

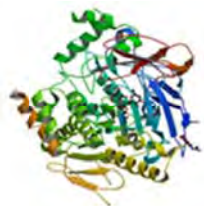
12th ChE

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12th International Meeting on Cholinesterases



PON6

Sixth International Conference on Paraoxonases

27 Sept-2 Oct 2015

Elche - Elx

(Alicante, Spain)



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MAIN SPONSORS

Visit-Elche. Ayuntamiento de Elche (*Elche Town Hall*)

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SUMMARY TIMING

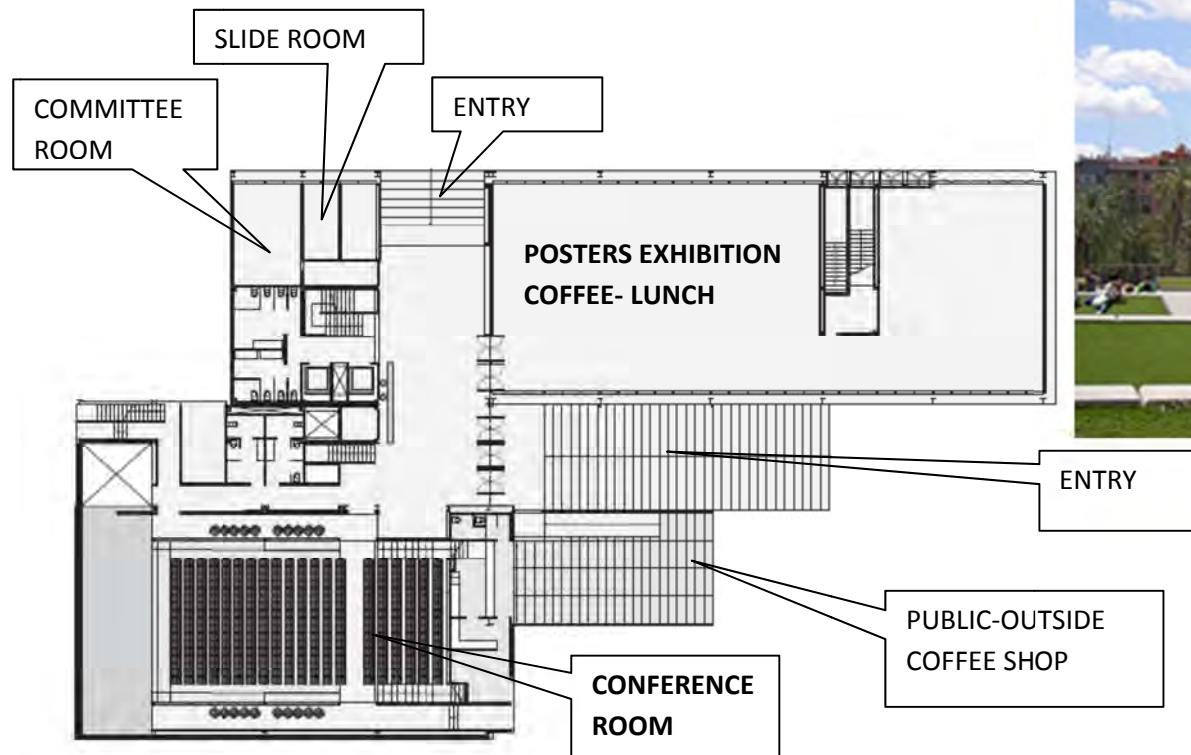
In this summary the time for coffees and lunches are considered but not showed.

The time of the session is the total time included long invited and short oral presentation

Time for showing the posters is scheduled during lunch and coffee breaks. All posters will be exposed during all the time of the meeting. Authors are expected to be present during the breaks of the same day of the corresponding oral sessions; those related with Friday sessions, during Thursday. Posters should be removed off on Thursday evening

SUNDAY 27	16:00	S0	OPENING OPENING SIMPOSIA Opening Lecture on Cholinesterases. The EMBO Keynote Lecture Opening Lecture on Paraoxonases
	19:00		WELCOME RECEPTION
MONDAY 28	08:00-12:35	S1	Structure and dynamics of cholinesterases (5x)
	12:35-19:25	S2	Interaction of ChE with Substrate , inhibitor and reactivators: implication in toxicity and therapy
TUESDAY 29	08:00-9:35	S2	Interaction of ChE (Cont.)
	09:35-10:30	S3	PON in Toxicity. Role in biotransformation and neuro protection
	11:00-16:00	S4	Bioscavengers against antiChEs: BuChE and other B-esterases role in detoxication and diagnosis
	16:00-19:10	S5	Chemical defense Paraoxonase-phosphotriesterase (A esterases) role in detoxication in human and biotechnology
WEDNESDAY 30	08:00-12:15	S6	Biological Functions of ChEs and related diseases
	12:30-22:00		EXCURSION TO ALICANTE AND LUNCH
THURSDAY 1	08:00-08:50	S6	Biological Functions of ChEs and related diseases (Cont)
	08:50-12:05	S7	Alzheimer disease
	12:05-13:05	S8	Discussion session: experimental versus clinical point of view
	14:15-17:25	S10	Paraoxonases: biological function and diseases: cardiovascular, inflammatory and other
	18:00		Poster remove
	19:30		PRE-GALA DINNER CONFERENCE: Biogenesis and Folding of AChE lecture DINNER
FRIDAY 2	8:30-11:40	S9	Enzymes and proteins other than ChEs interacting with OP: toxicity and biology
	11:40-12:50	S11	3D Session CLOSING SESSION
	12:50	S13	Closing Lecture on how is structure related to function Closing dissertations and Next Meetings
	13:45		END OF MEETING

CONGRESS VENUE



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**MAPS
IN LAST PAGES**

Congress Centre of Elche (Congress Centre "Ciutat d'Elx"),

Calle Filet de Fora, 1, 03203 **Elche** (Alicante, Spain)

The climate, good communications to Airport and proximity to centers of economic activity, make Elche ideal for holding conferences and business meetings enclave.

Congress Centre Ciutat d'Elx is located in an environment of great attraction [in the historic center of the city of Elche/Elx](http://www.visitelche.com/en/business-tourism/centro-de-congresos/)..

More information: <http://www.visitelche.com/en/business-tourism/centro-de-congresos/>

PROGRAM (ORAL SESSIONS)

16:00**WELCOME***by Meeting Organizers*

16:10

S00-0

S00. OPENING CONFERENCES. In Memoriam of Bhupendra P. Doctor.Chairs: *Patrick Masson (France/USA/Russia), Antonio Hernández (Spain).*

16:15

S00-1

The EMBO Keynote Lecture. (CHOLINESTERASE OPENING CONFERENCE)**MicroRNA-regulators of cholinergic signaling.***Hermona Soreq.- (Presenting Author: **Hermona Soreq**)*

17:15

S00-2

PARAOXONASE OPENING CONFERENCE

Paraoxonases 1, 2 and 3 - what are their functions?*C.E. Furlong, J. Marsillach, L.G. Costa.- (Presenting Author: **Clement Furlong**)*

18:15**Bhupendra P. Doctor***by Palmer Taylor*

19:00**WELCOME RECEPTION**

Monday, 28

8:00	S01	STRUCTURE AND DYNAMICS OF CHOLINESTERASES. <i>Chairs: Pascale Marchot (France), Israel Silman (Israel).</i>
8:05-8:25	S01-1	Acetylcholinesterase: 25 years since the 3D structure was solved – What have we learned? <i>Sussman, Joel L., Silman, Israel.</i> - (Presenting Author: Joel Sussman)
8:30-8:50	S01-2	Mechanistic considerations of reactivation and tissue disposition influencing oxime efficacies as antidotes and scavengers. <i>Palmer Taylor, Zoran Radić, K. Barry Sharpless.</i> - (Presenting Author: Palmer Taylor)
8:55-9:15	S01-3	Dynamic mapping of acetylcholinesterase for structural-dynamics based reactivator design. <i>Santoni G., de la Mora E., Colletier J.P., Jean L., Xu Y., Sussman J., Silman I., Baati R., Renard P.Y., Nachon F., Weik M.</i> - (Presenting Author: Martin Weik)
9:20-9:40	S01-4	Structures of acetylcholinesterase complexes with click chemistry inhibitors. <i>Yves Bourne, Palmer Taylor, Pascale Marchot.</i> - (Presenting Author: Yves Bourne)
9:45-10:05	S01-5	Genetic polymorphism of human butyrylcholinesterase: molecular modelling of structure, dynamics and catalytic activity of allelozymes. <i>Sofya Lushchekina, Hervé Delacour, Oksana Lockridge, Patrick Masson.</i> - (Presenting Author: Sofya Lushchekina)
10:10-10:30	S01-6	Families of polyproline peptides in butyrylcholinesterase and acetylcholinesterase tetramers. <i>Oksana Lockridge, Lawrence M. Schopfer.</i> - (Presenting Author: Oksana Lockridge)
10:35-11:05		COFFEE and POSTERS
11:05-11:15	S01-7	Recent neutron scattering results on acetylcholinesterase in the presence of different inhibitors, on its hydrostatic pressure-induced molten globule state and on the effect of osmotic pressure. <i>J. Peters, N. Martinez, M.Trovaslet, F.Nachon, P.Masson.</i> - (Presenting Author: Judith Peters)

11:20-11:30	S01-8	Butyrylcholinesterase activity in a Polish population. <i>Jacek Jasiecki, Joanna Jonca, Monika Zuk, Bartosz Wasag, Anna Szczoczarz, Krzysztof Lewandowski, Krzysztof Waleron, Piotr Skowron.</i> - (Presenting Author: Jacek Jasiecki)
11:35-11:45	S01-9	Variant butyrylcholinesterase phenotypes from Andhra Pradesh, India. <i>GR Sridhar, G Nirmala, Premrata S, Satyanarayana M.</i> - (Presenting Author: Gumpeny R Sridhar)
11:50-12:00	S01-10	Conformational changes of human AChE in solution upon reversible and covalent ligand binding revealed by small angle X-ray scattering. <i>Donald K. Blumenthal, Xiaolin Cheng, Palmer Taylor, Zoran Radić.</i> - (Presenting Author: Donald K. Blumenthal)
12:05-12:15	S01-11	Catching the reactivation reaction. <i>Anders Allgardsson, Lotta Berg, Christine Akfur, Franz Worek, Anna Linusson, Fredrik Ekström.</i> - (Presenting Author: Fredrik Ekström)
12:20-12:30	S01-12	AChE-S plays a role of deoxyribonuclease during apoptosis. <i>Aiying Du, Jing Xie, Kaijie Guo, Lei Yang, Yihan Wan, Qi OuYang, Xuejin Zhang, Xin Niu, Lu Lu Jun Wu, Xuejun Zhang.</i> - (Presenting Author: Xue Jun Zhang)

