

33205. Therapeutic Targets in Neuropsychopharmacology (coordinator: Prof Manuela Garcia Lopez manuela.garcia@uam.es)

Classes will take place at Seminar XIV

Hour	Monday-19 February	Tuesday- 20- February	Wednesday-21 February	Thursday-22 February	Friday-23 February
	9:30h General instructions to the subject Prof. Manuela G. Lopez Coordinator				
10-11	Action potential Prof. Jesús Hernández Guijo Dept. Pharmacology-UAM	Structural organization of neurons and glia. Dynamic structure of neuronal membrane Prof. Miguel Garzón Dept. Anatomy-UAM	Calcium channels: modulation Prof. Jesús Hernández-Guijo Department Pharmacology-UAM	Endoplasmic reticulum and mitochondrial calcium: contribution to cellular death Prof. María F. Cano-Abad Dept. Pharmacology-IFTH-UAM	Oxidative stress and neuronal pathology Prof. Antonio Cuadrado Department Biochemistry-UAM
11-12	Sodium and Potassium Channels Prof. Jesús Hernández-Guijo Dept. Pharmacology-UAM	General concepts on the organization of the CNS Prof. Miguel Garzón Dept. Anatomy-UAM	Electrical activity in neuronal circuits Prof. David Fernández Sevilla Dept. Anatomy-UAM	Altered chromaffin cell function in disease Prof. Antonio García Dept. Pharmacology-IFTH-UAM	Glia and cerebral function Prof. MD Martín de Saavedra Universidad Complutense de Madrid
12-13	Calcium Channels Prof. Luis Gandía Dept. Pharmacology-IFTH-UAM	Main sensorial and motor systems Prof. Miguel Garzón Dept. Anatomy-UAM	Release of neurotransmitters by exocytosis Prof. Almudena Albillas Dept. Pharmacology-UAM	Nicotinic receptors Prof. Luis Gandía Dept. Pharmacology-IFTH-UAM	Neuroinflammation and its implication in neurodegeneration Prof. Ana I. Rojo Department Biochemistry-UAM
13-14					

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Hour	Monday-26 February	Tuesday- 27 February	Wednesday- 28 February	Thursday-29 February	Friday-1 March
10-11	Common mechanisms in neurodegenerative diseases <i>Prof. Jordi Matias-Guiu Antem Hospital San Carlos</i>	<i>Optimising animal models of schizophrenia-related alterations for antipsychotic drug development</i> <i>Prof. Alejandro Higuera Matas UNED</i>	–INTERACTIVE ACTIVITY therapeutic targets for NPP (see order of presentation below) (Evaluation committee: Elena Tortosa and Manuela Garcia Lopez)	Depression: molecules, circuits and pharmacological treatment <i>Prof. Pilar Lopez Garcia Dept. Psychiatry UAM</i>	Multiple sclerosis: physiopathology and treatment <i>Prof. Celia Oreja-Guevara Servicio Neurología Hospital San Carlos</i>
11-12	How genomics and transcriptomics have contributed to our knowledge in Neurodegenerative diseases. <i>Prof. Elisa Navarro UCM</i>	Therapeutic strategies in Alzheimer's disease <i>Prof. Manuela Gª López- Dept. Pharmacology-IFTH-UAM</i>	–INTERACTIVE ACTIVITY-cont therapeutic targets for NPP (Evaluation committee: Elena Tortosa and Manuela Garcia Lopez)	Schizophrenia: neurobiological basis and pharmacological treatment <i>Prof. Pilar Lopez Garcia Dept. Psychiatry UAM</i>	Biomarkers in neurodegenerative diseases <i>Prof. Marta del Campo Universidad CEU</i>
12-13	Autism Spectrum Disorders: molecular mechanisms and treatment <i>Prof. MD Martin de Saavedra UCM</i>	Drug development in Amyotrophic lateral Sclerosis <i>Prof. Ana Martínez Centro de Investigaciones Biológicas-CSIC</i>	–INTERACTIVE ACTIVITY: therapeutic targets for NPP (see order of presentation below) (Evaluation committee: Elena Tortosa and Manuela Garcia Lopez)	Perception of pain <i>Prof. Javier de Andrés Unidad de Dolor-Hospital la Paz</i>	–INTERACTIVE ACTIVITY - cont therapeutic targets for NPP Coordinator: Manuela G. Lopez
13-14					

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Hour	Monday-4 March	Tuesday- 5 March	Wednesday- 6 March	Thursday-7 March	Friday-8 March
10-11	Group Presentation Coordinators: Manuela Garcia Lopez/ Elena Tortosa/ Elsa Cortes <u>SESSION I: Parkinson's disease: In vitro and in vivo models</u> (4 STUDENTS)- Approaches and experimental models to develop drugs for PD	Friedreich's ataxia: novel therapeutic targets <u>Prof. Saul XXXXXX</u> Universidad Complutense de Madrid	Parkinson's disease: new therapeutic strategies <u>Prof. Isabel Lastres-Becker</u> Department Biochemistry-UAM	Individual Presentations: (Evaluation committee:TBD) Student Presentation 1 (15+10 min) Student Presentation 2 (15+10 min)	Individual Presentations: (Evaluation committee:TBD) Student Presentation 7 (15+10 min) Student Presentation 8 (15+10 min)
11-12	<u>SESSION II: Stroke</u> Group Presentation (3 STUDENTS)- Approaches and experimental models to develop drugs for stroke	Stem cells to treat neurodegenerative diseases. <u>Prof. José A Morales García</u> Universidad Complutense de Madrid	Stroke: Pharmacological basis and therapeutic strategies <u>Prof. Blanca Fuentes</u> Servicio de Neurología. Hospital la Paz	Student Presentation 3 (15+10 min) Student Presentation 4 (15+10 min)	Student Presentation 9 (15+10 min) Student Presentation 10 (15+10 min)
12-13	<u>SESSION III: Alzheimer's: In vitro and in vivo models</u> Group Presentation (4 STUDENTS)- Approaches and experimental models to develop drugs for AD	The retina as a model for neuroprotective research in Central Nervous System pathologies Profa. Elena Salobrar García Martín <i>Investigadora en el Instituto de Investigaciones Oftalmológicas Ramón Castroviejo. UCM</i>	<u>TBD</u>	Student Presentation 5 (15+10 min) Student Presentation 6 (15+10 min)	Student Presentation 11 (15+10 min) Student Presentation 12 (15+10 min)
13-14	<u>SESSION IV: ALS: In vitro and in vivo models</u> Group Presentation (4 STUDENTS)- Approaches and experimental models to develop drugs for ALS				

Interactive Sessions

28th February	TARGET	Disease
	NRF2	Depression
	Tau protein	Alzheimer
	CGRP	Migraine
	CSF-1	Parkinson
	Neurotrophic factors	Huntington's disease
	Purinergic receptors	Amyotrophic Lateral Sclerosis
	NLRP3	Traumatic brain injury
	GLP1 receptor agonist	Alzheimer
	NMDA receptors	Depression
	NOX4	Brain ischemia-stroke
	TREM2	Alzheimer

Group Presentations: Monday 4th March (10-14 h)

Date	(10:00-10:30 h)		
GROUP I		SESSION I	Models for Parkinson's
Date	(10:30-11:00 h)		
GROUP II		SESSION II	Models for Stroke
Date	(11:30-12:00 h)		
GROUP III		SESSION III	Models for Alzheimer's disease
Date	(12:00-12:30 h)		
GROUP IV		SESSION IV	Models for ALS

Individual Presentations: March 7 and 8th: Order of presentation TBD (this will be decided the first day of class)

	Name	Surname	Date
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