MICHAEL FREDERICK DUNN

Datos Generales

Nombre: MICHAEL FREDERICK DUNN

Máximo nivel de estudios: DOCTORADO

Antigüedad académica en la UNAM: 31 años

Nombramientos

Vigente: INVESTIGADOR TITULAR B TC Definitivo
Centro de Ciencias Genómicas
Desde 01-05-2021

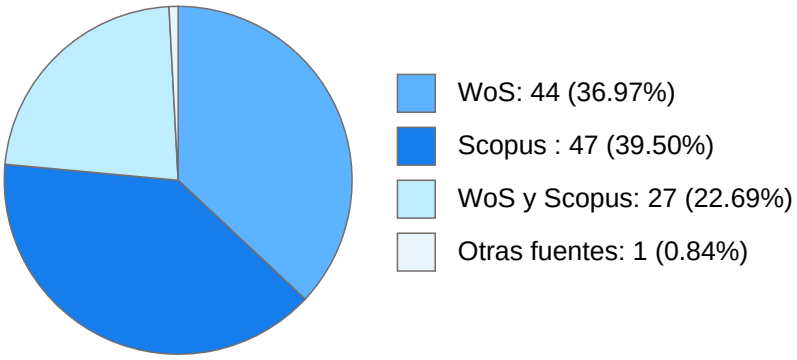
Estímulos, programas, premios y reconocimientos

SNI I - 2023
PRIDE C 2018 - 2024
PRIDE B 2012 - 2018
PRIDE Fijo 2012
PRIDE B 2012
PRIDE Fijo 2010 - 2012
PRIDE C - 2010

MICHAEL FREDERICK DUNN

DOCUMENTOS EN REVISTAS

Histórico de Documentos



#	Título	Autores	Revista	Año
1	Effect of Glyphosate on Microbiota and Enzymatic Activity in Rhizosphere of Riparian Plants	MICHAEL FREDERICK DUNN GRISELDA KARINA GUILLEN NAVARRO Mariana Y. Lopez-Chavez et al.	ACTA BIOLOGICA COLOMBIANA	2024
2	EFECTO DEL GLIFOSATO SOBRE LA MICROBIOTA Y LA ACTIVIDAD ENZIMÁTICA EN RIZÓSFERA DE PLANTAS RIPARIAS	MICHAEL FREDERICK DUNN López-Chávez M.Y. Infante-Mata D. et al.	ACTA BIOLOGICA COLOMBIANA	2024
3	The Sinorhizobium meliloti NspS-MbaA system affects biofilm formation, exopolysaccharide production and motility in response to specific polyamines	MARIA GABRIELA GUERRERO RUIZ MICHAEL FREDERICK DUNN Chávez-Jacobo V.M. et al.	MICROBIOLOGY -SGM	2023
4	Plasmids of the incompatibility group FIBK occur in Klebsiella variicola from diverse ecological niches	MICHAEL FREDERICK DUNN OMAR ALEJANDRO AGUILAR VERA Josefina Duran-Bedolla et al.	INTERNATIONAL MICROBIOLOGY	2023
5	Continuous glyphosate applications affect plant development of mangrove species from coastal wetlands: Rhizophora mangle and Pachira aquatica	MICHAEL FREDERICK DUNN GRISELDA KARINA GUILLEN NAVARRO López-Chávez M.Y. et al.	AQUATIC BOTANY	2023

