Scientific Program
Fifteenth Workshop on Vitamin D

**Tuesday, June 19: PM**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00 – 5:00 PM</td>
<td>Workshop Executive Committee (WEC)</td>
</tr>
<tr>
<td>4:00 – 6:00 PM</td>
<td>Registration desk opens</td>
</tr>
<tr>
<td>6:00 – 7:30 PM</td>
<td>Welcoming Reception</td>
</tr>
</tbody>
</table>
Scientific Program-Wednesday
Fifteenth Workshop on Vitamin D

Wednesday, June 20: AM

8:00 – 8:15 AM  OPENING REMARKS:  R. Bouillon, A.W. Norman

Session I:  Session Chairpersons: Tony Norman & Roger Bouillon

8:15 – 8:55 AM  D. Moras  Discussion  PLENARY LECTURE: UNDERSTANDING VDR/RXR/DNA INTERACTIONS
8:55 – 9:00 AM  Discussion

9:00 – 9:20 AM  A. Annalora  Discussion  STRUCTURAL ANALYSIS OF MITOCHONDRIAL CYP24A1 OF THE VITAMIN D PATHWAY: ILLUMINATING NOVEL PARADIGMS FOR RATIONAL DRUG DEVELOPMENT
9:20 – 9:25 AM  Discussion

9:25 – 9:45 AM  K. Schlingmann  Discussion  24-HYDROXYLASE MUTATIONS IN IDIOPATHIC INFANTILE HYPERCALCEMIA
9:45 – 9:50 AM  Discussion

9:50 – 10:00 AM  M. Kaufmann  Discussion  PERSONALIZED VITAMIN D METABOLISM: SINGLE NUCLEOTIDE POLYMORPHISM ANALYSIS REVEALS NATURALLY-OCcurring CYP24A1 VARIANTS WITH ALTERED ENZYMIC PROPERTIES
10:00 – 10:05 AM  Discussion

10:15 – 10:20 AM  Discussion

10:20 – 10:50 AM  COFFEE BREAK

Session II:  Session Chairpersons: Mark Haussler & Rene St. Arnaud

10:50 – 11:10 AM  W. Pike  Discussion  UNBIASED ANALYSIS OF VITAMIN D RECEPTOR BINDING AT TARGET GENOMES REVEALS BASIC PRINCIPLES OF 1α,25-DIHYDROXYVITAMIN D₃-REGULATED GENE EXPRESSION
11:10 – 11:15 AM  Discussion

11:15 – 11:25 AM  C. Carlberg  Discussion  MECHANISTIC IMPLICATIONS OF GENOME- AND TRANSCRIPTOME-WIDE VIEWS ON VITAMIN D SIGNALING
11:25 – 11:30 AM  Discussion

11:30 – 11:40 AM  M. Tenniswood  Discussion  TESTOSTERONE AND VITAMIN D₃ COORDINATELY MODULATE LIPID METABOLISM VIA miRNA-MEDIATED FEED-FORWARD LOOP IN PROSTATE CANCER CELLS
11:40 – 11:45 AM  Discussion

11:45 – 11:55 AM  M. Campbell  Discussion  DISTORTED NCOR1 RECRUITMENT TO VDR TARGET GENES ASSOCIATES WITH ALTERED DNA METHYLATION PATTERNS IN PROSTATE CANCER CELLS
11:55 – 12:00 PM  Discussion

12:00 – 12:10 PM  Y. Oda  Discussion  MOLECULAR CHAPERONES REGULATE VITAMIN D RECEPTOR MEDIATED TRANSCRIPTION AND KERATINOCYTE DIFFERNTIATION
12:10 – 12:15 PM  Discussion
Session III: Poster Session A (Box Lunch)
12:15 – 2:00 PM  Duration depends on total number of poster presentations

