormal liver function tests. Postmarketing: vary rare: hypersensitivity and skin reactions, including angioedema, generalised rash and bulbous skin reaction, uveitis and osteonecrosis of the jaw, See full PI for others. Calcium carbonate and/or Cholecalciferol: Uncommon: hypercalcaemia, hypercalciuria. Rare: flatulence, constipation, nausea, abdominal pain, diarrhea, pruritus, rash and urticaria. DOSAGE AND ADMINISTRATION: Actonel EC 35mg tablets: take with a glass of plain water with or without food, Actonel EC should be taken in an upright position. Patient should avoid lying down for 30 minutes. Tablets must be swallowed whole. Actonel EC Combi: The recommended dose in adults is 1 Actonel EC 35mg tablet on the first day, then, beginning on the next day, 1 calcium 500 mg tablet daily for 6 days. This 7 day sequence is then repeated each week. Actonel EC Combi D: Intended for patients for whom the amount of calcium and cholecalciferol included is considered to provide adequate supplementation. The recommended dose is 1 Actonel EC 35mg tablet on the first day, followed by, beginning on the next day, 1 calcium carbonate/cholecalciferol sachet daily for 6 days. This 7 day sequence is then repeated each week starting with the Actonel EC 35mg tablet. See full PI for full information. STORAGE: store below 25 °C. Sponsored in Australia by TEVA Pharma Australia Pty Ltd, ABN 41 169 715 664, Level 1, 37 Epping Road, Macquarie Park, Sydney, NSW 2113. Based on the PI last updated 11 May 2016.

REFERENCES: 1. Silverman SL et al. Osteoporos Int 2007;18:25—34. 2. Harrington JT et al. Calcif Tissue Int 2004;74:129—35. 3. Mellstrom DD et al. Calcif Tissue Int 2004;75:462—68. 4. McClung MR et al. N End J Med 2001;344:333-40. 5. Roux C et al. Curr Med Res Opin 2004;20:433—39. 6. Actonel EC® Product Information. 7. Adler RA et al. J Bone Miner Res 2016;31:16—35. 8. Lamy O et al. J Clin Endocrinol Metab 2016 Oct 12 [Epub ahead of print].



ANZBMS-IFMRS-JSBMR PROGRAM

SATURDAY 17 JUNE 2017

Registration Open

8:00AM - 5:30PM Foyer outside A1 & A2

Pre-conference satellite meeting - The Genetics of Bone Disease: practical approaches and applications

9:30AM - 11:30AM A1

Chairs: Aideen McInerney-Leo & John Kemp 9:30 AM **Emma Duncan**

The genetic basis of osteoporosis and implications for fracture prediction abs# 1

9:45 AM Aideen McInerney-Leo

Genetic investigations of monogenic bone disease using exome sequencing abs# 2

10:00 AM Paul Leo

Genetic investigations of osteoporosis using genome-wide association studies abs#3

10:15 AM Scott Youlten

Using mouse genetics to inform human skeletal disorders abs# 4

10:30 AM Matt Brown

Informing drug discovery and drug repositioning through genetic association studies abs# 5

10:45 AM David Evans

Leveraging Mendelian randomization strategies to identify modifiable lifestyle factors causally

related to osteoporosis pathogenesis abs# 6

ANZBMS Council Meeting

10:30AM - 3:00PM Arbour Boardroom

Pre-conference satellite meeting - Osteoporosis: diagnosis, management and therapy

10:30AM - 2:00PM A2

Chair: Mark Cooper

10:30 AM Jackie Center

Diagnosis of osteoporosis and fracture risk estimates

11:30 AM lan Reid

Treatment approach for individuals

12:30 PM Light Lunch

1:00 PM Carolyn Crandall and Paul Mitchell

Service Organisation and Fracture Prevention

Light Lunch I

11:30AM - 12:00PM Foyer outside A1 & A2

Pre-conference satellite meeting - Bone quality: what is it and how do we measure it?

