

CURRICULUM VITAE

FORMATO EUROPEO/EUROPEAN FORMAT

INFORMAZIONI PERSONALI/ PERSONAL INFORMATION

Nome, Cognome/Name, Surname **Prof. C. Angel SANCHEZ LAMAR**
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Via, numero civico, c.a.p., città, Habana – Cuba,
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E-mail angel.sanchez@fbio.uh.cu; angelsanchezlamar@gmail.com
Sito web/Website
Nazionalità/Nationality **Cubana**
Luogo e data di nascita/ Place and Habana – Cuba (08/02/1958)
Date of birth

ESPERIENZA PROFESSIONALE/ WORK EXPERIENCE

Se dipendente CNR indicare: N. MATRICOLA
QUALIFICA
LIVELLO

In ordine di data /Dates (from – to) *January 2000 - Present*

[Iniziare con le più recenti ed elencare separatamente ciascun incarico ricoperto/ Add separate entries for each relevant post occupied, starting with the most recent.]

Nome e indirizzo del datore di lavoro *Biology Faculty – University of La Habana- Cuba.*
/ Name and address of employer
Tipo o settore di attività / Type of *Research in Genetic Toxicology and Genetic Didactic*
business or sector
Funzione o posto occupato / *Signor Professor of Genetics and Consultant Professor of University of La*
Occupation or position held *Habana-Cuba*
Principali mansioni e responsabilità / *Head of the Vegetal Biology Department and Genetic Toxicology Laboratory*
Main activities and responsibilities

ISTRUZIONE E FORMAZIONE / EDUCATION AND TRAINING

In ordine di data /Dates (from – to)	
[Iniziare con le più recenti ed elencare separatamente ciascun corso frequentato con successo/ Add separate entries for each relevant course you have completed, starting with the most recent.]	
Nome e tipo d'istituto di istruzione o formazione / Name and type of organisation providing education and training	Biology Faculty – University of Havana- Cuba Institute of Genetics, Sapienza University of Rome - Italy.
Principali materie e competenze professionali apprese / Principal subjects occupational skills covered	44 years of teaching experience both in pre- and post-degree courses. Head of the Department of General Genetics Head of the Department of Plant Biology Head of the Toxicological Genetics Laboratory Senior Lecturer in Toxicological Genetics Scientific supervisor in Degrees, Masters and PhD works
Certificato o diploma ottenuto /Title of qualification awarded	PhD in Biological Sciens
Livello nella classificazione nazionale o internazionale / Level in National classification	High level: Full Professor and Professor Emeritus of Havana University

ATTIVITA' DI RICERCA / RESEARCH ACTIVITIES

Attuali campi di ricerca / Research sectors	Analysis of genotoxicity, apoptosis and cell cycle modulation in human cell lines treated with medical plant extracts commonly used in traditional Cuban medicine. Antimutagenesis activity exerted by phytochemical components against DNA damage induced by chemicals and physical mutagens in <i>in vitro</i> mammal cells Genotoxicity and antimutagenicity exerted by plants of Cuban endemic <i>Phyllanthus</i> species in experimental models as plasmidial DNA and cell lines <i>in vitro</i> Cytofluorimetric analysis of antioxidant activity of <i>Halimeda incrassata</i> , <i>Halimeda oppuntia</i> , <i>Galaxaura</i> y <i>Bryothamnion triquetrum</i> aqueous extracts Analysis of cytotoxic and genotoxic effects of environmental water pollution by industrial residues in La Habana rivers.
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Cytotoxic and genotoxic related to 2,4,6-trihydroxyphenantrene generated after resveratrol UV exposition.

Antimitotic activity exerted by *Xanthium strumarium* extract in cancer cells lines and tumoral *in vivo* models.

Photoprotective effects of Cuban endemic *Phyllanthus* plants aqueous extracts on UV radiation-induced DNA damage.

