

Scientific Program – Wednesday and Thursday

Wednesday, May 29, 2019

1:00 - 8:00PM Registration / Hospitality Desk Opens
5:00 - 8:00PM Welcome Reception and Plenary Poster Session

Thursday, May 30, 2019

8:00 - 8:15AM **OPENING REMARKS**
J. Fleet, Workshop Chair

Session I: **KEYNOTE I: THE YEAR IN VITAMIN D: BASIC RESEARCH** Moderator: J. Welsh

8:15 - 8:55AM C. Bernal-Mizrachi THE YEAR IN VITAMIN D: BASIC RESEARCH
8:55 - 9:00AM *Discussion*

Session II: **VITAMIN D RECEPTOR – TRANSCRIPTION/MECHANISM OF ACTION** Moderator: S. Christakos

9:00 - 9:25AM M. Campbell OPPORTUNITIES, CHALLENGES, AND FUTURE PROSPECTS FOR
9:25 - 9:30AM *Discussion* GENOMICS APPROACHES IN VITAMIN D RESEARCH

9:30 - 9:40AM T. Ishii THE ROLE OF PIAS4-MEDIATED SUMOYLATION IN THE REGULATION
9:40 - 9:45AM *Discussion* OF VITAMIN D RESPONSE

9:45 - 9:55AM S.M. Lee VITAMIN D AND PHOSPHATE REGULATE FIBROBLAST GROWTH FACTOR
9:55 - 10:00AM *Discussion* 23 EXPRESSION VIA TRANSCRIPTIONAL MECHANISMS

10:00 - 10:10AM J. White A GLOBAL REANALYSIS OF 80 GENE EXPRESSION PROFILING STUDIES
10:10 - 10:15AM *Discussion* PROVIDES NUMEROUS INSIGHTS INTO CELL-SPECIFIC INNATE IMMUNE
REGULATION BY 1,25(OH)₂D₃

10:15 - 10:40AM **BREAK**

Session III: **VITAMIN D METABOLISM (Dr. Helen Henry Memorial Session)** Moderator: M. Hewison

10:40 - 10:45AM D. Bikle INTRODUCTION

10:45 - 11:10AM M. Meyer MECHANISTIC BASIS FOR THE REGULATION OF VITAMIN D
11:10 - 11:15AM *Discussion* METABOLISM BY CALCITROPIC AND PHOSPHATURIC HORMONES IN
THE KIDNEY AND HORMONE FEEDBACK REGULATION BY 1,25(OH)₂D₃

11:15 - 11:25AM J. Cleal PLACENTAL UPTAKE AND METABOLISM OF VITAMIN D; A POTENTIAL
11:25 - 11:30AM *Discussion* MEDIATOR OF FETAL GROWTH?

11:30 - 11:40PM J. Welsh ACCUMULATION OF VITAMIN D IN MAMMARY GLAND: ROLE OF DIET
11:40 - 11:45PM *Discussion* AND VITAMIN D BINDING PROTEIN

11:45 - 11:55AM	M. Kaufmann	RATIO OF 25-HYDROXYVITAMIN D ₃ -TO-24,25-DIHYDROXYVITAMIN D ₃ :
11:55 - 12:00PM	<i>Discussion</i>	A VITAMIN D METABOLISM-BASED BIOMARKER OF CHRONIC KIDNEY DISEASE PROGRESSION
12:00 - 12:30PM	POSTER SESSION I PREVIEWS (“FLASH” POSTER SESSION I)	
	J. Fleet	
12:30 - 2:30PM	POSTER SESSION I WITH LUNCH	
Session IV:	UPDATE ON VITAMIN D SUPPLEMENTATION TRIALS (VITAL, ViDA, D2d)	
	(sponsored by Abiogen)	
	Moderators: J. Fleet and R. Bouillon	
2:30 - 2:35PM	J. Fleet	INTRODUCTION AND CONTEXT
2:35 - 3:00PM	R. Scragg	THE <u>VITAMIN D</u> ASSESSMENT (ViDA) STUDY – DESIGN AND
3:00 - 3:05PM	<i>Questions</i>	MAIN FINDINGS
3:05 - 3:30PM	J. Manson	THE <u>VITAMIN D</u> AND <u>OMEGA-3</u> TRIAL (VITAL) - VITAMIN D
3:30 - 3:35PM	<i>Questions</i>	SUPPLEMENTS AND PREVENTION OF CANCER AND CARDIOVASCULAR DISEASE
3:35 - 4:00PM	BREAK	
4:00 - 4:25PM	A. Pittas	THE VITAMIN <u>D</u> AND TYPE <u>2</u> DIABETES (D2D) STUDY
4:25 - 4:30PM	<i>Questions</i>	
4:30 - 5:00PM	All	DISCUSSION OF SUPPLEMENTATION TRIALS WITH DIRECTED QUESTIONS
Session V:	ERADICATION OF RICKETS	
	Moderator: R. Jorde	
5:00 - 5:30PM	R. Bouillon	BRIEF COMMENTARY AND DISCUSSION
7:00 - 10:00PM	NETWORKING DINNER EVENT: CRUISE AROUND MANHATTAN ON CIRCLE LINE	
	TICKET IS REQUIRED (BOARDING BEGINS AT 6:30 PM)	

