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# III Congreso de Bioquímica y Biología Molecular de Bacterias

Cuatro Ciénegas, Coahuila, 3-7 de octubre de 2013

**Third Meeting of Biochemistry and  
Molecular Biology of Bacteria  
P r o g r a m**

Cuatro Ciénegas, Coahuila. October 3 - 7, 2013

Thursday, October 3	
11:00 – 18:00	Registration
14:00 – 17:00	Lunch
18:45 – 19:00	Opening Ceremony
19:00 – 20:00	Opening Talk. <span style="float: right;">Chair: Herminia Loza Tavera</span> Gabriel Guarneros <b>From phage genetics to phage genomics: A personal journey</b> CINVESTAV, IPN
20:00 – 22:00	Welcome Cocktail
Friday, October 4	
7:00 – 9:00	Breakfast
9:00 – 9:20	Oral Session I. <span style="float: right;">Chair: Luis Servín González</span>  <b>Antagonism networks from gamma proteobacteria from Cuatro Ciénegas, and the rock, paper and scissors theory</b> <i>Eneas Aguirre-von-Wobeser, Gloria Soberón-Chávez, Gabriel Yaxal Ponce-Soto, Mirna Vázquez, Luis E. Eguiarte, Valeria Souza.</i> Instituto de Investigaciones Biomédicas, UNAM
9:20 – 9:40	<b>Expression and characterization of <i>Mycobacterium tuberculosis</i> glycosylated lipoproteins in <i>Streptomyces lividans</i></b> <i>Isaí Arista Carrera, González-Cerón G, Córdova-Dávalos LE and Servín-González L.</i> Instituto de Investigaciones Biomédicas, UNAM
9:40 – 10:00	<b>Characterization, identification and isolation of extremophile bacteria from the crate-lake of San Luis Atexcac, Tepeyahualco, Puebla, Mexico</b> <i>Daniela Arroyo Lobato, Oliart RRM, Quintana R, Palafox RM.</i> Instituto Tecnológico Superior de Zacapoaxtla
10:00 – 10:20	<b>The two-component regulatory system SsrA/B represses expression of the SPI-1 and flagellar genes in <i>Salmonella enterica</i> serotype Typhimurium</b> <i>María Magdalena Banda Hernández, José Luis Puente García and Víctor Humberto Bustamante Santillán.</i> Instituto de Biotecnología, UNAM
10:20 - 10:40	<b>Rhizobial strains employ different strategies for conjugative transfer regulation</b> <i>Susana Brom Klanner, Gonzalo Torres-Tejerizo, Laura Cervantes, Eunice López-Fuentes, María Julia Althabegoiti, Antonio Lagares, Mariano Pistorio and David Romero.</i> Centro de Ciencias Genómicas, UNAM

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10:40 – 11:00	Coffee Break
	Oral Session II. Chair: Laura Camarena
11:00 – 11:20	<b>Interaction between the quorum sensing protein NprR and synthetic signaling peptides in <i>Bacillus thuringiensis</i></b> <i>Rosina Cabrera, Ana María Guzmán Partida, Gabriel Guarneros, Mayra de la Torre, Adela Rodríguez-Romero.</i> Centro de Investigación en Alimentación y Desarrollo, Hermosillo
11:20 – 11:40	<b>Expression of the <i>Escherichia coli</i> DNA adenine methyltransferase (Dam) in <i>Streptomyces coelicolor</i> is lethal</b> <i>Marti Cadena-Sandoval, González-Cerón G, Martínez AI, Servín-González L.</i> Instituto de Investigaciones Biomédicas, UNAM
11:40 – 12:00	<b>Functional and comparative genomics of <i>Pseudomonas aeruginosa</i> Mu-like bacteriophages: Defining the pangenome of a group of transposable virus</b> <i>Adrián Cazares López, Kameyama Kawabe Luis, Guarneros Peña Gabriel.</i> CINVESTAV – IPN, Zacatenco
12:00 – 12:20	<b>Resistance of <i>Pseudomonas aeruginosa</i> against new antimicrobials</b> <i>Rodolfo García Contreras, Marielba Montes de Oca, Berenice Pérez, Leslie Nuñez, Elizabeth Lira-Silva, Ricardo Jasso Chávez, Mariano Martínez Vázquez, Israel Castillo-Juárez, Norma Velázquez Guadarrama, Rafael Coria Jiménez, Toshinari Maeda, Thomas K. Wood.</i> Instituto Nacional de Cardiología Ignacio Chávez
12:20 – 12:40	<b>Genomic analysis, transfer capabilities and symbiovars in <i>Rhizobium</i></b> <i>M. Julia Althabegoiti, Ernesto Ormeño-Orrillo, Luis Lozano, Gonzalo Torres Tejerizo, Víctor González and Esperanza Martínez-Romero.</i> Centro de Ciencias Genómicas, UNAM
12:40 – 13:00	Coffee Break
13:00 – 14:00	Plenary Session I. Chair: Christian Sohlenkamp Diego de Mendoza <b>The Molecular Logic of Cold Sensing in Bacteria</b> IBR – CONICET, Argentina
14:00 – 16:00	Lunch
	Oral Session III. Chair: Bertha González Pedrajo
16:00 – 16:20	<b>Oxidative fermentation in the Acetic Acid Bacteria; <i>Gluconacetobacter diazotrophicus</i> and his periplasmic oxidation system of sugars</b> <i>Rolando Gasca Licea, Martha Lucinda Contreras Zentella, Daniel Cerqueda García, Martín Sará Páes, José Edgardo Escamilla Marván<sup>‡</sup> and Roberto</i>

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16:20 – 16:40	<p>Arreguín Espinosa de los Monteros. Instituto de Química e Instituto de Fisiología Celular, UNAM</p> <p><b>Zwitterionic membrane lipids phosphatidylethanolamine and phosphatidylcholine affect transcription and physiology of <i>Sinorhizobium meliloti</i> in different ways</b> <i>Otto Geiger, Daniela B. Medeot, Diana Vera-Cruz, Diana X. Sahonero-Canavesi, Stefan Weidner, Alfred Pühler, Isabel M. López-Lara and Christian Sohlenkamp.</i> Centro de Ciencias Genómicas, UNAM</p>
16:40 – 17:00	<p><b>Localization of OmpA in <i>Caulobacter crescentus</i> depends on the position of the gene locus in the chromosome</b> <i>Luis David Ginez Vázquez, Aurora Osorio Franco and Sebastián Poggio.</i> Instituto de Investigaciones Biomédicas, UNAM</p>
17:00 – 18:00	<p>Plenary Session II. Chair: Valeria Souza Michael Travisano <b>Experimental Evolution of Multicellularity</b> University of Minnesota, Minneapolis, USA</p>
18:00 – 20:00	Poster Session Odd Numbers
20:00 – 22:00	Dinner
<b>Saturday, October 5</b>	
7:00 – 9:00	Breakfast
9:00 – 9:20	<p>Oral Session IV. Chair: Alfonso Vilchis Peluyera</p> <p><b>Genomic and Metabolic Diversity in <i>Bacillus coahuilensis</i>: An approach of microevolution in Cuatro Ciénegas, Coahuila</b> <i>Zulema Gómez, Ismael Hernández, María Dolores Rodríguez, Valeria Souza, Gabriela Olmedo.</i> CINVESTAV del IPN Irapuato</p>
9:20 – 9:40	<p><b>Characterization of IntA, a bidirectional site-specific recombinase required for conjugative transfer of the symbiotic plasmid of <i>Rhizobium etli</i> CFN42</b> <i>Rogelio Hernández-Tamayo, Christian Sohlenkamp, José Luis Puente, Susana Brom and David Romero.</i> Centro de Ciencias Genómicas, UNAM</p>
9:40 – 10:00	<p><b>Rhizospheric microbial activity related with phosphorus acquisition of two populations of <i>Sporobolus airoides</i> (Torr.) in Cuatro Ciénegas valley</b> <i>Dainiz Hernández y Hernández, John Larsen, Felipe García-Oliva.</i> Centro de Investigación en Ecosistemas, UNAM</p>

