

5th

European Biosensor Symposium

20 25

PROGRAM



OCTOBER
26-29TH

TARRAGONA - SPAIN



20
25
EBS

Venue

Tarragona Exhibition and Congress Center

Address

Arquitecte Rovira, 2
Tarragona, Spain

Chair of the Conference:

Prof. Dr. M.-Pilar Marco (IQAC-CSIC)

 www.ebs2025.com

Dear Friends and Colleagues

On behalf of the Organizing Committee, we cordially invite you to join us for the 5th European Biosensor Symposium to be held the 26th–29th October 2025 in Tarragona, Spain.

Biosensors have started to revolutionize the way we manage several aspects of our lives. They are at the forefront of technical innovation driving breakthroughs across a wide range of fields and industries. The need for rapid, accurate and reliable detection instruments in the medical, food quality and safety, agriculture and environmental domains has been the driving force that has expanded the global biosensor market at an unprecedented rate in the last decades.

Improved or innovative (biological) recognition elements combined with advanced microelectronic transducers or nanomaterials have delivered a new generation of tools and devices with enhanced features which have the potential to impact all those fields in which real-time monitoring or diagnosing are required. Enormous achievements in speed, sensitivity, selectivity, precision, accuracy and mobility have been reached. Far from coming to a halt, the future of biosensors seems to be bright in view of the rapid advancements in nanotechnology, materials science, innovative fabrication techniques of micro(nano) electronic transducers and microfluidics. In addition, point-of-care (PoC) devices, multiplexed chips, medical imaging or wearable biosensors generate massive information, which can be handled also thanks to advancements in Artificial Intelligence (AI) technologies.

This may open the door to expand knowledge in distinct research areas but may also impact the healthcare industry. In parallel, advanced microfluidic organ-on-chip (OoC) platforms are envisaged as powerful tools for predicting toxicity or designing personalized diagnostic and therapeutic strategies.

The European Biosensor Symposium bi-annual conference has the mission to highlight the advances and the relevance of biosensors creating a forum of debate to promote and strengthen scientific advances and collaborations and the emergence of new research ideas. Born in 2017 in Potsdam, Germany, and after 3 editions celebrated in Florence, Italy (2019), on-line (2021) and in Aachen, Germany (2023), EBS will travel to the south of Europe and be celebrated in Spain for the first time.

Young and experienced leading experts in the field will get around in this international event encompassing both fundamental and applied research, offered through plenary, keynote, invited talks and poster presentations that will stimulate interdisciplinary discussions. This will take place in Tarragona, a UNESCO World Heritage site with an enviable scenario of Roman Empire symbols like an impressive amphitheater or the charming old town full of medieval architecture and narrow streets. Besides this unique blend of Roman reminiscences, the city has a vibrant culture, an excellent Mediterranean gastronomy and the beautiful sandy beaches of Costa Daurada to offer to its visitors.

We are willing to count on your participation in the 5th European Biosensor Symposium in October 2025 and to welcoming you to Tarragona, Spain.

Yours sincerely

Organization Committee

Prof. Dr. M-Pilar Marco & Prof. Dr. Fred Lisdat



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Honorary Members

Prof. Dr. Serge Cosnier	Grenoble University	France
Prof. Dr. Frieder Scheller	Potsdam University	Germany



Sunday, October 26th

From 16:00h **Registration**

17:30-18:00h **Opening - Eutyches Auditorium**

Organization Committee

Prof. Dr. María Pilar Marco & Prof. Dr. Fred Lisdat

18:00-18:15h **Short Talk - Eutyches Auditorium**

The Roots of the EBS series

Prof. Dr. Frieder Scheller. Postdam University, Germany.

18:15-19:15h **Plenary Talk - Eutyches Auditorium**

Pushing the boundaries of paper microfluidics for improving and maintaining health.

Prof. Dr. Paul Yager. University of Washington. Seattle, United States

19:15-20:15h

Welcome Cocktail 





Monday, October 27th

9:00–10:00h Plenary Talk – **Eutyches Auditorium**

Soft, Wireless Biosensors for Clinical Care.
Prof. Dr. John A. Rogers. Northwestern University, Evanston, United States.

10:00–10:40h Keynote – **Eutyches Auditorium**

Disposable Sensors for Next-Generation Diagnostics.
Prof. Dr. Can Dincer. University of Munich, Germany.