Scientific Program – Friday

Session VI:

VITAMIN D AND CANCER

Moderators: E. Kallay and D. Feldman

8:00 - 8:25AM	L. Augenlicht	VITAMIN D AND THE NUTRITIONAL ENVIRONMENT DETERMINE WHICH AND HOW INTESTINAL STEM CELLS CONTRIBUTE TO HOMEOSTASIS AND TUMORIGENESIS
8:25 - 8:30AM	<i>Discussion</i>	
8:30 - 8:40AM	P. Hershberger	VITAMIN D METABOLITES EXERT BENEFICIAL EFFECTS IN EGFR MUTANT LUNG CANCERS
8:40 - 8:45AM	<i>Discussion</i>	
8:45 - 8:55AM	J. Fleet	1, 25 DIHYDROXYVITAMIN D (1,25(OH) ₂ D) INHIBITS THE T CELL SUPPRESSIVE FUNCTION OF MYELOID DERIVED SUPPRESSOR CELLS (MDSC)
8:55 - 9:00AM	<i>Discussion</i>	
9:00 - 9:10AM	J. Garcia	REGULATION OF MEGALIN BY VITAMIN D AS THE MECHANISM FOR DIFFERENTIAL LEVELS OF INTRA-PROSTATIC ANDROGENS BETWEEN AFRICAN AMERICAN AND CAUCASIAN MEN
9:10 - 9:15AM	<i>Discussion</i>	
9:15 - 9:25AM	C. Peng	PRE-DIAGNOSTIC CIRCULATING 25-HYDROXYVITAMIN D, BREAST TUMOR GENE EXPRESSION AND BREAST CANCER RECURRENCE IN THE NURSES' HEALTH STUDIES
9:25 - 9:30AM	<i>Discussion</i>	
9:30 - 9:40AM	A. Heath	25-HYDROXYVITAMIN D CONCENTRATION AND CAUSE-SPECIFIC MORTALITY: THE MELBOURNE COLLABORATIVE COHORT STUDY
9:40 - 9:45AM	<i>Discussion</i>	
9:45 - 10:15AM	BREAK	

Session VII:

VITAMIN D AND THE MICROBIOME OR IMMUNITY

Moderators: M. Cantorna and J. White

10:15 - 10:40AM	V. Tangpricha	IMPACT OF VITAMIN D ON THE MICROBIOME IN PATIENTS WITH CYSTIC FIBROSIS
10:40 - 10:45AM	<i>Discussion</i>	
10:45 - 10:55AM	J. Arora	VITAMIN D REGULATES THE MICROBIOTA TO INDUCE ROR γ T/FOXP3+ REGULATORY T CELLS
10:55 - 11:00AM	<i>Discussion</i>	
11:00 - 11:10AM	S. Tukaj	CALCITRIOL TREATMENT AMELIORATES INFLAMMATION AND BLISTERING IN MOUSE MODELS OF EPIDERMOLYSIS BULLOSA ACQUISITA
11:10 - 11:15AM	<i>Discussion</i>	
11:15 - 11:25AM	YC Li	VITAMIN D/VITAMIN D RECEPTOR SIGNALING IS REQUIRED FOR NORMAL DEVELOPMENT AND FUNCTION OF GROUP 3 INNATE LYMPHOID CELLS IN THE GUT
11:25 - 11:30AM	<i>Discussion</i>	
11:30 - 11:40AM	M. Suzuki	PRENATAL VITAMIN D DEFICIENCY ALTERS IMMUNE CELL PROPORTIONS IN ADULT MICE
11:40 - 11:45AM	<i>Discussion</i>	
11:45 - 11:55AM	G. Parnell	HOMEOSTATIC REGULATION MAY LIMIT IMMUNE RESPONSE TO VITAMIN D SUPPLEMENTATION, ESPECIALLY TO CHOLECALCIFEROL
11:55 - 12:00PM	<i>Discussion</i>	