12:00PM - 2:00PM A1

Chairs: Egon Perilli & Christina Vrahnas 12:00 PM **Ego Seeman**

What determines bone quality and why is it important? abs# 7

12:20 PM Natalie Sims

Bone histology: benefits, limitations and pitfalls abs#8

12:40 PM Christina Vrahnas

FTIR imaging in bone: what does it tell us? abs# 9

1:00 PM Christian Langton

Quantitative ultrasound assessment of bone quality – time for a new paradigm abs# 10

1:20 PM Egon Perilli

Mechanical testing combined with imaging abs# 11

Light Lunch II

12:30PM - 1:00PM Foyer outside A1 & A2

Opening ceremony

3:00PM - 3:30PM **Boulevard Auditorium**

Welcome to country Convenor/LOC welcome

The future of osteoporosis care

3:30PM - 5:00PM **Boulevard Auditorium**

Chairs: Markus Seibel & Jackie Center 3:30 PM **Dennis Black**

Who is at fracture risk and how do we best assess it: enormous progress over the last 30 years

abs# 12

4:00 PM **Carolyn Crandall**

Screening for osteoporosis and fracture risk: a primary care perspective abs# 13

Bente Langdahl 4:30 PM

Osteoporosis therapies – past, present and future abs# 14



Welcome Reception & ANZBMS Plenary Posters

5:00PM - 7:00PM **Boulevard Foyer**

SUNDAY 19 JUNE 2017

Registration Open

6:30AM – 6:00PM Boulevard Auditorium

Morning Fitness Class - YOGA

7:00AM - 8:00AM Greenspace – Brisbane Tafe

Biology & treatment of rheumatic diseases

8:30AM - 10:00AM Boulevard Auditorium

Chairs: Allison Pettit & Hiroshi Takayanagi 8:30 AM Hal Hoffman

Mechanisms of inflammation and bone disease in CAPS abs# 15

9:00 AM Cornelia Weyand

Immune aging as a risk factor for inflammatory disease abs# 16

9:30 AM Tony Kenna

Emerging concepts in immunopathogenesis of ankylosing spondylitis

abs# 17

In association with

Australian Rheumatology Association

Morning tea

10:00AM - 11:00AM Boulevard Foyer

Fracture prevention, fracture care

11:00AM - 12:30PM Boulevard Auditorium

Chair: Julie Pasco, Richard Dell

11:00 AM Timothy Kwok

A cost effective strategy to screen for and treat osteoporosis to prevent hip fractures in older

people abs# 18

11:30 AM Belinda Beck

Exercise – 'broad spectrum' therapy for fracture prevention? abs# 19

12:00 PM Paul Mitchell

Fracture liaison services: a global perspective abs# 20

The conference acknowledges the support of **AMGEN**°

Advances in bone biology (I)

11:00AM - 12:30PM B1 & B2

Chairs: Seiji Fukumoto & Tara Brennan-Speranza 11:00 AM **Jennifer Westendorf**

Hdac inhibition and bone formation abs# 21

11:30 AM Hanna Taipaleenmäki

Role of microRNAs in the bone-cancer dialogue abs# 22

12:00 PM Graham Williams

High-throughput skeletal phenotyping of knockout mice:

new approaches to functional genomics abs# 23

The conference acknowledges the support of



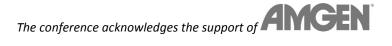


Lunch

12:30PM - 2:00PM Boulevard Foyer

Poster Viewing I (odd numbers)

12:30PM - 2:00PM Boulevard Room



Live imaging of bone cells

2:00PM - 3:30PM Boulevard Auditorium

Chairs: Natalie Sims & Peter Croucher 2:00 PM Jennifer Stow

Imaging the macrophage surface; dorsal ruffling in a new light abs# 24

2:30 PM Masaru Ishii

In vivo bone imaging: opening a new era in the field of bone and mineral research abs# 25

3:00 PM Michelle McDonald

Intravital imaging of osteoclasts in vivo reveals a novel cell fate mechanism abs# 26

3:15 PM Nathan Pavlos

Visualising osteoclast dynamics by confocal microscopy: up-close and personal abs# 27

Afternoon tea

3:30PM - 4:00PM Boulevard Foyer

Outstanding abstracts

4:00PM - 5:40PM Boulevard Auditorium

Chairs: Michaela Kneissel & Jack Martin 4:00 PM Victoria D Leitch

Tram2 is a novel genetic determinant of bone mass and strength abs# 28

4:20 PM Emma M Wade

Mutations in *MAP3K7* and *TAB2* cause a distinct autosomal dominant form of frontometaphyseal dysplasia through a gain-of-function mechanism *abs# 29*