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6	A host-specific diaminobutyrate aminotransferase contributes to symbiotic performance, homoserine metabolism, and competitiveness in the Rhizobium leguminosarum/Pisum sativum system	MICHAEL FREDERICK DUNN Ballesteros-Gutiérrez M. Albareda M. et al.	FRONTIERS IN MICROBIOLOGY	2023
7	The Biosynthesis and Functions of Polyamines in the Interaction of Plant Growth-Promoting Rhizobacteria with Plants	MICHAEL FREDERICK DUNN Becerra-Rivera V.A.	PLANTS-BASEL	2023
8	Hemicellulolytic bacteria in the anterior intestine of the earthworm Eisenia fetida (Sav.)	MICHAEL FREDERICK DUNN Ordoñez-Arévalo B. Huerta-Lwanga E. et al.	SCIENCE OF THE TOTAL ENVIRONMENT	2022
9	A Tar aspartate receptor and Rubisco-like protein substitute biotin in the growth of rhizobial strains	MARIA DEL CARMEN VARGAS LAGUNAS ALMA RUTH REYES GONZALEZ MICHAEL FREDERICK DUNN et al.	MICROBIOLOGY-SGM	2022
10	Diversity, properties and functions of bacterial arginases	MICHAEL FREDERICK DUNN Victor M. Hernandez Alejandra Arteaga	FEMS MICROBIOLOGY REVIEWS	2021
11	Glyphosate-remediation potential of selected plant species in artificial wetlands	MICHAEL FREDERICK DUNN López-Chávez M.Y. Alvarez-Legorreta T. et al.	SCIENCE OF THE TOTAL ENVIRONMENT	2021
12	Sequencing of 640,000 exomes identifies GPR75 variants associated with protection from obesity	MICHAEL FREDERICK DUNN PABLO ANTONIO KURI MORALES JESUS ALEGRE DIAZ et al.	Science	2021
13	Polyamines produced by Sinorhizobium meliloti Rm8530 contribute to symbiotically relevant phenotypes ex planta and to nodulation efficiency on alfalfa	ALFONSO LEIJA SALAS GEORGINA HERNANDEZ DELGADO MICHAEL FREDERICK DUNN et al.	MICROBIOLOGY-SGM	2020
14	Genetic regulation, biochemical properties and physiological importance of arginase from Sinorhizobium meliloti	L. Medina Aparicio Edson N. Carcamo Noriega MARIA DE LOURDES GIRARD CUESY et al.	MICROBIOLOGY-SGM	2020
15	Polyamine biosynthesis and biological roles in rhizobia	MICHAEL FREDERICK DUNN Becerra-Rivera V.A.	FEMS MICROBIOLOGY LETTERS	2019
16	Proteins in the periplasmic space and outer membrane vesicles of Rhizobium etli CE3 grown in minimal medium are largely distinct and change with growth phase	HERMENEGILDO TABOADA CASTRO MICHAEL FREDERICK DUNN MARIA DEL CARMEN VARGAS LAGUNAS et al.	MICROBIOLOGY-SGM	2019

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17	Qualitative changes in proteins contained in outer membrane vesicles produced by Rhizobium etli grown in the presence of the nod gene inducer naringenin	HERMENEGILDO TABOADA CASTRO MICHAEL FREDERICK DUNN MARIA DEL CARMEN VARGAS LAGUNAS et al.	ARCHIVES OF MICROBIOLOGY	2019
18	Polyamines are required for normal growth in sinorhizobium meliloti	MICHAEL FREDERICK DUNN Becerra-Rivera V.A. Bergström E. et al.	MICROBIOLOGY -SGM	2018
19	The naringenin-induced exoproteome of Rhizobium etli CE3	HERMENEGILDO TABOADA CASTRO MICHAEL FREDERICK DUNN MARIA DEL CARMEN VARGAS LAGUNAS et al.	ARCHIVES OF MICROBIOLOGY	2017
20	The Rhizobium leucaenae CFN 299 pSym plasmid contains genes expressed in free life and symbiosis, as well as two replication systems	NOE BECERRA LOBATO MARIA ESPERANZA MARTINEZ ROMERO MICHAEL FREDERICK DUNN et al.	ANNALS OF MICROBIOLOGY	2017
21	The Sinorhizobium meliloti glyoxylate cycle enzyme isocitrate lyase (AceA) is required for the utilization of poly-beta-hydroxybutyrate during carbon starvation	MICHAEL FREDERICK DUNN ISMAEL HERNANDEZ LUCAS Augusto Ramirez-Trujillo, Jose et al.	ANNALS OF MICROBIOLOGY	2016
22	Antifungal performance of extracellular chitinases and culture supernatants of Streptomyces galilaeus CFFSUR-B12 against Mycosphaerella fijiensis Morelet	MICHAEL FREDERICK DUNN MAGDALENA HERNANDEZ ORTIZ SERGIO MANUEL ENCARNACION GUEVARA et al.	WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY	2016
23	Genetic and biochemical characterization of arginine biosynthesis in Sinorhizobium meliloti 1021	MARIA DE LOURDES GIRARD CUESY MICHAEL FREDERICK DUNN Hernández V.M. et al.	MICROBIOLOGY -SGM	2015
24	Antifungal activity of Serratia marcescens CFFSUR-B2 purified chitinolytic enzymes and prodigiosin against Mycosphaerella fijiensis, causal agent of black Sigatoka in banana (Musa spp.)	MICHAEL FREDERICK DUNN Ingrid GutierrezRoman, Martha HolguinMelendez, Francisco et al.	Biocontrol	2015
25	Key roles of microsymbiont amino acid metabolism in rhizobia-legume interactions	MICHAEL FREDERICK DUNN	CRITICAL REVIEWS IN MICROBIOLOGY	2015

