



## **HECTOR RIVEROS ROSAS**

### **Datos Generales**

**Nombre:** HECTOR RIVEROS ROSAS

**Máximo nivel de estudios:** DOCTORADO

**Antigüedad académica en la UNAM:** 40 años

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### **Nombramientos**

**Vigente:** PROFESOR DE CARRERA TITULAR B TC Definitivo  
Facultad de Medicina  
Desde 01-12-2017

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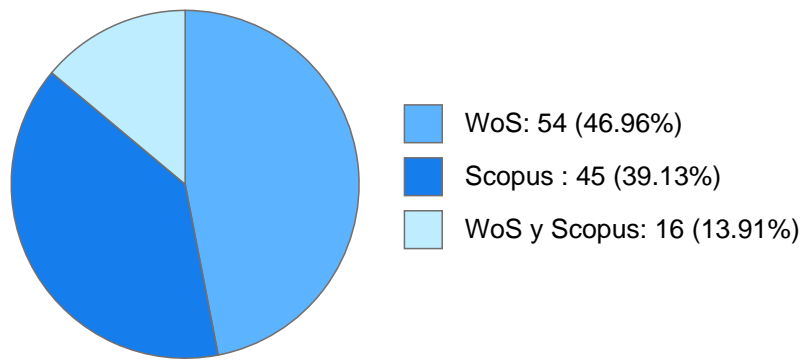
### **Estímulos, programas, premios y reconocimientos**

SNI II 2016 - 2024  
SNI I - 2015  
PRIDE D 2021 - 2024  
PRIDE C - 2021  
PASPA Estancias Sabáticas 2017 - 2018

## HECTOR RIVEROS ROSAS

### DOCUMENTOS EN REVISTAS

#### Histórico de Documentos



#	Título	Autores	Revista	Año
1	Tandem-repeat lectins: structural and functional insights	HECTOR RIVEROS ROSAS ALEJANDRA HERNANDEZ SANTOYO Francisco H. Olvera-Lucio et al.	Glycobiology	2024
2	Iron chelation mitigates mitochondrial dysfunction and oxidative stress by enhancing nrf2-mediated antioxidant responses in the renal cortex of a murine model of type 2 diabetes	HECTOR RIVEROS ROSAS Peña-Montes D.J. Huerta-Cervantes M. et al.	Mitochondrion	2024
3	Exploring the druggability of the binding site of aurovertin, an exogenous allosteric inhibitor of FO1-ATP synthase	PAOLA MENDOZA ESPINOSA HECTOR RIVEROS ROSAS ENRIQUE GARCIA HERNANDEZ et al.	FRONTIERS IN PHARMACOLOGY	2022
4	Structural and evolutionary insights into the multidomain galectin from the red abalone <i>Haliotis rufescens</i> with specificity for sulfated glycans	ADELA RODRIGUEZ ROMERO HECTOR RIVEROS ROSAS ALEJANDRA HERNANDEZ SANTOYO et al.	FISH & SHELLFISH IMMUNOLOGY	2022
5	Antilipidemic and Hepatoprotective Effects of Ethanol Extract of <i>Justicia spicigera</i> in Streptozotocin Diabetic Rats	HECTOR RIVEROS ROSAS Murillo-Villicaña M. Noriega-Cisneros R. et al.	Nutrients	2022
6	Identification of a unique endoplasmic retention motif in the <i>Xenopus</i> GIRK5 channel and its contribution to oocyte maturation	CLAUDIA IVETH RANGEL GARCIA CAROLINA SALVADOR HERNANDEZ BEATRIZ DIAZ BELLO et al.	FEBS OPEN BIO	2021