4:40 PM Michelle M McDonald

Anti-sclerostin antibody treatment prevents myeloma bone disease and increases bone

strength abs# 30

5:00 PM Ego Seeman

The ability of structural deterioration to predict fracture is independent of bone mineral density

status: the OFELY study abs# 31

5:20 PM Weiwen Chen

Fracture associated mortality - how much is due to the fracture versus co-morbidity: the 45 and

up study abs# 32

ANZBMS Presidents Dinner (Invitation only)

7:00PM - 10:30PM Rooftop North – Rydges South Bank

9 Glenelg Street, Brisbane QLD 4000, Brisbane

MONDAY 19 JUNE 2017

Registration Open

6:30AM – 6:00PM Boulevard Auditorium

Morning Fitness Class - ZUMBA

7:00AM - 8:00AM Greenspace – Brisbane Tafe

Teva Breakfast Session - Treating Osteoporosis - a personalised approach

7:00AM - 8:30AM

The conference acknowledges the support of

B1 & B2

Muscle, bone & mechanical forces

8:30AM - 10:00AM Boulevard Auditorium

Chairs: Ego Seeman & Theresa Guise

8:30 AM Mark Forwood

Mechanical loading: the good, the bad and the ugly abs# 33

9:00 AM Teresita Bellido

Osteocytes and mechanosensory pathways abs# 34

9:30 AM Michaela Kneissel

Muscle and bone interactions abs# 35

The conference acknowledges the support of

Lilly

Morning tea

10:00AM - 11:00AM Boulevard Foyer

Proffered papers - Basic Science I

11:00AM - 12:36PM Boulevard Auditorium

Chairs: Paul Baldock & Hong Zhou

11:00 AM Kylie A Alexander

Oncostatin M: a mediator of neurological heterotopic ossification abs# 36

11:12 AM Rachel Davey

Androgens decrease fat mass in male mice by acting via the Androgen Receptor (AR) in bone

marrow progenitor cells. abs# 37

11:24 AM Markus J Seibel

Androgens potentiate the adverse metabolic side effects of excess glucocorticoids in mice abs#

38

11:36 AM Christopher S Kovacs

Absence of calcitriol causes increased lactational bone loss and lower milk calcium, but does not impair post-lactation recovery of bone mass, mineralization, or strength in *Cyp27b1* null mice

abs# 39

11:48 AM Nicola J Lee

Identification of two opposing NPY-mediated pathways from the brain to bone abs# 40

12:00 PM Natalie C Butterfield

Photoperiod-induced central actions of thyroid hormone are essential for medullary bone

formation abs# 41

12:12 PM Ingrid J Poulton

Specific blockade of Interleukin-6 trans-signalling prevents ovariectomy-induced trabecular

bone loss abs# 42

12:24 PM Nidhish Francis

Protease-activated receptor-2 expression by oral epithelial cells is required for bone loss

associated with periodontal disease abs# 43

Proffered papers - Clinical I

11:00AM - 12:36PM B1 & B2

Chair: Syndia Lazarus & Weiwen Chen 11:00 AM Roger Zebaze

Anti-resorptive therapy compromises bone's material composition predisposing to atypical

femoral fractures abs# 44

11:12 AM Astrid Fahrleitner-Pammer

Effects of 24 months treatment of teriparatide compared with risedronate on new fractures in postmenopausal women with severe osteoporosis: a randomized, double-dummy, clinical trial

abs# 45

11:24 AM Sabashini K Ramchand

Oestradiol suppression in premenopausal women with non-metastatic breast cancer is

associated with severely deteriorated bone microstructure abs# 46

11:36 AM Kara L Holloway

Trabecular bone score in women with dysglycaemia and diabetes abs# 47

11:48 AM Esther Camp

Inhibition of tyrosine kinase receptor C-ROS-1 as novel treatment in alleviating TWIST-1

haploinsufficiency induced craniosynostosis in children abs# 48

12:00 PM Richard L Prince

Differences in femoral neck structure between elderly caucasian and Chinese populations: a

Perth-Beijing cohort study abs# 49

12:12 PM Ego Seeman

Bone microarchitecture after discontinuation of denosumab in postmenopausal women with

low bone mass abs# 50

12:24 PM Astrid Fahrleitner-Pammer

Effect of 10 years of denosumab treatment on bone histology and histomorphometry in the

FREEDOM extension study abs# 51

Lunch

12:30PM - 2:00PM Boulevard Foyer

Poster Viewing II (even numbers)

12:30PM - 2:00PM Boulevard Room

Eli Lilly Symposium - Treating Patients with Severe Osteoprosis - What's New?

