



# Encuentros París 2012

## Université Pierre et Marie Curie Conference Volume

4-6 July 2012



# ENCUEENTROS

PARIS 2012

Knowledge for Economic and Social Development

[www.encuentros2012.org](http://www.encuentros2012.org)

Follow us on twitter @E2012\_Paris



[facebook.com/encuentros2012](https://facebook.com/encuentros2012)









03

Welcome by the Organizers

04

Greetings from  
Fundación Imagen de Chile

06

Program Overview

10

Welcome to Paris

14

Organizers

18

Sponsors and Media Partners

20

Lectures and Workshops

34

List of Participants

## EDITORIAL

### Editors

Cristián Hernández-Cuevas

Juan Pablo Hontavilla

María José Navarrete

Vicente Sandoval

Matías Garretón

### Graphic Design

MRC.cl

### Conference Volume Layout and Design

MRC.cl

This brochure is design for informational purposes only. The organizers cannot guarantee for accuracy and completeness.

[www.encuentros2012.org](http://www.encuentros2012.org)

Follow us on twitter @E2012\_Paris



[facebook.com/encuentros2012](https://facebook.com/encuentros2012)



# ENCUENTROS

PARIS 2012

Knowledge for Economic and Social Development

## Welcome by the Organizers

*The Encuentros 2012 Conference offers a unique opportunity for networking, cooperation and exchanging new ideas. This non-profit platform fosters the interaction between students and professionals from Chile and the rest of the world. We believe in the power of the networks. Chileans and foreign nationals interested in Chile are more than welcome to contribute their knowledge and experience for social and economic development.*



# Welcome to Encuentros 2012 “Knowledge for Economic and Social Development”

The largest international conference of Chilean scholars and entrepreneurs

We are delighted to receive our community in the Encuentros 2012 conference, which will be held in Paris, in the University Pierre et Marie Curie, the best French University and a member of the time-honored Sorbonne Universités Research and Superior Education Pole. Since 2006, the Encuentros conferences have been held annually in different countries around the world and have served as a platform for interaction for Chilean students and professionals working abroad, their counterparts in Chile, and foreign students and professionals interested in exchange and collaboration with our country. The success and growth of these conferences shows the strength and vitality of the Chilean scientific community, which expands around the world as the spearhead of an emerging nation that seeks to boost its development by launching herself into the knowledge economy.

However, our country is engaged in a profound revision of its economic model, raising important issues about social equality and environmental sustainability. This is the reason why in Encuentros 2012 we wish to further enlarge the disciplinary horizons of these

conferences, giving equal importance to the Exact, Natural and Social Sciences, proposing two parallel and complementary questionings. In the first areas: How can we obtain fruitful results from the knowledge acquired abroad, developing technological projects in Chile? And for the latter one: What kind of society are we building in Chile and how to improve it? Both questions are two sides of same problem and they should converge into a truly sustainable development strategy, which is much more than a sum of individual projects and in which the state, academia and the private sector should closely cooperate.

Encuentros 2012 is a non-profit conference which results from the work of 25 volunteers that over the past 18 months have spent a significant part of their time to materialize this initiative. We also count with an experienced advisory board which has been instrumental at shaping the conference. Acknowledgements are in order to all the institutions and corporations that have believed in Encuentros and have funded or supported this initiative. Special thanks to our kind sponsors, both Chilean and foreign. You will notice

that media partners El Mercurio and Canal 13C will be covering the event, the latter of which will also be recording a documentary based on Encuentros 2012 and the stories of their participants.

Along the years, the Encuentros conferences have increasingly recognized the key role that multidisciplinary meetings play in accelerating the career opportunities of their participants, through the creation of new collaborations and through the exchange of knowledge which result in generating innovative ideas and opportunities. We are confident that the Encuentros 2012 conference, as those that preceded it, will be an intellectual springboard where both Chileans and foreign nationals interested in Chile can build networks in order to expand and enhance the contribution of knowledge for social and economic development.

**Matías Garretón**

on behalf of all the organizers of Encuentros 2012



Blas Tomic  
Executive Director  
Fundación Imagen de Chile

It is with great satisfaction that I can express the Fundación Imagen de Chile's support for the 2012 "Encuentros" Conference. This initiative, now in its seventh year, represents the enterprising and constructive spirit of Chile's students, professionals, and entrepreneurs and the importance of the exchange of knowledge between those who live abroad and those who reside in Chile.

The Foundation's objective is to promote Chile's general image, to enhance its value, and make this undertaking a national mission. In reality, Chile's image is in itself a tool for our development. In this context,

the Foundation and its network of talents, ChileGlobal, fully share the principles of this conference, and we are pleased to join forces with its organizers to ensure even greater impact on behalf of our country.

The migration of talent from developing countries to developed countries has long been an issue of ongoing concern. However, as of the late 20th and early 21st centuries, we have seen an unprecedented increase in the movement of people and the circulation of social, economic, and financial capital. This has led to mobility being identified as one of the most important principles of modernity, which now transcends

the concepts of a territorially defined modern society. The so-called "brain drain" in today's world becomes "brain circulation", which is now a determining factor of innovation, of entrepreneurship, and therefore, of development.

The organizers and participants of this conference are the best examples of this mobility of Chile's social capital, and this type of initiative plays a catalyzing role that facilitates the exchange of knowledge, which in turn allows their experience, ideas, and talents to be used to the advantage of their countries of origin.

Today's world is more global, interconnected, and interdependent.

With the aim of being able to capitalize on the benefits of this globalization, it is essential to have strategies in place that facilitate ties with Chile's "global citizens". Networks such as ChileGlobal and conferences such as Encuentros contribute to achieving this goal.

The contribution that all of you outstanding professionals, students, scientists, and entrepreneurs are making to the country, not only comes from your research, projects, ideas, and contacts... you are also builders and ambassadors of the image of Chile. Therefore, it is important for our Foundation to participate in and contribute to the success of

this conference. For a country like Chile, located far from the most advanced centers of development, the existence of these instances facilitates the "bridge" role that you can play toward the development that we all desire.

You are the ones who bring the world to Chile and Chile to the world.

Congratulations... and much success to you all.

**Blas Tomic**  
Executive Director  
Fundación Imagen de Chile

# ENCUENTROS 2012: Program Overview / Wednesday - Thursday

Time	Wednesday - July 04th
<b>Encuentros Amphitheater</b>	
13.00 - 15.15	Registration
15.00 - 15.40	Avant-premiere: Documentary Encuentros Berkley 2011 (Optional)
15:40 - 16:00	Welcome speech by Jorge Edwards, Ambassador of Chile in France
16.00 - 16.45	<b>Keynote Lecture: Bernard Seguin:</b> Climate Change and Viticulture
16.45 - 17.15	Fundación Imagen País - Blas Tomic
17.15 - 17.30	Short Break
17.30 - 20.00	Encuentros Evening: A special open session where outstanding guests are engaged in an insightful discussion on current affairs, politics and culture

Time	Thursday - July 05th		
	<b>Economy, Sociology and Public Policies</b> Blue - Auditorium	<b>Architecture, Urban Studies and Geography</b> Red - Auditorium	
09.00 - 09.15	<b>Lorenzo Cerda</b> Environmental Policy: An Evolutionary Perspective	<b>Marcia Vera</b> Resettlement of refugees in Chile and Brazil. When the solution is also a challenge	
09.15 - 09.30	<b>Francisco Molina</b> Negotiated Rationalities, Politicised Identities: Inter-Generational Relations, Water Conflicts and Mining in Chiu – Chiu, Chile	<b>Camila Cociña</b> Housing policy in Chile: Challenges to reach the scale of inequality	
09.30 - 09.45	<b>Javier Bronfman &amp; María Floro</b> How Well have Social Protection Schemes in Chile Reduced Household Vulnerability?	<b>Felipe Lanuza</b> Representing absence: A critical view on the territories of the ex-railway circumvallation of Santiago	
09.45 - 10.30	<b>Augustin Fosu</b> Growth, Inequality, and Poverty Reduction in Developing Countries: Recent Global Evidence	<b>Adrian Atkinson</b> Nexus: Planning cities and regions in an increasingly resource-constrained world	
10.30 - 11.00	<b>Coffee break + Photo session</b>		
	<b>Natural Sciences, Renewable Energies and Environment</b> Blue - Auditorium	<b>Education and Communication</b> Red - Auditorium	<b>Information Technologies, Engineering and Mathematics</b> White - Auditorium
11.00 - 11.15	<b>Juan Águila-Coghlan</b> Climate change and communication. A challenge for Chile and for today's world	<b>Ximena Galdames</b> About romanticism, development and children's rights: curricular paradigms for reconceptualising the early childhood field in Chile	<b>Pedro Parraguez</b> Mapping industrial networks as an approach to identify inter-organisational collaborative potential in new product development
11.15 - 11.30	<b>Enrique Cabrera</b> Collaboration in photovoltaics Germany – Chile	<b>Valeria Cabello</b> Improving Chilean initial teacher education through peer assessment	<b>Jorge Clarke</b> Hitting times for the stochastic wave equation with fractional-colored noise
11.30 - 11.45	<b>América Paz Durán</b> Effectiveness of the Chilean Protected Area Network	<b>Álvaro González</b> The influence of Educational Technical Assistance for improvement of disadvantaged schools in Chile: Principles and Practical Orientation	<b>José Brito</b> Single atom-photon interfaces: building blocks of quantum networks

Time	Thursday - July 05th		
	<b>Natural Sciences, Renewable Energies and Environment</b> Blue - Auditorium	<b>Education and Communication</b> Red - Auditorium	<b>Information Technologies, Engineering and Mathematics</b> White - Auditorium
11.45 - 12.00	<b>Francisco de la Barrera</b> A landscape that evolved from es- pinal to urban and nowadays provi- des ecological benefits to citizens	<b>Catherine Flores</b> Beginning Teachers' Induction Experiences: A Chilean Case Study	<b>To be Announced</b>
12.00 - 12.45	<b>Gilles Boeuf</b> Biodiversity: between Rio and Rio + 20	<b>Francesc Pedró</b> Connected Minds – How connec- tedness influences learners	<b>Patricio Felmer</b> Mathematics in Chile: Perspectives and Challenges in Research and Education
12.45 - 14.15	Thematic Lunch		
<b>Encuentros Amphitheater</b>			
14.15 - 15.15	<b>Keynote Lecture: Saskia Sassen: EXPULSIONS: A category for our Age</b>		
<b>Special Session: Part 1</b>			
15.15 - 16.00	<b>Brain Gain</b> Return of skill and human capital (Erasmus Mundus Student & Alumni Association) (Molly Pollack, María José Navarrete, Patrice Vermeren, Mario Roseblatt)		
16.00 - 16.30	<b>Coffee break</b>		
<b>Special Session: Part 2</b>			
16.30 - 18.15	<b>Brain Gain</b> Return of skill and human capital (Erasmus Mundus Student & Alumni Association) (Molly Pollack, María José Navarrete, Patrice Vermeren, Mario Roseblatt)		
18.15 - 19.45	Poster session + Cocktail		
20.30 - 21.45	Friendly French Dinner		

