

PROGRAMA GENERAL

GENERAL PROGRAM

4^{to} SIMPOSIO INTERNACIONAL SOBRE FARMACOLOGIA DE LOS PRODUCTOS NATURALES /
4th INTERNATIONAL SYMPOSIUM ON PHARMACOLOGY OF NATURAL PRODUCTS

PROGRAMA GENERAL / GENERAL PROGRAM

ACTIVIDADES PRECONGRESO / PRE-CONGRESS ACTIVITIES

VIERNES 18 de Septiembre / FRIDAY, September 18

CURSO PRECONGRESO (CPC) / PRECONGRESS COURSE

Curso	Precongreso	09:00 – 14:00	CPC No.1: “ <i>Métodos Analíticos para el estudio de Productos naturales</i> ”. / <i>Analytical methods for the study of natural products</i>
No. 1 / CPC No. 1			Coordinadores / Coordinators: MSc Caridad M. García Peña / Lic. Jacqueline Aylema Romero Díaz.
Teatro CIDEM, 26 y Boyeros, La Habana			
		08:30	ACREDITACION Y BIENVENIDA
CPC-01		09:00	Desarrollo de materias primas de interés farmacéutico. / <i>Development of raw materials of pharmaceutical interest.</i> MSc. Lisandra García Borges.
CPC-02		10:00	Métodos analíticos empleados en el control de calidad y estudios de estabilidad en productos naturales. / <i>Analytical methods used for quality control and stability studies in natural products.</i> Lic. Jacqueline Aylema Romero Díaz y MSc. Luis Martínez Alvarez
CPC-03		11:00 – 11:30	Merienda / Snack
		11:30	Validación de métodos analíticos y estudios de estabilidad. / <i>Validation of analytical methods and stability studies.</i> MSc. Caridad M. García Peña
CPC-04		12:30	Requerimientos para el registro de medicamentos de origen natural. / <i>Requirements for the registration of drugs from natural origin</i> MSc. Ayadamis Martín Sosa
CPC-05		13:30	Actividad práctica / Practical activity. MSc. Caridad Margarita García Peña. Lic. Jacqueline Aylema Romero Díaz. MSc. Luis Martínez Alvarez.
		14:30	Discusión General y Entrega de Certificados / <i>General discussion and delivery of Certificates.</i>

VIERNES 18 de Septiembre / FRIDAY, September 18
CURSO PRECONGRESO (CPC) / PRECONGRESS COURSE

<p>Curso Precongreso No. 2 / CPC No. 2 CINFA CIDEM, 26 y Boyeros, La Habana</p>	<p>09:00 – 14:00</p>	<p>CPC No. 2: “Recursos de Información para el Estudio de Productos Naturales”. / <i>Information Resources for the Study of Natural Products.</i> Coordinadores / Coordinators: MSc. Ricardo Castro Armas, Lic. Beatriz Elizagaray-Fernández, CINFA, CIDEM.</p>
	<p>08:30</p>	<p>ACREDITACION Y BIENVENIDA</p>
<p>CPC-01</p>	<p>09:00</p>	<p>El Centro de Información Farmacéutica (CINFA) al servicio de la investigación de Productos Naturales. / <i>The Pharmaceutical Information Center (CINFA) serving the Natural Products Research</i> MSc. Ricardo Castro Armas, CIDEM.</p>
<p>CPC-02</p>	<p>10:00</p>	<p>Descripción de los recursos informativos del Centro de Información Farmacéutica (CINFA) destinados al estudio de medicamentos herbarios y productos naturales. / <i>Description of information resources of the Pharmaceutical Information Center (CINFA) for the study of herbal drugs and natural products.</i> Lic. Beatriz Elizagaray y MSc. Ricardo Castro. CIDEM.</p>
	<p>11:00 – 11:30</p>	<p>Merienda / Snack</p>
<p>CPC-04</p>	<p>11:30</p>	<p>Actividad práctica empleando los Recursos de Información disponibles en el CINFA. / <i>Practical activity using the information resources available on the CINFA.</i> Lic. Beatriz Elizagaray y Lic. Regla de las Cuevas. CIDEM.</p>
<p>CPC-05</p>	<p>12:30</p>	<p>Un acercamiento al entorno de las Patentes de Productos Naturales. / <i>An approach to the environment Patent of Natural Products.</i> Lic. Pedro Bárzaga, CIDEM.</p>
<p>CPC-06</p>	<p>13:30</p>	<p>Revista Cubana de Plantas Medicinales: una excelente oportunidad para la publicación científica. / <i>Cuban Journal of Medicinal Plants: an excellent opportunity for scientific publication</i> MSc. Ioanna Martínez Hormaza. Central Laboratory of Pharmacology, FCM “Salvador Allende”.</p>
	<p>14:00</p>	<p>Discusión General y Entrega de Certificados / <i>General discussion and delivery of Certificates.</i></p>

VIERNES 18 de Septiembre / FRIDAY, September 18

CURSO PRECONGRESO (CPC) / PRECONGRESS COURSE

Curso Precongreso No. 3 / CPC No. 3 Teatro CECMED	09:00 – 14:00	CPC No.3: <i>Ensayos Clínicos y Aspectos regulatorios para el desarrollo de Productos Naturales y Medicamentos Herbarios. / Clinical trials and regulatory aspects for the development of Natural Products and Herbal Medicines.</i> Coordinadores / Coordinators: Dra. Diadelis Ramirez Figueredo, MSc Julian Rodríguez Álvarez, Dr. Alberto Hernández
	08:30	ACREDITACION Y BIENVENIDA. / REGISTRATION AND WELCOME
CPC C-01	09:00	Metodología de los Ensayos Clínicos para Productos Naturales / <i>Methodology of Clinical Trials for Natural Products.</i> Dr. Alberto Hernández Rodríguez, Director, CENCEC.
CPC C-02	10:00	El Protocolo de Investigación en Ensayos Clínicos con Productos Naturales. / <i>The Research Protocol in Clinical Trials with Natural Products.</i> Dra María Acelia Marrero Miragaya, CENCEC.
CPC C-03	11:00	Ética de la Investigación y Productos Naturales. / <i>Research Ethics and Natural Products.</i> MSc. Julian Rodríguez Álvarez, CENCEC.
CPC C-04	11:00 – 11:30 11:30	Merienda / Snack Marco Regulatorio Actualizado de Medicina Tradicional y Natural. / <i>Updated Regulatory Framework of Traditional and Natural Medicine.</i> Dra. Diadelis Ramírez Figueredo, CECMED.
CPC C-05	12:30	Requisitos para el Registro de Medicamentos Herbarios para uso Humano. / <i>Requirements for Registering Herbal Medicines for Human Using.</i> Dra. Diadelis Ramírez Figueredo, CECMED.
CPC C-06	13:30	Requisitos para el Registro de Productos Homeopáticos para uso Humano. / <i>Requirements for Registering Homeopathic Products for Human Using.</i> Dra. Diadelis Ramírez Figueredo. CECMED.
	14:30	Discusión General y Entrega de Certificados / General discussion and delivery of Certificates.

SÁBADO 19 de septiembre, 2015 / SATURDAY, September 19, 2015

Taller Pre-Congreso (TPC). Comunicaciones Orales (CO) / Oral Communications. Precongress Workshop		2^{DO} TALLER DE LA ESTACIÓN EXPERIMENTAL DE PLANTAS MEDICINALES “JUAN TOMAS ROIG” (EEM). / 2ND WORKSHOP AT THE EXPERIMENTAL STATION OF MEDICINAL PLANTS “JUAN TOMAS ROIG”, CIDEM, CUBA. Participan en el Taller Delegados seleccionados que asisten a Fapronatura 2015 y todos los trabajadores, investigadores, especialistas y técnicos de la EEM. / <i>Participate in the workshop Delegates selected attending FAPRONATURA 2015 and all workers, researchers, specialists and technicians of EEM.</i>
Coordinadores / Coordinators:		Téc. Carlos Rodríguez Ferradá, Director EEM, MSc. Magdalena M. Rivera, EEM, CIDEM-Cuba.
	09:30-09:15	Palabras de Bienvenida y Apertura / Welcome and Opening Words MSc. Alejandro Saúl Padrón. Director CIDEM.
Presentación Oral	09:15-09:45	EL PROGRAMA DE INVESTIGACIÓN-DESARROLLO DE PRODUCTOS MEDICINALES HERBARIOS EN EL CIDEM. ACTUALIDAD Y PERSPECTIVAS. / PROGRAMME FOR RESEARCH-DEVELOPMENT OF HERBAL MEDICINAL PRODUCTS IN THE CIDEM. UPDATE AND PROSPECTS. Dr. René Delgado Hernández, Director de Investigación-Desarrollo / Director, Research and Development, CIDEM, Cuba.
Mesa Redonda	09:45-11:00	THE PROCESS OF RESEARCH-DEVELOPMENT-PRODUCTION- MARKETING OF HERBAL MEDICINES IN THE EXPERIMENTAL STATION OF MEDICINAL PLANTS "JUAN TOMAS ROIG" CIDEM / QUALITY ASSURANCE OF PLANT RAW MATERIAL FOR THE PRODUCTION OF EFFECTIVE AND SAFE HERBAL MEDICINAL PREPARATIONS. <u>DrC Lérica Acosta¹, MSc.Ing. María M. Rivera Amita², Tec. Carlos A. Rodríguez Ferrada².</u> ¹ "Francisco Morón Rodríguez" Central Laboratory of Pharmacology. University of Medical Sciences of Havana, Salvador Allende Faculty of Medicine, 56 Carvajal St, between A and Diana St, Cerro, Postal code 12000, Havana, Cuba. ² Experimental Station of Medicinal Plants, Center of Pharmaceutical Research and Drug Development (CIDEM), Cuba.
	11:00-11:30	MERIENDA / SNACK. Degustación de frutas y jugos naturales. / <i>Tasting of fruits and natural juices.</i>
Presentación Oral	11:30-12:00	EXPERIENCIAS EN EL CULTIVO Y PROPAGACIÓN DE PLANTAS MEDICINALES EN LA EEM. / EXPERIENCES IN CULTIVATION AND PROPAGATION OF MEDICINAL PLANTS IN THE EEM. Ing Pedro Sánchez Roque, EEM, CIDEM.
	12:00-12:30	Reconocimiento Especial de la Asociación Cubana de Técnicos Agrícolas y Forestales de la Provincia Artemisa (ATAF) “POR LA OBRA DE LA VIDA” dedicado al cultivo y propagación de Plantas Medicinales. / Special AWARD of the Cuban Association of Agricultural and Forestry Technicians of Artemisa Province (ATAF) "FOR THE WORK OF LIFE" dedicated to the cultivation and propagation of Medicinal Plants. Ing. Pedro Sánchez Roque.
	12:30-13:00	Recorrido por la Estación Experimental de Plantas Medicinales “Juan Tomas Roig” del CIDEM. / Visit to the Experimental Station of Medicinal Plants "Juan Tomas Roig" CIDEM
	13:00-14:00	Actividad de Clausura / Closing activity

LUNES 21 de Septiembre / Monday, September 21

	08:00	Salida Delegados extranjeros de los Hoteles Kohly y Panorama, Ciudad de La Habana hacia Hotel Los Helechos, Topes de Collantes, Cuba / <i>Departure of Foreigners Delegates from Kohly and Panorama Hotels, Havana to Los Helechos Hotel, Topes de Collantes, Cuba.</i>
	13:00 - 14:00	Recibimiento y Acreditación a Delegados. Ubicación en Habitaciones del Hotel “Los Helechos” / <i>Welcome and Accreditation of Delegates. Location in Rooms at “Los Helechos” Hotel.</i>
	14:00 - 15:00	Almuerzo / Lunch
	15:00 - 16:00	Bienvvenida al Parque Topes de Collantes en la Plaza de las Memorias y la Casa del Café. / <i>Welcome to “Topes de Collates” Park in the Square of Memories and in The Coffee House.</i>
Sala 1 / Teatro		
Room 1 / Theater		
“KURHOTEL Escambray”	17:00	Inauguración y Conferencias de Apertura / <i>Inauguration and Opening Lectures (L)</i>
	17:00	PALABRAS DE APERTURA / <i>Opening words</i>
Coordinadores / Coordinators		Dr. René Delgado-Hernández, CIDEM, Cuba. / <i>Dra. Idania Rodeiro Guerra, CEBIMAR, Cuba.</i>
	17:00 - 17:15	Bienvvenida a los Delegados / <i>Welcome remarks</i> Dr. René Delgado-Hernández. Presidente Comité Organizador, Presidente Sociedad Cubana de Farmacología / <i>President of Organizing Committee, President, Cuban Society of Pharmacology</i>
	17:15 - 17:30	Presentación del Programa del Congreso / <i>Presentation of the Program of the Congress.</i> Dra. Idania Rodeiro Guerra. Presidente del Comité Científico / <i>President of Scientific Committee, Secretary, Cuban Society of Pharmacology.</i>
	17:30 - 17:50	Inauguración Oficial del Congreso / <i>Official inauguration of the Congress</i> Dr. Emilio Delgado. Director Nacional de Medicamentos y Tecnologías Sanitarias, MINSAP, Cuba / <i>National Director of Drugs and Health Technologies</i>
L-01	17:50 - 18:35	ELUCIDACIÓN DE LOS MECANISMOS POLIFARMACOLÓGICOS DE QUIMIOPREVENCIÓN DEL CÁNCER POR MANGIFERINA Y WITAFERINA A MEDIANTE MÉTODOS TRANSCRIPTÓMICOS Y QUIMIOPROTEÓMICOS Y ANÁLISIS DE LOS BLANCOS TERAPÉUTICOS / <i>ELUCIDATING POLYPHARMACOLOGICAL MECHANISMS OF CANCER CHEMOPREVENTION BY MANGIFERIN AND WITAFERIN A BY TRANSCRIPTOME AND (CHEMO) PROTEOME BASED PATHWAY AND DRUG TARGET ENRICHMENT ANALYSIS</i> Prof. Wim Vanden Berghe Laboratory of Protein Chemistry, Proteomics and Epigenetic Signaling (PPES), Department of Biomedical Sciences, University of Antwerp, Belgium.
L-02	18:40 - 19:25	ESTRATEGIA PREDICTIVA PARA LA SELECCIÓN DE CANDIDATOS NATURALES PARA LA DIABETES TIPO 2 BASADA EN LA ACTIVIDAD INHIBITORIA DE PTP-1B Y DPP-IV Y LA CAPTACIÓN DE GLUCOSA IN VITRO / <i>PREDICTIVE STRATEGY TO SCREENING NATURAL CANDIDATES FOR TYPE 2 DIABETES BASED ON PTP-1B AND DPP-IV INHIBITORY ACTIVITY AND IN VITRO GLUCOSE UPTAKE</i> Dra. Evangelina Marrero Faz, MD, PhD. National Center for Animal and Plant Health. Past President, Cuban Society of Pharmacology. / <i>Centro Nacional de Sanidad Agropecuaria (CENSA), Pasada Presidente de la Sociedad Cubana de Farmacología, Cuba.</i>

L-03	19:30 - 20:00	PRODUCTOS NATURALES: PUNTO CLAVE EN EL PROGRAMA CUBANO DE MEDICINA NATURAL Y TRADICIONAL / NATURAL PRODUCTS: A KEY-POINT FOR THE CUBAN PROGRAM OF TRADITIONAL AND NATURAL MEDICINE <u>Dr. Johann Perdomo Delgado</u> Jefe del Departamento de Medicina Natural y Tradicional / Head of Traditional and Natural Medicine Department, MINSAP, Cuba.
“Villa Caburni” and “KURHOTEL Escambray”	20:10 – 21:00	CENA / DINNER
	21:30	ACTIVIDAD CULTURAL DE BIENVENIDA / WELCOME CULTURAL ACTIVITY

MARTES, 22 Septiembre / TUESDAY, September 22

08:00-12:00 **Recorrido por el Parque Natural “Topes de Collantes”, Visita a los Parques “GUANAYARA” y CODINA. / Tour inside “Topes de Collantes” Natural Park. A visit to “GUANAYARA” and CODINA Parks.**

13:00-14:00 **Almuerzo en Restaurant típico del parque “La Casa de La Gallega” junto al Río Guanayara o en la Hacienda Codina / Lunch in a typical restaurant of the Park, near to Guanayara River, “La Casa de la Gallega”, or in the CODINA House.**

**Sala 1 / Teatro
Room 1 / Theater
“KURHOTEL Escambray”**

CONFERENCIAS PLENARIAS / LECTURES

Coordinadores / Coordinators: **Dra Diadelis Remirez Figueredo, CECMED, Cuba / Dr. Alberto Hernández Rodríguez, CENCEC, Cuba.**

L-04 15:00-15:30 **MEDICINA NATURAL Y TRADICIONAL: REALISMO MÁGICO? / NATURAL AND TRADITIONAL MEDICINE: MAGICAL REALISM?**

Dr. Julián Pérez Peña. MD, MsC.

