Published in final edited form as:

J Steroid Biochem Mol Biol. 2013 July ; 136: 1–2. doi:10.1016/j.jsbmb.2013.05.013.

Fifteenth Vitamin D Workshop

Anthony W. Norman* [Chair], **Daniel Bikle** [Incoming Chair], and **Roger Bouillon** [Past Chair]

Department of Biochemistry, Division of Biomedical Sciences, University of California, 5456 Boyce Hall, Riverside, CA 92521, United States

The primary aim of the Vitamin D Workshop is to organize and present scientific meetings on any aspect related to vitamin D. The first vitamin D Workshop was held in Frankfurt, Germany in 1973 and the following workshops have been held approximately every three years, alternating between Western Europe and the USA, until 2009 in Brugge, Belgium for the 14th Workshop. The average attendance was ~350–450 over this time interval. Two Workshops in July 1991 (Paris) and in May 1996 (Strasbourg) were the high attendance meetings with 595 and 571 delegates respectively. Further information on attendance and the very many countries represented are available on line at the Vitamin D Workshop: <http://vitamind.ucr.edu/workshop/>.

In 2009/2012 two new developments became apparent. Holding four day meetings, once every three years, did not meet the needs of many researchers and clinicians in the vitamin D field. Secondly, the publication rate of peer reviewed papers that had the term ‘vitamin D’ in the title or abstract has taken several kangaroo jumps forward starting in 2005. The average number of vitamin D publications published in 1964–1984 was ~400–500/year. By 2004 the publication rate was 1000 papers/year, and by 2010 it was 2,600 papers/year. In 2012 the publication rate continued rising to 3600 papers/year. The extrapolation for 2013 is based on 1380 papers published after only 14 weeks of 2013, suggests that over 5000 papers on vitamin D will be published in 2013! Clearly, holding a meeting every three years could not keep researchers properly informed on new vitamin D findings.

The second parameter driving the rate of publication growth has been the expansion of the science of vitamin D. In particular the growth of the vitamin D endocrine system, as marked by the discovery of the vitamin D receptor (VDR) for $1\alpha,25(\text{OH})_2\text{D}_3$ is now well over 40 target tissues. In Houston it was reported that even human spermatozoa have significant levels of the VDR that is essential to many key events in sperm function. Thus the vitamin endocrine system has grown far beyond just intestine, bone and kidney (calcium homeostasis). The VDR is now intimately involved with the immune system (both adaptive and the innate systems), the pancreas β cells and insulin secretion and all aspects of the metabolic syndrome, the heart and cardiovascular system, and also muscle function and strength. Results on all these systems are included in these Special Issue.

A third parameter that continues to expand interest in vitamin D is at the personal level. It is the arena of vitamin D nutrition, both at the individual level (How much vitamin should each person take?) and at the population level and vitamin D-related diseases level (how can clinical trials be organized to determine the window of safe vitamin D intake, e.g. not too low and not too high where hypercalcemia could be encountered).

So after consultation with the Workshop's Program Committee which is comprised of 24 leaders in the field who regularly attended the Workshops, it was decided that the Workshop should be held annually in the three days immediately preceding the US Endocrine Society's annual meetings starting with the 15th Workshop in Houston. In 2013, the 16th Vitamin D Workshop will be held in San Francisco from June 11th–14th and in 2014 the 17th Vitamin D Workshop will be held in Chicago, IL from June 17th to 20th.

The Fifteenth Vitamin D Workshop was held in the Intercontinental Hotel, in Houston, Texas from Tuesday evening June 19th through Friday afternoon June 22nd 2012.

The most popular presentations at the Houston Workshop were the two Plenary Lectures. The Workshop opened with Professor Dino Moras from the INSERM unit in Illkirch, France. The title of his lecture was "Understanding VDR/RXR/DNA interactions". For 50 minutes he shared with the audience his latest uncovering of secrets describing the intimate details of the interaction of the steroid hormone $1\alpha,25(\text{OH})_2\text{D}_3$ with its cognate receptor, the vitamin D receptor.

Professor Bert W. O'Malley, from Baylor Medical School in Houston, gave his Plenary lecture on Friday morning at 8 AM as a joint session with the Aldosterone meeting. The title of his talk was "Nuclear receptor coactivators: Master genes for physiology, Pathology and Targets for new therapies".

On the last Friday afternoon at the Houston Workshop a vitamin D nutrition roundtable discussion was presented by national and international leaders in this field. They included Drs, E. Giovannucci (US), C. Gallagher (UA), R. Heaney (US), and R. Bouillon (Belgium) who each gave, in 15 min, their advice on optimal and safe levels of vitamin D₃ and also the importance of achieving positive and safe clinical results in selected disease states. This was followed by an International Panel Discussion which included the names above with the addition of J. Pettifor (South Africa), R; Vieth (Canada), D. Bikle (US) and A. Norman (US). This was followed by a vigorous discussion by attendees until 5:15 p.m. closing. The consensus was that there was still disagreement amongst the experts on what should be the daily intake of vitamin D₃.