12:35	S02	INTERACTION OF ChE WITH SUBSTRATES, INHIBITORS AND REACTIVATORS: IMPLICATION IN TOXICITY AND THERAPY. Chairs: <i>Frank Worek (Germany); Terrone Rosenberry (USA).</i>
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12:40-13:00	S02-1	Structural studies on the complex of the photosensitizer methylene blue with acetylcholinesterase: relevance to photodynamic therapy, radiation damage and drug design. <i>Israel Silman, Mathilde M Triquigneaux, Linda Song, Orly Dym, Clifford Felder, Aviv Paz, Esther Roth, Marilyn Ehrenshaft, Valery L Shnyrov, Yacov Ashani, Yechun Xu, Leesa J Deterding, Ronald P Mason, Joel L Sussman, L Weiner.</i> - (Presenting Author: Israel Silman)
13:05-13:25	S02-2	Hopeahainol A is a reversible inhibitor at the acetylcholinesterase (AChE) peripheral site that inactivates AChE. <i>T.L. Rosenberry, P.K. Martin, A.J. Nix, J. Cheung, S.A. Wildman, S.A. Snyder, R.X. Tan.</i> - (Presenting Author: Terrone Rosenberry)

13:30-14:40**LUNCH and POSTERS**

14:40-15:00	S02-3	Catalytic organophosphorus compounds scavenging by acetylcholinesterase assisted with aldoximes. <i>Zrinka Kovarik, Nikolina Macek Hrvat, Suzana Žunec, Maja Katalinic, Palmer Taylor, Zoran Radić.</i> - (Presenting Author: Zrinka Kovarik)
15:05-15:25	S02-4	Oximes in organophosphate poisoning: 60 years of hope and despair. <i>Franz Worek, Horst Thiermann, Timo Wille.</i> - (Presenting Author: Franz Worek)
15:30-15:50	S02-5	Conformational rigidity of Drosophila cholinesterase allows for the prediction of combined effects in a particular double mutant. <i>Jure Stojan.</i> - (Presenting Author: Jure Stojan)
15:55-16:15	S02-6	Mechanisms of drug metabolism by cholinesterases and rational design of novel therapies. <i>Fang Zheng, Chang-Guo Zhan.</i> - (Presenting Author: Chang-Guo Zhan)
16:20-16:40	S02-7	Di- (not Tri!)fluoromethylketones as potent inhibitors of resistant mutant G119S Anopheles gambiae AChE. <i>Eugene Camerino, Dawn M. Wong, Fan Tong, Florian Körber, Aaron D. Gross, Rafique Islam, Elisabet Viayna, James M. Mutunga, Jianyong Li, Maxim M. Totrov, Jeffrey R. Bloomquist, Paul R. Carlier.</i> - (Presenting Author: Paul R Carlier)
16:45-17:15		COFFEE and POSTERS
17:15-17:35	S02-8	P-glycoprotein inhibition by Tariquidar: broad spectrum efficacy for the central action of nerve agent treatment. <i>Marloes J.A. Joosen, Peter Hesseling, Stefanie M. Vester, Steven D. Klaassen, Paul J. Lucassen, Herman P.M. van Helden.</i> - (Presenting Author: Marloes Joosen)
17:40-17:50	S02-9	Synthesis of new uncharged reactivators for cholinesterases inhibited by organophosphorus nerve agents. <i>Anissa Braïki, Julien Renou, Romain Mougeot, Zrinka Kovarik, Rachide Baati, Florian Nachon, Martin Weik, Ludovic Jean, Pierre-Yves Renard.</i> - (Presenting Author: Anissa Braïki)
17:55-18:05	S02-10	Zebrafish models for human acute organophosphorus poisoning. <i>Melissa Faria, Natalia Garcia-Reyero, Francesc Padros, Patrick J. Babin, David Sebastian, Jérôme Cachot, Eva Prats, Eduardo Rial, Anja Knoll-Gellida, Guilaine Mathieu, B. Lynn Escalon, Antonio Zorzano, Amadeu M.V.M Soares, Demetrio Raldúa.</i> - (Presenting Author: Demetrio Raldúa)

18:10-18:20	S02-11	Uncharged reactivators of OP-inhibited human cholinesterases. <i>Renou Julien, Warnault Pierre, Braïki Anissa, Gomez Catherine, Mercey Guillaume, Verdelet Tristan, Kliachyna Maria, De Sousa Julien, Baati Rachid, Touvrey-Loiodice Mélanie, Arboléas Mélanie, Guilhem Calas, Nachon Florian, Santoni Gianluca, Weik Martin, Jean Ludovic, Renard Pierre-Yves.</i> - (Presenting Author: Jean Ludovic)
18:25-18:35	S02-12	Insights on two in situ click chemistry reactions for the synthesis of AChE inhibitors. <i>Emilia Oueis, Cyril Ronco, Florian Nachon, Cyrille Sabot, Ludovic Jean, Pierre-Yves Renard.</i> - (Presenting Author: Pierre-Yves Renard)
18:40-18:50	S02-13	Efficacy of novel phenoxyalkyl pyridinium oximes for preventing death or brain damage caused by surrogates of sarin and VX. <i>Janice Chambers, Edward Meek, Howard Chambers.</i> - (Presenting Author: Janice Chambers)
18:55-19:05	S02-14	Discovery of cholinesterase inhibitors by pharmacophore-based virtual screening. <i>Satish N. Dighe, Girdhar Singh Deora, Benjamin P. Ross.</i> - (Presenting Author: Satish N. Dighe) B.P. Doctor Young Scientist Award
19:10-19:20	S02-15	A proposal for prophylaxis and treatments for acute organophosphate poisoning using the vertebrate model zebrafish. <i>Melissa Faria, Eva Prats, Amadeu M.V.M. Soares, Demetrio Raldúa.</i> - (Presenting Author: Melissa Faria)
19:25		<i>(To be Continued next day)</i>

Tuesday, 29

8:00	S02	Cont
8:05-8:15	S02-16	Catalytic activities of therapeutically promising mutants of butyrylcholinesterase against cocaine and its toxic metabolites. <i>Fang Zheng, Chang-Guo Zhan.</i> - (Presenting Author: Fang Zheng)
8:20-8:30	S02-17	Discovery of a new class of tetrahydroacridine hybrid reactivators of organophosphorus-inhibited human acetylcholinesterase. <i>Julien De Sousa, Yerri Jagadeesh, Gianluca Santoni, Martin Weik, Ludovic Jean, Pierre-Yves Renard, José Dias, Florian Nachon, Richard C. D. Brown, Rachid Baati.</i> - (Presenting Author: Rachid Baati)
8:35-8:45	S02-18	Efficiency of imidazolium based oximes in reactivation of organophosphorus compound-inhibited cholinesterases. <i>Maja Katalinic, Nikolina Macek Hrvac, Ante Milicevic, Dubravko Jelic, Ines Primožic, Srdanka Tomic, Zrinka Kovarik.</i> - (Presenting Author: Maja Katalinic). B.P. Doctor Young Scientist Award
8:50-9:00	S02-19	Vector control by small organic compounds to combat mosquito-borne infectious diseases. <i>Sofie Knutsson, Cecilia Engdahl, Fredrik Ekström, Luna Kamau, Anna Linusson.</i> - (Presenting Author: Sofie Knutsson)
9:05-9:15	S02-20	Synthesis and kinetic evaluation of quaternary and non-quaternary oximes as reactivators of acetylcholinesterase inhibited by organophosphorus toxicants. <i>Rahul Sharma, Kallol K Ghosh.</i> - (Presenting Author: Rahul Sharma). B.P. Doctor Young Scientist Award
9:20-9:30	S02-21	PCocSH: A plant-produced human butyrylcholinesterase variant for treatment of cocaine addiction-related diseases. <i>Katherine E Larrimore, R Player Kendle, Tameem Jamal, Kathryn Stefanko, Latha Kannan, Janet Neisewander, Yang Gao, Chang-Guo Zhan, Stephen Brimijoin, Tsafir S Mor.</i> - (Presenting Author: Tsafir S Mor)
9:35	S03	PON IN TOXICITY. ROLE IN BIOTRANSFORMATION AND NEURO PROTECTION. Chairs: <i>Lucio Costa (USA/Italy); Antonio Hernandez (Spain).</i>

9:40-10:00 S03-1 **PON1 as a determinant for biological effects associated with pesticide exposure in humans.** *Hernández AF, Lozano D, Gómez-Martín A, Gil F, Parrón T, Alarcón R, Requena MM, Lacasaña M.*- (Presenting Author: **Antonio F. Hernández**)

10:05-10:25 S03-2 **Paraoxonase-2 (PON2) in the CNS and its potential neuroprotective role.** *J. Garrick, T.B. Cole, C.E. Furlong, J. Marsillach, L.G. Costa.*- (Presenting Author: **Lucio G. Costa**)

10:30-11:00 **COFFEE and POSTERS**

11:00 S04 **BIOSCAVENGERS AGAINST ANTICHes: BuChE AND OTHER B-ESTERASES ROLE IN DETOXICATION AND DIAGNOSIS.** Chairs: *Patrick Masson (France/USA/Russia); Douglas Cerasoli (USA).*

11:05-11:25 S04-1 **Post-exposure huBuChE following percutaneous VX poisoning: guinea-pig studies.** *Helen Rice, Tom M Mann, John EH Tattersall, A Chris Green.*- (Presenting Author: **Helen Rice**)

11:30-11:50 S04-2 **Biochemical and structural study of a self-reactivating butyrylcholinesterase after V-type nerve agent inhibition.** *Xavier Brazzolotto, Marie-Thérèse Froment, Florian Gessay, Franz Worek, Frédéric Dorandeu, Florian Nachon.*- (Presenting Author: **Xavier Brazzolotto**)

11:55-12:15 S04-3 **Use of VR and V-analog compounds to probe the active site of atypical Butyrylcholinesterase from *Oryzias latipes*.** *Melanie G. Kirkpatrick, Richard E. Sweeney, Shane A. Kasten, Robert C. diTargiani, Douglas M. Cerasoli, Tamara C. Otto.*- (Presenting Author: **Tamara Otto**)

12:20-12:40 S04-4 **Proteomics characterization of biomarkers of organophosphorus exposure.** *Judit Marsillach, Edward Hsieh, Rebecca Richter, Stephanie Suzuki, Thomas Bukowski, Michael MacCoss, Andrew Hoofnagle, Clement Furlong.*- (Presenting Author: **Judit Marsillach**)

12:45-13:05 S04-5 **Novel hybrid small molecule scavengers for mitigating nerve agents toxicity.** *Amitai G., Chapman S., Gez R., Raveh L., Bar-Ner N., Ashkenazi N.*- (Presenting Author: **Gabi Amitai**)

13:10-13:30 S04-6 **Lipases as targets of organophosphorus toxicants and pharmaceuticals.** *John E. Casida, Daniel K. Nomura.*- (Presenting Author: **John E. Casida**)

