



V MEETING OF THE FREE RADICALS AND OXIDATIVE STRESS
BRANCH OF THE MEXICAN BIOCHEMICAL SOCIETY



March 18-21, 2015
Hacienda San José Vista Hermosa, Puente de Ixtla, Morelos

VI INTERNATIONAL WORKSHOP ON COMPARATIVE ASPECTS OF
OXIDATIVE STRESS IN BIOLOGICAL SYSTEMS

PROGRAM

WEDNESDAY, MARCH 18TH, 2015	
15:00-17:30	Registration desk open
17:30-18:00	Opening remarks
18:00-19:00	Inaugural Lecture "Control of breast cancer cell bioenergetics by nitric oxide" Dr. Neil. Hogg. Key-Note Speaker Medical College of Wisconsin. Milwaukee, WI. President Society of Free Radicals in Biology and Medicine SFRBM
19:00-20:00	Ice-breaker
20:00-22:00	Dinner
THURSDAY, MARCH 19TH, 2015	
07:00-08:45	Workshop: Early Morning graduate course – day one "¿Qué es un radical libre?" Dr. Mina Königsberg Universidad Autónoma Metropolitana-Iztapalapa. México
08:00-13:00	Registration desk open
08:45-10:00	Breakfast
	Topic: Free radicals in Medicine
10:00-11:00	Alejandro Silva-Palacios tBHQ/Nrf2 confers neuroprotection to old rats against an oxidant treatment with 3-nitropropionic acid. Universidad Autónoma Metropolitana, Iztapalapa Adriana Guadalupe Pérez-Ruiz Effect antiproliferative of (-)-epicatechin and its relationship with reactive oxygen species in breast cancer cell. Escuela Superior de Medicina - IPN Laura Guerrero-Medrano Undesired toxicity of cyclophosphamide associated with increased oxidative stress in cancer-free organs. Bioquímica, CINVESTAV - IPN



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11:00-12:00	<p>Invited Plenary Lecture</p> <p>Dr. Francisco Laurindo Martins "Protein disulfide isomerases: novel roles in redox signaling and homeostasis" Instituto del Corazón, Universidad de Sao Paulo, Brazil</p>
12:00-12:15	Break
	<p>Symposium: Free radicals and antioxidants in microorganisms</p>
12:15-12:45	<p>Dr. Mario Pedraza Reyes "Consequences of faithful or error-prone processing of ROS-promoted DNA damage in <i>Bacillus subtilis</i>." University of Guanajuato, Guanajuato, México</p>
12:45-13:15	<p>Dr. Alejandro de las Peñas "Oxidative stress response, adherence and resistance to azoles in the opportunistic fungal pathogen <i>Candida glabrata</i>." Instituto Potosino de Investigación Científica y Tecnológica, San Luis Potosí, México</p>
13:15-13:45	<p>Dr. Javier Barrios González "In search for the environmental stimuli that induce higher lovastatin production in solid-state fermentation: ROS regulate the pathway genes" Universidad Autónoma Metropolitana-Iztapalapa. México</p>
13:45-16:00	Lunch
16:00-17:00	<p>Fabiola Jaimes-Miranda The role of Sim35 during aging and oxidative stress in the yeast <i>Saccharomyces cerevisiae</i>. Instituto de Fisiología Celular, UNAM</p> <p>Ailed Pérez-Sánchez Modification of the ROS profile in lovastatin solid-state fermentation by genetic means or by environmental manipulation. Universidad Autónoma Metropolitana, Iztapalapa</p> <p>Rocío del Carmen Pérez-Aguilar Dynamics of the intracellular H₂O₂ levels in the root of <i>Arabidopsis thaliana</i> in response to a specific NADH inhibitor. Instituto de Biotecnología, UNAM</p>
17:00-19:00	Poster viewing and discussion 1



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19:00-20:00	Business meeting of the Free Radicals and Oxidative Stress Branch of the Mexican Biochemical Society
20:00-22:00	Dinner
FRIDAY, MARCH 20TH, 2014	
07:00-08:45	Workshop: Early Morning graduate course – day two “El rol del proteosoma en la eliminación de proteínas oxidadas.” Dr. Claudio Torres Pathology and Laboratory Medicine Department. Drexel University, Philadelphia, USA.
08:45-10:00	Breakfast
	Topic: Free radicals in plants and mitochondria
10:00-11:00	Gerardo Rangel-Sánchez Characterization of the effects of chromium on the production of reactive oxygen species and hormone response in <i>Arabidopsis thaliana</i> . IIQB, Universidad Michoacana de San Nicolás Hidalgo Joel Herrera-Martínez A gene regulatory network underlying ROS patterns in <i>Arabidopsis</i> roots. Instituto de Ecología, UNAM María Alejandra Sánchez-Muñoz The formation of supercomplexes is preserved by <i>Moringa oleifera</i> hydroalcoholic extract in liver during early diabetes. Facultad de Ciencias Químicas, Universidad Juárez del Estado de Durango
11:00-12:00	Invited Plenary Lecture Dr. José Antonio Enríquez Domínguez "Mitochondrial supercomplexes and ROS" Centro Nacional de Investigaciones Cardiovasculares Carlos III Madrid, España
12:00-12:15	Break
	Symposium: Free radicals in cell biology
12:15-12:45	Dr. Emilio Rojas “Antioxidant response regulation by MicroRNAs contributes to cellular transformation” Departamento de Medicina Genómica y Toxicología Ambiental Instituto de Investigaciones Biomédicas, UNAM. México