Wednesday, June 20:  PM

Session IV:  Session Chairpersons: Donald Trump & David Gardner

2:00 – 2:20 PM  D. Feldman  Discussion  ANTICANCER ACTIVITY OF DIETARY VITAMIN D₃ IN MOUSE XENOGRAFT MODELS OF BREAST AND PROSTATE CANCER
2:20 – 2:25 PM

2:25 – 2:35 PM  L. Nonn  Discussion  1, 25-DIHYDROXYVITAMIN D₃ AND DIETARY VITAMIN D₃ UPREGULATE TUMOR SUPPRESSOR MICRONNAS IN PRIMARY PROSTATE CELLS AND PATIENT PROSTATE TISSUE
2:35 – 2:40 PM

2:40 – 3:00 PM  P. Hershberger  Discussion  DIFFERENTIAL RESPONSE TO 1α, 25(OH)₂D₃ IN MOLECULARLY DISTINCT LUNG CANCER SUBSETS
3:00 – 3:05 PM

3:05 – 3:15 PM  J. L. Sea  Discussion  FGF23 INHIBITS EXTRA-RENAL SYNTHESIS OF 1, 25-DIHYDROXYVITAMIN D IN HUMAN MONOCYTES
3:15 – 3:20 PM

3:20 – 3:40 PM  R. Mason  Discussion  THE ROLE OF THE VITAMIN D RECEPTOR AND ER₉/57 IN PROTECTION FROM UV-INDUCED DNA DAMAGE BY 1α,25(OH)₂D₃ 3:40 – 3:45 PM

3:45 – 3:55 PM  Y. Jiang  Discussion  1α, 25(OH)₂-DIHYDROXYVITAMIN D₃/VDR PROTECTS THE SKIN FROM UVB-INDUCED TUMOR FORMATION BY INHIBITING THE β-CATENIN PATHWAY 3:55 – 4:00 PM

4:00 – 4:20 PM  M. Blomberg-Jensen  Discussion  VITAMIN D AND MALE REPRODUCTION: EVIDENCE FOR NON-GENOMIC EFFECTS 4:20 – 4:25 PM

4:25 – 4:55 PM  COFFEE BREAK

Session V:  Session Chairpersons: Tony Norman & Barbara Boyan

3:20 – 3:40 PM

3:40 – 3:45 PM

3:45 – 3:55 PM

3:55 – 4:00 PM

4:00 – 4:20 PM

4:20 – 4:25 PM

4:25 – 4:55 PM

Session VI:  Session Chairpersons: JoEllen Welsh & Martin Blomberg-Jensen

4:55 – 5:05 PM  J. Lundqvist  Discussion  VITAMIN D-MEDIATED REGULATION OF CYP21A2 TRANSCRIPTION - A NOVEL MECHANISM FOR VITAMIN D ACTION 5:05 – 5:10 PM

5:10 – 5:30 PM  S. Cramer  Discussion  THE PROSTATE STEM CELL AS A VITAMIN D TARGET 5:30 – 5:35 PM

5:35 – 5:45 PM  C. P. Bernal-Mizrachi  Discussion  VITAMIN D SUPPRESSION OF ENDOPLASMIC RETICULUM STRESS PROMOTES AN ANTI-ATHEROGENIC MONOCYTE/MACROPHAGE PHENOTYPE IN TYPE 2 DIABETIC PATIENTS 5:45 – 5:50 PM

5:50– 6:30 PM  YOUNG INVESTIGATOR AWARDS
Scientific Program-Thursday  
Fifteenth Workshop on Vitamin D

Thursday, June 21: AM

Session VII:  Session Chairpersons: David Goltzman & Martin Hewison

8:15 – 8:35 AM  R. St-Arnaud  Discussion  NOVEL MECHANISM OF ACTION FOR 24-
8:35 – 8:40 AM  Discussion  HYDROXYLATED VITAMIN D METABOLITES IN
FRACTURE REPAIR

8:40 – 8:50 AM  M. Meyer  Discussion  VDR INHIBITS MOUSE MSC OSTEOGENIC
8:50 – 8:55 AM  Discussion  DIFFERENTIATION AND MINERALIZATION