1:00PM - 2:00PM B1 & B2

The conference acknowledges the support of

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Bugs and bones

2:00PM - 3:30PM Boulevard Auditorium

Chairs: Sakae Tanaka & Jennifer Westendorf 2:00 PM Hiroshi Takayanagi

Sepsis, osteoblasts and immunodeficiency abs# 52

2:30 PM Suresh Mahalingam

Viral infections and rheumatic disease abs# 53

3:00 PM Carl Stephan

Whole body skeletisation by Dermestid beetles for bone research abs#

54

In association with

Afternoon tea

3:30PM - 4:00PM Boulevard Foyer

29 | Page

New Investigator session

4:00PM - 5:36PM Boulevard Auditorium

Chairs: Paul Anderson & Tania Winzenberg

4:00 PM Zihui Li

Mechanical loading therapy increases bone formation while reducing bone resorption following

implantation in a mouse model of postmenopausal osteoporosis abs# 55

4:12 PM Thao P. Ho-Le

Determination of risk threshold for osteoporosis therapy: a decision curve analysis approach

abs# 56

4:24 PM Junjie Gao

Mitochondrial transfer between dendritic network is essential for osteocyte homeostasis abs#

57

4:36 PM Rossana C Nogueira

Maintenance of CAPO Kids physical benefits after one-year follow up abs# 58

4:48 PM Scott E Youlten

Osteocytes express a unique transcriptome that underpins skeletal homeostasis abs# 59

5:00 PM Kara B Anderson

Relationship between lumbar spine BMD and trabecular bone score in men with and without

soft tissue artefacts abs# 60

5:12 PM Lena Batoon

CD169⁺Mac-2⁺ osteomacs promote bone regeneration via intramembranous and endochondral

ossification abs# 61

5:24 PM Mahmoud M Bakr

Intermittent PTH accelerates stress fracture remodelling more effectively with cessation of

bisphosphonate, than with concurrent bisphosphonate treatment. abs# 62

ANZBMS EGM

5:40PM - 6:40PM B1 & B2

"Bones and Brews. Meeting of the Minds BBQ"

9 Glenelg Street, Brisbane QLD 4000, Brisbane

7:00PM - 10:00PM

Soleil Pool Bar - Rydges South Bank

TUESDAY 20 JUNE 2017

Registration Open

6:30AM - 6:00PM **Boulevard Auditorium**

Morning Fitness Class - PILATES

7:00AM - 8:00AM Greenspace - Brisbane Tafe

Alexion Breakfast Session - Differentiating hypophosphatasia (HPP) from other skeletal dysplasias in adults &

7:00AM - 8:30AM B1 & B2

The conference acknowledges the support of **KLEXION**

Rare/childhood bone diseases

8:30AM - 10:00AM **Boulevard Auditorium**

Chairs: David Sillence & Frances Milat

8:30 AM **Matthew Warman**

Non-heritable malformative skeletal diseases caused by somatic mutations abs# 63

9:00 AM **Matt Brown**

Genetic risk prediction in common diseases abs# 64

9:30 AM **Anna Simon**

Diagnosis and treatment of hereditary autoinflammatory syndromes abs# 65

Morning tea

10:00AM - 11:00AM **Boulevard Auditorium**

Proffered papers - Basic Science II

Boulevard Auditorium 11:00AM - 12:36PM

Chairs: Michelle McDonald & Riko Nishimura

11:00 AM Kent Søe

Osteoclasts have two resorption modes that differ with respect to resorption orientation,

aggressiveness, molecular characteristics and drug sensitivity abs# 66

11:12 AM Ippei Kanazawa

Osteoblast AMP-activated protein kinase regulates skeletal development in vivo abs# 67

11:24 AM Tao Wang

Sparc is a critical regulator of tendon development abs# 68

11:36 AM Mark S Cooper

Local glucocorticoid metabolism regulates the effects of therapeutic glucocorticoids on bone

abs# 69

11:48 AM Denise C Zujur

Modeling of bone remodeling by three-dimensional co-culture of mouse embryonic stem cell-

derived osteoblasts and osteoclast precursors abs# 70

12:00 PM Narelle E McGregor

Soluble Interleukin-6 receptor released by osteocytes promotes bone formation by trans-

signaling abs# 71

12:12 PM **Audrey Rakian**

Bmp2 gene in αSMA+ stem/progenitor cells is required for their proper differentiation to

periodontal ligament fibroblasts, cementoblasts and alveolar bone osteoblasts abs# 72