Especialista de Segundo grado en Salud Pública; Profesor e Investigador Auxiliar de la FCM “Salvador Allende” de la Universidad de Ciencias Médicas de La Habana. / Professor Medical University of Havana.

L-05 15:35-16:05 **ESTUDIOS CLÍNICOS CON PRODUCTOS NATURALES EN CUBA. RESULTADOS Y PROYECCIONES / CLINICAL TRIALS WITH NATURAL PRODUCTS IN CUBA. RESULTS AND PROJECTIONS.**

Dr. Alberto Hernández Rodríguez.

Director, Centro Nacional Coordinador de Ensayos Clínicos (CENCEC) / Director, National Center Coordinating of Clinical Trials, Havana, Cuba.

16:10-16:25 **RECESO / COFFEE BREAK**

**Salas / Rooms
1,2,3,4**

16:30-19:30 **COMUNICACIONES ORALES / ORAL COMMUNICATIONS (OC)
SIMPOSIOS / SYMPOSIA**

**SALA 1 Teatro /
ROOM 1 Theater**

16:30-19:30 **SIMPOSIO No. 1: INVESTIGACIÓN PRECLÍNICA DE PRODUCTOS NATURALES / SYMPOSIUM: PRECLINICAL RESEARCH OF HERBAL PRODUCTS**

Coordinadores / Coordinators: ***Prof. Teresa Izquierdo Sánchez, Universidad Autónoma Metropolitana, México D.F. / DrC. Bárbara Beatriz Garrido Suárez, CIDEM, Cuba.***

OC-01 16:30-16:50

BIOACTIVE EXTRACTS OF CHILEAN NATIVE PLANT FOR THE TREATMENT OF ULCERS

Maité Rodríguez-Díaz, Rodríguez S², Sabando C², Gutiérrez C² Torres F¹, Delgado JM¹. ¹Escuela de Química y Farmacia, Facultad de Medicina, Universidad Andrés Bello, Santiago, Chile. ²Centro de Investigación de Polímeros Avanzados (CIPA), Concepción, Chile

OC-02	16:55-17:15	<p>VASODILATOR EFFECT OF ALCOHOLIC EXTRACT OF THE LEAVES AND STEMS OF <i>OENOTHERA ROSEA</i> AIT. "YAWAR SUQU" IN ISOLATED AORTIC RINGS OF GUINEA PIGS, AYACUCHO-2013. <u>Johnny Aldo Tinco Jayo</u>, Pariona F. Facultad de Ciencias de la Salud, Universidad Nacional de San Cristóbal de Huamanga, Ayacucho, Perú.</p>
OC-03	17:20-17:40	<p>ANTIINFLAMMATORY AND ANTINOCICEPTIVE EFFECTS OF <i>Cassia fistula</i> Linn. (Fabaceae) fruits <u>Palacios-Espinosa JF</u>, Núñez-Peña L, Izquierdo-Sánchez T, Lozada-García MC. Departamento de Sistemas Biológicos, Universidad Autónoma Metropolitana Unidad Xochimilco, México D.F.</p>
OC-04	17:45-18:00	<p>CHARACTERIZATION OF THE ANTINOCICEPTIVE ACTIVITIES OF THE ETHANOLIC EXTRACT FROM <i>CLUSIA MINOR</i> L LEAVES IN DIFFERENT EXPERIMENTAL MODELS IN MICE Reynaldo G¹, de Souza MM², Malheiros A², Dallas MT², Aver K², Piovesan LG², Rodeiro I¹, Bello A¹, Mangas R¹, <u>Menéndez R</u>². ¹ Instituto de Farmacia y Alimentos (IFAL). Universidad de La Habana. Cuba. ² Centro de Bioproductos Marinos (CEBIMAR). Agencia de Medio Ambiente. La Habana. Cuba. ³ Universidade do Vale do Itajaí, Santa Catarina, Brazil.</p>
OC-05	18:05-18:20	<p>HYPOCHOLESTEROLEMIC AND ANTI-ATHEROSCLEROTIC EFFECTS OF MORINGA OLEIFERA LEAF DECOCTION IN APOE KO MICE <u>Fuentes D</u>, Fernández N, Díaz BL, León A, Blanco D, Gutierrez M, García A, Ronda M, Prida Y, Torres Y, Cabezas L. National Center for Laboratory Animal Breeding (CENPALAB), Boyeros, Havana, Cuba.</p>
OC-06	18:25-18:40	<p><i>CYMOPOGON CITRATUS</i> FRACTIONS, PROTECTIVE ACTIVITY AGAINST UVC LIGHT IN <i>CAULOBACTER CRECENTUS</i> <u>Fuentes-León F</u>, García F, Aguilera K, González-Pumariega M, Sánchez-Lamar A. Departamento de Biología Vegetal, Facultad de Biología, UH, Vedado, Plaza de la Revolución, La Habana, Cuba.</p>
OC-07	18:45-19:05	<p>ANTI-HYPERNOCEPTIVE EFFECT OF MANGIFERIN IN PERSISTENT AND NEUROPATHIC PAIN MODELS IN RATS <u>Garrido B</u>¹, Garrido G², Castro M¹, Merino N¹, Valdés O¹, Rodeiro I³, Hernández I³, Godoy J⁴, Ferreira S⁴, Delgado R¹. ¹ Laboratorio de Farmacología y Toxicología, Centro de Investigación y Desarrollo de Medicamentos, Nuevo Vedado, La Habana, Cuba. ² Departamento de Ciencias Farmacéuticas, Universidad Católica del Norte, Antofagasta, Chile. ³ Centro de Bioproductos Marinos, Nuevo Vedado, La Habana, Cuba. ⁴ Department of Pharmacology, Faculty of Medicine of Ribeirão Preto, University of São Paulo, Ribeirão Preto, SP, Brazil.</p>
	19:10-19:30	DISCUSIÓN GENERAL / GENERAL DISCUSSION
	20:30-21:30	CENA / DINNER
SALA 2 / ROOM 2	16:30-19:30	SIMPOSIO No. 2: ESTUDIOS CLÍNICOS Y FARMACOEPIDEMIOLÓGICOS DE PRODUCTOS HERBARIOS / SYMPOSIUM: CLINICAL AND PHARMACOEPIDEMOLOGICAL STUDIES OF HERBAL PRODUCTS
Coordinadores / Coordinators:		<i>Dra. Maria Acelia Marrero Miragaya</i>, CENCEC, La Habana, Cuba. <i>Prof. Kaj Winther</i>, University of Copenhagen, Denmark.
OC-08	16:30-16:45	<p>A HERBAL REMEDY MADE FROM SUBSPECIES OF <i>ROSA CANINA</i> (LITO), REDUCES SYMPTOMS OF OSTEOARTHRITIS AND THE CONSUMPTION OF PAIN KILLERS <u>Winther K</u>¹, Campbell-Tofte J². ¹ Department of Nutrition, Exercise and Sport, University of Copenhagen, Denmark. ² Coordinating Research Unit, Frederiksberg Hospital, Denmark.</p>

OC-09	16:50-17:05	EFFICACY AND SAFETY OF SURFACEN® IN THE TREATMENT OF CHILDREN WITH RESPIRATORY DISTRESS SYNDROME (RDS) Díaz E, Blanco O, Rodríguez VS, Morilla A, Barrese Y, Ávila Y, Uranga R, Machado MC, Castro BL, <u>Fernández O</u> . Centro Nacional de Sanidad Agropecuaria (CENSA), San José de las Lajas, Mayabeque, Cuba. Centro Nacional Coordinador de Ensayos Clínicos (CENCEC), La Habana, Cuba.
OC-10	17:10-17:25	THE IMPACT OF PLACEBO ON PAIN AND PHYSICAL ACTIVITY IN PATIENTS WITH OSTEOARTHRITIS <u>Winther K</u> ¹ , Marstrand K ² , Campbell-Tofte J ³ , Hansen P ¹ . ¹ Department of Nutrition, Exercise and Sport, University of Copenhagen, Denmark. ² Elverum Hospital, Elverum, Norway. ³ Coordinating Research Unit, Frederiksberg Hospital, Denmark.
OC-11	17:30-17:45	EFFECT OF SPIRULINA PLATENSIS IN PATIENTS WITH METABOLIC SYNDROME <u>Casamayor Z</u> , González S, Díaz A, Conde E. Grupo Empresarial LABIOFAM, Boyeros, La Habana, Cuba.
OC-12	17:50-18:05	EFFECTIVENESS AND SAFETY OF NUTRISOL AS NUTRITIONAL SUPPLEMENT IN THE TREATMENT OF ADOLESCENTS WITH NUTRITIONAL DEFICIENCY 1 <u>González S</u> , Domínguez MI, Casamayor Z, Hernández B, Conde E, Leal A, Filgueira I, Agramonte G 2 Casas MJ, Povea E, Hevia D, Díaz M, Álvarez B, Pérez IM, Esplugan A, Bejerano CJ, Albertine M. ¹ Grupo Empresarial LABIOFAM, Boyeros, La Habana Cuba. ² Hospital Universitario Pediátrico William Soler, La Habana, Cuba.
OC-13	18:10-18:25	CLINICAL TRIALS USING NATURAL PRODUCTS DEVELOPED BY THE CENTER FOR PHARMACEUTICAL RESEARCH AND DRUG DEVELOPMENT. CURRENT STATUS AND PERSPECTIVES. <u>García-García I</u> , Jiménez-Rodríguez D, Festary-Casanovas T, Delgado-Hernández R. Center for Pharmaceutical Research and Drug Development (CIDEM), Nuevo Vedado, Havana, Cuba.
OC-14	18:30-18:45	IMPACT OF QUALITY SYSTEM FOR CLINICAL TRIALS WITH NATURAL PRODUCTS <u>DrC. Sandra Álvarez Guerra</u> National Center Coordinating of Clinical Trials (CENCEC), Havana, Cuba.
OC-15	18:50-19:05	SAFETY OF CONSUMING HERBAL MEDICINES. EXPERIENCE FROM FARMACOVIGILANCE STUDIES. <u>Ruiz AK</u> ¹ , García AJ ² , Alonso L ³ . ¹ Facultad de Ciencias Médicas "General Calixto García", Plaza de la Revolución, La Habana, Cuba. ² Escuela Nacional de Salud Pública. ³ Centro Nacional Coordinador de Ensayos Clínicos (CENCEC), La Habana, Cuba.
	19:10-19:30	DISCUSIÓN GENERAL / GENERAL DISCUSSION
	20:30-21:30	CENA / DINNER
SALA 3 / ROOM 3	16:30-19:30	SIMPOSIO No. 3: CARACTERIZACIÓN QUÍMICA Y ANALÍTICA DE PRODUCTOS NATURALES / SYMPOSIUM: CHEMICAL AND ANALYTICAL CHARACTERIZATION OF NATURAL PRODUCTS
Coordinadores / Coordinators:		MSc. Caridad García Peña , CIDEM, La Habana, Cuba. DrC. Iraida Spengler Salabarría , Fac. Química, UH, La Habana, Cuba.
OC-16	16:30-16:45	CYCLOPEPTIDE ALKALOIDS FROM ZIZIPHUS OXYPHYLLA <u>Emmy Tuenter</u> , Exarchou V, Ahmad R, Apers S, Hermans N, Pieters L. University of Antwerp, Department of Pharmaceutical Sciences, Natural products & Food Research and Analysis (NatuRA), Antwerp, Belgium.

