

## THE VI CONFERENCE OF PRE-DOCTORAL RESEARCHERS OF THE UdG

*Facultat de Ciències Econòmiques i Empresariales (Sala de Graus)  
Campus Montilivi, University of Girona [May 30<sup>th</sup> – June 2<sup>nd</sup>]*

### Monday, May 30<sup>th</sup>

**9:00h – 9:15h:** Registration

**9:15h – 9:30h:** Welcome (*Dr. Maria Pla de Solà, Research Vice-rector of the University of Girona & Dr. Gerardo Boto, Director of the School of Doctoral Studies*)

**9:30h – 10:15h:** Opening Conference: Why do we do research at university? (*Dr. Àngel Puyol González, Philosophy Department, Universitat Autònoma de Barcelona*)

**10:15h – 10:45h:** Coffee Break

**10:45h – 13:00h:** *Session I – Art, heritage and culture*

*(Moderated by Alejandro Piñel)*

10:45h: Genesis of “Cartes d’Itàlia” (1955) by Josep Pla: a history of fascination (*David Portillo de Barrio*)

11:00h: The journalism of Prudenci Bertrana (*Judit Pujol Prat*)

11:10h: Adolf Fargnoli: cabinetmaker, ceramist and poet (1890-1952) (*Pau Bagué*)

11:25h: The Spanish sex wars? A theoretical and visual approach to representations of sexuality in late-Francoism Spanish art (*Saray Espinosa*)

11:40h: Philosophy in the national construction of Catalonia. Study of nationalist historiography of philosophy (*Max Pérez Muñoz*)

11:55h: Tourism as a promoter of safeguarding cultural heritage in UNESCO’s creative cities of gastronomy (*Carla Coloniese*)

12:10h: Digital image aesthetics: early cinema’s virtual worlds’ persistence in the films of David Lynch (*Daniel Pérez Pàmies*)

12:25h: Study of the stable programs of performing arts in Girona counties (*Marta Parramón Girvent*)

12:40h: The production and consumption system of iron oxide pigments at Les Coves del Fem site (Ulldemolins, Priorat-Tarragona) (*Lucía Alonso, Universitat Autònoma de Barcelona*)

**13:00h – 15:00h:** Lunch

**15:00h – 16:45h: Session II – Peptides, proteins and enzymes**

*(Moderated by Cristina Serra)*

15:00h: *Prunus persica* plant endogenous peptides PpPEP1 and PpPEP2 cause PTI-like transcriptome reprogramming in peach and enhance resistance to *Xanthomonas arboricola* PV. Pruni (Laura Foix)

15:15h: Peptides with antibacterial or LPS-targeting activities with potential application to control plant diseases (Roser Iborra)

15:25h: The role of a lipid transfer protein in phellem suberization (Javier Surís-Auguet)

15:40h: Rational design of P450-based enzymatic platform for the Regioselective hydroxylation of decanoic acid (Jordi Soler)

15:55h: Looking for echoes of the past: reconverting an hydroxynitrile lyase to an arylesterase (Guillem Casadevall)

16:10h: Designing tryptophan synthases for stand-alone functionality (Cristina Duran)

16:25h: Simulation of enzyme reactions in glycoside hydrolases (Irene Cuxart, Universitat de Barcelona)

**16:45h – 17:00h: Coffee Break**

**17:00h – 18:20h: Session III – Electrochemistry and Computational Chemistry**

*(Moderated by Laia Vicens)*

17:00h: Understanding the electronic structure of excited state aromatic systems and macrocycles (Sílvia Escayola)

17:15h: Computational analysis of 1,3-dipolar reaction inside carbon nanotubes (Michele Tomasini)

17:30h: Exploring the fluxional behavior of bioinspired artificial receptors with MD simulations (Ricard López-Coll)

17:45h: Bio-electro CO<sub>2</sub> recycling to ethanol (Meritxell Romans-Casas)

18:00h: to be announced (Blanca Belsa, Institut de Ciències Fotòniques, Universitat Politècnica de Catalunya)

