



22-25 DE SEPTIEMBRE DE 2015

**XXXVIII Reunión Anual Sociedad de Bioquímica y Biología Molecular de Chile**  
HOTEL DREAMS, LOS VOLCANES \* PUERTO VARAS

SEPTIEMBRE 2015

	Tuesday 22		Wednesday 23		Thursday 24		Friday 25
10:30 - 13:00	Registration	09:00 - 10:45	Oral Session 3 Oral Session 4	09:00 - 10:45	Oral Session 5 Oral Session 6	10:00 - 12:00	Symposium 7 Symposium 8
13:00 - 14:30	Lunch	10:45 - 11:15	Coffee - Break	10:45 - 11:15	Coffee - Break	12:00 - 13:00	Awards
14:45 - 16:30	Oral Session 1 Oral Session 2	11:15 - 13:15	Symposium 3 Symposium 4	11:15 - 13:15	Symposium 5 Symposium 6		
16:30 - 17:00	Coffee - Break	13:15 - 15:00	Lunch	13:15 - 15:00	Lunch		
17:00 - 19:00	Symposium 1 Symposium 2	15:30 - 17:15	New Memebers Session1 New Memebers Session2	15:00 - 16:00	SBBM Members Meeting		
19:15 - 19:30	Opening Ceremony	17:15 - 19:15	Poster Session I and Coffee Break	16:00 - 17:15	Severo Ochoa Lecture: Andrés Aguilera		
19:30 - 20:45	Opening Lecture <b>Paul Anderson</b>	19:30 - 20:45	Osvaldo Cori Lecture: <b>Rafael Vicuña</b>	17:15 - 19:15	Poster Session II and Coffee Break		
20:45 - 21:00	DataBlitz Session1	20:45 - 21:00	DataBlitz Session2	19:30 - 20:45	PABMB Lecture: <b>Melissa Moore</b>		
21:00 - 22:30	Welcome Cocktail			21:30 - 24:00	Gala Dinner and Party		

# PROGRAM

## Opening Lecture:

**Paul Anderson**

Harvard Medical School, U.S.A

<http://anderson.bwh.harvard.edu/index.html>

## Osvaldo Cori Lecture:

**Rafael Vicuña**

P. Universidad Católica de Chile

<http://postgrado.bio.uc.cl/facultad/profesores/rafael-vicuna/>

## Severo Ochoa Lecture:

**Andres Aguilera**

CABIMER, Universidad de Sevilla, Spain

[www.cabimer.es/web/en/dept/mb/genome-instability/](http://www.cabimer.es/web/en/dept/mb/genome-instability/)

## PABMB Lecture:

**Melissa Moore**

UMASS Medical School, U.S.A

[www.umassmed.edu/moorelab/](http://www.umassmed.edu/moorelab/)

**Oral Sessions:** *to be selected from the submitted abstracts*

## Tuesday 22

### Symposium 1

ACCDIS Symposium on Molecular Mechanisms  
of Chronic Diseases

**Chair:** Lorena García, Universidad de Chile

### Symposium 2

Microbial Pathogenesis

**Chair:** Luis F. Larrondo, P. Universidad Católica de Chile

#### Alejandra San Martín

Department of Medicine. Emory University. U.S.A  
*Cytoskeleton regulation and its role in vascular biology.*

#### Alejandro Yañez

Instituto de Bioquímica y Microbiología, Universidad Austral  
de Chile. Chile  
*Preclinical Studies for Sodium Tungstate and its effect in diabetic  
neuropathy.*

#### Mario Chiong

Advanced Center for Chronic Diseases (ACCDIS), Universidad  
de Chile. Chile.  
*Metabolic regulation of vascular smooth muscle cell  
dedifferentiation.*

#### Lorena García

Advanced Center for Chronic Diseases (ACCDIS), Universidad  
de Chile. Chile.  
*VCAM-1: a novel biomarker in cardiovascular diseases.*

#### Carlos Santiviago

Dpto de Bioquímica y Biología Molecular. Universidad de  
Chile. Chile  
*Genome-wide identification of genes required for *Salmonella* to  
survive within the host*

#### Marcio Rodrigues

Center for Technological Development in Health (CDTS).  
Oswaldo Cruz Foundation, Brazil  
*Role of an autophagy regulator in the pathogenesis of  
*Cryptococcus neoformans**

#### Chuck S. Farah.

Departamento de Bioquímica Universidad de Sao Paulo.  
Brazil  
*Bacterial Warfare: A new role for the Type IV Secretion System*

#### Paulo Canessa

Millennium Nucleus for Fungal Integrative and Synthetic  
Biology. P. Universidad Católica. Chile  
*Employing *Botrytis cinerea*, *Arabidopsis thaliana* and *Solanum  
lycopersicum* to understand environmental prompts as modifiers  
of the host-pathogen interaction*

## Wednesday 23

### Symposium 3

Central dogma at the single molecule level  
**Chair:** Christian A.M. Wilson, Universidad de Chile