OC-17	16:50-17:05	<p>PHYTOCHEMICAL CHARACTERIZATION OF PLANTS SCUTELLARIA INCARNATA VENT AND THE JUSTICIA PECTORALIS JACQ <u>Jesús Hólmer Álvarez</u>, García M, Ordoñez L. Programa de Ciencias Agropecuarias, mejoramiento genético vegetal. Universidad Nacional de Colombia, Palmira, Colombia.</p>
OC-18	17:10-17:25	<p>PHYTOCHEMICAL AND PHARMACOLOGICAL STUDY OF <i>Salvia hispánica</i> L. <u>Mendoza-Espinoza JA</u>¹, Bañuelos-Hernández AE², Medina-Valdez M¹, Díaz de León-Sánchez F², Pérez-Flores LJ², Rivera-Cabrera F², Sierra-Palacios E¹ ¹ Cátedra Amelia Sámano Bishop Universidad Autónoma Metropolitana, Iztapalapa; Colegio de Ciencias y Humanidades. Plantel Casa libertad, Universidad Autónoma de la Ciudad de México. ² Laboratorio de Fisiología Bioquímica y Biología Molecular de Plantas, Departamento de Ciencias de la Salud, DCBS, Universidad Autónoma Metropolitana, Iztapalapa.</p>
OC-19	17:30-17:45	<p>EVALUATION OF THE CONTENT OF VITAMIN C IN <i>MALPIGHIA GLABA</i> L. (ACEROLA) <u>García CM</u>, Martínez V, García L, Nogueira A, González ML, Rivera MM, Sánchez P, Rodríguez C, Díaz M. Center for Pharmaceutical Research and Drug Development, Havana, Cuba.</p>
OC-20	17:50-18:05	<p>STUDY OF PHYSICOCHEMICAL PARAMETERS OF DIFFERENT CULTIVARS OF <i>MANGIFERA INDICA</i> L. LEAVES FOR THEIR USE AS A SOURCE OF MANGIFERIN <u>Romero JA</u>¹, Vandama R¹, López M¹, Capote M², Ferradá C¹, Carballo C¹, Delgado R¹, Vanden Berghe W³, Apers S³. ¹ Center for Pharmaceutical Research and Drug Development, Havana, Cuba. ² Institute of Tropical Fruit Research, Miramar, Playa, Havana, Cuba. ³ University Antwerp, Campus Drie Eiken, Wilrijk, Belgium.</p>
OC-21	18:10-18:25	<p>EVALUATION OF ANTI-INFLAMMATORY ACTIVITY OF <i>MAYTENUS ELAEODENDROIDES</i> GRISEB AND METABOLIC FINGERPRINT USING FIA/ESI/MS^N <u>Spengler I</u>¹, García T¹, Heredia E², Fernández A¹, Vilegas W³, Suárez Y¹, Pérez C¹. ¹ Center for Natural Product Studies, Faculty of Chemistry, Havana University, Cuba. ² LIORAD Laboratory, BioCubaFarma, Havana, Cuba. ³ Experimental Campus of Sao Vicente, UNESP—Sao Paulo State University, Sao Vicente, Sao Paulo, Brazil.</p>
OC-22	18:30-18:45	<p>PHYTOCHEMICAL CHARACTERIZATION AND PRELIMINAR ANINOCICEPTIVE ACTIVITY OF ETHANOLIC EXTRACT LEAVES OF <i>CLUSIA MINOR</i> L. <u>Mangas R</u>¹, Reynaldo G¹, Menéndez R², Montes de Oca R³, Rodeiro I², Bello A, de Souza MM⁴, Malheiros A⁴. ¹ Institute of Pharmacy and Food (IFAL), University of Havana, Cuba. ² Center of Marine Bioproducts (CEBIMAR). ³ Antidoping Laboratory, Havana, Cuba. ⁴ Universidade do Vale do Itajaí (UNIVALI), Itajaí, SC, Brasil.</p>
OC-23	18:50-19:05	<p>PHYTOCHEMICAL STUDY OF <i>CROTON LINEARIS</i> JACQ. LEAVES <u>García J</u>¹, Escalona JC¹, do Carvalho MG², de la Vega J³, Rojas J⁴, Machado R⁴ ¹ Departamento de Farmacia, Facultad de Ciencias Naturales, Universidad de Oriente, Santiago de Cuba, Cuba. ² Departamento de Química, Instituto de Ciencias Exactas, Universidade Federal Rural de Rio, RJ, Brasil. ³ Centro de Toxicología y Biomedicina, Universidad de Ciencias Médicas, Santiago de Cuba, Cuba. ⁴ Departamento de Química, Facultad de Ciencias Naturales, Universidad de Oriente, Santiago de Cuba, Cuba.</p>
	19:10-19:30	DISCUSIÓN GENERAL / GENERAL DISCUSSION
	20:30-21:30	CENA / DINNER

SALA 4 / ROOM 4	16:30-19:30	SIMPOSIO No. 4: PRODUCTOS ANTI-INFECCIOSOS NATURALES / SYMPOSIUM: NATURAL ANTI-INFECTIOUS PRODUCTS
Coordinadores / Coordinators: OC-24	16:30-16:45	DrC. Lianet Monzote Fidalgo / Dr. Aymé Fernández Calienes, IPK, Cuba. INHIBITION OF <i>HELICOBACTER PYLORI</i> BY <i>PARTHENIUM HYSTEROPHORUS</i> EXTRACTS Espinosa-Rivero J¹ , Durán D ¹ , Rendón-Huerta E ² , Romero, I ¹ . ¹ Departamento de Bioquímica, ² Departamento de Biología Celular y Tisular, Facultad de Medicina, Universidad Nacional Autónoma de México, Ciudad Universitaria, D.F., México.
OC-25	16:50-17:05	ANTIVIRAL ACTIVITY AND QUALITATIVE CHEMICAL COMPOSITION OF THE CUBAN PLANT <i>AGERATINA HAVAMENSIS</i> (KUNTH) R. M. KING & H. ROBINSON García TH¹ , Quintino da Rocha C ⁴ , Dias MJ ⁴ , Pino L ¹ , del Barrio G ² , Roque A ² , Pérez CE ¹ , Campaner dos Santos L ³ , Spengler I ¹ , Vilegas W ⁴ . ¹ Centro de Estudios de Productos Naturales, Facultad de Química, Universidad de La Habana. ² Departamento de Microbiología y Virología, Facultad de Biología, Universidad de La Habana. ³ Departamento de Química Orgánica, Instituto de Química de Araraquara, Universidad Estadual de São Paulo, Araraquara, São Paulo, Brasil. ⁴ Campus Experimental del Litoral Paulista, Universidad Estadual de São Paulo, São Vicente, São Paulo, Brasil.
OC-26	17:10-17:25	OLEOZON IN THE TREATMENT OF <i>GIARDIA LAMBLIA</i> IN CHILDHOOD Herrero H , Casas S, Ramos L, Gross C. Facultad de Medicina No 1 Santiago de Cuba
OC-27	17:30-17:45	VIRUCIDAL ACTION OF AN EXTRACT OF <i>PUNICA GRANATUM</i> L. ON THE STRUCTURAL PROTEINS OF THE INFLUENZA VIRUS Peña BR , Duménigo A, Martínez I. Facultad de Ciencias Médicas "Dr. Salvador Allende", La Habana, Cuba.
OC-28	17:50-18:05	ANTI-PLASMODIAL ACTIVITY OF <i>PARTHENIUM HYSTEROPHORUS</i> L. LACTONES Fernández-Calienes A ¹ , Fraga J¹ , Mendiola J ¹ , Scull R ² , Morier L ¹ , Linares R ¹ , Mendoza D ¹ , Cuéllar A ² . ¹ Departamento de Parasitología, Instituto de Medicina Tropical "Pedro Kourí" (IPK), La Habana, Cuba. ² Instituto de Farmacia y Alimentos, Universidad de La Habana.
OC-29	18:10-18:25	ANTIMALARIAL USE VALIDATION OF PLANT SPECIES IN CUBA Fernández-Calienes A¹ , Fraga J ¹ , Mendiola J ¹ , Scull R ² , Cuéllar A ² , Bécquer E ³ , Herrera PP ⁴ . ¹ Departamento de Parasitología, Instituto de Medicina Tropical "Pedro Kourí" (IPK), La Lisa, La Habana, Cuba. ² Instituto de Farmacia y Alimentos. Universidad de La Habana. ³ Jardín Botánico Nacional de Cuba, La Habana, Cuba. ⁴ Instituto de Ecología y Sistemática, La Habana, Cuba.
OC-30	18:30-18:45	POTENTIALITIES OF EXTRACTS FROM <i>SOLANACEAE</i> FAMILY AGAINST <i>LEISHMANIA AMAZONENSIS</i> Monzote L , Cuesta-Rubio O, Jimenez J, Quintino C, Márquez I, Gutiérrez Y, Wagner V. Departamento de Parasitología, Instituto de Medicina Tropical "Pedro Kourí", La Habana, Cuba.
OC-31	18:50-19:05	INTERFACIAL AND ANTIMICROBIAL PROPERTIES OF THE EXOGENOUS PORCINE SURFACTANT MIXED WITH DRUGS USED IN RESPIRATORY CLINICS Blanco O¹ , Pérez R ¹ , Espinosa I ¹ , Lugones Y ¹ , Morilla A ² , Faure R ¹ . ¹ Centro Nacional de Sanidad Agropecuaria (CENSA), San José de las Lajas, Mayabeque, Cuba. ² Hospital Materno Infantil "Dr. Ángel Arturo Aballí", La Habana, Cuba.

19:10-19:30 **DISCUSIÓN GENERAL / GENERAL DISCUSSION**
 20:30-21:30 **DINNER / CENA**

KURHOTEL ESCAMBRAY	21:30-23:30	SECCIÓN DE CARTELES / POSTER SECTION
Coordinadores / Coordinators:		Drs. Nelson Merino, Julio César Rodríguez González, Addis Bellma Menéndez, Sandra Alvarez, Dannis Civeiro Mota, Esperanza Cardoso, Eliza Aznar, Leonardo Ramos, Cuba.
Carteles / Posters	21:30-22:00	Discusión de carteles e Intercambio científico. Presentación oral (5 min) de carteles seleccionados / Poster discussion and Scientific exchange. Oral presentation (5 min) of selected posters.
Sala 1/ Room 1 Teatro / Theater OC-32	21:30-21:45	CUBAN JOURNAL OF MEDICINAL PLANTS, PRESENT AND FUTURE. <u>MSc. Ioanna Martínez Hormaza</u>, García Al. Central Laboratory of Pharmacology, Faculty of Medical Sciences "Salvador Allende", Cerro, Havana, Cuba.
L-06	21:50-22:10	DESARROLLO DE PRODUCTOS NATURALES DE MANERA SOSTENIDA, EXPERIENCIA DEL CENTRO DE INVESTIGACIÓN Y DESARROLLO DE MEDICAMENTOS / DEVELOPMENT OF NATURAL PRODUCT DRUGS IN A SUSTAINABLE MANNER, AN EXPERIENCE OF CENTER FOR PHARMACEUTICAL RESEARCH AND DRUG DEVELOPMENT. <u>MSc. Nicté González Alfonso</u>. CIDEM, Cuba.
OC-33	22:15-22:30	PRESENTACIÓN DE LA MULTIMEDIA <u>PLANTMED VERSION 3</u>. INFORMACIÓN CIENTÍFICA SOBRE PRODUCTOS NATURALES Y MEDICINA HERBARIA / PRESENTATION OF <u>MULTIMEDIA PLANTMED VERSION 3</u>, SCIENTIFIC INFORMATION RELATED WITH NATURAL PRODUCTS AND HERBAL MEDICINES <u>MSc. Ricardo Castro Armas</u>. Director of Center of Pharmaceutical Information (CINFA), CIDEM, Cuba.
KURHOTEL ESCAMBRAY Discoteca	22:30-24:00	Degustación de Ronces Cubanos. Música y Karaoke. Demostraciones de Bailes típicos cubanos / Tasting of Cuban Rums. Music and Karaoke. Performance of Cuban Typical Dances.

MIÉRCOLES 23 de Septiembre / WEDNESDAY, September 23

09:00-12:00 **Recorrido por la Ciudad de Trinidad, Patrimonio de la Humanidad / Tour by Trinidad City, UNESCO World Heritage Site. Encuentro con el Historiador de la Villa / A meeting with the Historian of the Villa.**

13:00-14:00 **Almuerzo en Restaurant "Los Almendros" del Parque "El Cubano" / Lunch, Restaurant "Los Almendros" in "El Cubano" Park.**

**Sala 1 / Teatro
 Room 1 / Theater
 "KURHOTEL Escambray"**

CONFERENCIAS PLENARIAS / LECTURES

Coordinadores / Coordinators: **DrC. Evangelina Marrero Faz, CENSA, Cuba. / Dr. Julián Pérez Peña, FCM Salvador Allende, Cuba.**

L-07 15:00-15:30 **OXIDATIVE STRESS REGULATION BY NATURAL ANTIOXIDANT COMPOUNDS: FROM EXPERIMENTAL DATA TO CLINICAL PRACTICE / REGULACIÓN DEL ESTRÉS OXIDATIVO POR ANTIOXIDANTES NATURALES: DE LA EXPERIMENTACIÓN A LA PRÁCTICA CLÍNICA. DrC. Liván Delgado Roche, Venturi I, Menéndez R, Malheiros A, de Souza MM, Filho VC, Fernández MD, Rodeiro I. Center of Marine Bioproducts (CEBIMAR), Havana, Cuba.**

L-08	15:35-16:05	<p>MORINGA OLEÍFERA: CHARACTERISTICS AND PHARMACEUTICAL PROPERTIES. DEVELOPMENT OF A TECHNOLOGY FOR OBTAINING HYDRO-ALCOHOLIC EXTRACTS. RESULTS OBTAINING AT FINLAY INSTITUTE. / MORINGA OLEIFERA: CARACTERÍSTICAS Y PROPIEDADES FARMACÉUTICAS. DESARROLLO DE UNA TECNOLOGÍA PARA LA OBTENCIÓN DE EXTRACTOS HIDROALCOHÓLICOS. RESULTADOS OBTENIDOS EN EL INSTITUTO FINLAY.</p> <p><u>Dra. Concepción Campa Huergo</u>, Callicó A, Arocha A, Echemendía O. Natural Products. Finlay Institute, Cuba.</p>
	16:10-16:25	RECESO / COFFEE BREAK

Salas / Rooms 1,2,3	16:30-19:45	COMUNICACIONES ORALES / ORAL COMMUNICATIONS SIMPOSIOS / SYMPOSIA
SALA 1 / ROOM 1	16:30-19:30	SIMPOSIO No. 5: RELEVANCIA FARMACOLÓGICA DE ANTIOXIDANTES NATURALES / SYMPOSIUM: PHARMACOLOGICAL RELEVANCE OF NATURAL ANTIOXIDANTS
Coordinadores / Coordinators:		<p><u>Dra. Lizette Gil del Valle</u>, IPK, La Habana, Cuba. / <u>Prof. Olga Pechanova</u> Slovak Academy of Sciences, Bratislava, Slovak Republic.</p>
OC-34	16:30-16:45	<p>ANTIOXIDANT AND ANTI-INFLAMMATORY EFFECTS OF PROTEOLYTIC FRACTION FROM <i>VASCONCELLEA CUNDINAMARCENSIS</i> LATEX ON HAIRLESS MICE SKIN IRRADIATED WITH MULTIPLE DOSES OF UVB</p> <p><u>Freitas KM</u>¹, Salas CE², Lopes MTP¹. Departments of ¹Pharmacology and ²Biochemistry and Immunology, Institute of Biological Science, Federal University of Minas Gerais, Belo Horizonte, MG, Brazil.</p>
OC-35	16:50-17:05	<p>THE EFFECTS OF ALIBERNET RED WINE EXTRACT ON NITRIC OXIDE AND REACTIVE OXYGEN SPECIES PRODUCTION IN SPONTANEOUSLY HYPERTENSIVE RATS</p> <p><u>Olga Pechanova</u>, Kovacsova M, Klimentova J, Barta A, Matuskova Z, Rehakova R, Cebova M. Institute of Normal and Pathological Physiology and Centre of excellence for regulatory role of nitric oxide in civilization diseases, Slovak Academy of Sciences, Bratislava, Slovak Republic.</p>
OC-36	17:10-17:25	<p>EVALUATION OF OXIDATIVE STRESS EXPERIMENTAL MODEL AND TOXICITY OF THE SEED OIL EXTRACT <i>CARAPA GUIANENSIS</i> AUBLET</p> <p><u>Arencibia DF</u>¹, Narciandi J², Rosario LA², Vidal A³. ¹ Center of Inspection and Environmental Control (CICA), Havana. Cuba. ² Institute of Pharmacy and Food Science (IFAL), Lisa, Havana, Cuba. ³ Havana University, Faculty of Biology, Havana, Cuba.</p>
OC-37	17:30-17:45	<p>TOTAL PHENOLIC CONTENT AND ANTIOXIDANT ACTIVITY OF <i>EUGENIA CLARENSIS</i> (BRITTON & P.WILSON), AN ENDEMIC CUBAN PLANT.</p> <p><u>Siverio-Mota D</u>, Coba-Sánchez Y, Nguyen N, Vicet-Muro L, Jorge-Rodríguez ME, Sueiro-Oyarzun ML, González-Mosquera D, Herrera-Pis Y. Department of Pharmacy. Faculty of Chemistry-Pharmacy, Universidad Central "Marta Abreu" de Las Villas, Santa Clara, Villa Clara, Cuba.</p>
OC-38	17:50-18:05	<p>ANTIOXIDANT THERAPY IN HUMAN IMMUNODEFICIENCY VIRUS-INFECTION</p> <p>Gil L¹, <u>Gravier R</u>¹, Tarinas A¹, Martínez G², León OS². ¹ Institute of Tropical Medicine "Pedro Kourí" (IPK), Havana, Cuba. ² Institute of Pharmacy and Food, Havana University, Havana Cuba.</p>

