UNIVERSIDAD DE CHILE
FACULTAD DE MEDICINA
ESCUELA DE POSTGRADO

CURSO DE POSTGRADO

Mecanismos Celulares y Moleculares de Enfermedad (Cellular and Molecular Mechanisms of Disease)

Nombre Curso

SEMESTRE *1º* **AÑO** *2019*

PROF. ENCARGADO	*Juan Cristobal Maass Oñate*	*13.769703-3*
PROF. COORD.	*Manuel Kukuljan Padilla*	*9.080.701-3*
	Nombre Completo	Cédula Identidad

Programa Fisiología y Biofísica, ICBM, FM, UCH

UNIDAD ACADÉMICA

TELÉFONO *229786080* **E-MAIL** *jcmaass@yahoo.com*

TIPO DE CURSO *Seminarios Bibliográficos*

(Básico, Avanzado, Complementario, Seminarios Bibliográficos, Formación General)

CLASES	**0 HRS.**
SEMINARIOS	**32 HRS.**
PRUEBAS	**0 HRS.**
TRABAJOS	**30 HRS.**

Nº HORAS PRESENCIALES	*032*
Nº HORAS NO PRESENCIALES	*096*
Nº HORAS TOTALES	***128***

CRÉDITOS *4*

(1 Crédito Equivale a 30 Horas Semestrales)

CUPO ALUMNOS *6* (N° mínimo) *15* (N° máximo)

PRE-REQUISITOS *Alumnos del PDCBM y PDCM; se dará prioridad a estudiantes de 1º año*

INICIO *5 de Abril 2019* **TERMINO** *19 de Julio 2019*

DIA/HORARIO POR SESION *Viernes* **DIA / HORARIO POR SESION** *14:00 a 16:00*

LUGAR *Auditorio Dr. Luis Figueroa, 2º piso, Escuela de Postgrado, Pabellón F, FM, UCH*

Escuela De Postgrado (Sala a determinar) u otro lugar

Metodología

Seminarios

(Clases, Seminarios, Prácticos)

Evaluación (Indicar % de cada evaluacion)

La evaluación es efectuada por el profesor del curso, sobre la base de la participación y desempeño durante las 16 sesiones, además de evaluación de ensayos en la temática y estilo del curso. Todos los estudiantes participan, dirigidamente, en la discusión de cada semana. El seminario está destinado a estudiantes de doctorado.

PROFESORES PARTICIPANTES (INDICAR UNIDADES ACADEMICAS)

Antonello Penna MDPhD, Departamento de Anestesiología, FM, UCH
Lorena Tapia MDPhD, Programa de Virología ICBM y Departamento de Pediatría Norte, FM, UCH
Luis Michea MDPhD, Programa Fisiología y Biofísica, ICBM, FM, UCH
Julia Guerrerp MDPhD, Programa Fisiología y Biofísica, ICBM, FM, UCH
Manuel Kukuljan MDPhD, Departamento de Neurociencias FM, UCH
Gonzalo Farias MDPhD, Departamento de Neurología, FM, UCH
Juan C Maass MDPhD, Programa Fisiología y Biofísica, ICBM y Departamento de Otorrinolaringología FM, UCH
Nicolás Crisosto MDPhD, Departamento de Medicina Interna Occidente FM, UCH
Luis Toro MDPhD, Departamento de Medicina Interna Norte FM, UCH
Felipe Salech MDPhD, Departamento de Medicina Interna Norte FM, UCH
Diego Reyes MDPhD, Departamento de Urología Norte FM, UCH
Yalda Lucero MDPhD, Departamento de Pediatría Norte FM, UCH

DESCRIPCIÓN

This bibliographic seminar is one of the most traditional courses dictated by this graduate school and it has been oriented to discuss cellular and molecular mechanisms involved in the generation of disease and their applicability to the clinical practice. In this version of the course, the scope of the discussion has been also increased towards systemic and behavioral aspects of disease. During the seminar recent high impact scientific papers will be discussed emphasizing the integration of the discussed topic into the broader clinical and biologic context, the detailed comprehension of the experimental design and methods used and its relevance. On every session students with different backgrounds will be explicitly encouraged to participate and contribute to the comprehension of the paper. The discussion of the papers will be in English.