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26	Potentiation of the synergistic activities of chitinases ChiA, ChiB and ChiC from Serratia marcescens CFFSUR-B2 by chitobiase (Chb) and chitin binding protein (CBP)	MICHAEL FREDERICK DUNN JOSE RAUNEL TINOCO VALENCIA Ingrid Gutierrez-Roman, Martha et al.	WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY	2014
27	Production of prodigiosin and chitinases by tropical Serratia marcescens strains with potential to control plant pathogens	MICHAEL FREDERICK DUNN Ingrid Gutierrez-Roman, Martha Holguin-Melendez, Francisco et al.	WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY	2012
28	Anaplerotic Function of Phosphoenolpyruvate Carboxylase in Bradyrhizobium japonicum USDA110	MICHAEL FREDERICK DUNN	CURRENT MICROBIOLOGY	2011
29	Major roles of isocitrate lyase and malate synthase in bacterial and fungal pathogenesis	MICHAEL FREDERICK DUNN J. A. Ramirez Trujillo ISMAEL HERNANDEZ LUCAS	MICROBIOLOGY -SGM	2009
30	Multichromosomal genome structure and confirmation of diazotrophy in novel plant-associated Burkholderia species	RAFAEL DIAZ MENDEZ PAULINA ESTRADA DE LOS SANTOS MICHAEL FREDERICK DUNN et al.	APPLIED AND ENVIRONMENTAL MICROBIOLOGY	2008
31	Functional characterization of the Sinorhizobium meliloti acetate metabolism genes aceA, SMc00767, and glcB	SERGIO MANUEL ENCARNACION GUEVARA MICHAEL FREDERICK DUNN EDMUNDO CALVA Y MERCADO et al.	JOURNAL OF BACTERIOLOGY	2007
32	Biotin biosynthesis, transport and utilization in rhizobia	SERGIO MANUEL ENCARNACION GUEVARA MICHAEL FREDERICK DUNN Guillén-Navarro K.	FEMS MICROBIOLOGY LETTERS	2005
33	The Rhizobium etli bioMNY operon is involved in biotin transport	ALEJANDRO GARCIA DE LOS SANTOS YOLANDA PEREZ TEJADA Y DOMINGUEZ MICHAEL FREDERICK DUNN et al.	FEMS MICROBIOLOGY LETTERS	2005
34	Biochemical characterization of a Rhizobium etli monovalent cation-stimulated acyl-coenzyme A carboxylase with a high substrate specificity constant for propionyl-coenzyme A	MICHAEL FREDERICK DUNN JAIME BIENVENIDO MORA Y CELIS Araíza G.	MICROBIOLOGY -SGM	2004
35	Proteome analysis of aerobic and fermentative metabolism in Rhizobium etli CE3	SERGIO MANUEL ENCARNACION GUEVARA MICHAEL FREDERICK DUNN MAGDALENA HERNANDEZ ORTIZ et al.	Proteomics	2003