Tuesday, May 31<sup>st</sup>

**9:00h – 9:45h: Opening Conference:** *to be announced (Dr. Lluís Bañeras, Department of Biology, Universitat de Girona)*

**9:45h – 11:15h: Session IV – Genetics and biomedicine**

*(Moderated by Fidanka Vasileva)*

9:45h: Manganese and Magnesium ions induce DNA damage *in vitro* in fully condensed pig sperm (*Estel Viñolas-Vergés*)

10:00h: Intracranial self-stimulation increases serum levels of miRNA-181c in a rat model of Alzheimer's disease (*Andrea Riberas*)

10:15h: Transferrin receptor is downregulated in the striatum of Huntington's disease: association with Iron accumulation (*Teresa Samperi*)

10:30h: Study of levels and activity of protein tyrosine phosphatase 1B in Huntington's disease models (*Llúcia Jaime*)

10:40h: Synthetic analogues of pituitary adenylate cyclase-activating polypeptide (PACAP) improve motor deficits in R6/1 mouse model of Huntington's disease (*Irene Solés-Tarrés*)

10:55h: Mutational footprints arising from chemotherapy due to interplay between DNA damage and repair (*Katyayani Anshu, Institut de Recerca Biomèdica de Barcelona – Universitat Pompeu Fabra*)

**11:15h – 11:45h: Coffee Break**

**11:45h – 13:30h: Session V – Health**

*(Moderated by Cristina Serra)*

11:45h: Practice guidelines for diving-related fatalities: multidisciplinary, experience-based investigation (*Maria Luisa Fúnez*)

12:00h: Post-COVID-19 patients show an increased endothelial progenitor cell production (*Paula Poyatos*)

12:15h: Association between socioeconomic factors and vaccination coverage against measles, mumps, and rubella in 8-years-old children in Catalonia: an ecological study (*Anna Reñé Reñé*)

12:25h: A treatment with olive leaf extract and assessment on healthy lifestyle reduces mild hypertension (*Rufina Espín*)

12:40h: Epicardial fat, interventricular septal and left ventricular posterior wall thicknesses are associated with cardiometabolic risk markers and physically active behavior in school-aged children (*Fidanka Vasileva*)

12:55h: Study of iodine status in adolescents through food intake and urinary iodine analysis (*Sílvia Reig*)

13:10h: The effect of aerobic and resistance training and vitamin D supplementation on lipid profile in patients with type 2 diabetes (*Enzal Dardashtipour, Universitat Ramon Llull*)

**13:30h – 15:00h:** Lunch

**15:00h – 17:00h: Session VI – Chemistry**

*(Moderated by Laia Vicens)*

15:00h: Alkylation of benzoyl hydrazines: access to mono- or di-substituted compounds  
*(Nicolas Joly)*

15:15h: Linking DOM fractions and THMFP in drinking water by enhanced HPSEC-DAD-DOC analytical approach *(Meritxell Valentí-Quiroga)*

15:30h: A DFT study of the N<sub>2</sub>O functionalization for the preparation of triazolopyridine and triazoloquinoline scaffolds *(Roger Monreal-Corona)*

15:45h: On the asymmetric substitution of  $\beta$ -diketiminato boralamines *(Sergi Danés)*

16:00h: A versatile and commercially available iron catalyst active in carbene transfer reactions *(Joel Nadal-Moradell)*

16:15h: Nickel-Catalyzed C<sub>sp2</sub>-OMe functionalization for chemoselective aromatic homologation *en route* to nanographenes *(Judith Sala)*

16:25h: Evaluation of electronic aspects and HAT mechanism in nickel-hypochlorite species *(Adrià Juvanteny)*

16:40h: Gold(I) supramolecular assemblies to achieve phosphorescence emission *(Araceli de Aquino, Universitat de Barcelona)*

**17:00h – 17:15h:** Coffee Break

**17:15h – 18:35h: Session VII – Architecture and construction**

*(Moderated by Alba Ceballos)*

17:15h: The temple of the southern area of Empúries' *neapolis* *(Elisabet Moner Coll)*

17:30h: Architecture and memory: the (re)presentation of the place *(Bàrbara Garcia Belmonte)*