**ULTERIORI INFORMAZIONI /
ADDITIONAL INFORMATION**

Direzione di progetti di ricerca:

1. Proyecto CAPES / MES No. 027/07, "Extracts of plants as source of protective agents of DNA damage induced by ultraviolet light" (Concluded in April 2007).
2. Project CAPES / MES No. 065-09, Extracts of the species *Phyllanthus orbicularis* and *Cymbopogon citratus* as protective agents of DNA against ultraviolet radiation: mechanisms of action (Concluded in April 2009).
3. CITMA Territorial Project, "Genotoxic evaluation and bioindicators of pollution in the Cojimar river" (Concluded in April 2010).
4. Collaborative project with Italy, "Studio dell'azione citostatica di estratti di piante endemiche cubane" (2009-2011).
5. Collaboration project with Terza University of Rome, "Study of the cytostatic action of the sesquiterpenes of Cuban plants *Xanthium strumarium* and *Tamarindus indica*" (2012-2013).
6. Collaboration project CAPES / MES No. 187-13, "The phytochemical components of the *Phyllanthus orbicularis* Kunth species as agents capable of reducing the photolysis produced by DNA, ultraviolet radiation: mechanisms of action" (2014-2016). USP, Sao Paulo, Brazil.
7. Project of the National Program of Basic Sciences "Contribution to the knowledge of the molecular mechanisms of action of compounds, isolated from plants, in the protection of the integrity of DNA against environmental mutagens" (2017-2019). Biology Faculty, Havana University, Cuba.
8. Project of the National Program of Basic Sciences of Ministry of Science, Technology and Environment : PN223LH010-030 « Natural products as a source of useful agents in the chemoprevention and chemotreatment of UV light-induced conditions ». (2021-2023). Biology Faculty, Havana University, Cuba.
9. Project of the National Program of Basic Sciences of Ministry of Science, Technology and Environment : " PN223LH010-063 "Characterization of plant compounds as DNA photoprotective agents: potential for use as sunscreens"" (2024-2026). Biology Faculty, Havana University, Cuba.

1. Piloto-Ferrer J., Sánchez-Lamar A., Francisco M., González M.L., Merino N., Aparicio G., Pérez C., Rodeiro I., Paz M.T. Xanthium strumarium's xanthatins induces mitotic arrest and apoptosis in CT26WT colon carcinoma cells. *Phytomedicine* 57 (2019) 236–244. IF: [4.18](#)
2. Franciosa A., Mosca L., Menéndez-Perdomo I., Fanelli S., Fontana M., D'Erme M., Fuentes-Leon F., Sánchez-Lamar A. 2,4,6-Trihydroxyphenanthrene, a trans-resveratrol photoreaction by product: First evidences of genotoxic risk. *Phytochemistry Letters* 30 (2019), 362–366. IF: [1.338](#)
3. Francioso A., Franke K, Villani C., Mosca L., D'Erme M., Frischbutter S., Brandt W., Sánchez-Lamar A., Wessjohann L. Insights into the Phytochemistry of the Cuban Endemic Medicinal Plant *Phyllanthus orbicularis*: Fideloside, a Novel Bioactive 8-C-glycosyl 2,3-Dihydroflavonol. *Molecules* (2019), 24, 2855; doi:10.3390/molecules24152855. IF: [3.06](#)
4. Castanedo L.A.M., Sánchez-Lamar A., Morera C., de la Nuez A., Matta C.F. Genoprotectio by complexation: The case of *Phyllanthus orbicularis* K extract. *Computational and Theoretical Chemistry* 1164 (2019) 112555. IF: [1.49](#)
5. Fuentes-León F.*, Peres de Oliveira A., Quintero-Ruiz N., Munford V., Satoru G., Coimbra A., Schuch A., Colepicolo P., Sánchez-Lamar A., Menck C.F.M*. "DNA Damage Induced by Late Spring Sunlight in Antarctica". *Photochemistry and Photobiology* 96(6): 1215-1220 (2020). <https://doi.org/10.1111/php.13307> . FI: 2,721. Grupo I. SJR: 0.81 Q2. H-index: 122.
6. Elías-Llumbet A., I.M. Menéndez-Perdomo, W.E. Miranda-Delgado, A. Sánchez-Lamar*. Caracteres mendelianos: un enfoque integrador para su impartición en cursos de Genética. *Revista Cubana de Ciencias Biológicas* Vol. 9 (1), enero-junio 2021, pp. 1-10. RNPS: 2362 ISSN: 2307-695X.
7. Alpízar-Pedraza D., de la Nuez A., Colina E., Piloto-Ferrer J.*, Sánchez-Lamar A.* Microtubules destabilizing agents binding sites in tubulin. *Journal of Molecular Structure*, Volume 1259, 5 July 2022, 132723. <https://doi.org/10.1016/j.molstruc.2022.132723> .
8. Alpízar-Pedraza D., Nuez A., Álvarez Y.M., Piloto-Ferrer J., Sánchez-Lamar A.*, Xanthatin and 8-epi-xanthatin as new potential colchicine binding site inhibitors: a computational study, *Journal of Molecular Modeling* (2023) 29:36 <https://doi.org/10.1007/s00894-022-05428-w> .
9. Céspedes I, Fuentes-León F, Rodeiro I, Laurencio-Lorca Y, Iglesias MV, Herrera JA, Cuellar C, Caballero V, Pereira L, Cuétara E, Sánchez A, Fernández MD, Núñez RR, Hernández-Balmaseda I, Ortiz E (2023) Kinetic characterization, antioxidant and in vitro toxicity potential evaluation of the extract M116 from *Bacillus amyloliquefaciens*, a Cuban southern coast marine microorganism. *J Pharm Pharmacogn Res* 11(4): 547– 556. <https://doi.org/10.56499/jppres23.1574> [11.4.547](#)
10. Fuentes-Leon F.*, Quintero-Ruiz N., Fernandez-Silva F.S., Munford V., Vernhes M., Martins Menck C.F., Galhardo R.S., Sanchez-Lamar A.* Genotoxicity of ultraviolet light and sunlight in the bacterium *Caulobacter crescentus*: Wavelength-dependence. *Mutation Research - Genetic Toxicology and Environmental Mutagenesis* 894 (2024) 503727 <https://doi.org/10.1016/j.mrgentox.2024.503727>