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12:45-13:15	Dra. Emma Saavedra "Metabolic modeling of the antioxidant pathway in <i>Trypanosoma cruzi</i> : in search of therapeutic targets". Instituto Nacional de Cardiología Ignacio Chávez, México
13:15-13:45	Dr. Armando Luna López "Hormetic response mechanisms that prevent oxidative damage during aging" Instituto Nacional de Geriátría, México
13:45-16:00	Lunch
16:00-18:00	Poster viewing and discussion 2
18:00-19:00	Invited Plenary Lecture Dr. Luis Cárdenas Torres "Dynamic of reactive oxygen species in root hair cells and pollen tubes are essential for polar growth" Instituto de Biotecnología, UNAM. México
19:00-21:00	Dinner
21:00	Cultural event – to be announced
SATURDAY, MARCH 21TH, 2015	
07:00-08:45	Workshop: Early Morning graduate course – day three "Aspectos metabólicos de la respuesta antioxidante" Dr. Emma Saavedra Instituto Nacional de Cardiología, Ignacio Chávez. México
08:45-10:00	Breakfast
	Topic: Free radicals and cell signaling
10:00-11:00	Invited Plenary Lecture Dr. Claudio Torres "Senescent astrocytes and neurodegenerative disease" Pathology and Laboratory Medicine Department Drexel University, Philadelphia, USA.
11:00-12:00	Denise Clavijo-Cornejo HGF induce the reactive oxygen species production via NADPH oxidase in primary mouse hepatocytes Universidad Autónoma Metropolitana, Iztapalapa



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	<p>Marco Antonio Zaragoza-Campillo Role of reactive oxygen species in the regulation of a MAP3K during the cell death of neurons. Instituto de Fisiología Celular. UNAM</p> <p>Enrique Salas-Vidal Reactive oxygen species dynamics in developing zebrafish embryos. Instituto de Biotecnología, UNAM</p>
12:00-12:15	Break
	Symposium: Oxidative stress and degenerative diseases
12:15-12:45	<p>Dr. Abel Santamaria del Ángel "Antioxidant and neuroprotective properties of S-alilcysteine, an aged-garlic compound" Instituto Nacional de Neurología y Neurocirugía – SSA. México</p>
12:45-13:15	<p>Dr. Ivonne Olivares-Corichi "Dysfunction of insulin by oxidative stress in diabetic and obese patients" Escuela Superior de Medicina, IPN. México</p>
13:15-13:45	<p>Dr. Guillermo Ceballos "Study of the flavanol (-)-epicatechin effects on oxidative markers in aged mice" Escuela Superior de Medicina, IPN. México</p>
13:45-14:00	Closing remarks
14:00-16:00	Lunch

Organizing Committee

Dr. Luis Cárdenas Torres
Instituto de Biotecnología, UNAM

Dr. Mina Königsberg Fainstein
Universidad Autónoma Metropolitana-Iztapalapa

Dr. Luis Enrique Gómez Quiroz
Universidad Autónoma Metropolitana-Iztapalapa

Dr. Ana Cecilia Zazueta Mendizábal
Instituto Nacional de Cardiología, Ignacio Chávez



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POSTER SESSION 1

THURSDAY 17:00 – 19:00

ESTRÉS OXIDANTE EN LA DIFERENCIACIÓN Y EL DESARROLLO

1.	EFFECT OF OMEGA 3 FATTY ACIDS IN LIPID COMPOSITION AND LIPOPEROXIDATION OF PLACENTAL MITOCHONDRIA FROM DIABETIC RATS. FIGUEROA-GARCÍA MC , CORTES-ROJO C, SAAVEDRA-MOLINA A, PALOMAR-M M AND MEJÍA-ZEPEDA R. UNIVERSIDAD MICHOACANA
2.	CADMIUM: ANTIOXIDANT ACTIVITY OF SOD AND CAT ON THE REPRODUCTIVE SYSTEM IN PERIPUBERAL MALE RATS. HERNÁNDEZ-RODRÍGUEZ J , LÓPEZ-LÓPEZ AL, ARENAS-RÍOS E, LEÓN-GALVÁN M, DAMIÁN-MATZUMURA P, VIGUERAS-VILLASEÑOR RM, BONILLA-JAIME H, ARTEAGA-SILVA M. UAM – IZTAPALAPA
3.	NADPH OXIDASE ACTIVITY IS REQUIRED FOR EPIBOLY CELL MIGRATION IN ZEBRAFISH EMBRYOS. FRANCISCO JAVIER MÉNDEZ-CRUZ , MARIO ADÁN MENDIETA-SERRANO, LUIS CÁRDENAS, HILDA LOMELÍ AND ENRIQUE SALAS-VIDAL. INSTITUTO DE BIOTECNOLOGÍA, UNAM