10:00–10:40h Keynote – **Medusa Room**
Frontier Bioelectroanalytical Technologies: Shaping the Future of Precision Health for All.
Prof. Susana Campuzano. Full Professor in Chemistry Sciences Faculty, Complutense University of Madrid

10:40–11:25h Oral Communications – **Eutyches Auditorium**

10:40–10:55h **0-EBIO-1. Fragment Imprinting using Epitopes and Recombinant Tags for Protein-MIPs**
A. Yarman, A F. T. Waffo, A. Oktay, O. Lenz, I. Zebger, S. Kurbanoglu, F. W. Scheller.

10:55–11:10h **0-EBIO-2. Integration of palladium--graphene nanohybrids on Si-based electrochemical sensors for food quality monitoring**
L. A. Dinu, F. Pogacean, C. Parvulescu, O. G. Simionescu, A. Aytacoglu, O. Brincoveanu, C. Romanitan, C. Pachiu, S. State, A. Mocanu.


11:10–11:25h **0-EBIO-3. Towards digital detection of biomarkers with CMOS ISFET arrays**
J. Cuenca-Michans, M. Ertl, J. Beltrán-Ramón, E. Marco, A. Cadarso, M. Gutiérrez-Capitán, C. Fernández-Sánchez, JM Margarit-Taulé, F. Serra-Graells, A. Baldi.

10:40–11:25h Oral Communications – **Medusa Room**

10:40–10:55h **0-MICRO-1. Modelling of capillary-force-controlled microfluidic systems using multiscale simulation methods**
S. Loebel, I. Schaarschmidt, P. Steinert, E. Gärtner, C. Pöhlmann, M. Hein, M. Richter, J. Weitzenberg, U. Eckert, A. Schubert

10:55–11:10h **0-MICRO-2. A Versatile Microfluidic Device with Integrated Joule-Heating and Bubble Trap for Enhanced Point-of-Care Biosensing**
M. Loessl, A. Baeumner.

11:10–11:25h **0-MICRO-3. Monitoring astrocyte response to ischemia via GFAP impedimetric sensing in a Stroke-on-a-Chip Model**
P. Rioboó Legaspi, B. Alric, E. Costa-Rama, M. T. Fernández-Abedul, Y. T. Matsunaga

11:25–11:50h Coffee Break 



Monday, October 27th

- 11:50-12:50h Oral Communications - **Eutyches Auditorium**
- 11:50-12:05h **0-EBIO-4. Towards Scalable and Green Fabrication of Flexible Biosensors for Sweat-Based Glucose and Lactate Detection**
H. Hamidi, D. Iacopino.
- 12:05-12:20h **0-EBIO-5. A label free electrochemical aptasensor enables the ultrasensitive and selective detection of neurofilament light**
H. Li, Q. Hu, K. Percze, A. Offenhäusser, D. Mayer
- 12:20-12:35h **0-EBIO-6. Compact and highly sensitive potentiometric biosensors using a solid-state, vertically stacked electrochemical cell**
M. Clua Estivill, P. Blondeau, F.J. Andrade.
- 12:35-12:50h **0-EBIO-7. Combining xanthine dehydrogenase (XDH) with electrochemical and photoelectrochemical systems**
G. Göbel, E. Steingelb, S. Leimkühler, W. Schuhmann, F. Lisdat


- 11:50-12:50h Oral Communications - **Medusa Room**
- 11:50-12:05h **0-WEAR-1. A hydrogel-based wearable device supporting sweat sampling for monitoring sports activities**
L.A. Tortajada Genaro, E. Borrás, M.J. Bañuls.
- 12:05-12:20h **0-WEAR-2. Insights into ISF-Blood Correlation Dynamics by the Aid of a Novel Microneedle Biosensor**
B. Y. Koca, P. Zolfaghari, H. Urey, H. Mirzajani
- 12:20-12:35h **0-WEAR-3. Neurodegenerative Disease Monitoring via Wearable OECTs Textile Biosensors**
A. Alam, V. Vit, N. Coppede.
- 12:35-12:50h **0-WEAR-4. Silk-Based Radiochromic Sensing Patch for On-site X-ray Dosimetry**
N. Ahmad, C. Guardiola, S. Aznar, G. Guirado, M. Álvarez, S. Mena, X. Muñoz.