# ENCUENTROS 2012: Program Overview / Friday - Saturday

Time	Friday - July 06th		
	<b>Natural Sciences, Renewable Energies and Environment</b> Blue - Auditorium	<b>Education and Communication</b> Red - Auditorium	<b>Architecture, Urban Studies and Geography</b> White - Auditorium
09.00 - 09.15	<b>Nicolas Maestriperi</b> Monitoring, modelling and predicting timber plantations dynamics. The case of San Juan de la Costa (Chile)	<b>Ximena Martínez</b> Considering Possibilities for Social Development in Chile through Inclusive Education	<b>Rodrigo Tapia</b> Guidance to local investment for conflictive sub-urban areas. Evolution of public land and its potential as regulator of territorial imbalances: the case of Las Campiñas, Chile
09.15 - 09.30	<b>Lucía Villar-Muñoz</b> Spatial variation of the heat flow on the south-central Chilean forearc	<b>Amaranta Alfaro</b> Civic engagement through social media in Chile: Exploring its potential to reinforce social cohesion	<b>Bernardita Devilat</b> Re-construction strategies on heritage villages after earthquakes. Chile: 2005, 2010, 20??
09.30 - 09.45	<b>Pablo Salas</b> Energy resources and climate change: Are we ready to decarbonise the economy?	<b>Rocío Rueda</b> Young citizens, technologies and political turn	<b>Vicente Sandoval</b> Discussing disaster risk discourses: the case of Santiago de Chile
09.45 - 10.30	<b>Gregory Lemkine</b> Watchfrog: from small model organisms towards big companies	<b>David Buckingham</b> The Remaking of Citizens: Media, Civic Participation and Learning	<b>Marie-Hélène Massot</b> Time economy, organizing mobility and time use inequalities in Greater Santiago and the Ile-de-France Region
10.30 - 11.00	<b>Coffee break</b>		
	<b>Medical Sciences and Life Sciences</b> Blue - Auditorium	<b>Economy, Sociology and Public Policies</b> Red - Auditorium	<b>Interdisciplinary and Applied Sciences</b> White - Auditorium
11.00 - 11.15	<b>Luis Córdova</b> Bisphosphonates: An alternative for surgical treatment of orthopedic implant loosening? Pre-clinical study	<b>Mayra Feddersen</b> A Sociocultural Analysis of U.S. Immigration Law and Psychology	<b>Jessica Ocampos</b> Biopolymer-mediated Delivery System For Mammalian Cell Biopreservation
11.15 - 11.30	<b>Felipe Soto</b> NTICs & Mental Health	<b>Rodrigo Urrea</b> Public Policies of Equity in Chile: The Pension System Case	<b>Francisco Rossier-Miranda</b> From Food-Grade Materials to Self-Assembled Microencapsulation Systems
11.30 - 11.45	<b>Pablo Godoy</b> The role of ABC transporter proteins in macrocyclic lactone resistance in <i>Haemonchus contortus</i> : a model to investigate and remediate anthelmintic resistance development in veterinary nematodes in Chile	<b>Paola Bordon</b> College-major choice to College-then-major choice in Chile	<b>Víctor Guadalupe</b> Industrial Biotechnology and Use of Metabolic Engineering for Bioprocesses Optimization: Elimination of By-product Formation in Ethanol Production from Fermentation of Sugars Using <i>Saccharomyces cerevisiae</i>

Time		Friday - July 06th		
		<b>Medical Sciences and Life Sciences</b> Blue - Auditorium	<b>Economy, Sociology and Public Policies</b> Red - Auditorium	<b>Interdisciplinary and Applied Sciences</b> White - Auditorium
11.45 - 12.00		<b>Fernando Monckeberg</b> The nutrition impact in the development of human capital: the case of Chile	<b>Dany Jaimovich</b> Is it time for Chile to become more active in international aid at the State level?	<b>Juan Asenjo</b> Systems Biology and the Biotechnology of the 21st. Century
12.00 - 12.15			<b>Stephan Klasen</b> Drivers of distributional change in Latin America	
12.15 - 12.45		<b>Jean-Pierre Changeaux</b> Toward a neuroscience of the human person?		<b>Rolando Chamy</b> New trends and challenges for the development of small scale biogas projects: A systemic point of view
12.45 - 14.15	Thematic Lunch			
<b>Encuentros Amphitheater</b>				
14.15 - 15.15	<b>Keynote Lecture: Rainer Fischer:</b> Innovation-driven convergence of white, green, yellow and red biotechnology			
15.15 - 16.00	<b>Special Session: Part 1</b> <b>Science and Entrepreneurship</b> (Pablo Valenzuela, Rainer Fischer, Luis Pablo Hervé)			
16.00 - 16.30	<b>Coffee break</b>			
16.30 - 18.15	<b>Special Session: Part 2</b> <b>Science and Entrepreneurship</b> (Pablo Valenzuela, Rainer Fischer, Luis Pablo Hervé)			
18.15 - 18.45	<b>Coffee break</b>			
18.45 - 20.00	Closing remarks and Encuentros Awards			
20.30 - 23.30	Special Reception at Chilean Embassy			
Time		Saturday - July 07th		
10.00 - 12.00	City Tour (Optional)			

## Welcome to Paris



With its incomparable historical sites and the richness of its patrimony, Paris is often referred to as the most famous museum-city on the world.

The capital has almost as many appearances as urban districts. Contrast between the very beautiful Saint Germain with its luxurious boutiques and the colorful Montmartre with its painters and the place du tertre.

The principal's attractions are the Canal Saint Martin, climb the Eiffel Tower, walk around the Notre Dame's cathedral, step in the Arc de Triomphe heart, visit the Marais, walk around the jardin du Luxembourg, Mount up to the Sacré Coeur or wonder down the most beautiful avenue in the world, the Champs-Élysées.

## About Pierre and Marie Curie University



The UPMC is the best ranked French University in the Shanghai index and is a member of the PRES Sorbonne Universités, a Research and Superior Education Pole also composed by the Panthéon-Aspas and Paris-Sorbonne universities.

The Paris VI University or the Pierre and Marie Curie University was established in 1971 following the division of the University of Paris, and is a principal heir to its Faculty of Sciences.

UPMC is the largest scientific and medical complex in France, active in many fields of research with scope and achievements at the highest level, as demonstrated by the many awards regularly won by UPMC researchers, and the many international partnerships it maintains across all five continents. Several university rankings have put UPMC at the 1st place in France, and it has been ranked as one of the top universities in the world.

It has over 125 laboratories, most of them associated with the Centre national de la recherche scientifique (CNRS). Some of its most notable institutes and laboratories include the Institut Henri Poincaré, Institut d'Astrophysique de Paris, Laboratoire d'informatique de Paris 6, Institut de mathématiques de Jussieu/Chevaleret (shared with University Paris Diderot) and the Laboratoire Kastler-Brossel (shared with École Normale Supérieure).

### Moving around by Metro

Every corner of Paris is easily reachable by Metro, find your way around it on - <http://www.ratp.fr/plan-interactif/> - one Metro ticket costs 1.70 euros. We suggest to buy a 10 tickets bundle promotion where each ticket costs 1.20 euros. All Metro stations have automatic ticket machines.

### Moving around by bicycle

You may also move around Paris by Bicycle. Velib is a large-scale public bicycle sharing system available in Paris. Anyone can use it by leaving a deposit on a credit card. For more information, visit Velib's official Website:

<http://www.velib.paris.fr/Plan-stations>

### Maps and Directions

Find your way in Paris using these comprehensive map services

Mappy: <http://en.mappy.com/>

Googlemap: <http://maps.google.fr/>

## Chilean Embassy

Information at <http://www.cgparis.cl/> Address : 64, Boulevard de Latour Maubourg 75007 Paris.

Telephone: (+33) (0) 1 44 18 59 60

# Visiting Paris...

- Paris information (official touristic Website) <http://en.parisinfo.com>

## Places to Visit

- Panthéon

The Panthéon, from Greek Πάνθειον meaning “Every god” is a building in the Latin Quarter in Paris. It was originally built as a church dedicated to St. Genevieve and to house the reliquary châsse containing her relics but, after many changes, now functions as a secular mausoleum containing the remains of distinguished French citizens.

- Père Lachaise

Père Lachaise officially, cimetière de l’Est, “East Cemetery” is the largest cemetery in the city of Paris, France (44 hectares (110 acres)), though there are larger cemeteries in the city’s suburbs. Père Lachaise is in the 20th arrondissement, and is reputed to be the world’s most visited cemetery, attracting hundreds of thousands of visitors annually to the graves of those who have enhanced French life over the past 200 years. It is also the site of three World War I memorials.

- Basilica of the Sacred Heart of Jesus of Paris

The Basilica of the Sacred Heart of Paris, commonly known as Sacré-Cœur Basilica is a Roman Catholic church and minor basilica, dedicated to the Sacred Heart of Jesus. A popular landmark, the basilica is located at the summit of the butte Montmartre, the highest point in the city.

## The main avenue in Paris

- The Champs Elysees avenue

With its cinemas, cafés, luxury specialty shops and clipped horse-chestnut trees, the Avenue des Champs-Élysées is one of the most famous streets and one of the most expensive strips of real estate in the world. Several French monuments are also on the street, including the Arc de Triomphe and the Place de la Concorde. The name is French for Elysian Fields, the place of the blessed dead in Greek mythology. The Avenue des Champs-Élysées is known as “The most beautiful avenue in the world”, La plus belle avenue du monde in French.

- Avenue de l’hôpital (Pierre et Marie Currie University)

The boulevard is one of the Boulevards du midi of Louis XIV, constructed to supplement the band of boulevards already completed on the right bank of the Seine. However, the work advanced very slowly and the boulevard only finally opened in 1760. It was then the start of the road to Fontainebleau, which followed the course of the present avenue d’Italie.

- Avenue Saint Germain des Pres

The Boulevard Saint-Germain was the most important part of Haussmann’s renovation of Paris (1850s and ‘60s) on the Left Bank, The Boulevard Saint-Germain derives its name from the church of Saint-Germain-des-Prés which dates back to the Middle Ages. This area around the boulevard is also referred to as the Faubourg (“Suburb”) Saint-Germain which developed around the abbey.



## Visiting Parisiens Parks

- Luxemburg

The Jardin du Luxembourg, or the Luxembourg Gardens, is the second largest public park in Paris (224,500 m<sup>2</sup> (22.5 hectares) located in the 6th arrondissement of Paris, France. The park is the garden of the French Senate, which is itself housed in the Luxembourg Palace.