17:45h: Le Dôme, the new generation research center in Caen. A case study of resilient architecture *(Félix Breton)*

18:00h: Re-inhabiting from the roofs: intersections between the inherited city and what the intervention project does. Rooftops and the city of Barcelona *(Marina Campomar)*

18:15h: Defining parameters of ventilated facades and its influence on energetic performance *(Oriol Roig, Universitat Politècnica de Catalunya)*

Wednesday, June 1<sup>st</sup>

**9:00h – 9:45h: Opening Conference:** Membrane technology: towards the circular economy (*Dr. Raquel Garcia-Pacheco, Laboratori d'Enginyeria Química i Ambiental – LEQUIA, Universitat de Girona*)

**9:45h – 11:00h: *Session VIII – Environment***

*(Moderated by Hermínia Andreu)*

9:45h: Compositional and Bayesian inference analysis of the concentrations of air pollutants in Catalonia, Spain (*Anna Mota*)

10:00h: Evaluating the effects of landscape change through the drystone terraces in the high Muga valley: trans-frontier environmental and patrimonial perspective (*Imogen Simpson-Mowday*)

10:15h: Water reuse for irrigation: how to perform hazard characterization for the human exposure to pharmaceuticals accumulated in food crops (*Josephine Vosse*)

10:30h: Analysis of African dust intrusion phenomena as aerosols modifying solar radiation in Girona (northwest Iberian Peninsula) (*Paula Girona*)

10:40h: The Antarctic as sentinel of global pollution (*Gemma Casas, CSIC – Universitat de Barcelona*)

**11:00h – 11:30h: Coffee Break**

**11:30h – 13:00h: *Session IX – Sustainability and social change***

*(Moderated by Laia Vicens)*

11:30h: Realities and mites of youth participation in the community (*Lara Morcillo*)

11:45h: Community mediation and vulnerability. Challenges and lessons from a case study in Olot (La Garrotxa) (*Eduard Carrera*)

12:00h: Promoting youth community participation as a basic strategy for social transformation (*Mireia Sala Torrent*)

12:15h: Profile of Girona environmental activists (*Adán Estrada Meléndez*)

12:25h: Influence of smart cities' sustainable tourism actions on the tourist selection process: the case of Barcelona (*Iratxe Aragón*)

12:40h: How do we shape a sustainable society? From intergovernmental plans to the role of consumers (*Joan Hereu-Morales, Universitat Politècnica de Catalunya*)

**13:00h – 15:00h: Lunch**

**15:00h – 16:50h: Session X – Materials applied to science**

*(Moderated by Cristina Serra)*

15:00h: Influence of pseudo-ductility on the nominal strength of notched specimens  
*(Anbazhagan Subramani)*

15:15h: Functionalization of fullerenes by cyclization reactions *(Cristina Castanyer)*

15:30h: Three-dimensional hydrophobic scaffolds for *in vitro* tumoroid culture *(David Angelats Lobo)*

15:45h: The influence of solvent on polycaprolactone fibers affecting the behavior of lung cancer cells *(Emma Polonio-Alcalá)*

16:00h: Innovative system for electrospray coating of polymeric cardiovascular stents  
*(Enric Casanova)*

16:15h: Multiwalled carbon nanotubes embedded in a polymeric matrix as a new materials for TFME for organic pollutant extraction *(Ivonne Quintanilla)*

16:30h: How do they do it? Bioinks edition *(Glòria Nieva, Institut Químic de Sarrià – Universitat Ramon Llull)*

**16:50h – 17:05h: Coffee Break**

**17:05h – 18:30h: Session XI – New technologies**

*(Moderated by Hermínia Andreu)*

17:05h: Software applications at the service of archaeology: A GIS for Empúries  
*(Margherita Zannini)*

17:20h: Co-creation and heritage experiences with augmented reality *(Núria Gascons)*

17:35h: Digital technologies' adoption in European manufacturing companies – from antecedents to impact *(Jana Kunecová)*

17:50h: Collision detection and avoidance for underwater vehicles using omnidirectional vision *(Eduardo Ochoa)*