12:00 - 12:30PM **POSTER SESSION II PREVIEWS ("FLASH" POSTER SESSION II)**

J. Fleet

12:30 - 2:30PM **POSTER SESSION II WITH LUNCH**

**Session VIII: VITAMIN D REGULATION OF BONE AND MINERAL METABOLISM
(Dr. Robert Wasserman Memorial Session)**

Moderators: G. Carmeliet and P. Anderson

2:30 - 2:35PM	S. Christakos	INTRODUCTION
2:35 - 3:00PM	S. Christakos	NEW INSIGHTS INTO VDR SIGNALING IN MOUSE AND HUMAN
3:00 - 3:05PM	<i>Discussion</i>	INTESTINAL BIOLOGY
3:05 - 3:15PM	E. Liu	IMPAIRED 1,25 DIHYDROXYVITAMIN D ACTION UNDERLIES
3:15 - 3:20PM	<i>Discussion</i>	ENTHESOPATHY DEVELOPMENT IN THE HYP MOUSE MODEL OF XLH
3:20 - 3:30PM	S. Doms	UNLIGANDED VDR SIGNALING NEGATIVELY AFFECTS BONE MASS
3:30 - 3:35PM	<i>Discussion</i>	
3:35 - 3:45PM	C. Sempos	25(OH)D REQUIREMENTS TO PREVENT RICKETS IN NIGERIAN
3:45 - 3:50PM	<i>Discussion</i>	CHILDREN ON A LOW CALCIUM DIET
3:50 - 4:15PM	BREAK	

Session IX: IMPACT OF GENETICS ON VITAMIN D

Moderator: M. Campbell

4:15 - 4:40PM	B. Richards	MENDELIAN RANDOMIZATION AS A TOOL TO UNDERSTAND THE ROLE
4:40 - 4:45PM	<i>Discussion</i>	OF VITAMIN D IN DISEASE SUSCEPTIBILITY
4:45 - 4:55PM	F. Ideraabdullah	CHARACTERIZING THE ROLE OF GENETIC BACKGROUND IN OFFSPRING
4:55 - 5:00PM	<i>Discussion</i>	EPIGENETIC DYSREGULATION BY MATERNAL VITAMIN D DEFICIENCY
5:00 - 5:10PM	A. Molin	IDIOPATHIC INFANTILE HYPERCALCEMIA CAUSED BY SLC34A1
5:10 - 5:15PM	<i>Discussion</i>	MUTATIONS: A DIFFICULT DIAGNOSIS
5:15 - 5:25PM	R. Dhaduk	VITAMIN D GENETIC VARIANTS AND 25-HYDROXYVIAMIN D ACROSS
5:25 - 5:30PM	<i>Discussion</i>	FIVE POPULATIONS OF AFRICAN DESCENT: THE METS/VIDA STUDY
5:30 - 6:00PM	AWARDS CEREMONY	

Moderators: J. Fleet, J. Welsh and J. Rathmacher

Scientific Program – Saturday

Session X:

KEYNOTE II: THE YEAR IN VITAMIN D: CLINICAL/POPULATION RESEARCH

Moderator: M. McKenna

8:00 - 8:40AM I. Schoenmakers THE YEAR IN VITAMIN D – CLINICAL AND POPULATION RESEARCH
8:40 - 8:45AM *Discussion*

Session XI:

VITAMIN D AND PUBLIC HEALTH

Moderator: S. Whiting

8:45 - 9:10AM S. Atkinson VITAMIN D INTAKE GUIDELINES FOR PERSONS AFFECTED BY
9:10 - 9:15AM *Discussion* MULTIPLE SCLEROSIS (MS) FROM THE MS SOCIETY OF CANADA

9:15 - 9:25AM K. Cashman EXPLORATION OF STRATEGIC FOOD VEHICLES FOR VITAMIN D
9:25 - 9:30AM *Discussion* FORTIFICATION IN LOW-MIDDLE INCOME COUNTRIES

Session XII:

NEW FUNCTIONS OF VITAMIN D

Moderator: R. Erben

9:30 - 9:40AM J. Rullo INTRAOCULAR CALCIFEDIOL: UNCOVERING A ROLE FOR VITAMIN
9:40 - 9:45AM *Discussion* D IN THE EYE

9:45 - 9:55AM E. Mandell MATERNAL VITAMIN D DEFICIENCY DECREASES DISTAL LUNG
9:55 - 10:00AM *Discussion* VASCULAR DEVELOPMENT AND PULMONARY ENDOTHELIAL CELL
GROWTH AND FUNCTION IN INFANT RATS

10:00 - 10:10AM N. Latic ABLATION OF VITAMIN D SIGNALING IN CARDIOMYOCYTES LEADS
10:10 - 10:15AM *Discussion* TO FUNCTIONAL IMPAIRMENT IN EXPERIMENTAL LEFT VENTRICULAR
HYPERTROPHY

10:15 - 10:40AM **BREAK**

Session XIII:

CONTROVERSY – VITAMIN D REQUIREMENTS DURING PREGNANCY

Moderator: M. Keily

10:40 - 10:55AM M. Keily CONTEXT AND BACKGROUND
10:55 - 11:10AM C. Wagner IDENTIFICATION OF KEY ISSUES I
11:10 - 11:25AM D. Roth IDENTIFICATION OF KEY ISSUES II
11:25 - 12:00PM All MODERATED DISCUSSION

12:00 - 12:15PM **CLOSING REMARKS**
J. Fleet, Workshop Chair