12:24 PM Sarah Kim

Attenuation of osteoblast and osteocyte glucocorticoid signalling protects from high-fat diet-

induced obesity, insulin resistance and bone loss abs# 73

Proffered papers - Clinical II

11:00AM - 12:36PM B1 & B2

Chairs: Peter Ebeling & Kerrie Sanders

11:00 AM Sandra Iuliano-Burns

Three months of dairy supplementation reduces bone resoprtion and improves IGF-1 in

institutionalised elderly: a cluster randomised study. abs# 74

11:12 AM Joshua R Lewis

Abdominal aortic calcification is a risk factor for atherosclerotic vascular disease in elderly

women abs# 75

11:24 AM Lelia L F de Abreu

Fracture risk in women with dysglycaemia abs# 76

11:36 AM Thao P. Ho-Le

Accurate prediction of hip fracture by machine learning approach abs# 77

11:48 AM Ippei Kanazawa

Association of bone turnover markers, bone mineral density, and prevalent vertebral fracture

with all-cause mortality in patients with type 2 diabetes mellitus abs# 78

12:00 PM **David Scott**

Sarcopenic obesiy is associated with lower tibial cortical area and thickness and poor physical

function in community-dwelling older adults abs# 79

12:12 PM Yi Yang

Tracking of bone mass from pre-puberty to young adulthood and identifying determinants

related to tracking abs# 80

12:24 PM Karen Borschmann

Promoting recovery in motor control and walking ability may reduce bone loss in paretic legs

within six months of stroke abs# 81

Lunch

12:30PM - 2:00PM **Boulevard Foyer**

Poster Viewing III (all posters)

12:30PM - 2:00PM **Boulevard Room**

"It's going tibia alright." Early career investigator panel discussion.

1:00PM - 2:00PM B1 & B2

Innovations in orthopaedics

Boulevard Auditorium 2:00PM - 3:30PM

Chair: Minghao Zheng & Jillian Cornish 2:00 PM **Kathryn Stok**

Advances in imaging joint health abs# 82

2:30 PM **Rick Sumner**

New approaches for enhancing implant fixation abs#83

3:00 PM Ling Qin

Mg-based biometal and hybrid fixation device as an innovative concept

to promote fracture healing and its clinical translation abs# 84

The conference acknowledges the support of

Orthopaedic Research Society

Afternoon tea

3:30PM - 4:00PM **Boulevard Foyer**

Advances in bone biology (II) and Late-breaking abstracts

4:00PM - 5:30PM **Boulevard Auditorium**

Chairs: Teresita Bellido & Nathan Pavlos 4:00 PM **Hong Zhou**

Glucocorticoids, bone and systemic metabolism abs# 85

4:30 PM John A Eisman

Novel bone anabolic genes in high bone mass families abs#86

4:42 PM Sue Lynn Lau

Homozygous variant in Cathepsin K in a family with multiple cases of bilateral atypical femoral

fracture but without clinical features of pyknodysostosis abs# 87

4:54 PM Aideen M McInerney-Leo

Idiopathic osteoporosis may be due to variants in osteogenesis imperfecta genes abs# 88

5:06 PM Joshua R Lewis

Abdominal aortic calcification, bone mineral density and fracture in

elderly women abs#89

5:18 PM Erika Yamashita

Intravital bone imaging revealing dynamic anti-tumor immune responses

against leukemic cells within bone marrow cavity in situ abs# 90

The conference acknowledges the support of



Conference Dinner

7:30PM - 11:00PM Boulevard Room

WEDNESDAY 21 JUNE 2017

Registration Open

6:30AM – 12:30PM Boulevard Auditorium

Morning Fitness Class - COMBINATION OF YOGA, PILATES, GYROTRONICS AND STRENGTH

7:00AM - 8:00AM Greenspace – Brisbane Tafe

Cancer & bone

8:30AM - 10:00AM Boulevard Auditorium

Chairs: Jean-Pierre Levesque & Hanna Taipaleenmäki

8:30 AM Masahiro Abe

Novel targets of treatment for myeloma-bone interaction abs# 91

9:00 AM Peter Croucher

Tumour cell dormancy in the skeleton abs# 92

9:30 AM Theresa Guise

Muscle function matters: role of the tumor-bone microenvironment in regulation of muscle

function in cancer abs# 93

Morning tea

10:00AM - 10:30AM Boulevard Foyer

Genomic control of bone homeostasis

10:30AM - 12:00PM Boulevard Auditorium

Chairs: John Eisman & Bente Langdahl 10:30 AM Emma Duncan

GWAS: changing our understanding of osteoporosis and other bone disorders abs# 94