13:35-14:45 **LUNCH and POSTERS**

14:45-14:55	S04-7	Erythrocytes as targeted carriers for nanoencapsulated butyrylcholinesterase. <i>C Pope, S Brimijoin, N Flynn, S Hartson, Y Li, R Koralege, K Poindexter, J Ramsey, A Ranjan, K Sahoo, C. Uchea, J Liu.</i> - (Presenting Author: Carey Pope)
15:00-15:10	S04-8	Development of an aerosolized recombinant human butyrylcholinesterase pretreatment to protect against toxicity from inhaled pesticides and nerve agents. <i>Yvonne Rosenberg, Palmer Taylor, Zoran Radić, Beth Laube, Lingjun Mao, Xiaoming Jiang, Segundo Hernandez-Abanto, Tom Snider, Robert Adams.</i> - (Presenting Author: Yvonne Rosenberg)
15:15-15:25	S04-9	Reactivation kinetic studies of bis-pyridinium mono-oximes against organophosphate poisoning: an <i>in-vitro</i> screening. <i>Arvind Kumar Sahu, Rahul Sharma, Bhanushree Gupta, Kallol K. Ghosh.</i> - (Presenting Author: Arvind Kumar Sahu)
15:30-15:40	S04-10	Huprine-based affinity resin to purify butyrylcholinesterase. <i>Emilie David, Cyril Ronco, Ludovic Jean, Xavier Brazzolotto, Florian Nachon, Pierre-Yves Renard.</i> - (Presenting Author: Emilie David)
15:45-15:55	S04-11	New approaches in monitoring biomarkers following human butyrylcholinesterase inhibition by organophosphorus compounds. <i>Melissa D. Carter; Leigh Ann Graham; Thomas P. Mathews; Darryl Johnson; Rudolph C. Johnson.</i> - (Presenting Author: Melissa D. Carter)

16:00 **S05** **CHEMICAL DEFENSE PARAOXONASE-PHOSPHOTRIESTERASE (A ESTERASES) ROLE IN DETOXICATION IN HUMAN AND BIOTECHNOLOGY.** Chairs: *Clement Furlong (USA); Joel Sussman (Israel).*

16:05-16:25	S05-1	Development of catalytic bioscavengers to protect against OP nerve agents. <i>Douglas M. Cerasoli, Catherine A. Hofstetter, Sandra DeBus, Sean M. Hodgins, Michael V. Boeri, Melanie G. Kirkpatrick, Tamara C. Otto, C. Linn Cadieux, Shane A. Kasten.</i> - (Presenting Author: Douglas Cerasoli)
16:30-16:50	S05-2	<i>In vitro</i> evaluation of the catalytic activity of PONs and PTES predicts the enzyme dose required for <i>in vivo</i> protection against organophosphate intoxication: verification of a concept. <i>Y. Ashani, M. Goldsmith, F. Worek, H.Leader, N, Agrawal, I, Silman, J.L.Sussman, D.S. Tawfik.</i> - (Presenting Author: Yacov Ashani)

16:55-17:25 **COFFEE and POSTERS**

17:25-17:45	S05-3	Engineering recombinant PON1s for increased catalytic efficiency of OP hydrolysis. <i>C.E. Furlong, T.R. Bukowski, S.M. Suzuki, J. Marsillach, R.J. Richter, L.G. Costa.</i> - (Presenting Author: Clement Furlong)
17:50-18:10	S05-4	A new post-intoxication treatment of paraoxon poisoning using an evolved PON1 variant and rGOT1. <i>Moshe Goldsmith, Yacov Ashani, David Mirelman, Dan S. Tawfik.</i> - (Presenting Author: Moshe Goldsmith)
18:15-18:35	S05-5	Mechanism and specificity of paraoxonase-1: OP therapeutic applications. <i>Thomas Magliery.</i> - (Presenting Author: Thomas J. Magliery)
18:40-18:50	S05-7	Thermostable phosphotriesterase-like lactonases as quorum quenching enzymes against <i>Pseudomonas aeruginosa</i> in a <i>Drosophila</i> infection model. <i>Elena Porzio, Davide Andrenacci, Luigi Mandrich, Giuseppe Manco.</i> - (Presenting Author: Elena Porzio)
18:55-19:05	S05-8	Assessing the stoichiometric efficacy of mammalian-expressed paraoxonase-1 variant I-F11 to afford protection against G-type nerve agents. <i>David G. Mata, Praveena Sabnekar, Cetara A. Watson, Peter E. Rezk, Nageswararao Chilukuri.</i> - (Presenting Author: Nageswararao Chilukuri)

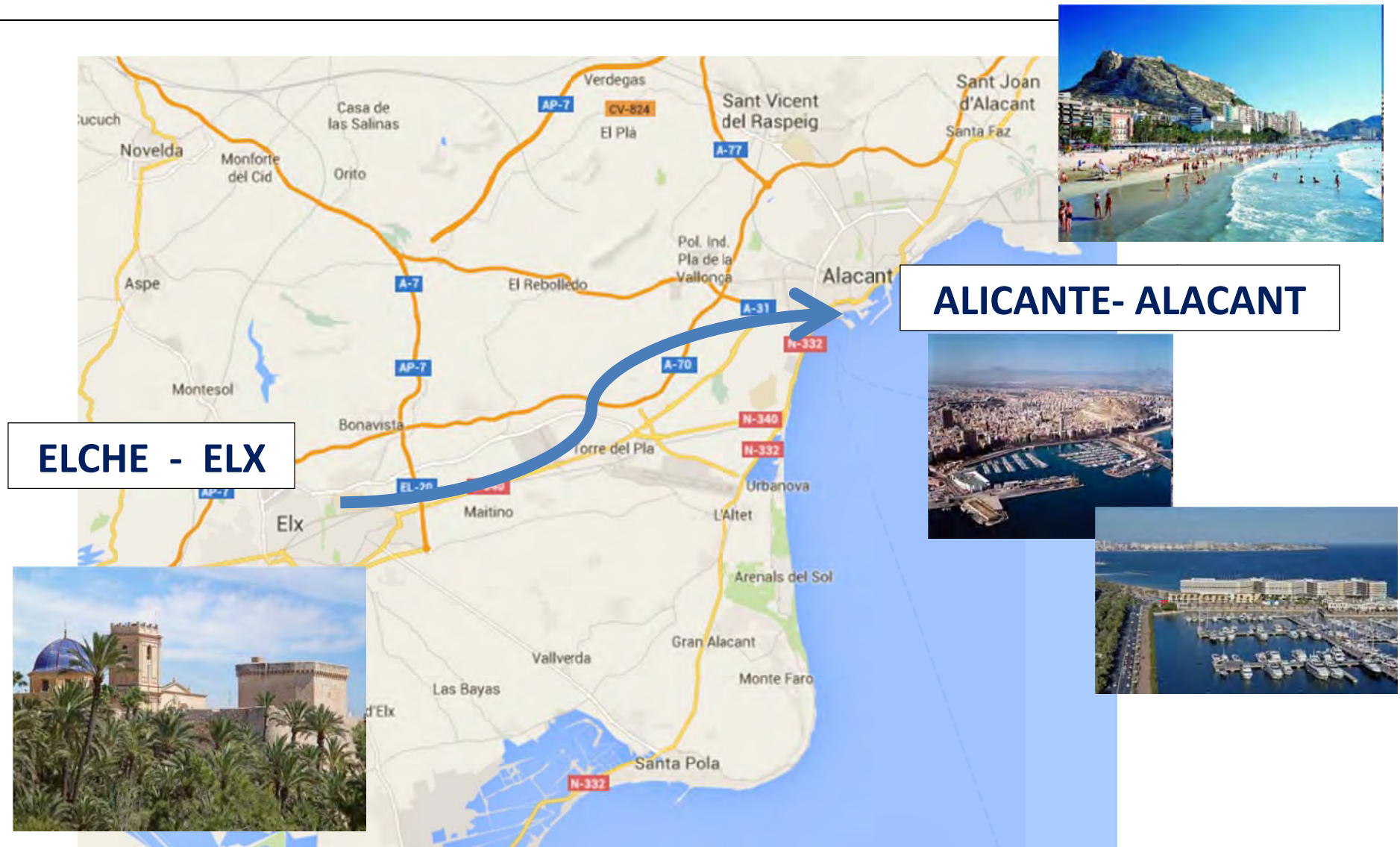
Wednesday, 30

8:00	S06	BIOLOGICAL FUNCTIONS OF ChEs AND RELATED DISEASES. Chairs: <i>Cecilio Vidal (Spain); Richard Rotundo (USA).</i>
8:05-8:25	S06-1	Cholinergic system and cell proliferation. <i>F.J. Campoy, C.J. Vidal, E. Muñoz-Delgado, M.F. Montenegro, J. Cabezas-Herrera, S. Nieto-Cerón.</i> - (Presenting Author: Francisco Javier Campoy)
8:30-8:50	S06-2	Roles of collagen Q in MuSK antibody-positive myasthenia gravis. <i>Kinji Ohno.</i> - (Presenting Author: Kinji Ohno)
8:55-9:15	S06-3	Emerging roles of BChE in obesity, aggression, lifespan, and Alzheimer's disease. <i>V.P. Chen, Y. Gao, L.-Y. Geng, S. Brimijoin.</i> - (Presenting Author: Stephen Brimijoin)
9:20-9:40	S06-4	A bioactive peptide derived from acetylcholinesterase: significance in development, neurodegeneration and cancer. <i>Susan Greenfield.</i> - (Presenting Author: Susan Greenfield)
9:45-10:05	S06-5	Hydrolysis of acetylcholine by cholinesterases <i>in vivo</i>: who-where-when. <i>Krejci Eric.</i> - (Presenting Author: Eric Krejci)
10:10-10:40		COFFEE and POSTERS
10:40-11:00	S06-6	Transcriptional regulation of acetylcholinesterase in different cells. <i>Karl W.K. TSIM, Wilson K.W. LUK, Cathy W. BI, Ping YAO, Kitty K.M. LAU, Miranda L. XU, Di CUI, Tina T.X. DONG.</i> - (Presenting Author: Karl Tsim)
11:05-11:25	S06-7	Checks and balances of cholinergic signaling in health and disease. <i>Hermona Soreq.</i> - (Presenting Author: Hermona Soreq)
11:30-11:40	S06-8	Synthesis of fluorescent probes for imaging of acetylcholinesterase. <i>Sovy Chao, Jacqueline Leroy, Jean Maurice Petit, Ludovic Jean, Eric Krejci, Pierre-Yves Renard.</i> - (Presenting Author: Sovy Chao)
11:45-11:55	S06-9	Labeling cholinesterases using semiconductor nanocrystals for biomedical applications. <i>Nir Waiskopf, Hermona Soreq, Uri Banin.</i> - (Presenting Author: Nir Waiskopf) B.P. Doctor Young Scientist Award
12:00-12:10	S06-10	Butyrylcholinesterase over-expression increased lipid accumulation in HepG2 cells. <i>Muslum Gok, Dilara N. Zeybek, Ebru Bodur.</i> - (Presenting Author: Muslum Gok)

