

THURSDAY SEPTEMBER 8TH

SESSION 5: VITAMIN D DOES THAT? (Moderators: Lori Plum & Sudaker Rao)

- 8:30 - 8:40 **Luke Peppone (University of Rochester Medical Center)** *High-dose vitamin D supplementation in patients with breast and prostate cancer to prevent cancer-treatment-induced bone loss.*
- 8:40 - 8:45 Discussion
- 8:45 - 8:55 **Sakoto Kise (Toyama Prefectural University)** *Functional analysis of vitamin D receptor (VDR) using adenovirus vector and its application to gene therapy for VDR KO rats.*
- 8:55 - 9:00 Discussion
- 9:00 - 9:10 **Dan Bikle (UCSF/VA Medical Center)** *Vitamin D receptor controls injury induced epidermal regeneration through cross-talk with P53/63 signaling.*
- 9:10 - 9:15 Discussion

SESSION 6: THE VDR AND THE SIGNALS WE KEEP - GENOMICS AND SIGNALING (Moderator: Moray Campbell)

- 9:15 - 9:35 **Ayse Kilic (Brigham and Women's Hospital/Harvard)** *Vitamin D mitigates allergic airway inflammation by modulating the expression of key genes on CHR17Q12-21.1.*
- 9:35 - 9:40 Discussion
- 9:40 - 9:50 **Morgan Ritter (North Carolina State University)** *Early disruption of vitamin D receptor signaling induces developmental behavior deficits in zebrafish.*
- 9:50 - 9:55 Discussion
- 9:55 - 10:05 **Nicole Ball (University of East Anglia)** *3'UTR structural elements are associated with CYP24A1-mediated abnormal calcium handling.*
- 10:05 - 10:10 Discussion

COFFEE BREAK

SESSION 7: WHAT THE GUT! MICROBES AND THE INTESTINE (Moderators: Sylvia Christakos & Seong Min Lee)

- 10:25 - 10:45 **Jim Fleet (University of Texas at Austin)** *Integrating genomic and physiologic data to understand how vitamin D signaling regulates intestinal biology.*
- 10:45 - 10:50 Discussion
- 10:50 - 11:00 **Natalie Watkins (University of Texas at Austin)** *Intestinal epithelial cell-deletion of CYP24A1 reduces renal CYP27B1 mRNA and enhances TRPV6 mRNA induction by low dietary calcium.*
- 11:00 - 11:05 Discussion
- 11:05 - 11:25 **Snehal Chaudhari (Harvard /University of Wisconsin-Madison)** *The role of vitamin D receptor in remodeling the gut-liver axis following bariatric surgery.*
- 11:25 - 11:30 Discussion

FLASH POSTER TALKS 2 (Moderator: Jim Fleet)

- 11:30 - 11:35 **Introduction**
- 11:35 - 11:38 **Thomas Lisse (University of Miami)** *Vitamin D inhibits the epithelial-mesenchymal transition (EMT) and migration of osteosarcoma cells via differential regulation of EMT and antioxidative genes and chromatin states.*
- 11:38 - 11:41 **Ganmaa Davaasambu (Harvard School of Public Health)** *Maternal vitamin D intakes during pregnancy and child health outcomes.*

- 11:41 - 11:44 **Martyna Stachowicz-Suhs (Hirsfeld Institute)** *Crosstalk between macrophages and murine 4T1 breast cancer cells in the context of the vitamin D-induced metastasis: COX-2/ PGE-2/ IL-6 as the main factors driving this process.*
- 11:44 - 11:47 **Kirstin Krieger (University of Illinois Chicago)** *Vitamin D sufficiency enhances epithelial differentiation of mouse prostate organoids and cancer cell lines.*
- 11:47 – 11:50 **Steven Strugnell (OPKO Health)** *Extended-release calcifediol may accelerate resolution of respiratory symptoms and mitigate pneumonia risk in patients with mild-moderate COVID-19.*

LUNCH WITH POSTER VIEWING

12:00 - 2:00 **POSTER SESSION 2 - ROOMS 2.110 AND 2.120**

SESSION 8: EXPANDING OUR UNDERSTANDING OF VITAMIN D METABOLISM (Moderators: Carmen Reynolds & Eva Liu)

- 2:00 - 2:20 **Mark B. Meyer (University of Wisconsin, Madison)** *The rapid genomic mechanisms controlling renal vitamin D metabolism.*
- 2:20 - 2:25 Discussion
- 2:25 - 2:35 **Glennville Jones (Queen's University)** *R396W mutation of CYP24A1: a humanized preclinical model of infantile hypercalcemia Type I.*
- 2:35 - 2:40 Discussion
- 2:40 - 2:50 **Etienne Sochett (Hospital for Sick Children, Toronto)** *Rifampin use in children with idiopathic infantile hypercalcemia.*
- 2:50 – 2:55 Discussion
- 2:55 - 3:15 **Martin Kaufmann (Queen's University)** *Clinical Utility of measuring the serum vitamin D metabolome including 24,25(OH)2D3 by liquid chromatography-tandem mass spectrometry (LC-MS/MS).*
- 3:15 - 3:20 Discussion

