

# CURRICULUM VITAE – LUIS SORDO VIEIRA, PH.D.

## CONTACT

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## EMPLOYMENT

### Research Assistant Professor

March 2020-Present

Division of Pulmonary, Critical Care and Sleep Medicine, Department of Medicine, University of Florida

### Postdoctoral Associate [The Jackson Laboratory For Genomic Medicine](#)

Jul. 2018 - March 2020

Principal Investigator : Reinhard Laubenbacher, Ph.D.

- Main project : Mathematical modeling of immunity in invasive aspergillosis.

### Postdoctoral Fellow I [Center for Quantitative Medicine, UConn Health](#)

Jul. 2017 - Jun. 2018

Principal Investigator : Paola Vera-Licona, Ph.D.

- Main project : Mathematical analysis of intracellular signaling networks, Cytoscape app development for analyzing signaling networks.
- Secondary project : Multiscale mathematical modeling of cancer.

## EDUCATION

**Ph.D.** Mathematics, University of Kentucky, *G.P.A.* : 4.0/4.0.

Aug. 2012 - May 2017

*Dissertation* : On  $p$ -adic fields and  $p$ -groups.

*Advisor* : Dr. David B. Leep

*Minor Areas* : Algebraic Topology, Numerical Analysis.

**M.A.** Mathematics, University of Kentucky, *G.P.A.* : 4.0/4.0.


Aug. 2012 - Dec. 2014





**B.S.** Mathematics, Wayne State University, *G.P.A.* : 3.96/4.0.

Aug. 2009 - May 2012

*Minor* : Physics.

## JOURNAL ARTICLES

Authorship order of entries with trailing  is guided by an ascending alphabetical order.

1. **Luis Sordo Vieira**, Reinhard C. Laubenbacher, David Murrugarra, *Control of Intracellular Molecular Networks Using Algebraic Methods*, Bull Math Biol 82 : 2 (2020).
2. David B. Leep and **Luis Sordo Vieira**, *Diagonal equations over unramified extensions of  $\mathbb{Q}_p$* . Bull. London Math. Soc. V. 50, N. 4, (2018). 
3. Ping Ngai Chung, Miguel A. Fernandez, Niralee Shah, **Luis Sordo Vieira**, *Are circles isoperimetric in the plane with density  $e^x$ ?*, Rose-Hulman Undergraduate Mathematics Journal V. 16, N. 1, (2015). 
4. Ping Ngai Chung, Miguel A. Fernandez, Niralee Shah, **Luis Sordo Vieira**, Elena Wikner, *Perimeter-minimizing pentagonal tilings*, Involve, V. 7, N. 4, (2014). 
5. Ping Ngai Chung, Miguel A. Fernandez, Yifei Li, Michael Mara, Frank Morgan, Isamar Rosa Plata, Niralee Shah, **Luis Sordo Vieira**, Elena Wikner, *Isoperimetric pentagonal tilings*, Notices Amer. Math. Soc. 59, N. 5, (2012). 

## PREPRINTS

1. **Luis Sordo Vieira**, Paola Vera-Licona, *Computing Signal Transduction in signaling networks modeled as Boolean Networks, Petri Nets and hypergraphs*, bioRxiv 272344.

## NON-SCIENTIFIC WRITING

1. Pamela E. Harris, Alicia Prieto Langerica, Vanessa Rivera Quiñones, **Luis Sordo Vieira**, Rosaura Uscanga, and Andrés R. Vindas Meléndez *2020 Lathisms : Latinxs and Hispanics in the Mathematical Sciences*, Notices Amer. Math. Soc., N. 9, (2020) to appear.
2. **Luis Sordo Vieira**, *Reflections of a First Year Postdoc*, Notices Amer. Math. Soc. V. 65, N. 8, (2018).
3. **Luis Sordo Vieira**, *Why care about the American Association for the Advancement of Science as an early-career mathematician?* Capital Currents Blog, American Mathematical Society, March, 21, 2019.
4. Pamela E. Harris, Guadalupe Lozano, Alicia Prieto-Langerica and **Luis Sordo Vieira**, *Lathisms in Focus*, June 2019.
5. Pamela E. Harris, Alicia Prieto-Langerica and **Luis Sordo Vieira**, *2019 Lathisms : Latinxs and Hispanics in the Mathematical Sciences*, Notices Amer. Math. N. 9, (2019)
6. **Luis Sordo Vieira**. "Policy Brief on National Biodefense Strategy" Duke SciPol, available at available at <https://scipol.org/track/dcpd-201800607-statement-national-biodefense-strategy/national-biodefense-strategy> (4/3/2019).