12:30-22:00

EXCURSION TO ALICANTE CITY

Lunch -Visit to the Castle and Free Time



Thursday 1

8:00	S06	(Cont.)
8:05-8:15	S06-12	Characterization of cholinesterases in mouse heart. <i>Dominika Dingová, Matej Kucera, Zuzana Kiliánová, Eric Krejci, Anna Hrabovská.</i> - (Presenting Author: Anna Hrabovska)
8:20-8:30	S06-13	A review of environmental contaminants that affect AChE activity. <i>Hualing Fu, Sherry Li Xu, Haiming Xu, Heidi Qunhui Xie, Bin Zhao.</i> - (Presenting Author: Sherry Li Xu)
8:35-8:45	S06-14	A potential role of microRNA in alterations of AChE expression caused by dioxin. <i>Tuan Xu, Heidi Qunhui Xie, Rui Sha, Zhiling Guo, Bin Zhao.</i> - (Presenting Author: Heidi Qunhui Xie)
8:50	S07	ALZHEIMER DISEASE. Chairs: <i>Javier Sáez-Valero (Spain); Anthony J. Turner (United Kingdom).</i>
8:55-9:15	S07-1	Alzheimer's disease: current therapy, etiology and second generation therapies. <i>David H. Small.</i> - (Presenting Author: David Small)
9:20-9:40	S07-2	AChE and the amyloid precursor protein (APP) – cross-talk in Alzheimer's Disease. <i>N.N. Nalivaeva, A.J. Turner.</i> - (Presenting Author: Natalia Nalivaeva)
9:45-10:05	S07-3	Cross-talk of acetylcholinesterase with presenilin-1. <i>María-Salud García-Ayllón, María-Letizia Campanari, Karl Tsim, Cecilio J. Vidal, Javier Sáez-Valero.</i> - (Presenting Author: María-Salud García-Ayllón)
10:10-10:40		COFFEE and POSTERS
10:40-11:00	S07-4	Alzheimer's disease: current treatment options and future developments. <i>Jordi Alom.</i> - (Presenting Author: Jordi Alom)

11:05-11:15	S07-5	Deposition of fibrillar β-Amyloid is reduced in a butyrylcholinesterase-knockout Alzheimer mouse model. <i>S. Darvesh, G.A. Reid.</i> - (Presenting Author: Sultan Darvesh)
11:20-11:30	S07-6	Synthesis of multi-target directed ligands against Alzheimer's disease : acetylcholinesterase inhibitor associated to kinases inhibitor. <i>Oukoloff Killian, Jean Ludovic, Coquelle Nicolas, Colletier Jacques-Philippe, Routier Sylvain, Renard Pierre-Yves.</i> - (Presenting Author: Killian Oukoloff)
11:35-11:45	S07-7	Acetylcholinesterase interacts with prion protein and displays altered levels in prion infections. <i>Joan Torrent, Alba Vilchez-Acosta, Diego Muñoz-Torrero, Marie Trovaslet, Florian Nachon, Arnaud Chatonnet, Isabelle Acquatella-Tran Van Ba, Ronan Le Goffic, Laetitia Herzog, Vincent Béringue, Human Rezaei.</i> - (Presenting Author: Joan Torrent)
11:50-12:00	S07-9	The effect of butyrylcholinesterase on cerebral glucose metabolism in the 5XFAD mouse model of Alzheimer's disease. <i>D.R. DeBay, G.A. Reid, I.R. MacDonald, M.Cash, G. Mawko, S. Burrell, E. Martin, C.V. Bowen, S. Darvesh.</i> - (Presenting Author: Drew R. DeBay) B.P. Doctor Young Scientist Award

12:05	S08	EXPERIMENTAL VERSUS CLINICAL POINT OF VIEW. Chairs: <i>Doug Cerasoli (USA).</i>
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12:10-12:30	S08-1	Catalytic vs stoichiometric bioscavengers: introduction and prospect. <i>Patrick Masson.</i> - (Presenting Author: Patrick Masson)
12:35-13:05	S08-2	General discussion (Round Table to be announced)

13:05-14:15	LUNCH and POSTERS
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14:15	S10	PARAOXONASES: BIOLOGICAL FUNCTION AND DISEASES: CARDIOVASCULAR, INFLAMMATORY AND OTHER". Chairs: <i>Jordi Camps (Spain); Michael Aviram (Israel).</i>
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14:20-14:40	S10-1	HDL - associated paraoxonase1 (PON1) attenuates atherosclerosis development: PON1 role in cholesterol efflux stimulation. <i>Aviram M.</i> - (Presenting Author: Michael Aviram)
14:45-15:05	S10-2	The role of PON2 in myocardial ischemia/reperfusion injury. <i>Jingyuan Li, Victor R. Grijalva, Mansoureh Eghbali, Srinivasa T. Reddy.</i> - (Presenting Author: Sirivinasa Reddy)

15:10-15:30	S10-3	Paraoxonases, mitochondrial dysfunction and noncommunicable diseases. <i>Jordi Camps</i> .- (Presenting Author: Jordi Camps)
15:35-15:55	S10-4	Interplay between paraoxonase-1 activity and adipokine expression in obese patients. <i>György Paragh, Ildikó Seres, Mariann Harangi, Péter Fülöp</i> .- (Presenting Author: György Paragh)
16:00-16:30		COFFEE and POSTERS
16:30-16:50	S10-5	Paraoxonase-2 regulates blood coagulation through endothelial redox-signaling and inflammation. <i>Julia Ebert, Petra Wilgenbus, Sven Horke</i> .- (Presenting Author: Julia Ebert)
16:55-17:05	S10-6	Modulation of paraoxonase 1 (PON1) activity and protein N-homocysteinylation by bisphosphonates in rats. <i>Marta Rusek, Jerzy Beltowski</i> .- (Presenting Author: Marta Rusek)
17:10-17:20	S10-7	Differential effects of antiretroviral treatment on paraoxonase 1 (PON1) activity in rats. <i>Jolanta Pastryk, Jerzy Beltowski, Marta Rusek</i> .- (Presenting Author: Jolanta Pastryk)

18:00**POSTERS SHOULD BE REMOVED**

19:15

S12

PRE-GALA DINNER CONFERENCE.Chair: *Palmer Taylor (USA).*

19:30

S12-1

The biogenesis and trafficking of acetylcholinesterase: from basic cell biology to therapeutic applications.*Richard L. Rotundo, Susana G. Rossi, Carlos A. Ruiz, Terrell R. Morton.- (Presenting Author: **Richard L. Rotundo**)***DINNER IN MUNICIPAL PARQ OF ELCHE**

Friday 2

8:30	S09	ENZYMES AND PROTEINS OTHER THAN ChEs INTERACTING WITH OPs: TOXICITY AND BIOLOGY. Chairs: <i>Eugenio Vilanova (Spain); Galina Makhaeva (Russia).</i>
8:35-8:55	S09-1	Carboxylesterases - general detoxification enzymes. <i>Philip Potter.</i> - (Presenting Author: Philip Potter)
9:00-9:20	S09-2	Esterase profiles of organophosphorus compounds (OPCs) predict their behavior <i>in vivo</i>. <i>Galina F. Makhaeva, Elena V. Rudakova, Rudy J. Richardson.</i> - (Presenting Author: Dr. Galina Makhaeva)
9:25-9:45	S09-3	Interactions of acetylthiocholine in chicken brain carboxylesterase activities. <i>Jorge Estévez, Iris Mangas, Mónica Benabent, Miguel A Sogorb, Eva del Río, Eugenio Vilanova.</i> - (Presenting Author: Jorge Estevez)
9:50-10:10	S09-4	ESTHER database: classification of esterases interacting with organophosphates. <i>Arnaud Chatonnet, Nicolas Lenfant, Thierry Hotelier, Leo Pezzementi, Yves Bourne, Pascale Marchot.</i> - (Presenting Author: Arnaud Chatonnet)
10:15-10:35	S09-5	Roles of NTE protein and encoding gene in neurodevelopment and neurodevelopmental toxicity. <i>Miguel A Sogorb, David Pamies, Carmen Estevan, Jorge Estévez, Eva del Río, Encarnación Fuster, Eugenio Vilanova.</i> - (Presenting Author: Miguel A Sogorb)
10:40-10:50	S09-6	Structural characterization of an organophosphate sequestering esterase from <i>Culex pipiens</i>, a disease carrying mosquito. <i>Davis H. Hopkins, Nicholas J. Fraser, Paul D. Carr, Colin J. Jackson.</i> - (Presenting Author: Nicholas Fraser)
11:00-11:10	S09-7	Butyrylcholinesterase identified as a phenyl valerate esterase activity highly sensitive to mipafox in chicken brain. <i>Mangas I, Radić Z, Vilanova E, Taylor P, Ghassemian M, Candela H, Estévez J.</i> - (Presenting Author: Iris Mangas)

11:15-11:40**COFFEE****11:45****S11****3D SESSION.**Chairs: *Zoran Radić (USA); Florian Nachon (France).***11:45-12:05**

S11-1

Allosteric modulation of butyrylcholinesterase *in vitro* and *in vivo*. *Zoran Radić, Nikolina Maček Hrvat, Suzana Žunec, Limin Zhang, Zrinka Kovarik, Palmer Taylor.*- (Presenting Author: **Zoran Radić**)**12:10-12:30**

S11-2

Crystal structures of human butyrylcholinesterase in complex with reversible inhibitors. *Florian Nachon, Marielle Villard-Wandhammer, Xavier Brazzolotto.*- (Presenting Author: **Florian Nachon**)**12:35-12:45**

S11-3

Structural studies of the Y337A/F338A age-resistant human acetylcholinesterase mutant. *Cheung J., Ginter C., Cassidy M., Franklin M. C., Rudolph M. J.*- (Presenting Author: **Jonah Cheung**)**12:50****S13****CLOSING SESSION.**Chair: *Cecilio Vidal (Spain); Eugenio Vilanova (Spain)***12:55-13:20**

S13-1

The cholinesterases: how is structure related to function? *Israel Silman.*- (Presenting Author: **Israel Silman**)**13:25-13:35**

Closing by the Chairs of the Boards

13:35-13:45**Next meetings****13:45****END OF THE MEETING**



POSTERS

Time for showing the posters is scheduled during lunch and coffee breaks.

All posters will be exposed during all the time of the meeting.

Authors are expected to be present during the breaks of the same day of the corresponding oral sessions; those related with Friday sessions, during Thursday

Posters should be removed off on Thursday evening

S01P STRUCTURE AND DYNAMICS OF CHOLINESTERASES.

- S01P-1 **Hybridoma cell lines that produce monoclonal antibodies to human acetylcholinesterase.** *Alicia J. Dafferner, Gaoping Xiao, Oksana Lockridge.*- (Presenting Author: **Alicia J. Dafferner**)
- S01P-2 **Structural basis of photo-induced acetylcholinesterase inhibitors.** *E. de la Mora, J. Broichhagen, I. Silman, D. Trauner, M. Weik.*- (Presenting Author: **Eugenio De la Mora**)

S02P INTERACTION OF ChE WITH SUBSTRATES, INHIBITORS AND REACTIVATORS: IMPLICATION IN TOXICITY AND THERAPY.