MÉTODOS Y MODELOS PARA EL ESTUDIO DE LAS ESPECIES REACTIVAS

4.	MEASUREMENT OF THE OXIDATIVE STRESS INDEX IN CRONICALLY EXPOSED TO VOLATILE ORGANIC COMPOUNDS (VOC) PEOPLE AND ITS RELATIONSHIP WITH METABOLIC POLYMORPHISMS. LÓPEZ VARGAS MR & MONTERO MONTOYA R . INSTITUTO DE INVESTIGACIONES BIOMEDICAS, UNAM
5.	PURIFICATION AND CHARACTERIZATION OF TAENIA CRASSICEPS CYSTICERCI (CESTODA) THIOREDOXIN: INSIGHT INTO THIOREDOXINGLUTATHIONE-REDUCTASE (TGR) SUBSTRATE RECOGNITION. MARTÍNEZ-GONZÁLEZ JJ , GUEVARA-FLORES A, RENDÓN JL & DEL ARENAL IP. FACULTAD DE MEDICINA, UNAM

ESTRÉS OXIDANTE EN MICROORGANISMOS

6.	PHYSIOLOGICAL AND BIOCHEMICAL CHARACTERIZATION OF DEAMINATED- DNA REPAIR PATHWAYS IN <i>BACILLUS SUBTILIS</i> . AYALA-GARCÍA VM AND PEDRAZA-REYES M. UNIVERSITY OF GUANAJUATO
7.	IDENTIFICATION AND SILENCING GENES <i>SRRA</i> AND <i>MSNA</i> IN A LOVASTATIN HIGH-PRODUCING STRAIN OF <i>ASPERGILLUS TERREUS</i> . BIBIÁN LEÓN ME , BARRIOS GONZÁLEZ J. UNIVERSIDAD AUTÓNOMA METROPOLITANA UNIDAD IZTAPALAPA
8.	CELULAR RESPONSE OF <i>YARROWIA LIPOLYTICA</i> TO OXIDATIVE STRESS CONDITIONS. DESENTIS DESENTIS MF , HUERTA OROS J, JIMÉNEZ SALAS Z, CAMPOS GÓNGORA E. UNIVERSIDAD AUTÓNOMA DE NUEVO LEÓN