OC-39	18:10-18:25	<p>EFFECTS OF VIMANG SUPPLEMENTATION IN ANTIRETROVIRAL-NAÏVE HIV/AIDS PATIENTS</p> <p><u>Gil L</u>¹, Martínez G², González I², Tarinas A¹, Álvarez A¹, Giuliani A³, Molina R¹, Robaina M⁴, Tápanes R¹, Pérez J¹, Guevara M⁵, Sellés A⁵.</p> <p>¹ Institute of Tropical Medicine "Pedro Kourí" (IPK), Havana, Cuba. ² Institute of Pharmacy and Food, Havana University, Havana Cuba. ³ Department of Chemistry and Medical Biochemistry, University of Milan, Italy. ⁴ National Center Coordinating of Clinical Trials, Havana, Cuba. ⁵ Center of Pharmaceutical Chemistry, Havana, Cuba.</p>
OC-40	18:30-18:45	<p>MANGIFERIN: THE CHALLENGE OF TRANSFORM A NATURAL ANTIOXIDANT WITH AN EXCELENT PRECLINICAL PHARMACOLOGICAL PROFILE IN NEW PHARMACEUTICAL PRODUCTS</p> <p><u>Delgado R</u>¹, Garrido B¹, Hernández I², Rodeiro I², Romero JA¹, Rodríguez JC¹, Quiñones OL¹, Acosta J³, Nuevas L¹, Salomón S¹, Rodríguez C¹, Haegeman G⁴, Vanden Berghe W⁵.</p> <p>¹ Center for Pharmaceutical Research and Drug Development, Havana, Cuba. ² Laboratorio de Farmacología, Center of Marine Bioproducts (CEBIMAR), La Habana, Cuba. ³ Facultad de Química, ISPJAE, La Habana, Cuba. ⁴ Laboratory of Eukaryotic Gene Expression and Signal Transduction (LEGEST), Department of Physiology, Ghent University, Belgium. ⁵ Laboratory of Protein Science, Proteomics and Epigenetic Signaling (PPES), Department of Biomedical Sciences, University Antwerp, Belgium.</p>
	18:50-19:30	DISCUSIÓN GENERAL / GENERAL DISCUSSION
	20:30-21:30	CENA / DINNER
SALA 2 / ROOM 2	16:30-19:45	<p>SIMPOSIO No. 6: EVALUACIÓN FARMACOLÓGICA Y POTENCIALIDADES TERAPÉUTICAS DE PRODUCTOS NATURALES EN EL TRATAMIENTO DEL CÁNCER / SYMPOSIUM: PHARMACOLOGICAL EVALUATION AND THERAPEUTIC POTENTIALITIES OF NATURAL PRODUCTS IN CANCER TREATMENT</p>
Coordinadores / Coordinators:		<p>Prof. Wim Vanden Berghe, University of Antwerp, Belgium. DrC. Gilberto L. Pardo Andreu, IFAL, Cuba.</p>
OC-41	16:30-16:45	<p>IN VIVO ANTITUMOR ACTIVITY OF MANGIFERIN IN MURINE COLON CARCINOMA</p> <p><u>Rodríguez-González JC</u>¹, Hernández-Balmaseda I², Quiñones-Maza OL¹, Merino N¹, Aparicio-López G¹, Valdés-Martínez O¹, Valentín-Quiñones N¹, Gabilondo-Ramírez T¹, Limonta-Ávalo R¹, Rodeiro-Guerra I², Beck Ilse M³, Wagemans G³, De Wever O³, Vanden Berghe W⁴, Delgado-Hernández R¹.</p> <p>¹ Center for Pharmaceutical Research and Drug Development (CIDEM), Nuevo Vedado, Plaza, Havana, Cuba. ² Laboratory of Pharmacology, Center of Marine Bioproducts, Havana, Cuba. ³ Laboratory of Experimental Cancer Research, Ghent University Hospital, Belgium. ⁴Laboratory of Protein Chemistry, Proteomics and Epigenetic Signalling (PPES), Department of Biomedical Sciences, University of Antwerp, Belgium; Laboratory of Eukaryotic Gene Expression and Signal Transduction (LEGEST), Department of Physiology, Ghent University, Ghent, Belgium.</p>
OC-42	16:50-17:05	<p>MANGIFERIN POTENTIATES PLATIN AND 5-FLUOROURACIL INDUCED CELL DEATH IN SIMPLE AND COMBINATION ANTINEOPLASTIC TREATMENTS IN CT26.WT CELLS</p> <p>Rodríguez-González JC¹, <u>Quiñones-Maza OL</u>, Hernández-Balmaseda I², Valentín-Quiñones N¹, Rodeiro-Guerra I², Delgado-Hernández R¹.</p> <p>¹ Center for Pharmaceutical Research and Drug Development (CIDEM), Nuevo Vedado, Plaza, Havana, Cuba. ² Laboratory of Pharmacology, Center of Marine Bioproducts. Havana, Cuba.</p>

- OC-43** 17:10-17:25 **ZUCCAGNIA PUNCTATA EXTRACT AND 2',4'-DIHYDROXYCHALCONE (DHC), A NATURAL FLAVONOID FROM THEM AS AN POTENTIAL ANTIMETASTATIC IN MURINE COLORECTAL MODEL**
Zampini IC^{1,2,3}, **Francisco M.**⁴, Nuño G¹, Carabajal A¹, Isla M^{1,2,3}, Piloto-Ferrer J⁴
¹ Laboratorio de Investigación de Productos Naturales (LIPRON), Instituto de Química del NOA (INQUINOA.CONICET).
² Facultad de Ciencias Naturales e IML. Universidad Nacional de Tucumán.
³ Fundación Miguel Lillo. S.M. de Tucumán, Argentina.
⁴ Departamento de Toxicología especial, Centro de Investigación y Desarrollo de Medicamentos (CIDEM), La Habana, Cuba.
- OC-44** 17:30-17:45 **THE CYTOTOXIC EFFECTS OF BROWN CUBAN PROPOLIS DEPEND ON THE NEMOROSONE CONTENT AND MAY BE MEDIATED BY MITOCHONDRIAL UNCOUPLING**
Pardo-Andreu GL¹, Núñez-Figueroa Y², Delgado-Hernández R², Cuesta-Rubio O³, Alberici LC⁴.
¹ Centro de Estudio para las Investigaciones y Evaluaciones Biológicas, Instituto de Farmacia y Alimentos, Universidad de La Habana, Cuba.
² Centro de Investigación y Desarrollo de Medicamentos, La Habana, Cuba.
³ Universidad Técnica de Machala. Unidad Académica de Ciencias Químicas y La Salud, Machala, Ecuador.
⁴ Departamento de Física e Química, Faculdade de Ciências Farmacêuticas de Ribeirão Preto, Universidade de São Paulo, Ribeirão Preto, SP, Brazil.
- OC-45** 17:50-18:05 **ASSESSMENT OF GENOTOXIC AND CYTOTOXIC EFFECTS OF ENDEMIC PHYLLANTHUS PLANTS AQUEOUS EXTRACTS**
Menéndez I, Sánchez-Lamar A.
Laboratorio de Genética Toxicológica, Departamento de Biología Vegetal, Facultad de Biología, Universidad de la Habana, Cuba.
- OC-46** 18:10-18:25 **ANTI-PROLIFERATIVE ACTIVITY OF FRACTIONS ISOLATED FROM BOLDOA PURPURASCENS CAV. IN HUMAN PROSTATE AND LUNG CANCER CELLS**
Hernández Y¹, **González DM**¹, Rodríguez T¹, Tamargo B², Sierra G³, Apers S⁴
¹ Department of Pharmacy, Central University "Marta Abreu" of Las Villas, Cuba. ² Institute of Pharmacy and Food, University of Havana, Cuba.
³ BioCubaPharma, Havana, Cuba. ⁴ Laboratory of Pharmacognosy and Pharmaceutical Analysis, Department of Pharmaceutical Sciences, University of Antwerp, Belgium.
- OC-47** 18:30-18:45 **RHOPALURUS JUNCEUS SCORPION VENOM: ANTITUMORAL, ANTIMETASTATIC EFFECT AND MECHANISM OF ACTION AGAINST EPITHELIAL CANCER.**
Díaz-García A¹, Yglesias A¹, Ruiz-Fuentes JL², Rodríguez H², Rodríguez L¹.
¹ Research Department, Laboratories of Biopharmaceuticals and Chemistries Productions (LABIOFAM), Boyeros, Havana, Cuba.
² Microbiology Department, Tropical Medicine Institute "Pedro Kouri", La Lisa. Havana, Cuba.
- OC-48** 18:50-19:05 **CHARACTERIZATION OF THE PROTEIN KINASE CYSTEINOME TARGETED BY WITHA FERIN A TO OVERCOME GC THERAPY RESISTANCE IN MULTIPLE MYELOMA**
Chirumamilla CS¹, Heyninck K², Dom M¹, Van Ostade X¹, Vanden Berghe W^{1,2}.
¹ Laboratory of Protein Science, Proteomics and Epigenetics Signaling (PPES), Department of Biomedical sciences, University of Antwerp, Belgium.
² Laboratory of GPCR Expression & Signal Transduction (L-GEST), Ghent University, Belgium.

OC-49	19:10-19:25	WITHAFERIN A INDUCED DNA HYPERMETHYLATION CONTRIBUTES TO SILENCING OF TUMOR PROMOTING GENES IN TRIPLE NEGATIVE BREAST CANCER Szarc vel Szić K ¹ , Declerck K ¹ , Crans RAJ ¹ , Diddens J ¹ , Scherf D ² , Gerhäuser C ² , <u>Vanden Berghe W</u> ¹ . ¹ Laboratory of Protein Chemistry, Proteomics and Epigenetic Signaling (PPES), Department of Biomedical Sciences, University of Antwerp, Belgium. ² Workgroup Cancer Chemoprevention and Epigenomics, Division of Epigenomics and Cancer Risk Factors, German Cancer Research Center (DKFZ), Heidelberg, Germany.
	19:30-19:45	DISCUSIÓN GENERAL / GENERAL DISCUSSION
	20:30-21:30	CENA / DINNER
SALA 3 / ROOM 3	16:30-19:30	SIMPOSIO No. 7: ETNOMEDICINA Y OTRAS INVESTIGACIONES FARMACOTERAPÉUTICAS CON PRODUCTOS NATURALES / SYMPOSIUM: ETHNOMEDICINE AND OTHER PHARMACOTHERAPEUTIC RESEARCHES WITH NATURAL PRODUCTS
Coordinadores / Coordinators:		Dr. Carlos César Callava Couret , Pinar del Rio, Cuba. DrC. Octavio Fernández Limia , CENSA, Cuba.
OC-50	16:30-16:45	FLORISTIC AND PHYTOCHEMICAL STUDY OF PLANTS COLLECTED IN AMECAMECA, MEXICO FROM FEBRUARY TO MARCH 2014. <u>Mendoza-Espinoza JA</u> ¹ , Peña-Miranda I ¹ , Bañuelos-Hernández AE ² , Aarland RC ¹ , Peralta-Gómez S ³ , Sierra-Palacios E ¹ , García-Ocón B ³ . ¹ Colegio de Ciencia y Humanidades, Universidad Autónoma de la Ciudad de México, Iztapalapa México D.F. ² Laboratorio de Fisiología Bioquímica y Biología Molecular de Plantas, Departamento de Ciencias de la Salud, DCBS, Universidad Autónoma Metropolitana (UAM), campus Iztapalapa. ³ Casa Libertad Herbario, Universidad de la Ciudad de México (UACM), campus Casa Libertad.
OC-51	16:50-17:05	STUDY OF NOSTOC SPHAERICUM VAUCHER POLYSACCHARIDES AND ITS APPLICATION AS ADDITIVE IN PROCESSED FOOD Rivera B, Cárdenas L, Alvarado B, Strong C, <u>Prof. Felix Milla Flores</u> . UIGV. Facultad Cs F B. Lima. Perú.
OC-52	17:10-17:25	COMPUTATIONAL STUDY OF THE DNA PROTECTIVE EFFECT OF THE 2,6-DISECBUTILPHENOL EXTRACTED FROM THE PLANT PHYLLANTHUS ORBICULARIS KUNTH <u>Monteserín A</u> ¹ , Pérez Y ² , Sánchez A ³ . ¹ Faculty of Biology. ² Faculty of Chemistry, University of Havana, Cuba.
OC-53	17:30-17:45	THE TOXICOLOGICAL PROFILES OF PIMENTO DIOCIA (PIMENTO) AND TWO OF ITS CONSTITUENTS <u>Prof. Janet Winsome Shelly-Campbell</u> , Oswald S. College of Health Sciences, University of Technology, Kingston, Jamaica.
OC-54	17:50-18:05	IMMUNEREGULATORY PHENOTYPE SHIFT BY BEE APIS ACCUPUNCTURE IN PRIMARY PROGRESIVE MULTIPLE SCLEROSIS (PPMS) <u>Abuín A</u> , Fernández F, Milián L, Rodríguez Y. Matanzas Medical Science University, Cuba.
OC-55	18:10-18:25	KNOWLEDGE AND CONSUMPTION OF NATURAL PRODUCTS IN THE PROVINCE OF ARTEMISA IN THE PERIOD 2014-2015. THEIR APPROPRIATE USE. <u>Moreno S</u> ¹ , Bermúdez I ² , Casado CM ³ , Cabrera JR ¹ , Hernández M ¹ . ¹ Company of Medications of the Artemisa province, Cuba. ² University of Havana. ³ Pharmacy and Food Institute, University of Havana.

