



**Nanoparticle-Based Imaging and Therapy of Chronic Pain in the Dorsal Root Ganglia**

**H2020-MSCA-ITN project 956477**

**3<sup>rd</sup> PIANO Annual Meeting and Final Conference**



**16-17<sup>th</sup> May 2023**

**Venue**

**Universidad Miguel Hernández  
Campus of Elche - Edificio Torregaitán  
Elche (Spain)**

**Meet room: [meet.google.com/fbh-fwiw-nfr](https://meet.google.com/fbh-fwiw-nfr)**

**AGENDA**

# 3<sup>rd</sup> PIANO Annual Meeting and Final Conference

Thursday 16.05.2024

Campus of Elche - Edificio Torregaitán

Meet room: [meet.google.com/fbh-fwiw-nfr](https://meet.google.com/fbh-fwiw-nfr)

Time	Annual Meeting	Participants
8.00	Registration & Poster set up	ESRs, Beneficiaries, Coordinator Team

Time	Opening ceremony	Participants
9.00	Welcome address: Antonio Ferrer-Montiel	ESRs, Beneficiaries, Coordinator Team
9:10	PIANO progress update: Olivia Simmonds	
9:35	Research program overview (Chair: Marzia Malcangio)	

## SYMPOSIUM 1– WP2.1 Biomaterials, nanoparticles, and imaging (lead: CHEM)

Time	Chair: Erik Agner	Participants
9.45	- <b>Delivering drugs and imaging probes into the dorsal root ganglia by biomaterial-based approaches. Professor Piera di Martino.</b> School of Pharmacy. University of Camerino. Italy.	ESRs, Beneficiaries, Coordinator Team
10:15	- <b>ESR1:</b> The preparation, characterisation and testing of different biomaterials.	
10:30	- <b>ESR3:</b> Hydrogel patches for pain relief drug delivery.	
10:45	- <b>ESR7:</b> The gating mechanism of TRPV2: a quest towards effective modulator.	
11:00	- <b>ESR11:</b> Development of MRI accessories for imaging and the physiological monitoring of pain.	

## Coffee Break and Poster Discussion

## SYMPOSIUM 2– WP2.2 Neurosurgery (lead: UCAM)

Time	Chair: Gonçalo Bernardes	Participant
12.00	- <b>Neuromodulation of Spinal Circuits: Neurorehabilitation and Recovery of Function Following Severe Spinal Cord Injuries. Professor Ronaldo Ichiyama.</b> Faculty of Biological Sciences. University of Leeds. UK.	ESRs, Beneficiaries, Coordinator Team
12:30	- <b>ESR5:</b> Neuroregeneration and Neurotransplantation.	

### Plenary lecture

Time	Chair: Marc Vendrell	Participants
12:45	- <b>TRPM8 modulators to relieve neuropathic pain. A medicinal chemistry program. Professor Rosario González Muñiz.</b> Instituto de Química Médica. CSIC. Spain.	ESRs, Beneficiaries, Coordinator Team

### Lunch Break and Poster Discussion

Time		Participants
14:30	- Restricted session for ESRs to bring up concerns or ideas to be addressed at the Supervisory Board & Management Meeting.	ESRs

### SYMPOSIUM 3– WP2.3 Neuropathic pain: mechanisms of action (Lead: UMH)

Time	Chair: Nikita Gamper	Participants
15:00	- <b>Pathophysiology of thermoTRP channels. Dr. Félix Viana.</b> Instituto Neurociencias, UMH-CSIC. Alicante. Spain	ESRs, Beneficiaries, Coordinator Team
15:30	- <b>ESR6:</b> GABAergic signalling in peripheral sensory ganglia and its role in pain processing.	
15:45	- <b>ESR9:</b> ThermoTRP ion channels as a key molecular and functional landmark for neuropathic pain transduction in subsets of somatosensory neurons.	
16:00	- <b>ESR10:</b> The synthesis of inhibitors that selectively target sodium ion channel subtypes.	
16:15	- <b>ESR15:</b> Reversal of oxidative DNA damage by nanoparticle-based stimulation of DNA repair pathways to induce anti-nociceptive effects in models of neuropathic pain.	

### Coffee Break & Poster Discussion

### SYMPOSIUM 4– WP2.4 Inflammatory process (Lead: KCL)

Time	Chair: Tracey Pirali	Participants
17:00	- <b>Fibroblast Control of Macrophage Phenotype in Chronic pain States. Professor Andrew J. Shepherd.</b> MD Anderson Cancer Center. University of Texas. USA	ESRs, Beneficiaries, Coordinator Team
17:30	- <b>ESR8:</b> The chemical modulation of in vivo macrophage functions at DRG sites.	
17.45	- <b>ESR13:</b> The use of exosomal cargo to investigate sensory neuron to macrophage communication after nerve trauma.	