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7	Glutathione Participation in the Prevention of Cardiovascular Diseases	DEYAMIRA MATUZ MARES HECTOR RIVEROS ROSAS HECTOR VAZQUEZ MEZA et al.	Antioxidants	2021
8	?Funny? channels in cardiac mitochondria modulate membrane potential and oxygen consumption	GUADALUPE TERESA PADILLA FLORES ZINAELI LOPEZ GONZALEZ LUIS ALFONSO VACA DOMINGUEZ et al.	BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS	2020
9	Aquaporin 8 is involved in H <sub>2</sub> O <sub>2</sub> -mediated differential regulation of metabolic signaling by alpha(1)- and beta-adrenoceptors in hepatocytes	MARIA MAGDALENA VILCHIS LANDEROS RAQUEL GUINZBERG PERRUSQUIA HECTOR RIVEROS ROSAS et al.	FEBS LETTERS	2020
10	Metabolic role of aldehyde dehydrogenases in <i>Pseudomonas putida</i> KT2440	ROSARIO ADELAIDA MUÑOZ CLARES HECTOR RIVEROS ROSAS Adriana Julian-Sanchez et al.	FASEB JOURNAL	2020
11	Aldehyde dehydrogenase diversity in bacteria of the <i>Pseudomonas</i> genus	HECTOR RIVEROS ROSAS ROSARIO ADELAIDA MUÑOZ CLARES Julián-Sánchez A. et al.	CHEMICO-BIOLOGICAL INTERACTIONS	2019
12	Fatty acid addition and thermotolerance of <i>Kluyveromyces marxianus</i>	HECTOR RIVEROS ROSAS Mejía-Barajas J. Montoya-Pérez R. et al.	FEMS MICROBIOLOGY LETTERS	2018
13	Bona fide choline monooxygenases evolved in Amaranthaceae plants from oxygenases of unknown function: Evidence from phylogenetics, homology modeling and docking studies	HECTOR RIVEROS ROSAS ROGELIO RODRIGUEZ SOTRES ROSARIO ADELAIDA MUÑOZ CLARES et al.	PLOS ONE	2018
14	beta-Adrenoceptors activate hepatic glutathione efflux through an unreported pathway	DEYAMIRA MATUZ MARES HECTOR RIVEROS ROSAS RAQUEL GUINZBERG PERRUSQUIA et al.	ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS	2018
15	Mechanisms of protection against irreversible oxidation of the catalytic cysteine of ALDH enzymes: Possible role of vicinal cysteines	ROSARIO ADELAIDA MUÑOZ CLARES LILIAN GONZALEZ SEGURA HECTOR RIVEROS ROSAS et al.	CHEMICO-BIOLOGICAL INTERACTIONS	2017
16	Newly synthesized cAMP is integrated at a membrane protein complex signalosome to ensure receptor response specificity	RAQUEL GUINZBERG PERRUSQUIA ANTONIO DIAZ CRUZ MARIA MAGDALENA VILCHIS LANDEROS et al.	FEBS JOURNAL	2017
17	Diversity and evolutionary analysis of iron-containing (Type-III) alcohol dehydrogenases in the three domains of life	CARLOS GAONA LOPEZ HECTOR RIVEROS ROSAS Julian-Sanchez, Adriana	FASEB JOURNAL	2017

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18	Diversity and evolutionary analysis of iron-containing (Type-III) alcohol dehydrogenases (FeADHs).	HECTOR RIVEROS ROSAS Adriana Julian-Sanchez	PROTEIN SCIENCE	2017
19	Diversity and Evolutionary Analysis of Iron-Containing (Type-III) Alcohol Dehydrogenases in Eukaryotes	CARLOS GAONA LOPEZ HECTOR RIVEROS ROSAS Julian-Sanchez, Adriana	PLOS ONE	2016
20	Phylogenetic analysis of chromate ion transporter (CHR) superfamily	HECTOR RIVEROS ROSAS Adriana Julian-Sanchez Jose Manuel Contreras-Sanchez	FASEB JOURNAL	2016
21	Amino acid residues that affect the basicity of the catalytic glutamate of the hydrolytic aldehyde dehydrogenases	ROSARIO ADELAIDA MUÑOZ CLARES LILIAN GONZALEZ SEGURA HECTOR RIVEROS ROSAS et al.	CHEMICO-BIOLOGICAL INTERACTIONS	2015
22	Residues that influence coenzyme preference in the aldehyde dehydrogenases	LILIAN GONZALEZ SEGURA HECTOR RIVEROS ROSAS Adriana JulianSanchez et al.	CHEMICO-BIOLOGICAL INTERACTIONS	2015
23	New insights on the mechanism of the K <sup>+</sup> -independent activity of crenarchaeota pyruvate kinases	Gustavo De la VegaRuiz HECTOR RIVEROS ROSAS Carlos GuerreroMendiola et al.	PLOS ONE	2015
24	Enzymogenesis of Zinc-Dependent Alcohol Dehydrogenases and Aldehyde Dehydrogenases in Animals Show That Their Origin Predates Natural Availability of Ethanol from the Diet	Adriana JulianSanchez Aida HernandezTobias Paola VaraCisneros et al.	FASEB JOURNAL	2015
25	Phylogenetic analysis of fungal heterotrimeric G protein-encoding genes and their expression during dimorphism in <i>Mucor circinelloides</i>	HECTOR RIVEROS ROSAS Ivan ValleMaldonado, Marco Eduardo JacomeGalarza, Irvin et al.	FUNGAL BIOLOGY	2015
26	Correction: New insights on the mechanism of the K <sup>+</sup> -independent activity of Crenarchaeota pyruvate kinases	HECTOR RIVEROS ROSAS GLORIA HERNANDEZ ALCANTARA JOSE DE JESUS GARCIA TREJO et al.	PLOS ONE	2015
27	Exploring the evolutionary route of the acquisition of betaine aldehyde dehydrogenase activity by plant ALDH10 enzymes: implications for the synthesis of the osmoprotectant glycine betaine	ROSARIO ADELAIDA MUÑOZ CLARES HECTOR RIVEROS ROSAS GEORGINA REGINA GARZA RAMOS MARTINEZ et al.	BMC PLANT BIOLOGY	2014
28	Potential monovalent cation-binding sites in aldehyde dehydrogenases	LILIAN GONZALEZ SEGURA HECTOR RIVEROS ROSAS Angel G. Diaz Sanchez et al.	CHEMICO-BIOLOGICAL INTERACTIONS	2013
29	Structural determinants of substrate specificity in aldehyde dehydrogenases	HECTOR RIVEROS ROSAS LILIAN GONZALEZ SEGURA Adriana Julian Sanchez et al.	CHEMICO-BIOLOGICAL INTERACTIONS	2013