OC-56	18:30-18:45	<p>RESULTS AND EXPERIENCE OF 24 YEARS OF TRADITIONAL AND NATURAL MEDICINE IN THE PHARMACEUTICAL SERVICE OF THE PINAR DEL RÍO PROVINCE <u>Callava CC</u>¹, Quintana N², Padrón G³. ¹ Programa Medicina Natural y Tradicional, Departamento Medicamentos y Tecnologías Médicas, Dirección Provincial de Salud Pinar del Río. ² Laboratorio de Producción de Medicamentos, Empresa de Farmacia y Óptica Pinar del Río. ³ Ministerio de la Agricultura.</p>
OC-57	19:10-19:25	<p>MODEL OF SUSTAINABLE MARKETING FOR AGRO INDUSTRIAL BUSINESSES IN GLOBAL MARKETS: CASE OF AGRO INDUSTRIAL BUSINESSES INCUBATOR OF CAUCA (AGROINNOVA) AND THE ENTREPRENEURSHIP OF THE TECHNOLOGICAL BASE AND ITS EXPERIENCE OF THE RELATIONSHIP UNIVERSITY– BUSINESS – STATE. <u>Olga Lucía Agudelo López</u>. National University of Colombia</p>
	19:30-19:45	DISCUSIÓN GENERAL / GENERAL DISCUSSION
	20:30-21:30	CENA / DINNER
SALA 4 / ROOM 4	16:30-19:30	<p>SIMPOSIO No. 1 Continuación: INVESTIGACIÓN PRECLÍNICA DE PRODUCTOS NATURALES / SYMPOSIUM: PRECLINICAL RESEARCH OF HERBAL PRODUCTS</p> <p>DrC. Milagros García Mesa / MSc. Ioanna Martínez Hormaza, LCF, FCM Salvador Allende, La Habana, Cuba.</p>
OC-58	18:30-18:45	<p>HYPOLIPIDEMIC EFFECTS OF CHITOSAN AND CHITOSAN ACIDS SALTS ON TWO MODELS OF INDUCED HYPERLIPIDEMIA IN MICE <u>Menéndez AB</u>¹, Menéndez R¹, Valle¹, Phuong DT², Phuong TN², de la Paz N¹, López O¹, Fernández M³, Nogueira A¹. ¹ Laboratorio de Control Biológico. Centro de Investigación y Desarrollo y Medicamento (CIDEM), La Habana, Cuba. ² National Institute of Medicinal Material. Department of Phytochemistry, Hanoi, Viet Nam. ³ Instituto de Farmacia y Alimentos. Universidad de la Habana. Cuba</p>
OC-59	16:30-16:45	<p>SOME NEUROPHARMACOLOGICAL ACTIVITIES OF THE ETHANOLIC EXTRACT FROM <i>Clusia minor</i> L LEAVES IN DIFFERENT CLASSICAL BEHAVIORAL MODELS IN MICE <u>Reynaldo G</u>¹, de Souza MM², Malheiros A², Dallas MT², Aver K², Piovesan LG², Rodeiro I³, Bello A¹, Mangas R¹, Cechinel V², Menéndez R³. ¹ Instituto de Farmacia y Alimentos (IFAL), Universidad de La Habana, Cuba. ² Universidade do Vale do Itajaí, Santa Catarina, Brazil. ³ Centro de Bioproductos Marinos (CEBIMAR), La Habana, Cuba.</p>
OC-60	17:10-17:25	<p>A MULTIFACTORIAL APPROACH FOR ANTIPLATELET DRUG DISCOVERY FROM MEDICINAL PLANTS <u>DrC. Milagros García Mesa</u>. “Francisco Morón Rodríguez” Central Laboratory of Pharmacology, University of Medical Sciences of Havana, “Salvador Allende” Faculty of Medicine, Cuba.</p>
OC-61	17:30-17:45	<p>PRECLINICAL PHARMACOLOGICAL VALIDATION AND PHYTOCHEMICAL SCREENING OF <i>PHANIA MATRICARIOIDES</i> <u>Duménigo A</u>, García AI, Martínez I, Victoria MC, Brito G, Blanco Y, Acosta L. Central Laboratory of Pharmacology, Havana Medical Sciences University, Cuba.</p>
OC-62	17:50-18:25	<p>QUALITY ASSURANCE OF VEGETABLE RAW MATERIAL TO PRODUCE PHYTOPHARMACEUTICAL PREPARATIONS <u>Acosta L</u>¹, Rivera MM², Rodríguez CA². ¹ “Francisco Morón Rodríguez” Central Laboratory of Pharmacology. University of Medical Sciences of Havana, “Salvador Allende” Faculty of Medicine, Cuba. ² Experimental Station of Medicinal Plants “Juan Tomas Roig”, Center for Pharmaceutical Research and Drug Development (CIDEM), Cuba.</p>

OC-63	18:30-18:45	TRAMIL-CUBA, ITS IMPACT IN RESEARCH AND DIFFUSION OF MEDICINAL PLANT USES <u>Victoria MC</u> , Morón F, Brito G, Blanco Y, López M, Peña BR, Acosta L, Morejón Z, Boucourt E, García AI, Duménigo A, Martínez I. Central Laboratory of Pharmacology, Faculty of Medical Sciences "Salvador Allende", Cerro, Havana, Cuba.
	18:50-19:30	DISCUSIÓN GENERAL / GENERAL DISCUSSION
	20:30-21:30	CENA / DINNER
Jardines / Gardens HOTEL "LOS HELECHOS"	20:30- 22:00	CENA DE DESPEDIDA / FAREWELL DINNER <i>Reconocimiento Especial a Delegados Cubanos y Extranjeros que han tenido una participación relevante en los Congresos Fapronatura que se han desarrollado / Special Recognition to Cubans and Foreigners Delegates that have been relevant participations in all Fapronatura Congress</i>
	22:00 – 24:00	FIESTA DE DESPEDIDA / FAREWELL PARTY

JUEVES 24 de SEPTIEMBRE / THURSDAY, SEPTEMBER 24

**Sala 1 / Teatro
Room 1 / Theater
"KURHOTEL Escambray"**

CONFERENCIAS PLENARIAS / LECTURES

Coordinadores / Coordinators: *Prof. Wim Vanden Berghe, University of Antwerp, Belgium / Dr. René Delgado Hernández, CIDEM, Cuba.*

L-09 09:00-09:30 **ROLE OF METABOLIZING SYSTEMS AND TRANSPORTERS IN HERB-DRUG INTERACTIONS, ITS IMPACT IN THE HUMAN HEALTH / PAPEL DE LOS SISTEMAS METABOLIZADORES Y TRANSPORTADORES EN LAS INTERACCIONES FÁRMACO-PRODUCTO HERBARIO Y SU IMPACTO EN LA SALUD HUMANA.**

Dra. Idania Rodeiro Guerra.

Center of Marine Bioproducts (CEBIMAR), Havana, Cuba.

L-10 09:35-10:05 **PHYTODRUGS CAN INCREASE THE EFFICACY OF CANCER CLASSIC THERAPIES / LOS FITOFÁRMACOS PUEDEN INCREMENTAR LA EFICACIA DE LAS TERAPIAS CLÁSICAS DEL CÁNCER**

Dra. María Eugenia Letelier Muñoz, Galindo H.

Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile, Santiago-Chile. Centro del Cáncer, Pontificia Universidad Católica. Santiago-Chile.

10:10-10:30 **RECESO / COFFEE BREAK**

Salas / Rooms 1,2,3 10:35-12:45 **COMUNICACIONES ORALES / ORAL COMMUNICATIONS
SIMPOSIOS / SYMPOSIA**

SALA 1 / ROOM 1 10:35-12:30 **SIMPOSIO No. 6 Continuación: EVALUACIÓN FARMACOLÓGICA Y POTENCIALIDADES TERAPÉUTICAS DE PRODUCTOS NATURALES EN EL TRATAMIENTO DEL CÁNCER / SYMPOSIUM: PHARMACOLOGICAL EVALUATION AND THERAPEUTIC POTENTIALITIES OF NATURAL PRODUCTS IN CANCER TREATMENT**

Coordinadores / Coordinators: *DrC. Beatriz Tamargo, IFAL, Cuba. / MSc. Janet Piloto, CIDEM, Cuba.*

OC-64 10:35-10:45 **PROTEOLYTIC FRACTION FROM *Vasconcellea cundinamaricensis* LATEX REDUCES ACTIVITY OF THE MATRIX METALLOPROTEINASE DURING MELANOCYTE TRANSFORMATION *IN VITRO***

Santos VG¹, Lemos FO¹, Lage FDO¹, **Salas CE²**, Lopes MTP¹.

Departments of ¹Pharmacology, ²Biochemistry and Immunology, Institute of Biological Sciences, Federal University of Minas Gerais, Belo Horizonte, Brazil.

OC-65	10:50-11:05	SAFFRON-BASED BIOACTIVE MOLECULE "CROCIN" PREVENTS LIVER CANCER. Amr Amin , PhD. Prof. Cell and Molecular Biology, Biology Department, UAE University, Al-Ain, UAE.
OC-66	11:10-11:25	EVALUATION OF A COMPLEMENTARY THERAPY WITH INMUNOMODULATOR BIOMODULINA T IN PATIENTS WITH NEOPLASIC DISEASE Aznar-García E¹ , Suárez-Fundora S ¹ ; Battista-Speranza G ² , Perea Y ³ , Rodríguez-Chávez S ¹ . ¹ Clinical and Health Registry, National Center of Bioproducts (BioCen), Bejucal, Mayabeque, Cuba. ² Day Oncologic Hospital G. B. Grassi Ostia. ³ Production Plant. National Center of Bioproducts (BioCen), Bejucal, Mayabeque, Cuba.
OC-67	11:30-11:45	ANTIPROLIFERATIVE EFFECTS OF SAPINDUS SAPONARIA L. ON PROSTATIC CANCER PC 3 CELL LINE Tamargo B¹ , Mena L ¹ , Plaza LE ² , Gómez Y ³ , Oliva BM ³ , Sierra G ⁴ . ¹ University of Havana. Cuba. ² University of Medical Sciences, Guayaquil, Ecuador. ³ Center for Engineering Genetic and Biotechnology, Cuba. ⁴ BioCubaFarma. Group of Cuban Biotechnology & Pharmaceutical Industries.
OC-68	11:50-12:05	BIOACTIVITY-GUIDED FRACTIONATION FOR ANTI-CANCER ACTIVITY OF XANTHIUM STRUMARIUM L. AND THEIR RESPONSIBLE CONSTITUENTS Piloto-Ferrer J , Zampini IC, Cuello S, Francisco M, Romero A, González ML, Pasquale S, Fiore M, Sánchez-Lamar A, Isla M. Center for Pharmaceutical Research and Drug Development (CIDEM), Plaza. Havana, Cuba.
	12:10-12:30	DISCUSIÓN GENERAL / GENERAL DISCUSSION
SALA 2 / ROOM 2	10:35-12:45	SIMPOSIO No. 8: ASPECTOS REGULATORIOS PARA EL DESARROLLO DE PRODUCTOS NATURALES / REGULATORY TOPICS ON NATURAL PRODUCTS DEVELOPMENT
Coordinadores / Coordinators:		DrC. Celeste Sánchez / DrC. Diadelis Remírez , CECMED. Cuba.
OC-69	10:35-10:45	REGULATORY FRAMEWORK OF TRADITIONAL MEDICINE IN CUBA. CONSIDERATIONS ABOUT HERBAL MEDICINES. de la Cruz CB, Ceballos N, Remírez D , Debesa F. Center for State Control of Drugs, Equipment and Medical Devices (CECMED)
OC-70	10:50-11:05	CLINICAL TRIAL, GCP AND CERTIFICATION IN NATURAL PRODUCTS Dra. Deybis Orta Hernández. Centro para el Control Estatal de Medicamentos, Equipos y Dispositivos Médicos (CECMED), Miramar, Playa, La Habana, Cuba.
OC-71	11:10-11:25	MAIN REGULATORY CRITERIA'S FOR THE CLINICAL DEVELOPMENT OF NATURAL PRODUCTS MSc. Julián Rodríguez Álvarez National Coordinator Center of Clinical Trials, Miramar, Havana, Cuba.
OC-72	11:30-11:45	FIFTEEN YEARS OF EXPERIENCE IN SAFETY ASSESSMENT OF HERBAL EXTRACTS Dra. Yana González Torres National Center for Laboratory Animals Breeding (CENPALAB), Havana, Cuba
OC-73	11:50-12:05	ACADEMIC TRAINING OF HUMAN CAPITAL FOR POSITIONING NATURAL AND TRADITIONAL MEDICINE García AJ , Suárez N, Ruiz AK. Escuela Nacional de Salud Pública, FCM "Calixto García", La Habana, Cuba.

OC-74	12:10-12:25	EVOLUTION, STRENGTHS AND WEAKNESSES IN REGULATION OF NATURAL HERBAL MEDICINE. BASES FOR NEW PRODUCTS.
		<u>DrC. Celeste Sánchez González.</u> Center for State Control of Drugs, Equipment and Medical Devices (CECMED), Playa. La Habana, Cuba.
	12:30-12:45	GENERAL DISCUSSION / DISCUSIÓN GENERAL
SALA 3 / ROOM 3	10:35-12:45	SIMPOSIO No. 9: BIOPRODUCTOS MARINOS Y SU RELEVANCIA FARMACOTERAPEUTICA / SYMPOSIUM: MARINE BIOPRODUCTS AND ITS PHARMACOTHERAPEUTIC RELEVANCE
Coordinadores / Coordinators:		<i>DrC. Roberto Menéndez Soto del Valle / MSc. Miguel David Fernández, CEBIMAR, Cuba.</i>
OC-75	10:35-10:45	IN VIVO ANTITUMORAL ACTIVITY OF THALASSIA TESTUDINUM EXTRACT IN A SYNGENEIC COLON TUMOR MODEL
		<u>Hernández I</u>¹, Vanden Berghe W², Paz-Lopes M³, Labrada M⁴, Delgado L¹, Op de Beeck K⁵, Naulaerts S⁶, Laukens K⁶, Van Camp G⁵, Hevia G⁴, Rodríguez JC⁷, dos Reis C⁸, Cassali D⁸, Fernández MD¹, Delgado R⁹, Rodeiro I¹.
		¹ Pharmacology Department, Center of Marine Bioproducts (CEBIMAR), Havana, Cuba. ² Laboratory of Protein Chemistry, Proteomics and Epigenetic Signaling (PPES), Department of Biomedical Sciences, University of Antwerp (UA), Antwerp, Belgium. ³ Laboratory of antitumor substances, Pharmacology Department, Biological Sciences Institute, UFMG, Belo Horizonte, Brazil. ⁴ Center of Molecular Immunology (CIM), Havana, Cuba. ⁵ Laboratory of Cancer Research and Clinical Oncology, Center of Medical Genetics, University of Antwerp, Belgium. ⁶ Advanced Database Research and Modelling (ADReM), Biomina, University of Antwerp (UA), Antwerp, Belgium. ⁷ Laboratory of Pathology, Oncology Hospital, Havana, Cuba. ⁸ Laboratory of Comparative Pathology, Pharmacology Department, Biological Sciences Institute, UFMG, Belo Horizonte, Brazil. ⁹ Center for Pharmaceutical Research and Drug Development (CIDEM), Havana, Cuba.
OC-76	10:50-11:05	NEUROPROTECTIVE COMPOUNDS FROM MACROALGAE; IMPLICATIONS FOR NEURODEGENERATIVE DISEASES
		<u>Menéndez R</u>, García T, Morales RA, Valdés O, González K, Hernández Y. Centro de Bioproductos Marinos, Agencia de Medio Ambiente, La Habana, Cuba.
OC-77	11:10-11:25	ANTITUMORAL EFFECT OF ST II, A CYTOLYSIN ISOLATED FROM SEA ANEMONE STICHODACTYLA HELIANTHUS, ON TUMORAL CELLS IN VITRO AND IN VIVO
		<u>Soto C</u>¹, del Valle A¹, Blanco R², Bencomo A², Rodríguez JC³, Lanio M¹, Álvarez C¹, Hernández AM².
		¹ Center for Protein Studies, Faculty of Biology, Havana University, Cuba. ² Center for Molecular Immunology, Havana, Cuba.
		³ National Institute of Oncology and Radiobiology, Havana, Cuba.
OC-78	11:30-11:45	ACTINOPORINS, PORE-FORMING PROTEINS FROM SEA ANEMONES, THEIR OLIGOMERIZATION PATHWAY
		<u>Mesa-Gallos H</u>¹, Delgado-Magnero KH¹, Pedrera L¹, Hernández-González JE¹, Cabezas S¹, Alvarez C¹, Lanio ME¹, García-Saez A², Ros U¹, Valiente PA¹.
		¹ Center for Protein Studies, Faculty of Biology, Havana University, Cuba. ² Interfaculty Institute for Biochemistry, University of Tübingen, Tübingen, Germany.