- S02P-1 **The ability of the oxime K203 to reactivate acetylcholinesterase inhibited by highly toxic organophosphorus compounds called nerve agents – a comparison with currently available oximes in rats.** *Jiri Kassa, Vendula Sepsova, Jiri Bajgar, Kamil Musilek, Kamil Kuca.*- (Presenting Author: **Jiri Kassa**)
- S02P-2 **A new class of hybrid reactivators for nerve agent-inhibited human acetylcholinesterase.** *Julien de Sousa, Florian Nachon, José Dias, Gianluca Santoni, Martin Weik, Christopher Timperley, Richard Brow, Rachid Baati.*- (Presenting Author: **Julien de Sousa**)
- S02P-3 **Uncharged reactivators of cholinesterases inhibited by organophosphorus nerve agents.** *P. Warnault, J. Renou, C. Gomez, G. Mercey, T. Verdelet, M. Kliachyna, J. de Sousa, R. Baati, M. Touvrety-Loiodice, M. Arboléas, G. Callas, F. Nachon, G. Santoni, M. Weik, L. Jean, P.Y. Renard.*- (Presenting Author: **Pierre Warnault**)
- S02P-4 **Cinchonines and cinchonidines as selective human butyrylcholinesterase inhibitors.** *Anita Bosak, Alma Ramic, Tamara Šmidlehner, Zrinka Kovarik, Ines Primožic.*- (Presenting Author: **Anita Bosak**)
- S02P-6 ***In vivo* efficacy assessment of new reactivators of VX-inhibited acetylcholinesterase in Mouse.** *André-Guilhem Calas, José Dias, Catherine Rousseau, Florian Nachon.*- (Presenting Author: **André-Guilhem Calas**)

- S02P-7 **Administration of the false transmitter precursor monoethylcholine as a therapeutic strategy for nerve agent poisoning.** *Charlotte Whitmore, Andy Smith, Chris Green.-* (Presenting Author: **Charlotte Whitmore**)
- S02P-8 **Comparison of HI-6 DMS and pralidoxime mesylate-mediated reactivation of guinea pig, human and rhesus macaque acetylcholinesterase inhibited by nerve agents.** *Coe N.A., Cook A.R., Choules J.E., Knight S., Erskine R., Tattersall J.-* (Presenting Author: **Nick Coe**)
- S02P-9 **Assessing the efficacy of novel uncharged oximes as reactivators of phosphylated cholinesterases.** *Maja Katalinic, Tamara Zorbaz, Nikola Marakovic, Anissa Braïki, Julien Renou, Florian Nachon, Ludovic Jean, Pierre-Yves Renard, Zrinka Kovarik.-* (Presenting Author: **Zrinka Kovarik**)
- S02P-10 **Non-acylating acetylcholinesterase inhibitors as a new potential environment friendly pesticides.** *Veronika Hrabcová, Daniel Jun, Katerina Babková, Jan Korábecný, Kamil Kuca.-* (Presenting Author: **Veronika Hrabcová**)
- S02P-11 **Energetic evaluations of the sarin-inhibited acetylcholinesterase: a molecular dynamics and *in vitro* analysis comparison.** *Joyce S.F.D. Almeida, Tanos C.C. França, Teobaldo R. C. Guizado, Ana P. Guimarães, Arlan S. Gonçalves, Martijn C. de Koning.-* (Presenting Author: **Tanos Celmar Costa França**)
- S02P-12 **Altered bisquaternary reactivators with enhanced BBB penetration.** *Kamil Kuca, Tomas Rousar, Michal Novotny, Ondrej Soukup, Alena Uhrikova, Aykut Sevimli, Petr Jost, Daniel Jun, Eugenie Nepovimova, Jan Korabecny, Kamil Musilek.-* (Presenting Author: **Kamil Kuca**)
- S02P-13 **Aromatic N-substituted 2-hydroxyiminoacetamide oximes: preparation, enantioseparation, and interactions with cholinesterases.** *Goran Šinko, Nikola Marakovic, Anamarija Knežević, Vladimir Vinkovic, Zrinka Kovarik.-* (Presenting Author: **Goran Šinko**)
- S02P-14 **Modulatory effect of β -alanyl-L-histidine on carbon tetrachloride-induced hepatotoxicity in rat.** *Noha Mohamed Shafik, Saad-Eldin .A. Abou-Elnoeman.-* (Presenting Author: **Noha Mohamed Shafik**)
- S02P-15 **Facilitative transport of reactivators across the blood brain barrier.** *Gregory E. Garcia, Jayendra B. Bhonsle, Bryan McCranor, John Koh.-* (Presenting Author: **Bryan J. McCranor**)
- S02P-16 **Replacement of inactive AChE molecules at the neuromuscular junction “*in vivo*”.** *Susana G. Rossi, Mir R. Anwar, Richard L. Rotundo.-* (Presenting Author: **Susana Rossi**)
- S02P-17 **Cholinesterase assay by an efficient fixed time endpoint method.** *Mónica Benabent, Eugenio Vilanova, Miguel Ángel Sogorb,*

*Jorge Estévez.- (Presenting Author: **Mónica Benabent**)*

- S02P-18 **No aging no reactivation of human acetyl cholinesterase inhibited by mipafox demonstrate by mass spectrometry and QMMM approaches.** *Mangas I, Taylor P, Vilanova E, Franca TCC, Komives E, Estévez J, Radić Z.- (Presenting Author: **Eugenio Vilanova**)*
- S02P-19 **Peripheral site of acetylcholinesterase in discovery of new oxime reactivators.** *Neul Ha, Hyun Myung Lee, Jin Soo Shin, Joo Yun Lee, Soo Bong Han, Sang-Ho Lee, Young-Sik Jung.- (Presenting Author: **Young-Sik Jung**)*
- S02P-20 **Design, synthesis and SAR of thioureas with potential selectivity for an AChE homolog.** *Tomas Kindahl, Sofie Knutsson, Cecilia Engdahl, Fredrik Ekström, Anna Linusson.- (Presenting Author: **Tomas Kindahl**)*
- S02P-21 **Epidemiology of pesticides in developing countries.** *Abdou K. A, Hend M. Abo El-Atta.- (Presenting Author: **Hend Mahmoud Abo El-Atta**)*
- S02P-22 **Phosphonylated acetylcholinesterase: probing the mechanism of a small molecule reactivator.** *C. Linn Cadieux, Haoyu Wang, Ethan Zhang, John Koh, Douglas Cerasoli.- (Presenting Author: **C. Linn Cadieux**)*
- S02P-23 **The PKPD relationship of HI-6 DMS against GB poisoning in the conscious guinea pig.** *Cook A. R., Coe N., Tattersall J.- (Presenting Author: **Alex Cook**)*
- S02P-24 **Protein fusion designed to enhance secretion of organophosphate hydrolase (OPH) from mammalian cells.** *Cetara Watson, David Mata, Stephen Kirby.- (Presenting Author: **Stephen Kirby**)*

S03P PON IN TOXICITY. ROLE IN BIOTRANSFORMATION AND NEURO PROTECTION.

- S03P-1 **Association of serum esterases (paraoxonase-1 and cholinesterase) with levels of organochlorine compounds in children.** *Hernández AF, Lozano D, González-Alzaga B, Rodríguez-Barranco M, López-Flores I, Aguilar-Garduño C, Lacasaña M.- (Presenting Author: **Antonio F. Hernández**)*
- S03P-3 **Effects of pesticide exposure on the activity of the serum paraoxonase-1 enzyme.** *Walaa A. Moselhy.- (Presenting Author: **Walaa A. Moselhy**)*

S04P BIOSCAVENGERS AGAINST ANTICHEs: BuChE AND OTHER B-ESTERASES ROLE IN DETOXICATION

AND DIAGNOSIS.

- S04P-1 **PON1 promoter polymorphisms and susceptibility to polycystic ovary syndrome: an indian perspective.** *Roshan Dadachanji, Nalini Shah, Anushree Patil, Sushma Khavale, Nanda Joshi, Srabani Mukherjee.*- (Presenting Author: **Roshan Dadachanji**)
- S04P-2 **Determination of the pseudo-catalytic effect of butyrylcholinesterase with oximes – applications for the dynamic model.** *Wille T, Horn G, Thiermann H, Worek F.*- (Presenting Author: **Timo Wille**)
- S04P-3 **Expression and production of exclusively tetrameric human butyrylcholinesterase with improved pharmacokinetics for protection against organophosphate poisoning, making a long-leaving biopharmaceutical** *Stanislav S Terekhov, Ivan V Smirnov, Olga G Shamborant, Marina A Zenkova, Elena L Chernolovskaya, Igor A Dyachenko, Natalie A Ponomarenko, Patrick Masson, Alexander G Gabibov.*- (Presenting Author: **Stanislav S Terekhov**)
- S04P-4 **Strategies for increased circulatory stability of organophosphorus bioscavengers.** *Gregory E. Garcia, Deborah Moorad-Doctor, Melissa A. Betz, Bryan J. McCranor.*- (Presenting Author: **Bryan J. McCranor**)
- S04P-5 **Identification of butyrylcholinesterase adducts with organophosphorus compounds using immunoprecipitation from blood plasma.** *Dubrovskii Ya. A, Murashko E.A., Beltyukov P.P., Podolskaya E.P., Babakov V.N.*- (Presenting Author: **Dubrovskii Ya. A.**)
- S04P-6 **The role of glycosylation on the thermal stability and circulatory half-life of a candidate nerve agent bioscavenger.** *David G. Mata*, Catherine A. Hofstetter, Cetara A. Watson, Chester J. Wrobel, Douglas M. Cerasoli, Nageswararao Chilukuri* (Presenting Author: **David G. Mata**)

S05P CHEMICAL DEFENSE PARAOXONASE-PHOSPHOTRIESTERASE (A ESTERASES) ROLE IN DETOXICATION IN HUMAN AND BIOTECHNOLOGY

- S05P-1 **Characterization of serum carboxylesterase knockout mice for as a model for organophosphorus nerve agent research.** *Catherine A. Hofstetter, C. Linn Cadieux, Zachary Canter, Douglas M. Cerasoli.*- (Presenting Author: **Catherine Hofstetter**)
- S05P-3 **Capacity of .OH radicals scavenging by human paraoxonase 1 (PON1h) in bacteria and cellular models under oxidative stress.** *Oyuki Nallely Manterola Quezada, Cancino-Díaz Juan Carlos; Sánchez Gutiérrez Manuel; Izquierdo Vega Jeanett Alejandra; Betanzos-Cabrera Gabriel.*- (Presenting Author: **Oyuki Nallely Manterola Quezada**)

- S05P-4 **Daily supplementation with fresh pomegranate juice increases paraoxonase 1 expression and activity in mice fed with an atherogenic diet.** Estrada-Luna D., Martínez-Hinojosa E., Manterola-Quesada O.N., Belefant-Miller H., López-Rodríguez, G., Atitlán-Gil A., Betanzos-Cabrera G.- (Presenting Author: **Gabriel Betanzos-Cabrera**)
- S05P-5 **Exploring the mechanism of the six-bladed β -propeller hydrolases.** Timothy J. Grunkemeyer, Kiran Doddapaneni, Srividya Murali, Thomas J. Magliery. (Presenting Author: **Timothy J. Grunkemeyer**)
- S05P-6 **Turning a thermostable lactonase into an efficient phosphotriesterase.** Immacolata Del Giudice, Rossella Coppolecchia, Luigia Merone, Elena Porzio, Teresa M. Carusone, Luigi Mandrich, Franz Worek, Giuseppe Manco.- (Presenting Author: **Elena Porzio**)

S06P BIOLOGICAL FUNCTIONS OF ChEs AND RELATED DISEASES.

