JOSE CORDOBA CHACON, PhD.

Department of Medicine, Section of Endocrinology, Diabetes and Metabolism.

University of Illinois at Chicago

835 S Wolcott Ave (North Entrance), M/C 640. Chicago, IL 60612

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CURRENT POSITION

Assistant Professor (RT, tenure-track starts on 08/16/2018).

08/2018 - present

Department of Medicine. Section of Endocrinology, Diabetes and Metabolism.

College of Medicine. University of Illinois at Chicago (UIC), Chicago, IL.

EDUCATION

Postdoctoral Research Fellow.

2011-2017

Department of Medicine. Section of Endocrinology, Diabetes and Metabolism.

College of Medicine. University of Illinois at Chicago (UIC), Chicago, IL.

Doctor of Philosophy in Science. Biomedicine program.

2007-2011

University of Cordoba (UCO), Cordoba, Spain

<u>Dissertation</u>: Contribution of somatostatin, cortistatin, their receptors and other peptides to the regulation of growth hormone in primates and mice.

Advisors: Justo P. Castano Fuentes, PhD and Raul M. Luque Huertas, PhD

Master of Science in Molecular and Cellular Biotechnology and Genetics.

2006-2007

University of Cordoba (UCO), Cordoba, Spain.

Thesis: Identification of truncated isoforms of somatostatin receptor subtype 5 in rodents.

Advisors: Justo P. Castano Fuentes, PhD

Master of Science in Biochemistry.

2004-2006

University of Cordoba (UCO), Cordoba, Spain.

Bachelor of Science, major in Biology.

2001-2004

University of Cordoba (UCO), Cordoba, Spain

ACADEMIC POSITIONS

Graduate College Faculty.

07/2019- present

Graduate College. University of Illinois at Chicago (UIC), Chicago, IL

Departmental Affiliate.

11/2018- present

Department of Physiology and Biophysics.

College of Medicine. University of Illinois at Chicago (UIC), Chicago, IL.

Assistant Professor (RT, tenure-track).

08/2018 - present

Department of Medicine. Section of Endocrinology, Diabetes and Metabolism.

College of Medicine. University of Illinois at Chicago (UIC), Chicago, IL.

Honors College Fellow.

08/ 2017- present

Honors College. University of Illinois at Chicago (UIC), Chicago, IL.

Visiting Instructor.

04/2017-08/2018

Department of Medicine. Section of Endocrinology, Diabetes and Metabolism.

College of Medicine. University of Illinois at Chicago (UIC), Chicago, IL.

WOC Researcher at Jesse Brown VA Medical Center

2011-present

Research & Development. Jesse Brown VA Medical Center, Chicago, IL.

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Professional Appointments

2014-2017 **Research Scientist**. Department of Medicine. UIC

Awarded with postdoctoral fellowship (2014-2015)

2011-2014 Visiting Postdoctoral Research Fellow. Department of Medicine. UIC.

Awarded with postdoctoral fellowship (2012-2013)

2008 (3mo) Visiting Research Specialist. Department of Medicine. UIC.

Awarded with fellowship (summer 2008)

2007 (3mo) Visiting Research Specialist. Department of Medicine. UIC.

Awarded with fellowship (summer 2007)

2007-2011 **Graduate student (PhD candidate)**. Department of Cell Biology, (UCO, Spain).

Awarded with predoctoral fellowship (2007-2011)

2004-2007 **Research Assistant**. Department of Cell Biology, (UCO, Spain).

Awarded with scholarship (2005-2006)

2005 (2mo) **Research Assistant**. Institute of sustainable agriculture. Cordoba, Spain.

Awarded with scholarship (summer 2005)

2003-2004 **Research Assistant**. Dept. Biochemistry and Molecular Biology. UCO.

Non-salaried.

Professional Memberships and Activities

2020-present	Central Society for Clinical and Translational Research, Milwaukee, WI
2017-present	American Association for the Study of Liver Diseases, Alexandria, VA.
2011-present	Endocrine Society, Washington, DC.
2017-2018	American Gastroenterological Association, Bethesda, MD.
2015-2019	American Diabetes Association, Arlington, VA.
2010-2011	European Society of Endocrinology, Bristol, UK.
2009-2010	Iberic Association of Comparative Endocrinology.

AWARDS AND HONORS (include scholarships and short-term fellowships)

2005-2006	Research Assistant Scholarships.	Ministry of Education, Spain.
2006	Outstanding MS in Biochemistry Award	University of Cordoba, Cordoba, Spain
2007,08	Visiting Research Fellowships.	Institute of Health "Carlos III", Spain.
2011	PhD in Science awarded with European Mention	University of Cordoba, Cordoba, Spain
2012	Outstanding PhD dissertation Award	University of Cordoba, Cordoba, Spain.
2014	Winner of the Presidential Poster Competition.	Endocrine Society, Washington, DC.
2014	Travel Award. Central Society for Clinical & Translational	Research (CSCTR), Milwaukee, WI.
2015	Eugenia Rosemberg Abstract Award	Endocrine Society, Washington, DC.
2018	Early Investigator Award.	Endocrine Society, Washington, DC.
2018	Outstanding Abstract Award	Endocrine Society, Washington, DC.
2019	Travel Award.	CSCTR. Milwaukee, WI.
2020	Early Career Development Award.	CSCTR. Milwaukee, WI.
2020	Young Investigator Award	Obesity & Diabetes Research Day, UIC
2021	Poster of Distinction	AASLD, Alexandria, VA.
2022	Rising Star in Diabetes and Obesity Research	University of Kentucky, Lexington, KY

SERVICE

Editorial Board Appointments

2020-2021 **Board Member** Early Career Reviewer of Endocrinology. Endocrine Society.

2020- **Editorial Board**. BMJ Open Diabetes Research & Care 2022- **Editorial Board**. Endocrinology. Endocrine Society.

2022- **Associate Editor** Frontiers in Endocrinology. Translational Endocrinology.

Committee Assignments and Administrative Services

University service

University of Cordoba. Cordoba. (Spain).

2009 **Scientific committee member.** 1st scientific meeting of trainees in research. (10/15-16/09).

2010-2011 Graduate student representative. Board of Department of Cell Biology, Physiology and

Immunology

University of Illinois at Chicago (UIC), Chicago, IL.

2014-2017 Scientific member. Institutional Animal Care and Use Committee (IACUC)

2017-present Co-chair of Endocrinology Research Grand Rounds. Department of Medicine. Section of

Endocrinology, Diabetes and Metabolism.

2018 Interviewer. Honors College Candidates. (03/02/18)

2018 Organizing committee. Faculty Retreat of the Division of Endocrinology, Diabetes and

Metabolism. (09/04/18)

2019 **Reviewer.** DPI Seed Program, cycle 2. Office of the Vice Chancellor for Research.

2019 **Reviewer.** Fall 2019, Undergraduate Research Awards. Honors College.

2019-present Planning/Organizing Committee. Diabetes and Obesity Research Day.

2019-present Poster Judge. Diabetes and Obesity Research Day. UIC

2019 **Poster Judge.** UIC College of Medicine Research Forum. (11/2/19)

2020 Interviews MD-PhD candidates. UIC Medical Scientist Medical Program. (1/13/20)

2020 Interviews PhD candidates. UIC Graduate Education in Biomedical Sciences (1/24/20)

2022 Co-facilitator of DOM Grant Bootcamp at UIC. "Methods/Approach; Communicating rigor and

transparency". (4/18/2022)

2022- present Associate Director of Communications for the UIC diabetes center.

2022- present Constant Examiner Integrative and Translational Physiology GEMS, UIC

2022-present College Committee on Student Promotions. College of Medicine. University of Illinois.

2022 **Reviewer**. DOM Peer Review of Grant applications. Scholarly Activities Council. (09/2022).

Jesse Brown Veterans Affairs Medical Center, Chicago, IL

2021-present Scientific voting member Institutional Animal Care and Use Committee (IACUC)

PhD Dissertations - PhD Oral Defence Committee

2019-2022 **Thesis committee member**. Kristen Lednovich. GEMS program UIC. (8/28/19). 2022 **Preliminary Exam - chairman**. Chioma Nnyamah. GEMS program UIC. (6/7/22).

(5/2023).

Non-University service

2023

2023

2015	Chair. Poster Preview Presentation. Oral Session. <i>GH, Prolactin and Metabolism</i> . 97 th Annual Meeting of the Endocrine Society. (03/05/2015). San Diego, CA
2017-present	Member. Promoter committee of the Forum UNICO. University of Cordoba, Spain.
2020	Reviewer Abstracts – ENDO2021 Annual meeting of the Endocrine Society
2022	Reviewer Abstracts – ENDO2022 Annual meeting of the Endocrine Society
2022	Reviewer Selected Articles, Environmental Health Perspectives.
	https://ehp.niehs.nih.gov/doi/10.1289/EHP11026
2021	Ad hoc reviewer. Cell Signaling and Molecular Endocrinology Study Section (CSME) -CSR NIH. October 12 th -13 th 2021
2022	Ad hoc reviewer. ZRG1 DKUS A (03) Topics in hepatology CSR NIH. March 17th 2022.
2022	Ad hoc reviewer. Xenobiotic and nutrient disposition and action (XNDA) CSR NIH. June 30th th 2022.
2022	Reviewer . Michigan Nutrition Obesity Research Center (MNORC) Pilot/Feasibility Grant:. (09/2022).
2022	Ad hoc reviewer. ZRG1 KUDS-Y (05) Conflicts in hepatology, pharmacology, and toxicology CSR NIH. Nov 29 th 2022.
2023-present	Trainee member, Liver Cell Biology in Hepatic Diseases . <i>Special Interest Group</i> American Association for the Study of Liver Diseases (AASLD)

2023 Chair. Oral Presentation. Nuclear Receptors: Transcriptional Dynamics and Kinetics. Annual Meeting of the Endocrine Society. 2023. 6/18/2023. Chicago, IL.