- Bois de Vincenne

The Bois de Vincennes is a park in the English landscape manner to the east of Paris. The park is named after the nearby town of Vincennes. The Bois de Vincennes, like the Bois de Boulogne, have been included to Paris in the 19th century. They are both surrounded by populated areas

- Buttes de chaumont

The Parc des Buttes Chaumont is a public garden situated in the 19th arrondissement of Paris. The name of the park is composed of two words, buttes (hills or heights), and Chaumont, which is probably a contraction of chauve (bald) and mont (mount). The park is the third largest of its kind in Paris encompassing over 5 kilometres of trails and paths.

# Organizers

## Senior Advisory Board



**Cristián Hernández**  
Chairman

Business Development  
Director at Fundación  
Ciencia & Vida, Chile

c.hernandez@encuentros2012.org



**Daniel Almonacid**  
Financial Advisor

Post doctoral Fellow,  
Computational Biology Lab,  
University California  
San Francisco

d.almonacid@encuentros2012.org



**María José Navarrete**  
Program Advisor

Professor at Universidad  
Austral de Chile in Valdivia

mj.navarrete@encuentros2012.org



**Juan Pablo Hontavilla**  
Sponsors and Media Advisor

Communications Director at  
GrupoAranex, Chile

jp.hontavilla@encuentros2012.org



**Luis Pablo Hervé**  
Coordination Advisor

Chief Executive Officer at  
Balvi Consultores, Valdivia,  
Chile

lp.herve@encuentros2012.org

## Organizing Committee



**Matías Garretón**  
President

PhD (c) Paris East University,  
France

m.garretón@encuentros2012.org



**Antonio Serrano**  
Vicepresident

Researcher at Centre of  
Biotechnology at Universidad  
Católica del Norte

antonio.e.serrano@encuentros2012.org



**Vicente Sandoval**  
Program Director

PhD (c) University College of London, United Kingdom

v.sandoval@encuentros2012.org



**Carolina Pinto**  
Social Events Director

PhD (c) Paris East University, France

c.pinto@encuentros2012.org



**Natalia Pino**  
Operations Director

PhD (c) Paris Descartes University, France

n.pino@encuentros2012.org



**Amaranta Alfaro**  
Communications Director /  
Education and Communication Coordinator

PhD (c) Graduate School for Media & Communication at Hamburg University, Germany

a.alfaro@encuentros2012.org

## Coordination Team



**Álvaro Bustos**  
Special Session Science & Entrepreneurship Coordinator

PhD (c) Neuro-Graduate School, Mainz, Germany

a.bustos@encuentros2012.org



**Jessica Ayala**  
Operations Coordinator

PhD (c) University Paris VII Diderot, France

j.ayala@encuentros2012.org



**Francisco Martínez**  
Operations Coordinator

PhD (c) Paris Sud University, France

f.martinez@encuentros2012.org



**Paulina Guerra**  
Operations Coordinator

MSc Université Paris 13, France

p.guerra@encuentros2012.org



**Ricardo Verdugo**  
Communications Coordinator

Assistant Professor at the  
Human Genetics Program of  
Universidad de Chile

r.verdugo@encuentros2012.org



**Antonieta Oyanguren**  
Media Coordinator

Master Program at Université  
Sorbonne Nouvelle

antonieta.oyanguren@gmail.com

## Call for papers committee



**Dario Lafferte**  
Call for Papers Coordinator

PhD (c) University of Kassel,  
Germany

d.lafferte@encuentros2012.org



**René Rocha**  
Call for Papers Coordinator

PhD (c) Institute of  
Agrochemistry and Food  
Technology, Valencia, Spain

rayius@gmail.com

## Program Committee



**Catherine Lambert**  
Natural Sciences, Renewable  
Energies and Environment  
Coordinator

PhD (c) Paris Nord University,  
France

c.lambert@encuentros2012.org



**Jerusa Brignardello**  
Medical and Life Sciences  
Coordinator

MSc. in Nutrition and Food  
from the Institute of Nutrition  
and Food Technology (INTA)-  
Universidad de Chile

j.brignardello@encuentros2012.org



**Matías Molina**  
Medical and Life Sciences  
Coordinator

Neuropsychologist from  
University Paris Descartes

m.molina@encuentros2012.org



**Jorge Hidalgo**  
Interdisciplinary and Applied  
Sciences Coordinator

Student at Pontificia  
Universidad Católica de  
Valparaíso, Chile

j.hidalgo@encuentros2012.org



**Herman Elgueta**  
Communications Coordinator

PhD (c) University of Sheffield,  
United Kingdom

[h.elgueta@encuentros2012.org](mailto:h.elgueta@encuentros2012.org)



**Carlos Villalobos**  
Economy, Sociology and Public Policies Coordinator

PhD (c) University of Göttingen,  
Germany

[c.villaobos@encuentros2012.org](mailto:c.villaobos@encuentros2012.org)



**Gonzalo Oroz**  
Architecture, Urban Studies and Geography Coordinator

PhD (c) Bauhaus-Universität Weimar,  
Germany

[g.oroza@encuentros2012.org](mailto:g.oroza@encuentros2012.org)



**Marcelo Noël**  
Call for Papers Director/  
Education and Communication Coordinator

PhD (c) University of Deusto,  
Bilbao, Spain

[m.noel@encuentros2012.org](mailto:m.noel@encuentros2012.org)



**Isabel Berna**  
Information Technologies, Engineering and Mathematics Coordinator

PhD (c) Universitat Politècnica de Catalunya, Barcelona, Spain /  
Professor at Universidad Metropolitana de Ciencias de la Educación of Santiago, Chile

[i.berna@encuentros2012.org](mailto:i.berna@encuentros2012.org)



**José Manuel Brito**  
Information Technologies, Engineering and Mathematics Coordinator

PhD (c) University of Saarland,  
Germany.

[jm.brito@encuentros2012.org](mailto:jm.brito@encuentros2012.org)



**Patricia Cerda**  
Brain Gain session coordinator

University of Poitiers  
in France

[p.cerda@encuentros2012.org](mailto:p.cerda@encuentros2012.org)



**Alejandra Sánchez**  
Brain Gain session coordinator

Pontificia Universidad Católica de Chile

[a.sanchez@encuentros2012.org](mailto:a.sanchez@encuentros2012.org)



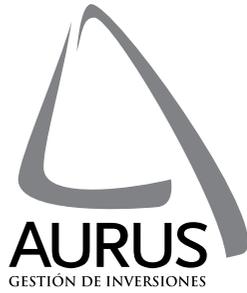
Fundación  
**Imagen de  
Chile**



Fundación  
**Ciencia  
& Vida**



## Sponsors



## Media Partners





There is no doubt that Encuentros offers a unique opportunity for networking, cooperation and exchanging new ideas. The Encuentros Evening aims to kick-start two and a half days of talks, poster sessions, plenary sessions, workshops, round tables, and social activities. This special open evening session runs on a dynamic program, outstanding guests and a friendly but insightful discussion. Here you will get a primer on several topics that are relevant to the Big Picture that this year's Encuentros Conference is focusing on: Knowledge for Economic and Social Development.

The session entails a plenary lecture on how Chile (as a brand) is perceived worldwide and a round table on some of the challenges and opportunities faced by a new generation of Chileans that wish to contribute to our country's development while living as an expatriate in a foreign nation. To finish off, we invite you to open your minds and hearts and engage in a thoughtful and honest conversation with Pablo Simonetti, renowned writer, columnist and president of Fundación Iguales, where we will address matters ranging from literature to diversity rights including current affairs, politics and culture.

### Round Table “Connecting Chile”

This activity is the only one in the program to be conducted in Spanish. Its goal is to open a dialogue through a roundtable discussion about a number of initiatives led by motivated Chileans who are looking to connect entrepreneurs, businessmen and Chilean researchers with the world. The panel is composed of Mario Roseblatt (Fundación Ciencia & Vida), Manuel Tuñón de Lara (Bordeaux Segalen University), Ana María Lennon (Institut Curie).



Mario Roseblatt



Manuel Tuñón de Lara



Ana María Lennon

## Open dialogue

### Pablo Simonetti Book writer and Columnist



Pablo Simonetti is an Engineer and a writer. He graduated with a degree in Civil Engineering from the Universidad Católica and a M.A. in Engineering-Economic Systems from Stanford University.

In 1996 Mr. Simonetti turned entirely to literature. The following year, his renowned story “Santa Lucía” won the first prize in an important writing contest. This and other short stories were collected and published in a single volume (“Vidas Vulnerables”, 1999).

In 2004 Mr. Simonetti published his novel “Madre que estás en los cielos”, which has been translated into five languages and has become one of the three biggest-selling Chilean novels in the past decade. In 2007 he

came out with “La razón de los amantes”, a novel that has since attracted great interest among readers. “La barrera del pudor” is his most recent work. This novel has been published in Latin America and Spain, and has had an enthusiastic response from critics.

Mr. Simonetti presides Fundación =Iguales, a non-governmental organization promoting equality and non discrimination for the sexual diversity. He also writes for several important news media in Chile. In his columns Mr. Simonetti addresses subject matters ranging from literature to diversity rights including current affairs, politics and culture.

## Climate change and viticulture

### Bernard Seguin INRA Avignon (France)



Appeared in the scientific community around 1970, the field of research on the impacts of climate change possibly induced by the increased concentration of greenhouse effect gases due to human activities has been rapidly enlarged. The tremendous amount of work devoted to its various aspects has been the object of an attempt to collect and analyse its evolution along the time by the setting-up of the IPCC (Intergovernmental Panel for climate change) in 1988. It was set up by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP) as an effort by the United Nations to provide the governments of the world with a clear scientific view of what is happening to the world's climate. This original structure has already delivered 4 reports (about one every 6 years), the last in 2007 having been awarded by the shared Nobel Peace prize. The main lines of its organization and functioning will be briefly described in the first part of the presentation, as well as the major components of climate change and its impacts nowadays well-established.

They will be illustrated in the second part by the consequences for the specific field of viticulture, which is a common subject of importance for both Chile and France. Considering its well-known dependency upon climate features, it was somewhat easy a long time ago to predict that wine production would be one of the most sensitive sectors impacted by climate change. But it has been largely confirmed by the more precise studies performed on the future projections these last ten years, as well by the already significant observed consequences of the recent warming at the same time. We will present them especially for the case of French vineyards, giving examples on significant changes in both harvest dates and characteristics in terms of alcohol content and acidity. The ongoing research projects in our two countries will be presented, and future impacts will be comparatively discussed in relation with their peculiarities, but also with the global international context for the wine market.

## SPECIAL SESSION

### Brain Gain, return of skills and human capital



Many Master students and PhD candidates have the same question: what happens after graduating? With this in mind we developed two special sessions focused on the “What’s next?” issue. The first session, “Brain Gain: return of skills and human capital”, will function as a sort of “field recognition” in order to make one aware of the challenges and opportunities one faces when evaluating a possible return to ones home country. Is the return the only possibility?, or is it possible to contribute to your country’s research and development system while living as an expatriate in a foreign nation?, how should we approach this issue?, is there any previous experience available from which we can learn? These are some of the questions this session seeks to answer.