OC-79	11:50-12:05	NEUROPROTECTIVE EFFECT OF PHYCOCYANOBILIN EXTRACTED FROM <i>SPIRULINA PLATENSIS</i> Piniella B , Pentón G, Campos R. Center for Genetic Engineering and Biotechnology, Vaccines Department, Havana, Cuba.
OC-80	12:10-12:25	NEW MARINE COMPOUNDS OF BIOMEDICAL INTEREST AND OTHERS INDUSTRIAL APPLICATIONS Fernández MD¹ , Núñez R ² , Ortiz E ² , Rodeiro I ¹ , Menéndez R ¹ , Hernández I ¹ , Valdés O ³ . Departments of Pharmacology ¹ , Microbiology ² and Chemistry ³ , Center of Marine Bioproducts (CEBIMAR), Vedado, Havana, Cuba.
	12:30-12:45	DISCUSIÓN GENERAL / GENERAL DISCUSSION

Sala 1 / Teatro Room 1 /	13:00 – 14:30	CEREMONIA DE CLAUSURA / CLOSING CEREMONY Theater “KURHOTEL Escambray”
	13:00 – 13:15	RELATORÍA DE LAS PRINCIPALES ACTIVIDADES DESARROLLADAS DURANTE FAPRONATURA 2015 / SUMMARY OF MAJOR ACTIVITIES DEVELOPED DURING FAPRONATURA 2015 MSc. Gledys Reynaldo , IFAL, Cuba.
	13:15 – 13:50	PREMIOS Y RECONOCIMIENTOS DE LA SOCIEDAD CUBANA DE FARMACOLOGÍA A LOS MEJORES TRABAJOS PRESENTADOS EN FAPRONATURA 2015 / AWARDS AND RECOGNITIONS OF THE CUBAN SOCIETY OF PHARMACOLOGY TO THE BEST WORKS PRESENTED IN FAPRONATURA 2015 Drs. Diadelis Ramirez, Mario Landys Chovel, María Acelia Marrero, Idania Rodeiro, María Cristina Lara, René Delgado, Cuban Society of Pharmacology, Cuba.
	13:50-14:00	Palabras de Clausura / Closing words MSc. María Cristina Lara Bastanzuri , Dirección de Medicamentos, MINSAP / Direction of Drugs, Ministry of Health, Cuba.
	14:30-15:00	Entrega de habitaciones para Delegados Cubanos / Check out Cuban Delegates.
	15:00:16:00	ALMUERZO / LUNCH
	16:30	Regreso a sus Provincias de Delegados Nacionales / Return of Cuban delegates to their Provinces. DESPEDIDAS / FAREWELLS

VIERNES, 25 de SEPTIEMBRE / FRIDAY, SEPTEMBER 25

09:00 – 12:00	Mañana libre para delegados extranjeros. Excursiones por el Parque Natural Topes de Collantes y Playa Ancón. / Free time for foreigner delegates. Tour by “Topes de Collantes” Natural Park and Ancon Beach.
13:00 14:00	ALMUERZO / LUNCH
14:00	REGRESO A LA HABANA / RETURN TO HAVANA Regreso de delegados extranjeros a La Habana / Return of foreigner delegates to Havana. DESPEDIDAS / FAREWELLS

01-88

CARTELES / POSTERS
MARTES, 22 Septiembre / TUESDAY, September 22
21:30 PM KURHOTEL ESCAMBRAY

PPP-01-21

FARMACOLOGÍA PRECLÍNICA / PRECLINICAL PHARMACOLOGY

- PPP-01** **ANTIALLODYNIC EFFECT OF MANGIFERIN IN NEUROPATHIC PAIN**
Espinosa de los Monteros-Zuñiga A, Izquierdo-Sánchez T, Godínez-Chaparro B.
Departamento de Sistemas Biológicos, División de Ciencias Biológicas y de la Salud, Universidad Autónoma Metropolitana-Xochimilco, D.F., México.
- PPP-02** **(-)-EPICATECHIN REDUCES ALLODYNIA IN RATS WITH PAINFUL DIABETIC NEUROPATHY**
Quiñonez-Bastidas GN¹, Calcutt NA, Frizzi K, Rocha-González H² Granados-Soto V¹, Murbartían J¹.
¹ Departamento de Farmacobiología, Cinvestav, Sede Sur, México, D.F., México.
² Sección de Estudios de Posgrado e Investigación, Escuela Superior de Medicina del Instituto Politécnico Nacional, México, D.F., México.
³ Department of Pathology, University of California San Diego, La Jolla, CA, USA.
- PPP-03** **DIRECT ACTIONS OF FLAVONOIDS ON RAT CARDIAC MUSCLE**
Fleites A, Galán L, Herrera I, Alvarez JL.
Laboratorio de Electrofisiología. Instituto de Cardiología y Cirugía Cardiovascular, Vedado, La Habana, Cuba.
- PPP-04** **IN VIVO ANTI-INFLAMMATORY ACTIVITY OF EXTRACTS, FRACTIONS AND ISOLATED COMPOUNDS OF *TABEBUIA* spp.**
Regalado Al¹, Sánchez LM¹, Mancebo B¹, Flogio MA².
¹ National Center for Animal and Plant Health (CENSA), San José de las Lajas, Mayabeque, Cuba. ² Centro Pluridisciplinar de Pesquisas Químicas Biológicas e Agrícolas (CPQBA), Campinas. Brasil.
- PPP-05** **A PHARMACO TOXICOLOGICAL STUDY OF THE EXTRACTS OBTAINED FROM THE PLANTS *TARGETES LUCIDA* CAV. AND *LIPPIA ALBA* MILL. ELABORATED IN THE INSTITUTE OF PHARMACY AND FOODS OF THE UNIVERSITY OF HAVANA**
García G, Casanova M, Jorge N, Gutiérrez Y, Sánchez A, Scull R, Pardo GL.
Center of Study for the Investigations and Biological Evaluations (CEIEB), Institute of Pharmacy and Foods, University of Havana, Cuba.
- PPP-06** **PHARMACOKINETICS AND RELATIVE BIOAVAILABILITY OF ZINC IONS RELEASED FROM A ZINC-ZEOLITIC (ZZ) MODIFIED RELEASE PRODUCT IN WISTAR RATS BY BOOTSTRAP**
Acuña G¹, del Toro H¹, Rodríguez L¹, de Castro N¹, Rodríguez G².
¹ Institute of Pharmacy and Foods. University of Havana, Cuba.
² Institute of Science and Technology of Materials. University of Havana, Cuba.
- PPP-07** **MECHANISM OF THE NEGATIVE INOTROPIC EFFECT OF NARINGIN IN MOUSE HEART**
Herrera I¹, Álvarez-Collazo J¹, López Al¹, Rodríguez AA², Galán L¹, Fleites A¹, Alvarez JL¹.
¹ Laboratorio de Electrofisiología. Instituto de Cardiología y Cirugía Cardiovascular, Vedado, La Habana, Cuba. ² Research Group for Experimental and Clinical Peptide Chemistry, Hannover Medical School, Hannover, Germany.
- PPP-08** **EFFECTS OF *KIGELIA PINNATA* FLOWERS EXTRACTS ON VOLTAGE-OPERATED-CALCIUM CHANNELS**
Hernández-Barreto E, Pérez-Donato JA, Ribalta V, Torres LA, Sueiro M, Armas Y.
Pharmacy Department, Chemistry and Pharmacy Faculty. Central University of Las Villas, Santa Clara, Villa Clara, Cuba.
- PPP-09** **EVALUATION OF THE ANTI-INFLAMMATORY AND ANALGESIC ACTIVITIES OF *Mosiera bullata* LEAVES**
Vicet-Muro L, Armas-González Y, Siverio-Mota D, Sueiro-Oyarsun M, Ribalta-Ribalta V¹, Concepción-Marrero G, Fuentes-Valdés M.
Pharmacy Department, Chemistry and Pharmacy Faculty. Central University of Las Villas, Santa Clara, Villa Clara, Cuba.

- PPP-10 **ACUTE AND CHRONIC ANTI-INFLAMMATORY ACTIVITY OF THE *Cucurbita moschata* Duch VEGETABLE OIL**
Sueiro-Oyarzun ML¹, Torres-Pla G¹, Cabrera-Santos K², Siverio-Mota D¹, Jorge-Rodríguez ME¹.
¹ Pharmacy Department, Chemistry and Pharmacy Faculty, Central University of Las Villas, Santa Clara City, Cuba. ² Principal Pharmacy of Santa Clara City, Villa Clara, Cuba.
- PPP-11 **STUDY OF PROPERTIES HEALING ALOE COMPARED WITH SHOSTASKOWKY BALM IN THE MALE ALBINO RATS**
Cardosa E, Dorado L.
 Universidad de Ciencias Médicas Guantánamo.
- PPP-12 **PHARMACOLOGICAL AND TOXICOLOGICAL ACTIVITY OF AQUEOUS EXTRACT OF SOLANUM TORVUM**
Pérez L, Puente E, Fong O, Salas H, Cedeño N, Wawoe N, Larramendi D, Barreiro AV.
 Dirección de Ciencia e Innovación Tecnológica. Universidad de Ciencias Médicas, Santiago de Cuba.
- PPP-13 **PRECLINICAL EVALUATION OF ANTINFLAMMATORY AND GASTROPROTECTIVE ACTIVITY OF THE LIQUID EXTRACT FROM THE LEAVES OF *Capraria biflora* L.**
Valido-Díaz A¹, Vicet-Muro L², Boffill-Cárdenaz M³, Pizarro-Espín A¹, Valdés-Álvarez M¹, Blanco Machado F¹.
¹ Experimental Toxicology Unit. Villa Clara Medical College. Cuba.
² Chemistry – Pharmacy Faculty. Central University “Marta Abreu” de Las Villas, Cuba.
³ Medicine Faculty. Villa Clara Medical College, Cuba.
- PPP-14 **PHYTOCHEMICAL SCREENING, GASTROPROTECTIVE ACTIVITY AND SEVERE TOXICITY OF *cnidoscolus chayamansa* mc. vaugh leaves**
Mena Y¹, González DM², Valido A¹, Pizarro A¹, Castillo O¹, Blanco F¹.
¹ Experimental Toxicology Unit. Villa Clara Medical College. Cuba.
² Chemistry – Pharmacy Faculty. Central University “Marta Abreu” de Las Villas, Cuba.
- PPP-15 **ASSEMENT OF *Agave brittoniana* NATURAL PRODUCTS ON EXPERIMENTAL METABOLIC SYNDROME**
González-Madariaga Y¹, Orestes-Guerra J², Nieto-Reyes L², Castillo-Alfonso O¹, Santiesteban-Muñoz D¹, Toledo-Soriano R¹, Casanova-Noche P³.
¹ Experimental Toxicology Unit. Villa Clara Medical College, Cuba.
² Chemistry - Pharmacy Faculty. Central University “Marta Abreu” de Las Villas, Cuba.
³ Medicine Faculty, Villa Clara Medical College, Cuba.
- PPP-16 **EVALUATION OF ANALGESIC ACTIVITY OF FLAVONOIDS OF *BOLDOA PURPURASCENS* CAV IDENTIFIED BY VIRTUAL SCREENING**
López A, González D, Marrero Y.
 Central University of Las Villas. Pharmacy Department. Faculty of Chemistry-Pharmacy-
- PPP-17 **TOXICOLOGICAL AND PHARMACOLOGICAL EVALUATION OF A WATERY EXTRACT OF *Pseudelephantopus spicatus* ROOTS OR CAW’S TONGUE, CUBA.**
 Hernández M¹, Pizarro A², García D¹, Saucedo Y³, Armas Y³, Zaita Y¹, Santos N¹, Bauta R¹, Artiles M¹, Galbán M¹.
¹ Technology Faculty of Health "Julio Trigo López" University of Medical Sciences "Dr. Serafín Ruiz of Zárte Ruiz" of Villa Clara, Cuba.
² Unit of Experimental Toxicology. University of Medical Sciences "Dr. Serafín Ruiz of Zárte Ruiz" of Villa Clara, Cuba.
³ Pharmacy Department, Central University "Marta Abreu" of Las Villas, Cuba.
- PPP-18 **CHEMOSENSITIZER EFFECT OF MICROENCAPSULATED SEED LIPID EXTRACT OF *CUCURBITA PEPO* L. IN CT26.WT TUMOR CELLS**
 Rodríguez-González JC, Quiñones-Maza OL, Valentín-Quiñones N, Antonio Nogueira Mendoza, Delgado-Hernández R.
 Center for Pharmaceutical Research and Drug Development (CIDEM), Plaza, Havana, Cuba.
- PPP-19 **ANTIINFLAMMATORY ACTIVITY OF *AZADIRACHTA INDICA* A. JUSS**
Berenquer CA¹, Landazuri S², Puente E¹, Rodríguez E¹, Fong O¹.
¹ Centro de Toxicología y Biomedicina (TOXIMED), Santiago de Cuba, Cuba.
² Vice Dirección de Ciencia y Técnica, Universidad de Ciencias Médicas, Santiago de Cuba.