Ad hoc reviewer. Cancer Cell Biology (CCB) Study section CSR NIH. February 9-10th 2023.

Reviewer Abstracts – ENDO2022 Annual meeting of the Endocrine Society

External referee PhD Dissertations - PhD Oral Defence Committee

2019	External referee PhD Dissertation. Role of splicing process alterations in the appearance of
	endocrine-metabolic diseases and tumor pathologies. Mercedes del Rio Moreno. University of
	Cordoba, Spain. Advisors: Manuel David Gahete Ortiz, Raul Miguel Luque Huertas.

- External referee PhD Dissertation. Characterization of new regulatory routes of lipid 2020 metabolism in adipocytes Alterations in obesity. Alejandro Fernandez Vega. University of Cordoba, Spain. Advisors: Maria del Mar Malagon Poyato.
- PhD Oral Defense Committee member (12/01/2020). Papel de los microsARNs y la 2020 inflamacion en la pathogenesis de enfermedades autoinmunes. Ivan Arias de la Rosa. University of Cordoba, Spain. Advisors: Nuria Barbarroja, Chary Lopez Pedrera, Carlos Perez Sanchez.
- 2021 External referee PhD Dissertation. Mechanisms of longevity extension and healthy aging by overexpression of cytochrome b5 reductase 3. Sandra Rodriguez Lopez. University of Cordoba, Spain. Advisors: Jose Manuel Villalba, Jose Antonio Gonzalez Reyes, Jose Alberto Lopez Domínguez.
- 2021 External referee PhD Dissertation. Role of intestinal microbiota composition in colorectal cancer and in the response to neoadjuvant radiochemotherapy previous to surgery. Lidia Sanchez Alcoholado. University of Malaga, Spain. Advisors: Maria Isabel Queipo Ortuno. Fernando Cardona Diaz.

2022

External referee PhD Dissertation. Novel molecular insights on the role of splicing dysregulation in cancer.. Emilia Alors Perez. University of Cordoba, Spain. Advisors: Justo Pastor Castano Fuentes and Raul Miguel Luque Huertas

Manuscript reviewer

Reviewer of these journals from 8/16/2018 – 08/07/2023	
Endocrinology	31
Metabolism – Clinical and Experimental	8
JCI Insight	4
Translational Research	3
Plos One	2
Clinical and Translational Gastroenterology	2
Obesity	2
BMJ Open Diabetes Research & Care	1
Case Reports in Endocrinology	1
Cellular and Molecular Gastroenterology and Hepatology	1
Cellular and Molecular Neurobiology	1
European Journal of Pharmacology	1
Journal of Pharmacological Sciences	1
Molecular and Cellular Endocrinology	1
Cell Reports Methods	1
Transgenic Research	1
Reviewer of these journals from 2011 to 8/15/2018	
Plos One	31
Journal of Molecular Endocrinology	5
Clinical and Translational Gastroenterology	3
Biochimica et Biophysica Acta (BBA) - Molecular and Cell Biology of Lipids	2
European Journal of Cell Biology	2
Journal of Biological Chemistry	2
Growth Hormone & IGF Research	1
Molecular and Cellular Endocrinology	1
Molecular Medicine	1
Molecular Metabolism	1
Nutrition & Metabolism	1

TEACHING

Didactic sessions:

I teach hepatic metabolism and pathophysiology in different classes of the Master of Science in Medical Physiology and the graduate program in medical sciences.

Master of Science in Medical Physiology/GEMS. Department of Physiology and Biophysics. UIC.

❖ PHYB 586 Cell Physiology. 3 hours <u>Course director</u>. Drs. O'Donnell, Shaye, Lee. Liver metabolism: Regulation of glucose and lipid metabolism in hepatocytes

	<u>Location</u>	<u>Dates</u>	<u>Evaluation</u>
Spring 2019.	COMRB #2175.	03/06/19 - 03/11/19	4.5 +/-0.71, 18/20 students
Spring 2020.	COMRB #2175.	03/04/20 - 03/09/20	4.38+/-0.87, 13/20 students
Spring 2021	Online class.	03/03/21 - 03/08/21	4.81+/-0.4, 16/16 students
Spring 2022	COMRB #2175	03/09/22 - 03/14/22	4.67+/-0.5 , 9/17 students
Spring 2023	COMRB #2175	03/01/23 - 03/06/23	4.71+/-0.49 8/16 students

Comments from students in the evaluations

- Dr. Cordoba-Chacon is an excellent instructor. His lecture demonstrated his strong interest in liver metabolism and the complicated pathways involved with it.
- Dr. Cordoba-Chacon was VERY prepared. Very knowledgeable and an excellent teacher. I have had him before and he never fails to impress me with his ability to lecture and give to a classroom.
- Good to see a Latinx researcher on the team. Has a good teaching style. Like the public health twists.
- Dr. Cordoba-Chacon's lecture on Liver metabolism was very densely packed with information. His assignment helped narrow the focus of research which helped me in furthering my understanding of the topic. Learning about the diverse functions of the liver can be overwhelming so being able to take a step back from all encompassing to more focused, from lecture to assignment respectively, helped in my understating of the topic.
- I think the lecture was a little bit lengthy and detailed for this course, but nonetheless it was fascinating and I can see Dr. Cordoba-Chacón's passion for hepatology which made the lecture interesting.
- PHYB 572 Clinical applications of Physiology II. 3 hours <u>Course director</u>: Drs. Naba and Cuervo-Grajal. <u>Liver pathophysiology: Non-alcoholic fatty liver disease</u>

	<u>Location</u>	<u>Dates</u>	<u>Evaluation</u>
Spring 2021	Online class.	04/15/21 - 04/22/21	4.75+/-0.45, 16/17 students
Spring 2022	COMRB #2175.	04/14/22 - 04/21/22	4.6 +/-0.52, 10/16 students
Spring 2023	COMRB #2175.	04/14/22 - 04/21/22	4.75 +/- 0.5 4/9 students

Comments from students in the evaluations

- Dr. Cordoba-Chacon is an excellent instructor and expert in the field of liver pathophysiology. His lecture on nonalcoholic steatohepatitis demonstrated his deep knowledge as well as interest in the subject.
- Dr. Cordoba-Chacon is very enthusiastic about what he teaches and he was a great instructor
- Jose was the most prepared lecture I have had. He was so passionate about his topic and I hope that the university values him as the true asset that he is.
- Dr. Cordoba-Chacon is clearly a wonderful researcher and conveys information admirably.
- Dr. Cordoba-Chacon's lecture about NAFLD/NASH development and treatment was very interesting and medically relevant. His essay and presentation topics challenge us to investigate treatments for the disease which helped reinforce what was learned.

PHYB 530 Stem Cells. 2 credits <u>Course director</u>. Drs. Liew and Jiang. Niches of hepatic stem cells in liver regeneration

<u>Location</u> <u>Dates</u> <u>Evaluation</u> **Fall 2018.** COMRB #6175. 10/23/18. 9 +/-1.33, 10/14 students.

PHYB 523 Metabolism. 3 credits <u>Course director</u>. Drs. Liew and Jiang. Liver centric regulation of energy metabolism

Location Dates Evaluation

Fall 2021. COMRB #2175. 11/23/21. 4.54/5, 14/22 students .

Fall 2022. COMRB #2175. 08/30/22. 4.83/5, 7/23 students

Graduate Education in Medical Sciences. College of Medicine. UIC

GEMS 521 Foundations of Biomedical Sciences - (UIC Graduate Program). 4 hours. (Instructor)
<u>Metabolism of Eukaryotic Cells II – Hepatocyte metabolism</u>

	<u>Location</u>	<u>Dates</u>	<u>Evaluation</u>
Fall 2019	COMRB #8175.	11/18/19 to 11/22/19	
Fall 2020	Online class.	11/09/20 to 11/13/20	
Fall 2021	Online class.	11/08/21 to 11/12/21	4.07+/-0.73, 17/48 students
Fall 2022	CMWT 220.	10/31/22 to 11/04/22	

GEMS 522 Foundations of Biomedical Sciences II - (UIC Graduate Program). 4 hours. (Instructor)
Principles of Gastrointestinal, liver and pancreas function—Lipid absorption: Hepatic and biliary function

	<u>Location</u>	<u>Dates</u>	<u>Evaluation</u>
Spring 2020	COMRB #8175.	02/24/20 to 02/28/20	
Spring 2021	Online class.	03/01/21 to 03/05/21	
Spring 2022	Online class.	02/21/22 to 02/25/22	
Spring 2023	MBRB #1017	02/20/23 to 02/24/23	

GEMS 505 - Methods Modules and Workshops- GEMS (UIC Graduate Program). 3 hours. (Instructor) <u>Metabolism and Metabolomics — Assessment of glucose and lipid homeostasis.</u>

<u>Location</u>	<u>Dates</u>	Evaluation
COMRB #8175.	02/24/20 to 02/25/20	
Online class.	03/01/21 to 03/02/21	
Online class.	02/21/22 to 02/22/22	
MBRB #1017	02/20/23 to 02/21/23	
	COMRB #8175. Online class. Online class.	COMRB #8175. 02/24/20 to 02/25/20 Online class. 03/01/21 to 03/02/21 Online class. 02/21/22 to 02/22/22

Small group teaching

- SYMPL PROGRAM. Career in Science. Lab Visit and Research Seminar: Role of hepatocyte PPARgamma in liver disease. <u>Course director</u>: Dr. Mariana Glusman. Ann & Robert H. Lurie. Children's Hospital of Chicago.
 - Summer 2018 Location: UIC CMWT #612/604. 3 hours on 08/03/18. # Students: 6.
 - Summer 2019 Location: UIC CMWT #612/604. 2 hours on 08/06/19. # Students: 4.