- Biojoven Workshop: “DNA damage induced by solar irradiation” (Oral presentation). April 2019. Havana, Cuba.
 - University Workshop on Epistemologies of the 20th and 11th Centuries. “Assessment of Mendel's work from an epistemological perspective” (Oral presentation). May 9, 2019. Havana, Cuba.
 - 5th International Meeting of Pharmaceutical and Food Sciences (EICFA 2019), May 15-17, 2019, Havana, Cuba.
 - “In silico study of interactions between Xanthanolides and the destabilizing binding pocket Colchicine in tubulin” (Oral presentation).
 - “Cuban Flora Species as a Potential Source of DNA Protective Compounds” (Poster).
 - VII International Symposium of Pharmaceutical Sciences 2019 (SICF 2019), June 24-28, 2019, Santa Clara, Cuba:
 - “Hydroxyl radical scavenger mechanisms by 2,4-di-tertbutylphenol and 2,6-di-secbutylphenol phytochemicals: a computational study” (Poster).
 - “Cuban Flora Species As A Potential Source Of DNA Protective Compounds” (Poster).
 - “Evaluation of Genotoxic and DNA Photoprotective Activity of Bryothamnion triquetrum and Halimeda incrassata Seaweeds Extracts” (Poster). 12^{mo} Seminario de Estudios Avanzados en el Diseño Molecular y la Bioinformática (SEADIM): “*In silico* study of interactions between Xanthanolides and the destabilizing binding pocket in tubulin” (Poster). 26-28 de Junio, 2019, Santa Clara, Cuba.
 - II International Workshop on new trends and applications for high-performance computing platforms: SICAR 2019. “Performance evaluation of different architectures in molecular dynamics simulations of biological systems” (Poster). September 24-26, 2019, Matanzas, Cuba.
 - I International Symposium CIDEM 2022, November 28 to December 1, 2022. Hotel Meliá Varadero, Varadero, Matanzas, Cuba. Presentation:
 - Saber UH. International Symposium on Biotechnology and Biomedicine: from the University to the Company. Presentations:
 - A modified workflow using *Caulobacter crescentus* to study the genotoxicity induced after a unique exposure to a damaging agent. Authors: Fabiana Fuentes León, Rodrigo Galhardo, Carlos Frederico Martins Menck, Ángel Sánchez-Lamar.
 - Computational analysis of the nature of the interactions between the allosteric inhibitor (2R, 3R)-(-)-3',4',5,7-tetrahydroxydihydroflavonol-8-C-β-D-glucopyranoside and the kinesin Eg5. Authors: Jennifer Suárez, Daniel Alpízar-Pedraza, Enrique Colina, Ángel Sánchez-Lamar.
 - Genotoxicity of hydroalcoholic extracts of *Urera baccifera* (L.) Gaudich. Ex Wedd. in in vitro biomodels. Authors: Laura Sánchez, Banessa Falcón, Fabiana Fuentes-León, Luis A. Garcés, Janet Piloto-Ferrer, Ángel Sánchez-Lamar.
 - *Plectranthus amboinicus* (Lour.) Spreng. and *Serjania subdentata* Juss. Ex Radlk: sources of genoprotective compounds against ultraviolet radiation. Authors: Carmen Yismaura Ban-de, Claudia Rodríguez, Banessa Falcón, Janet Piloto-Ferrer, Angel Sánchez-Lamar, Iraida Spengler.
- XIV INTERNATIONAL CONVENTION ON ENVIRONMENT AND DEVELOPMENT 2023. II CONGRESS ON GEOSPATIAL SCIENCES