COFFEE BREAK

SESSION 9: THE BONES HAVE IT (Moderators: Tom Thacher/Madhu Biyani)

- 3:35 – 3:55 **Eva Liu (Brigham and Women's Hospital/Harvard)** *Role of 1,25 dihydroxyvitamin D in regulating enthesopathy development in the HYP mouse model of XLH.*
- 3:55 - 4:00 Discussion
- 4:00 - 4:10 **Stefanie Doms (KU Leuven)** *The vitamin D3 analog, WY1048, affects cortical bone directly through VDR induced signaling in osteoblast precursors.*
- 4:10 - 4:15 Discussion
- 4:15 - 4:25 **Seong Min Lee (University of Wisconsin, Madison)** *A complex genomic mechanism governs the regulation of fibroblast growth factor 23 expression in response to 1,25-dihydroxyvitamin D3, phosphate and inflammation.*
- 4:25 - 4:30 Discussion
- 4:30 - 4:40 **Serra Ucer Ozgurel (University of Texas at Austin)** *Male LRP5 A214V mutant mice with genetically programmed high bone mass have disruption of the vitamin D endocrine system.*
- 4:40 - 4:45 Discussion
- 4:45 – 4:55 **Lieve Verlinden (KU Leuven)** *Osteoblast-specific deletion of neuropilin 2 results in trabecular and cortical bone loss in male mice.*
- 4:55 – 5:00 Discussion
- 5:00 - 5:10 **Sudhaker Rao (Henry Ford Health)** *Effect of vitamin D metabolites on bone histomorphometry in health black and white women: an attempt to unravel the so-called Vitamin D Paradox in blacks.*
- 5:10 - 5:15 Discussion

FRIDAY SEPTEMBER 9TH

SESSION 10: CANCER - HEALTH DISPARITIES AND TREATMENTS (Moderators: Sue Ingles & Thomas Lisse)

- 8:30 - 8:50 **Clayton Yates (Tuskegee University)** *Prostate cancer and vitamin D - GWAS, skin color and health disparities.*
- 8:50 - 8:55 Discussion
- 8:55 - 9:05 **Madhu Biyani (Kanazawa University)** *A novel DNA aptamer for CYP24 inhibition exerts a therapeutic effect by enhancing anti-proliferative function of vitamin D in lung cancer cells.*
- 9:05 - 9:10 Discussion
- 9:10 - 9:20 **Cydney Dennis (Virginia Commonwealth University)** *24R,25(OH)2D3 induces its anti-apoptotic effect in laryngeal cancer cells through a PLD mediated mechanism.*
- 9:20 - 9:25 Discussion
- 9:25 - 9:35 **Rocio Garcia-Becerra (Universidad Nacional Autonoma de Mexico)** *Re-establishment of the antitumoral effects of antiestrogens by calcitriol in triple-negative breast cancer models.*
- 9:35 - 9:40 Discussion

COFFEE BREAK

SESSION 11: NOT JUST ANOTHER MICRONUTRIENT - NUTRITION AND VITAMIN D (Moderators: Dan Bikle & Snehal Chaudhari)

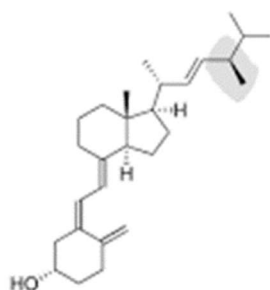
- 9:55 - 10:15 **Susan A. Lanham-new (University of Surrey)** *Differential effects of vitamin D2 and vitamin D3 on vitamin D metabolism in health and disease.*
- 10:15 - 10:20 Discussion
- 10:20 - 10:30 **Tom Thacher (Mayo Clinic)** *Serum 1,25-dihydroxyvitamin D and the pathogenesis of vitamin D/calcium deficiency rickets – a multivariable re-analysis.*
- 10:30 - 10:35 Discussion
- 10:35 - 10:45 **Sue Shapses (Rutgers University)** *Vitamin D deficiency in older mice causes excess weight gain and compromises the biomechanical strength of bone without a decrease in BMD.*
- 10:45 - 10:50 Discussion
- 10:50 - 11:00 **Sophie Davies (University of Bath)** *25(OH)D3 expenditure does not differ meaningfully between active, lean and sedentary overweight adults.*
- 11:00 - 11:05 Discussion
- 11:05 - 11:25 **Roger Bouillon (KU Leuven)** *Calcifediol as a treatment option for hypovitamin D.*
- 11:25 - 11:30 Discussion

CLOSING REMARKS

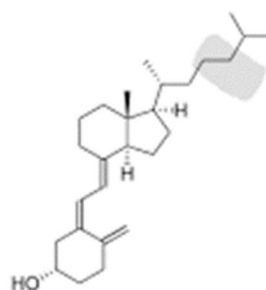
NETWORKING LUNCH - Mingle on the patio or Grab & Go

TUESDAY SEPT 6, 2022

PLENARY POSTER SESSION



Ergocalciferol
(Vitamin D2)



Cholecalciferol
(Vitamin D3)