- **❖** BIOS 100 Discussion of research manuscript
 - Fall 2018. <u>Location</u>: UIC CMWT #612 10/23/18. <u># Students</u>: 3 Cordoba-Chacon J, et al. J Nutr Biochem. 2019;67:90-100.

<u>Lab teaching of Master program</u> University of Cordoba, Cordoba, Spain.

- **❖ MS in Biology 1**st year. Animal and plant cytology and histology [Instructor, Spanish].
 - 2007-2008 2 hours. # Students: >20 Course director. Dr. Justo Castano.
- * MS in Biology 4th year. Cell Biology basic techniques [Instructor, Spanish].
 - 2008 2009 4 hours. # Students: >20. Course director. Dr. Raul Luque
 - 2009-2010 4 hours. # Students: >20. Course director: Dr. Raul Luque.

Training and Supervisory Responsibilities

Research Specialist		Last Known Position
2007-2011	Ana Isabel Pozo Salas.	Animal Tech Univ of Cordoba, Spain
2007-2008	Qi Lin, MD	Research Assistant, UIC.
2011-2012.	Chike Anadumaka, BS.	Research Assistant, UIC.
2013- 2015.	Neena Majumdar, MS	Research Assistant, UIC.
Co-author of	manuscript #36.	

12/17-08/19 Danielle C. Pins Master student, UIC

2022- <u>Jose Muratalla</u>

Poster award – UIC Diabetes and Obesity Research Day 2022 Co-author of several manuscripts #45, 47, 51 and review article #7.

 Undergraduate student 		Last Known Position
2008	Furquan Baqui	Resident, Cleveland Clinic
2012-2014	Naveen Pokala	MD, Washington Univ.
2013	David Geldermann	Research Assistant, UIC.
2013	Eshwar Murphy.	MD candidate. Nicosia Med. Sch.
2013-2014	Bennish Zaman	Loyola University
2014	Suvrat Chandra	Research Assistant, UIC.
2016-2017	Wara (Syeda) Pirzada	Food Application Technologist. Sensient Technologies.
2017-2018	Zackary White	Graduate Student, GEMS, UIC.
Co-autho	or of manuscript #41	

2017-2018 Apoorva Tummala MD student, UIC - Class of 2023

BS in Biological Sciences, BA in Economics (Summa cum laude), UIC. GPPA-Medicine and Honors College student (2016-2018).

As my mentee she was awarded:

- Honors College Undergraduate Research award,
- Honorable mention certificate in the defense of a poster in the 2017 Research Forum of the College of Medicine
- Endocrine Society's Summer Research Fellowship (06/2018-08/2018)
- Outstanding Abstract Award 2019 Endocrine society meeting.

She completed her <u>Independent study</u> (BIOS-399), and Honors College capstone research project in 2018. Co-author of manuscript #41

2017-2018 Amna Haider Applying to Medical Schools She completed her Independent study (BIOS-399), MS Midwestern University.

08/18 – 12/19 Hanin El-Khateeb MD student Loyola Stritch School of Medicine BS in Biological Sciences, BA UIC. Honors College student (2017-2019).

As my mentee she was awarded:

• Honors College Undergraduate Research award (2019).

She completed her Independent study (BIOS-399), and Honors College capstone research project in 2019.

01/18 - 03/20 Jose Muratalla

Community Health Educator/Retinal Technician Sinai Health System, Cicero, IL.

Jose is a research fellow in the Latin@s Gaining Access to Network for Advancement in Science (L@S GANAS) project. I served as research mentor for Jose.

As my mentee he was awarded:

- Chancellor Undergraduate Research Award in 2020.
- Endocrine Society's Summer Research Fellowship (2020)
- He presented an abstract oral presentation in ENDOonline 2020.

He completed his Independent study (BIOS-399) in 2020.

08/18 - 05/20 Eram Fatima

Applying to Medical Schools

Honors College student (2017-2020).

As my mentee she was awarded:

Honors College Undergraduate Research award (2019).

She completed her Independent study (BIOS-399) in 2019, Honors College capstone research project in 2020.

10/19 - 03/20 Richard Chiu: GPPA-Medicine and Honors College student

06/21 - 05/22 Angelie Bacon: Honors College student

As my mentee she was awarded:

- Chancellor Undergraduate Research Award in 2022.
- Honors College Undergraduate Research award (2022).

She completed her Honors College capstone research project in 2022.

07/22 - 02/23 Naveen Ramakrishnan: Honors College student

07/22 -Tirth Patel

03/23 -Lina Reynoso

Graduate Student

Last Known Position

01/23 – 02/23 Izabela Hawro (rotation)

Research Experiences for Medical and Graduate Students (Summer Fellowship) - Endocrine Society 2023.

Postdoctoral Fellow

Last Known Position

Abigail Wolf (DVM). 2015

AbbVie. Post-doc Veterinarian.

First-author of manuscript #36.

2018-2019 Greg H. Norris, PhD Data Scientist, Industry

Co-author of manuscript #45.

Jose Alberto Diaz-Ruiz 2019 (2mo)

Assistant Professor, IMDEA, Madrid, Spain

Co-author of manuscripts #45, 47, 51.

2019- present Samuel Man Lee, PhD

Current Postdoctoral fellow in my laboratory

Honorable mention certificate - poster in the 2019 Research Forum of the College of Medicine

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Poster of Distinction – Liver meeting 2021

Poster award – UIC Diabetes and Obesity Research Day 2021

Oral Presentation – UIC Diabetes and Obesity Research Day 2022

Travel award – UIC Postdoctoral Association 2022.

First-author of manuscripts #45, 47, 51 and review article #7.

2022- present Marta Sierra-Cruz, PhD

Current Postdoctoral fellow in my laboratory

Updated 08/07/23

Co-author of review article #7.

Travel award – Endocrine Society Meeting 2023.

Early Career Forum - Endocrine Society Meeting 2023.

Clinical Fellow

Last Known Position

2018 (2mo) Pablo Jesus Remon Ruiz, MD Co-author of manuscript #47.

Hospital Virgen del Rocio, Seville Spain

o Honors College Students, I serve as Honors College Fellow.

2018 – 2019 Isaac Jose. Issac graduated in Fall 2019. Capstone	e project: Layden's lab.
2018 – 2020 Akram Alnounou Akram graduated in Spring 2020. C	Capstone project: Xu's lab.
2018 – 2020 Ken Jones Ken graduated in Spring 2020. Cap	ostone project:
2018 – 2020 Musa Alqam Musa graduated in Spring 2020.	
2018 – 2021 Ulyces Gutierrez Ulyces graduated in Spring 2021.	Capstone project: Juarez IIT
2021 – 2022 Angelie Bacon Angelie graduate in Spring 2022. C	Capstone project: Cordoba Lab.
2021 – present Giancarlo Sarasti	-
2021 – present Gina Sisodiya	
2021 – present Omar Abdelaziz	
2022 – present Omar Loya	
2022 – present Milana Antic	

RESEARCH SUPPORT

My independent research program is focused on liver pathophysiology and is supported by three major grants funded by NIH (K01, R03, R01, \$1,698,506, 2018-2023).

My R01 and R03 support 8.4 calendar months of my position. I am Co-I in a R01 (Song, 0.24 cal months), and a VA merit (Kineman, 1.2 calendar months).

Current

BX004448 (Dept Veterans Affairs) Kineman (PI)

04/2023-03/2027

Title: Hormonal control of NASH development and progression

In this application, we will study the role of hepatocyte-specific growth hormone receptor and estrogen receptor signaling to prevent non-alcoholic steatohepatitis.

Role: Co-Investigator. \$700,000 (Direct costs/4 years)

1.2 calendar months

R03DK129419-01A1

Title: Regulation of methionine metabolism in NASH by PPARgamma

06/2022-05/2024.

In this project we will study how PPARgamma could regulate the expression of genes involved in the metabolism of methionine, and how TZD regulates PEMT and BHMT activity in mouse primary hepatocytes.

Role: Principal investigator. \$237,010 (Total costs/2years)

2.4 calendar months

R01DK131038-01 (NIDDK, NIH)

02/2022-01/2027.

Title: PPARgamma-regulated mechanisms in hepatocytes that promote NAFLD

In this project we will study how PEMT and BHMT reveres NASH, and how TZD regulate the activity of PEMT and BHMT in perfused liver and mouse primary hepatocytes of mice with NASH

Role: Principal investigator. \$ 2,128,955 (Total costs/5 years)

6 calendar months

R01AA030255-01 (NIAAA, NIH) Song, Z (PI)

08/2022-05/2027

Title: <u>Hepatic Nicotinamide N-Methyltransferase (NNMT) as a Pathogenetic Mechanism and Therapeutic Target for Alcoholic Liver Disease</u>

In this project Dr. Song will study the relevance of NNMT in the induction of ER stress and PPAR_γ dependent mechanisms that could promote alcoholic fatty liver disease.