ESTRÉS OXIDANTE EN LA MUERTE CELULAR Y LA ENFERMEDAD

9.	EFFECT OF AQUEOUS EXTRACT FROM <i>SPIRULINA MAXIMA</i> ON INDUCED OXIDATIVE STRESS IN MICE SPERM. AGUILAR-GONZÁLEZ LJ , MOJICA-VILLEGAS MA, CHAMORRO-CEVALLOS GA, SÁNCHEZ-GUTIÉRREZ M, IZQUIERDO-VEGA JA. NATIONAL SCHOOL OF BIOLOGICAL SCIENCES, NATIONAL POLYTECHNIC INSTITUTE
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10.	EFFECT OF CURCUMIN ON MITOCHONDRIAL FUNCTION IN THE EXPERIMENTAL RENAL INSUFFICIENCY. APARICIO-TREJO OE , TAPIA E, MEDINA-CAMPOS ON, PEDRAZA-CHAVERRI J. DEPARTMENT OF BIOLOGY, FACULTY OF CHEMISTRY, UNAM
11.	HYPOXIA INTERFERES WITH RESPONSE TO 2-METHOXYESTRADIOL TREATMENT IN HUMAN NON-SMALL LUNG CANCER CELLS. AQUINO-GÁLVEZ A , GONZÁLEZ-ÁVILA G, GUTIÉRREZ-GONZÁLEZ LH, DELGADO TELLO J, CASTILLEJOS-LÓPEZ M, MENDOZA-MILLA C, CHECA M, TRINIDAD LÓPEZ A, TEJAS C, ZÚÑIGA J, CISNEROS J, TORRES-ESPÍNDOLA LM, HERNÁNDEZ-JIMÉNEZ C, GARCÍA DEL VALLE A. NATIONAL INSTITUTE OF RESPIRATORY DISEASES " ISMAEL COSÍO VILLEGAS
12.	AGED GARLIC EXTRACT INCREASES NEUROPEPTIDE Y, SUPEROXIDE DISMUTASE, CATALASE AND GLUTATHIONE PEROXIDASE mRNA LEVELS IN HYPOTHALAMUS OF DIABETIC RATS. BARRAGÁN-BONILLA MI , AGUILERA P, ESPINOZA-ROJO M. UNIDAD ACADÉMICA DE CIENCIAS QUÍMICO BIOLÓGICAS. UNIVERSIDAD AUTÓNOMA DE GUERRERO
13.	EFEECTO PROTECTOR DE LA S-ALILCISTEÍNA (SAC) EN UN MODELO DE ESTRÉS POR INMOVILIDAD EN RATAS. BECERRIL-CHÁVEZ H , COLÍN-GONZÁLEZ AL, SANTAMARÍA A. LABORATORIO DE AMINOÁCIDOS EXCITADORES, INSTITUTO NACIONAL DE NEUROLOGÍA Y NEUROCIURGÍA
14.	PORCIN PEPTIDES ATTENUATE 3-NITROPROPIONIC ACID- INDUCED BRAIN DAMAGE IN YOUNG RATS. CALDERÓN GUZMÁN D , OSNAYA BRIZUELA N, ORTÍZ HERRERA M, HERNÁNDEZ GARCÍA E, BARRAGÁN MEJÍA G, JUÁREZ OLGUÍN H, VALENZUELA PERAZA A, LABRA RUÍZ NA. LABORATORY OF NEUROCHEMISTRY. NATIONAL INSTITUTE OF PEDIATRICS
15.	THE EFFECT OF PROTEIN SUPPLEMENTATION, THE EXERCISE OF RESISTANCE AND ITS RELATIONSHIP WITH THE OXIDATIVE STRESS IN OLDER ADULTS WITH SARCOPENIA. CALDERÓN GUERRERO GZ , POLANCO FIERRO JA, GUTIÉRREZ LÓPEZ L, GARCÍA SÁNCHEZ JR, OLIVARES CORICHI IM. SEPI-ESM-IPN
16.	EFFECT OF THE OBESITY IN PRESCHOOL AGE ABOUT REACTIVE SPECIES OXYGEN AND ANTIOXIDANT SYSTEMS, IN A PEDIATRIC HOSPITAL OF THE SECRETARIA DE SALUD DEL DISTRITO FEDERAL, MEXICO. CARMONA-MONTESINOS E , VELÁZQUEZ PÉREZ R, GOROSTIETA SALAS E, PICHARDO-AGUIRRE E, PONCE-HINOJOSA G, HERNÁNDEZ-ZIMBRÓN L, RIVAS-ARANCIBIA S. FACULTAD DE MEDICINA, UNAM
17.	ANTIPROLIFERATIVE AND NEUROTOXIC EFFECT FROM EXTRACTS OF SOURSOP (<i>ANNONA MURICATA</i>) ON ASTROCITOMA CELLS (U87-MG). CHUZEVILLE-MUNGUÍA C , VÁZQUEZ-LUNA A, ÁLVAREZ-SÁNCHEZ E, MORALES-MONTOR J, VILLALPANDO-AGUILAR JL, MORENO-LEÓN G, FERNÁNDEZ-SÁNCHEZ J, AND DÍAZ-SOBAC R. INSTITUTO DE CIENCIAS BÁSICAS. UNIVERSIDAD VERACRUZANA.
18.	EFFECT OF AGED GARLIC EXTRACT ON THE EXPRESSION OF GLUT1 AND GLUT3 mRNA IN BRAIN OF DIABETIC RATS. DE LA CRUZ-CONCEPCIÓN B , BARRERA-NAVARRETE P, BARRAGÁN-BONILLA MI, ESPINOZA-ROJO M. UNIDAD ACADÉMICA DE CIENCIAS QUÍMICO BIOLÓGICAS. UNIVERSIDAD AUTÓNOMA DE GUERRERO
19.	ROLE OF REACTIVE OXYGEN SPECIES AND NOX IN THE CELL DEATH AND MORPHOLOGY OF CULTURED CEREBELLAR ASTROCYTES. DOMÍNGUEZ G , OLGUÍN M AND MORÁN J. INSTITUTO DE FISIOLÓGIA CELULAR, UNAM
20.	HIGH CHOLESTEROL DIET INDUCES MITOCHONDRIAL INJURY, OXIDATIVE STRESS, AND LIVER DAMAGE. DOMÍNGUEZ-PÉREZ M , NUÑO LÁMBARRI N, ROSAS-LEMUS M, RODRÍGUEZ-OCHOA JI, MIRANDA RU, URIBE-CARVAJAL S, SOUZA-ARROYO V, BUCIO-ORTÍZ L, GÓMEZ-QUIROZ LE, GUTIÉRREZ-RUIZ MC. CIENCIAS DE LA SALUD, UAM IZTAPALAPA



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21.	SUPPLEMENTATION WITH L-ARGININE PROVIDES PROTECTION AGAINST DNA DAMAGE CAUSED BY OXIDATIVE STRESS IN CULTURES OF HUMAN VASCULAR ENDOTHELIAL CELLS. AURORA ESPEJEL-NUÑEZ , FLORES-PLIEGO ARTURO, MANJARREZ-JANTES K, SOLIS-PAREDES JM, PARRA-HERNANDEZ S, GUADALUPE ESTRADA-GUTIERREZ. DEPARTMENT OF IMMUNOBIOCHEMISTRY, INSTITUTO NACIONAL DE PERINATOLOGIA
22.	SUBCELLULAR LOCALIZATION OF NRF2 IN THE DIABETIC RAT RETINA. ALBERT-GARAY JS , SÁNCHEZ-CHÁVEZ G, SALCEDA-SACANELLES R. INSTITUTO DE FISIOLÓGIA CELULAR, UNAM
23.	CURCUMIN PRETREATMENT AVOIDS CR(VI)-INDUCED HEPATOTOXICITY. GARCÍA-NIÑO WR , ZATARAIN-BARRÓN ZL, VEGA-GARCÍA CC, HERNÁNDEZ-PANDO R, TAPIA E, ZAZUETA C, PEDRAZA-CHAVERRI J. FACULTY OF CHEMISTRY, UNAM
24.	COCOA INTAKE INCREASES PHYSICAL FITNESS IN ATHLETES AND REDUCES MUSCLE DAMAGE AND OXIDATIVE. GONZÁLEZ GARRIDO JA , GARCÍA SÁNCHEZ JR, GUTIÉRREZ SALGADO DY, GARRIDO LLANOS S, PÉREZ RUIZ AG, OLIVARES CORICHI IM. ESCUELA SUPERIOR DE MEDICINA, IPN
25.	EFFECT OF A SPORTS MEDICAL PROGRAM OF FORCE ON OXIDATIVE STRESS IN HEALTHY ELDERLY AND SARCOPENIA. GUDIÑO CASTRO L , MEJÍA MUÑOZ E, MARTÍNEZ ARELLANES LY, GUTIÉRREZ LÓPEZ L, GARCÍA SÁNCHEZ JR, OLIVARES CORICHI IM. SEPI-ESM-IPN