In this sense we have prepared a dynamic panel, contrasting personal experiences with institutional perspectives, and the point of view of senior and emergent researchers from the fields of natural and social sciences. The confirmed speakers for this session are: Dr. Mario Rosemblatt, Executive Director of Fundación Ciencia para la Vida; Dr. María José Navarrete, postdoctoral fellow at Universidad Austral de Chile, who will share some insider’s tips in the process of returning to Chile; Dr. Patrice Vermeren, Professor of Philosophy at the University of Paris 8, Executive Director of the Argentine Franco Studies of the University of Buenos Aires; and Dr. Molly Pollack, Executive Director of ChileGlobal, a network of talented Chilean professionals in support of innovation.



Patrice Vermeren



María José Navarrete



Mario Rosemblatt



Molly Pollack

# SPECIAL SESSION

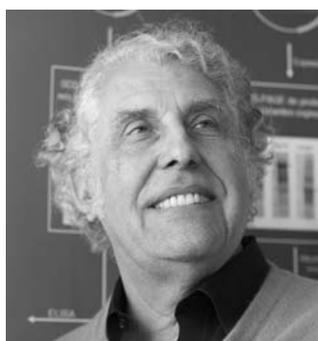
## Science & Entrepreneurship



The special “Science and Entrepreneurship” session aims to get the most out of highly qualified “brains” that will share their entrepreneurial ideas and experiences in order to help you move your business projects forward. Through the session we aim to cover all the relevant topics needed to bootstrap your project or idea so you can venture into your science-based business fully aware of the risks and rewards. To finish off, a round table conversation with our guest speakers will allow us to go deeper into what it is like to be an entrepreneur and scientist at the same time, and will give us the opportunity to listen to their recommendations in order to successfully survive this journey.

We are delighted to announce that our senior guest speakers will be Prof. Dr. Pablo Valenzuela, Founder and Director of Fundación Ciencia para la Vida, and Prof. Dr. Rainer Fischer, Department head of the Institute for Molecular Biotechnology Senior Executive director of the Fraunhofer Institute. Both are renowned scientists and entrepreneurs who have made remarkable contributions from the private sector and academia. Needless to say, their experiences and stories will fire-up the hall and most likely inspire many of those who have not even considered starting an entrepreneurial project.

We will also be accompanied by Dr. Luis Pablo Herve, a Chilean postdoctoral fellow who has recently created his start-up company in Valdivia, Chile, after a promising academic career both in the US and Europe. Dr. Herve will share the real challenges and satisfactions a “scientist-next-door” may face when they follow their intuition and jump into the reality and cruelty of the business world in Chile. In addition, there will be a series of multimedia resources available to access, in the most didactic way possible, the basic knowledge you require to ignite the entrepreneurial flame we all have inside.



Pablo Valenzuela



Rainer Fischer



Luis Pablo Herve



### **Innovation-Driven Convergence of white, green, yellow and red Biotechnology**

**Rainer Fischer**

Institut für Biologie VII, RWTH Aachen University and Fraunhofer IME

The ability of German industry to compete on the international market depends to a large extent on the innovative power of its enterprises and its research organizations. With its clearly defined mission of application-oriented research and its focus on key technologies that are relevant to the future, the Fraunhofer Gesellschaft plays a prominent role in the German and European innovation process driven by applied research and development (R&D). The 60 Fraunhofer Institutes are continuously adapting their activities to meet current demand, thereby responding to the present and predicted needs of the market and its consumer. At the same time, they are contributing to the development of promising new technologies, platforms and product candidates through their own research and by supporting spin-off companies.

This paper addresses the role of R&D policy in the innovation strategy of the Fraunhofer Institute for Molecular Biology and Applied Ecology (Fraunhofer IME) by outlining recent innovation initiatives, networks and methods, giving practical examples from areas such as medical, plant and industrial biotechnology, all encompassed within the holistic discipline of systems biotechnology. We will emphasize common features of successful innovations and strategies to improve and accelerate innovation in the future. Finally we will consider the hurdles and stumbling blocks that prevent the conversion of innovations into real products, and strategies to improve the success rate at the interface of innovative applied R&D and industry on a global scale.

## Lectures | SOCIAL SCIENCES



### **EXPULSIONS: A Category for our Age**

**Professor Saskia Sassen**  
Columbia University

When the cold war ended, a new struggle began.<sup>1</sup> The period of Keynesian-led relative redistribution in developed market economies was followed by a radical reshuffling of capitalism. The Keynesian period brought with it an active expansion of logics that valued people as workers and consumers. The current phase of advanced capitalism does not. In the last two decades there has been a sharp growth in the numbers of people that have been “expelled” from homes, villages, life projects, support systems; their numbers are far larger than the newly “incorporated” middle classes of countries such as India and China. I use the term “expelled” to describe a diversity of conditions: the growing numbers of the abjectly poor, of the displaced in poor countries who are warehoused in formal and informal refugee camps, of the minoritized

and persecuted in rich countries who are warehoused in prisons, of workers whose bodies are destroyed on the job and rendered useless at far too young an age, able-bodied surplus populations warehoused in ghettos and slums. My argument is that this massive expulsion is actually signaling a deeper systemic transformation that has been documented in bits and pieces but not quite narrated as an overarching dynamic that is taking us into a new phase of global capitalism. The paper is based on the author’s forthcoming book *Expulsions*.

<sup>1</sup> This is based on the author’s “A Savage Sorting of Winners and Losers.” *Globalizations* March–June 2010, Vol. 7, Nos. 1–2, pp. 23–50. A longer analysis can be found in her forthcoming book *Expulsions: When Complexity Produces Elementary Brutalities*.

## **Watchfrog: from small model organisms towards big companies**

### **Gregory Lemkine**

PhD, Founder and chief executive officer of WatchFrog



Any attempt to further our understanding of how environmental stressors impinge on environmental health must involve increasing our knowledge of the physiological effects of synthetic chemicals. However, it is almost impossible to make causal links between contaminant exposure and major patho-physiological damage. WatchFrog creates and markets innovative solutions for the in vivo detection of a wide range of chemical, pharmaceutical and cosmetic substances. This new generation of tests is allied to early embryonic stages of aquatic models, just after hatching of the eggs, in order to replace, reduce or refine the use of animal models (3Rs of animal protection policies).

When a biological function is activated, WatchFrog models “light up” (through emission of fluorescence, Figure 1). The automation of reading results in vivo, allows

researchers to detect prolonged and acute low dose toxicity, through disruption of endocrine functions; and detect and quantify toxic substances in the environment (e.g. drinking water, lake/river water, reuse waterground water runoff, effluent, sludge, industrial waste...

Gregory Lemkine, PhD, Founder and chief executive officer of WatchFrog.

Dr. Lemkine has a through understanding of the technical, scientific and marketing of biotechnologies and completed a training/action cycle of HEC school of management. Prior to inception of the company, Dr. Lemkine was in charge of technology transfer in the Museum National d’Histoire Naturelle in Paris. He holds a PhD in Physiology and has published many articles in international scientific journals.

## **Biodiversity: between Rio and Rio + 20**

### **Professor Gilles Boeuf**

University Pierre & Marie Curie



In Rio in June 1992, it was decided to create the Convention on Biological Diversity, 191 countries today have ratified such an agreement. In Johannesburg in June 2002, it was decided to curb the loss of biodiversity by 2010 and the European Community chimed in “stop”! We shall be far from it and the UNESCO Conference in Paris in January 2010 decided to achieve the objective again for 2020. Biodiversity is much more than the only inventory and catalogue of living species. It is most of all the set of the relations living being establish between themselves and with their environment. It is the living fraction of Nature.

The Millennium Ecosystem Assessment (2005) announced in its formal report that living species are

passing away at a race from 100 to 1 000 faster than that was estimated during those last 500 million years. The human being has become the most powerful force of evolution on the planet and must imperatively change his habits if he wants to carry on living in harmony with nature: he is tightly intertwined with that diversity and cannot do without it. These aspects will be discussed in Rio 2012 and so, the 2020 aim, realistic objective or complete utopia? Will we be able to better succeed for a target we were not able to reach between 2002 and 2010? Situations between Western Europe and Chile are they so different?.



### Toward a neuroscience of the human person?

Jean-Pierre Changeux  
Collège de France & Institut Pasteur

The epigenesis theory of development can be traced back to William Harvey (1651), who stated, in contrast to contemporary preformation views, that the embryo arises by “the addition of parts budding out from one another”. The word epigenesis was subsequently used by Conrad Waddington (1942) to specify how genes might interact with their surroundings to produce a phenotype. This is also the meaning we adopted in our paper, « Theory of the Epigenesis of Neuronal Networks by Selective Stabilization of Synapses » (Changeux et al. 1973 ; Changeux & Danchin 1976), according to which the environment affects the organization of connections in an evolving neuronal network through the stabilization or degeneration (pruning) of labile synapses associated with the state of activity of the network. This definition contrasts with the recent and more restricted sense of the status of DNA methylation and histone modification

in a particular genomic region. The synapse selection theory was introduced to deal with two major features regarding the genetic evolution of the human brain : 1. the non-linear increase in the organisational complexity of the brain despite a nearly constant number of genes ; 2. the long postnatal period of brain maturation (ca 15 years in humans), through which critical and reciprocal interactions take place between the brain and its physical, social and cultural environment. This theory will be evaluated and updated in the framework of the recent human/primate genome data, analysis of gene expression patterns during postnatal development, brain imaging of cultural pathways, such as those for language learning, and current views about the neural bases of higher brain function, in particular the global neuronal workspace architectures for access to consciousness and its pathologies (see Dehaene and Changeux 2011).

## The nutrition impact in the development of human capital: the case of Chile

Fernando Monckeberg  
INTA / Universidad de Chile



Researches done in Chile during the sixties and seventies showed the existence of a high index of chronic undernutrition, which affected, in different grades, more than sixty percent of child population between the age of 0 and 6. This disease caused higher early child mortality, serious after-effects in the physical and intellectual development of the survivors. The deficiencies became evident later, during the beginning of learning and this was the main cause of scholar desertion at primary school. As a consequence, the average schooling in those years were 2,8 years (1965).

The researches proved the physical and mental damage in the infant population. This was produced during the fast grow stage: from the last month of pregnancy to the first years of extrauterine life. This resulted in the hypothalamic “imprinting” in the base of brain, which persists throughout life.

The percentage of damaged population was so high, that it not only had effect on the infant population, but on the whole Chilean society. Looking at the infant population, the initiation of inequality of opportunities became

evident. For the society, this was the main obstacle for its progress and development.