Role: Co- investigator.

\$ 2,302,447 (Total costs/5yr)

0.24 cal, months

T35DK131960 (NIDDK, NIH) Lash/Alrefai (PIs)

09/2022-08/2027

Title: University of Illinois Short-Term Research Training Program (SRTP)

Role: Program Faculty Mentor \$76,880 (Direct costs/year 1)

T32DK128782 (NIDDK, NIH) Unteman (PI)

06/2021-05/2026

Title: <u>UIC Diabetes Research Training Program</u>

Role: Program Faculty Mentor \$80,386 (Direct costs/year 1)

PI20-00079 (FIS/ISCIII, Spain). Barbarroja (PI, IMIBIC, Spain) 2020-2024

Title: Pathological mechanisms involved in liver disease associated with chronic inflammatory arthritis.

Role: Co-Investigator 135,520 Euros (Total direct costs/4years)

PEMP-0036-2020 (J Andalucia, Spain). Gahete (PI, IMIBIC, Spain)

2021-2023

Title: Multi-omic approach for the identification of new and personalized biomarkers for diagnostic, prognosis, and therapy in the pathological interaction among obesity and hepatocellular carcinoma.

Role: Co-Investigator 121,710 Euros (Total direct costs/2years)

Completed

BX001114-A0 (Dept Veterans Affairs) Kineman (PI)

04/2019-03/2023

Title: Hormonal regulation of NASH development and progression

We will test if a reduction in hepatocyte-specific GHR-mediated activation of the transcription factor, Stat5B, directly contributes to adult- NASH development and selective enhancement of hepatocyte-Stat5B activity will prevent and reverse NASH.

Role: Consultant \$891,938 (Total direct costs/4years)

PID2019-106893R-l00 (M.Science and Innovation, Spain). Diaz-Ruiz, (PI, IMDEA, Spain) 2020-2023

Title: <u>Desde la biologia del envejecimiento hasta intervenciones sostenibles: Una aproximación basada en el microbioma.</u>

Role: Co-Investigator 100,000 Euros (Total direct costs/4years)

1381035-F (FEDER/Andalucia, Spain). Barbarroja (PI, IMIBIC, Spain) 2022

Title: Identificación de biomarcadores de enfermedad hepática no alcohólica en pacientes con Artritis

Psoriásica

Role: Co-Investigator 35,000 Euros (Total direct costs)

K01DK115525-01 (NIDDK, NIH)

02/2018-12/2022.

Title: Hepatocyte PPARgamma regulated mechanisms in NAFLD and lipid homeostasis

Examining the mechanisms by which PPAR γ promotes fatty liver, with a focus on how PPAR γ regulates the monoacylglycerol pathway and fatty acid uptake to promote hepatic steatosis/NASH and control dyslipidemia.

Role: Principal investigator. \$ 684,105 (*Total costs/5 years*) 6 calendar months

NIH R01DK114326-A1 (NIDDK, NIH) Kineman (PI, UIC)

04/2019-03/2023

Title: Hormonal regulation of liver metabolism

We will use short-term manipulation of hepatic GHR/Stat5b signaling to study how GH directly regulates glycolysis-mediated DNL.

Role: Consultant \$1,629,544 (Total costs/4years)

Start-up funds (Division of Endocrinology, Diabetes and Metabolism)

04/2017 - 07/2022

Role: Principal investigator.

Chancellor Undergraduate Research Award (UIC) - Bacon, mentee - Spring 2022

Angelie Bacon will earn an hourly wage from these funds.

Role: Mentor \$3000.00 (hourly compensation for mentee) –

AWD035726-03 (Sub00000060) DRTC, University of Chicago

04/19-03/21

Pilot and Feasibility Grant P30-DK020595

Title: Suppression of hepatic glucose production by conjugated linoleic acids.

In this project we will study how a specific conjugated linoleic acid may regulate the production of glucose by the liver in a model of congenital lipodystrophy.

Role: Principal investigator \$60,000 (*Total cost/2 years*) 0.5 calendar months

Early Career Development Award (CSCTR)

04/20-03/21

Title: Role of TZD-activated PPAR gamma in hepatocytes in the development and progression of NASH. In this project we will study how a TZD may alter hepatocyte function in the development of NASH. Role: Principal investigator \$10,000 (Total cost) 0.3 calendar months

NORCH P30 Pilot grant Dichtel, L. (PI MGH) 08/2019-07/2021

Title: Molecular Mechanisms of Growth Hormone Action in NAFLD.

In this project we will assess the composition of plasma and hepatic fatty acids in patients treated with growth hormone as therapy for NAFLD.

Role: Co-investigator \$60,000 (*Total costs/2 years*) 0.12 calendar months

Chancellor Undergraduate Research Award (UIC) - Muratalla, mentee - Spring 2020

Jose Muratalla will earn an hourly wage from these funds.

Role: Mentor \$3000.00 (hourly compensation for mentee) –Not completed due to COVID-19

Summer Research Fellowship (Endocrine Society) - Muratalla, mentee - Summer 2020

This fellowship encourages promising students to pursue careers in endocrinology. The Society provides a stipend to each award recipient to participate in research projects under the guidance of a Society member for 10 to 12 weeks during the summer. After the summer fellowship, recipients are invited to attend ENDO 2021, the Society's Annual Meeting & Expo and will receive complimentary registration, airfare and lodging, and per diem for the duration of the meeting.

Role: Mentor \$4000.00 (compensation for mentee) – Not completed due to COVID-19

L@S GANAS (Latin@s Gaining Access to Networks for Advacement in Science, UIC)

- Muratalla, mentee - Spring 2018 - Fall 2019

This stipend would be used to cover expenses related to the work of L@S GANAS research fellow.

Role: Mentor \$1800.00 (research funds for project)

Honors College Undergraduate Research Grants (UIC)

- Fatima and El-Khateeb, mentees - Spring 2019

Eram Fatima and Hanin El-Khateeb will perform experiments to assess the role of hepatocyte PPAR γ in the reversion of NASH mediated by TZD

Role: Mentor \$2000.00 (research funds for project)

Summer Research Fellowship (Endocrine Society) - Tummala, mentee - Summer 2019

This fellowship encourages promising students to pursue careers in endocrinology. The Society provides a stipend to each award recipient to participate in research projects under the guidance of a Society member for 10 to 12 weeks during the summer. After the summer fellowship, recipients are invited to attend ENDO 2019, the Society's Annual Meeting & Expo and will receive complimentary registration, airfare and lodging, and per diem for the duration of the meeting.

Role: Mentor \$4000.00 (compensation for mentee)

Honors College Undergraduate Research Grant (UIC) - Tummala, mentee - Spring 2018

Apoorva Tummala will perform an experiment to quantify the amount of a specific fatty acid (used as a tracer) that it is taken up by different tissues of mice with adult-onset hepatocyte-specific PPARγ knockout. Role: Mentor \$960.00 (research funds for project)

BX001114. (Dept Veterans Affairs) Kineman (PI)

10/2012-09/2016

Title: Interrelationship between the GH-axis and metabolism

Research to explore: the tissue-specific insulin sensitivity in a mouse model with endogenous elevation of GH (HiGH mice), the liver-specific crosstalk between insulin and GH on de novo lipogenesis and hepatic glucose production and the liver-specific signaling of GH or insulin on lipogenic enzyme expression.

Role: Postdoctoral associate \$635,000.00.

PDR-033 (Chicago Biomedical Consortium, CBC)

07/2014-06/2015

Title: GH regulation of hepatic PPAR-gamma activity in mice.

Research to assess if hepatic growth hormone resistance lead to in vivo activation of PPAR gamma and the subsequent de novo lipogenesis. In vivo and ex vivo experiment will use the novel adult-onset liver-

specific GH receptor knock-down model and the PPRE-Lucieferase reporter model in combination with ex vivo techniques.

Role: Principal investigator. \$12,000.00. (research funds for project)

2014 Endocrine Scholars Award (Endocrine Society)

07/2014-06/2015

Title: 2014 Endocrine Scholars Award in Growth Hormone Research supported by Genentech.

Research to explore in more detail the impact of hepatic GH resistance on glucose and lipid metabolism, with the use of our novel mouse model (adult-onset liver-specific GH receptor knock-down mice). Although the topic is similar to the CBC grant, in this grant, the PPAR gamma transcriptional activity, in vivo pharmacological blockage of PPAR gamma activity in hepatic GH resistant mice, and longer hepatic GH resistance phenotype related to metabolic dysfunction will be examined.

Role: Principal investigator \$60,000.00 (\$50,000 – salary; \$10,000 – travel)

R01 DK088133-01 (NIDDK, NIH) Kineman (PI)

05/2010-02/2015

Title: GH and adult physiology

Research to explore the metabolic phenotype of a mouse model of adult-onset isolated growth hormone deficiency (AOiGHD), with an emphasis on glucose homesostasis as it relates to tissue-specific insulin sensitivity and pancreatic insulin output.

Role: Collaborator \$1,008,445.00

CCTS Pilot Grant (UIC) Kineman (PI)

05/2012-04/2014

Title: Use of the fast-food diet mouse model to study the pathophysiology of NASH

This research focuses on evaluating the progression of NASH in a mouse fed a diet high in fat and fructose and to determine if fructose per se, or just increased carbohydrate intake is responsible for development of fatty liver and progression to NASH.