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30	Non-steroidal anti-inflammatory drugs activate NADPH oxidase in adipocytes and raise the H <sub>2</sub> O <sub>2</sub> pool to prevent cAMP-stimulated protein kinase a activation and inhibit lipolysis	HECTOR VAZQUEZ MEZA Martha Zentella de Pina JUAN PABLO PARDO VAZQUEZ et al.	BMC BIOCHEMISTRY	2013
31	Electrostatic potential surface in the aldehyde binding site of aldehyde dehydrogenases (ALDHs) is a determinant for substrate specificity	Adriana Julian Sanchez LILIAN GONZALEZ SEGURA HECTOR RIVEROS ROSAS et al.	FASEB JOURNAL	2013
32	An Lrp-type transcriptional regulator controls expression of the Bacillus subtilis chromate transporter	Adriana Julian Sanchez HECTOR RIVEROS ROSAS Aguilar-Barajas, Esther et al.	ANTONIE VAN LEEUWENHOEK INTERNATIONAL JOURNAL OF GENERAL AND MOLECULAR MICROBIOLOGY	2013
33	Lineage-specific fragmentation and nuclear relocation of the mitochondrial cox2 gene in chlorophycean green algae (Chlorophyta)	HECTOR RIVEROS ROSAS DIEGO GONZALEZ HALPHEN Rodriguez-Salinas, E et al.	MOLECULAR PHYLOGENETICS AND EVOLUTION	2012
34	Antiparallel membrane topology of paired short-chain chromate transport proteins in Bacillus subtilis	Rene Martinez Valencia Guadalupe Reyes Cortes Martha I. Ramirez Diaz et al.	FEMS MICROBIOLOGY LETTERS	2012
35	Natural alcohol exposure: Is ethanol the main substrate for alcohol dehydrogenases in animals?	Aida Hernandez Tobias Adriana Julian Sanchez ENRIQUE PIÑA GARZA et al.	CHEMICO-BIOLOGICAL INTERACTIONS	2011
36	Bacterial transport of sulfate, molybdate, and related oxyanions	HECTOR RIVEROS ROSAS Aguilar-Barajas, Esther Diaz-Perez, Cesar et al.	Biometals	2011
37	Phylogenetic analysis of the domains that conform the NADPH oxidases	Adriana Julian Sanchez Lucia Magis Weinberg HECTOR RIVEROS ROSAS	FASEB JOURNAL	2010
38	Functional Diversification and Evolution of Animal Zinc-Dependent Alcohol Dehydrogenases	Adriana Julian Sanchez Lucia Magis Weinberg HECTOR RIVEROS ROSAS	FASEB JOURNAL	2009
39	Short-Chain Chromate Ion Transporter Proteins from Bacillus subtilis Confer Chromate Resistance in Escherichia coli	HECTOR RIVEROS ROSAS Diaz-Magana, Amada Aguilar-Barajas, Esther et al.	JOURNAL OF BACTERIOLOGY	2009
40	PHYLOGENETIC ANALYSIS OF CHROMATE RESISTANCE DETERMINANTS	Adriana Julian Sanchez HECTOR RIVEROS ROSAS Diaz-Perez, Cesar et al.	FASEB JOURNAL	2008
41	Mechanisms of bacterial resistance to chromium compounds	HECTOR RIVEROS ROSAS Ramirez-Diaz, Martha I. Diaz-Perez, Cesaar et al.	Biometals	2008