- S06P-1 **A bioactive peptide derived from acetylcholinesterase: effects on neuronal dynamics in rat brain slices.** Antoine-Scott Badin, Susan A Greenfield.- (Presenting Author: **Antoine-Scott Badin**)
- S06P-2 **A bioactive peptide derived from acetylcholinesterase: effects on PC12 cells that prompt to a new therapy.** Sara Garcia Ratés, Susan Greenfield.- (Presenting Author: **Sara Garcia Ratés**)
- S06P-3 **The bone morphogenetic protein 2 (BMP2)-induced downstream signalings are altered by globular form AChE in cultured osteoblasts.** Cathy W.C. Bi, Miranda L. Xu, Kitty K.M. Lau, Jane D. Cui, Huangquan Lin, Paul S.P. IP, Tina T.X. Dong, Karl W.K. Tsim.- (Presenting Author: **Cathy W.C. Bi**)
- S06P-4 **The N-glycosylation of acetylcholinesterase regulates the enzymatic activity, stability and transport in a recombinant expression system.** Miranda L. Xu, Wilson K.W. Luk, Kitty K.M. Lau, Cathy W.C. Bi, Jane D. Cui, Huangquan Lin, Tina T.X. Dong, Karl W.K. Tsim.- (Presenting Author: **Miranda L. Xu**)
- S06P-5 **Expression of P2Y receptor and acetylcholinesterase in muscle and brain of P2Y1 knock-out mice.** Jane D. Cui, Cathy W.C. Bi, Miranda L. Xu, Kitty K.M. Lau, Wilson K.W. Luk, Huangquan Lin, Tina T.X. Dong, Karl W.K. Tsim.- (Presenting Author: **Jane D. Cui**)
- S06P-6 **A bioactive peptide derived from acetylcholinesterase: direct detection in the developing and degenerating brain.** Paul Morrill, Susan Greenfield.- (Presenting Author: **Paul Morrill**)
- S06P-7 **Butyrylcholinesterase on the Terminal Schwann cells controls the level of acetylcholine release at the neuromuscular junction.**

*Konstantin Petrov, Eric Krejci.- (Presenting Author: **Konstantin Petrov**)*

- S06P-8 **Cholinesterases regulate skeletal development in chicken limbs in ovo and *in vitro* micromass cultures.** *Janine Spieker, Johannes L. Frieß, Anika Salfelder, Ichie Steinfeld*, Silke Storsberg, Astrid Vogel-Höpker and Paul G. Layer.- (Presenting Author: **Ichie Steinfeld**)*
- S06P-10 **Radiation treatments and cholinergic actions in rheumatoid arthritis: effects of TNF- α are counter-acted by AChE inhibition in mouse micromass cultures.** *Gopenath Thangaraj, Vadim Manakov, Paul G. Layer.- (Presenting Author: **Paul G. Layer**)*
- S06P-11 **A new potential activity of human butyrylcholinesterase: Lipid hydrolysis.** *Muslum Gok, Cigdem Cicek, Ebru Bodur.- (Presenting Author: **Ebru Bodur**)*
- S06P-12 **BChE affects emotional behaviors including fear and fighting.** *Y. Gao, L. Y.Geng, S. Brimijoin.- (Presenting Author: **Yang Gao**)*
- S06P-13 **MicroRNA discriminators of brain-intestinal TLR9-cholinergic communication.** *Bettina Nadorp, Hermona Soreq.- (Presenting Author: **Bettina Nadorp**)*
- S06P-14 **Bone morphogenetic proteins regulate cholinergic signalling during BMP-induced RPE regeneration in chick.** *Jörg Steinfeld, Ichie Steinfeld, Nicola Coronato, Meggi-Lee Hampel, Paul G. Layer, Astrid Vogel-Höpker.- (Presenting Author: **Jörg Steinfeld**)*
- S06P-15 **Expression of cholinesterases and their molecular anchors in rat aorta.** *Zuzana Kilianova, Dominika Dingova, Kristina Smiczekova, Anna Hrabovska.- (Presenting Author: **Zuzana Kilianova**)*
- S06P-16 **Toxic effects of permethrin on male rabbit fertility and immunity.** *Abdou K. A.; Khalaf Abd El -Azim A., AboNorag M. A., Neamat M. Ibrahim.- (Presenting Author: **Abdou K. A**)*
- S06P-17 **Molecular modeling of mechanism of action of anti-myasthenia gravis slow-binding inhibitor of acetylcholinesterase.** *E. Kots, S. Lushchekina, A. Kharlamova, K. Petrov, P. Masson.- (Presenting Author: **Ekaterina Kots**)*
- S06P-18 **Cholinergic regulation of murine skeletogenesis: premature ossification and incomplete chondrogenesis in cholinesterase-deficient mice.** *Janine Spieker, Vadim Manakov, Thomas Mudersbach, Gopenath Thangaraj, Astrid Vogel-Höpker, Paul G. Layer.- (Presenting Author: **Paul G. Layer**)*

S07P ALZHEIMER DISEASE.

- S07P-1 **Incorporation of 11C and 18F into selective BChE inhibitors as radiotracers for *in vivo* radioimaging.** *Sawatzky, E.; Samnick, S.; Decker, M.*- (Presenting Author: **Edgar Sawatzky**)
- S07P-2 **Dehydroevodiamine-based butyrylcholinesterase inhibitors as lead structures for positron emission tomography tracers.** *Sarah Wehle, Michael Decker.*- (Presenting Author: **Sarah Wehle**)
- S07P-3 **7-Meota-donepezil like compounds – novel agents to combat Alzheimer's disease.** *P. Cabelova, R. Dolezal, E. Nepovimova, K. Babkova, K. Spilovska, M. Andrs, K. Musilek, O. Soukup, K. Kuca.*- (Presenting Author: **Jan Korabecny**)
- S07P-4 **Pharmacological evaluation of potential Alzheimer's disease drugs.** *Sepsova V, Jun D, Matouskova L, Korabecny J, Kassa J, Bajgar J, Soukup O.*- (Presenting Author: **Vendula Sepsova**)
- S07P-5 **The effect of thionine on amyloid- β peptide levels in PS70 cells.** *Melike Yuksel Tek, Kevser Biberoglu, Seda Onder, K. Gonca Akbulut, Ozden Tacal.*- (Presenting Author: **Kevser Biberoglu**)
- S07P-6 **7-Methoxytacrine-memantine hybrids as candidates for Alzheimer disease treatment.** *Soukup Ondrej, Korabecny Jan, Spilovska Katerina, Musilek Kamil, Jun Daniel, Horak Martin, Kaniakova Martina, Šipošová Katarína, Kuca Kamil.*- (Presenting Author: **Ondrej Soukup**)
- S07P-7 **Learning performances and vulnerability to amyloid toxicity in the butyrylcholinesterase knockout mouse.** *Manon Strehaiano, Nathalie Siméon, Christelle Bertrand, Arnaud Chatonnet, Tangui Maurice.*- (Presenting Author: **Chatonnet Arnaud**)
- S07P-8 **Multitarget drug design strategy: quinone-tacrine hybrids designed to block amyloid-beta aggregation and to exert anticholinesterase and antioxidant effects.** *Eugenie Nepovimova, Elisa Uliassi, Jan Korabecny, Luis Emiliano Pena-Altamira, Sarah Samez, Alessandro Pesaresi, Gregory E. Garcia, Manuela Bartolini, Vincenza Andrisano, Christian Bergamini, Romana Fato, Doriano Lamba, Marinella Roberti, Kamil Kuca, Barbara Monti, Maria Laura Bolognesi.*- (Presenting Author: **Eugenie Nepovimova**)
- S07P-9 **Butyrylcholinesterase- and β -amyloid-associated neuropathology in familial Alzheimer's disease with presenilin 1 (Leu235Pro) mutation.** *S. Darvesh, M.K.Cash, K. Rockwood.*- (Presenting Author: **Sultan Darvesh**)

S09P ENZYMES AND PROTEINS OTHER THAN ChEs INTERACTING WITH OPs: TOXICITY AND BIOLOGY.

- S09P-1 **Phenylvalerate esterase activity and inhibition of human butyrylcholinesterase: kinetic and molecular modeling demonstration.** *Mangas I, França T. C.C. , Rodrigues F, Radick Z, Taylor P, Vilanova E, Estévez J.-* (Presenting Author: **Iris Mangas**)
- S09P-2 **Human neuroblastoma SH-SY5Y as potential model for studying the role of esterases in human central nervous system.** *Miriam González, Eva del Río, Jorge Estévez, Eugenio Vilanova, Miguel A. Sogorb.-* (Presenting Author: **Miriam González**)
- S09P-3 **ESTHER database: 2015 update on the alpha/beta hydrolase fold superfamily of proteins.** *Arnaud Chatonnet, Nicolas Lenfant, Thierry Hotelier Leo Pezzementi, Yves Bourne, Pascale Marchot.-* (Presenting Author: **Marchot Pascale**)
- S09P-4 **Discrimination with irreversible inhibitors (mipafox, paraoxon, PMSF and iso-OMPA) of enzymatic components in acetylthiocholine-hydrolyzing activity.** *Verónica Selva, Mónica Benabent, Iris Mangas, Miguel A. Sogorb, Eva del Río, Roberto A. Ruiz, Eugenio Vilanova, Jorge Estévez.-* (Presenting Author: **Verónica Selva**)
- S09P-5 **Effects of mipafox, paraoxon and chlorpyrifos and its metabolite chlorpyrifos-oxon on D3 mouse embryonic stem cell differentiation.** *Encarnación Fuster, Jorge Estévez, Eva del Río, Eugenio Vilanova, Miguel A. Sogorb.-* (Presenting Author: **Encarnación Fuster**)

S10P PARAOXONASES: BIOLOGICAL FUNCTION AND DISEASES: CARDIOVASCULAR, INFLAMMATORY AND OTHER.