11:00 AM Joseph Powell

Using ultra high-throughout single cell sequencing to understanding cellular heterogeneity abs#

95

11:30 AM Charles Farber

Informing GWAS using systems genetics abs# 96

The conference acknowledges the support of **ASBMR**



Close of meeting

12:00pm

PLENARY POSTER LISTING

Paul H. Anderson

Impaired osteoclastogenesis in conditional osteoblast VDR-KO mice results in exacerbated PTH-mediated bone catabolism under suboptimal dietary conditions. abs# 102

Niloufar Ansari

Maternal genotype has life-long effects on bone mass, shape and strength in Dmp1Cre.Pthlhff mice abs# 103

Agnieszka Arthur

The balance of bone homeostasis is disrupted with the loss of ephrinB1 in osteoprogenitors, resulting in an osteoporotic phenotype. abs# 104

Ebrahim Bani Hassan

Mid-thigh muscle and bone masses are sensitive indices of bone and muscle loss in older fallers abs# 105

Belinda R Beck

Clinical translation of brief, high intensity exercise for bone, muscle and functional outcomes in postmenopausal women with low to very low bone mass: First 12-month findings from The Bone Clinic abs# 106

Charles Inderjeeth

Age specific cut-off for FRAX® without BMD better identifies who to treat or investigate for suspected underlying osteoporosis in a cohort over 70 years age compared to IOF thresholds. abs# 107

Jian-ming Lin

The effects of adiponectin deficiency on osteoclasts abs# 108

Ishanka Munugoda

Ambulatory activity is protective for hip replacement due to fracture and due to osteoarthritis but has detrimental effects on knee replacement due to osteoarthritis: a population-based prospective cohort study *abs# 109*

Tuan V Nguyen

Burden of fractures attributable to low bone mineral density abs# 110

Raewyn Poulsen

Is altered NMDA signalling responsible for disrupting the chondrocyte-intrinsic circadian clock and inducing the chondrocyte phenotype shift central to the development of osteoarthritis? abs# 111

Marcia A Munoz

Understanding the actions of bisphosphonate drugs: inhibitory effects on macrophage populations outside the skeleton abs# 112

Pamela Rufus

A preliminary investigation into the association between age and impact microindentation in men abs# 113

Deepti K Sharma

Bone-Derived 1,25-dihydroxyvitamin D is a determinant of trabecular bone structure in hip fracture patients abs# 114

Kerrie M Sanders

Change in health-related quality of life and wellbeing following a fragility fracture: AUSICUROS abs# 115

Patricia WM Ho

PTHrP of full length is an autocrine / paracrine regulator in the osteocyte abs# 116

Sophia X Sui

Low hand grip strength as a marker of poor mobility and falls in older women abs# 117

Neda Taghaviesfandouni

Protease-activated receptor-2 triggers mast cell degranulation and exacerbates bone and muscle pathology in dystrophin deficiency abs# 118

Hirofumi Tenshin

Osteoclasts utilize TRAIL for their NF-κB activation, but TAK1 inhibition resumes TRAIL-induced apoptosis in osteoclasts abs# 119

Thach Tran

Transition to fracture and mortality: development of a risk assessment tool from two large population-based prospective cohort studies abs# 120

Hsu-Wen Tseng

TNF alpha: a mediator of neurological heterotopic ossification abs# 121

Jinwen Tu

Chondrocytes regulate joint inflammation through endogenous glucocorticoid signalling abs# 122

Feitong Wu

Time watching television or videos and strenuous physical activity in younger women either independently or interact to predict lower limb muscle strength and balance but not bone density in midlife: a 12-yr prospective study *abs# 123*

Yuhei Yahiro

Loss of BMP-inducible gene Atoh8 in mice decreases bone mass abs# 124

Scott E Youlten

The osteocyte transcriptome shows major temporal changes during maturation and sexual dimorphism in adulthood *abs#* 125

Tuan V Nguyen

Contribution of lifestyle factors to fracture: a lifestyle profile approach abs# 126

