

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

Classes will take place at Seminar XIV

Hour	Monday-16 February	Tuesday- 17 February	Wednesday-18 February	Thursday-19 February	Friday-20 February
10-11	10:30h General instructions to the subject <i>Prof. Manuela G. López</i> <i>Coordinator</i>	Calcium Channels <i>Prof. Luis Gandía</i> <i>Dept. Pharmacology-IFTH-UAM</i>	Release of neurotransmitters by exocytosis <i>Prof. Almudena Albillos</i> <i>Dept. Pharmacology-UAM</i>	Glia and cerebral function <i>Prof. MD Martin de Saavedra</i> <i>Universidad Complutense de Madrid</i>	–INTERACTIVE ACTIVITY-cont. (Prof. Manuela Garcia Lopez) therapeutic targets for NPP see student distribution below
11-12	General concepts on the organization of the CNS <i>Prof. Miguel Garzón</i> <i>Dept. Anatomy-UAM</i>	Calcium channels: modulation <i>Prof. Jesús Hernández-Guijo</i> <i>Dept. Pharmacology-UAM</i>	Electrical activity in neuronal circuits: LTP de basis of memory <i>Prof. David Fernández Sevilla</i> <i>Dept. Anatomy-UAM</i>	Neuroinflammation and its implication in neurodegeneration <i>Prof. Ana I. Rojo</i> <i>Department Biochemistry-UAM</i>	–INTERACTIVE ACTIVITY-cont. (Prof. Manuela Garcia Lopez) therapeutic targets for NPP see student distribution below
12-13	General concepts on the organization of the CNS <i>Prof. Miguel Garzón</i> <i>Dept. Anatomy-UAM</i>	Action potential: Sodium and Potassium Channels <i>Prof. Jesús Hernández Guijo</i> <i>Dept. Pharmacology-UAM</i>	Nicotinic receptors as targets for neurological diseases <i>Prof. Luis Gandía</i> <i>Dept. Pharmacology-IFTH-UAM</i>	Mitochondria in the pathology of neurodegenerative diseases <i>Prof. Noemi Esteras</i> <i>Dept. Biochemistry. School of Medicine. UCM</i>	–INTERACTIVE ACTIVITY-cont. (Prof. Manuela Garcia Lopez) therapeutic targets for NPP see student distribution below
13-14	Main sensorial and motor systems <i>Prof. Miguel Garzón</i> <i>Dept. Anatomy-UAM</i>		Endoplasmic reticulum and mitochondrial calcium: contribution to cellular death <i>Prof. María F. Cano-Abad</i> <i>Dept. Pharmacology-IFTH-UAM</i>	Calcium homeostasis and drug repurposing <i>Prof. Adrian Girona Martínez</i> <i>Dept. Pharmacology-UAM</i>	–INTERACTIVE ACTIVITY-cont. (Prof. Manuela Garcia Lopez) therapeutic targets for NPP see student distribution below

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Hour	Monday-23 February	Tuesday- 24 February	Wednesday- 25 February	Thursday-26 February	Friday-27 February
10-11	Therapeutic strategies in Alzheimer's disease <i>Prof. Manuela G^a López- Dept. Pharmacology- IFTH-UAM</i>		Drug development in Amyotrophic lateral Sclerosis <i>Prof. Ana Martínez Centro de Investigaciones Bológicas- CSIC</i>	Parkinson's disease: new therapeutic strategies <i>Prof. Isabel Lastres-Becker Department Biochemistry UAM</i>	Group presentation supervision: Prof. Manuela Garcia Lopez) <u>SESSION Alzheimer's: In vitro and in vivo models</u> Group Presentation Approaches and experimental models to develop drugs for AD see student distribution below
11-12	Friedreich's ataxia: novel therapeutic targets <i>Prof. Saul Herranz Universidad Complutense de Madrid</i>	Biomarkers in neurodegenerative diseases <i>Prof. Marta del Campo Universidad CEU BarcelonaBeta Brain Research Center</i>	Stem cells to treat neurodegenerative diseases. <i>Prof. José A Morales García Universidad Complutense de Madrid</i>	Deciphering the vascular component of Alzheimer's disease <i>Prof. Marta Cortés. Centro de Neurociencias Cajal (CNC-CSIC).</i>	Group Presentation (supervision: Prof. Manuela Garcia Lopez) <u>SESSION : Parkinson's disease: In vitro and in vivo models</u> Approaches and experimental models to develop drugs for PD see student distribution below
12-13		Amyotrophic lateral sclerosis: therapeutic strategies <i>Dr. Oscar Garnes Camarena Fundación Jiménez Díaz</i>	The retina as a model for neuroprotective research in Central Nervous System pathologies <i>Profa. Elena Salobrar García Martín Instituto de Investigaciones Oftalmológicas Ramón Castroviejo. UCM</i>	Group Presentation (supervision: Prof. Manuela Garcia Lopez) <u>SESSION: Stroke</u> Approaches and experimental models to develop drugs for stroke see student distribution below	Group Presentation (supervision: Prof. Manuela Garcia Lopez) <u>SESSION ALS: In vitro and in vivo models</u> Approaches and experimental models to develop drugs for ALS see student distribution below