- 12:50-13:30h Flash Presentations - **Eutyches Auditorium**
- 12:50-12:55h **FP-APP -1. Translating Biomarker Discovery into Point-of-Care Biosensors: Advancing Prognostic Tools for Malaria.**
C. Parolo.
- 12:55-13:00h **FP-APP -2. Biofunctionalization as Key Step in Biosensor Applications -- From R&D to Highthroughput Manufacturing.**
W. Weigel, S. Plesshoff, H. El Agami, A. Mader.
- 13:00-13:05h **FP-BIOH-1. Advanced Functionalization Strategies of Graphene Transistor Arrays for Sensitive Neurotransmitter Detection.**
E. Prats-Alfonso, S. Brosel-Oliu, X. Illa Vila, R. Villa Sanz, A. Guimerà-Brunet.



Monday, October 27th

- 13:05-13:10h **FP-BIOR-1. Improving Nanobody Stability and Production by Using ProteinMPNN.**
A. Pejenaute, L. Gálvez-Larrosa, C. Segovia, P. Herrero-Alfonso, D. Fernández-Ramos, F. Lopitz-Otsoa, O. Millet, F. Peccati, G. Jiménez-Osés, G. Ortega-Quintanilla.
- 13:10-13:15h **FP-BIOR-2. Targeting Soluble BCMA with DNA Aptamers: New Tools for Liquid Biopsy Diagnostics in Multiple Myeloma.**
R. Guillén-Palomares, L. Ramos-Palacios, L. Tuñón-González, A. Díaz-Fernández, N. De los Santos-Álvarez, M. J. Lobo-Castañón.
- 13:15-13:20h **FP-MICRO-1. New automation and detection strategies for compact biomarker monitoring systems based on microfluidic microarrays.**
F. Vinci, C. Fernández Sánchez, M. Rodríguez Núñez, A. Calleja Navalpotro, M. P. Marco, A. Baldi Coll.
- 13:20-13:25h **FP-OD-1. Automated Patch Clamp for the Detection of Tetrodotoxin and the Toxicological Characterisation of its Analogues.**
J. Reverté, F. Sureda, A. Tudó, M. Alkassar, M. Rambla-Alegre, A. Sánchez-Henao, M. Mandalakis, P. Peristeraki, J. Diogène, M. Campàs.
- 13:25-13:30h **FP-APP-10. Multichannel plasmonic platform for rapid and high-sensitivity multiplexed and comprehensive diagnostics**
M.C. Estévez, J. F. Giarola, P. Ramírez-Priego, L. Lechuga.

13:30-14:30h Lunch 

14:30-15:30h Plenary Talk - **Eutyches Auditorium**

**How deep (learning) is the organ-on-chip?
Decoding the Microphysiological Models with AI.**

Prof. Dr. Eugenio Martinelli. University of Rome Tor Vergata, Rome, Italy

15:30-16:45h Oral Communications - **Eutyches Auditorium**

15:30-15:45h **0-EBIO-8. Applications of electrochemical biosensors containing gold or carbon nanomaterials for the determination of aptamer or DNA-based biomolecular interactions**
D. Ozkan-Arikoysal, H. Subak, F.F. Yilmaz, G. Selvolini, M. Macchiagodena, M. Pagliai, P. Procacci, G. Marrazza.

15:45-16:00h **0-EBIO-9. Horseradish Peroxidase As an Electrochemical Reporter Protein for Cell-Free Biosensor Systems**
A. Ruhela, S. B.W. Liyanagedera, A. J.P. Perkins, N. Laohakunakorn, J. R. K. Marla.

16:00-16:15h **0-EBIO-10. From Lab to Open Hardware: A Polyaniline-Based Biosensor for Carbapenemase-Producing Bacteria**
S. Yunus, G. Le Brun, J-P Raskin

16:15-16:30h **0-EBIO-11. Versatile Conductive Ink Formulations for Flexible, Wearable, and Edible Enzyme-Based Bioelectronics**
P. Bollella, V. Marchianò, A. Tricase, E. Macchia, L. Gentile, D. Leech, R. Kidayaveettil, G. Scamarcio, L. Torsi



Monday, October 27th

16:30-16:45h **0-EBIO-12. Pathogen-on-a-Chip: Impedance-Based Detection of Biofilm Formation of Staphylococcus aureus and Staphylococcus Scládalculus epidermidis**
B. Yöney, R. Oborilová, K. Lacina, P.