### Symposium 4

Epigenetics and Chromatin Structure:  
from Cell Function to Biomarkers  
**Chair:** Paola Casanello, P. Universidad Católica de Chile

#### Daniel Guerra

Universidad Peruana Cayetano Heredia, Perú  
*Transcription regulation through changes in the DNA - RNA polymerase contacts.*

#### Daniel Goldman

University of California, Berkeley. U.S.A  
*Mechanical force releases nascent chain-mediated ribosome arrest.*

#### Jaime Andrés Rivas-Pardo

Columbia University, New York, U.S.A  
*Mechano-Physiology of the giant muscle protein titin*

#### Rodrigo Maillard

Georgetown University, U.S.A  
*The ClpXP protease unfolds substrates using a constant rate of pulling but different gears.*

#### Gernot Längst

Lab of Chromatin Dynamics and Nuclear Architecture.  
University of Regensburg. Germany.  
*TNF $\alpha$  signalling primes chromatin for NF- $\kappa$ B binding and induces rapid and widespread nucleosome repositioning*

#### Martín Montecino

Center for Biomedical Research and FONDAP Center for Genome Regulation. UNAB. Chile  
*Epigenetic control of cell fate*

#### Bernardo Krause

Facultad de Medicina. P. Universidad Católica de Chile. Chile.  
*Fetal programming of endothelial function by epigenetic mechanisms*

#### Alejandro Corvalán

Facultad de Medicina P. Universidad Católica de Chile. Chile.  
*Epigenetic alterations and potential biomarkers in digestive tumors*

## Thursday 24

### Symposium 5

Getting the Message: the Complex Life of Eukaryotic mRNAs  
**Chair:** Ricardo Soto-Rifo, Universidad de Chile

### Symposium 6

Green Biology: understanding molecular mechanisms in plant systems  
**Chair:** Claudia Stange, Universidad de Chile

#### Andrew Mouland

McGill University. Canada  
*HIV-1-mediated endolysosome translocation: Impact on viral RNA localization and host metabolism*

#### Emiliano Ricci

CIRI, ENS-Lyon. France  
*RIPiT-seq reveals the endogenous RNA-target sites of DEAD-box protein 3 (DDX3)*

#### Alfredo Castello

Department of Biochemistry. University of Oxford. UK  
*Proteome-wide determination of RNA-binding domains by RBDmap*

#### Ricardo Soto-Rifo

Instituto de Ciencias Biomédicas. Universidad de Chile. Chile  
*From the nucleus to the ribosome: understanding the mechanisms controlling gene expression from the HIV-1 unspliced mRNA*

#### María Josefina Poupin

Facultad de Ingeniería y Ciencias, Universidad Alfonso Ibáñez.  
*Bacteria can modulate a plant life cycle: beneficial interaction between Arabidopsis thaliana and the rhizobacteria Burkholderia phytofirmans PsJN*

#### Simón Ruiz

Instituto de Biotecnología y Biología Vegetal, Universidad de Talca.  
*Involvement of the intracellular vesicle trafficking in the plant tolerance to salt stress*

#### Ingo Dreyer

Centro de Bioinformática y Simulación Molecular (CBSM)  
Universidad de Talca  
*Long distance K<sup>+</sup> transport in plants*

#### Andrea Vega

Dept. Ciencias Vegetales, Facultad de Agronomía e Ingeniería Forestal, P. Universidad Católica de Chile. Chile  
*Integration of nitrogen gene networks and plant defense responses*

# Friday 25

## Symposium 7

Key Roles of Autophagy in Chronic Diseases

**Chairs:** Eugenia Morselli, P. Universidad Católica de Chile  
Alfredo Criollo, Universidad de Chile

## Symposium 4

When Biology Meets Computers: Oncodomains,  
Microbiomes and Allosteric networks

**Chairs:** Daniel Almonacid, UNAB  
Cesar Ramírez-Sarmiento, Universidad de Chile

### Zhao Wang

Department of Internal Medicine. UT Southwestern Medical Center, Dallas, TX-U.S.A

*Pathological Cardiac Remodeling: Role of the Unfolded Protein Response and Autophagy*

### Eugenia Morselli

Dpto. Biología Celular y Molecular. Pontificia Universidad Católica de Chile. Chile

*Inhibition of hypothalamic autophagy and induction of inflammation by long-term high fat diet exposure*

### Alfredo Criollo

Universidad de Chile. Chile

Autophagy in cardiovascular diseases

### Patrice Codogno

Institut Necker Enfants-Malades. University of Paris. France

*Autophagy and plasma membrane domains.*

### Daniel Almonacid

Universidad Andrés Bello, Chile

Sequence similarity networks: Phylogenomics tool for studying sequence relationships across large datasets

### Zac Apte

uBiome U.S.A

Your microbiome and citizen science, science at scale

### Ricardo Armisen

Pfizer Chile - Center of Excellence in Precision Medicine, Chile

Transcriptome editing promotes breast cancer progression through the regulation of cell cycle and DNA repair

### Elizabeth Komives

University of California San Diego, U.S.A

Allosteric Networks in Thrombin