Role: Collaborator \$38,500.00

Postdoctoral fellowship (Foundation Alfonso Martin Escudero, Spain) 01/2012-12/2013

Title: Endocrine Regulation of the Metabolic Function: Somatotropic axis and pancreatic function.

Research to explore in more detail the impact of GH on β -cell function using islets obtained from mouse models with elevated endogenous GH levels (HiGH mice) as well as treating wild-type islets with GH to examine the impact on basal and stimulated insulin release and expression. Although the topic is related to the ongoing R01, in this grant the impact of "elevated" instead of "reduced" GH is examined.

Role: Principal investigator \$88.000,00 (salary)

FI06/00804 (Predoctoral fellowship, Institute of Health "Carlos III", Spain) 02/2007-01/2011

Title: <u>Cortistatin: receptors and molecular mechanisms as anti-inflammatory, neuroendocrine and tumoral agent.</u>

Research to explore the role of cortistatin and receptor in endocrine processes related to neuroendocrine regulation and tumoral processes. This scholarship was obtained in a public and highly competitive call at national (Spain) level. 55 positions were funded in 2007 and only 1 at University of Cordoba

Role: Pre-doctoral trainee \$92,000 (salary)

SCIENTIFIC PRODUCTION

PEER-REVIEWED FULL LENGTH PUBLICATIONS: (in chronological order)

http://www.ncbi.nlm.nih.gov/sites/myncbi/1pSAGCvkfnok0/bibliography/40862351/public/?sort=date&direction=descending

Since 2009, I have published 63 peer-reviewed manuscripts: 56 research articles, and 7 reviews. I am first author of 13 research articles, and senior corresponding author in 7 of them.

H-index is 25, with 1,729 citations (1519 without self-citations, average citations per item: 27.87)

Source: Web of Science, Clarivate Analytics 08/07/23.

Research articles

- 1. Luque RM, Soares BS, Peng XD, Krishnan S, <u>Cordoba-Chacon J</u>, Frohman LA, Kineman RD. Use of The MT-hGHRH mouse to identify regulatory pathways that suppress pituitary somatotrope hyperplasia and adenoma formation due to GHRH-R Hyperactivation. *Endocrinology*. 2009 Jul;150(7):3177-85.
- 2. Gahete MD, <u>Cordoba-Chacon J</u>, Salvatori R, Castaño JP, Kineman RD, Luque RM. <u>Metabolic regulation of ghrelin O-acyl transferase (GOAT) expression in the mouse hypothalamus, pituitary, and stomach. *Molecular and Cellular Endocrinology*. 2010. Apr 12;317(1-2):154-60</u>
- 3. <u>Cordoba-Chacon J</u>, Gahete MD, Duran-Prado M, Pozo-Salas Al, Malagón MM, Gracia-Navarro F, Kineman RD, Luque RM, Castaño JP. <u>Identification and characterization of new functional truncated isoforms of somatostatin receptor subtype 5 in rodents. Cellular and Molecular Life Sciences. 2010 Apr;67(7):1147-63.</u>
- 4. Gahete MD, Rubio A, <u>Cordoba-Chacon J</u>, Gracia-Navarro F, Kineman RD, Avila J, Luque RM, Castaño JP. Expression of the Ghrelin and Neurotensin Systems is Altered in the Temporal Lobe of Alzheimer's Disease Patients. *Journal of Alzheimers Disease*. 2010 22(3):819-28.
- 5. Cordoba-Chacon J, Gahete MD, Castaño JP, Kineman RD, Luque RM. Somatostatin and its receptors contribute, in a tissue-specific manner, to the sex-dependent, metabolic (fed/fasting) control of growth hormone axis in mice. American Journal of Physiology: Endocrinology and Metabolism.2011; 300(1):E46-54.
- 6. Taboada GF, Neto LV, Luque RM, <u>Cordoba-Chacon J</u>, de Oliveira Machado E, de Carvalho DP, Kineman RD, Gadelha MR. Impact of gsp Oncogene on the mRNA Content for Somatostatin and Dopamine Receptors in Human Somatotropinomas. *Neuroendocrinology*. 2011; 93(1):40-7.
- 7. Luque RM, <u>Cordoba-Chacon J</u>, Gahete MD, Navarro VM, Tena-Sempere M, Kineman RD, Castaño JP. Kisspeptin Regulates Gonadotroph and Somatotroph Function in Nonhuman Primate Pituitary via Common and Distinct Signaling Mechanisms. *Endocrinology*. 2011; 152(3):957-66
- 8. Luque RM, Lin Q, <u>Cordoba-Chacon J</u>, Subbaiah PV, Buch T, Waisman A, Vankelecom H, Kineman RD. Metabolic Impact of Adult-Onset, Isolated, Growth Hormone Deficiency (AOiGHD) Due to Destruction of Pituitary Somatotropes. *PLoS One*. 2011 Jan 19;6(1):e15767.
- 9. Gahete MD, <u>Cordoba-Chacon J</u>, Hergueta-Redondo M, Martínez-Fuentes AJ, Kineman RD, Moreno-Bueno G, Luque RM, Castaño JP. A novel human ghrelin variant (In1-ghrelin) and ghrelin-O-acyltransferase are overexpressed in breast cancer: potential pathophysiological relevance. *PLoS One*. 2011;6(8):e23302.

- 10. Durán-Prado M, Gahete MD, Hergueta-Redondo M, Martínez-Fuentes AJ, <u>Cordoba-Chacon J</u>, Palacios J, Gracia-Navarro F, Moreno-Bueno G, Malagón MM, Luque RM, Castaño JP. <u>The new truncated somatostatin receptor variant sst5TMD4 is associated to poor prognosis in breast cancer and increases malignancy in MCF-7 cells. *Oncogene*. 2012 Apr 19;31(16):2049-61.</u>
- 11. <u>Cordoba-Chacon J</u>, Gahete MD, Pozo-Salas AI, Martínez-Fuentes AJ, de Lecea L, Gracia-Navarro F, Kineman RD, Castaño JP, Luque RM. Cortistatin is not a somatostatin analogue but stimulates prolactin release and inhibits GH and ACTH in a gender-dependent fashion: potential role of ghrelin. *Endocrinology*. 2011 Dec;152(12):4800-12. doi: 10.1210/en.2011-1542. <u>Selected as Translational highlights from Endocrinology J Clin Endocrinol Metab</u>, 2011 96(11):3559-3561.
- 12. Gahete MD, <u>Cordoba-Chacon J</u>, Anadumaka CV, Lin Q, Brüning JC, Kahn CR, Luque RM, Kineman RD. <u>Elevated GH/IGF-I, due to somatotrope-specific loss of both IGF-I and insulin receptors, alters glucose homeostasis and insulin sensitivity in a diet-dependent manner. *Endocrinology*. 2011 Dec;152(12):4825-37. doi: 10.1210/en.2011-1447. Epub 2011 Oct 11.</u>
- 13. <u>Cordoba-Chacon J</u>, Gahete MD, Castaño JP, Kineman RD, Luque RM. <u>Homologous and heterologous in vitro regulation of pituitary receptors for somatostatin, growth hormone (GH)-releasing hormone, and ghrelin in a nonhuman primate (Papio anubis). *Endocrinology*. 2012 Jan;153(1):264-72.</u>
- 14. <u>Cordoba-Chacon J</u>, Gahete MD, Culler MD, Castaño JP, Kineman RD, Luque RM. <u>Somatostatin dramatically stimulates growth hormone release from primate somatotrophs acting at low doses via somatostatin receptor 5 and cyclic <u>AMP</u>. *J Neuroendocrinol*. 2012 Mar;24(3):453-63.</u>
- 15. Granata R, Gallo D, Luque RM, Baragli A, Scarlatti F, Grande C, Gesmundo I, <u>Cordoba-Chacon J</u>, Bergandi L, Settanni F, Togliatto G, Volante M, Garetto S, Annunziata M, Chanclón B, Gargantini E, Rocchietto S, Matera L, Datta G, Morino M, Brizzi MF, Ong H, Camussi G, Castaño JP, Papotti M, Ghigo E. <u>Obestatin regulates adipocyte function and protects against diet-induced insulin resistance and inflammation.</u> FASEB J. 2012 Aug;26(8):3393-411.
- 16. <u>Cordoba-Chacon J</u>, Gahete MD, Pozo-Salas AI, Moreno-Herrera A, Castaño JP, Kineman RD, Luque RM. Peripubertal-onset but not adult-onset obesity increases IGF-I and drives development of lean mass, which may lessen the metabolic impairment in adult obesity. Am J Physiol Endocrinol Metab. 2012 Nov 1;303(9):E1151-7.
- 17. Gahete MD, <u>Cordoba-Chacon J</u>, Luque RM, Kineman RD. The rise in growth hormone during starvation does not serve to maintain glucose levels or lean mass but is required for appropriate adipose tissue response in female mice. *Endocrinology*. 2013 Jan;154(1):263-9
- 18. Lubbers ER, List EO, Jara A, Sackman-Sala L, <u>Cordoba-Chacon J</u>, Gahete MD, Kineman RD, Boparai R, Bartke A, Kopchick JJ, Berryman DE. <u>Adiponectin in mice with altered GH action: links to insulin sensitivity and longevity? *J Endocrinol*. 2013 Feb 25;216(3):363-74.</u>
- 19. Chanclón B, Luque RM, <u>Cordoba-Chacon J</u>, Gahete MD, Pozo-Salas AI, Castaño JP, Gracia-Navarro F, Martínez-Fuentes AJ. Role of endogenous cortistatin in the regulation of ghrelin system expression at pancreatic level under normal and obese conditions. PLoS One. 2013;8(2):e57834.
- 20. Gahete MD, <u>Cordoba-Chacon J</u>, Lin Q, Brüning JC, Kahn CR, Castaño JP, Christian H, Luque RM, Kineman RD. Insulin and IGF-I Inhibit GH Synthesis and Release in Vitro and in Vivo by Separate Mechanisms. *Endocrinology*. 2013 Jul;154(7):2410-20.
- 21. <u>Cordoba-Chacon J</u>, Gahete MD, Pozo-Salas Al, Castaño JP, Kineman RD, Luque RM. <u>Endogenous</u> somatostatin is critical in regulating the acute effects of L-arginine on growth hormone and insulin release in mice. *Endocrinology*. 2013 Jul;154(7):2393-8.
- 22. <u>Cordoba-Chacon J</u>, Gahete MD, Pokala NK, Geldermann D, Alba M, Salvatori R, Luque RM, Kineman RD. Long- but not short-term adult-onset, isolated GH deficiency in male mice leads to deterioration