15:30-17:00h Oral Communications - **Medusa Room**

15:30-15:45h **0-BIOH-1. Silk Fibroin as a "Green Matrix" for Enzyme Immobilization exemplified for Amperometric Glucose Sensing**
K.A. Janus, S. Achtsnicht, B. Isella, A. Kopp, K. Miyamoto, T. Yoshinobu, M. Keusgen, M. J. Schöninga.

15:45-16:00h **0-OT-1. Heat Transfer-based immunobiosensor for serological detection of Mycobacterium leprae infection**
A. Parreiras de Jesus, R. Arreguin-Campos, A. L. Grossi de Oliveira, R.T. Fujiwara, T. Cleij, B. van Grinsven

16:00-16:15h **0-OT-2. Electrolyte-gated organic field-effect transistors for diagnostics**
M. Mas Torrent, M. J. Ortiz-Aguayo, C. Martínez-Domingo, D. Kos, D. Gutiérrez

16:15-16:30h **0-OT-3. Spontaneous Cell Detachment from Temperature Gradients: Getting the Method Ready for Antimicrobial Drug Testing at Cell Culture Leve**
C.T. Urban, S. Bakhshi Sichani, D. Yongabi, M. P. Lettinga, P. Wagner, C. Glorieux, J. Gruber

16:30-16:45h **0-OD-1. Integrated paper|transition metal dichalcogenides colorimetric device for the nanozymatic-sensing of glutathione in saliva**
A. Scroccarello, P. Di Battista, F. Della Pelle, D. El Fadil, D. Compagnone.

16:45-17:00h **0-DATA-1. Dopamine Detection in the Presence of Interfering Substances Using Machine Learning Methods**
C. Kallabis, P. Beyerlein, F. Lisdat

17:00-17:40h Round Table - **Eutyches Auditorium**

WEARABLES: "Wearable Biosensors: Merging Health Monitoring with Everyday Life"

Moderator
Dr. Antoni Baldi.

Panelists
Prof. Dr. John A. Rogers, Prof. Dr. Firat Gude, Dr. Beatriz Prieto and Prof. Dr. Can Dincer.



Monday, October 27th

- 17:40-18:10h Flash presentation – **Eutyches Auditorium**
- 17:40-17:45h **FP-ET-1. A Miniaturized Multi-sensor Chip for Small-Scale Bioreactor Monitoring in Precision Fermentation.**
R. Van den Eeckhoudt, N. I. Rusli, V. Vangalis, J. Bauwens, K. J. Verstrepen, M. Kraft, I. Taurino.
- 17:45-17:50h **FP-ET-2. 3D-Printed Electrochemical Aptasensor for Label-Free Detection of Breast Cancer Cells.**
S. Yuksel, R. Ilhan, E. Arzuk, P. Ballar Kirmizibayrak, P. Kara.
- 17:50-17:55h **FP-ET-3. Sensitive Electrochemical Biosensor for Environmental DNA Detection.**
T. D'Aponte, E. Cavaliere, F. Carteni, E. De Alteriis, S. Mazzoleni, V. Lannotti, R. Velotta, B. Della Ventura.
- 17:55-18:00h **FP-ET-4. Hybrid Electrochemical Biosensors Integrating Bionanomaterials for Clinical Diagnostics.**
S. Hassanpour.
- 18:00-18:05h **FP-ET-5. Hydrogel-Gold-Nanoparticle Composites as a Potential Sensing-Transduction Element for Biomedical Sensing Platforms-Initial Investigation of Electrical Character.**
A. Hassan, J. Körner.
- 18:05-18:10h **FP-ET-6. Quantifying Perfluorooctanoic Acid: A MIP-Based Impedimetric Sensor Approach.**
C. Neves Lourenço, J. Lowdon, T. Cleij, B. Van Grinsven.
- 18:10-20:00h Poster session



Tuesday, October 28th

8:50-11:50h **Socio-Cultural Activity**

Guided tour of Tarragona. Visit to the Roman Ruins

Meeting point: Tarragona Exhibition and Congress Center

11:50-12:50h **Plenary Talk - Eutyches Auditorium**

Revisiting Biosensing with Digital Holography.

Prof. Dr. Romain Quidant. Photonics Laboratory, ETH Zürich, Switzerland.