7. **Luis Sordo Vieira.** "Policy Brief on Opportunities Exist for the National Institutes of Health to Strengthen Controls In Place to Permit and Monitor Access to its Sensitive Data" Duke SciPol, available at <https://scipol.org/track/opportunities-exist-national-institutes-health-strengthen-controls-place-permit-and-monitor-0> (5/15/2019).
8. **Luis Sordo Vieira.** "Policy Summary on Federal Health IT Strategic Plan" Duke SciPol, available at <https://scipol.org/track/federal-health-it-strategic-plan-2020-2025-draft>

#### AWARDS AND HONORS

<b>Science Policy Fellowship</b> , Society for Industrial and Applied Mathematics.	<i>Spring 2019</i>
<b>Fellowship to Attend Cancer Systems Biology Workshop</b> , Center for Complex Biological System, UC Irvine.	<i>Fall 2018</i>
<b>Featured Mathematician in the Lathisms Project</b> , Lathisms/American Mathematical Society.	<i>Fall 2018</i>
<b>Featured Mathematician in the NextGen Project</b> , American Mathematical Society.	<i>Fall 2018</i>
<b>Mathematics Class of 1960s Invited Speaker</b> , Williams College.	<i>Fall 2018</i>
<b>2nd place in Speak4Science Competition</b> , UConn Health-The Jackson Laboratory Postdoc Research Day.	<i>Fall 2018</i>
<b>Reedy Award</b> , University of Kentucky.	<i>Fall 2012</i>
<b>Outstanding Undergraduate Award</b> , Wayne State University Mathematics Department.	<i>Spring 2012</i>
<b>Ron Mosier Memorial Award for Outstanding Undergraduate Presentation</b> , Mathematical Association of America, Michigan Sectional.	<i>Spring 2011</i>

#### RESEARCH FUNDING

<b>American Mathematical Society-Simons Foundation Travel Grant</b>	<i>Fall 2019</i>
<b>National Science Foundation Graduate Research Fellowship Grant N. 1247392</b>	<i>2013-2016</i>

#### FUNDING FOR OUTREACH

<b>Tensor-SUMMA Grant (Co-I)</b> Lathisms : Latinxs and Hispanics in the Mathematical Sciences	<i>2019-2020</i>
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#### WORKSHOPS AND TRAINING

Computational Psychiatry Workshop, Institute for Pure and Applied Mathematics	<i>Spring 2020</i>
Data Carpentry Certified Instructor, The Carpentries Foundation.	<i>Fall 2019</i>
MiniCourse : Beyond Genes : Epigenetics, Environment, and Health, The Jackson Laboratory.	<i>Fall 2019</i>
Evolutionary Dynamics in Cancer Workshop, Mathematical Biosciences Institute, The Ohio State.	<i>Fall 2019</i>
Machine Learning with Scikit, The Jackson Laboratory.	<i>Fall 2019</i>
3-Week Intensive Course in Cancer Systems Biology, CCBS UC Irvine.	<i>Spring 2019</i>
Data Visualization Workshop, The Jackson Laboratory.	<i>Spring 2019</i>
Introduction to High Performance Computing, The Jackson Laboratory.	<i>Fall 2018</i>
Microbiome Community Analysis, The Jackson Laboratory.	<i>Fall 2018</i>
Bioconductor for RNAseq Analysis, The Jackson Laboratory.	<i>Fall 2018</i>
MiniCourse Basics of Mouse Genetics, The Jackson Laboratory.	<i>Fall 2018</i>
MiniCourse Basics of CRISPR/Cas9, The Jackson Laboratory.	<i>Fall 2018</i>
27th Annual Course on Experimental Models of Human Cancer, The Jackson Laboratory.	<i>Fall 2018</i>
Character Theory Workshop, Mathematical Sciences Research Institute.	<i>Summer 2016</i>
Summer School on Arithmetic, Groups and Analysis, Centre International de Mathematiques Pures et Appliquees.	<i>Fall 2015</i>
Algebraic Topology Workshop, Mathematical Sciences Research Institute.	<i>Summer 2013</i>

