



Bilbao Advanced Courses
on Biophysics 2013

Tuesday, 2 of July

9:00-9:30 Introduction- Dan Minor/Alvaro Villarroel

9:30-10:30 Game – ‘Sabes o no lo sabes’

10:30-11:00 Coffee break

11:00-12:30 Dan Minor - daniel.minor [at] ucsf.edu

Cardiovascular Research Institute, University of California San Francisco, USA

Structural investigation of voltage-gated ion channel function and regulation

<http://www.cvri.ucsf.edu/~dminor/about/minor.html>

13:00-14:00 Lunch at Deusto University

<http://goo.gl/maps/GL8ok>

14:00-15:30 Pierre-Jean Corringer - pjcorrin [at] pasteur.fr

Institut Pasteur, Groupe Récepteurs-Canaux, Paris, FRANCE

Allosteric transition of pentameric ligand-gated ion channel: insights from bacterial homologs

<http://www.pasteur.fr/ip/easysite/pasteur/en/research/scientific-departments/neuroscience/units-and-groups/channel-receptors/index>

15:30-17:00 Mounir Tarek - mtarek [at] srsmc.uhp-nancy.fr

Equipe de Chimie et Biochimie Théoriques, UMR Synthèse et Réactivité de Systèmes Moléculaires Complexes, Centre National de la Recherche Scientifique Université de Lorraine, Nancy, FRANCE

Activation and modulation of voltage-gated cation channels from Molecular Dynamics simulations

<http://www.srsmc.uhp-nancy.fr/spip/?Tarek-Mounir>

17:00-17:30 - Coffee break



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17:30-19:00 Andrew Plested - [plested \[at\] fmp-berlin.de](mailto:plested@fmp-berlin.de)

Liebnitz Institute for Molecular Pharmacology, Max Debrück Center, Berlin,
GERMANY

***Glutamate Receptors Rock! Mechanisms of Activation and
Desensitization***

<http://www.fmp-berlin.info/research/molecular-physiology-and-cell-biology/research-groups/plested/mnb0.html>

19:00-19:30 Olaf Scheel - www.cytocentrics.com

Automated ion channel recordings and in silico modeling

20:00 Tapas tour Bilbao Old town (Casco Viejo de Bilbao), sponsored by
Fundación Biofísica Bizkaia.

<http://tourism.euskadi.net/x65-19215x/en/s12PortalWar/programasExperiencialesJSP/buscadorCapitalesMedida.jsp?lang=en>

http://en.wikipedia.org/wiki/Casco_Viejo



Wed 3 Jul

9:00-10:30 Thomas Grutter - grutter [at] bioorga.u-strasbg.fr

Laboratoire de Conception et Application de Molécules Bioactives, Equipe de Chimie et Neurobiologie Moléculaire, UMR 7199 CNRS/ Université de Strasbourg, FRANCE

illuminating the structure and function of P2X receptors

http://bioorga.u-strasbg.fr/grutter/grutter_team.html

10:30-11:00 – Coffee break

11:00-13:00 Mohamed Krier - Mohamed.Kreir [at] nanion.de

Nanion Technologies, Germany

Planar lipid bilayers and ion channels reconstitution

<http://www.nanion.de/company/about-nanion.html>

13:00-14:00 Lunch at Deusto University

14:00-15:30 Pau Gorostiza – pau [at] icrea.cat

Universidad de Barcelona ICREA, Barcelona, Spain

Modulation of neurotransmission using light-gated channels

http://www.ibecbarcelona.eu/component/option,com_jresearch/Itemid,73/id,39/task,show/view/member/

15:30-17:00 Vassily Bavro - v.bavro [at] bham.ac.uk

University of Birmingham, UK

Structural mass-spectrometry approaches for study of membrane proteins, using an example of potassium channel dynamics

<http://www.birmingham.ac.uk/staff/profiles/iandi/bavro-vassiliy.aspx>

17:00-17:30 Coffee break

17:30-19:00 Bring Your Own Channel (BYOC) recording session

19:00-21:00 Student data blitz (5 min per student)



Thurs 4 Jul

9:00-10:30 Henry Colecraft – hc2405 [at] columbia.edu

Depts. of Physiology and Cellular Biophysics, & Pharmacology Columbia
University New York, USA

Channel engineering

http://asp.cpmc.columbia.edu/pharm/pharmfac/profile_list.asp?ItemNumber=19

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10:30-11:00 - Coffee Break

11:00-12:30 Teresa Giraldez - tgiraldez [at] mac.com

Unidad de Investigación, Hospital Universitario N. S. Candelaria, Santa Cruz de
Tenerife, SPAIN

***Studying structural dynamics underlying activation of whole ion
channels at the membrane with patch-clamp fluorometry***

<http://giraldez.webs.ull.es/Welcome.html>

13:00-14:00 Lunch at Deusto University

14:00 -15:30 Frank Bosmans, frankbosmans [at] jhmi.edu

Department of Physiology, The Johns Hopkins University School of Medicine,
Baltimore, USA

Animal toxins as tools to investigate ion channel function

http://biolchem.bs.jhmi.edu/bcmb/Pages/faculty/faculty_detail.aspx?FID=691

General discussion, Closing remarks

Time to be announced: Guided tour to Guggenheim Museum

21:00 Farewell dinner, sponsored by Fundación Biofísica Bizkaia.



What to expect

Participants are selected on merit, with registration limited to a maximum of 30, allowing them to flourish in an optimal learning environment. Typically there are two 90-min sessions, followed by a 30-min open discussion. The Speakers and participants delve into an in-depth analysis of each Speaker's domain. The participants are expected to steer discussions toward a specific direction.

Time at the end of each day and during one entire afternoon is reserved for recreation and local sightseeing—a relaxing and enjoyable time that the Speakers and participants spend together. Speakers and participants have meals and are logged together, reinforcing opportunities for discussions.