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10:00 – 10:20	<b>Heterogeneous distribution of cyanophages on the oceans</b> <i>Pedro Márquez-Zacarías, Ryan O. Schenck, Sergei A. Solonenko, Bonnie T. Poulos and Matthew B. Sullivan.</i> Instituto de Ecología, UNAM
10:20 – 10:40	<b>Characterization of the microbial community of Parícutín volcano, Michoacán, México</b> <i>Medrano Santillana M, Brito S. EM, Duran R, Gutiérrez C. JF y Reyna L. GE.</i> División de Ciencias Naturales y Exactas, Universidad de Guanajuato
10:40 – 11:00	Coffee Break
	Oral Session V.                      Chair: Martín Pedro Vargas Suárez
11:00 – 11:20	<b>The <i>Azotobacter vinelandii</i> flagella are driven by both H<sup>+</sup> and Na<sup>+</sup> ions</b> <i>Cinthia Núñez, Cárdenas L, León R, Guzmán J, Bogachev AV, Espín G.</i> Instituto de Biotecnología, UNAM
11:20 – 11:40	<b><i>Streptococcus pneumoniae</i> requires iron for its viability and expresses two membrane proteins that bind haemoglobin and haem</b> <i>José de Jesús Olivares-Trejo, María Elena Romero-Espejel, Mario A. Rodríguez Rodríguez and Marco A. González-López.</i> Posgrado en Ciencias Genómicas, Universidad Autónoma de la Ciudad de México
11:40 – 12:00	<b>Quantitative analysis of <i>mcrA</i> transcripts and its correlation with methanogenic activity in two natural wetlands</b> <i>Lorena Palacio, Ricardo Oropeza, Nagamani Balagurusamy.</i> Escuela de Ciencias Biológicas, Universidad Autónoma de Coahuila
12:00 – 12:20	<b>Halotolerant and halophilic bacteria in scenarios of astrobiological interest</b> <i>Sandra I. Ramírez, Rocío Avendaño, Lilia Montoya, Manuel Esparza-Ochoa, Marisela Aguirre-Ramírez.</i> Centro de Investigaciones Químicas, UAEM
12:20 – 12:40	<b>Isolation and characterization of a CR(VI)-reducing bacteria with potential application in bioremediation and waste water treatment</b> <i>Paloma Lara, Enrique Morett, Katy Juárez.</i> Instituto de Biotecnología, UNAM
12:40 – 13:00	Coffee Break
13:00 – 14:00	Plenary Session III.                      Chair: Gabriela Olmedo Gabriel Moreno Hagelsieb <b>Protein functional interactions in an expanding DNA sequence universe</b> Department of Biology, Wilfrid Laurier University, Canadá

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14:00 – 16:00	Lunch
16:00 – 16:20	Oral Session VI. <span style="float: right;">Chair: Jesús Silva Sánchez</span>  <b>Functions of the quorum sensing receptor NprR in <i>Bacillus thuringiensis</i></b> <i>Jorge Rocha</i> , Rosina Cabrera, Gabriela Olmedo, Mayra de la Torre. Centro de Investigación en Alimentación y Desarrollo
16:20 – 16:40	<b>EscO is an F<sub>1</sub>-gamma subunit-like protein of the ATPase complex in the injectisome of enteropathogenic <i>Escherichia coli</i></b> <i>Mariana Romo-Castillo</i> , Ángel Andrade, Norma Espinosa and Bertha González-Pedrajo. Instituto de Fisiología Celular, UNAM
16:40 – 17:00	<b>PhaP is a minor component of the PHB granule in <i>Caulobacter crescentus</i> but is important for PHB accumulation</b> <i>Ana Laura Salinas Romero</i> , Aurora Ventura Osorio, Sebastián Poggio. Instituto de Investigaciones Biomédicas, UNAM
17:00 – 18:00	Plenary Session IV. <span style="float: right;">Chair: Valeria Souza</span> Martin Polz <b>Ecology and Evolution of Bacterial Populations in the Wild</b> Massachusetts Institute of Technology, USA
18:00 – 20:00	Poster Session Even Numbers
20:00 – 22:00	Dinner
Sunday, October 6	
7:00 – 9:00	Breakfast
9:00 – 14:00	Visit to “Las Pozas” Cuatro Ciénegas
15:00 – 17:00	Lunch
17:00 – 20:00	Workshop ASM Scientific Writing and Publishing Instructor: Edmundo Calva, Instituto de Biotecnología, UNAM
20:00 – 22:00	Dinner

