

7TH INTERNATIONAL CONFERENCE ON BONE MORPHOGENETIC PROTEINS

JULY 9-13TH, 2008
LAKE TAHOE, CALIFORNIA

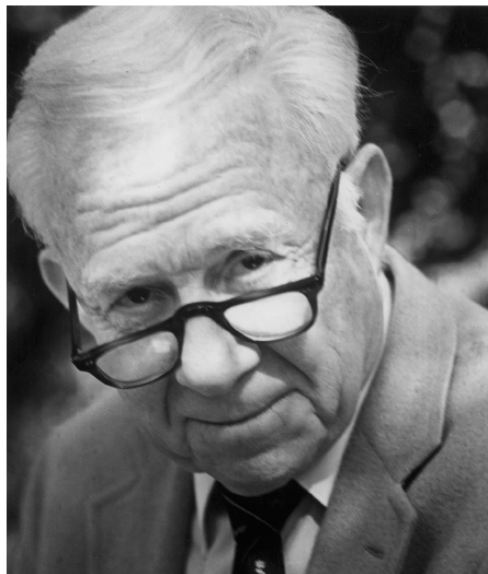
JULY 9TH, 2008 WEDNESDAY

1:00-4:00 P.M. *REGISTRATION AND CHECK IN*
4:00 P.M. *WELCOME*

DR. PAUL DI CESARE, M.D.
*CHAIRMAN, DEPARTMENT OF ORTHOPAEDIC SURGERY,
UC DAVIS SCHOOL OF MEDICINE*

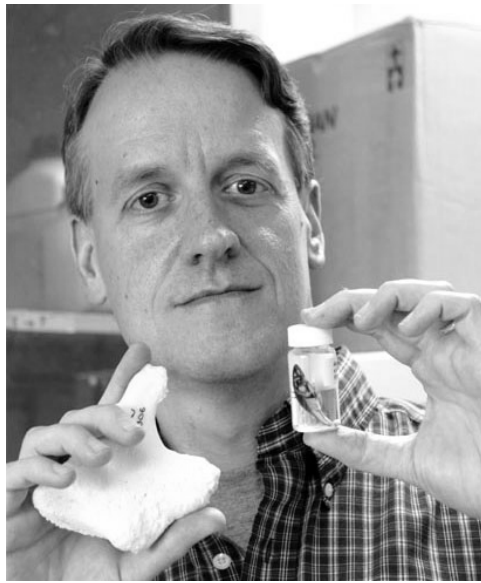
DR. ZAKIR BENGALI, PH.D.
*VICE PRESIDENT FOR MEDICAL RESEARCH
SHRINERS HOSPITAL FOR CHILDREN*

MARSHALL R. URIST LECTURE



1914-2001

MARSHALL R. URIST LECTURER



DAVID M. KINGSLEY
STANFORD UNIVERSITY

“How is Vertebrate Skeletal Anatomy Encoded in the Genome?”

5:15 P.M. RECEPTION
6:15 P.M. DINNER

JULY 10TH, 2008 THURSDAY

8:00 A.M. ***CELL AND DEVELOPMENTAL BIOLOGY OF BMPS***

CHAIRPERSONS: V. ROSEN & K. LYONS

SPEAKERS:

8:00 A.M. V. ROSEN

"Bmpr2 is dispensable for Endochondral Bone Formation"

8:25 A.M. H. LIN

"The RGM/Dragon Family of BMP Co-Receptors"

8:50 A.M. K.LYONS

"In vivo analysis of Inhibitory Smad Function in Skeletal Development"

9:15 A.M. Y. MISHINA

"Enhanced BMP signaling through a type I receptor, BMPRIA, in cranial neural crest-derived osteoblasts is a potential cause for craniosynostosis."

9:35 A.M. D. MORTLOCK

"Long-range regulatory elements control expression of Bmp2 and Bmp4"

9:55 A.M. L. XU

"Identification of BMP/Dpp Signal Modulators Through RNAi Screening"

10:15 A.M. *COFFEE BREAK*

10:30 A.M ***BMP RECEPTORS AND SIGNALING***

CHAIRPERSONS: P. KNAUS AND K. MIYAZONO

SPEAKERS:

10:30 A.M. K. MIYAZONO

"BMP target genes involved in osteoblast and chondroblast differentiation"

10:50 A.M. E. DeROBERTIS

"Integrating the BMP/DPP and Wnt signaling pathways at the level of Smad1/Mad phosphorylations"

11:10 A.M. P. KNAUS

"Fine tuning of BMP signaling"

11:30 A.M. P. YU

"Applications of BMP Signaling Inhibitors in Physiology and Disease"

11:50 A.M. A. HATA

"Smad proteins control miRNA maturation"

12:10 P.M. J. GROPE

"Cooperative Assembly of BMP and TGF- β Signaling Complexes"

12:30 P.M. J. NICKEL

"The dominant receptor assembly on cell surfaces involves only one I type receptor chain and mediates long term signal transduction by BMP-2"