PPP-20 SPONTANEOUS WITHDRAWAL IN SPRAGUE DAWLEY RATS EXPOSED TO THE COMBUSTION PRODUCTS OF *MIMOSA PUDICA*

Fong O¹, Berenguer CA¹, de la Vega JE¹, Mira H¹, Salas H¹, Álvarez F².

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PPP-21 PRECLINICAL VALIDATION OF THE *COSTUS PICTUS* D.DON (CAÑA MEXICANA) SPECIES

Blanco Y, Victoria MC, Martínez I, López M, Acosta L, Brito G, Duménigo A, Morejón Z, Morón F, Cabrera H, Martínez JM.

Laboratorio Central de Farmacología. Facultad de Ciencias Médicas "Salvador Allende", Cerro, Habana.

PNA-22-26

ANTIOXIDANTES NATURALES / NATURAL ANTIOXIDANTS

PNA-22 IN VITRO AND IN VIVO ANTIOXIDANT EFFECT OF THE ETHANOLIC EXTRACT OF *SOLANUM DIPLOCONOS* FLOWERS

Venturi I¹, Delgado-Roche L², Menéndez R², Morales RA², Valdés O³, Hernández Y³, Malheiros A¹, de Souza MM¹, Cechinel-Filho V¹, Rodeiro I².

¹ Programa de Pós-graduação em Ciências Farmacêuticas, Universidade do Vale do Itajaí, Santa Catarina, Brazil.

² Department of Pharmacology, Center of Marine Bioproducts, Havana, Cuba.

³ Department of Chemistry, Center of Marine Bioproducts, Havana, Cuba.

PNA-23 PROTEOLYTIC FRACTION FROM *Vasconcellea cundinamarcensis* LATEX PROMOTES MACROPHAGE TUMORICIDAL ACTIVITY AGAINST BREAST CANCER CELLS

Braga AD¹, Freitas KM¹, Teixeira LCR¹, **Salas CE**², Lopes MTP¹.

Departments of ¹Pharmacology and ²Biochemistry and Immunology, Institute of Biological Sciences, Federal University of Minas Gerais, Belo Horizonte, MG, Brazil.

PNA-24 ANTIOXIDANT CAPACITY AND FATTY ACID PROFILE OF *SWINGLEA GLUTINOSA* (BLANCO) MERR, CULTIVATED IN CUBA.

Goya E¹, Jorge E¹, Saucedo Y¹, Vander Heyden Y², Le Thi Cam Tú¹.

¹ Department of Pharmacy, Faculty of Chemical-Pharmacy, Central University of Las Villas, Santa Clara, Villa Clara, Cuba.

² Department of Analytical Chemistry and Pharmaceutical Technology, Faculty of Medicine and Pharmacy, Vrije Universiteit Brussel-VUB, Belgium.

PNA-25 TROPICAL FRUITS POLYPHENOLS: EXCELLENT INHIBITORS OF THE OXIDATION OF THE LDL

Herrera E¹, Fernández R¹, Bebelagua Y², García MA¹, Rodríguez JL³.

¹ Pharmacy and Food Institute, University of Havana, Cuba.

² Center of Molecular Immunology. Atabey, Playa, Havana, Cuba.

³ Food Industry Research Institute, Havana, Cuba.

PNA-26 EVALUATION OF ANTIOXIDANT ACTIVITY AND ACUTE TOXICITY OF AQUEOUS FRACTION OF *Dichrostachys cinerea* (L.) Wight & Arn. (MIMOSACEAE) LEAVES

Ribalta V¹, Torres L², Hernández E¹, Sueiro M¹, Armas Y¹, Ruz V¹.

¹ Pharmacy Department, Chemistry and Pharmacy Faculty. Central University of Las Villas, Santa Clara, Cuba.

² Pharmacy Department, Food and Pharmacy Institute, University of Havana, Cuba.

PNAI-27-35

ANTI-INFECCIOSOS NATURALES / NATURAL ANTI-INFECTIOUS

PNAI-27 IN VITRO ANTILEISHMANIAL ACTIVITY OF *HELIOTROPIUM INDICUM* AND *CORDIA DENTATA* FRACTIONS

Gómez-Estrada H¹, Mercado-Camargo J¹, Cervantes-Ceballos L¹, Jiménez-Villalobos T¹, Robledo-Restrepo S².

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² Programa de Estudio y Control de Enfermedades Tropicales PECET. Universidad de Antioquia. Medellín-Colombia.

PNAI-28 ANTIMICROBIAL ACTIVITY AND PHENOLIC COMPOUND IN TWO CUBAN PHYLLANTHUS SPECIES

Chevalier P¹, Galdós M², **Electra E**¹.

¹ Universidad de Ciencias Médicas "Carlos J. Finlay", Camagüey.

² Centro de Inmunología y Productos Biológicos (CENIPBI), Camagüey.

PNAI-29 ANTIBACTERIAL EFFECT OF *COSTUS SPIRALIS* LEAVES EXTRACT ON PATHOGENIC STRAINS OF *VIBRIO CHOLERA*

Pérez C, Falero A, Hung BR, **Ledón T**, Fando R.

Centro Nacional de Investigaciones Científicas, Playa. La Habana, Cuba.

PNAI-30 CYTOSTATIC AND CYTOTOXIC EVALUATION OF EXTRACTS FROM 5 CUBAN PLANTS WITH POSSIBLE ANTIMICROBIAL, ANTIPARASITIC AND ANTIPROLIFERATIVE EFFECT

Mancebo B, Regalado AI, Sánchez LM.

National Center for Animal and Plant Health (CENSA), San José de las Lajas, Mayabeque, Cuba.

PNAI-31 ANTIMICROBIAL ACTIVITY OF LEAF EXTRACTS OF MORINGA OLEIFERA

Echemendía O, Callico A, Lago V, Almora E, Bolaños G, Fidalgo O, Monteagudo R, Morales Y.

Instituto Finlay, La Lisa, La Habana, Cuba

PNAI-32 ANTIMICROBIAL ACTIVITY OF THE TOTAL EXTRACT, FRACTIONS AND PURE COMPOUNDS OF THE LEAVES OF *Excoecaria lucida* Sw.

Gross C¹, Munyewu B², **Ochoa A**², Escalona JC², Camacho M³, Fechine J⁴, Sobral M⁴.

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² Departamento de Farmacia, Facultad de Ciencias Naturales, Universidad de Oriente, Santiago de Cuba. ³ Centro de Estudios de Biotecnología Industrial, Facultad de Ciencias Naturales, Universidad de Oriente, Santiago de Cuba, Cuba.

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PNAI-33 ANTIMICROBIAL ACTION OF BIXA ORELLANA L.

Morales M¹, Galdós MC¹, López I¹, Vázquez R², Piña JC¹.

¹ Camagüey Medical University. ² "Tte. Tomás Rojas" Teaching Polyclinic, Camagüey, Cuba.

PNAI-34 IN VITRO ANTIFUNGAL ACTIVITY OF CRUDE HYDRO-ALCOHOLIC EXTRACT OF *PETIVERIA ALLIACEA* L ON CLINICAL *CANDIDA* ISOLATES

Velar RE¹, Illnait MT¹, Illnait J², Fernández CM¹, Martínez GF¹, Perurena MR¹, Monroy EX¹, Meis JF³.

¹ Mycology Laboratory; Tropical Medicine Institute "Pedro Kourí" (IPK), La Lisa. Havana, Cuba.

² Natural Products Laboratory, National Centre for Scientific Research (CNIC), Playa. Havana, Cuba. ³ Regional Public Health Laboratory Service. Department of Medical Microbiology and Infectious Diseases, Canisius Wilhelmina Hospital (CWZ), Nijmegen, The Netherlands.

PNAI-35 ANTIPLASMODIAL ACTIVITY AND ACUTE ORAL TOXICITY OF HYDROALCOHOLIC EXTRACTS OF *ZUELANIA GUIDONIA* SP

Puente E¹, Mora C², Jaramillo M², Berenguer C¹, Rodríguez E¹, Salas I¹, Reinert A¹, Cedeño N¹.

¹ Centro de Toxicología y Biomedicina (TOXIMED), Santiago de Cuba, Cuba.

² Facultad de Química Farmacéutica, Universidad de Antioquia, Colombia.

PTS-36-44 ESTUDIOS TOXICOLÓGICOS / TOXICOLOGICAL STUDIES

PTS-36 CHRONIC ORAL TOXICITY OF TANNIN POWDERS OBTAINED FROM BARK OF *PINUS CARIBAEA* MORELET IN RATS

Curbelo A¹, Bada AM¹, Santana JL², González B¹, González Y¹, González C¹, Arteaga ME¹, Gómez D¹, Mancebo A¹.

¹ Centro Nacional para la Producción de Animales de Laboratorio (CENPALAB), La Habana, Cuba. ² Instituto Superior de Ciencias y Tecnologías Aplicadas (InsTEC), La Habana, Cuba.

PTS-37 DERMAL AND OCULAR IRRITATION STUDIES OF TWO CREAMS INTENDED FOR ITS USE FOR PSORIASIS

Rivero Y¹, González Y¹, Mancebo A¹, Scull I², Arteaga ME¹, González C¹, Bada AM¹.

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- PTS-38 STABILITY AND TOXICITY OF LEAF EXTRACT SPONDIAS MOMBIN L.**
Pérez-Portero Y¹, Losada-Martínez L¹, Bignott-Tissert Y¹, Rodríguez-Leblanch E³, Cedeño-Soularit N³, Mourlot-López A³, González-Giro Z³, Escalona-Arranz J².
¹ Department of Biology, Faculty of Natural Science, Universidad de Oriente.
² Department of Pharmacy, Faculty of Natural Science, Universidad de Oriente.
³ Centro de Toxicología y Biomedicina (TOXIMED), Santiago de Cuba, Cuba.
- PTS-39 TOXICOLOGICAL STUDIES TO THE PRODUCTS CODASAL PLUS, CODAHUMUS 20, CODACÍTRICOS, CODAMIN RADICULAR, CODAMIN B-Mo AND CODAN USED IN THE AGRICULTURE AS BIO-FERTILIZERS**
García G, Casanova M, Jorge N, Pardo GL.
 Center of Study for the Investigations and Biological Evaluations (CEIEB), Institute of Pharmacy and Foods, University of Havana, Cuba.
- PTS-40 ASSESSMENT OF ACUTE AND SUBCHRONIC ORAL TOXICITY OF SEED OIL CARAPA GUIANENSIS AUBLET EXTRACT**
Curveco D¹, Arencibia D², Rosario L³, Narciandi J³, Alonso A³, Crespo Y³, Vidal A⁴.
¹ Finlay Institute, La Lisa. Havana. Cuba. ² CICA, Miramar, Playa Havana. Cuba.
³ Institute of Pharmacy and Food (IFAL, U.H), La Lisa, Havana. Cuba.
⁴ University of Havana, Biology Faculty, Havana, Cuba.
- PTS-41 ACUTE ORAL TOXICITY AND ANTIINFLAMMATORY ACTIVITY OF THE ETHANOLIC EXTRACT AND FRACTIONS OF LEAVES OF Eugenia clarensis (Britton & P.Wilson)**
Nguyen N¹, Vicet-Muro L¹, Siverio-Mota D¹, Jorge-Rodríguez ME¹, Coba-Sánchez Y¹, González-Mosquera D¹, Montenegro N².
¹ Department of Pharmacy. Faculty of Chemistry-Pharmacy, Universidad Central "Marta Abreu" de Las Villas, Santa Clara, Villa Clara, Cuba. ² Chemical Bioactive Center, Universidad Central "Marta Abreu" de Las Villas, Santa Clara, Villa Clara, Cuba.
- PTS-42 TOXICITY EVALUATION AT SINGLE DOSE AND DIURETIC ACTIVITY OF THE HYDROALCOHOLIC EXTRACT *Mosiera bullata* (Britton & P. Wilson) Bisse LEAVES**
Armas-González Y, Sueiro-Oyarzun ML, Vicet-Muro L, Ribalta-Ribalta V, Hernández-Barreto E, Siverio-Mota D, Ruz-San Juan V, Valdés-Fuentes M.
 Pharmacy Department, Chemistry and Pharmacy Faculty, Central University of Las Villas, Santa Clara, Villa Clara, Cuba.
- PTS-43 THE COMET ASSAY. A METHOD TO DETERMINE THE ANTIGENOTOXIC EFFECT OF A GRAPE SEED PROCYANIDIN EXTRACT.**
 Llópez N¹, Céspedes E², Puiggros F¹, Arola L¹, Ardévol A¹, Blade C¹, Salvadó MJ¹.
¹ Departamento de Bioquímica y Biotecnología, Universidad Rovira I Virgili, España.
² Facultad de Ciencias Médicas "General Calixto García", La Habana, Cuba.
- PTS-44 TOXICITY STUDIES OF CURCUMA LONGA EXTRACTS**
Quintana N, García JJ.
 Laboratorio de Fito y Apifármacos, Empresa Provincial de Farmacias y Ópticas Pinar del Río.
- PCT-45-57 ESTUDIOS CLÍNICOS / CLINICAL TRIALS**
- PCT-45 BENEFICIAL EFFECTS OF A ROSE HIP PRAPARATION CONTAINING SEEDS AND SHELLS ON AGING AND WRINKLES OF THE SKIN**
 Petharat L¹, Wongsuphasawat K¹, Winther K².
¹ School of Anti-aging and Regenerative Medicine, Mae Fah Luang University, Chiangrai, Thailandan University of Bankok, Thailand.
² Department of Nutrition, Exercise and Sport, University of Copenhagen, Denmark.
- PCT-46 CLINICAL-HEMATOLOGICAL EVALUATION OF NEOTROFIN IN THE TREATMENT OF ANEMIC PREGNANT WOMAN IN 10 DE OCTUBRE MUNICIPALITY**
Suárez S¹, Aznar E¹, Silva N², Fernández JR², González M¹, Rodríguez S¹, Revilla Y¹.
¹ Centro Nacional de Biopreparados (BioCen), Bejucal, Mayabeque, Cuba.
² Hospital Docente Materno Infantil 10 de Octubre, La Habana, Cuba.
- PCT-47 PHARMACOLOGICAL EVIDENCES OF ANTIFUNGAL ACTION OF OZONIZED SUNFLOWER OIL OLEOZON®**
Ledeo O, Zamora Z, Falcón L, Fernández L, Fernández I, Calunga J, Menéndez S.
 National Center for Scientific Research, Cubanacán, Playa, Cuba.