AND DISASTER RISK. Tuesday, July 4. MEMORIES MIRAMAR Hotel, Havana, Cuba. Presentations:

- Monitoreo del daño al ADN inducido por la radiación UV solar en La Habana (23o03'17.4''n, 82o17'03.0''w). Autores: Angel Sánchez-Lamar, Luis Alejandro Garcés Guzmán, Fabiana Fuentes-León, Marioly Verhnes Tamayo, Janet Piloto-Ferrer.
- Daño en el ADN inducido por la luz solar ultravioleta. Autores: Fabiana Fuentes León, Frank S. Fernández Silva, Nathalia Quintero Ruiz, Veridiana Munford, Rodrigo S. Galhardo, Carlos Frederico Martins Menck, Ángel Sánchez-Lamar.
- **V Convención Científica Internacional UCIENCIA 2023. I Taller Internacional de Biología Computacional y Bioinformática. 27 al 29 de Sept., Hotel Meliá Internacional Varadero, Matanzas, Cuba. Ponencia:**
 - Análisis computacional de la naturaleza de las interacciones entre el inhibidor alostérico (2R, 3R) -(-)-3', 4', 5, 7-tetrahidroxidihidroflavonol-8-C-β-D-glucopiranosido y la quinesina Eg5. Autores: Jennifer Suárez Niebla, Ángel Sánchez-Lamar, Enrique Colina Araújo and Daniel Alpízar-Pedraza.
- **Fapronatura 2024. International Congress on Pharmacology of Natural Products. Cuban Society of Pharmacology, June 10-14, 2024:**
 - Phytochemical screening, genotoxicity and photoprotective capacity of extracts and fractions obtained from *Urera baccifera* (L.) Gaudich Ex. Wedd. Autores: Sánchez L., García T., Fuentes-León F., Spengler I., Caridad Pérez, Sánchez-Lamar A. (Ponencia oral).
 - *Plectranthus amboinicus* (lour.) Spreng. As a protector of DNA against uv radiation. Autores: Bande C.Y., Sánchez L., Fuentes-León F., Vernhes M., Falcón B., Spengler I., Piloto-Ferrer J., Sánchez-Lamar A. (Ponencia oral).
 - Alternative models used for assessing the genotoxicity of natural products. Autores: Fuentes León F., Vernhes M., Sánchez-Lamar A., Piloto J. (Ponencia oral).
 - *Phyllanthus orbicularis* Kunth: sources of phytochemicals with photoprotective properties. Autores: Vernhes M., Francioso A., Schuch A., Spengler I., García T., Menck CF., Fuentes-León F., Sánchez-Lamar A. (Ponencia oral).
 - "Interactions between different molecular targets and fideloside that show the antimutagenic properties of *Phyllanthus orbicularis* extract: Computational Approach". Autores: Suárez J., Perurena R., Colina E., Alpízar D., Sánchez-Lamar A. (Ponencia oral).
- **QUIMICUBA 2024, Convention Center, Havana, Nov. 2-5**
 - "Identification of the major metabolites in the ethyl acetate and n-butanol extracts of *Urera baccifera* leaves by UPLC-ESI-MS". Authors: Arael Suárez García, Laura Sánchez, Fabiana Fuentes, Ángel Sánchez, Caridad E Pérez, Irida Spengler, Trina Haydee García (Poster).
 - "In vitro genotoxicity of extracts of *Urera baccifera* (L.) Gaudich Ex. Wedd obtained from two different collections. Authors: Sánchez Hechavarría L., García Pérez T.H., Suárez García A.J., Spengler Salabarría I., Fuentes-León F., Sánchez-Lamar A. (Oral presentation).
 - "The action of the phytochemical Fideloside in the protection of DNA against mutagenicity induced by aromatic amines: in silico modelling". Authors: Illañez C., Perurena R., Alfonso D., Sánchez-Lamar A. (Poster).
 - "The phytochemical Fideloside as a potential inhibitor of cytochrome CYP1A and CYP1A2. A computational study". Authors: Alfonso D., Perurena R., Illañez C., Sánchez-Lamar A. (Poster).
 - "*Plectranthus amboinicus* (lour.) Spreng.: source of DNA-protecting compounds against ultraviolet radiation". Authors: Bande Carballo Y.,