This Special Issue publication is the fourteenth in our Vitamin D workshop series. The first ten were published as independent stand-alone books, each of approximately 1000 pages. The last three Workshop Proceedings have been published in JSBMB (for the 12th–14th Workshops). We are delighted that the current editor of JSBMB, Dr. Jerzy Adamski and Elsevier Press have extended to the Vitamin D Workshop the opportunity to publish the Special Issue from the 15th Workshop in JSBMB.

A total of 207 registered delegates (with 182 abstracts and 126 posters) from 27 countries were in attendance at the 15th Workshop. The scientists who attended the Workshop are the authors of the manuscripts that are published by Elsevier's Journal of Steroid Biochemistry and Molecular Biology in this special edition. A total of 107 peer-reviewed manuscripts appear in this Special Edition of the Journal of Steroid Biochemistry and Molecular Biology. In the table immediately below is a summary of the 27 countries of the world that were represented at the Workshop.

Attendance at the 15th Vitamin D Workshop in June 2012, by Country

Argentina	Australia	Austria	Belgium	Brazil
Canada	China	Denmark	Finland	France
Germany	Hungary	India	Ireland	Israel
Japan	Mongolia	New Zealand	Norway	Poland
Scotland	South Africa	Spain	Switzerland	Netherlands
United Kingdom	USA			

The Fifteenth Workshop continued its tradition of presenting Young Investigators under the age of 35 who had submitted a meritorious abstract to the Workshop with an \$800 travel award. The recipients are listed below.

Three Vitamin D Workshop Career Recognition awards were given to distinguished scientists to honor their significant and continuing contributions to the field of vitamin D research during their careers. See below.

The Workshop Executive Committee (WEC) acknowledges the financial support from the Sponsors of the 15th Vitamin Workshop. Their names are listed below. Without their generous support, the Workshop would not have been able to launch this new format of our meeting.

Also the meeting could not have happened without the untiring contributions of Ms. Roxanne Hall from Meetings Plus and Ms. Nancy Day and Debbie Van Zanten from Riverside.

Official Sponsors and Donors

Fifteenth Vitamin D Workshop, in 2012

Leadership Sponsors

Chugai Pharmaceutical Co. Ltd., Japan

Heartland Assays. USA

Pfizer, Inc., USA

Strong Sponsors

Cerbios- Pharma SA, Switzerland

Bio Tech Pharmaca, Inc. USA

DiaSorin, Inc.

DSM Nutritional Products Ltd, Switzerland

Genzyme Corp. USA

Teijin Pharma Ltd., Japan

FIFTEENTH VITAMIN D WORKSHOP AWARDS**Young Investigator Award Recipients**

Martin Kaufman, Queen's University, Kingston, Canada

Jessica L. Sea, UCLA, Los Angeles,

Sarah Beaudin, SUNY Albany, Rensselaer, NY

Zhican Wang, University of Michigan, Ann Arbor, MI

Gabriela Bomfim-Ferreira, KU Leuven, Belgium

Carlien Leyssens, KU Leuven, Belgium

Johan Lundquist, Uppsala University, Uppsala, Sweden

Julia Hobaus, University of Vienna, Vienna, Austria

Career Award Recipients

J. Wesley Pike, University of Wisconsin, Madison, WI

John Pettifor, Baragwanath Hospital, Johannesburg, South Africa

Robert M. Heaney, Creighton University School of Medicine, Omaha, NB

PROGRAM ADVISORY COMMITTEE (PAC)

Ricardo Boland, Argentina Carsten Carlberg, Finland

Sylvia Christakos, USA Marie Demay, USA

David Feldman, USA Christopher Gallagher, USA

Edward Giovannucci, USA Helen Henry, USA

Bruce Hollis, USA Candance Johnson, USA

Glenville Jones, Canada Phillip Koeffler, USA

Christel Lamberg-Alardt, Finland Yan Chum Li

Paul MacDonald, USA Chantal Mathieu, Belgium

John Pettifor, South Africa Antonio Mourino, Spain

Joerg Reichrath, Germany J. Wesley Pike, USA

Hans Van Leeuwen, Belgium Martin Hewison, USA

WORKSHOP EXECUTIVE COMMITTEE (WEC)

Anthony Norman, USA

Daniel Bikle, USA

David Goltzman, Canada

Mark Haussler, USA

Rebecca Mason, Australia

Roger Bouillon, Belgium

Donald Trump, USA

JoEllen Welsh, USA