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Monday, October 7	
7:00 – 9:00	Breakfast
	<p style="text-align: center;">Oral Session VII.                      Chair: Dimitris Georgellis</p>
9:00 – 9:20	<p><b>Membrane biosynthesis and remodelling in <i>Streptomyces</i></b>  <i>Mario Sandoval-Calderón</i>, Don D. Nguyen, Clifford A. Kapono, Pieter C. Dorrestein, Christian Sohlenkamp.            Centro de Ciencias Genómicas, UNAM</p>
9:20 – 9:40	<p><b>Evolution of the <i>Salmonella</i> Typhimurium emergent genotype ST213</b>  <i>Claudia Silva</i>, Magdalena Wiesner, Marcos Fernández-Mora, Miguel A. Cevallos, Crispín Zavala-Alvarado, Carolina Yáñez-Domínguez, Mussaret Zaidi and Edmundo Calva.            Instituto de Biotecnología, UNAM</p>
9:40 – 10:00	<p><b>Activity modulation of the histidine kinase ArcB by quinones</b>  <i>Hortencia Silva-Jiménez</i>, Álvarez AF, Rodríguez C, Torres-Larios A, Georgellis D.            Instituto de Fisiología Celular, UNAM</p>
10:00 – 10:20	<p><b>Structural and functional characterization of two <i>Alicyclophilus</i> sp. transposon-tagged mutants unable to grow in N-methylpyrrolidone</b>  <i>Julieta Solís-González</i>, José Alberto Hernández-Eligio, Jesús Campos, Luis Lozano, Miguel A. Cevallos Gaos, Guadalupe Espín and Herminia Loza-Tavera.            Facultad de Química, UNAM</p>
10:20 – 10:40	<p><b>Extreme Microorganisms from <i>Los Azufres</i> Geothermal Site</b>  <i>Elcia Margareth Souza Brito</i>, Marissa Rodríguez Galván, César Augusto Caretta and Remy Guyoneaud.            Universidad de Guanajuato</p>
10:40 – 11:00	Coffee Break
	<p style="text-align: center;">Oral Session VIII.                      Chair: Candelario Vázquez Cruz</p>
11:00 – 11:20	<p><b>Overproduction of the <i>Rhizobium cbb<sub>3</sub></i> oxidase promotes a significant enhancement in nitrogen fixation and tolerance to drought in bean plants</b>  <i>Chouhra Talbi</i>, Cesar Aresse-Igor, María Jesús Delgado, Eulogio Bedmar and Lourdes Girard.            Centro de Ciencias Genómicas, UNAM</p>
11:20 – 11:40	<p><b>Diverse scavenging strategies for P: lessons from P-limited bacteria</b>  <i>Yunuen Tapia-Torres</i>, Rodríguez Torres Ma. Dolores, Islas África, Souza Saldivar Valeria, Elser James, Olmedo Álvarez Gabriela and García-Oliva Felipe.            Centro de Investigaciones en Ecosistemas, UNAM</p>



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11:40 – 12:00	<p><b>Identification of the two-component system that regulates the <i>fla2</i> genes in <i>Rhodobacter sphaeroides</i></b>  <i>Benjamín Vega-Baray</i>, Clelia Domenzain, Anet Rivera, Aurora Osorio, Sebastian Poggio, Georges Dreyfus and Laura Camarena.          Instituto de Investigaciones Biomédicas, UNAM</p>
12:00 – 12:20	<p><b>Characterization of new components of the SST4 as part of the strategy in the search for antigens against <i>Helicobacter pylori</i></b>  <i>Germán Rubén Aguilar-Gutiérrez</i>, Enrique Merino-Pérez, Eduardo Cesar Lazcano-Ponce, Sara Yuvisela Bahena Reyes, Armando Pérez-Torres, Yolanda López-Vidal, Gonzalo Castillo-Rojas, Marcos Flores-Encarnación.          CISEI, Instituto Nacional de Salud Pública</p>
12:20 – 12:40	<p><b>Biased gene conversion in <i>Rhizobium etli</i> is caused by preferential double strand breaks on one of the recombining homologs</b>  <i>Fares Osam Yáñez</i>, Mildred Castellanos and David Romero.          Centro de Ciencias Genómicas, UNAM</p>
12:40 – 13:00	Coffee Break
13:00 – 14:00	<p>Plenary Session V.                      Chair: Edmundo Calva          Anca Segall  <b>Illuminating dark matter in the viral universe: Using artificial neural networks to predict the function of hypothetical viral proteins</b>          San Diego State University, USA</p>
14:00 – 16:00	Lunch
16:00 – 17:00	<p>Plenary Session VI.                      Chair: Herminia Loza          Guadalupe Espín  <b>Gene expression during the formation of <i>Azotobacter vinelandii</i> cysts</b>          Instituto de Biotecnología, UNAM</p>
17:00 – 17:30	Final Announcements and Closing Ceremony
20:00 – 24:00	Dinner and Dancing

All oral presentations will be held in the Gobernadores Room

All poster presentations will be held in the Maria Bonita Room



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**Odd Poster Presentation: Friday October 4<sup>th</sup>**

**María Bonita Room: 18:00 – 20:00hrs**

**Even Poster Presentation: Saturday October 5<sup>th</sup>**

<b>1.</b>	<b>Identification of membrane proteins of <i>Helicobacter pylori</i> which bind human haemoglobin.</b> <i>José de Jesús Olivares-Trejo</i> , Norma Velázquez Guadarrama, María Elizabeth Álvarez Sánchez, María Elena Romero-Espejel and Marco Antonio González-López. Posgrado en Ciencias Genómicas, UACM
<b>2.</b>	<b>Heterologous biosynthesis of very long chain fatty acid: Implications for fatty acid synthetic biology.</b> <i>Mauricio Aguilar Rangel</i> , Christian Sohlenkamp, Otto Geiger, Isabel M. López-Lara. Centro de Ciencias Genómicas, UNAM
<b>3.</b>	<b>Biosynthesis of polyhydroxyalkanoates produced by a native soil bacteria isolated from North of Mexico.</b> <i>Elizabeth Alemán Huerta</i> , Carlos Saavedra Treviño, Enrique Martínez, Guadalupe Rojas Verde, Katiushka Arévalo Niño, Verónica Almaguer Cantú, Luis Galán Wong. Facultad de Ciencias Biológicas, UANL
<b>4.</b>	<b>Detection by molecular means of <i>Borrelia burgdorferi</i> ss in <i>Boophilus micropuls</i>, comun tick of cattle, in the State of Yucatán.</b> <i>Apodaca-Hernández Javier Eduardo</i> , Barrera-Pérez Mario Antonio, Arena-Ortiz María Leticia, Sánchez Rodríguez Ernesto Cuauhtémoc. Posgrado Institucional Ciencias de la Salud, Univ. Autónoma de Yucatán
<b>5.</b>	<b>Intestinal microbial diversity in White shrimp <i>Litopenaeus vannamei</i> as determined by DGGE and traditional methods.</b> <i>Ma. Leticia Arena Ortiz</i> , Jaqueline Tuyub Tzuc, Diana Resendiz Escalante, Emanuel Aviles, Gabriela Gaxiola. UMDI-SISAL, UNAM
<b>6.</b>	<b>Evaluation of <i>mazG</i> like ORFs of <i>Pseudomonas aeruginosa</i> phages as a regulator of the nutritional stress response.</b> <i>Arenas-Luna Víctor Manuel</i> , Flores-López Víctor Missael, Arguijo-Hernández Emma Socorro and Guarneros-Peña Gabriel. CINVESTAV-IPN
<b>7.</b>	<b>Exploring genetic diversity of actinobacteria isolated from sediments of Cuatro Ciénegas, Coahuila.</b> <i>Héctor Arocha Garza</i> , Souza Valeria, Olmedo Álvarez Gabriela, Galán-Wong LJ, De la Torre-Zavala Susana. Facultad de Ciencias Biológicas, UANL
<b>8.</b>	<b>Molecular detection of magnetotactic bacteria from Cuatro Ciénegas, Coahuila.</b> <i>Bautista-López Santiago</i> , Ramírez Ana, Salazar-Coria Lucía, Garibay-Febles Vicente, Souza Saldívar Valeria, Zapata-Peñasco Icoquih. Instituto Mexicano del Petróleo
<b>9.</b>	<b>The role of NUDIX hydrolase in biosynthesis of Poly-<math>\beta</math>-Hydroxybutyrate and alkylresolcinols in <i>Azotobacter vinelandii</i>.</b> <i>Bedoya-Pérez Leidy P</i> , Moreno Soledad, Espín Guadalupe. Instituto de Biotecnología, UNAM
<b>10.</b>	<b>Distribution and diversity of microbial communities in Pozas Azules Cuatro Ciénegas.</b> <i>Jazmín Itzel Blaz Sánchez</i> , Laura Espinosa Asuar. Instituto de Ecología, UNAM
<b>11.</b>	<b>Regulation and functional analysis of the <i>cfbABCD</i> fimbrial operon of <i>Citrobacter rodentium</i>.</b> <i>Caballero-Flores Gustavo Gilberto</i> , Martínez-Santos Verónica and Puente José Luis. Instituto de Biotecnología, UNAM
<b>12.</b>	<b>The global regulators Hfq and CsrA are required for proper <i>uvrY</i> translation.</b> <i>Martha I. Camacho</i> , Adrián F. Álvarez, Enrique Guzmán and Dimitris Georgellis. Instituto de Fisiología Celular, UNAM