ESTRÉS OXIDANTE EN PLANTAS

26.	HYDROTROPIC RESPONSE DEFICIENCY IN THE <i>AHR1</i> MUTANT AFFECTS REACTIVE OXYGEN SPECIES REGULATION IN ROOTS OF <i>ARABIDOPSIS THALIANA</i> . CASTILLO-OLAMENDI LG , CASSAB G AND PORTA H. INSTITUTO DE BIOTECNOLOGÍA, UNAM
27.	REGULATION OF AUTOPHAGY BY ROS DURING HYDROTROPIC RESPONSE OF <i>ARABIDOPSIS THALIANA</i> . JIMÉNEZ NOPALA GE , CEVALLOS PORTA D, CASSAB LOPEZ G, PORTA DUCOING H. INSTITUTO DE BIOTECNOLOGÍA, UNAM

ESPECIES REACTIVAS Y SEÑALIZACIÓN

28.	SENESCENCE-ASSOCIATED SECRETORY PHENOTYPE (SASP) FROM STRESS-INDUCED PREMATURE SENESCENCE (SIPS) PRIMARY LUNG MICE FIBROBLASTS INDUCES POTENTIAL CHANGES IN CELLULAR SENESCENCE, PROLIFERATION, AND CELL MIGRATION IN CELL LINE L929. AQUINO CRUZ ANGÉLICA ALEJANDRA , MACIEL BARÓN LUIS ÁNGEL, MINA KÖNIGSBERG, NORMA EDITH LÓPEZ-DÍAZ GUERRERO, ARMANDO LUNA LÓPEZ. CIENCIAS BIOLÓGICAS Y DE LA SALUD. UAM IZTAPALAPA
29.	CHRONIC OBESITY CONDITION INCREASE THE INCIDENCE OF mTDNA OXIDATION. CANTÚ VALDEZ JA , RIVERA-ÁLVAREZ I, AND GARCÍA N. INSTITUTO DE CARDIOLOGÍA Y MEDICINA VASCULAR TECNOLÓGICO
30.	HGF/C-MET DECREASES NADPH OXIDASE ACTIVITY BY A MECHANISM MEDIATED BY THE PROTEASOME 26S. SIMONI-NIEVES ARTURO , CLAVIJO-CORNEJO DENISE, SALAS-SILVA SORAYA, PALESTINO-DOMÍNGUEZ M, BUCIO L, SOUZA V, MIRANDA RU, GUTIÉRREZ-RUIZ MC, GÓMEZ-QUIROZ LE. CIENCIAS BIOLÓGICAS Y DE LA SALUD. UAM IZTAPALAPA



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31.	REDOX AND ERK SIGNALING EFFECT ON NRF2 PATHWAY ACTIVATION IN POSTCONDITIONED HEARTS. GUEVARA-CHÁVEZ JG , BUELNA-CHONTAL M AND ZAZUETA C. NATIONAL INSTITUTE OF CARDIOLOGY "IGNACIO CHÁVEZ"
32.	GLUTATHIONE (GSH) AND L-CYSTEINE, CONCENTRATIONS EFFECT ON EQUINE SPERM STORED AT 4°C. LÓPEZ-TRINIDAD BP , RETANA F, RODRÍGUEZ-TOBÓN A, LEÓN-GALVÁN MA, MARTÍNEZ AJ Y ARENAS-RÍOS E. CIENCIAS BIOLÓGICAS Y DE LA SALUD. UAM IZTAPALAPA
33.	REACTIVE OXYGEN SPECIES FROM A RAC1 INDEPENDENT NADPH OXIDASE REGULATE THE MOTILITY AND CAPACITATION OF <i>CAVIA PORCELLUS</i> SPERMATOZOA. ORTIZ-GARCÍA CI , ROA-ESPITIA AL, HERNÁNDEZ-GONZÁLEZ ENRIQUE O. CINVESTAV – IPN ZACATENCO