SELECTED  
PRESENTATIONS

Matemáticas y Medicina, Fundación Panameña para la promoción de las matemáticas, <b>Invited Speaker</b>	Summer 2020
Investigating the role of iron via a mathematical model, Blackwell-Tapia Conference, ICERM.	Fall 2018
A computational method for investigating the connections between tumor-associated macrophages' polarization and iron metabolism, Biomathematics and Ecology Education Research Symposium, <b>Invited Speaker.</b>	Fall 2018
Modeling Macrophages' Iron Handling Applied Mathematics Seminar, <b>Invited Speaker</b> , University of Kentucky.	Fall 2018
Mathematics for Breast Cancer Research : Investigating the Role of Iron, <b>Mathematics Class of 1960s Invited Speaker</b> , Williams College.	Fall 2018
A multiscale agent-based model of tumor growth to investigate the role of iron, Latin@s in the Mathematical Sciences, IPAM.	Spring 2018
On Artin's Conjecture Algebraic Geometry and Number Theory Seminar, <b>Invited Speaker</b> , Clemson University.	Spring 2017

HIGHLIGHTED  
SERVICE

Co-organizer for Mathematics Summer Workshop for Achieving Greater Graduate Educational Readiness (SWAGGER)	Summer 2020
Co-organizer for Career Fair at The Jackson Laboratory	Fall 2019
Reviewer for Gene, MDPI Process, and PLOS Comp. Biology.	2019 - Present
UConn Health and The Jackson Laboratory Postdoctoral Association President.	2019 - Present
External member of Duke SciPol Writers Studio.	Spring 2019-Present
Lathisms.org Leadership Team.	Spring 2019-Present
The Jackson Laboratory Public Tour Guide.	Fall 2018
The Jackson Laboratory Librarian Hiring Committee.	Fall 2018
The Jackson Laboratory Q & A Faculty Panel Organizer.	Fall 2018
The Jackson Laboratory Roundtable on Science Policy Organizer.	Fall 2018
UConn Health and The Jackson Laboratory Postdoctoral Association Vice President.	2018 - Present
UConn Health and The Jackson Laboratory Postdoctoral Association Interim Secretary.	2017 - 2018
UConn Health Postdoc Research Day Organizing Committee.	2018, 2019
Underrepresented Students in Topology and Algebra Research Symposium, Invited Mentoring Panel member.	Spring 2018
Judge for UConn Health Medical Student Poster Presentation.	Spring 2018
Judge for Joint Mathematics Meetings Undergraduate Poster Presentation.	Spring 2017
Mentor and reading leader for incoming Graduate Students.	Fall 2016
University of Kentucky Day for Women in Mathematics Presenter.	Fall 2015
Mathematics Graduate Student Council Colloquium Organizer.	Spring 2013

TEACHING

<b>University of Kentucky</b> , Instructor for Linear Algebra, Calculus III.	Spring 2017, 2016, Fall 2014
<b>University of Kentucky</b> , Calculus for Life Sciences, Teaching Assistant.	Fall 2016
<b>University of Kentucky</b> , Calculus I, Online Lecturer.	Summer 2016
<b>University of Kentucky</b> , T.A. Calculus for Business, Calculus II.	Spring 2013, 2014
<b>University of Kentucky</b> , Calculus II, Teaching Assistant.	Spring 2013

PROFESSIONAL  
ORGANIZATIONS

American Association for the Advancement of Science.	2018 - Present
American Association for Cancer Research.	2018 - Present
Society for Mathematical Biology.	2017 - Present
Society For Industrial and Applied Mathematics.	2016 - Present
American Mathematical Society.	2012 - Present