12:50-13:30h **Flash Presentations - Eutyches Auditorium**

12:50-12:55h **FP-OPT-2. A user-friendly and rapid colorimetric biosensor for environmental DNA detection.**

E. Cavaliere, T. D'Aponte, M. Zotti, S. Mazzoleni, B. Della Ventura, R. Velotta.

12:55-13:00h **FP-OT-1. Phase-Separating Peptides: A Convenient Tool for the Rapid Detection of Microbial Contamination in Highly Pigmented Produce.**

S. Gudlur, Z. Hu, G. R. L. Yap, C. Por, A. Miserez.

13:00-13:05h **FP-POC-1. Implantable Multiparametric Sensing Device for Point-of-Care Cardiovascular Biomarker Detection.**

C. Arroyo Rivera, M. Mir, J. Samitier.

13:05-13:10h **FP-POC-2. Synthesis of gated-mesoporous silica materials for detection metalloproteinases 2 and 9 and the development of paper strips for rapid tests.**

C. Alventosa-Díaz, E. Climent, T. Vural, R. Martínez-Máñez.

13:10-13:15h **FP-POC-3. Label-Free Detection of Cardiac Biomarkers Using NanoMIPs-Functionalized Conductometric Sensors.**

P. Chidambaram, G. S Perera, F. Akhlagi, S. Sriram, Madhu.

13:15-13:20h **FP-WEAR-1. Advancing ICU Care: Continuous Monitoring with Wearable Biosensors for Early Sepsis Detection Using Printed Electronics.**

K. Alemany López, A. Ben Aissa, C. Casellas Coll, A. Moya Lara.

13:20-13:25h **FP-OD-2. A novel FKBP12 sensor using long period optical fibre gratings**

F. Baldini, C. Bartolini, G. Caminati, M. Fytory, G. Frigenti, A. Giannetti, A. Ishaq, S. Menichetti, N. Marcucci, S. Tombelli, M. Tozzetti, C. Trono.

13:25-13:30h **FP-OD-6. Moringa oleifera and Marula-derived platforms for the detection of body fluids at the crime scene**

P. Komane, N. Leah, K. Pillay, P. Kumar, R. Parboosing, Y. Choonara.



Tuesday, October 28th

13:30-14:30h Lunch

14:30-15:10h Keynote - **Eutyches Auditorium**

Fluorescent biosensors for diagnostics and drug discovery in cancer

Dr. May Morris. Institut des Biomolécules Max Mousseron, CNRS, UMR 5247, Montpellier University, 1919 Route de Mende, France.

14:30-15:10h Keynote - **Medusa Room**

Computational design of new-to-nature β -sheet proteins for next-generation biorecognition elements

Dr. Enric Marcos. Molecular Biology Institute of Barcelona (IBMB), CSIC, Spain.

15:10-17:00h Oral Communications - **Eutyches Auditorium**

15:10-15:25h **0-OBIO-1. Newly designed molecular beacon for SERS-based miRNA detection**

M. Banchelli, S. Tombelli, C. D'andrea, M. De Angelis, C. Trono, F. Baldini, P. Matteini, G. Giannetti

15:25-15:40h **0-OBIO-2. Controlled aggregation of gold nanoparticles in continuous flow microreactor: toward the robust production of ultrasensitive NIR SERS nanotags**

A. Verdin, P. Stienet, G. Eppe, C. Malherbe

15:40-15:55h **0-OBIO-3. Nanozyme-Powered Cellulose Membrane for Smartphone-based Glyphosate Determination in Food**

M. Kumar, A. Scroccarello, F Della Pelle, T. Di Giulio, E. Mazzotta, D. Compagnone

15:55-16:10h **0-OBIO-4. Magnetic beads-enhanced surface plasmon resonance imaging detection of circulating tumour DNA from cancer patients in liquid biopsy**

N. Bellassai, R. D'Agata, E. Giordani, G. Ziccheddu, R. Corradini, G. Spoto

16:10-16:25h **0-OBIO-5. Plasmonic biosensor and binding inhibition assay for detection of tramadol**

S. Springer, E. Hemmerová, M. Čapková, J. Homola

16:25-16:40h **0-OBIO-6. Label-free vancomycin monitoring in serum with a hydrogel-based surface plasmon aptasensor**

K. Toma, Y. Taguchi, K. Iitani, T. Arakawa, K. Mitsubayashi.

16:40-16:55h **0-OBIO-7. Colorimetric Plasmonic Biosensor for the Parallel Detection of Multiple Biomarkers**