- PCT-48 EFFECTIVENESS OF COMBINATION THERAPY WITH 25% ALOE CREAM AND RELAXATION- VISUALIZATION TECHNIQUES IN PSORIASIS**
Serrano Y, Miranda T, Díaz T.
 University Hospital "Manuel Ascunce Domenech", Camagüey, Cuba.
- PCT-49 VIMANG® MANGIFERA L. EXTRACT INDICATES AS PROTECTIVE DERMATOLOGIC DURING RADIATION TREATMENT**
Gil D, Fleitas R, Cruz JL.
 Hospital Docente Clínico Quirúrgico "Dr. Salvador Allende", La Habana, Cuba.
- PCT-50 EFFECTIVENESS OF IMEFASMA SYRUP IN THE TREATMENT OF BRONCHIAL ASTHMA**
Ramos L, Casas S, Herrero H, Vega S, Planas N.
 Medical Sciences University of Santiago de Cuba.
- PCT-51 OUTLINE TREATMENT OF ASTHMATIC PATIENTS WITH TRADITIONAL MEDICINE IN THE AREA NORTH OF MORON**
Cepero S, Cintra J, Rodríguez A, Pino L.
 Medicine University of Ciego de Ávila. Educational Docent Morón.
- PCT-52 NODULE OF LUNG. PRESENTATION OF A ONCOLOGIC PATIENT TREATED WITH NATURAL MEDICINES.**
Miranda R, Fernández JL, Morales MC.
 Grupo Empresarial LABIOFAM.
- PCT-53 STUDY OF PRODUCTION AND PRESCRIPTION OF ANTICATARRHAL SYRUPS IN TRINIDAD**
Rodríguez A¹, Rodríguez V², Zerquera R².
¹Hospital General de Trinidad "Tomás Carreras Galeano", Sancti Spíritus, Cuba.
² Filial de Ciencias Médicas "Elena Fernández de Castro", Trinidad, Sancti Spíritus, Cuba.
- PCT-54 PHARMACOVIGILANCE OF PHYTOMEDICINES AND APIMEDICINES, MATANZAS 2005 - 2014.**
Santos L, Marín N, Sánchez D, Hidalgo M.
 Universidad de Ciencias Médicas de Matanzas, Cuba,
- PCT-55 UTILITY OF PHYTOTHERAPY IN INSOMNIA**
Cintra J, Betancourt O, Rodríguez A.
 Policlínico Docente Universitario Diego del Rosario, Morón, Ciego de Ávila, Cuba.
- PCT-56 CLINICAL EVALUATION OF PATIENTS WITH BENIGN PROSTATIC HYPERPLASIA TREATED WITH THE NUTRITIONAL SUPPLEMENT CALPROST**
Jiménez D¹, Festary T¹, Machado M², Suarez M², Silveira D³, Wong H³, Barroso E⁴, Fernández R⁴, García I¹, Tuero A⁵, Delgado R¹.
¹ Center for Pharmaceutical Research and Drug Development (CIDEM), Havana, Cuba.
² Dr Luis Díaz Soto" Clinical Surgical Hospital, Havana, Cuba. ³ "Joaquín Albarrán" Clinical Surgical Hospital, Havana, Cuba. ⁴ "Iván Portuondo" Clinical Surgical Hospital, San Antonio de los Baños, Artemisa, Cuba. ⁵ Center for Genetic Engineering and Biotechnology, Havana, Cuba.
- PCT-57 ADVERSE EVENTS ASSOCIATED TO ACUPUNCTURE PRACTICE IN CUBA, 2003-2010.**
 García-Milián A¹, Perdomo-Delgado J², Alonso-Carbonell L³, Ruiz-Salvador AK⁴, López-Puig P¹
¹ National School of Public Health. Havana, Cuba. ² Ministry of Public Health. Havana, Cuba.
³ National Center Coordinating of Clinical Trials (CENCEC). Havana, Cuba.
⁴ "General Calixto Garcia" Medical Faculty. Havana, Cuba.

PETM-58-62 ETNOMEDICINA / ETHNOMEDICINE

- PETM-58 APPLICATION OF HERBAL REMEDIES IN SKIN DISEASES**
Miranda T, Serrano Y, Díaz T.
 University Hospital "Manuel Ascunce Domenech", Camagüey, Cuba.
- PETM-59 MEDICINAL PLANT OF TRADITIONAL USE IN THE SANTO DOMINGO MUNICIPALITY. ETHNOBOTANICAL STUDY.**
López M¹, López S², García O¹, Cabrera K², González N³.
¹ FUM "Dr. Heriberto A. Martínez Rodríguez", Santo Domingo. Villa Clara.
² Policlínico "Dr. Manuel Piti Fajardo", Santo Domingo, Villa Clara.
³ Universidad de Ciencias Médicas, Santa Clara, Villa Clara.

- PETM-60 USE OF THE NATURAL AND TRADITIONAL MEDICINE IN STOMATOLOGY SERVICES OF THE PLAYA MUNICIPALITY DURING 2014**
Estupiñán M¹, Lara C², Delfín M¹.
¹ Municipality Health Direction, Playa, Havana, Cuba. ² Ministry of Cuban Public Health
- PETM-61 ETHNOMEDICAL STUDY OF THE *JUSTICIA SECUNDA* PLANT**
León Y.
 LABIOFAM Entrepreneurial Group. Sancti Spíritus branch, Cuba.
- PETM-62 PRECLINICAL VALIDATION OF TRADITIONAL USE OF *HIBISCUS ROSA SINENSIS* (Marpacífico)**
Brito G., Martínez I, Morón F, Victoria MC, Duménigo A, Morejón Z, Nossin E.
 Central Laboratory of Pharmacology, Faculty of Medical Sciences. "Dr. Salvador Allende", Cerro, Havana Cuba.
- PMO-63-65 PRODUCTOS NATURALES DE ORIGEN MARINO / NATURAL PRODUCTS FROM MARINE ORIGIN**
- PMO-63 MEMORY ENHANCING EFFECTS OF BM-21, AN AQUEOUS-ETHANOLIC EXTRACT OF THE MARINE PLANT *Thalassia testudinum*, IN AGED AND ALUMINIUM INTOXICATED MICE.**
García T¹, Morales RA¹, Palmero A¹, García N¹, Valdés O¹, Fernández G², Pérez C², Menéndez R¹
¹ Center of Marine Bioproducts (CEBIMAR), Neuropharmacology Department, Havana, Cuba.
² Institute of Medicine "Victoria de Girón", Havana, Cuba.
- PMO-64 STUDY OF POTENTIAL DRUG INTERACTION BETWEEN *Thalassia testudinum* BM-21 EXTRACT AND SOME DRUGS ACTING IN SNC: A PRECLINICAL STUDY.**
Morales RA. García T, Palmero A, Valdés O, González K, Hernández Y, Menéndez R, Rodeiro I
 Center of Marine Bioproducts (CEBIMAR), Neuropharmacology Department, Havana, Cuba.
- PMO-65 ANTIOXIDANT EFFECTS FROM THE SEAWEED *Sargassum* spp EXTRACT IN UVB-RADIATED MURINE SKIN: POTENTIAL DERMOPROTECTIVE ACTION**
 Morales R^{*}, Rodríguez M¹, Menéndez R¹, García T¹, González K¹, Hernández Y¹, Valdés O¹, Fernández M¹, Nuñez R¹, Cáceres L², Govin L².
¹ Center of Marine Bioproducts (CEBIMAR), Havana, Cuba. ² Suchel Regalo, Havana, Cuba.
- PACH-66-78 CARACTERIZACIÓN QUÍMICA Y ANALÍTICA DE PRODUCTOS NATURALES / ANALYTICAL AND CHEMICAL CHARACTERIZATION OF NATURAL PRODUCTS**
- PACH-66 PHYSICO-CHEMICAL EVALUATION OF THE PERSEITOL OBTAINED FROM PERU AND CUBA AVOCADO (*PERSEA AMERICANA*)**
García CM. Martínez V, González ML, Martínez L, Rivera MM, Sánchez P, Rosas LO.
 Center for Pharmaceutical Research and Drug Development (CIDEM), Havana, Cuba.
- PACH-67 OPTIMIZATION OF EXTRACTION CONDITION FOR FLAVONOIDS IN *TALIPARITI ELATUM* S.W. USING RESPONSE SURFACE METHODOLOGY**
Barrios M. Romero JA, López M.
 Center for Pharmaceutical Research and Drug Development (CIDEM), Havana, Cuba.
- PACH-68 GAS CHROMATOGRAPHY DETERMINATION OF THE FATTY ACIDS CONCENTRATION DURING SUNFLOWER OIL OZONATION**
Támbara Y¹, Flores D², Hernández K², Álvarez A¹, Fernández LA², Gil D², Ledea O².
¹ Center for Genetic Engineering and Biotechnology, Havana, Cuba.
² National Center for Scientific Research, Havana, Cuba.
- PACH-69 BACTERICIDAL ACTIVITY OF PLANT WEDELIA TRILOBATA L. PRELIMINARY STUDY OF THE TYPES OF METABOLITES PRESENT IN ITS EXTRACTS.**
Pérez C¹, Echemendía OA², Spengler I¹, García T¹.
¹ Center for Natural Product Studies, Faculty of Chemistry, University of Havana, Cuba.
² Finlay Institute, Havana, Cuba.
- PACH-70 ANTITUMORAL ACTIVITY OF ETHANOLIC EXTRACT OF THE BARK OF *MAYTENUS BUXIFOLIA* SUBSP. *CAJALBANICA* (BOHIRDI; O.MUÑIZ). METABOLIC FINGERPRINT BY (FIA/ESI/MS^N).**
Pino L¹, Rodeiro I², Hernández I², Spengler I¹, García T¹, Fernández A¹, Vilegas W³, Pérez C¹.
¹ Center for Natural Product Studies, Faculty of Chemistry, University of Havana, Cuba.
² CEBIMAR, Havana, Cuba. ³ Experimental Campus of Sao Vicente, UNESP—Sao Paulo State University, Sao Vicente, Sao Paulo, Brazil.

- PACH-71 PHARMACOGNOSTIC STUDY OF *Schinus terebinthifolius* Raddi (FALSE COPAL)**
 Águila C, Álvarez Y, Mena O.
 LABIOFAM Entrepreneurial Group, Havana, Cuba.
- PACH-72 CONTENT OF SOLIDS OF CAESALPINIA VESICARIA L ACCORDING TO THE PART AND AGE OF THE PLANT**
Celorio S¹, Cuellar A², Cuesta A³, Otero E⁴.
¹ Cienfuegos Medical School. ² Drug and Food Institute of Havana University.
³ Cienfuegos Botanical Garden (Atkin´s Garden)
⁴ Experimental Medicinal Farm Plants in La Sierrita, Cienfuegos.
- PACH-73 CHEMICAL CHARACTERIZATION AND INSECTICIDAL ACTIVITY OF THE *OCIMUM BASILICUM* L. LEAVES ESSENTIAL OIL**
Chil I^{1,2,3}, Escalona JC¹, Mendonça PM², Dutok CM^{1,2,3}, Cortinhas LB², de Carvalho MG⁴, Queiroz MMC².
¹ Departamento de Farmacia, Facultad de Ciencias Naturales, Universidad de Oriente, Santiago de Cuba. ² Laboratório de Entomologia Médica e Forense, Instituto Oswaldo Cruz, Rio de Janeiro, RJ, Brasil. ³ Programa de Pós-graduação em Biodiversidade e Saúde, Instituto Oswaldo Cruz/Fundação Oswaldo Cruz, Rio de Janeiro, RJ, Brasil. ⁴ Departamento de Química, Instituto de Ciências Exatas, Universidade Federal Rural do Rio de Janeiro, Brazil.
- PACH-74 INFLUENCED OF EXTRACTION MEDIUM IN THE COMPOSITION OF VOLATILE COMPONENTS OF ZANTHOXYLUM PISTACIFOLIUM GRISEB LEAVES. (RUTACEAE).**
Heredia Y¹, González R², Escalona JC¹, García J¹, de la Vega J².
¹ Departamento de Farmacia, Facultad de Ciencias Naturales, Universidad de Oriente, Santiago de Cuba. ² Centro de Toxicología y Biomedicina (TOXIMED), Universidad de Ciencias Médicas.
- PACH-75 POLYPHENOLIC PROFILE OF *SOLANUM LYCOPERSICUM* FRUITS IRRIGATED WITH STATIC MAGNETIC FIELD**
Ferrer AE¹, Fung Y¹, Gómez LM¹, Lage MA², López J².
¹ National Center of Applied Electromagnetism. Universidad de Oriente, Santiago de Cuba.
² Dpt. Analytical Chemistry, Nutrition and Bromatology. Faculty of Farmacy. Campus Sur s/n. Universidad de Santiago de Compostela, Spain.
- PACH-76 MINERAL CONCENTRATION IN *ROSMARINUS OFFICINALIS* CULTIVATED WITH MAGNETICALLY TREATED WATER, AN ALTERNATIVE AS NUTRITIVE SUPPLEMENT.**
Fung Y¹, Ferrer AE¹, Hendrix S², Gómez L¹, Cuypers A².
¹ Centro Nacional de Electromagnetismo Aplicado, CNEA. Universidad de Oriente, Santiago de Cuba, Cuba. ² Center for Environmental Sciences, Hasselt University, Belgium.
- PACH-77 PROCEDURE TO CHARACTERIZE PURIFIED HEME SOLUTIONS USING PHISICAL, CHEMICAL AND SPECTROSCOPIC METHODS**
González M¹, Gómez JA², Otero Y¹, Revilla Y¹.
¹ Laboratorio de Investigaciones, Centro Nacional de Biopreparados, Bejucal, Mayabeque, Cuba. ² Centro de Inmunología Molecular, Playa, Havana, Cuba.
- PACH-78 PHYTOCHEMICAL EVALUATION AND ESTIMATION OF THE CONTENT OF POLYPHENOLS AND FLAVONOIDS IN HYDROALCOHOLIC EXTRACTS OF MULBERRY (MORERA) LEAVES HARVESTED IN CUBA**
Almora E¹, Lago V¹, González K², Callicó A¹, Bolaños G², Valdéz O², Echemendía O¹, Adames Y¹, Monteagudo R¹, Fidalgo O¹, Morales Y¹.
¹ Instituto Finlay, Playa, La Habana, Cuba.
² Centro de Bioproductos Marinos (CEBIMAR), Plaza, La Habana, Cuba.
- PISI-79-83 INFORMÁTICA E INFORMACIÓN CIENTÍFICA / INFORMATIC AND SCIENTIFIC INFORMATION**
- PISI-79 NATURAL ANTIOXIDANT COUMARINS: QSAR APPROACHES REGARDING THEIR GENOTOXICITY**
Guardado E^{1,2}, Molina E^{1,2}, Abreu OA¹, Santana L², Uriarte E², Matos MJ².
¹ Universidad de Camagüey "Ignacio Agramonte y Loynaz", Cuba.
² Universidad de Santiago de Compostela, Santiago de Compostela – España.

- PISI-80 ESSENTIAL RESOURCES AVAILABLE IN TELEMATIC NET OF HEALTH IN CUBA FOR NATURE MEDICINE**
Delgado I¹, Lara C².
¹ Centro Nacional de Información Ciencias Médicas (Infomed)
² Dirección Nacional de Medicamentos y Tecnologías Sanitarias, MINSAP; La Habana, Cuba.
- PISI-81 MULTIMEDIA: "TRADITIONAL AND NATURAL MEDICINE IN PRIMARY HEALTH CARE", AN USEFUL TOOL IN PRIMARY HEALTH CARE.**
García M, Durán Y.
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NOTAS