

Guillermo de Anda Jáuregui

Current Position

2016–to date **Research Fellow**, *University of North Dakota*, School of Medicine and Health Sciences.

Education

2011– 2016 **Ph.D. Program in Biomedical Sciences (*Doctorado en Ciencias Biomédicas*)**, *Universidad Nacional Autónoma de México*, Instituto Nacional de Medicina Genómica.

Project: Search of pharmacological targets associated to breast cancer molecular subtypes.

2005–2010 **Bachelor's degree in Pharmaceutical Chemistry**, *Universidad Nacional Autónoma de México*, Facultad de Química, Graduated with honors.

Publications

2016 **G de Anda-Jáuregui, TE Velázquez-Caldelas, J Espinal-Enríquez, E Hernández-Lemus**, *Transcriptional Network Architecture of Breast Cancer Molecular Subtypes*, *Frontiers in Systems Biology*.

2015 **G de Anda-Jáuregui, RA Mejía-Pedroza, J Espinal-Enríquez, E Hernández-Lemus**, *Crosstalk events in the estrogen signaling pathway may affect tamoxifen efficacy in breast cancer molecular subtypes*, *Computational Biology and Chemistry*.

2012 **H Jung-Cook, G de Anda-Jáuregui, K Rubio-Carrasco, L Mayet-Cruz**, *Comparación de perfiles de disolución. Impacto de los criterios de diferentes agencias regulatorias en el cálculo de f_2* , *Revista Mexicana de Ciencias Farmacéuticas*.

Teaching

Pharmaceutical Chemistry program

2014– current **Biopharmacy laboratory**, *Universidad Nacional Autónoma de México*, Facultad de Química.

Research interests

Systems and network biology

Identification of pharmacological targets for complex diseases based on systems biology approaches

Classification algorithms for heterogeneous diseases

Pathway deregulation in complex diseases

Crosstalk phenomena in biological networks

Breast cancer
Diabetes

Computer Skills

Proficient in R, PYTHON

Bioinformatic Techniques

Microarray processing
Differential expression analysis
Pathway enrichment analysis
Breast cancer molecular subtyping
Transcriptional network inference
Module detection in transcriptional networks

Experimental techniques

High performance liquid chromatography - Mass Spectrometry
Bioanalytical method development and validation
Differential scanning calorimetry
Pharmacological and pharmacokinetic evaluation in mouse and rat models

Conferences

- 2016 **Community Structure in Transcriptional Networks of Breast Cancer Molecular Subtypes**, *Poster*, 2nd International Summer Symposium, Instituto Nacional de Medicina Genómica.
- 2015 **A systems biology approach for the search of breast cancer pharmacological targets**, *Poster*, 1st Student Gathering, Instituto Nacional de Medicina Genómica.
- 2015 **Effects of pathway crosstalk in the therapeutic efficacy of antiestrogenic treatment for breast cancer**, Symposium: Advances and Perspectives in Medicinal Chemistry, Taxco, Guerrero.
- 2015 **Crosstalk events in the estrogen signaling pathway that affect tamoxifen efficacy in different subtypes of breast cancer**, Institutional Seminar, Instituto Nacional de Medicina Genómica.
- 2013 **Pharmacokinetic evaluation of a new compound with cysticidal activity**, XXVIII Annual Research Reunion, Instituto Nacional de Neurología y Neurocirugía.
- 2013 **Pharmacological evaluation of a new compound with antiparasitic activity**, *Poster*, Research Week, Facultad de Química-UNAM.
- 2012 **Development of an analytical method for the quantification of a new compound with antiparasitic potential**, 2nd Graduate Student Congress, UNAM.

Thesis committee participation

- 2016 Beatriz Chantey Herrera Blancas, pharmaceutical chemistry program, Facultad de Química, UNAM
- 2016 Emmanuel Salvador Vilchiz Noguez, pharmaceutical chemistry program, Facultad de Química, UNAM
- 2016 Hernandez Mendoza Adriana Guadalupe, pharmaceutical chemistry program, Facultad de Química, UNAM
- 2016 Sofía Cortés Molina, pharmaceutical chemistry program, Facultad de Química, UNAM
- 2016 Alan Giovanni Gómez Cano, pharmaceutical chemistry program, Facultad de Química, UNAM

Scholarships and awards

- 2011-2016 Doctoral grant 324432 - CONACYT(MEXICO)
- 2009 Student Exchange scholarship - UNAM / UCLA
- 2006-2009 High Achievement Academic Program (*Programa de Alta Exigencia Académica*)-UNAM

Languages

- Spanish **Native**
- English **Advanced** *Cambridge Certificate in Advanced English (CEFR Level C1)*
- French **Basic**