### Closing lecture

Time	Chair: Asia Fernández Carvajal	Participants
17:45	- <b>Translational Pain Research. Professor Tim Hucho.</b> Faculty of Medicine. University of Cologne. Germany.	ESRs, Beneficiaries, Coordinator Team

Time	Closing ceremony	Participants
18.30	- <b>Closing Address</b> (Marzia Malcangio & Antonio Ferrer-Montiel).	ESRs, Beneficiaries, Coordinator Team

**Dinner 20:30h**

# 3<sup>rd</sup> PIANO Annual Meeting and Final Conference

**Friday 17.05.2024**

**Instituto de Investigación, Desarrollo e Innovación en Biotecnología Sanitaria (IDiBE)**



**Edificio Torregaitán**

**Von Humbolt Seminar room**

Time	Topic	Participants
9:00-12:00	<b>Supervisory Board &amp; Management Meeting</b>	Supervisors, ESR representative and Coordinator

**Lunch and farewell**

## PRACTICAL INFORMATION

<p style="text-align: center;"><b>VENUE</b></p>	<p>Universidad Miguel Hernández (<a href="http://www.umh.es">www.umh.es</a>)</p> <p>Scientific meeting: IDiBE, Edificio Torregaitám (<a href="#">Campus of Elche</a>)</p> <p>Consortium meeting: IDiBE, Edificio Torregaitán (<a href="https://idibe.umh.es">https://idibe.umh.es</a>)</p> <p>Meet room: <a href="https://meet.google.com/fbh-fwiw-nfr">meet.google.com/fbh-fwiw-nfr</a></p>
<p style="text-align: center;"><b>TRAVEL TO ELCHE</b></p> 	<p><b>Plane:</b> The easiest way to reach Elche is by plane. Several EU airlines give service at good prices. The Alicante/Elche airport has flights to most European cities. The airport is 15 min from the city of Elche (<a href="https://www.aena.es/es/alicante-elche-miguel-hernandez.html">https://www.aena.es/es/alicante-elche-miguel-hernandez.html</a>)</p> <p><b>Train:</b> Trains from Madrid and Barcelona also arrive to Elche city (<a href="http://www.renfe.es">www.renfe.es</a>).</p> <p><b>Car:</b> Major roads (AP7 freeway) run through the east coast from France to south Spain, passing through Elche. (<a href="https://www.google.es/maps/preview">https://www.google.es/maps/preview</a>)</p>
<p style="text-align: center;"><b>ACCOMODATION</b></p> 	<p>For your stay, we suggest the following hotels:</p> <ul style="list-style-type: none"> <li>-<b>Hotel Huerto del Cura</b> (<a href="https://www.hotelhuertodelcura.com">https://www.hotelhuertodelcura.com</a>). A classic and garden-type hotel. Located in the city center.</li> <li>-<b>Hotel Jardin Milenio</b> (<a href="https://www.porthotels.es/port-jardin-milenio.html">https://www.porthotels.es/port-jardin-milenio.html</a>). This is also a very good and affordable hotel, located near the city center.</li> <li>-<b>Hotel Centro Elche - Melia</b> (<a href="https://www.melia.com/es/hoteles/espana/elche/hotel-elche-centro-by-melia?esl-k=sem-google%7Cng%7Cc559301128009%7Cm%7Ck%7Cp%7Ct%7Cdc%7Ca128915859749%7Cg15177840433&amp;gclid=EA1aIQobChMIvvKbyuyQggMV0otoCR0otg0oEAAYASAAEgIhoPD_BwE&amp;gclid=aw.ds">https://www.melia.com/es/hoteles/espana/elche/hotel-elche-centro-by-melia?esl-k=sem-google%7Cng%7Cc559301128009%7Cm%7Ck%7Cp%7Ct%7Cdc%7Ca128915859749%7Cg15177840433&amp;gclid=EA1aIQobChMIvvKbyuyQggMV0otoCR0otg0oEAAYASAAEgIhoPD_BwE&amp;gclid=aw.ds</a>). Nice hotel, located in the city center.</li> <li>-<b>IBIS Hotel</b> (<a href="https://ibiselcheelche.com-hotel.com/es/">https://ibiselcheelche.com-hotel.com/es/</a>). Located near the city center and the University campus.</li> </ul>
<p style="text-align: center;"><b>SOCIAL DINNER</b></p> 	<p><b>Restaurante la Taula</b> (<a href="https://www.porthotels.es/es/restaurante-la-taula.html">https://www.porthotels.es/es/restaurante-la-taula.html</a>). Located in Hotel Jardin Milenio.</p>