- S10P-1 **Association of paraoxonase 1 and oxidative stress with acute kidney injury in premature asphyxiated neonates.** *Jasmina Ivanišević, Jelena Kotur Stevuljevic, Aleksandra Stefanovic, Milica Miljkovic, Zorana Jelic Ivanovic, Biljana Pejovic, Amira Peco Antic.-* (Presenting Author: **Jasmina Ivanisevic**)
- S10P-2 **Human paraoxonase 2 (PON2):expression in E.coli and characterization of an engineered full active form.** *Luigi Mandrich, Mariangela Cerreta, Elena Porzio, Giuseppe Manco.-* (Presenting Author: **Mariangela Cerreta**)
- S10P-3 **Paraoxonase-1 activity in high density lipoproteins from follicular fluid: omparison between healthy and obese women.** *Bacchetti Tiziana, Arianna Vignini, Ferretti Gianna.-* (Presenting Author: **Tiziana Bacchetti**)
- S10P-4 **Proteomics analysis of paraoxonase-3 in autoimmune disease patients with subclinical atherosclerosis.** *Judit Marsillach, Jessica Besler, Tomas Vaisar, Bevra Hahn, John Brunzell, Clement Furlong, Ian deBoer, Maureen McMahon, Andrew Hoofnagle.-* (Presenting Author: **Judit Marsillach**)

- S10P-5 **Paraoxonase 2 (PON2) expression in bladder cancer.** *Tiziana Bacchetti, Gianna Ferretti, Rachela Giuliente, Davide Sartini, Valentina Pozzi, Monica Emanuelli.*- (Presenting Author: **Tiziana Bacchetti**)
- S10P-6 **Paraoxonase-1 and myeloperoxidase correlates with vascular biomarkers in untreated hyperlipidemic patients.** *Mariann Harangi, Noémi Zsíros, Viktória E. Varga, Anita Szentpéteri, Hajnalka Lorincz, Mónika Katkó, Ildikó Seres, Péter Fülöp, György Paragh.*- (Presenting Author: **Mariann Harangi**)
- S10P-7 **Serum vaspin level, paraoxonase-1 activity, and HDL subfractions in non-diabetic, obese patients.** *Ildikó Seres, Péter Fülöp, Hajnalka Lorincz, Tímea Katona, Mariann Harangi, György Paragh.*- (Presenting Author: **Ildikó Seres**)
- S10P-8 **Correlations between insulin sensitizing adipokines and oxidative stress markers in obese non-diabetic individuals.** *Péter Fülöp, Ildikó Seres, Sándor Somodi, Mariann Harangi, Hajnalka Lorincz, György Paragh.*- (Presenting Author: **Péter Fülöp**)
- S10P-9 **Inflammation and oxidation in class III obesity: the role of chemokine (c-c motif) ligand 2 and paraoxonase 1.** *Maria Guirro, Esther Rodríguez-Gallego, Anna Hernández-Aguilera, Fedra Luciano-Mateo, Noemí Cabré, Anabel García-Heredia, Salvador Fernández-Arroyo, Jordi Camps, Jorge Joven.*- (Presenting Author: **Maria Guirro**)

S11P 3D SESSION

- S11P-1 **Conformational changes of ache backbone upon reversible and covalent ligand binding revealed by overlay independent pdb data analysis.** *Jacqueline Rohrer, Morgana Sidhom, Jingting Han, Zoran Radić.*- (Presenting Author: **Zoran Radić**)