TÓPICOS EMERGENTES EN EL CAMPO DE LAS ESPECIES REACTIVAS

34.	OXIDATIVE STRESS DUE CADMIUM SUBLETHAL EXPOSURE IN THE AXOLOTL (<i>AMBYSTOMA MEXICANUM</i>). GARCÍA ÁVILA AG , ROSAS PERÉZ I, MIRANDA MARTÍN DEL CAMPO J, MORTON BERMEA O, ZÚÑIGA LAGUNES S AND VANEGAS PÉREZ C. POSGRADUATE PROGRAM IN MARINE SCIENCES AND LIMNOLOGY. NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO
35.	BIOMARKERS OF EXPOSURE AND OXIDATIVE STRESS IN THE CRAYFISH <i>CAMBARELLUS MONCTEZUMAE IN SITU</i> EXPOSED TO METALS. HERNÁNDEZ CE , ZÚÑIGA SR, ROSAS I, CRAM S, PONCE DE LEÓN C, HERNÁNDEZ M, FERNÁNDEZ P, MORTON O AND VANEGAS RC. FACULTY SCIENCES. NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO



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POSTER SESSION 2
FRIDAY 16:00 – 18:00

ESTRÉS OXIDANTE EN LA DIFERENCIACIÓN Y EL DESARROLLO

36.	IMMUNO AND CONFOCAL MICROSCOPY LOCALIZATION ANALYSIS OF GLUTATHIONE PEROXIDASE 4 INDICATES DIVERSE FUNCTIONS IN EARLY ZEBRAFISH DEVELOPMENT. MENDIETA-SERRANO MA , SCHNABEL-PERAZA D, LOMELÍ H, AND SALAS-VIDAL E. INSTITUTO DE BIOTECNOLOGÍA, UNAM
37.	AN <i>IN VITRO</i> MODEL TO STUDY NEURONAL SENESCENCE. MORENO-BLAS D , MUCIÑO-HERNÁNDEZ G, GERÓNIMO-OLVERA C, MASSIEU-TRIGO L, KÖNIGSBERG FM & CASTRO-OBREGÓN S. INSTITUTO DE FISIOLÓGIA CELULAR, UNAM
38.	INSULIN ACTIVATES GROWTH AND H ₂ O ₂ LEVELS IN ROOT HAIRS OF ARABIDOPSIS. PASCUAL MORALES EJ , MELLADO ROJAS ME, CÁRDENAS TORRES L, REYES DE LA CRUZ H, GARCÍA PINEDA E, BELTRÁN PEÑA E. IIQB, UNIVERSIDAD MICHOACANA DE SAN NICOLÁS DE HIDALGO

MÉTODOS Y MODELOS PARA EL ESTUDIO DE LAS ESPECIES REACTIVAS

39.	MOLECULAR EVOLUTION AND CHEMICAL PROPERTIES OF THIOREDOXINS. MUÑOZ GONZÁLEZ ZM , DELAYE ARREDONDO LJ, ALAS GUARDADO S DE J AND APARICIO PLATAS F. DIVISIÓN DE CIENCIAS NATURALES E INGENIERÍA, UAM CUAJIMALPA
40.	KINETIC BEHAVIOR OF WATERCRESS (<i>NASTURTIUM OFFICINALE</i>) AQUEOUS, ACETONIC AND ALCOHOLIC LEAVES EXTRACTS. URQUIZA MARTÍNEZ MV , MEDRANO CASTILLO OI, VÁZQUEZ HERNÁNDEZ A AND FENTON NAVARRO B. FACULTAD DE CIENCIAS MÉDICAS Y BIOLÓGICAS "DR. IGNACIO CHÁVEZ". UNIVERSIDAD MICHOACANA

ESTRÉS OXIDANTE EN MICROORGANISMOS

41.	OXIDATIVE STRESS RESPONSE GENERATED BY HEAVY METALS IN <i>CANDIDA GLABRATA</i> . GUTIÉRREZ-ESCOBEDO MG , DE LAS PEÑAS-NAVA A, CASTAÑO-NAVARRO IB AND RODRÍGUEZ-AGUILAR J. INSTITUTO POTOSINO DE INVESTIGACIÓN CIENTÍFICA Y TECNOLÓGICA
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43.	A DNA DAMAGE DEPENDENT MECHANISM REGULATES THE RETURN OF <i>BACILLUS SUBTILIS</i> SPORES TO VEGETATIVE GROWTH. VALENZUELA-GARCÍA L , CAMPOS-CASTILLO SS AND PEDRAZA REYES M. DEPARTMENT OF BIOLOGY. UNIVERSITY OF GUANAJUATO