M. Toma



Tuesday, October 28th

- 15:10-17:00h Oral Communications – **Medusa Room**
- 15:10-15:25h **0-OBIOR-1. Base Gap switches: a novel class of molecular switch for synthetic biology-driven biosensors**
D. Richards, Y. Partington, F. Abgottspon, B. Dalla Via, I. de Geyer d'Orth, P. Cools, A. deMello
- 15:25-15:40h **0-OBIOR-2. Rapid and Specific Detection of Whole-Cell Pathogens Using Phage Protein-Based Lateral Flow Assays**
G. Le Brun, M. Nuytten, A. Leprince, J-P Raskin, A. Gillis
- 15:40-15:55h **0-OBIOR-3. A Dual Aptasensor for inflammatory cytokines detection in biological fluids**
M. B. Irimes, M. Tertis, A. Pusta, , R. Oprean, C. Cristea
- 15:55-16:10h **0-OBIOR-4. Multimodal Recognition Architectures for microRNA Biosensing**
M. Abdel-Hamied, S. Rajpal, M. Guo, Y. Wei, F. Oswald, B. Mizaikoff, CKranz.
- 16:10-16:25h **0-OBIOR-5. Biosensing of dsRNA, a Universal Viral Biomarker: Coupling Protein-Based Sandwich Assay with Nanopore Direct RNA Sequencing for Emerging Infectious Disease Surveillance**
S. Sahu, A. N. Xhurxhi, S. Szunerits, C. Ritzenthaler
- 16:25-16:40h **0-OBIOR-6. An Electrochemical Aptamer-Based Biosensor for In Vivo, Real-Time Pharmacokinetic Monitoring of Trastuzumab**
A. Idili, A. Chamorro-García, G. Valenti, A. Porchetta, K. Plaxco, T. Kippin, M. Alfonsini, L. Fetter, N. Emmons
- 16:40-16:55h **0-OBIOR-7. Detection of autoinducing peptides for the diagnosis Staphylococcus aureus infections**
N. Castro, C. Ferrero, N. Pascual, A. Lacoma, J.-Pablo. Salvador, M.-Pilar Marco


17:00-17:50h Round Table – **Eutyches Auditorium**

AI: “AI-Powered Biosensors: Smart Detection and Predictive Analytics”

Moderator
Prof. Dr. Laura Lechuga.

Panelist
Prof. Dr. Eugenio Martinelli, Dr. Enric Marcos, Prof. Dr. Manel del Valle.

17:50-19:20h **Poster Session**

21:00-22:30h **Conference Dinner**  **August Hall**



Wednesday, October 29th

9:00-10:00h Plenary Talk - **Eutyches Auditorium**

From Laboratory to Shelf: Next generation biosensing technologies for the food system
Dr. Firat Güder. Imperial College London. United Kingdom.

10:00-10:40h Keynote - **Eutyches Auditorium**

Lighting the Future of Biosensing with Next-Generation Luminescent Proteins.
Dr. Elena Benito-Peña. Universidad Complutense de Madrid, Spain.

10:00-10:40h Keynote - **Medusa Room**

Odorant biosensors based on electrical properties of olfactory receptors
Prof. Dr. Josep Samitier. Institute for Bioengineering of Catalonia (IBEC), Institute of Science and Technology; Barcelona, Spain.

10:40-11:25h **Oral Communications - Eutyches Auditorium**

10:40-10:55h **O-APP-1. Electrochemical detection of extracellular vesicles for early point of care cancer diagnosis and treatment monitoring**
M. Furness, A. Kalkal, P. Lozano Sanchez, M. Caffio, J. Webber, A. Devadoss

10:55-11:10h **O-APP-2. Immunoreagents and immunoassays for biotoxin analysis. Patulin as a case in point**
J. V. Mercader, D. Haydn, I. Navarro-fuertes, A. Abad-Somovilla, A. Abad-Fuentes

11:10-11:25h **O-APP-3. Benzimidazolium-Based Fluorescent and Colorimetric Probe for Selective Detection of Hydrogen Sulfide and Live-Cell Imaging**
D. Bains, A. Shanavas



Wednesday, October 29th

10:40–11:25h **Oral Communications – Medusa Room**

10:40–10:55h **0–OPOC–1. Highly Efficient Coreactant–Free Electrochemiluminescence Sensing Platform with Multiplexed Interdigitated Spiral Microelectrodes**
S. Bozorgzadeh, A. O'Riordan

10:55–11:10h **0–OPOC–2. Towards Resistance–Spraying Approaches: A Lateral Flow Platform for Antivirulence Antibiotic Screening**
D. Valero Calvo, M. Calvo–Andrés, A. De la Escosura

11:10–11:25h **0–OPOC–3. Harnessing optogenetic switches for innovative light–driven bioassays**
N. Urban, M. Hörner, W. Weber, C. Dincer.