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36	Ania regulates reserve polymer accumulation and global protein expression in Rhizobium etli	SERGIO MANUEL ENCARNACION GUEVARA MARIA DEL CARMEN VARGAS LAGUNAS MICHAEL FREDERICK DUNN et al.	JOURNAL OF BACTERIOLOGY	2002
37	Effect of aniA (carbon flux regulator) and phaC (poly-ß-hydroxybutyrate synthase) mutations on pyruvate metabolism in Rhizobium etli	MICHAEL FREDERICK DUNN SERGIO MANUEL ENCARNACION GUEVARA MARIA DEL CARMEN VARGAS LAGUNAS et al.	JOURNAL OF BACTERIOLOGY	2002
38	Cloning and characterization of the pyruvate carboxylase from Sinorhizobium meliloti Rm1021	MICHAEL FREDERICK DUNN Araíza G. Finan T.M.	ARCHIVES OF MICROBIOLOGY	2001
39	Tricarboxylic acid cycle and anaplerotic enzymes in rhizobia	MICHAEL FREDERICK DUNN	FEMS MICROBIOLOGY REVIEWS	1998
40	Regulation of pyruvate carboxylase in Rhizobium etli	MICHAEL FREDERICK DUNN MIGUEL ANGEL CARLOS CEVALLOS GAOS JAIME BIENVENIDO MORA Y CELIS et al.	FEMS MICROBIOLOGY LETTERS	1997
41	Pyruvate carboxylase from Rhizobium etli: Mutant characterization, nucleotide sequence, and physiological role	MICHAEL FREDERICK DUNN SERGIO MANUEL ENCARNACION GUEVARA ARACELI ELVIRA DAVALOS RODRIGUEZ et al.	JOURNAL OF BACTERIOLOGY	1996
42	Fermentative and aerobic metabolism in Rhizobium etli	SERGIO MANUEL ENCARNACION GUEVARA MICHAEL FREDERICK DUNN JAIME BIENVENIDO MORA Y CELIS et al.	JOURNAL OF BACTERIOLOGY	1995
43	Strain distribution and in planta production of an extracellular polysaccharide depolymerase from bradyrhizobium japonicum	MICHAEL FREDERICK DUNN Karr A.L.	CANADIAN JOURNAL OF MICROBIOLOGY	1992
44	The nod gene inducer genistein alters the composition and molecular mass distribution of extracellular polysaccharides produced by Rhizobium fredii USDA193	MICHAEL FREDERICK DUNN Pueppke S.G. Krishnan H.B.	FEMS MICROBIOLOGY LETTERS	1992
45	Isolation of an extracellular polysaccharide (EPS) depolymerase produced by Bradyrhizobium japonicum	MICHAEL FREDERICK DUNN Karr A.L.	CURRENT MICROBIOLOGY	1990
46	Exopolysaccharides produced by phytopathogenic Pseudomonas syringae pathovars in infected leaves of susceptible hosts	MICHAEL FREDERICK DUNN Fett W.F.	PLANT PHYSIOLOGY	1989

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47	Recovery of recombinant proteins from yeast	MICHAEL FREDERICK DUNN King D.J. Walton F. et al.	BIOCHEMICAL SOCIETY TRANSACTIONS	1988
48	Bacteriocins and temperate phage of Xanthomonas campestris pv. glycines	MICHAEL FREDERICK DUNN Fett W.F. Maher G.T. et al.	CURRENT MICROBIOLOGY	1987

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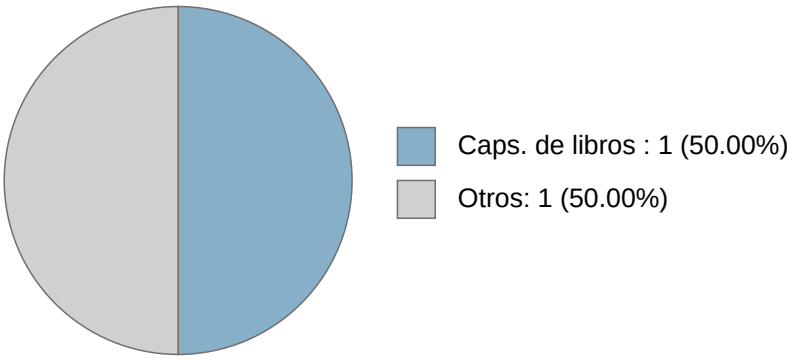
LIBROS Y CAPITULOS CON ISBN