8:55 – 9:15 AM  P. H. Anderson  Discussion  THE IMPLICATIONS OF VITAMIN D METABOLISM IN BONE
9:15 – 9:20 AM  Discussion  CELLS

9:20 – 9:40 AM  C. Mathieu  Discussion  VITAMIN D AND ITS ANALOGUES AS MODULATORS OF
9:40 – 9:45 AM  Discussion  THE IMMUNE SYSTEM: THE CASE OF TYPE 1 DIABETES

9:45 – 9:55 AM  A.R. Martineau  Discussion  VITAMIN D ACCELERATES RESOLUTION OF
9:55 – 10:00 AM  Discussion  INFLAMMATORY RESPONSES DURING TUBERCULOSIS
TREATMENT

10:00 – 10:30 AM  COFFEE BREAK

Session VIII:  Session Chairpersons: Rebecca Mason & John White

10:30 – 10:50 AM  D. Bikle  Discussion  PROTECTIVE ROLE OF VITAMIN D SIGNALING IN SKIN
10:50 – 10:55 AM  Discussion  CANCER FORMATION

10:55 – 11:05 AM  S. Beaudin  Discussion  1, 25(OH)D₃ AND 25(OH)D₃ CONTROL GENES INVOLVED
11:05 – 11:10 AM  Discussion  IN CANCER METABOLISM AND IMPAIR ADAPTATION OF
MAMMARY EPITHELIAL CELLS TO GLUTAMINE
DEPLETION

11:10 – 11:30 AM  C. Wagner  Discussion  HEALTH CHARACTERISTICS AND OUTCOMES OF NICHD
11:30 – 11:35 AM  Discussion  AND THRASHER RESEARCH FUND (TRF) VITAMIN D (VITD)
SUPPLEMENTATION TRIALS DURING PREGNANCY

11:35 – 11:55 AM  G. Schwartz  Discussion  SERUM CALCIUM AND THE RISK OF FATAL PROSTATE
11:55 – 12:00 PM  Discussion  CANCER

Session IX: Poster Session B (Box Lunch)

12:00 – 2:00 PM  Duration depends on total number of poster presentations

Thursday, June 21: PM

Session X:  Session Chairpersons: Roger Bouillon & Gary Schwartz

2:00 – 2:20 PM  C. Johnson  Discussion  PROLIFERATION AND CELL CYCLE PROGRESSION:
2:20 – 2:25 PM  Discussion  DISRUPTION & MODULATION BY VITAMIN D IN CANCER
AND THE TUMOR MICROENVIRONMENT
2:25 – 2:35 PM  
**W. Chang**  
Discussion  
AUTOCRINE AND ENDOCRINE ACTIONS OF PARATHYROID CYP27B1

2:35 – 2:40 PM  
**Discussion**

2:40 – 2:50 PM  
**B. Hollis**  
Discussion  
VITAMIN D₃ SUPPLEMENTATION AT 4,000 IU PER DAY FOR ONE YEAR RESULTS IN A DECREASE OF POSITIVE CORES AT REPEAT BIOPSY IN PATIENTS WITH LOW-RISK PROSTATE CANCER UNDER ACTIVE SURVEILLANCE

2:55– 3:05 PM  
**J.R. Muindi**  
Discussion  
CHOLECALCIFEROL SUPPLEMENTATION MODULATES SERUM VITAMIN D METABOLITES AND ASSOCIATIONS WITH POLYMORPHISMS IN THE VITAMIN D PATHWAY GENES

---

**Session XI: Session Chairpersons: Chantal Mathieu & JoEllen Welsh**

3:10 – 3:30 PM  
**C.B. Ambrosone**  
Discussion  
VITAMIN D AND BREAST CANCER IN AFRICAN-AMERICAN WOMEN