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Classes will take place at Seminar XIV

Hour	Monday-2 March	Tuesday- 3 March	Wednesday- 4 March	Thursday-5 March	Friday-6 March
10-11	Optimising animal models of schizophrenia-related alterations for antipsychotic drug development <i>Prof. Alejandro Higuera Matas UNED</i>	Pharmacological basis and therapeutic strategies <i>Prof. Blanca Fuentes Servicio de Neurología. Hospital la Paz</i>	Depression: molecules, circuits and pharmacological treatment <i>Prof. Pilar López García Dept. Psychiatry UAM</i>	Individual Presentations: (Prof. Manuela Garcia Lopez and TBD) Student Presentation 1 (15+10 min) Student Presentation 2 (15+10 min)	Individual Presentations: (Prof. Manuela Garcia Lopez and TBD) Student Presentation 7 (15+10 min) Student Presentation 8 (15+10 min)
11-12	Dendritic plasticity and neuropsychiatric disorders. <i>Prof. MD Martin de Saavedra Universidad Complutense de Madrid</i>	ApTOLL: from bench to bedside <i>Prof. Macarena Hernández Jiménez Universidad Complutense de Madrid</i>	Schizophrenia: neurobiological basis and pharmacological treatment <i>Prof. Pilar Lopez Garcia Dept. Psychiatry UAM</i>	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	Autism Spectrum Disorders: molecular mechanisms and treatment <i>Prof. MD Martin de Saavedra Universidad Complutense de Madrid</i>	Recent advances and challenges in spinal cord injury treatment <i>Prof. Juliana M. Rosa Neuronal Circuits and Behaviour Lab Hospital Nacional de Paraplégicos. Toledo</i>	Perception of pain <i>Prof. Javier de Andrés Unidad de Dolor-Hospital la Paz</i>	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	Common mechanisms in neurodegenerative diseases <i>Prof. Jordi Matias-Guiu Antem Hospital San Carlos</i>		Multiple sclerosis: physiopathology and treatment <i>Prof. Celia Oreja-Guevara Servicio Neurología Hospital San Carlos</i>		

Interactive Sessions 20th February 10-12:30 h

Name		TARGET	Disease
Bruno Soto	Gabriela Simón	Inflammation	Depression
Vanessa Promes	Emma Parada	GLP1 receptor agonist	Alzheimer
Patricia Ortega	Maite Molina	NRF2 transcription factor	Frontotemporal dementia
Laura Mena	Clara Martín	CSF-1	Parkinson
Marcos Mansilla	Victoria Llamas	Neurotrophic factors	Huntington's disease
Alice Jimenez	Sara Izquierdo	Purinergic receptors	Amyotrophic Lateral Sclerosis
Maria Cruz	Sofía Canellas	NLRP3	Traumatic brain injury
Eva Arroyo		Tau protein	Alzheimer

Group Presentations on disease models

Date			students
GROUP I 26 th February February 12-13 h	SESSION IV	Models for Stroke	Emma Parada Vanessa Promes Gabriela Simón Bruno Soto
GROUP II 27 th February 10-11 h	SESSION I	Models for Alzheimer's disease	Eva Arroyo Sofia Cañellas Maria Cruz Lavado Sara Izquierdo
GROUP III 27 th February 11-12 h	SESSION II	Models for Parkinson's	Alice Jimenez Victoria Llamas Marcos Mansilla Clara Martín
GROUP IV 27 th February 11-12 h	SESSION III	Models for ALS	Laura Mena Maite Molina Patricia Ortega

Individual Presentations: TBD (this will be decided the first day of class)
15 min presentation +10 min discussion

5-6th March

Order of presentation	Name	Surname	hour	Date
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