- of β -cell function, which cannot be accounted for by changes in β -cell mass. *Endocrinology*. 2014 Mar;155(3):726-35.
- 23. Luque RM, <u>Cordoba-Chacon J</u>, Ibañez-Costa A, Gesmundo I, Grande C, Gracia-Navarro F, Tena-Sempere M, Ghigo E, Gahete MD, Granata R, Kineman RD, Castaño JP. **Obestatin plays an opposite role in the regulation of pituitary somatotrope and corticotrope function in primate and mice.** *Endocrinology*. 2014 Apr;155(4):1407-17.
- 24. Gahete MD, <u>Cordoba-Chacon J</u>, Lantvit DD, Ortega-Salas R, Sanchez-Sanchez R, Perez-Jimenez F, Lopez-Miranda J, Swanson SM, Castaño JP, Luque RM, Kineman RD. <u>Elevated GH/IGF-I promotes mammary tumors in high-fat, but not low-fat, fed mice.</u> *Carcinogenesis*. 2014. 35(11):2467-73.
- 25. <u>Cordoba-Chacon J</u>, Gahete MD, McGuinness OP, Kineman RD. <u>Differential impact of selective GH deficiency and endogenous GH excess on insulin-mediated actions in muscle and liver of male mice. Am J Physiol Endocrinol Metab. 2014. 307(10)E928-34.</u>
- 26. Ibanez-Costa A, <u>Cordoba-Chacon J</u>, Gahete MD, Kineman RD, Castano JP, Luque RM. <u>Melatonin regulates somatotrope and lactotrope function through common and distinct signaling pathways in cultured primary pituitary cells from primates. Endocrinology. 2015. 156(3):1100-10.</u>
- 27. Villa-Osaba A, Gahete MD, <u>Cordoba-Chacon J</u>, de Lecea L, Pozo-Salas AI, Delgado-Lista FJ, Álvarez-Benito M, López-Miranda J, Luque RM, Castaño JP. Obesity Alters Gene Expression for GH/IGF-I Axis in Mouse Mammary Fat Pads: Differential Role of Cortistatin and Somatostatin. PLoS One. 2015 Mar 25;10(3):e0120955
- 28. Pedraza-Arevalo S, <u>Cordoba-Chacon J</u>, Pozo-Salas AI, L-Lopez F, de Lecea L, Gahete MD, Castano JP, Luque RM. Not so giants: <u>Mice lacking both somatostatin and cortistatin have high GH levels</u>, but show no changes in growth rate or IGF-I levels. *Endocrinology*. 2015 Jun;156(6):1958-64.
- 29. Cordoba-Chacon J, Majumdar N, Pokala NK, Gahete MD, Kineman RD. Islet insulin content and release are increased in male mice with elevated endogenous GH and IGF-I, without evidence of systemic insulin resistance or alterations in β-cell mass. Growth Horm IGF Res. 2015 Aug;25(4):189-95.
- 30. <u>Cordoba-Chacon J</u>, Majumdar N, List EO, Diaz-Ruiz A, Frank SJ, Manzano A, Bartrons R, Puchowicz M, Kopchick JJ, Kineman RD. **Growth hormone inhibits hepatic de novo lipogenesis in adult mice**. Diabetes. 2015. 64(9):3093-103.
- 31. Kineman RD, Majumdar N, Subbaiah PV, <u>Cordoba-Chacon J*</u>. Hepatic PPARγ is not essential for the rapid development of steatosis following loss of hepatic GH signaling, in adult mice. Endocrinology. 2016; 157(5):1728-35. *<u>Kineman and Cordoba-Chacon are corresponding authors</u>.
- 32. <u>Cordoba-Chacon J</u>, Gahete MD, Pozo-Salas Al, de Lecea L, Castano JP, Luque RM. <u>Cortistatin is a key factor regulating the sex-dependent response of the growth hormone and stress axes to fasting in mice. Endocrinology</u>. 2016 157(7):2810-23.
- 33. Villa-Osaba A, Gahete MD, <u>Cordoba-Chacon J</u>, de Lecea L, Castano JP, Luque RM. Fasting modulates GH/IGF-I axis and its regulatory Systems in the mammary gland of female mice: influence of endogenous cortistatin. Molecular and Cellular Endocrinology. 2016. 434:14-24.
- 34. Liu Z, <u>Cordoba-Chacon J</u>, Kineman RD, Cronstein B, Muzumdar R, Gong Z, Werner H, Yakar S. **Growth hormone control of hepatic lipid metabolism.** Diabetes. 2016;65(12):3598-3609
- 35. Luque RM, Cordoba-Chacon J, Pozo-Salas Al, Porteiro B, de Lecea L, Nogueiras R, Gahete MD, Castano JP. Obesity- and gender-dependent role of endogenous somatostatin and cortistatin in the regulation of endocrine and metabolic homeostasis in mice. Scientific Reports. 2016;6:37992

- 36. Wolf Greenstein A, Majumdar N, Yang P, Subbaiah PV, Kineman RD, <u>Cordoba-Chacon J</u>. Hepatocyte PPARγ-regulated mechanisms in diet-induced steatosis in adult male mice. Journal of Endocrinology. 2017;232(1):107-121
- 37. Yamamoto S, Kuramoto K, Wang N, Situ X, Priyadarshini M, Zhang WR, <u>Cordoba-Chacon J</u>, Layden BT, He CC. **Autophagy Differentially Regulates Insulin Production and Insulin Sensitivity.** Cell reports. 2018; 23(11): 3286-3299.
- 38. <u>Cordoba-Chacon J.</u> Sarmento-Cabral A, del Rio-Moreno M, Diaz-Ruiz A, Subbaiah PV, Kineman RD. Adult-onset hepatocyte GH resistance promotes NASH in male mice, without severe systemic metabolic dysfunction. Endocrinology. 2018. 159(11):3761-3774.
- 39. Pusec C, De Jesus A, Khan MW, Terry A, Ludvick AE, Xu K, Giancola N, Pervaiz H, Smith ED, Ding X, Harrison S, Chandel NV, Hay N, Ardehali H, <u>Cordoba-Chacon J</u>, Layden BT. **Hepatic HKDC1 expression contributes to liver metabolism**. Endocrinology. 2019. 160(2):313-330
- 40. Khan MW, Priyadarshini M, <u>Cordoba-Chacon J</u>, Becker TC, Layden BT. Hepatic hexokinase domain containing 1 (HKDC1) improves whole body glucose tolerance and insulin sensitivity in pregnant mice. Biochim Biophys Acta Mol Basis Dis. 2018 S0925-4439(18)30484-8.
- 41. Cordoba-Chacon J*, Dhavamani S, Yalagala PCR, Tummala A, White Z, Nagao T, Kineman RD, Subbaiah PV. Tissue-dependent effects of cis-9,trans-11- and trans-10,cis-12-CLA isomers on glucose and lipid metabolism in adult male mice. The Journal of Nutritional Biochemistry. 2019. 67:90-100.
 - Cordoba-Chacon serves a corresponding author of this manuscript.
- 42. Torres C, Mancinelli G, <u>Cordoba-Chacon J</u>, Viswakarma N, Castellanos K, Grimaldo S, Kumar S, Principe D, Dorman MJ, McKinney R, Hirsch E, Dawson D, Munshi HG, Rana A, Grippo PJ. **p110γ-Deficiency Protects Against Pancreatic Carcinogenesis yet Predisposes to Diet-Induced Hepatotoxicity**. Proc Natl Acad Sci U S A. 2019. 116(29):14724-14733.
- 43. Cordoba-Chacon J. Loss of Hepatocyte-Specific PPARγ Expression Ameliorates Early Events of Steatohepatitis in Mice Fed the Methionine and Choline-Deficient Diet. PPAR Research. 2020: 9735083.
- 44. Sarmento-Cabral A, de Rio-Moreno M, Vazquez-Borrego MC, Mahmood M, Gutierrez-Casado E, Pelke N, Guzman G, Subbaiah PV, <u>Cordoba-Chacon J</u>, Yakar S, Kineman RD. **GH directly inhibits steatosis and liver injury in a sex-dependent and IGF1-independent manner.** J Endocrinol. 2021. 248(1):31-44.
- 45. Lee SM, Pusec CM, Norris GH, de Jesus A, Diaz-Ruiz A, Muratalla J, Sarmento-Cabral A, Guzman G, Layden BT, <u>Cordoba-Chacon J</u>. Hepatocyte-specific loss of PPARgamma protects mice from NASH and increases the therapeutic effects of rosiglitazone in the liver. Cellular and Molecular Gastroenterology and Hepatology. 2021 11(5):1291-1311.
- 46. Poudel SB, Dixit M, Yildirim G, <u>Cordoba-Chacon J</u>, Gahete MD, Yuji I, Kirsch T, Kineman RD, Yakar S. Sexual dimorphic impact of adult onset somatopause on life span and age-induced osteoarthritis. Aging Cell. 2021 20(8):e13427.
- 47. Lee SM, Muratalla J, Diaz-Ruiz A, Remon-Ruiz P, McCann M, Liew CW, Kineman RD, <u>Cordoba-Chacon</u> <u>J</u>. Rosiglitazone requires hepatocyte PPARγ expression to promote steatosis in male mice with diet-induced obesity. Endocrinology. 2021. 162(11):bgab175.
- 48. McCann M; Li Y; Muñoz M; Gil G; Qiang G; <u>Cordoba-Chacon J</u>; Blüher M; Duncan S; Liew CW. **Adipose expression of CREB3L3 modulates body weight during obesity.** Scientific reports. 2021. 11(1):19400.
- 49. Khan MW, Terry AR, Priyadarshini M, Guzman G, <u>Cordoba-Chacon J</u>, Ben-Sahra I, Wicksteed B, Layden BT. The hexokinase "HKDC1" interaction with the mitochondria is essential for hepatocellular carcinoma progression. Cell Death Dis. 2022. 13(7):660.