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42	Signaling the signal, cyclic AMP-dependent protein kinase inhibition by insulin-formed H <sub>2</sub> O <sub>2</sub> and reactivation by thioredoxin	Martha Zentella de Pina HECTOR VAZQUEZ MEZA JUAN PABLO PARDO VAZQUEZ et al.	JOURNAL OF BIOLOGICAL CHEMISTRY	2008
43	Phylogenetic analysis of the chromate ion transporter (CHR) superfamily	HECTOR RIVEROS ROSAS Díaz-Pérez C. Cervantes C. et al.	FEBS JOURNAL	2007
44	Dichotomic phylogenetic tree of the pyruvate kinase family: K <sup>+</sup> -dependent and -independent enzymes	JESUS ANTONIO ORIA HERNANDEZ HECTOR RIVEROS ROSAS LETICIA HAYDEE RAMIREZ SILVA	JOURNAL OF BIOLOGICAL CHEMISTRY	2006
45	Inosine released after hypoxia activates hepatic glucose liberation through A <sub>3</sub> adenosine receptors	RAQUEL GUINZBERG PERRUSQUIA ANTONIO DIAZ CRUZ HECTOR RIVEROS ROSAS et al.	AMERICAN JOURNAL OF PHYSIOLOGY-ENDOCRINOLOGY AND METABOLISM	2006
46	Diversity, taxonomy and evolution of medium-chain dehydrogenase/reductase superfamily	HECTOR RIVEROS ROSAS RAFAEL VILLALOBOS MOLINA JUAN PABLO PARDO VAZQUEZ et al.	EUROPEAN JOURNAL OF BIOCHEMISTRY	2003
47	Reactive oxygen species generated by microbial NADPH oxidase NoxA regulate sexual development in <i>Aspergillus nidulans</i>	MARIA TERESA LARA ORTIZ HECTOR RIVEROS ROSAS JESUS AGUIRRE LINARES	MOLECULAR MICROBIOLOGY	2003
48	Bifunctional aldehyde/alcohol dehydrogenase (ADHE) in chlorophyte algal mitochondria	GUILLERMO MENDOZA HERNANDEZ HECTOR RIVEROS ROSAS DIEGO GONZALEZ HALPHEN et al.	PLANT MOLECULAR BIOLOGY	2003
49	Antagonism between the metabolic responses induced by epinephrine and piroxicam on isolated rat hepatocytes	HECTOR RIVEROS ROSAS RAQUEL GUINZBERG PERRUSQUIA YOLANDA DEL SOCORRO SALDAÑA BALMORI et al.	EUROPEAN JOURNAL OF PHARMACOLOGY	1999
50	Ozone and its precursors in the atmosphere of Mexico City	HECTOR GERARDO RIVEROS ROTGE HECTOR RIVEROS ROSAS Arriaga J.L. et al.	J AIR WASTE MANAGE	1998
51	Personal exposure to elements in Mexico City air	HECTOR RIVEROS ROSAS Pfeifer G.D. Lynam D.R. et al.	SCIENCE OF THE TOTAL ENVIRONMENT	1997
52	Enzymology of ethanol and acetaldehyde metabolism in mammals	HECTOR RIVEROS ROSAS ENRIQUE PIÑA GARZA Julian-Sanchez A.	Archives Of Medical Research	1997
53	Hydrocarbons and carbon monoxide in the atmosphere of Mexico City	HECTOR GERARDO RIVEROS ROTGE HECTOR RIVEROS ROSAS Tejeda J. et al.	JOURNAL OF THE AIR & WASTE MANAGEMENT ASSOCIATION	1995



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**Coordinación de Planeación, Evaluación y**  
**Simplificación de la Gestión Institucional**  
**Reporte individual**



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54	Effects of moderate chronic ethanol consumption on rat liver mitochondrial functions	HECTOR RIVEROS ROSAS ENRIQUE PIÑA GARZA De Piña M.Z. et al.	Alcohol	1989
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## HECTOR RIVEROS ROSAS