During the period 1973-1990 there was an holistic strategy implement as a state policy, with the aim of preventing the “socio genetic-biological” damage, that ancestrally was producing in the first stages of life. With the investment of 23 thousand millions of dollars, programs of nutrition, education and environmental sanitation were implemented with wide coverage. This controlled child malnutrition after 20 years.

As a consequence of that, twenty years later, Chile has reached an important, and constant progress in economical and social areas, protruding from the other countries of the region.

Currently, 100 percent of the Chilean population is finishing the primary education, 75 percent is finishing secondary education and 46 percent is entering to undergraduate studies leading to the fact that the entire population has attained an average schooling of 12 years.



### **New trends and challenges for the development of small scale biogas projects: A systemic point of view**

**Rolando Chamy**  
NBC Center-PUCV

From the beginning, biogas projects have been one of the pillars of development in to climate change related issues, mainly due to greenhouse gases effect such as methane, which is twenty one times higher, than CO<sub>2</sub>. Methane can be captured in a relatively simple manner, in common industrial processes. It is produced in residential waste landfills, water and solids treatment processes and in general, in organic matter decomposition processes.

Currently, according to data provided by the United Nations Framework Convention on Climate Change (UNFCCC), there are 4156 CDM registered projects, where 42.23% corresponds to small scale projects. 25% of the small scale projects are methane avoidance type, so that, there is a large potential for dispersed, small emission reduction activities unable to benefit from the conventional CDM projects.

Some of the barriers existing to regulated CDM projects implementation are: high upfront CDM project development costs (100,000 – 200,000 USD), long processing time: on average it takes 13 months from project submission to registration, and another 15 months from registration to the first issuance, ex poste revenue based on actual emission reduction, strict schedule – project size, starting date, technology, among others. A way to overcome these barriers is the development of small scale biogas projects in the form of a programmatic CDM. A programme of activities (PoA) is a voluntary coordinated action by a private or public entity which coordinates

and implements any policy/measure or stated goal (i.e. incentive schemes and voluntary programmes), which leads to anthropogenic GHG emission reductions or removals by sinks that are additional to any that would occur in the absence of the PoA, via an unlimited number of CDM programme activities. The main differences from regular CDM are: scheduled activities rather than a project activity can be registered, many similar CDM project activities coordinated by a private or public entity, flexible schedule: the activities can take place in many different locations (including multi-country) over a period of up to 28 years.

Additionally, in a new vision, anaerobic digestion has to be seen in a systemic viewpoint. If an industry needs to solve an environmental problem with its effluents and residues, the solution is not only a treatment plant; the solution is an integrated project in which the economic, energetic and environmental sustainability are important, not only for the industry, also for the region and the planet. The systemic approach allows to develop more ambitious anaerobic projects in under developed countries by considering GHGs reduction as a fundamental variable. With this mechanism, industrialized countries helps to the development of poor countries and can obtain its reduction goals.

Combining these two elements, small scale biogas projects can provide a viable and integral solution at a country and worldwide level.

## Systems Biology and the Biotechnology of the 21st. Century

Juan Asenjo  
University of Chile



Systems Biology allows today the mathematical modelling and computational simulation of biological and biotechnological systems with the aim of carrying out biological experiments “in silico” and the study, analysis and optimization of such systems without the need for as much experimental work. This talk will present the basic principles behind the developments that have allowed the revolution of Biotechnology and Systems Biology, including Metabolomics, Proteomics, Genomics and Protein Engineering and Metabolic Engineering. Using such tools we have modelled proteins with unusual properties such as those with high activity at low temperatures found in Antarctic and the metabolism of yeast and bacteria and to microbes from the Atacama desert producing novel antibiotics and anticancer drugs.

This presentation will show some of the basic principles that have resulted in the revolution of systems biology today. The use of enzymes at low temperatures has great potential in terms of lower energy consumption, therapeutic applications and low temperature detergents and they pose a challenge to protein engineering. We have built 3-D models based on detailed homology

studies in order to understand their cryophilicity (cold-activity) and to design protein engineering strategies. These include analysis of electrostatic interactions, degree of compaction, atomic fluctuations and hydrogen bond networks.

Metabolomics provides the tools for detailed analysis of cell metabolism using extensive gene expression data and flux calculations. As a model system we have used a recombinant *Saccharomyces cerevisiae*. When comparing gene expression during growth on ethanol to that on glucose 98% of genes of the central metabolic pathways are overexpressed which is totally different from what is observed for Metabolic Flux Analysis, where the specific growth rate is lowered to ca. 40%, which clearly shows no direct correlation between Microarray results and actual cell behavior. We have also developed a continuous mathematical model that simulates gene regulation of the metabolism of both strains. Using a Regularization of Inverse Problems strategy we have been able to solve a system of 120 unknowns and only 72 equations very successfully with fluxes and intracellular concentrations similar to experimental data.



## **Drivers of distributional change in Latin America**

**Stephan Klasen**  
Universität Göttingen

The presentation will discuss the key drivers for rising and falling inequality in the 1990s and 2000s in Latin America. Of particular importance will be the role of educational expansion, overall economic conditions,

macro policies, and the spread of social protection policies. It will try to identify the most important policy issues for Latin America as well as what other regions might learn from this experience.



## **Growth, Inequality and Poverty Reduction in Developing Countries: The Recent Comparative Global Evidence**

**Augustin Fosu**  
UN University-WIDER

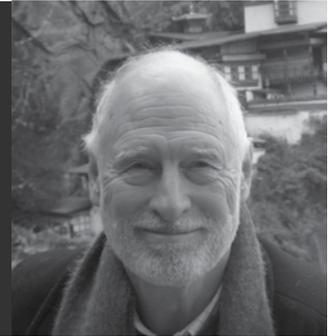
The study presents recent global evidence on the transformation of economic growth to poverty reduction in developing countries, with emphasis on the role of income inequality. The focus is on the period since the early-mid-1990s when growth in these countries as a group has been relatively strong, surpassing that of the advanced economies. Both regional and country-specific data are analyzed for the \$1.25 and \$2.50-level poverty headcount ratios using the most recent World Bank data. The study finds that on average income growth has been the major driving force behind both the declines and increases in poverty. The study, however, documents substantial regional and country differences that are masked by this 'average' dominant-growth story. While in the majority of countries, growth was the major factor behind falling or increasing poverty, inequality, nevertheless, played

the crucial role in poverty behavior in a large number of countries. And, even in those countries where growth has been the main driver of poverty-reduction, further progress could have occurred under relatively favorable income distribution. For more efficient policymaking, therefore, idiosyncratic attributes of countries should be emphasized. In general, high initial levels of inequality limit the effectiveness of growth in reducing poverty while growing inequality increases poverty directly for a given level of growth. It would seem judicious, therefore, to accord special attention to reducing inequality in certain countries where income distribution is especially unfavorable. Unfortunately, the present study also points to the limited effects of growth and inequality-reducing policies in low-income countries.

## **Nexus: Planning cities and regions in an increasingly resource-constrained world**

**Adrian Atkinson**

**New Synergies in Development (NSD)**



We have known since the famous Limits to Growth study of the early 1970s that unless the global development process is reoriented to diminish environmental impacts and escalating consumption of resources, that this cannot be sustained. The resulting concept and aspiration to achieve 'sustainable development' failed miserably to deflect the global development path and now we stand at the edge of what will without doubt be a catastrophic failure of the global economic system and 'environmental

backlash', the beginnings of which are already starting to unfold. There are nevertheless actions that can be taken to ameliorate the worst impacts and perhaps save some reasonable economic structures and lifestyles along the downward passage. This lecture will discuss some of the initiatives currently being developed to this end and reviews what planners should be doing to take up these initiatives in their own work.

## **Time economy, organizing mobility and time use inequalities in Greater Santiago and the Ile-de-France Region**

**Marie-Hélène Massot**

**Research Director at IFSTTAR**



In contemporary societies, time scarcity is progressively recognized as a major driver of human behavior. Since Beckett's groundbreaking work and from an economic perspective, wellbeing can be conceived as a combination of goods, relationships and the time needed to produce and enjoy them. Urban evolution could be considered as a particular manifestation of this driving force. In fact, after a century of technological improvements in transport systems, travel time budgets seem to be remarkably constant, among cities with strong socioeconomic differences, as was postulated by Zahavi's conjecture. As a consequence, increasing speeds are invested in longer distances of daily travel. In other words, mobility is not just a result of urban form and transport technology, but also a powerful organizing force of urban evolution. In fact, this drives urban sprawl in the long term, which associates with social segregation and increases mobility inequalities. In Greater Santiago

(GS) and the Ile-the France Region (IdF), the poorest families have lower accessibility to jobs, services and leisure, while spending a greater share of their income in transportation. Moreover, in GS, longer working journeys are closely related to lower professional qualifications, a relationship which is reversed in IdF. As time allocation is a universal human constraint, this kind of analysis is a useful method to compare different societies, raising questions about the role of quality public services and welfare supports. In conclusion, excessive temporal and monetary efforts in transportation, in addition to long working journeys, simultaneously hinder family wellbeing and social inclusion. Developing adequate labor legislation, providing inexpensive social services and improving daily mobility conditions must be considered simultaneously, in order to ensure the general wellbeing of families.



### **The Remaking of Citizens: Media, Civic Participation and Learning**

**David Buckingham**

Loughborough University, UK

New media – especially the internet – have often been seen to provide a solution to the problem of young people's apparent disaffection from civic and political life. While television has been accused of contributing to apathy and alienation, the internet has been proclaimed as a means of stimulating participation and regenerating public debate. In this presentation, I want to look back to some older research on children and television, and draw on some more recent work on a large pan-European research project about young people, the internet and

civic participation, in order to take a critical look at such claims. I want to challenge the terms of this debate, in terms of the dominant constructions of young people, of technology and of citizenship. I will suggest that technology alone will not address the fundamental causes of young people's disengagement: rather, we need to address more fundamental issues of social power and inequality, and identify the forms of motivation and competence that young people need to acquire if they are to become active citizens.



### **Connected Minds – How connectedness influences learners**

**Francesc Pedró**

UNESCO (Paris)

This contribution addresses three main questions. First, can the claim that today's students are new millennium learners, or digital natives, be sustained empirically? Second, is there consistent research evidence demonstrating the effects of technology adoption on cognitive development, social values, and learning expectations? Third, what are the implications for educational policy and practice?

The responses found suggest a mixed and far more complex picture than is usually presented in most of the well-known essays on this topic. First, although an increasing percentage of young people can be said to be

adept in technology, it is misleading to assume that all of them fit equally well into the image of new millennium learners. Second, there is not enough empirical evidence yet to support the idea that students' use of technology and digital media is transforming the way in which they learn, their social values and lifestyles, and, finally, their expectations about teaching and learning. Third, more must be done to improve the knowledge base about technology use in education so as to inform the debates. This requires not only more experimental research but also increased efforts to better disseminate existing findings and thus avoid reinventing of the wheel.