- 50. Wang X, Qiang Q, Li Y, Wang K, McCann M, Gil V, Yu Y, Li S, Yang Z, XU S, Cordoba-Chacon J, De Jesus DF, Sun B, Chen K, Wang X, Zhou L, Hu R, Ding Q, Kulkarni R, Gao D, Blüher M, Liew CW. Secreted EMC10 is upregulated in human obesity and its neutralizing antibody prevents dietinduced obesity in mice. Nature Communications. 2022; 13(1):7323
- 51. Lee SM, Muratalla J, Karimi S, Diaz-Ruiz A, Frutos MD, Guzman G, Ramos-Molina B, <u>Cordoba-Chacon J</u>. Hepatocyte PPARγ contributes to the progression of non-alcoholic steatohepatitis in male and female obese mice. *Cellular and Molecular Life Sciences*. 80(2):39
- 52. Griffiths A, Wang J, Song Q, Lee SM, <u>Cordoba-Chacon J</u>, Song Z. **ATF4-mediated CD36 Upregulation**Contributes to Palmitate-induced Lipotoxicity in Hepatocytes. American Journal of Physiology: gastrointestinal and liver physiology. doi: 10.1152/ajpgi.00163.2022.
- 53. Pusec C, Ilievski V, de Jesus A, Farooq Z, Zapater J, Sweis N, Hagar I, Khan MW, Ardehali H, <u>Cordoba-Chacon J</u>, Layden BT. <u>Liver-specific overexpression of Hkdc1 increases hepatocyte size and proliferation</u>. Sci Rep. 2023 May 17;13(1):8034.
- 54. Qing Song, Jun Wang, Alexandra Griffiths, Samuel Lee, Iredia Iyamu, Rong Huang, <u>Jose Cordoba-Chacon</u>, and Zhenyuan Song. **Nicotinamide N-methyltransferase (NNMT) upregulation contributes to palmitate-elicited PPARγ transactivation in hepatocytes**. Am J Physiol Cell Physiol. 2023 Jul 1;325(1):C29-C41.
- 55. Mari C. Vázquez-Borrego, Mercedes del Río-Moreno, Maxim Pyatkov, André Sarmento-Cabral, Mariyah Mahmood, Natalie Pelke, Magdalena Wnek, <u>Jose Cordoba-Chacon</u>, David J. Waxman, Michelle A. Puchowicz, Owen P. McGuinness, Rhonda D. Kineman. **Direct and indirect actions of hepatocyte growth hormone receptor (GHR)-signaling on hepatic glycolysis, de novo lipogenesis, steatosis and insulin sensitivity.** Metabolism. 2023 Jul;144:155589.
- 56. Arias de la Rosa, Ivan; Ruiz-Ponce, Miriam; Cuesta-López, Laura; Román-Rodriguez, Cristobal; Perez-Sanchez, Carlos; Leiva-Cepas, Fernando; Calvo, Jerusalem; Ruiz, Desiree; Gahete, Manuel David; Herman-Sánchez, Natalia; Navarro, Pilar; Ortega, Rafaela; Cordoba, Jose; Pérez-Pampin, Eva; Gonzalez, Antonio; Lucendo, Alfredo; Collantes-Estevez, Eduardo; Lopez-Pedrera, Chary; Escudero, Alejandro; Barbarroja, Nuria. Clinical features and immune mechanisms directly linked to the altered liver function in patients with rheumatoid arthritis. Accepted.

Review articles

- Gahete MD, Duran-Prado M, Luque RM, Martinez-Fuentes AJ, Quintero A, Gutierrez-Pascual E, <u>Cordoba-Chacon J</u>, Malagón MM, Gracia-Navarro F, Castaño JP. <u>Understanding the Multifactorial Control of Growth Hormone Release by Somatotropes: Lessons from Comparative Endocrinology. *Annals of the New York Academy of Sciences* 2009, Vol. 1163, No. 1, pp. 137-153.
 </u>
- 2. Gahete MD, <u>Cordoba-Chacón J</u>, Duran-Prado M, Malagón MM, Martinez-Fuentes AJ, Gracia-Navarro F, Luque RM, Castaño JP. Somatostatin and its receptors from fish to mammals. *Annals of the New York Academy of Sciences* 2010 Jul; 1200:43-52.
- 3. Luque RM, Gahete MD, <u>Cordoba-Chacon J</u>, Childs GV, Kineman RD. <u>Does the pituitary somatotrope play a primary role in regulating GH output in metabolic extremes? *Annals of the New York Academy of Sciences* 2011 Mar; 1220(1):82-92.</u>
- 4. <u>Cordoba-Chacon J</u>, Gahete MD, Durán-Prado M, Luque RM, Castaño JP. <u>Truncated somatostatin receptors as new players in somatostatin-cortistatin pathophysiology</u>. *Annals of the New York Academy of Sciences* 2011 Mar; 1220(1):6-15.

- 5. Gahete MD, <u>Cordoba-Chacon J</u>, Kineman RD, Luque RM, Castaño JP. Role of ghrelin system in neuroprotection and cognitive functions: implications in Alzheimer's disease. *Peptides*. 2011 Nov;32(11):2225-8.
- 6. Dichtel L, <u>Cordoba-Chacon J</u>, Kineman RD. Growth hormone and insulin-like growth factor I regulation of nonalcoholic fatty liver disease. J Clin Endocrinol Metab. 2022 Feb 16:dgac088. doi: 10.1210/clinem/dgac088.
- 7. Lee SM, Muratalla J, Sierra-Cruz M, <u>Cordoba-Chacon J</u>. Role of hepatic peroxisome proliferator-activated receptor γ in NAFLD. J Endocrinol. 2023. doi: 10.1530/JOE-22-0155. Online ahead of print.

Submitted manuscripts

- Torres C, Mancinelli G, Chen E, <u>Cordoba-Chacon J, Pins D, Saeed S, McKinney R, Castellanos K, Orsi G, Singhal M, Yalagala PCR, Leal C, Grimaldo S, Ortuno FM, Bishehsari F, Grippo PJ. PUFAs modulate pancreatic ductal adenocarcinoma development by regulating the PIP3/PI3K/AKT pathway. Submitted.
 </u>
- 2. Belen Brie, Andre Sarmento-Cabral, Florencia Pascual, <u>Jose Cordoba-Chacon</u>, Rhonda Kineman, Damasia Becu-Villalobos. <u>Differential modification of GHRH-GH-GHR-STAT5-IGF-I axis reveals unique sexually dimorphic hepatic signatures for Lcn13, Asns, Hamp2, Hao2, and Pgc1a. Submitted</u>
- 3. Song Q, Hwang CL, Park J, Lee SM, Sun Z, Sun J, <u>Cordoba-Chacon J</u>, Jiang Y, Song Z. Ammonia is an ER stress inducer provoking hepatic fat accumulation via ATF4-dependent de novo lipogenesis activation: a potential link between dysbiosis and alcoholic liver disease. In preparation.

ORAL PRESENTATIONS

Invited Presentations

Growth hormone and gender are important factors in hepatic steatosis: a mouse model with adultonset hepatic growth hormone resistance.

Seminars of the Maimonides institute for biomedical research of Cordoba

University of Cordoba, Cordoba, (SPAIN). Host: Dr. Raul M. Luque.

06/05/14

Role of hepatic PPARgamma in non-alcoholic steatohepatitis.

Seminars of the Maimonides institute for biomedical research of Cordoba

University of Cordoba, Cordoba, (SPAIN). Host: Dr. Raul M. Luque.

06/22/18.

This seminar is available online: https://www.youtube.com/watch?v=_6Zi3Vw4vkQ&t=483s

Hepatocyte PPAR γ plays an important role in the development of NASH induced by methionine- and choline-deficient diets

VIII Jornadas de divulgacion de la investigacion en Biologia Molecular, Celular, Genetica y Biotecnologia.