- Fuentes-León F., Vernhes Tamayo M., Falcón Hidalgo B., Spengler Salabarría I., Piloto-Ferrer J., Sánchez-Lamar A. (Poster).
- “Antimutagenic multifunctionality of plant-derived compounds”. Authors: Sánchez-Lamar A., Vernhes Tamayo M., Fuentes-León F. (Oral presentation).
 - **II Simposio Internacional del CIDEM**, Varadero, Cuba, 25 – 28 Nov.
 - “Experimental evidence of the antimutagenicity of *Phyllanthus orbicularis* extract against promutagenic aromatic amines”. Autores: Sánchez-Lamar A., Vernhes-Tamayo M., Fuentes-León F. (Ponencia oral).
 - “Genoprotection by inhibition of cytochrome cyp1a1 and cyp1a2: the case of the flavonoid fideloside”. Autores: Alfonso-García D., Perurena-García R., Illañez-Salomón C., Sánchez-Lamar A. (Ponencia oral).
 - “A direct mechanism of genoprotective action of fideloside”. Autores: Illañez-Salomón C., Perurena-García R., Alfonso-García D., Sánchez-Lamar A. (Ponencia oral).

Elenco delle posizioni di visiting professor assegnate

- “- At Cuenca University, Ecuador, in 2007.
-
- At Institute of Biomedical Sciences of Sao Paulo University, Brazil, in 2009.
- A- At “Roma Tre University”, in 2013.
- At “Roma Tre University”, in 2015.
- At “Sapienza University of Roma”, in 2017.

**TRATTAMENTO DEI DATI
PERSONALI, INFORMATIVA E
CONSENSO**

Il D.Lgs. 30/6/2003, n. 196 “*Codice in materia di protezione dei dati personali*” regola il trattamento dei dati personali, con particolare riferimento alla riservatezza, all’identità personale e al diritto di protezione dei dati personali; l’interessato deve essere previamente informato del trattamento .

La norma in considerazione intende come “trattamento” qualunque operazione o complesso di operazioni concernenti la raccolta, la registrazione, l’organizzazione, la conservazione, la consultazione, l’elaborazione, la modifica, la selezione, l’estrazione, il raffronto, l’utilizzo, l’interconnessione, il blocco, la comunicazione, la diffusione, la cancellazione e la distruzione di dati, anche se non registrati in una banca dati.

In relazione a quanto riportato, autorizzo il CNR al trattamento dei dati contenuti nel presente *curriculum vitae* e nella documentazione della quale fa parte integrante, sollevandolo da ogni responsabilità e autorizzandolo alla pubblicazione, nel sito web del CNR, della relazione inerente alle proprie ricerche svolte durante il soggiorno finanziato dal CNR nell’ambito del Programma STM . Inoltre acconsento all’aggiornamento delle informazioni intranet che mi riguardano sia relative le pubblicazioni sia alle ricerche svolte.

(*barrare la casella*)

Si, acconsento