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<b>13.</b>	<b>Demographic expansion in sympatric bacterial lineages revealed by coalescent analyses.</b> <i>Morena Avitia Cao Romero</i> , Ana E. Escalante Hernández, Eria Alaide Rebollar Caudillo, Alejandra Moreno Letelier, Luis Enrique Eguiarte Fruns and Valeria Souza Saldívar. Instituto de Ecología, UNAM
<b>14.</b>	<b><i>Pseudomonas aeruginosa</i> prophages that exclude secondary infections by other phages.</b> <i>Carballo-Ontiveros Marco Antonio</i> , Sepúlveda-Robles Omar Alejandro, Guarneros-Peña Gabriel and Kameyama-Kawabe Luis Yoshio. CINVESTAV-IPN, Zacatenco
<b>15.</b>	<b>Two plasmids from the bean-nodulating <i>Sinorhizobium fredii</i> strain GR64 regulate each other's conjugation genes.</b> <i>Laura Cervantes-de la Luz</i> , Gonzalo Torres-Tejerizo, Eunice López-Fuentes and Susana Brom. Centro de Ciencias Genómicas, UNAM
<b>16.</b>	<b>Role of ribosomal protein S1 in the binding of adenine-rich mRNAs to ribosomal 30S subunit.</b> <i>Juan Carlos Cifuentes Goches</i> , Manuel Alberto Castillo Méndez, Gabriel Guarneros Peña, Javier Hernández Sánchez. CINVESTAV – IPN, Zacatenco
<b>17.</b>	<b>Response of the bacterial communities from Cuatro Cienegas Basin (Chihuahua) to environmental stress caused by UV radiation and temperature: A perspective from the culturable bacteria.</b> <i>Diego Armando Contreras Peralta</i> and Jorge Antonio Valdivia Anistro. Instituto de Ecología, UNAM
<b>18.</b>	<b>Transcriptional asymmetry in prokaryotic genomes. A comparative analysis.</b> <i>Joel Corona Pacheco</i> , Alfonso Vilchis Peluyera, Arístides III Sampieri Hernández, Luisa Alba Lois, Claudia Segal Kischinevzky and Víctor Valdés López. Facultad de Ciencias, UNAM
<b>19.</b>	<b>Characterization of <i>Serratia marcescens</i>, a bacteria associated with entomopathogenic nematodes with different activity against agricultural pests</b> <i>Edgar Dantan Gonzalez</i> , Rosa Estela Quiroz Castañeda, Felipe Martínez Garduño, Ared Mendoza Mejía, Gabriel Guillen Solís, Federico Sánchez Rodríguez, Verónica Obregón Barboza, Paul Gaytan Colin, Laura Ortiz Hernández. Centro de Investigación en Biotecnología, UAEM
<b>20.</b>	<b>Taxonomic and functional analysis of the sulfur cycle using metagenomic data</b> <i>Valerie Yselle De Anda Torres</i> . Instituto de Ecología, UNAM
<b>21.</b>	<b>Bioprospection of Microbial Diversity in the state of Guanajuato.</b> <i>Gustavo Alberto de la Riva</i> , Juan Colli Mul, Francisco Alejo Iturvide, María Azucena Márquez Lucio, Claudia Isela Rodríguez. Instituto Tecnológico Superior de Irapuato
<b>22.</b>	<b>Bacillus diversity in a sediment core sample in Churince System, Cuatro Cienegas Coah.</b> <i>Louis Paul Decena-Segarra</i> , Africa Islas-Robles and Gabriela Olmedo-Álvarez. Instituto Tecnológico Superior de Irapuato
<b>23.</b>	<b>A novel ring made by a distant homologue of the FlgT protein interacts with MotB and FliL and is essential for flagellar rotation in <i>Rhodobacter sphaeroides</i>.</b> <i>Clelia Domenzain</i> , Salvador Fabela, Javier De la Mora, Aurora Osorio, Víctor Ramírez-Cabrera, Sebastian Poggio, Georges Dreyfus and Laura Camarena. Instituto de Investigaciones Biomédicas, UNAM
<b>24.</b>	<b>Fitness of <i>Bacillus subtilis</i> to salty environments as an astrobiology model.</b> <i>Esparza-Ochoa Manuel de Jesús</i> , Ramírez-Jiménez Sandra I, Aguirre-Ramírez Marisela. Universidad Autónoma de Ciudad Juárez
<b>25.</b>	<b>Genomic structure of phages infecting <i>Pseudomonas aeruginosa</i>.</b> <i>Victor Flores</i> , Adrian Cazares, Omar Sepulveda, Luis Kameyama and Gabriel Guarneros. CINVESTAV – IPN, Zacatenco