POSTER LISTING

ODD NUMBERS

Jasna Aleksova

Oestradiol, but not PTH, is associated with lumbar spine bone mineral density in men receiving dialysis pre-transplant. abs# 127

Tonima S Ali

Pathogenesis cascade of post-traumatic osteoarthritis in rat models studied by MRI abs# 129

Nicholas Athanasou

The effect of zoledronic acid and osteoprotegerin on tumour cell viability in Ewing sarcoma. abs# 131

Babatunde A Ayodele

Subchondral bone microdamage accumulates in the distal metacarpus of thoroughbred racehorses with intensive training. abs# 133

Ebrahim Bani Hassan

Marrow fat is not correlated with visceral and subcutaneous fat in elderly men abs# 135

Lena Batoon

CCR2 signalling is not critical in a tibial injury that heals through intramembranous bone healing abs# 137

Dennis M Black

The interaction of acute-phase reaction and efficacy for osteoporosis after zoledronic acid: analysis of horizon pivotal fracture trial abs# 139

Sharon L Brennan-Olsen

Region of residence, area-level socioeconomic position, and the utilisation of total primary joint replacement for hip or knee osteoarthritis in western Victoria: A cross-sectional multilevel study of the Australian Orthopaedic Association National Joint Replacement Registry abs# 141

Karen E Callon

Preliminary analysis of a porcine ECM for musculoskeletal regeneration abs# 143

Lianzhi Chen

Obesity induced bone formation of subchondral bone is associated with early total knee replacement in patients with osteoarthritis *abs# 145*

Weiwen Chen

Effect of tenofovir on BMD and TBS in HIV negative subjects abs# 147

Jasmine R Cleminson

Dietary tryptophan and bone in older women: a cross-sectional study abs# 149

Larry I Cohen

Pelvic parameters in the prediction of anterior sagittal spine collapse abs# 151

Ali Ghasem-Zadeh

Microstructural decay in spinal cord injury abs# 153

Sheron Sir Loon Goh

Reduced bone mineral density in human immunodeficiency virus-infected individuals: A meta-analysis of its prevalence and risk factors *abs# 155*

Terry Golombick

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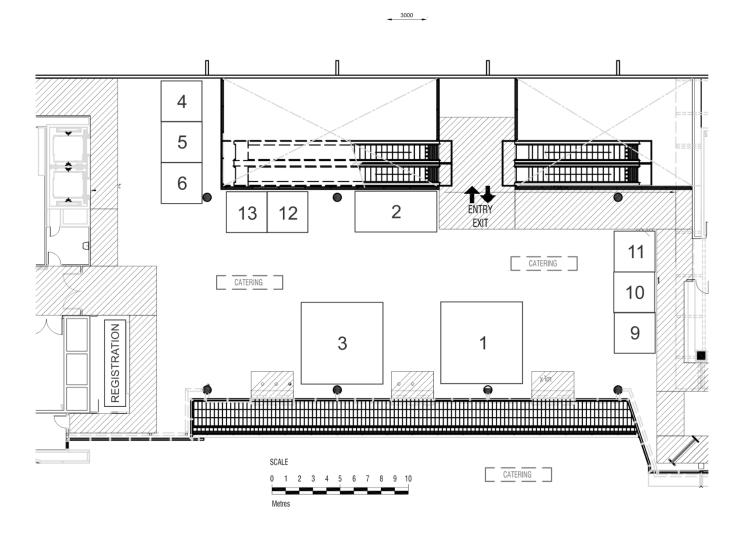
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DESTINATION SUPPORT

Brisbane Marketing Booth 11

www.choosebrisbane.com.au

Brisbane Marketing is the driving force behind Brisbane's growing reputation as a progressive and globally-connected city. As a wholly-owned subsidiary of Brisbane City Council, Brisbane Marketing aspires to be one of the world's best economic development agencies. In addition to being home to the Brisbane Convention Bureau, Brisbane Marketing is Brisbane's official agency for major events, export and inward investment and is responsible for profiling Brisbane as a study destination. Brisbane Marketing coordinates and hosts the Asia Pacific Screen Awards (APSA) and is the regional tourism organisation for Brisbane and the surrounding region.