ABSTRACTS ORAL SESSIONS

Abstracts will be available in the meeting

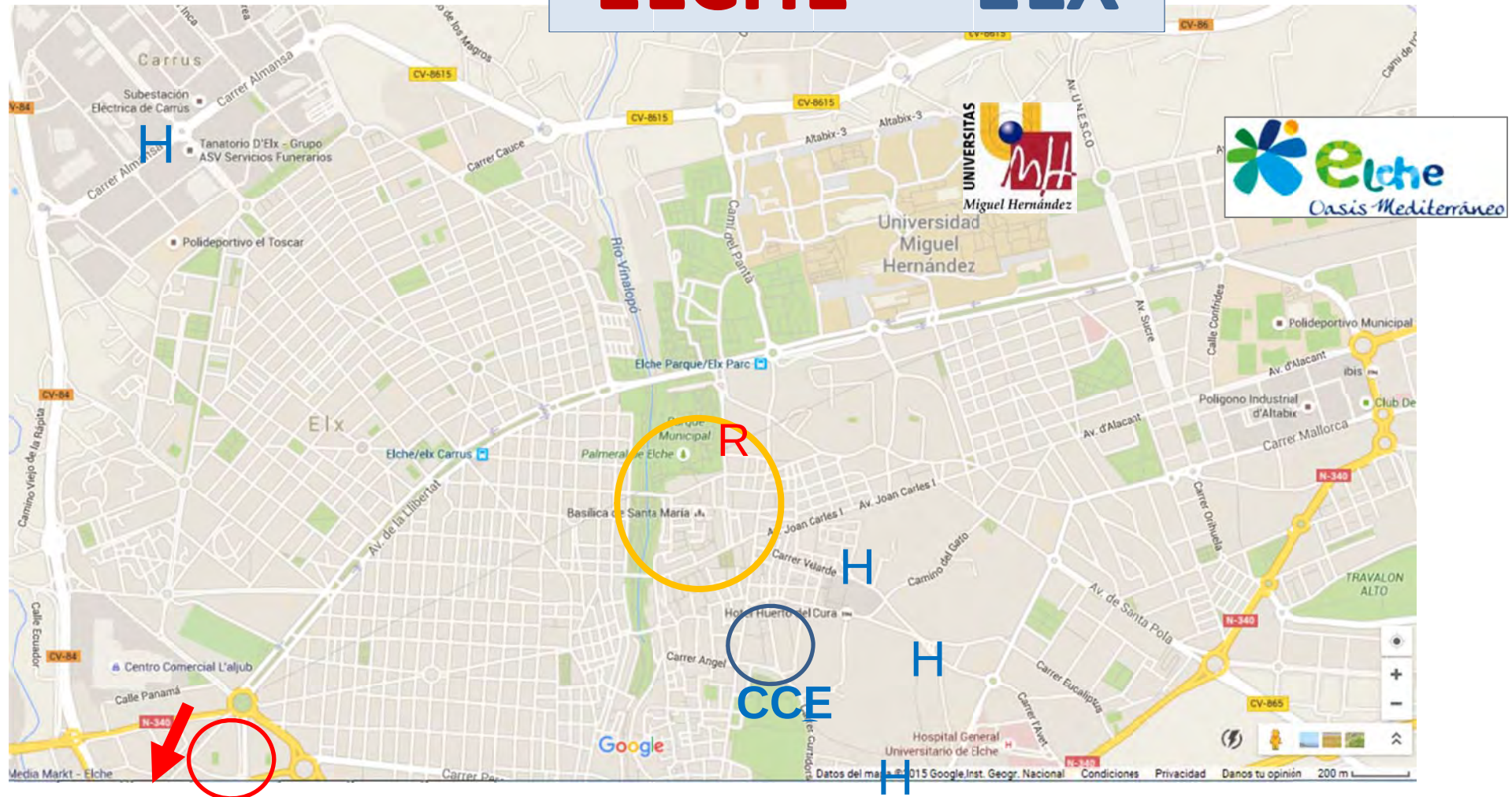


MAP AREA ELCHE-AIRPORT-ALICANTE



GENERAL MAPS OF THE CITY

ELCHE - ELX

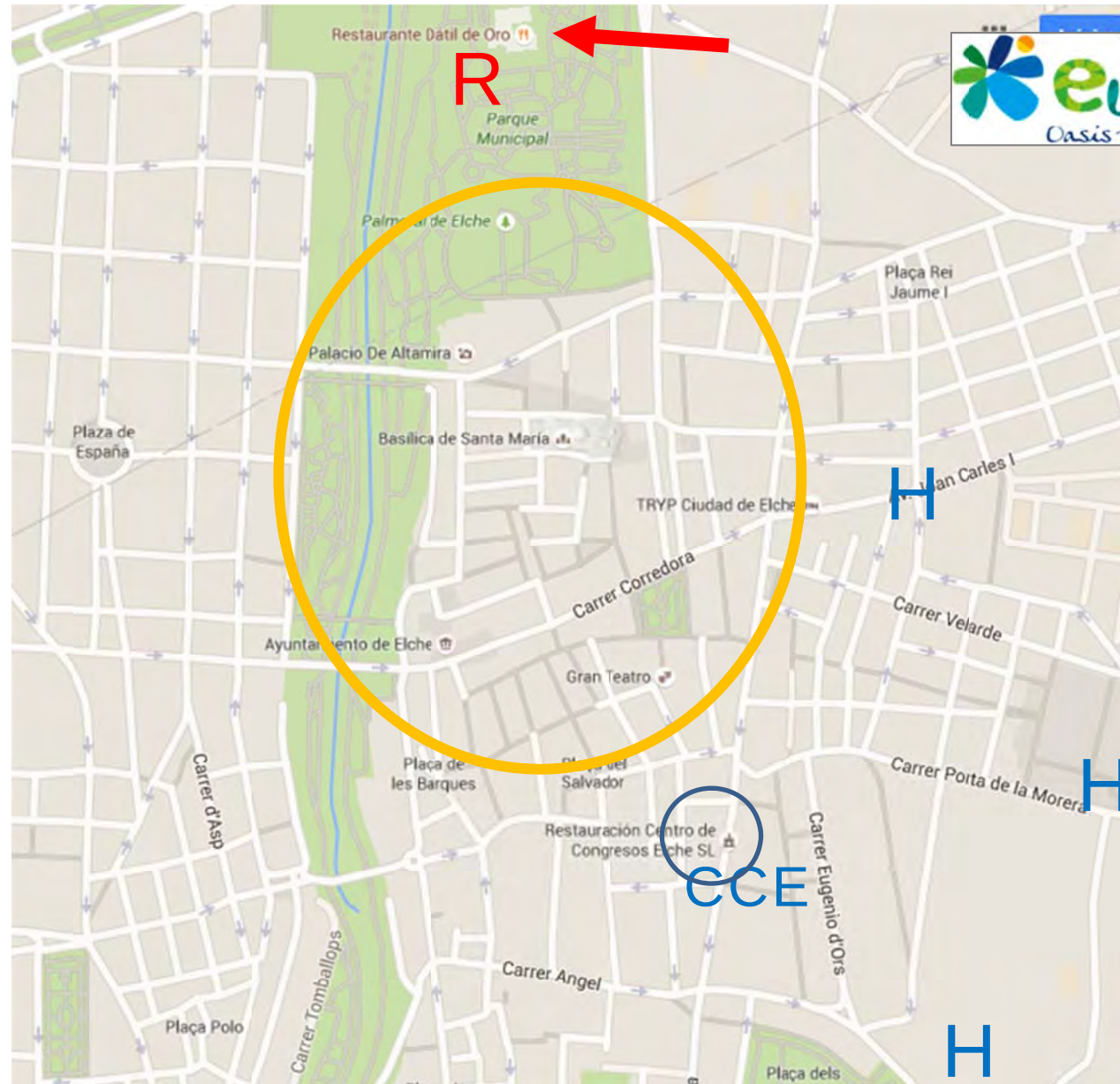


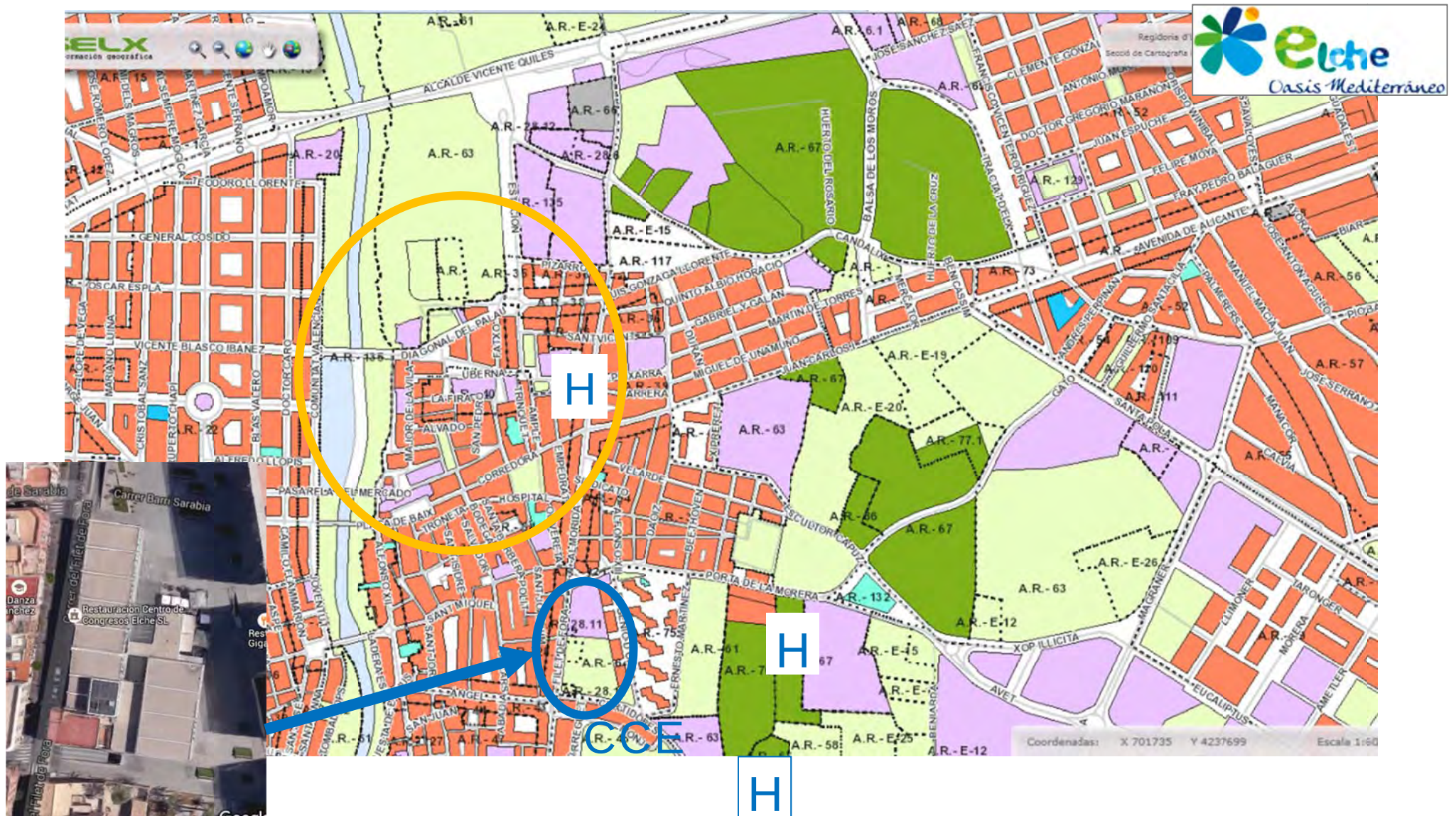
○ Big stores
 ○ Historical-Social Area.
 ○ CCE (Congress Center);
 H Hotels
 R Restaurant for the Dinner ("Dátil de Oro")

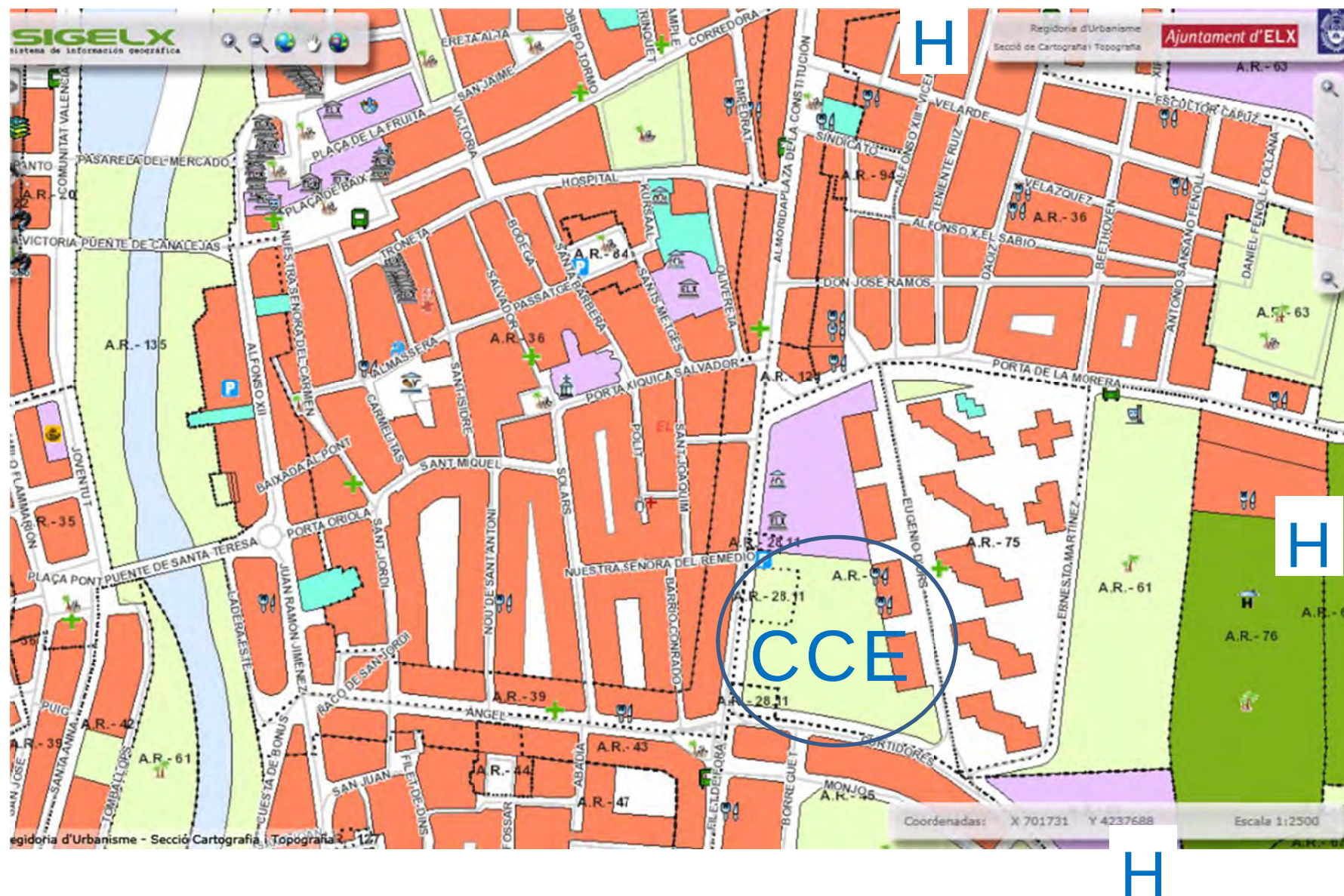
MAPS OF THE CITY

CLOSE TO THE

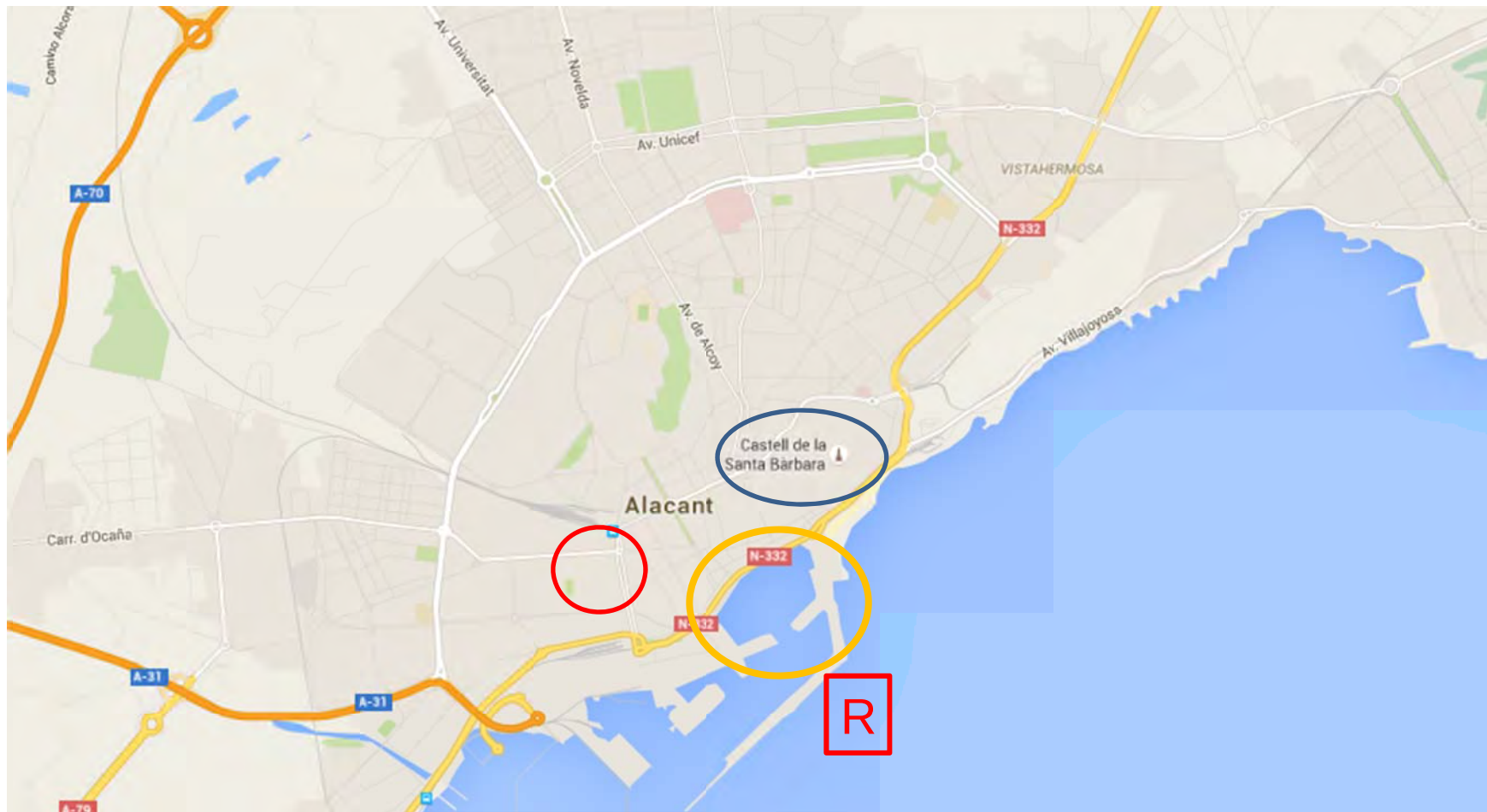
CONGRESS VENUE







GENERAL MAPS OF ALICANTE CITY



○ Big stores ○ Historical-Social Area. ○ The Castle R Restaurant for Lunch ("Volvo Race Area and Museum")