12:50 P.M. LUNCH

2:00 P.M. ***BMP SIGNALING AND ANTAGONISTS***

CHAIRPERSONS: P. TEN DIJKE AND A. ECONOMIDES

SPEAKERS:

2:00 P.M. P. TEN DIJKE

"BMP Signaling in osteoblast differentiation and bone formation"

2:20 P.M. H. ALAOU

"Engineered Bone Morphogenetic Proteins with Decreased Susceptibility to Noggin Inhibition"

2:40 P.M. M. YANAGITA

"BMP/BMP antagonist in kidney disease and development"

3:00 P.M. N. TSUMAKI

"Smad7 inhibits chondrocyte differentiation at multiple steps during endochondral bone formation"

3:20 P.M. R. RAZ

"Bmp3-null aged mice display increased trabecular bone volume and reduced cross sectional area at the mid-femoral diaphysis"

3:35 P.M. N. GHOSH-CHOUHURY

"c-Abl Tyrosine kinase is a central player of Osteoblast (OB) and Osteoclast (OC) Differentiation in Bone remodeling"

3:50 P.M. K. LAVERY

“Bone Morphogenetic Proteins 2/4 and 6/7 Utilize Distinct Receptor Combinations to Induce Osteoblastic Differentiation of Human Bone Marrow-Derived Mesenchymal Stem Cells”

4:10 P.M. Y. GAO

“New insights into the mechanisms of BMP9 Signaling”

4:25 P.M. D. HUYLEBROECK

“Smads and partners: from stem cell function and differentiation to disease”

5:00-6:30 P.M. *POSTER SESSION*

5:00-6:00 P.M. *REFRESHMENTS*

6:30 P.M. *DINNER*

JULY 11TH, 2008 FRIDAY

8:00 A.M. ***BMPS, GDFS, JOINT BIOLOGY AND HOMEOSTASIS***

CHAIRPERSONS: F. LUYTEN AND S. KADIYALA

SPEAKERS:

8:00 A.M. F. LUYTEN

"Bone Morphogenetic Protein Signaling in Arthritis"

8:20 A.M. I. SEKIYA

"Arthroscopic Transplantation of Synovial Stem Cells into Cartilage Defect"

8:40 A.M. S. CHUBINSKAYA

"Biology of OP-1 in human articular cartilage"

9:00 A.M. P. VAN DER KRAAN

"Changes in chondrocyte TGF beta signaling during ageing and osteoarthritis"

9:20 A.M. P. SEEMANN

"Molecular mechanisms of skeletal diseases caused by deregulated BMP signalling"

9:40 A.M. S. WAKITANI

"Cartilage repair with autologous bone marrow mesenchymal cell transplantation"

10:00 A.M. M. HAYASHI

"Weekly intraarticular injections of BMP-7 inhibit osteoarthritis progression"

10:15 A.M. *COFFEE BREAK*

10:30 A.M. ***BMPS ACTIONS IN AND BEYOND BONE***

CHAIRPERSONS: D. RUEGER AND T.K. SAMPATH

SPEAKERS:

10:30 A.M. P. SIMIC

"The unique role of bone morphogenetic protein-6 in bone biology"

10:50 A.M. S. VUKICEVIC

"Circulating BMP-1 Isoforms: Novel Diagnostic and Therapeutic Challenges for Bone Regeneration"

11:10 A.M. C. MORRIS

"Evaluation of myostatin/GDF-8 inhibition in preclinical models of muscle disease"

11:25 A.M. D. GRAF

"Multiple roles for Bmp7 in the development of the mouse cortex"

11:40 A.M. M. EDSON

"Deletion of bone morphogenetic receptor type 1A (*Bmpr1A*) in mouse ovarian granulosa cells causes progressive infertility"

11:55 A.M. P. ASPENBERG

"BMP signaling in tendons: Mechanical loading increases Myostatin and decreases Follistatin"

12:10 P.M. W.D. CARLSON

"Novel BMP agonists ameliorate acute kidney injury in animal models"

12:30 P.M. Y.H. TSENG

"Novel Role of Bone Morphogenetic Protein-7 in Brown Fat Adipogenesis and Energy Expenditure"

12:45-2:00 P.M. LUNCH

2:00 P.M. EXCURSION AROUND LAKE TAHOE: BUS TRIP

5:30-6:30 P.M. RECEPTION

6:30 P.M. DINNER

JULY 12TH, 2008 SATURDAY

8:00 A.M. *SCAFFOLDS AND HYDROGELS FOR BMP DELIVERY*

CHAIRPERSONS: H. SEEHERMAN AND J. WOZNEY

SPEAKERS:

8:00 A.M. H. SEEHERMAN

“Biocompatibility of Synthetic Carriers for Soft Tissue Engineering and the Importance of Macropores for Guided Tissue Repair”

8:20 A.M. T. WEBSTER

“Nanotechnology to Regenerate Tissues: Hype or Reality?”

8:40 A.M. P. HAMILTON

“High Affinity BMP-Binding Peptides and Their Use for Targeted Delivery”

9:00 A.M. E. SCHWARZ

“Freeze-Dried rAAV-Coated Allografts for BMP Delivery and Tissue Engineering”

9:20 A.M. T. POHL

“A novel strategy for the immobilization of BMP-2 on surfaces to study local density effects on C2C12 cell adhesion”

9:35 A.M. H. JENNISEN

“BMP at the solid-liquid interface”

9:55 A.M. G. FEICHTINGER

“C-terminal Epitope Tagging of Bone Morphogenetic Proteins Interferes with Bioactivity”

10:10 A.M. *COFFEE BREAK*

10:30 A.M. **BMPS AND CRANIOFACIAL AND
PERIODONTAL APPLICATIONS**

**THIS SESSION IS DEDICATED TO
DR. PHILIP J. BOYNE**



1924-2008

CHAIRPERSONS: U. RIPAMONTI AND U. WIKESJÖ

SPEAKERS:

10:30 A.M. U. RIPAMONTI

"Bone morphogenetic proteins and the induction of bone formation by *smart* biphasic self-inducing biomimetic matrices"

10:50 A.M. U. WIKESJÖ

"Development of rhBMP-2 Coated Oral Implants: An Update"

11:10 A.M. J.C. PETIT

"The induction of cementogenesis by bone morphogenetic proteins initiates the induction of periodontal tissue regeneration"

11:25 A.M. M. NAKASHIMA
"Dental Pulp Regeneration"

11:45 A.M. M. SEYEDIN
"The Biologic Advantage of Juvenile Articular Chondrocytes for Cartilage Repair"

12:05 P.M. S. HARRIS
" Role and Mechanisms of BMP-2 and BMP-4 in Osteoblast Commitment"

12:25P.M. N. KAMIYA
"Sclerostin, a Wnt signaling inhibitor, is a downstream target of BMP signaling during embryonic bone development"

12:40 P.M. LUNCH

2:00 P.M. **CANCER AND PATHOPHYSIOLOGY**

CHAIRPERSONS: G. MUNDY AND F. KAPLAN

SPEAKERS:

2:00 P.M. P. ROY-BURMAN
"BMP Signaling in Prostate Cancer Progression"

2:20 P.M. S. STEINERT
"BMP-2 – a new prognostic marker in human breast carcinomas"

2:40 P.M. J. SEEHRA
"Activin and its role in bone metastases as well as the importance of activin inhibition"

3:00 P.M. F. KAPLAN
"Ossification Syndromes Caused by Mutations in the BMP Type I Receptor ACVR1/ALK2"

3:20 P.M. T. KATAGIRI
"Constitutively activated ALK2 and increased Smad1/5 cooperatively induce BMP signaling in fibrodysplasia ossificans progressive"

3:35 P.M. E. SHORE
"The ACVR1/ALK2 R206H mutation in fibrodysplasia ossificans progressiva (FOP) stimulates ligand independent BMP signaling and chondro/osseous differentiation"

3:50 P.M. BREAK

4:15-5:00 P.M. **THE NOREEN CUNNINGHAM LECTURE**
 G. MUNDY M.D.

5:00 P.M **THE 8TH INTERNATIONAL CONFERENCE ON BMPS,**
 SEPTEMBER 15TH-18TH 2010.
 KATOLIEKE UNIVERSITEIT, LEUVEN, BELGIUM.
 F. LUYTEN AND D. HUYLEBROEK

5:15-6:15P.M. RECEPTION

6:15 P.M. DINNER

7:30-10 P.M. TOM DELANEY- ORCHESTRA AND DANCING

JULY 13TH, 2008 SUNDAY

8:00 A.M. *BMPS IN TRAUMA AND FRACTURE REGENERATION*

CHAIRPERSONS: T. EINHORN AND E. CHAO

SPEAKERS:

8:00 A.M. T. EINHORN

“Role of BMPs in Orthopaedic Trauma Surgery”

8:25 A.M. R. HAMDY

“Safety and Efficacy of OP1 in Children.”

8:45 A.M. E. CHAO

“Segmental Bone Defect Reconstruction Using Extracortical Bone Bridging and Ingrowth (EBBI) Principle with BMP Augmentation”

9:10 A.M. D. MARSH

“TBA”

9:30 A.M. D. SPAGNOLI

“TBA”

9:50 A.M. K. BURKUS

“BMP-2 and Spinal Fusion”

10:10 A.M. F. SHULER

“Orthopaedic Trauma Applications of BMP: Is the Juice Worth the Squeeze and How is the Data Perceived?”

**10:30 A.M. *DISCUSSION OF OUTSTANDING ISSUES
IN CLINICAL APPLICATIONS OF BMPS***

PANEL MEMBERS:

**T. EINHORN
D. MARSH
D. SPAGNOLI
M. BOSTRÖM
P. ASPENBERG
M. LEE**

11:00 A.M. *ADJOURNMENT*