## **Mathematics in Chile: Perspectives and Challenges in Research and Education**

**Patricio Felmer**  
Universidad de Chile



In this talk we present a panorama of mathematics research in Chile: main centers, areas, doctoral programs and other information. We will also present a view of school mathematics in Chile: results of international

tests, teacher education and other relevant information. Starting on these contrasting faces of mathematics in Chile, we discuss on perspectives and challenges.

# List of Participants

## A

### Abdulridha, Hussein Abdullah

**Law**

husseinabdullah2006@yahoo.com

### Adesuyi, Adedola Oluwafemi

**Social Sciences**

aadesuyi2011@yahoo.com

### Atkinson, Adrian

**Social Sciences**

Geneva, Switzerland  
atkinson@newsynergies.ch

### Adriasola, Florencia Josefina

**Design and Innovation Management**

Chile  
florenciadriasola01@gmail.com

### Aissa, Meflah

**Physics, Engineering, Energy**

Algeria  
walid.aissa@yahoo.fr

### Alfaro, Amaranta

**Social Media & Citizen Engagement**

Germany  
a.alfaro@encuentros2012.org

### Ali, Saffa Hussain

**Teaching Political Sciences**

Iraq  
saffa.hussain@yahoo.com

### Almonacid, Daniel

**Bioengineering**

United States  
daniel.almonacid@ucsf.edu

### Araneda, Rodrigo Antonio

**Neuroscience**

Belgium  
araneda.rodrigoantonio@gmail.com

### Aránguiz, Natalia

**Financial Markets and Finance Development**

United Kingdom  
natalia.aranguiz@gmail.com

### Arroyo Muñoz, Daniel Benito

**Math (Optimal Control of PDEs)**

Germany  
daniel.arroyo.27@gmail.com

### Ayala, Jessica

**Education**

France  
j.ayala@encuentros2012.org

## B

### Bachmann Fuentes, Ricardo Ignacio

**Law, Philosophie**

Chile  
ignaciobachmann@yahoo.es

### Badawi, Saqr

**International arbitration, Consulting**

Syrian Arab Republic  
sakrbadawe@hotmail.com

### Berna, Isabel

**Information Technologies**

Spain  
i.berna@encuentros2012.org

### Bernal, Raquel Flores

**Education**

Chile  
rdflores@puc.cl

### Beytia, María De los Ángeles

**Life Science**

Chile  
canque@gmail.com

### Bordon Tapia, Paola

**Economics**

United States  
pbordont@gmail.com

### Bravo Contreras, Rodrigo Andrés

**Economics**

United Kingdom  
rodrigobravoc@gmail.com

### Brignardello, Jerusa

**Medical and Life Sciences**

Chile  
j.brignardello@encuentros2012.org

**Briones, Rodolfo**

**Biophysics**  
Germany  
rbrione@gwdg.de

**Brito, Jose Manuel**

**Information Technologies**  
Germany  
jm.brito@encuentros2012.org

**Bronfman, Javier**

**Economy**  
United States  
jb0438a@american.edu

**Burgos Díaz, César**

**Biotechnology**  
Spain  
cburg006@gmail.com

**Burgos, Francisco Alejandro**

**Social Sciences**  
Chile  
burgosfrancisco@hotmail.com

**Bustos, Álvaro**

**Neurobiology**  
Germany  
a.bustos@encuentros2012.org

**C****Cabello González, Valeria**

**Educational Psychology**  
United Kingdom  
v.m.cabellogonzalez@dundee.ac.uk

**Cabezas, Francisca**

**Higher Education Studies**  
France  
francisca\_sofia@hotmail.com

**Cabrera, Luisa Soledad**

**Social Sciences**  
Spain  
solecabrera@gmail.com

**Calvo, Carolina**

**Engineering/Physics**  
United States  
wirapower@gmail.com

**Casanova-Morales, Nathalie**

**Physics**  
France  
casa886@gmail.com

**Cascante, Freddy**

**Medicine**  
Spain  
freddy.cascante@gmail.com

**Castro, María Eugenia**

**Education**  
Chile  
mariaeugeniacaastro@gmail.com

**Cepeda Haro, Sebastián Ignacio**

**CO2 Emissions, Renewables**  
France  
sebastian.cepeda@members.em-a.eu

**Cerda Patricia**

**Education**  
France  
p.cerda@encuentros2012.org

**Cerda, Fernando A.**

**Structural Health Monitoring**  
United States  
fcerda@cmu.edu

**Cerda, Lorenzo**

**Economics (environmental)**  
Chile  
lorenzo.cerda@gmail.com

**Chalise, Mahendra Kumar**

**Educator and Freelance Journalist**  
Nepal  
hrs.apusa@gmail.com

**Chapagain, Atmeshwar**

**Communication**  
Nepal  
aapusa@gmail.com

**Chávez, Roberto Orlando**

**Life Sciences**  
The Netherlands  
roberto.chavez@wur.nl

**Clarke, Jorge Andrés**

**Mathematics**  
Chile  
clarkemove@gmail.com

### **Clasing, Paula**

**Social Science**  
United Kingdom  
pauclas@gmail.com

### **Cociña, Camila**

**Urbanism, Architecture, Social Science**  
United Kingdom  
camila.cocina@gmail.com

### **Contesse, Bernardita**

**Life Science**  
Chile  
bernictc@gmail.com

### **Contreras Ruiz, Ximena**

**Social Sciences**  
Spain  
ximenacontrerasruiz@gmail.com

### **Contreras, Carmen Veronica**

**Economy and Development**  
United Kingdom  
ccontrerasro@gmail.com

### **Córdova, Luis Alberto**

**Medical and Life Sciences**  
Chile  
luiscordovajara@vtr.net

### **Corral Nuñez, Camila**

**Dentistry**  
United Kingdom  
corral.camila@gmail.com

### **Cuevas, Felipe**

**Energy**  
Chile  
fcuevas.gonzalez@gmail.com

## **D**

### **David Buckingham**

**Social Sciences**  
London, United Kingdom  
d.buckingham@ioe.ac.uk

### **De la Barrera, Francisco**

**Landscape and Urban Ecology**  
Spain  
fdelabarrera@gmail.com

### **Deraëve, Sophie**

**Planning and Regional Studies**  
France  
sophie.deraeve@gmail.com

### **Devilat, Bernadette Marie**

**Architecture**  
United Kingdom  
bernadette.devilat.11@ucl.ac.uk

### **Díaz General, Elizabeth Noemí**

**Earth Sciences**  
Italy  
elizabethnoemi.diaz@unibo.it

### **Durán, Paz**

**Conservation Biology**  
United Kingdom  
paz.duran.moya@gmail.com

## **E**

### **Elgueta, Herman**

**Social Psychology**  
United Kingdom  
hermanelgueta@gmail.com

### **Emuda, Festus Opemipo**

**Information Technology**  
Palestine Territory, Occupied  
emudafestusopemipo@yahoo.co.uk

### **Espinoza, Ignacio**

**Medical Physics**  
Chile  
i.espinoza@dkfz.de

### **Espinoza-Vera, Marcia**

**Education and Literature**  
Australia  
m.espinozavera@uq.edu.au

### **Evert Arriagada, Katherine**

**Food science and technology**  
Spain  
katherineevert@gmail.com

## F

### Fariás, Paula

**Life Sciences, Neuroscience**  
Chile  
paulafariasr@gmail.com

### Feddersen, Mayra

**Law**  
United States  
m.feddersen@encuentros2013.org

### Feddersen, Mr Andrés

**Literature**  
France  
andresfeddersen@gmail.com

### Fernández Puratich, Harald

**Energy**  
Spain  
h.fernandez@redciencia.org

### Fernández, Cristian

**Life Sciences (Radiation Biology)**  
Canada  
fernancg@mcmaster.ca

### Ferrada, Pablo

**Appl. Physics**  
Germany  
pd.ferrada@gmail.com

### Figueroa, Fernando

**Energy**  
Chile  
far.figueroa@gmail.com

### Figueroa, Verónica

**Cognitive neuroscience**  
Germany  
vfigueroag@gmail.com

### Flores, Catherine Ximena

**Education**  
Australia  
catherine\_flores\_2002@yahoo.com

### Fosu, Augustin

**Social Sciences**  
Helsinki, Finland  
fosu@wider.unu.edu

### Francesc Pedró

**Social Sciences**  
Paris, France  
f.pedro@unesco.org

### Fredes Muñoz, Gloria

**Education**  
Spain  
gloria.fredes@estudiants.urv.cat

### Fuentealba, María Olga

**Psicología de la Educación**  
Spain  
molgafuentealba@gmail.com

### Fuentealba, Mariaolga

**Psicología de la Educación**  
Spain  
mariaolgafo@gmail.com

### Fuentes Bustos, María Ignacia

**Molecular Plant Physiology**  
Germany  
bustos@mpimp-golm.mpg.de

## G

### Gajardo Saavedra, Leonardo Jorge

**Urban, Economy**  
Chile  
helea\_gasa@hotmail.com

### Galdames, Ximena

**Education -Early childhood**  
United Kingdom  
xgaldamesc@gmail.com

### García, Sebastián

**Life Sciences**  
Germany  
sebagt@gmail.com

### Garreton, Matías

**Urban Planning**  
France  
m.garreton@encuentros2012.org

### Gilles Boeuf

**Paris, France**  
gilles.boeuf@obs-banyuls.fr  
Exact and Natural Sciences

## **Godoy, Pablo**

**Parasitology, Veterinary Sciences**  
Canada  
pgodoyr@gmail.com

## **Gómez, Susana**

**Life sciences**  
France  
susana.gomez@inserm.fr

## **González, Álvaro**

**Education**  
United Kingdom  
alvarogonzaleztorres@gmail.com

## **González, Paz**

**Social sciences**  
Spain  
pazfernanda@gmail.com

## **Gregory Lemkine**

**Exact and Natural Sciences**  
Paris, France  
lemkine@watchfrog.fr

## **Guadalupe Medina, Víctor Gabriel**

**Industrial Biotechnology**  
The Netherlands  
v.g.guadalupe@medina@tudelft.nl

## **Guerra, Paulina**

**Encuentros 2012**  
Paris, France  
p.guerra@encuentros2012.org

# H

## **Hamad, Saddam**

**Political Science**  
political\_dream@yahoo.com

## **Henríquez Barrera, Bruno Patricio**

**Architecture**  
Spain  
bhb.arq@gmail.com

## **Hermann, Carla**

**Physics**  
France  
carlita.mica@gmail.com

## **Hernández, Cristián**

**Biotechnology**  
Chile  