### LIBROS Y CAPITULOS CON ISBN

#### Obras con registro ISBN



#	Título	Autores	Alcance	Año	ISBN
1	Antología de Salud	AGUSTIN LOPEZ MUNGUIA CANALES ANA CECILIA POLANCO PONCE BENJAMIN RUIZ LOYOLA et al.	Libro Completo	2022	9786073070232
2	Antología de salud ¿Cómo ves?	OMAR TORREBLANCA NAVARRO ELVA GUADALUPE ESCOBAR BRIONES HECTOR RIVEROS ROSAS et al.	Libro Completo	2019	9786073023887
3	Bioquímica de Laguna	FEDERICO MARTINEZ MONTES JUAN PABLO PARDO VAZQUEZ HECTOR RIVEROS ROSAS	Libro Completo	2018	9786073004411
4	Bioquímica de Laguna	FEDERICO MARTINEZ MONTES JUAN PABLO PARDO VAZQUEZ HECTOR RIVEROS ROSAS	Libro Completo	2018	9786073005210
5	Bioquímica de Laguna	FEDERICO MARTINEZ MONTES JUAN PABLO PARDO VAZQUEZ HECTOR RIVEROS ROSAS	Libro Completo	2018	978607448706 0



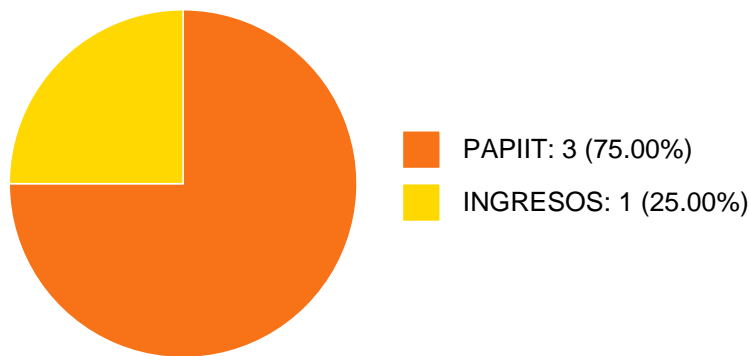
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6	Bioquímica de Laguna	FEDERICO MARTINEZ MONTES JUAN PABLO PARDO VAZQUEZ HECTOR RIVEROS ROSAS	Libro Completo	2018	978607448708 4
7	Alcohol and the liver: Role of mitochondria	HECTOR RIVEROS ROSAS Saavedra-Molina, A. Julián-Sánchez, A. et al.	Capítulo de un Libro	2016	9781634844154
8	Bioquímica de Laguna	ENRIQUE PIÑA GARZA FEDERICO MARTINEZ MONTES JUAN PABLO PARDO VAZQUEZ et al.	Libro Completo	2012	9786074482928
9	Bioquímica de Laguna	FEDERICO MARTINEZ MONTES JUAN PABLO PARDO VAZQUEZ ENRIQUE PIÑA GARZA et al.	Libro Completo	2012	9786074482911
10	Bioquímica de Laguna	FEDERICO MARTINEZ MONTES JUAN PABLO PARDO VAZQUEZ HECTOR RIVEROS ROSAS	Libro Completo	2009	9786074480221
11	Heavy metal resistance in pseudomonads	HECTOR RIVEROS ROSAS Aguilar-Barajas E. Ramírez-Díaz M.I. et al.	Capítulo de un Libro	2006	9780387288819

## HECTOR RIVEROS ROSAS

### PARTICIPACIÓN EN PROYECTOS

#### Histórico de participación en proyectos

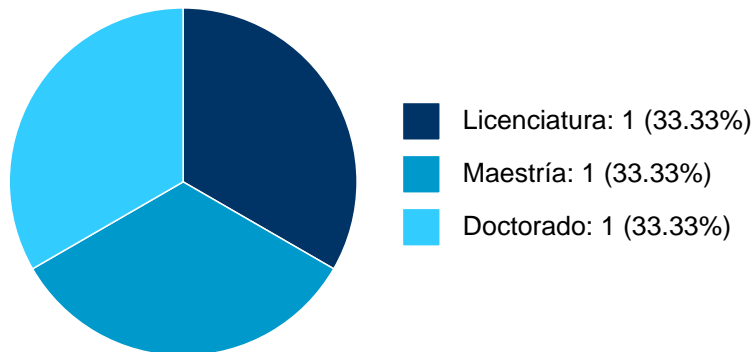


#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	La evolución de proteínas y de vías metabólicas desde una perspectiva bioinformática	HECTOR RIVEROS ROSAS	Recursos PAPIIT	01-01-2016	31-12-2018
2	Evolución de proteínas y vías metabólicas, una perspectiva bioinformática.	HECTOR RIVEROS ROSAS	Recursos PAPIIT	01-01-2019	31-12-2021
3	La bioinformática como herramienta para entender los procesos de evolución de proteínas y vías metabólicas.	HECTOR RIVEROS ROSAS	Ingresos Propios	03-08-2021	03-08-2024
4	La bioinformática como herramienta para entender los procesos de evolución de proteínas y vías metabólicas	HECTOR RIVEROS ROSAS	Recursos PAPIIT	01-01-2022	31-12-2024