18:05h: Intelligent analytical tool for improve gas turbine performance *(Martí de Castro, Universitat Politècnica de Catalunya)*

Thursday, June 2<sup>nd</sup>

**9:00h – 9:45h: Opening Conference:** Social sciences and research: present and future (*Dr. Salvador Martí, Department of Public Law, Univeristat de Girona*)

**9:45h – 11:05h: *Session XII – Society and quality of life***

*(Moderated by Alba Ceballos)*

9:45h: Effectiveness of the application of a nursing intervention program in the management of parental anxiety and infant pai in the surgical process of children to be circumcised (*Lyudmyla Andrusenko*)

10:00h: Quality of life, optimism and resilience in women with breast cancer (*Catalina Ocayo*)

10:15h: Discovering social reality related to personal skills and health: qualitative study based on focus groups (*Yudy Young-Silva*)

10:30h: Systematic literature review about the perspectives of women with intellectual disabilities concerning their socio-affective relationships (*Maialen Beltran Arretxe*)

10:45h: Challenges of future: a perspective from the humanities (*Laia Palos, Universitat Ramon Llull*)

**11:05h – 11:35h: Coffee Break**

**11:35h – 13:00h: *Session XIII – History and Art History***

*(Moderated by Alejandro Piñel)*

11:35h: La prosa de Joan Vinyoli (*Georgina Torra*)

11:45h: Jacint Morató and the paradigm shift in the structure of the 18<sup>th</sup> century altarpiece: research and ways of analysis (*Illán Holgado*)

12:00h: The disappearance of large carnivores in the Iberian Peninsula (*Pau Balsera*)

12:10h: Between coercion and coordination. The correspondence of the Barcelona board of trade as a source for tracking social change (1760-1847) (*Dion Baillargeon*)

12:25h: The “Antigua Farmacia Esteva de Llivia” as a pharmaceutical “lieu de mémoire” of the 20<sup>th</sup> century (*Lluís Coromina Verdaguer*)

12:40h: The European and non-European capitals of culture (2000-2020). City branding, local development and urban imaginaries (*Perla Massó, Universitat de Barcelona*)

**13:00h – 15:00h: Lunch**

**15:00h – 16:50h: Session XIV – Education**

*(Moderated by Maialen Beltrán)*

15:00h: Art thinking as experimentation in educational innovation. Socio-educational impact on Greek society: analysis, implementation and evaluation as a challenge to enhance to society of tomorrow (*Carlota Blasco Aguirre*)

15:15h: Adaptation and validation to Spanish of a questionnaire to measure perceptions of teachers about STEM (*Marcela Silva*)

15:30h: A mismatch between teachers' beliefs and actual practices related to STEAM education (*Jefferson Rodrigues-Silva*)

15:45h: Opportunities to develop algebraic thinking in early childhood textbooks (*Nataly Pincheira*)

16:00h: Analysis of the presence of patterned tasks in early childhood education textbooks (*Yeni Acosta*)

16:15h: Study of the effectiveness of the application of the TEACCH methodology in reducing behavioural disorders and improving the quality of life of people with intellectual disabilities and the need for widespread support (*Yolanda Andreu*)

16:30h: Pedagogical landscapes of Victorian masculinity (*Raquel Cercós, Universitat Central de Catalunya – Universitat de Vic*)

**16:50h – 17:05h: Coffee Break**

**17:05h – 18:30h: Session XV – Law and administration**

*(Moderated by Emma Calderón)*

17:05h: The cycle of continuous improvement and iso international standards as a basis for mitigation of administrative and financial interactions in the public administration. Ecuadorian public management case study. (*María de los Ángeles Torres*)

17:20h: Public administration and the Sumak Kawsay (*Francisco Xavier Alarcón Espinosa*)

17:35h: Taxation of telework (*Daniel Santiago Marcos*)

17:50h: The protection of the victim of trafficking in human beings in the international legal system and its application at the European regional level: a proposal for the status of the victim (*Georgina Rodríguez Muñoz*)

18:05h: The European Union and Constitutional Identity (*Nicola Abate, Universitat Pompeu Fabra*)