11:25–11:50h **Coffee Break** 

11:50–13:20h **Oral Communications – Eutyches Auditorium**

11:50–12:05h **0–APP–4. Gut Health Unlocked: Ingestible Sensing from Lab to Human Trials**
S. Sijabat, F. Leonardj, A. Even, R. Minderhoud, T. Torfs, A. van Heusden, D. Firfilionis, T. Teichmann, N. Van Helleputte, C. Van Hoof.

12:05–12:20h **0–APP–5. From Ocean to Lab: Fast and Portable Solutions to Monitor Ciguatera**
M. Campàs, J. Reverté, S. Leonardo, T. Tsumuraya, M. Hirama, N. Oshiro, J. Turquet, J. Diogène

12:20–12:35h **0–APP–6. Biomimetic Nanoplasmonic Sensor for Immunotherapy Evaluation**
R. Batool, M. Soler, L.M. Lechuga

12:35–12:50h **0–APP–7. Development of in–vitro diagnostic platforms for detection of MRC5– and THP1–derived exosomes using optical and chemiluminescent readouts**
R. Rossi, A. Burgos Jaramillo, M. Marti Ripoll, M. I. Pividori Gurgo.

12:50–13:05h **0–APP–8. Valorizing G–quadruplex DNA Structures in Cancer Diagnosis and Staging through Accessible Electroanalytical Biodevices**
V. Ruiz–Valdepeñas Montiel, A. Cabrero–Martín, J. Velázquez–Gutiérrez, M. Garranzo–Asensio, J.M. Pingarrón, R. Barderas, S. Campuzano

13:05–13:20h **0–APP–9. Towards wearable real–time health monitoring: Aptamer–based biosensors for label–free detection of disease markers in dermal interstitial fluid**
A. Chandran, R. Gordon, J. Dear, H. Schulze, J. Fallowfield, T. Bachmann



Wednesday, October 29th

- 11:50–13:20h Oral Communications – **Medusa Room**
- 11:50–12:05h **0–OPOC–4. Multiplexing amplification and detection biosensor design using LAMP–based nucleic acid amplification for viral infection targets followed by readout via lateral flow assay**
S. Agarwal, R. Brambilla, A. Puyskens, A. Nitsche, F. K Bier.
- 12:05–12:20h **0–OPOC–5. Calorimetric Lateral Flow Immunoassay for the Detection of miRNAs associated to Pancreatic Cancer using Triangular Au Nanoparticles.**
A. J. Luna Pozo, A. García Barrientos, L. C. beola Guibert, C. Cuestas Ayllón, V. Grazú Bonavía, J. Martínez de la Fuente
- 12:20–12:35h **0–OPOC–6. Electrically Readable Lateral Flow Assay Using Organic Transistors for Hepatitis B and C detection**
M. A. Ortíz Aguayo, C. Martínez-Domingo, D. Kos, D. Gutiérrez Yatacua, M. Mas-Torrent
- 12:35–12:50h **0–OPOC–7. On-site CMV diagnostics using a CRISPR–powered microfluidic biosensor**
A. Subramani, N. Urban, M. Johnston, R. Elling
- 12:50–13:05h **0–OPOC–8. A Flexible Electrochemical Platform for Alkaline Phosphatase Monitoring in Physiological Sample**
I. Atay, P. M. Kalligosfyri, A. Miglione, A. Esposito, R. Alhardan, G. Lula, I. A. Darwish, S. Kurbanoglu, S. Cinti
- 13:05–13:20h **0–OPOC–9. A novel LAMP method to produce DNA nanoballs: optimization, characterization and application to clinical pathogens via impedance analysis**
A. Toldra, D. Barrett, S. Bellver, V. Pelechano.

13:30–14:00h Science Stand-up – **Eutyches Auditorium**

14:00–14:30h Awards ceremony and Closing session – **Eutyches Auditorium**

Prof. Dr. M.–Pilar Marco & Prof. Dr. Cecilia Cristea

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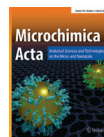
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