Jared Coolwell Aboriginal Art

Booth 4

www.facebook.com/jaredcoolwellaboriginalart

We believe Moondagurra 'the rainbow serpent' is the creator of life to this land. Before Mundagurra came the land was dry, barren and dead. One day was travelling down a small dry gully she became stuck. Unable to move Mundagurra called upon her brothers Yaro 'the rain' and Naelen 'the cloud' to help her. The brothers called up a great Moogerah 'storm' and sent it to help Mundagurra. As the large Moogerah passed over her, the water got under her belly and she was able wiggle side to side to open up the small gully and continue on with her journey, creating a large river behind her as she went. The small dry gully that had been turned into a large river, we called Maiwa but today it is known as the Brisbane River. We still believe Mundagurra is alive today she is underground protecting and giving birth to all the animal tribes.

Jarrad Coolwell is displaying some of his artwork within the exhibition at the ANZBMS-IFMRS conference. Feel free to make contact with Jared if you are interested in purchasing some of his artwork.

Tourism and Events Queensland

www.queensland.com

Tourism and Events Queensland (TEQ) is a statutory body of the Queensland Government and the state's lead marketing destination and experience development and major events agency.

Tourism Australia

www.australia.com/businessevents

Tourism Australia's dedicated business events unit Business Events Australia delivers marketing communications, industry partnerships and a trade distribution program to raise international awareness and consideration of Australia as a business events destination. Under the Business Events Australia brand, Tourism Australia undertakes activity in key international markets to ensure Australia's business events offering is communicated to media, business events planners and decision makers.

EXHIBITORS

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Faxitron is the pioneer and leading brand in cabinet x-ray with over 7000 systems installed worldwide. We offer compact, fully-shielded digital radiography and pre-clinical DXA systems for BMD and body composition. Our systems offer the highest resolution (down to 8 micron) with the largest field of view (up to 9"x11.5"). Multiple cabinet and detector sizes with microfocus sources up to 100kV make our systems ideal for small animal in vivo/ex vivo imaging and longitudinal studies.

Getz Healthcare Pty Ltd Booth 9

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Operating in 9 countries across Asia, Getz Healthcare is partnered with prominent global industry leaders, to offer the latest in medical technology products and services; and is committed to developing long-term relationships with partners and customers. This is achieved through the application and sharing of experience, knowledge and resources including marketing support, exceptional service, and clinical training.

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Hologic Booth 10

www.hologic.com

Hologic, Inc. is a leading developer, manufacturer and supplier of premium diagnostic products, medical imaging systems and surgical products. The Company's core business units focus on diagnostics, breast health, GYN surgical, and skeletal health. With a unified suite of technologies and a robust research and development program, Hologic is dedicated to The Science of Sure. For more information on Hologic, visit www.hologic.com.

Contact details: Hologic (Australia) Pty Ltd

Toll free: 1800 264 073 | Phone: +61 2 9888 8000 | Fax: +61 2 9870 7555 | Email: australia@hologic.com

Thomson Scientific Instruments Pty Ltd

Booth 13

www.tsi.com.au

Thomson Scientific Instruments is the distributor for Bruker MicroCT (formerly Skyscan) (http://bruker-microct.com/home.htm) across Australia and New Zealand. Established in 1980, it has been our privilege to serve the Australasian scientific community with innovative instrumentation to do cutting edge science. For more information on our MicroCT product range visit http://www.tsi.com.au/product/micro_ct.html

SOCIETIES

Australian and New Zealand Bone and Mineral Society (ANZBMS)

Booth 5 & 6

www.anzbms.org.au

The ANZBMS is a not-for-profit collegiate organisation and the principal professional body for scientists and clinicians involved in bone and mineral metabolism research in Australia and New Zealand. Since its inception in 1988, the ANZBMS has become one of the premier bone research societies in Australia, with its members recognised for their outstanding contributions made to clinical and biomedical musculoskeletal research. The ANZBMS continues to act as a policy advisor to national governments of Australia and NZ and to the community throughout Australasia on relevant issues including clinical bone disease and funding for musculoskeletal research.

International Federation of Musculoskeletal Research Societies

www.ifmrs.org

The IFMRS is a federation of international, non-profit musculoskeletal research societies dedicated to promoting excellence in the field. The mission of the IFMRS is to open channels of communication and collaboration among musculoskeletal research societies around the world, and to provide a forum for networking, an on-line information resource, IFMRS grants and awards and activities for our Future Global Leaders.

Further information on activities and membership can be found on the IFMRS website at www.ifmrs.org

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