Obras con registro ISBN



#	Título	Autores	Alcance	Año	ISBN
1	Rhizobial Amino Acid Metabolism: Polyamine Biosynthesis and Functions	MICHAEL FREDERICK DUNN D'Mello, JPF	Article	2017	9781780647241
2	The Symbiome of Llaveia Cochineals (Hemiptera: Coccoidea: Monophlebidae) Includes a Gammaproteobacterial Cosymbiont Sodalis TME1 and the Known Candidatus Walczuchella monophlebidarum	MICHAEL FREDERICK DUNN MARIA ESPERANZA MARTINEZ ROMERO JULIO CESAR MARTINEZ ROMERO	Capítulo de un Libro	2017	9789535130338

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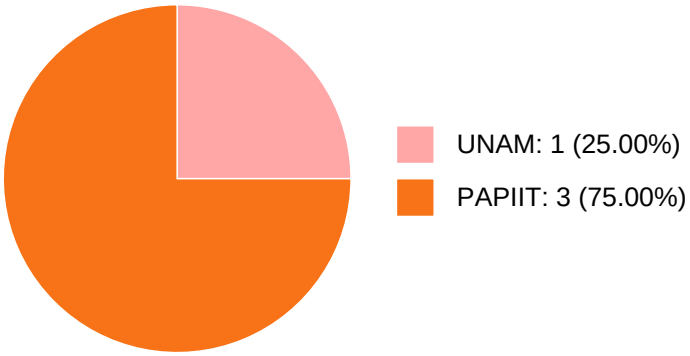
PARTICIPACIÓN EN PROYECTOS

Histórico de participación en proyectos



#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	Regulación de la biosíntesis y degradación de arginina en Sinorhizobium meliloti Rm1021.	MICHAEL FREDERICK DUNN	Presupuesto de la UNAM asignado a la Dependencia	01-02-2004	31-12-2020
2	Elucidación de los papeles fisiológicos de las poliaminas en Sinorhizobium meliloti	MICHAEL FREDERICK DUNN	Recursos PAPIIT	01-01-2017	31-12-2019
3	Caracterización de la detección de poliaminas en Sinorhizobium meliloti por un módulo de señalización que regula los niveles del segundo mensajero di-GMP-c.	MICHAEL FREDERICK DUNN	Recursos PAPIIT	01-01-2020	31-12-2022
4	Definición del transporte de poliaminas de Sinorhizobium meliloti y su papel potencial en la percepción de las poliaminas ambientales como señales químicas	MICHAEL FREDERICK DUNN	Recursos PAPIIT	01-01-2023	31-12-2025

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PARTICIPACIÓN EN TESIS

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

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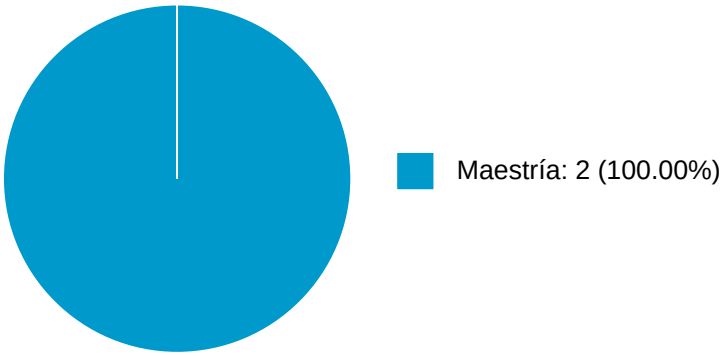
DOCENCIA IMPARTIDA

Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Maestría	CURSO IV	Instituto de Biotecnología	4	2019-2
2	Maestría	CURSO IV	Instituto de Biotecnología	4	2009-1

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PATENTES

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

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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