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<b>26.</b>	<b>Biochemical characterization of a 24 kDa esterase from <i>Alicyclophilus</i> sp. BQ1, related to its ability to grow in polyurethane.</b> <i>Jacqueline Fuentes-Jaime</i> , Martín Vargas-Suárez, Jorge Herrera-Díaz and Herminia Loza-Tavera. Facultad de Química, UNAM
<b>27.</b>	<b>Could the Quorum Sensing Receptor NprR Have Different Functions Depending on the Signal Peptide that Binds?.</b> <i>Ernesto Gallardo-Espinoza</i> , Jorge Rocha, Mayra de la Torre. Centro de Investigación en Alimentación y Desarrollo
<b>28.</b>	<b>Efficient production of <i>Bacillus thuringiensis</i> Cry1AbMod toxin under cry3Aa promoter region and single cysteine mutations in the protoxin region.</b> <i>Blanca Ines García-Gómez</i> , Jorge Sánchez, Jorge E. Ibarra, Alejandra Bravo and Mario Soberón. Instituto de Biotecnología, UNAM
<b>29.</b>	<b>Biofilm Formation by <i>Bacillus thuringiensis</i>.</b> <i>Karina García-Gutiérrez</i> , Francisco Javier Díaz-García, Jorge Ibarra-Rendón and Patricia Gómez de León-Cruces. Facultad de Medicina, UNAM
<b>30.</b>	<b>Role of chaperones, polyphosphate, and atp synthase in dna gyrase reactivation in <i>E. coli</i> stationary-phase cells after addition of nutrients.</b> <i>Gómez Eichelmann Carmen</i> , Alejandra Gutiérrez Estrada and Jesús Ramírez Santos. Instituto de Investigaciones Biomédicas, UNAM
<b>31.</b>	<b>Identification of genes involved in restriction of methylated DNA by <i>Streptomyces coelicolor</i>.</b> <i>González-Cerón G</i> , Miranda-Olivares O, Michel-Chávez G, Servín-González L. Instituto de Investigaciones Biomédicas, UNAM
<b>32.</b>	<b>Functional divergence of duplicate genes coding for RNA helicases type DEAD in <i>Bacillus subtilis</i>.</b> <i>José Antonio González Gutiérrez</i> , Francisco López Mendoza, Gabriela Olmedo Alvarez. CINVESTAV – IPN, Irapuato
<b>33.</b>	<b>RNA-seq and global mapping of transcriptional start sites involved in electron transfer mechanism in <i>Geobacter sulfurreducens</i>.</b> <i>Getzabeth González</i> , Aurora Labastida, Leticia Vega, Verónica Jiménez, Maricela Olvera, Sonia Davila, Enrique Morett and Katy Juárez. Instituto de Biotecnología, UNAM
<b>34.</b>	<b>Identification of nitrogen-fixing bacteria associated with the gut of <i>Dendroctonus</i> spp.</b> <i>Guerra-Camacho Jairo</i> , Zúñiga-Bermúdez Gerardo, Villa-Tanaca Lourdes and Hernández-Rodríguez César. Escuela Nacional de Ciencias Biológicas, IPN
<b>35.</b>	<b>Comparison of microbial diversity in bulk soil and rhizosphere soil of <i>Dassilarium cedrossanum</i> in Churince, CCC.</b> <i>Germán Hernández Alonso</i> , Valerie de Anda and Valeria Souza. Instituto de Ecología, UNAM
<b>36.</b>	<b>Changes in the soil bacterial community along an agricultural gradient in the Cuatro Ciénegas valley.</b> <i>Hernández Becerra Natali</i> , Tapia Torres Yunuen, Beltrán Paz Ofelia, Blaz Sánchez Jazmín, Souza Valeria, García-Oliva Felipe. Centro de Investigaciones en Ecosistemas, UNAM
<b>37.</b>	<b><i>Gluconacetobacter diazotrophicus</i> as a possible pathogenic bacterium.</b> <i>Alejandro Ulises Herrera Romero</i> , Ana Karen Fernández Yépez, Alma Rosa Pérez Rodríguez, Daniela Amador Bravo and Marcos Flores Encarnación. Facultad de Medicina, BUAP
<b>38.</b>	<b>Genome sequence analysis of <i>Avibacterium paragallinarum</i> strain CL.</b> <i>Horta Valerdi G</i> , Negrete E, Vaca S, Perez V, Olmedo G, Hernández I, Gómez Z, Sánchez P and Vazquez C. Instituto de Ciencias, BUAP
<b>39.</b>	<b>Number of operons and growth rate dynamics in a mesocosmos enriched with phosphorous in the Cuatro Ciénegas Valley.</b> <i>José Luis Jiménez Seinos</i> , Valeria Souza

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40.	<b>Characterization of mutant <i>iscR</i> of <i>Dickeya dadantii</i> for the biogenesis in clusters [Fe-S].</b> <i>Julio Cesar Juárez-García</i> , Diego Eloyr Navarro-López, Evangelina Esmeralda Quiñones-Aguilar, Joaquín Alejandro Qui-Zapata, Gabriel Rincón-Enríquez. Biotecnología Vegetal, CIATEJ
41.	<b>The repressor protein of <i>Escherichia coli</i> phage mEp021.</b> <i>Leonor Lastra Vargas</i> , Luis Kameyama Kawabe, Gabriel Guarneros Peña. CINVESTAV – IPN, Zacatenco
42.	<b>Conjugative transfer of pRet42a from <i>Rhizobium etli</i> CFN42: Role of hypothetical conserved proteins (<i>hcp</i>) encoding genes located in the <i>tra</i> region, and influence of the recipient.</b> <i>Eunice López-Fuentes</i> , Laura Cervantes-De la luz, Gonzalo Torres-Tejerizo and Susana Brom. Centro de Ciencias Genómicas, UNAM
43.	<b>Antimicrobial Activity Induced by a <i>Pregnenolone-Carbamazepine</i> Derivative on <i>S. aureus</i>, <i>K. pneumoniae</i> and <i>E. coli</i>.</b> <i>María del Carmen López Ramos</i> , Lauro Figueroa Valverde, Carolina Naal Dzib. Facultad de Ciencias Químico Biológicas, Universidad Autónoma de Campeche
44.	<b>Role of IHF in the Transcriptional Regulation of the <i>ecp</i> Operon.</b> <i>Martínez-Santos VI</i> , Medrano-López A and Puente JL. Instituto de Biotecnología, UNAM
45.	<b>Oligomerization analysis of the Cry1Ab toxin from <i>Bacillus thuringiensis</i>.</b> <i>Matus-Acuña Violeta</i> and Bravo Alejandra. Instituto de Biotecnología, UNAM
46.	<b>An orphan bacteriophage group no more: The genome of the <i>Pseudomonas aeruginosa</i> bacteriophage H66.</b> <i>Maya Otoniel</i> , Flores-López Victor, Cazares López Adrian, Guarneros Gabriel. CINVESTAV – IPN, Zacatenco
47.	<b>Cultivation-independent estimation of rhizobial alpha and beta diversity in tropical dry forest soils of Morelos reveals that <i>Rhizobium etli</i> and <i>Rhizobium phaseoli</i> are the dominant species.</b> <i>Fabiola Miranda-Sánchez</i> , Javier Rivera and Pablo Vinuesa. Centro de Ciencias Genómicas, UNAM
48.	<b>Ribosome Recycling Factor (RRF) overproduction prevents cell growth by increasing the rates of early <i>pep</i>-tRNA drop off.</b> <i>Montes Cruz Rodolfo</i> , Bueno Martínez José, Kameyama Kawabe Luis Yoshio and Guarneros Peña Gabriel. CINVESTAV – IPN, Zacatenco
49.	<b><i>Actinobacillus seminis</i> secretes a protease that degrades bovine IgG and fibrinogen.</b> <i>Montes-García J. Fernando</i> , De la Cruz Aldo, Vaca Sergio, Villamar Tomás, Acosta Jorge and Negrete-Abascal Erasmo. Facultad de Estudios Superiores Iztacala, UNAM
50.	<b>Water stress affects the metabolic capacity of a soil bacterial community from the Cuatro Ciénegas valley.</b> <i>Montiel-González Cristina</i> , Gómez Zulema, Olmedo-Álvarez Gabriela, García-Oliva Felipe. Centro de Investigación en Ecosistemas (CIEco), UNAM y Centro de Investigaciones Avanzadas (CINVESTAV), IPN
51.	<b>Research of factors affecting the activity of the sensor kinase BarA of <i>Escherichia coli</i>.</b> <i>Estefanía Morales Ruiz</i> , Martha I. Camacho Hernández, Gerardo Guzmán Córdova, Adrián F. Álvarez and Dimitris Georgellis. Instituto de Fisiología Celular, UNAM
52.	<b>Isolation and characterization of phosphate solubilizing bacterias natives from Mesquite (<i>Prosopis chilensis</i>) rhizosphere soil in Mexicali Valley.</b> <i>Lizbeth Moreno Ramírez</i> and Daniel González Mendoza. Institute of Agricultural Sciences, Autonomous University of Baja California
53.	<b>Detection of <i>Helicobacter pylori</i> in rainwater and air.</b> <i>Rosa María Nava Nolazco</i> , Germán Rubén Aguilar Gutiérrez, Angélica Ramírez Aguila and Marcos Flores

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55.	<b>Genome-wide Mapping of Transcription Start Sites in <i>Escherichia coli</i>.</b> <i>M. Olvera</i> , A. Labastida, L. Vega-Alvarado, V. Jimenez-Jacinto, L. Olvera, A. Mendoza, S. Davila, R. Grande, L. Collado, A. Hernandez, G. Gonzalez, K. Juárez, V. Moreno, C. Vargas, E. Sanchez, B. Taboada, I. Aguilar, J. Collado and E. Morett. Instituto de Biotecnología, UNAM
56.	<b>Activity of the <i>Streptomyces coelicolor</i> restriction system for methylated DNA against phage infection.</b> <i>Omaña-Guzmán TV</i> , Martínez-Morales AI, González-Cerón G and Servín-González L. Instituto de Investigaciones Biomédicas, UNAM
57.	<b>In silico detection of phage elements into <i>Pseudomonas aeruginosa</i> genomes deposited in databases.</b> <i>Ortega Oliva Sandra Angélica</i> , Cazares López Cesar Adrián, Guarneros Peña Gabriel. CINVESTAV del IPN Zacatenco
58.	<b>Isolation and Selection of microorganisms with lipase production potencial from soil.</b> <i>Eugenia Guadalupe Ortiz Lechuga</i> , Isela Quintero Zapata, Luis Jesús Galán Wong, Katiushka Arévalo Niño. Facultad de Ciencias Biológicas, UANL
59.	<b>Sphingolipid biosynthesis in <i>Caulobacter crescentus</i>.</b> <i>Jonathan Padilla Gómez</i> , Sebastian Poggio, Daniela A. García-Soriano, Diana X. Sahonero-Canavesi, Isabel M. López-Lara and Otto Geiger. Centro de Ciencias Genómicas, UNAM
60.	<b>The resilience of microbial mats from Cuatro Ciénegas to different scenarios of global climate change.</b> <i>Silvia Pajares</i> and Valeria Souza. Instituto de Ecología, UNAM
61.	<b>Distribution and Diversity of <i>Planctomycetes phylum</i>, in Pozas Azules, Cuatro Ciénegas, using the 16S ribosomal gene.</b> <i>Blanca Lorena Peña García</i> , Valeria Souza Saldivar, Laura Espinosa Asuar. Instituto de Ecología, UNAM
62.	<b>Isolation and characterization of marine bacteria able to grow on polyurethane as sole carbon source.</b> <i>Gabriela Rosario Peña-Sandoval</i> , Luis Alberto Arias-Escalante, Anadely Martínez-López, Tamara Sinai Bernal-Jaspeado and Herminia Loza-Tavera. Universidad Autónoma de Nayarit
63.	<b>Improved Monitoring and Control of Microbiologically Influenced Corrosion (MIC).</b> <i>Beatriz Monica Perez-Ibarra</i> , Kathleen E. Duncan, Gary Jenneman, Jennifer Busch Harris, Robert Webb and Kerry Sublette. University of Oklahoma, OK, U.S.A.
64.	<b>Isolation of plant growth-promoting actinomycetes associated with jojoba (<i>Simmondsia chinensis</i>) roots.</b> <i>Pérez-Rosales Elvia</i> , Alcaraz-Meléndez Lilia, Puente M. Esther, Zenteno-Savín Tania, Vázquez-Juárez Ricardo, Morales-Bojórquez Enrique. Centro de Investigaciones Biológicas del Noreste
65.	<b><i>Acinetobacter spp.</i> plasmids, a diverse gene source.</b> <i>Heana Salto</i> , Gonzalo Torres Tejerizo, Daniel Wibberg, Andreas Schlüter and Mariano Pistorio. Instituto de Biotecnología y Biología Molecular, CCT-La Plata, CONICET, Dto de Cs. Biológicas, Fac. Cs. Exactas, UNLP
66.	<b>Coexistence of Different <i>Pseudomonas</i> Lineages in Cuatro Ciénegas, Coahuila: Arms Race or Cooperation?</b> <i>Gabriel Yaxal Ponce Soto</i> and Valeria Souza Saldivar. Instituto de Ecología, UNAM



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<b>68.</b>	<b>Seasonal microbial diversity in hot springs from a geothermal zone in Araró, México.</b> <i>Cristina Mariana Prieto-Barajas, Ruth Alfaro Cuevas-Villanueva, Eduardo Valencia-Cantero, Gustavo Santoyo.</i> Instituto de Investigaciones Químico Biológicas-UMSNH
<b>69.</b>	<b>Identification and analysis of <i>aoxB</i> gene in arsenic-resistant Gammaproteobacteria isolated from the Mololoa River.</b> <i>Quintero-Castañeda Armando, Mondragón-Jaimes Verónica Alejandra, Bueno-Durán Adela Yolanda, Velázquez-Fernández Jesús Bernardino, Sánchez-Herrera Leticia Mónica.</i> Universidad Autónoma de Nayarit
<b>70.</b>	<b>In the soil bacterium <i>Bacillus subtilis</i>, FNR (Fumarate Nitrate Reduction) is regulated by MTA?</b> <i>Evangelina Esmeralda Quiñones Aguilar, Marc Chippaux and Marilyn Foglino.</i> Biotecnología Vegetal, CIATEJ
<b>71.</b>	<b>Function study of the Histidin kinase CbrA in the alginate synthesis in <i>Azotobacter vinelandii</i>.</b> <i>Quiroz-Rocha E, Hernández-Ortíz A, Guzmán J, Espín G and Nuñez C.</i> Instituto de Biotecnología, UNAM
<b>72.</b>	<b>hFixL and FxkR are the key regulators for <i>fixKf-like</i> genes expression.</b> <i>Alma Reyes-González, David Zamorano-Sánchez and Lourdes Girard.</i> Centro de Ciencias Genómicas, UNAM
<b>73.</b>	<b>Isolation of bacteriophages from bacteria that cause the soft rot of agave mezcalero.</b> <i>Gabriel Rincón-Enríquez, Alejandro Guillermo Solís-Sánchez, Evangelina Esmeralda Quiñones-Aguilar, Joaquín Alejandro Qui-Zapata, Luis López-Pérez.</i> Biotecnología Vegetal, Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco
<b>74.</b>	<b>The genetic system ISC in virulence of <i>Pseudomonas syringae</i> pv. <i>phaseolicola</i> in bean plants.</b> <i>Gabriel Rincón-Enríquez, Diego Eloyr Navarro-López, Evangelina Esmeralda Quiñones-Aguilar, Joaquín Alejandro Qui-Zapata.</i> Biotecnología Vegetal, Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.
<b>75.</b>	<b>Regulatory elements in <i>cis</i> and <i>trans</i> modulate the expression of the <i>fla2</i> flagellar genes in <i>Rhodobacter sphaeroides</i>.</b> <i>Anet Rivera Osorio, Elidet Gómez-César, Sebastian Poggio, Aurora Osorio, Georges Dreyfus and Laura Camarena.</i> Instituto de Fisiología Celular, UNAM
<b>76.</b>	<b>Functional analysis of the <i>R. etli</i> hFixL and FxkR proteins.</b> <i>Patricia Rivera, David Zamorano-Sánchez, Adrián Álvarez, Dimitris Georgellis and Lourdes Girard.</i> Centro de Ciencias Genómicas, UNAM
<b>77.</b>	<b>Use of technologies in the bioinformatics analyses of high-throughput sequencing projects.</b> <i>Fernando Riveros-Mckay Aguilera, Paloma Lara Figueroa, Katy Juarez and Enrique Morett.</i> Instituto de Biotecnología, UNAM
<b>78.</b>	<b>Multilocus Sequence Analysis of <i>Escherichia</i> isolates from pristine and contaminated rivers in Mexico reveals contrasting population Structures and the presence of cryptic lineages.</b> <i>Pablo Rodriguez Bucheli Torres Torija, Jazmín Ramos Madrigal, Pablo Vinuesa Fleischmann.</i> Centro de Ciencias Genómicas, UNAM
<b>79.</b>	<b>Gene regulation of <i>Avin11010</i> and <i>Avin11020</i> genes and their role in desiccation resistance and other abiotic stresses in <i>Azotobacter vinelandii</i> cysts and vegetative cells.</b> <i>Selma Julieta Rodríguez Salazar, Soledad Moreno, Guadalupe Espín Ocampo.</i> Instituto de Biotecnología, UNAM

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<b>81.</b>	<b>Phylogenetics of different groups of <i>Bacillus</i> in the sediment community of the Churince water system at Cuatro Ciénegas, Coahuila, México.</b> <i>María Dolores Rodríguez Torres, África Islas, Ismael Hernández, Valeria Souza, Gabriela Olmedo Álvarez.</i> CINVESTAV – IPN, Irapuato
<b>82.</b>	<b>Characterization of polyurethane degrading bacterial consortia.</b> <i>Alba Luz Savín-Gámez, Martín Vargas-Suárez, Maricarmen Quirasco Baruch and Herminia Loza-Tavera.</i> Facultad de Química, UNAM
<b>83.</b>	<b>Diversity of the pEAF virulence plasmid of enteropathogenic <i>Escherichia coli</i> (EPEC).</b> <i>Claudia Silva, Crispín Zavala-Alvarado, Carmen Contreras, Carolina Yáñez-Domínguez and José Luis Puente.</i> Instituto de Biotecnología, UNAM
<b>84.</b>	<b>Identification of Carbapenemases in Clinical Isolates Causing Nosocomial Infections in Mexico.</b> <i>Silva Sánchez Jesús, Garza-Ramos Ulises, Barrios Humberto, Tamayo-Legorreta Elsa, Reyna-Flores Fernando, Sánchez-Pérez Alejandro, Rodríguez-Zulueta Patricia, Hernandez-Castro Rigoberto, Galicia-Paredes Alejandra, Meza-Chávez Armando, Salazar Juanita, Sánchez-Francia David.</i> Instituto Nacional de Salud Pública, CISEI
<b>85.</b>	<b>Bacteriophages, a sustainable alternative for Agave soft rot biocontrol.</b> <i>Alejandro Solís-Sánchez, Evangelina Esmeralda Quiñones-Aguilar, Joaquín Alejandro Qui-Zapata, Karla Liliana Vega-Ramos, Jaime Xavier Uvalle-Bueno, Gabriel Rincón-Enríquez.</i> Biotecnología Vegetal CIATEJ
<b>86.</b>	<b>Towards a functional characterization of the Orf4 protein, a structural component of the type III secretion system of enteropathogenic <i>Escherichia coli</i>.</b> <i>José Eduardo Soto Guzmán, Miguel Díaz Guerrero, Norma Espinosa and Bertha González-Pedrajo.</i> Instituto de Fisiología Celular, UNAM
<b>87.</b>	<b>Probing the phosphoryl-group transfer routes in the ArcB dimer.</b> <i>Juan Luis Terán Melo, Hortencia Silva Jiménez and Dimitris Georgellis.</i> Instituto de Fisiología Celular, UNAM
<b>88.</b>	<b>Detection of Rhizobial Conjugative Transfer by Flow Cytometry: Tools and Applications.</b> <i>Gonzalo Torres Tejerizo, Laura Cervantes, María Julia Althabegoiti, Mariano Pistorio, David Romero and Susana Brom.</i> Centro de Ciencias Genómicas, UNAM
<b>89.</b>	<b>Regulation of secretion through the injectisome of enteropathogenic <i>Escherichia coli</i> (EPEC).</b> <i>Claudia Torres-Vargas, Miguel Díaz-Guerrero, Norma Espinosa-Sánchez and Bertha González-Pedrajo.</i> Instituto de Fisiología Celular, UNAM
<b>90.</b>	<b>Effect of oligotrophic conditions over the rDNA operon copy number and in the growth rate dynamic in the genus <i>Bacillus</i> isolated from the Cuatro Cienegas Basin, Coahuila.</b> <i>Jorge Antonio Valdivia Anistro, Jim Elser, Gabriela Olmedo Alvarez, Valeria Souza Saldivar.</i> Instituto de Ecología, UNAM
<b>91.</b>	<b>Bacterial isolation from crater lakes in “7 Luminarias”, México: La Joya, Cíntora and Parangueo.</b> <i>Valerdi Negreros Julio César, Pacheco Cabañas Rita Karen, Rico Herrera Mauricio, Malm Olaf, Brito Elcia Margareth S.</i> Escuela de Biología, BUAP
<b>92.</b>	<b>Possible relevance of a bacterial porin-esterase in polyurethane utilization as carbon source.</b> <i>Martín Vargas-Suárez, José Alberto Hernández-Eligio, Mariana</i>



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93.	<b>Study of microbial biodiversity of anoxygenic purple sulfur bacteria in Cuatro Ciénegas, Coahuila.</b> Paola Angélica Vázquez Cisneros, Ana Gutiérrez, Pablo Bucheli, Katy Juarez and Dra. Valeria Souza Saldivar. Instituto de Ecología, UNAM
94.	<b>Finding of CRISPR/Cas system reminiscences in <i>Avibacterium paragallinarum</i>.</b> Lourdes Pérez-Hernández, Jaqueline López-Ochoa, Candelario Vázquez-Cruz, Erasmo Negrete-Abascal, Patricia Sánchez Alonso. Instituto de Ciencias, BUAP
95.	<b>Role of the ecological and evolutionary forces in the microbial populations of the genus <i>Vibrio spp.</i> in Cuatro Ciénegas, Coahuila.</b> Mirna Vázquez Rosas Landa and Dra. Valeria Souza Saldivar. Instituto de Ecología, UNAM
96.	<b>Analysis of the arrestin-like activity of the <i>Bacillus subtilis</i> Spo0M protein.</b> Luz Adriana Vega, María Tabche, Enrique Merino, Liliana Pardo. Instituto de Biotecnología, UNAM
97.	<b>Activity of traditional Mexican medicinal plants extracts in quorum sensing systems of <i>Pseudomonas aeruginosa</i>.</b> Velázquez Guadarrama Norma, Wang Kan Xuan, Bravo Eslava Berenice, Juan Carlos Vigueras Galindo, Castillo Juárez Israel, Martínez Mariano, Soto Marco, García Rodolfo. Hospital Infantil de México Federico Gómez
98.	<b>Phylogenetic analysis based on polymorphisms of the <i>Helicobacter pylori vacA</i> gene isolated from pediatric patients.</b> Vigueras Galindo Juan Carlos, Mendoza Elizalde Sandra, Giono Cerezo Silvia, Zúñiga Bermúdez Gerardo, Consuelo Sánchez Alejandra, Valencia Mayoral Pedro, Velázquez Guadarrama Norma. Hospital Infantil de México Federico Gómez
99.	<b>The possibility of impossibility: when pA/C found the pX1.</b> Magdalena Wiesner, Claudia Silva, Marcos Fernández-Mora, Miguel A. Cevallos, Crispín Zavala-Alvarado, Mussaret Zaidi and Edmundo Calva. Centro de Ciencias Genómicas, UNAM
100.	<b>Production in fed batch culture of NprR recombinant protein from <i>Bacillus thuringiensis</i> in <i>E. coli</i>.</b> Guadalupe Yapur-Villaseñor, Rosina Cabrera and Mayra de la Torre. Centro de Investigación en Alimentación y Desarrollo
101.	<b>Characterization and identification of diazotrophic and nitrogen-oligotrophic bacteria isolated from mine tailings.</b> Lily Xochilt Zelaya-Molina, Zeltzin Magaña-García, César Hugo Hernández Rodríguez. Escuela Nacional de Ciencias Biológicas, IPN
102.	<b>Characterization of the immune response of stress proteins from BCG Mexico.</b> Luis Contreras Castro and Yolanda López Vidal. Programa de Inmunología Molecular Microbiana, Facultad de Medicina, UNAM
103.	<b>Identification of the peptides presented in the MHC Class II of dendritic cells stimulated with <i>Mycobacterium avium</i> and BCG Phipps.</b> Tania Varela-Salinas, Yolanda López-Vidal. Programa de Inmunología Molecular Microbiana, Edificio de investigación, Facultad de Medicina, UNAM
104.	<b>HSL production and regulation in <i>Sinorhizobium fredii</i> NGR234.</b> Francisco Pedraza López, Magdalena Weisner Reyes, Christian Sohlenkamp, Otto Geiger, Isabel López Lara, Miguel Ángel Cevallos Gaos. Centro de Ciencias Genómicas, UNAM
105.	<b>Evolutionary analysis of the photosynthetic function in <i>Paulinella chromatophora</i></b> Cecilio Valadez and Luis Delaye. CINVESTAV Irapuato
106.	<b>Horizontally transferred genes have low expression levels.</b> Gilberto Álvarez and Luis Delaye. CINVESTAV Irapuato

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<b>107.</b>	<b>Evolution of Codon Usage Bias in Bacteria and Archaea.</b> <i>Guadalupe Arellano</i> and Luis Delaye. CINVESTAV Irapuato
<b>108.</b>	<b>A database for the study of reduced genomes.</b> <i>David Martínez</i> and Luis Delaye. CINVESTAV Irapuato
<b>109.</b>	<b>Analysis of the ability to improve drought tolerance to <i>Phaseolus vulgaris</i> L. of a collection of rhizobium strains isolated from central highlands of México.</b> <i>Miguel Angel Villalobos López, Lorena Jaquelin Gómez Godínez, Andrea Salvador Muñoz, Lourdes GirardCuesy, ChouhraTalbi, and Analilia Arroyo Becerra.</i> Centro de Investigación en Biotecnología Aplicada-Instituto Politécnico Nacional
<b>110.</b>	<b>Evolutionary analysis of <i>Bacillus</i> spp. through phylogenomic reconstruction.</b> <i>Hernández González Ismael L, Moreno-Hagelsieb Gabriel, Olmedo Álvarez Gabriela.</i> Molecular Biology and Microbial Ecology Laboratory. Genetic Engineering Department. CINVESTAV-Irapuato.
<b>111.</b>	<b>The effect of neutral mutations on protein evolution in genomes under genome reduction.</b> <i>Ana Juárez-Vázquez</i> and Francisco Barona-Gómez. Laboratory on Evolution of Metabolic Diversity. National Laboratory of Genomics for Biodiversity (LANGEBIO).
<b>112.</b>	<b>EvoMining: An evolution-inspired genome mining tool for the discovery of novel metabolic pathways.</b> <i>Martinez-Guerrero C, Cruz-Morales P. &amp; Barona-Gómez F.</i> Laboratory on Evolution of Metabolic Diversity. National Laboratory of Genomics for Biodiversity (LANGEBIO).
<b>113.</b>	<b>Metabolic model comparison reveals changes in central metabolism during <i>Streptomyces</i> adaptation to industrial lifestyle.</b> <i>Pablo Cruz-Morales, Janaka Eridisinghe, Christopher Henry&amp;Francisco Barona-Gómez.</i> Laboratory on Evolution of Metabolic Diversity. National Laboratory of Genomics for Biodiversity (LANGEBIO).