The papers are chosen weekly considering impact, completion of research, relevance as paradigm to comprehend disease production or prevalence as selection criteria.

Examples of papers discussed in previous years:
Singer et al., Targeting BACE1 with siRNAs ameliorates Alzheimer disease neuropathology in a transgenic model. Nature Neuroscience. 8:1343-9, 2005.

Wu et al. Hypomethylation-linked activation of PAX2 mediates tamoxifen-stimulated endometrial carcinogenesis. Nature 438:981-7, 2005.

OBJETIVOS

To discuss and comprehend the most remarkable cellular and molecular mechanisms of disease and the translation this knowledge into the clinical practice.

CONTENIDOS / TEMAS

Mechanisms of disease in Neurologic, Infectious, Psychiatric, Degenerative, Metabolic, Nutritional, Hormonal, Age related diseases and Cancer. Also we will review some aspects related to Gene Therapy, Regenerative Medicine, Genomics, Immunology and Translational Medicine.

BIBLIOGRAFÍA BÁSICA

How to read a scientific paper (Adam Ruben)
http://www.sciencemag.org/careers/2016/01/how-read-scientific-paper

How to (seriously) read a scientific paper (Elisabeth Pain)
http://www.sciencemag.org/careers/2016/03/how-seriously-read-scientific-paper

How to Prepare an Outstanding Journal Club Presentation (Rishi Sawhney)

http://www.hematology.org/Thehematologist/Features/1308.aspx

How to give a paper presentation (J DiCarlo and N Kanwisher)
https://ocw.mit.edu/courses/brain-and-cognitive-sciences/9-916-the-neural-basis-of-visual-object-recognition-in-monkeys-and-humans-spring-2005/assignments/how_to_pres_pap.pdf

BIBLIOGRAFÍA RECOMENDADA

Subramanyam R. Art of reading a journal article: Methodically and effectively. Journal of Oral and Maxillofacial Pathology : JOMFP. 2013;17(1):65-70. doi:10.4103/0973-029X.110733.

How to Read and Present a Scientific Paper (Jiri Srba)
http://people.cs.aau.dk/~hans/Dat5/slides.pdf

CALENDARIO DE ACTIVIDADES

(A continuación señalar : Descripción de la actividad, fechas, horas presenciales y no presenciales y Profesores a cargo)

FECHA	HORAS PRESENCIALES	HORAS NO PRESENCIALES	DESCRIPCION ACTIVIDAD	PROFESOR
05/04/2019	2	6	Introduction to the methodology of the course	JCM
12/04/2019	2	6	Gene Therapy	JCM
19/04/2019	2	6	General cellular and Molecular Mechanisms of Disease	MK
26/04/2019	2	6	Gastrointestinal Diseases	YL
03/05/2019	2	6	Dementia and biomarkers	GF
10/05/2019	2	6	Perioperative cognitive impairment	AP
17/05/2019	2	6	Translational medicine in hipertension	LM
24/05/2019	2	6	Acute Kidney Injury	LTo
31/05/2019	2	6	Sensory systems	JCM
07/06/2019	2	6	Viral mechanisms and viral genome	LTa
14/06/2019	2	6	Mechanisms of Cancer	MK
21/06/2019	2	6	Inflammation	JG
28/06/2019	2	6	Cancer Immune therapy	DR
05/07/2019	2	6	Hormonal and metabolic disease	NC
12/07/2019	2	6	Biology of aging and delirium	FS
19/07/2019	2	6	Closure Activity	JCM

ACTUALIZADO AL 07/01/2019