c.hernandez@encuentros2012.org

## **Hernández, Gabriel Andrés**

**Education**  
United Kingdom  
gabrielmartrou@gmail.com

## **Hernández, Marcela**

**Health sciences-dentistry**  
Chile  
mhernandezrios@gmail.com

## **Hernández, Matías**

**Life Sciences**  
Germany  
mhernan@gwdg.de

## **Hernández, Myriam**

**Information and Communication Science**  
France  
myriampazhernandez@yahoo.fr

## **Hervé, Luis Pablo**

**Veterinary Epidemiology**  
Chile  
lp.herve@encuentros2011.org

## **Herve, Mauricio**

**Political Sciences**  
Chile  
mauricio.herve@gmail.com

## **Hidalgo, Jorge Luis**

**Biotechnology**  
Chile  
j.hidalgo@encuentros2012.org

## **Hontavilla, Juan Pablo**

**Media**  
Chile  
jp.hontavilla@encuentros2012.org

## **Inostroza, María Jesús**

**Applied Linguistics**  
Chile  
minostroza1@sheffield.ac.uk

## **Irles, Paula**

**Life Sciences**  
Spain  
paula.irles@ibe.upf-csic.es

## **Isla Monsalve, Pablo**

**Social Sciences**  
The Netherlands  
paismo67@gmail.com

## **J**

## **Jafar, Yasin Hussien**

**Teacher in Middle School**  
yasinalhamdany@yahoo.com

## **Jaimovich, Dany**

**Economics**  
Germany  
jaimovich@econ.uni-frankfurt.de

## **Jean-Pierre Changeaux**

**Paris, France**  
changeux@noos.fr  
Exact and Natural Sciences

## **Jofré, Ximena**

**Child Forensic Psychology**  
United Kingdom  
ximejofre@gmail.com

## **Jorquera, Gonzalo**

**Life Sciences**  
Chile  
gJORQUERA.olave@gmail.com

## **Asenjo, Juan**

**Exact and Natural Sciences**  
Chile  
juasenjo@ing.uchile.cl

## **K**

## **Kausel, Gudrun**

**Life Science**  
Chile  
gkausel@uach.cl

## **L**

## **Labra López, Raúl Abdías**

**Professor of History**  
Chile  
raul.labra@gmail.com

## **Lafferte, Dario**

**Renewable Energy**  
Germany  
d.lafferte@encuentros2012.org

## **Lambert, Catherine**

**Life sciences**  
France  
c.lambert@encuentros2012.org

## **Landabur, Rodrigo**

**Estudiante Máster en Psicología Forense**  
Spain  
r.landabur@gmail.com

## **Lanuza, Felipe**

**Architecture**  
United Kingdom  
lanuzarq@gmail.com

## **Lara Kevelier, Ysaías**

**Environment Preservation**  
Dominican Republic  
oppacma@gmail.com

## **Larraín, Luis**

**International Affairs**  
France  
lalarrain@gmail.com

## **Lassale, Camille**

**Nutritional Epidemiology**  
France  
c.lassale@uren.smbh.univ-paris13.fr

## **Latorre, Camila**

**Eventos**  
Chile  
camilatorre21@gmail.com

## **Leal, Paula Alejandra**

**Education**  
United Kingdom  
paulileal@yahoo.com

**Lee, Ivonne**

**Genética y Acuicultura**  
Spain  
ivodani@gmail.com

**Lehmann, Claudia Sofía**

**Engineerin/Physics**  
Portugal  
prismas13@hotmail.com

**Litvak, Simon**

**Biochemistry, Virology**  
France  
simon.litvak@reger.u-bordeaux2.fr

**López, Marcelo Noel**

**Economy, Education**  
Spain  
m.noel@encuentros2012.org

**Leal, Paula Alejandra**

**Education**  
United Kingdom  
paulileal@yahoo.com

**Lee, Ivonne**

**Genetica y Acuicultura**  
Spain  
ivodani@gmail.com

**Lehmann, Claudia Sofía**

**Engineering/Physics**  
Portugal  
prismas13@hotmail.com

**Litvak, Simon**

**Biochemistry, Virology**  
France  
simon.litvak@reger.u-bordeaux2.fr

**López, Marcelo Noel**

**Economy, Education**  
Spain  
m.noel@encuentros2012.org

**Mahmood, Kanan Mohammed**

**Kirkuk University**  
Iraq  
kanan.mhmd@yahoo.com

**Mariano da Silva, Liliane Ferreira**

**Architecture**  
Brazil  
liliane@lognet.com.br

**Martínez, Francisco**

**Physics**  
France  
franciscoloud@gmail.com

**Martínez, Ximena Cecilia**

**Education**  
Canada  
xmartra@gmail.com

**Mella, Vanessa**

**Life sciences**  
France  
v.mella@encuentros2012.org

**Melo, Sebastián**

**New Media**  
United Kingdom  
sebastian.melo@gmail.com

**Menkash, Zainab Abdullah**

**Political Siences**  
zinab46@yahoo.com

**Menkash, Zainab Abdullah**

**Political Siences**  
zinab49@yahoo.com

**Menzel, Cristian**

**Chemistry**  
United Kingdom  
cristian.menzel@postgrad.manchester.ac.uk

**Michea, Paula**

**Immunology**  
France  
paula.michea@curie.fr

**Molina Camacho, Francisco**

**Social Sciences**  
Chile  
fmolinac@gmail.com

**M****Maestriperi, Nicolas**

**Social Sciences**  
France  
maestrip@univ-tlse2.fr

## **Molina, Matías**

**Neuropsychology**

France

matiasmolinadonoso@gmail.com

## **Monckeberg, Fernando**

**Exact and Natural Sciences**

Chile

## **Mores, María Eugenia**

**Social Sciences**

United States

maruja28@msn.com

## **Munizaga, Juan Antonio**

**Environmental Engineering**

Spain

jamunizaga@gmail.com

## **Muñoz, Christian**

**Engineering**

Spain

cmunoz@cimne.upc.edu

## **Olivares, René**

**Literature**

Germany

rene.olivares.j@gmail.com

## **Olivarí, Jocelyn**

**Economics of Entrepreneurship and Innovation**

The Netherlands

olivari@merit.unu.edu

## **Olmos Gormaz, Daniela Victoria**

**Architecture**

Spain

daniela.victoria.olmos.gormaz@gmail.com

## **Oroz, Gonzalo**

**Architecture**

Germany

g.oroz@encuentros2012.org

## **Oyanguren, Antonieta**

**Université Sorbonne Nouvelle**

Paris, France

antonieta.oyanguren@gmail.com

# N

## **Navarrete, María José**

**Veterinary**

Chile

mj.navarrete@encuentros2012.org

## **Niklitschek, Sebastian Andrés**

**Mathematics**

France

sebastian.niklitschek-soto@inria.fr

## **Niklitschek, Tomás Andrés**

**Life Science - Business**

United Kingdom

tniklitschek@gmail.com

# O

## **Ocampos, Jessica**

**Biotechnology and Chemical Engineering**

United Kingdom

jaocampos@gmail.com

# P

## **Paris, Pilar**

**Management and Organisational Dynamics**

United Kingdom

pparis@uc.cl

## **Parraguez Ruiz, Pedro**

**Engineering**

Denmark

ppru@dtu.dk

## **Patricio Felmer**

**Exact and Natural Sciences**

Chile

pfelmer@laima.dim.uchile.cl

## **Pavlovic, María José**

**Visual Anthropology**

United Kingdom

jose.pavlovic@gmail.com

## **Pérez Morgado, Paula**

**Social Sciences**  
United Kingdom  
paulaperez@gmail.com

## **Pinto, Carolina**

**Social Sciences**  
France  
caropintob@gmail.com

## **Pino, Natalia**

**Education**  
France  
n.pino@encuentros2012.org

## **Pinto, Pamela**

**Nutricion**  
Chile  
pintopamela726@gmail.com

## **Plaza, Andrés Eduardo**

**Plant Sciences**  
United Kingdom  
ap677@cam.ac.uk

## **Pollack, Molly**

**ChileGlobal**  
Chile  
mpollack@imagendechile.cl

## **Ponton, María Elena**

**Education**  
United Kingdom  
mariaelenaponton@gmail.com

## **Raphael, Cloux Fontes**

**Social Sciences, Political Sciences**  
Brazil  
raphaelcloux2@yahoo.com.br

## **Reczuch, Adam**

**Economy**  
Poland  
adam.reczuch@kronn.pl

## **Rocha, René Antonio**

**Life Sciences**  
Spain  
r.rocha@encuentros2012.org

## **Rodríguez, Natalia**

**Life Sciences**  
Chile  
ns.rmuxica@gmail.com

## **Rojas, Felipe**

**Architecture**  
Chile  
unidaddeviviendasm@gmail.com

## **Chamy, Rolando**

**Exact and Natural Sciences**  
Chile  
rchamy@ucv.cl

## **Roseblatt, Mario**

**Fundación Ciencia & Vida**  
Chile

# **R**

## **Fischer, Rainer**

**Exact and Natural Sciences**  
Aachen, Germany  
rainer.fischer@ime.fraunhofer.de

## **Ramírez González, Alicia Cecilia**

**Information Science**  
United Kingdom  
uczcacr@ucl.ac.uk

## **Ramiro, Víctor**

**Computer**  
France  
victor.ramiro@isae.fr

# **S**

## **Saavedra, Leopoldo**

**Architecture**  
Germany  
saavedra\_leonardo@yahoo.com

## **Sáez, Alberto Felipe**

**Biotechnology**  
Spain  
asaez2004@gmail.com

## **Salas Bravo, Pablo**

**Economy, Engineering, Energy**  
United Kingdom  
pas80@cam.ac.uk

**Salgado, Eduardo**

**Life Sciences**  
Germany  
eduardo.salgado@med.uni-heidelberg.de

**Salgado, Mauricio**

**Social Sciences**  
Spain  
mausalgado@gmail.com

**Salih, Muhannad Bunyan**

**Teaching in Civil Law**  
m.law34@yahoo.com

**Sánchez, Alejandra**

**Education**  
Chile  
a.sanchez@encuentros2012.org

**Sandoval, María José**

**Educational Psychology**  
United Kingdom  
sandovalmj@gmail.com

**Sandoval, Pamela Y.**

**Life Sciences**  
Switzerland  
pamela.sandoval@izb.unibe.ch

**Sandoval, Vicente**

**Development Planning**  
United Kingdom  
v.sandoval@encuentros2012.org

**Saskia Sassen**

**Social Sciences**  
New York, United States  
sjs2@columbia.edu

**Schlageter, Andres**

**Animal Welfare**  
The Netherlands  
andres.schlagetertello@wur.nl

**Schobin, Janosch**

**Sociology**  
Germany  
janosch.schobin@his-online.de

**Seguin, Bernard**

**Exact and Natural Sciences**  
Paris, France  
bernard.seguin@avignon.inra.fr

**Serón, Javier**

**Industrial Engineering**  
javier.seron@alumnos.uach.cl