## HECTOR RIVEROS ROSAS

### PARTICIPACIÓN EN TESIS

#### Histórico de Colaboraciones en Tesis

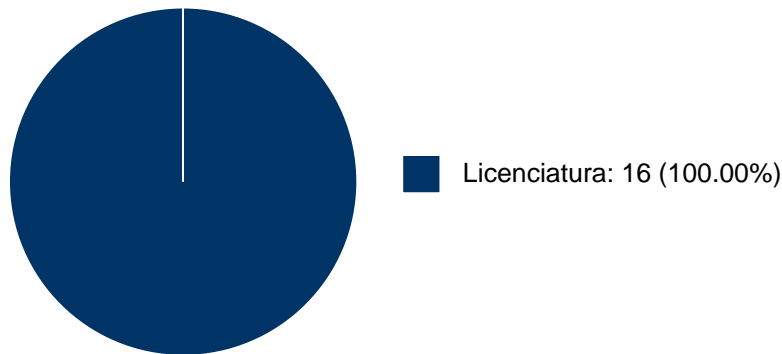


#	Título del documento	Tipo de Tesis	Sinodales	Autores	Entidad	Año
1	Análisis de la diversidad y evolución de las alcohol deshidrogenasas dependientes de hierro feadh (tipo III) en eucariontes	Tesis de Doctorado	HECTOR RIVEROS ROSAS,	Gaona López, Carlos,	Facultad de Medicina,	2017
2	Mecanismo de acción de los AINE's sobre la poza de glutatión en hepatocitos tratados con etanol	Tesis de Maestría	HECTOR RIVEROS ROSAS,	Hernández Vázquez, Alain de J.,	Facultad de Medicina,	2009
3	Inhibición de la lipólisis por naproxen en adipocitos aislados en ratas	Tesis de Licenciatura	HECTOR RIVEROS ROSAS,	Piña Zentella, Guadalupe,		1999

## HECTOR RIVEROS ROSAS

### DOCENCIA IMPARTIDA

#### Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	39	2024-1
2	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	42	2024-1
3	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	17	2023-0
4	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	32	2022-0
5	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	25	2021-0
6	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	37	2020-0
7	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	40	2017-0
8	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	40	2016-0
9	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	35	2015-0
10	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	37	2014-0
11	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	38	2013-0
12	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	42	2012-0
13	Licenciatura	BIOQUIMICA Y BIOLOGIA MOLECULAR	Facultad de Medicina	39	2011-0
14	Licenciatura	BIOQUIMICA Y BIOL.MOLECULAR	Facultad de Medicina	36	2010-0
15	Licenciatura	BIOQUIMICA Y BIOL.MOLECULAR	Facultad de Medicina	35	2009-0
16	Licenciatura	BIOQUIMICA Y BIOL.MOLECULAR	Facultad de Medicina	30	2008-0



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**Reporte individual**



**HECTOR RIVEROS ROSAS**

**PATENTES**

**No se encuentran registros en la base de datos de patentes asociados a:**

**HECTOR RIVEROS ROSAS**

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**FUENTES DE INFORMACIÓN**

**Internos**

#	Información	Fuente	Sistema	Periodo
1	Grupos ordinarios y resumen de historias académicas	DGAE	SIAE	2008-2025
2	Nombramientos, datos generales, estímulos, premios y reconocimientos	DGAPA	RUPA	2008-2025
3	Producción Académica	CH	Humanindex	2008-2021
4	Producción Académica	CIC	SCIC	2000-2017
5	Proyectos	DGPO	SISEPRO	2018-2022
6	Tesis	DGB	TESIUNAM	2008-2024
7	Tutorías en Posgrado	CGEP	SIIPosgrado	2008-2021

**Externos**

#	Información	Fuente	Sistema	Periodo
8	Documentos Indexados	Elsevier	Scopus	2008-2025
9	Documentos Indexados	Thomson Reuters	WoS	2008-2025
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2025
11	Patentes	IMPI	SIGA	2008-2024