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45.	METABOLIC, INFLAMMATORY AND OXIDATIVE STRESS PARAMETERS THROUGHOUT THE LIFE OF OBESE MICE GMS. HERNÁNDEZ-BAUTISTA RJ , CAZAREZ-ORDOÑEZ S, GONZÁLEZ-PUERTOS VY, ALMANZA-PERÉZ JC, ALARCÓN-AGUILAR FJ, KÖNIGSBERG-FAINSTEIN M, LÓPEZ-DÍAZGUERRERO NE. UNIVERSIDAD AUTÓNOMA METROPOLITANA UNIDAD IZTAPALAPA
46.	ANTIOXIDANT DEFENCES AND IMMUNOCOMPETENCE IN THE FISHING BAT <i>MYOTIS VIVESI</i> UNDER HARSH ENVIRONMENT CONDITIONS. HERNÁNDEZ-ARCIGA U , HERRERA-MONTALVO LG, MIRANDA-LABRA RU, KÖNIGSBERG-FAINSTEIN M. INSTITUTO DE BIOLOGÍA, UNAM
47.	EFFECT OF ASCORBIC ACID AND ALPHA-TOCOPHEROL ON THE INDUCTION OF MICRONUCLEOUS AND APOPTOTIC CELLS IN MICE TREATED WITH VANADIUM PENTOXIDE. HERNÁNDEZ-CORTÉS LM , ALTAMIRANO-LOZANO MA AND GARCÍA-RODRÍGUEZ MC. FACULTAD DE ESTUDIOS SUPERIORES “ZARAGOZA”, UNAM
48.	ADDITION OF ANTIOXIDANTS IN THE EXTENDER FOR THE CONSERVATION OF SPERM QUALITY OF BOAR SEMEN FRESH. CÓRDOVA IZQUIERDO A, IGLESIAS REYES AE , JUÁREZ MOSQUEDA ML, MÉNDEZ MENDOZA M, VILLA MANCERA AE AND HUERTA CRISPÍN R. PRODUCCIÓN AGRÍCOLA Y ANIMAL. UNIVERSIDAD AUTÓNOMA METROPOLITANA XOCHIMILCO
49.	EFFECT OF RACE AND THE ADDITION OF ANTIOXIDANTS ON SPERM QUALITY OF BOAR SEMEN FROZEN-THAWED. CÓRDOVA IZQUIERDO A, IGLESIAS REYES AE , JUÁREZ MOSQUEDA ML, MÉNDEZ MENDOZA M AND VILLA MANCERA AE. PRODUCCIÓN AGRÍCOLA Y ANIMAL. UNIVERSIDAD AUTÓNOMA METROPOLITANA UNIDAD XOCHIMILCO
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51.	ANTIOXIDATIVE EFFECT OF DOCOSAHEXAENOIC ACID (DHA) ON INDOMETHACIN INDUCED GASTRIC DAMAGE IN MOUSE. MARTÍNEZ-PÉREZ Y , GALICIA-MORENO M, CHÁVEZ-PIÑA AE. ESCUELA NACIONAL DE MEDICINA Y HOMEOPATÍA IPN
52.	COMPARATIVE PROFILE OF OXIDATED FATTY ACIDS IN ADIPOCYTES, SUBCLINICAL ATHEROGENESIS AND METABOLIC RISK BETWEEN NON-OBESE AND OBESE PATIENTS. MELCHOR-LÓPEZ A , MARTÍNEZ-HERNÁNDEZ JE, PÉREZ-CABEZA DE VACA R, GUERREROCELIS N, GÓMEZ-CORTÉS E, ORTÍZ-FERNÁNDEZ M, MONTOYA-RAMÍREZ J, GAYTÁN-FUENTES OF, BRITO-MUNIVE RH, URBINA LEÓN D, VILLANUEVA-CANELO JP, BLAS-AZOTLA R, RODRÍGUEZ-TREJO JM, GONZÁLEZ-DELEO S, RIZO-GARCÍA Y, OROZCO-VÁQUEZ J, TORÍZ-ORTÍZ A, OSORIO-VALERO M, MORENO-DEL VALLE TR, GARRO-ALMENDARO K, MONDRAGÓN-TERÁN P, SUÁREZ-CUENCA JA. POSGRADUATE PROGRAM IN MEDICAL SCIENCE, NATIONAL UNIVERSITY OF MEXICO