**Serrano, Antonio E.**

**Biotechnology**  
Chile  
antonio.e.serrano@gmail.com

**Shayal, Azeez Jebur**

**Political Sciences**  
azizshaeal@yahoo.com

**Soto, Felipe**

**Mental Health**  
Spain  
felipegno@yahoo.com

**Spoerer, Matilde**

**Political Sciences**  
France  
mspoerer@yahoo.fr

**Stephan Klasen**

**Social Sciences**  
Göttingen, Germany  
sklasen@uni-goettingen.de

**T****Tabali, Pía**

**English Language**  
United Kingdom  
pilitacaroline@hotmail.com

**Tapia Cerda, Rodrigo Javier**

**Urban Studies**  
Spain  
rjtapiac@gmail.com

**Tomic, Blas**

**Fundación Imagen de Chile**  
Chile

**Troncoso, Paulina Alejandra**

**Astrophysics**  
Italy  
troncoso@oa-roma.inaf.it

## U

### Urrea Lioi, Rodrigo

**Economy and Public Policies**  
France  
rodrigo.urrealioi@gmail.com

### Urrejola, Elías

**Photovoltaics**  
Germany  
urrejola.elias@gmail.com

## V

### Valderrama, Lorena

**History of Science and Scientific Communication**  
Spain  
lolo.valderrama@gmail.com

### Valdes Thompson, Nataly Elizabeth

**Social Sciences**  
United Kingdom  
natalyvath@gmail.com

### Valenzuela, Angélica

**Biotechnology**  
Chile  
angelicavalenzuelaavila@gmail.com

### Vargas, Pablo

**Life Sciences**  
France  
pablo.vargas@curie.fr

### Vega Riquelme, Carmen Paulina

**Glaciochemistry**  
Chile  
carmen.vega@geo.uu.se

### Vega Zuniga, Tomás

**Neuroscience**  
Germany  
bugarde@gmail.com

### Velásquez, Francisco Isaías

**Education**  
Portugal  
francisco\_velasquez\_semper@yahoo.com

### Vera Espinoza, Marcia Alejandra

**Refugee Studies**  
United Kingdom  
marcia.vera@sheffield.ac.uk

### Verdejo, Valentina

**Life Sciences**  
France  
valentina.verdejo-parada@etud.univ-montp2.fr

### Verdugo Ricardo

**Veterinary**  
USA  
r.verdugo@encuentros2012.org

### Vermeren, Patrice

**Universidad de París VIII**  
Paris, France

### Villacorta, Aliro José

**Biotechnology**  
Italy  
ajvillacorta@gmail.com

### Villalobos, Carlos

**Economy**  
Germany  
c.villalobos@encuentros2012.org

### Villar-Muñoz, Lucía

**Marine Geosciences**  
Germany  
lvillar@geomar.de

### Villavicencio, Camila

**Biology**  
Germany  
camilavillavi@gmail.com

# W

## Wains, Waqar Ahmed

**Communication**

Pakistan

waqarahmed\_786@hotmail.com

# Y

## Yaseen, Nozad Ahmed

**Kirkuk**

dr.shwany@yahoo.com

## Yuseff, María-Isabel

**Life Sciences**

France

miyuseff@curie.fr

# Z

## Zapata, Alejandro

**Economy**

Spain

fmliazapatalee@hotmail.com

## Zuniga Barra, Álvaro Andrés

**Political Sciences**

Italy

Alvaroandres@libero.it

## Zuñiga, Raúl

**Engineering**

Germany

zun@biba.uni-bremen.de

# Conference Angels

Thank you to our modern-day patrons for supporting this authentic, inspirational and fascinating grassroots movement:

- Alejandro Olave, Chile
- Ana María Lennon, France
- Andres Plaza, United Kingdom
- Arturo Yudelevich, Chile
- Bernardita Kleinsteuber, Chile
- Catherine Flores, Chile
- Cesar Hidalgo, USA
- Danny Lobos, Chile
- Eduardo Villablanca, USA
- Francisca Gomez, Chile
- Fundación Ciencia & Vida, Chile
- Gabriela Repetto, Chile
- Gudrun Kausel, Chile
- Isabel Valdes, USA
- Ivan Dimov, USA
- Jaime De Calisto, USA
- Jonathan Hermosilla, Chile
- Jose Villa Riffo, Chile
- Karl Weinacker, Chile
- Loreto Araya, Chile
- Luis Constandil, Chile
- Marco Cacciuttolo, USA
- Marco Dazarola, Chile
- Maria Paz Dominguez, USA
- Maria Rosa Bono, Chile
- Mary Rodriguez, Chile
- Matias Hernandez, Germany
- Mauricio Baez, Chile
- Nathalie Levy, Chile
- Nicolas Loira, Chile
- Patricio Mendoza, USA
- Roberto Brücher, Chile
- Rodolfo Briones, Chile
- Rodrigo Nosedo, USA
- Rosemarie Sutter
- Simon Litvak, France
- Tomas Niklitschek, United Kingdom
- Victor Medina, Netherlands
- Yuly Fuentes-Medel, USA
- ZentyneI Ltda, Chile

Published by El Mercurio newspaper, June 13th

**La meta es recaudar US\$7.000** en 14 días. Las donaciones pueden ser por cualquier monto.

Encuentros 2012:

## Conferencia científica busca apoyo en “ángeles”

Encuentros, una conferencia que desde hace siete años reúne y fomenta la creación de redes entre estudiantes chilenos de posgrado, residentes tanto en Chile como en el extranjero, acaba de lanzar una campaña buscando “ángeles” que ayuden a financiar la conferencia que se realiza en julio en París ([www.encuentros2012.org](http://www.encuentros2012.org)). La meta es recaudar US\$7.000 que no se ha logrado reunir a través de auspicios. Quienes donen US\$50 o más recibirán diversos reconocimientos dependiendo del monto. Para contribuir ir a: <http://bit.ly/MxKr97>







# Program at a glance

Time		Wednesday - July 04th		
<b>Encuentros Amphitheater</b>				
13.00 - 15.15	Registration			
15.00 - 15.40	Avant-premiere: Documentary Encuentros Berkley 2011 (Optional)			
15.40 - 16.00	Welcome speech by Jorge Edwards, Ambassador of Chile in France			
16.00 - 16.45	<b>Keynote Lecture: Bernard Seguin:</b> Climate Change and Viticulture			
16.45 - 17.15	Fundación Imagen País - Blas Tomic			
17.15 - 17.30	Short Break			
17.30 - 20.00	Encuentros Evening: A special open session where outstanding guests are engaged in an insightful discussion on current affairs, politics and culture			
Time		Thursday - July 05th		
		<b>Economy, Sociology and Public Policies</b> Blue - Auditorium	<b>Architecture, Urban Studies and Geography</b> Red - Auditorium	
09.00 - 09.15	Lorenzo Cerda		Marcia Vera	
09.15 - 09.30	Francisco Molina		Camila Cociña	
09.30 - 09.45	Javier Bronfman & María Floro		Felipe Lanuza	
09.45 - 10.30	Augustin Fosu		Adrian Atkinson	
10.30 - 11.00	<b>Coffee break + Photo session</b>			
		<b>Natural Sciences, Renewable Energies and Environment</b> Blue - Auditorium	<b>Education and Communication</b> Red - Auditorium	<b>Information Technologies, Engineering and Mathematics</b> White - Auditorium
11.00 - 11.15	Juan Águila-Coghlan		Ximena Galdames	Pedro Parraguez
11.15 - 11.30	Enrique Cabrera		Valeria Cabello	Jorge Clarke
11.30 - 11.45	América Paz Durán		Álvaro González	José Brito
11.45 - 12.00	Francisco de la Barrera		Catherine Flores	To be Announced
12.00 - 12.45	Gilles Boeuf		Francesc Pedró	Patricio Felmer
12.45 - 14.15	Thematic Lunch			
<b>Encuentros Amphitheater</b>				
14.15 - 15.15	<b>Keynote Lecture: Saskia Sassen:</b> EXPULSIONS: A category for our Age			
15.15 - 16.00	<b>Special Session: Part 1 - Brain Gain:</b> Return of skill and human capital (Erasmus Mundus Student & Alumni Association) - (Molly Pollack, María José Navarrete, Patrice Vermeren, Mario Roseblatt)			
16.00 - 16.30	<b>Coffee break</b>			
16.30 - 18.15	<b>Special Session: Part 2 - Brain Gain:</b> Return of skill and human capital (Erasmus Mundus Student & Alumni Association) - (Molly Pollack, María José Navarrete, Patrice Vermeren, Mario Roseblatt)			
18.15 - 19.45	Poster session + Cocktail			
20.30 - 21.45	Friendly French Dinner			
Time		Friday - July 06th		
		<b>Natural Sciences, Renewable Energies and Environment</b> Blue - Auditorium	<b>Education and Communication</b> Red - Auditorium	<b>Architecture, Urban Studies and Geography</b> White - Auditorium
09.00 - 09.15	Nicolas Maestriperi		Ximena Martínez	Rodrigo Tapia
09.15 - 09.30	Lucía Villar-Muñoz		Amaranta Alfaro	Bernardita Devilat
09.30 - 09.45	Pablo Salas		Rocío Rueda	Vicente Sandoval
09.45 - 10.30	Gregory Lemkine		David Buckingham	Marie-Hélène Massot
10.30 - 11.00	<b>Coffee break</b>			
		<b>Medical Sciences and Life Sciences</b> Blue - Auditorium	<b>Economy, Sociology and Public Policies</b> Red - Auditorium	<b>Interdisciplinary and Applied Sciences</b> White - Auditorium
11.00 - 11.15	Luis Córdova		Mayra Feddersen	Jessica Ocampos
11.15 - 11.30	Felipe Soto		Rodrigo Urrea	Francisco Rossier-Miranda
11.30 - 11.45	Pablo Godoy		Paola Bordon	Victor Guadalupe
11.45 - 12.00	Fernando Monckeberg		Dany Jaimovich	Juan Asenjo
12.00 - 12.15	Jean-Pierre Changeaux		Stephan Klasen	Rolando Chamy
12.15 - 12.45	Thematic Lunch			
<b>Encuentros Amphitheater</b>				
14.15 - 15.15	<b>Keynote Lecture: Rainer Fischer:</b> Innovation-driven convergence of white, green, yellow and red biotechnology			
15.15 - 16.00	<b>Special Session: Part 1 - Science and Entrepreneurship</b> - (Pablo Valenzuela, Rainer Fischer, Luis Pablo Hervé)			
16.00 - 16.30	<b>Coffee break</b>			
16.30 - 18.15	<b>Special Session: Part 2 - Science and Entrepreneurship</b> - (Pablo Valenzuela, Rainer Fischer, Luis Pablo Hervé)			
18.15 - 18.45	<b>Coffee break</b>			
18.45 - 20.00	Closing remarks and Encuentros Awards			
20.30 - 23.30	Special Reception at Chilean Embassy			
Time		Saturday - July 07th		
10.00 - 12.00	City Tour (Optional)			