3:30 – 3:35 PM  
**Discussion**

3:35 – 3:45 PM  
**J. White**  
Discussion  
1,25-DIHYDROXYVITAMIN D IS A MASTER REGULATOR OF THE MYC/MXD1/MAD NETWORK

3:50 – 4:10 PM  
**D. Gardner**  
Discussion  
LIGANDED VITAMIN D RECEPTOR DISPLAYS ANTI-HYPERTROPHIC ACTIVITY IN THE MURINE HEART

4:15 – 4:45 PM  
**COFFEE BREAK**

---

**Session XII: Session Chairpersons: Glenville Jones  David Feldman**

4:45 – 5:05 PM  
**A.M. Mondul**  
Discussion  
CIRCULATING LEVELS OF 25(OH)D AND VITAMIN D BINDING PROTEIN AND RISK OF CANCER

5:05 – 5:10 PM  
**Discussion**

5:10 – 5:30 PM  
**M. Hewison**  
Discussion  
VITAMIN D AND IMMUNE REGULATION: NEW CONCEPTS AND CHALLENGES

5:30 – 5:35 PM  
**Discussion**

5:35 – 5:45 PM  
**M. Bouttier**  
Discussion  
1,25-DIHYDROXYVITAMIN D₃ HARNESSES AUTOCRINE AND PARACRINE INNATE IMMUNE SIGNALLING TO CONTROL M. TUBERCULOSIS INFECTION

5:50 – 6:00 PM  
**C. Leyssens**  
Discussion  
THE VITAMIN D ANALOG TX527 AMELIORATES DISEASE SYMPTOMS IN A CHEMICALLY-INDUCED MODEL OF INFLAMMATORY BOWEL DISEASE

6:00-6:05 PM  
**Discussion**

6:05-6:20 PM  
**WORKSHOP CAREER AWARDS**
Scientific Program-Friday
Fifteenth Workshop on Vitamin D

Friday, June 22: AM

Session XIII: Plenary Lecture

8:00 – 8:05 AM  Introduction  Tony Norman
8:05 – 8:55 AM  Bert W. O'Malley  Discussion
8:55 – 9:05 AM  Discussion

PLENARY LECTURE: NR COACTIVATORS: MASTER GENES FOR PHYSIOLOGY, PATHOLOGY-AND-? TARGETS FOR NEW THERAPIES

9:05 – 9:35 AM  COFFEE BREAK

Session XIV: Session Chairpersons: Wes Pike & Martin Tenniswood

9:35 – 9:55 AM  S. Kato  Discussion
9:55 – 10:00 AM  Discussion

VITAMIN D RECEPTOR IN OSTEOBLASTS IS A NEGATIVE REGULATOR OF BONE MASS CONTROL

10:00 – 10:10 AM  N.J. Koszewski  Discussion
10:10 – 10:15 AM  Discussion

IMPORTANCE OF APICAL MEMBRANE DELIVERY OF 1,25-DIHYDROXYVITAMIN D₃ (1,25D₃) TO VITAMIN D-RESPONSIVE GENE EXPRESSION IN THE COLON

10:15 – 10:35 AM  N. Takahashi  Discussion
10:35 – 10:40 AM  Discussion

MECHANISM OF INHIBITORY ACTION OF ELDECALCITOL, AN ACTIVE VITAMIN D ANALOG, ON BONE RESORPTION IN VIVO

10:40 – 10:50 AM  C. Narvaez  Discussion
10:50 – 10:55 AM  Discussion

GENOMIC PATHWAYS REGULATED BY 1,25(OH)₂D₃ AND THE VITAMIN D RECEPTOR (VDR) IN HUMAN ADIPOSE TISSUE – DERIVED STEM CELLS

Session XV: Session Chairpersons: Robert Heaney & David Goltzman

10:55 – 11:15 AM  L. Lieben  Discussion
11:15 – 11:20 AM  Discussion

THE DELICATE BALANCE BETWEEN VITAMIN D, CALCIUM AND BONE HOMEOSTASIS: LESSONS LEARNED FROM INTESTINAL- AND OSTEOBLAST-SPECIFIC VDR NULL MICE