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55.	STUDY OF MODULATION OF DNA REPAIR BY AUTOPHAGY AND THE NUCLEAR RECEPTOR FAMILY NR4A. MUCIÑO HERNÁNDEZ G , MARTÍNEZ MORENO ZE, AGUILAR MALDONADO B AND CASTRO OBREGÓN S. INSTITUTO DE FISIOLÓGIA CELULAR, UNAM
56.	CHOLESTEROL OVERLOAD ENHANCES LIVER DAMAGE DUE TO A DECREASE IN ANTIOXIDANT PROTEINS IN MICE SUBJECTED TO BILE DUCT LIGATION. NUÑO-LÁMBARRI N , DOMÍNGUEZ-PÉREZ M, BAULIES-DOMENECH A, GARCÍA-RUIZ C, GUTIÉRREZ RUIZ MC, FERNÁNDEZ-CHECA JC, GÓMEZ-QUIROZ LE. DEPARTMENT OF HEALTH SCIENCE. UNIVERSIDAD AUTÓNOMA METROPOLITANA IZTAPALAPA
57.	DIFFERENTIAL MITOCHONDRIAL DYNAMICS IN REPLICATIVE SENESCENCE (RS) AND STRESS INDUCED PREMATURE SENESCENCE (SIPS) IN HUMAN LUNG FIBROBLASTS WI38. RECILLAS ROMÁN LHS, ORTIZ PEDRAZA YI , GONZÁLEZ PUERTOS VY, CORTÉS HERNÁNDEZ P, KÖNIGSBERG M. CIENCIAS DE LA SALUD. UNIVERSIDAD AUTÓNOMA METROPOLITANA IZTAPALAPA
58.	EFFECT OF TREATMENT WITH SIMBIOTIC ON OXIDATIVE STRESS AND METABOLIC PARAMETERS IN OBESE CHILDREN IN SCHOOLAR AGE. OSORIO CRUZ Y, ACEVEDO RODRÍGUEZ G, OLIVARES CORICHI IM, HERNÁNDEZ RUIZ J, GARCÍA SÁNCHEZ JR. ESCUELA SUPERIOR DE MEDICINA, IPN
59.	EFFECT OF ADMINISTRATION OF FLAVONOIDS (QUERCETIN-3-RUTINOSIDE AND MYRICETIN) ON GENOTOXIC AND CYTOTOXIC DAMAGE IN MICE CD-1 TREATED WITH HEXAVALENT CHROMIUM: MICRONUCLEUS, APOPTOSIS AND CELL VIABILITY. RAMOS-LEON J , ALTAMIRANO-LOZANO MA AND GARCÍA-RODRÍGUEZ MC. FACULTAD DE ESTUDIOS SUPERIORES "ZARAGOZA", UNAM
60.	THE ROLE OF REACTIVE OXYGEN SPECIES IN THE ASSEMBLY AND STABILIZATION OF MITOCHONDRIAL SUPERCOMPLEXES IN HEART. RAMÍREZ-CAMACHO JI , FLORES-HERRERA O Y ZAZUETA C. DEPARTMENT OF CARDIOVASCULAR BIOMEDICINE. NATIONAL INSTITUTE OF CARDIOLOGY IGNACIO-CHÁVEZ
61.	INFLUENCE OF PHYSICAL ACTIVITY ON THE MITOCHONDRIAL DYNAMICS IN SKELETAL MUSCLE FROM OBESE RATS. RIVERA-ÁLVAREZ I , CHARLES A, GARCÍA N. INSTITUTO DE CARDIOLOGÍA Y MEDICINA VASCULAR, TECNOLÓGICO DE MONTERREY
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63.	NICORANDIL TREATMENT ALLOWS RECOVERY IN POST-FATIGUE TENSION FROM DIABETIC SKELETAL MUSCLE. URINCHO-CASTRO JJ , MANZO-ÁVALOS S, SAAVEDRA-MOLINA A, CORTÉS-ROJO C, RODRÍGUEZ-OROZCO AR, MONTOYA-PÉREZ R. IIQB, UNIVERSIDAD MICHOACANA DE SAN NICOLÁS DE HIDALGO



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66.	EFFECT OF REDUCED GLUTATHIONE (GSH) EXOGENOUS, IN CAPACITATION PROCESS IN THE BOAR SPERM (<i>SUS SCROFA DOMESTICUS</i>). RODRÍGUEZ-TOBÓN E , DAMIÁN-MATSUMURA PG, FUENTES-MASCORRO G, RODRÍGUEZ-TOBÓN A, LÓPEZ-TRINIDAD BP AND ARENAS-RÍOS E. BIOLOGÍA DE LA REPRODUCCIÓN ANIMAL. UNIVERSIDAD AUTÓNOMA METROPOLITANA IZTAPALAPA
67.	BCL-2 LOCATION DURING HORMETIC RESPONSE. RODRÍGUEZ-ENRÍQUEZ RJ , LUNA-LÓPEZ A, KÖNIGSBERG M, GILMORE AP. WELLCOME TRUST CENTRE FOR CELL-MATRIX RESEARCH, FACULTY OF LIFE SCIENCES. UNIVERSITY OF MANCHESTER
68.	CADMIUM AGGRAVATES OXIDATIVE DAMAGE IN MOUSE PRIMARY HEPATOCYTE CULTURE WITH HIGH LIPID CONTENT. ROSALES-CRUZ DP , DOMÍNGUEZ-PÉREZ M, REYES-ZÁRATE E, GÓMEZ-QUIROZ LE, MIRANDA-LABRA R, GUTIÉRREZ-RUIZ MC, ROJAS-DEL CASTILLO E, BUCIO-ORTIZ L Y SOUZA-ARROYO V. CIENCIAS DE LA SALUD. UNIVERSIDAD AUTÓNOMA METROPOLITANA IZTAPALAPA

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70.	BIOMARKERS OF OXIDATIVE STRESS IN <i>OREOCHROMIS NILOTICUS</i> (CICLIDAE) <i>IN SITU</i> EXPOSED TO METALS. VALENZUELA VELAZQUEZ Y , ZÚÑIGA-LAGUNES S, ROSAS-PÉREZ I, CRAM-HEYDRICH S, PONCE DE LEÓN-HILL C, HERNÁNDEZ-QUIROZ M, FERNÁNDEZ-LOMELIN P, MORTON-BERMEA O Y VANEGAS-PÉREZ RC. FACULTY OF SCIENCES. NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO