

2009 GORDON RESEARCH CONFERENCE ON POLYAMINES

Program



[SUNDAY June 21, 2009]

THE GENETICS AND EPIGENETICS OF POLYAMINE METABOLISM

Discussion Leader: Robert A. Casero, Jr. (Johns Hopkins University)

Yi Huang (Johns Hopkins University)

"Histone Lysine-specific Demethylase 1 (LSD1): an emerging epigenetic target for polyamine analogues in cancer therapy"

Olivier Namy (University of Paris-Sud)

"Epigenetic control of polyamines by the prion [PSI+]"

Chaim Kahana (Weizmann Institute)

"A system approach for studying the role of polyamines in supporting cellular proliferation"

[MONDAY June 22, 2009]

POLYAMINES IN CELLULAR HOMEOSTASIS AND PHYSIOLOGY

Discussion Leader: Leena Alhonen (University of Kuopio)

Myung Hee Park (NIH)

"Posttranslational modification of eIF5A: hypusine modification and acetylation"

Keiko Kashiwagi (Chiba University)

"Polyamine effect on protein synthesis and its mechanism"

Jian-Ying Wang (University of Maryland School of Medicine)
"Regulation of mRNA Turnover and Translation by Polyamines"

Lisa Shantz (University of Pennsylvania Hershey Medical Center)
"Post-transcriptional regulation of ornithine decarboxylase in skin
carcinogenesis"

POLYAMINE BIOSYNTHESIS - ENZYME STRUCTURE, FUNCTION
AND CONTROL

Discussion Leader: Kazuei Igarashi (Chiba University)

Steven Ealick (Cornell University)
"Substrate specificity, putrescine activation and inhibitor design for
S-adenosylmethionine decarboxylase"

David Hoffman (University of Texas)
"Structure and Function of Proteins of the Polyamine Pathway: SSAT and
Antizyme"

Short Presentations from Poster Session I

[TUESDAY June 23, 2009]

POLYAMINE CATABOLISM AND TRANSPORT

Discussion Leader: Heather Wallace (University of Aberdeen)

Susan Gilmour (Lankau Institute)
"Polyamines as Strong Biological Modifiers that Promote Tumorigenesis"

Kaymar Zahedi (University of Cincinnati)
"Polyamine Catabolism in Ischemic Reperfusion Injuries"

Keith T. Wilson (Vanderbilt)
"Spermine Oxidase in Helicobacter pylori-Induced Gastric Carcinogenesis: A
Novel Mechanism for Oxidative Stress and DNA Damage"

Takeshi Uemura (University of Arizona)

"Polyamine transport in mammals"

POLYAMINE FUNCTION IN PLANTS AND LOWER EUKARYOTES

Discussion Leader: Tony Michael (Institute of Food Research, Norwich)

Autar Mattoo (Wallace Beltsville Agricultural Research Center)

"Polyamines regulate gene clusters involved in anabolic metabolism in plants and cross talk with plant hormones"

Kiyotaka Hitomi (Nagoya University)

"Characterization of the preferred substrate sequence for transglutaminase, an enzyme for protein cross-linking and polyamine-conjugation"

Short Presentations from Poster Session I

[WEDNESDAY June 24, 2009]

POLYAMINE DRUG DISCOVERY AND DEVELOPMENT

Discussion Leader: Eugene Gerner (University of Arizona Cancer Center)

Otto Phanstiel (University of Central Florida)

"Synthesis and Bioevaluation of Aryl-polyamines as Potential Polyamine Transport Ligands and Inhibitors"

Nicholas P. Farrell (Virginia Commonwealth University)

"Platinum Polynuclears as Polyamine Analogs? Chemistry and Biology of the Phosphate Clamp"

Ian Blagbrough (Bath University)

"Lipopolyamines for siRNA delivery - totally different from gene therapy or just more of the same?"

Heinz Gehring (University of Zurich)

"Novel cell proliferation inhibitors targeting enzymes in polyamine metabolism"

CLINICAL APPLICATION OF DRUGS TARGETING POLYAMINE
METABOLISM

Discussion Leader: Laurence Marton (Progen Pharmaceuticals Ltd.)

Andre Bachmann (University of Hawaii Manoa)

"Role of ODC as a therapeutic target in pediatric neuroblastoma"

John Cleveland (Scripps Florida)

"Mechanisms Controlling Cancer Prevention when Targeting Ornithine
Decarboxylase"

Short Presentations from Poster Session II

[THURSDAY June 25, 2009]

POLYAMINE METABOLISM AS A TARGET FOR ANTIPARASITIC
CHEMOTHERAPY

Discussion Leader: Sigrid Roberts (Pacific University)

Lynn Soong (University of Texas Medical Branch)

"The role of arginine metabolism in Leishmania infection"

Annette Kaiser (University of Bonn)

"Completing the hypusine pathway for antiparasitic chemotherapy: Target
evaluation of DHS and molecular cloning of the dohh gene as a novel drug
target"

Lyn-Marie Birkholz (University of Pretoria)

"Functional consequences of polyamine-depletion in malaria parasites"

Rentala Madhubala (Jawahrlal Nehru University)

"Hypusine pathway: a novel drug target in kinetoplastids"

KEYNOTE SESSION: PERSPECTIVES ON PAST, PRESENT & FUTURE
POLYAMINE RESEARCH

Discussion Leader: Anthony Pegg (University of Pennsylvania Hershey)

Medical Center)

Olle Heby (Umea University)

"Advances in polyamine research since the first GRC on polyamines"

Short Presentations from Poster Session II

Keynote Presentation: Carl Porter (Roswell Park Memorial Cancer Center)

"Metabolic concepts worthy of a stimulus package"

[FRIDAY June 26, 2009]

Departure