11:20 – 11:30 AM  J. Glowacki  Discussion
11:30 – 11:35 AM  Discussion

HISTONE DEACETYLATION MEDIATES THE REJUVENATION OF OSTEOBLASTOGENESIS BY THE COMBINATION OF PTH AND 25(OH)D IN HMSCS FROM ELDERS

11:35 – 11:55 AM  A. Prentice  Discussion
11:55 – 12:00 PM  Discussion

RICKETS AROUND THE WORLD

Session XVI: Poster Session C (Box Lunch)

12:00 – 1:15 PM
**Friday, June 22: PM**

<table>
<thead>
<tr>
<th>Session XVII:</th>
<th>VITAMIN D NUTRITION</th>
</tr>
</thead>
</table>
| **1:30 – 1:40 PM** | M.S. Calvo | **Discussion**  
SURVEY OF CURRENT VITAMIN D FOOD FORTIFICATION PRACTICES IN THE UNITED STATES AND CANADA  

| **1:40 – 1:45 PM** | E. Giovannucci | **Discussion**  
VITAMIN D AND HEALTH: ARE RANDOMIZED CONTROLLED TRIALS THE FINAL ARBITRATOR?  

| **1:45 – 2:05 PM** | C. Gallagher | **Discussion**  
DOSE EFFECT OF VITAMIN D3 ON SERUM 25 HYDROXYVITAMIN D IN OLDER CAUCASIAN AND AFRICAN AMERICAN WOMEN  

| **2:05 – 2:10 PM** | R. Heaney | **Discussion**  
OPTIMAL HEALTH REQUIRES SERUM 25(OH)D LEVELS ABOVE 30 ng/mL  

| **2:10 – 2:30 PM** | R. Bouillon | **Discussion**  
VITAMIN D SUPPLEMENTATION: RATIONALE FOR MODEST BUT GENERALIZED APPROACH  

| **2:30 – 2:35 PM** | Panel Discussion | C. Gallagher, B. Hollis, P. Lips, R. Vieth  

| **2:35 – 2:55 PM** | Audience Discussion |  

| **3:00 – 3:20 PM** | K. S. Jones | **Discussion**  
COMPARISON OF THE PLASMA HALF-LIFE OF STABLE ISOTOPE LABELED 250HD$_2$ AND 250HD$_3$  

| **3:20 – 3:25 PM** | K. Brock | **Discussion**  
VITAMIN D STATUS IS ASSOCIATED WITH SUN EXPOSURE, VITAMIN D AND CALCIUM INTAKE, ACCULTURATION AND ATTITUDES IN IMMIGRANT EAST ASIAN WOMEN LIVING IN SYDNEY  

| **3:55 – 4:20 PM** | R. Jorde | **Discussion**  
ASSOCIATIONS BETWEEN POLYMORPHISMS RELATED TO SERUM 25-HYDROXYVITAMIN D LEVEL AND HUMAN HEIGHT  

| **4:20 – 4:30 PM** | Discussion |  

| **4:30 – 4:35 PM** | K. S. Jones | **Discussion**  
COMPARISON OF THE PLASMA HALF-LIFE OF STABLE ISOTOPE LABELED 250HD$_2$ AND 250HD$_3$  

| **4:35 – 4:45 PM** | K. Brock | **Discussion**  
VITAMIN D STATUS IS ASSOCIATED WITH SUN EXPOSURE, VITAMIN D AND CALCIUM INTAKE, ACCULTURATION AND ATTITUDES IN IMMIGRANT EAST ASIAN WOMEN LIVING IN SYDNEY  

| **4:50 – 5:00 PM** | R. Jorde | **Discussion**  
ASSOCIATIONS BETWEEN POLYMORPHISMS RELATED TO SERUM 25-HYDROXYVITAMIN D LEVEL AND HUMAN HEIGHT  

| **5:00 – 5:05 PM** | Discussion |  

| **5:05– 5:15 PM** | CLOSING REMARKS AND ANNOUNCEMENTS |