Department of Biochemistry and Molecular Biology. University of Cordoba (SPAIN).

Host: Dr. Conrado Moreno Vivian.

06/14/18.

Role of hepatocyte PPARgamma in lipid homeostasis in health and disease.

Seminars of the Department of Physiology and Biophysics

University of Illinois at Chicago. Chicago, IL. Host: Dr. Henar Cuervo Grajal.

10/05/18.

El Post-Doc, la hora de decider: Que hacer con el futuro? Ideas, opciones, consejos, experiencias personales.

FORO UNICO, "AULA EXTERIOR". RUTA DEL TALENTO DE CORDOBA POR EL MUNDO.

University of Cordoba, Cordoba, (SPAIN).

Host: Dr. Raul M. Luque and Dr. Justo P. Castano Fuentes. [KEYNOTE SPEAKER]

06/19/19.

Press note in regional newspaper: https://www.diariocordoba.com/cordoba-ciudad/2019/06/19/foro-unico-imibic-colaboran-jornada-36195172.html

Hepatocyte-specific PPARy regulation of non-alcoholic steatohepatitis.

Conference at IBIMA. Biomedical research institute of Malaga (IBIMA), Malaga, Spain.

Host: Dr. Bruno Ramos-Molina and Fernando Cardona.

06/14/19.

Meeting with staff at CorDynamics, Chicago, IL.

09/18/19.

The silent epidemic of non-alcoholic fatty liver: murine models that will allow us to develop a treatment.

Ciencia ECUSA y Cervantes 2021 (ECUSA and Cervantes Institute), Chicago, IL.

Host: Dr. Araceli Valverde.

06/16/21

This seminar is available online: https://www.youtube.com/watch?v=18m3AeZ H58

Relevance of hepatocyte-specific PPARγ in the development of non-alcoholic fatty liver disease (NAFLD) Seminars of the Division of Gastroenterology and Hepatology.

University of Illinois at Chicago, Chicago, IL. Host: Dr. Ravinder Gill.

09/22/21.

Role of PPARy in hepatocytes in the development of non-alcoholic fatty liver disease (NAFLD)

Rising Star Symposium.

University of Kentucky, Lexington, KY. Host: Dr. Simon Fisher and Dr. Nada Porter.

10/21/22.

https://uknow.uky.edu/research/world-recognized-diabetes-expert-be-keynote-speaker-first-ever-university-kentucky-rising

PPARy in hepatocytes & non-alcoholic fatty liver disease (NAFLD)

NR IMPACT. 2022-2023 Seminar series. Zoom meeting.

Host: NR IMPACT, Dr. Rebecca Riggins (Georgetown University).

01/20/23.

Role of hepatocyte PPARy in mice with diet-induced non-alcoholic fatty liver disease (NAFLD).

Graduate Group in Nutritional Biology. 2022-2023 Seminar series. Zoom meeting.

University of California, Davis, CA.

Host: Dr. Gerardo Mackenzie.

01/30/23.

Role of PPARy in hepatocytes of mice with diet-induced non-alcoholic fatty liver disease (NAFLD).

Molecular and Cell Biology Seminar Series. 2022-2023. Zoom meeting.

Baylor College of Medicine, Houston, TX.

Host: Dr. Daniel Gorelick.

03/29/23

Unraveling the role of hepatocyte PPARγ in NAFLD progression and response to TZDs

SY002 Nuclear Receptors in Inter-organ Communication in Health and Disease

ENDO 2023 - Annual meeting of the Endocrine Society, Chicago, IL.

6/15/23.

National/International Meetings (designate if invited)

Hepatic GH resistance increases de novo lipogenesis independent of sex, but only leads to fatty liver in males.

The Endocrine Society's 97th Annual Meeting & Expo. San Diego (CA).

03/2015.

Hepatocyte Peroxisome Proliferator-activated Receptor Gamma (pparg) Offsets The Anti-steatogenic Effects Of Thiazolidinediones In Obese Male Mice.

Endocrine Society Meeting. ENDOonline2020

06/09/20

Local/Regional Meetings

GH mediated regulation of hepatic lipogenesis; Lessons from the adult-onset, liver-specific, GH-receptor knockdown mouse.

Endo Retreat 2014, University of Illinois at Chicago

Host: Dr. John Kopchick and Steve Swanson.

06/19/14

Contribution of hepatocyte-specific PPAR gamma to the development of non-alcoholic steatohepatitis (NASH), insulin resistance and obesity

Young Investigator Awardee's talk. UIC Obesity and Diabetes Research Day.

Host: Dr. Brian Layden. [Awardee]

10/13/20.

Role of TZD-activated PPAR gamma in hepatocytes in the development and progression of NASH.

Early Career Development Awardee's talk.2021 Midwest Clinical and Translational Research Meeting.
Online Conference. [Awardee] 04/15/21.

Basic Science Grand Rounds Presentations

Interrelationship between growth hormone and insulin in regulating hepatic lipid metabolism.

Lipid Club 2014-2015. UIC Chicago. Host: Dr. Papasani V. Subbaiah.

10/16/14

The potential pathological link between hepatic GH and insulin resistance and de novo lipogenesis.

Diabetes/Obesity Research program. UIC. Chicago.

11/06/14

New insights into PPARγ-mediated control of hepatic lipogenesis and bile acid production.

Lipid Club 2015-2016. UIC. Chicago. Host: Dr. Papasani V. Subbaiah.	09/17/15
VA Young Research Forum. Jesse Brown VA Medical Center. Chicago.	07/27/16
Northwestern University. Chicago, IL. [INVITED] Host: Brian Layden, MD, PhD.	05/27/16

Tissue specific actions of PPARy agonist (TZDs) that contribute to hepatic lipid content.

Endocrinology Grand Rounds, Division of Endocrinology, Diabetes and Metabolism. UIC 02/21/17. Host: Dr. Brian T. Layden.

Relevance of hepatocyte PPARy-regulated mechanisms in NASH.

Lipid Club 2017-2018. UIC Chicago. Host: Dr. Papasani V. Subbaiah. 04/19/18.

Hepatocyte PPARgamma expression is positively associated with NASH progression

Diabetes and Obesity Research and Journal Club. UIC. Host: Dr. Brian T Layden. 04/17/19. ECM, Liver and GI brainstorm session. UIC. Host: Dr. Natalia Nieto. 05/16/19.

Effect of conjugated linoleic acid isomers on lipid and glucose homeostasis.

Lipid Club 2018-2019. UIC Chicago. Host: Dr. Papasani V. Subbaiah. 05/16/19.

Role of hepatocyte PPARγ in mice with diet-induced non-alcoholic fatty liver disease (NAFLD). Liver/GI WIP. UIC. Host: Dr. Natalia Nieto. 02/21/23.

Role of PPARγ in hepatocytes of mice with diet-induced non-alcoholic fatty liver disease (NAFLD).
Lipid Club 2022-2023. UIC Chicago. Host: Dr. Papasani V. Subbaiah.

04/19/23.

ABSTRACTS AND PRESENTATION IN SCIENTIFIC MEETINGS.

Oral communications - National/International

- Castaño JP, Gahete MD, Durán-Prado M, Luque RM, Martínez-Fuentes AJ, Quintero A, Gutiérrez-Pascual E, <u>Cordoba-Chacon J</u>, Malagón MM, Gracia-Navarro F. <u>Understanding the multifactorial regulation of</u> GH release by somatotropes: lessons from comparative endocrinology. 24th Conference eurepean compartaive endocrinologists. Oral Presentation. Genova (Italy). 2008
- 2. <u>Cordoba-Chacon J</u>, Castano J.P, Kineman R. D, and Luque R.M. <u>Homologous and heterologous in vitro regulation of pituitary receptors for somatostatin (SST), growth hormone (GH)-releasing hormone (GHRH) and ghrelin in a non-human primate (Papio anubis). 10th European Congress of Endocrinology. Oral communication. Istambul (Turkey) 2009</u>
- 3. Cordoba-Chacon J, Gahete MD, Castaño JP, Kineman RD, Luque RM. Somatostatin receptor subtype expression in hypothalamus, pituitary, and stomach of male and female, wildtype and somatostatin knock-out mice under fed and fasted conditions. 7° Congreso de la Asociacion Iberica de Endocrinologia Comparada. Oral communication. Porto, (Portugal). 2009
- 4. <u>Cordoba-Chacon J.</u> La cortistatina es más que un simple análogo natural de la somatostatina: estudio endocrino-metabólico de ratones CST-KO. XXXV congreso de la sociedad andaluza de endocrinología y nutrición. Invited Oral Communication. Úbeda, Jaén (Spain). 2010.
- 5. Cordoba-Chacon J. Majumdar N, Puchowicz M, Frank SJ, List EO, Kopchick JJ, Kineman RD. Hepatic GH resistance increases de novo lipogenesis independent of sex, but only leads to fatty liver in males. The Endocrine Society's 97th Annual Meeting & Expo. Oral Communication. San Diego (CA). 2015. Eugenia Rosemberg Abstract Award.
- 6. Torres C, Principe DR, Park A, McKinney R, Dorman MJ, Rana A, Hirsch E, <u>Cordoba-Chacon J</u>, Grippo PJ. Pl3Kγ-deficiency protects against pancreatic tumorigenesis at the expense of diet-Induced hyperlipidemia and hepatotoxicity. American Association for Cancer Research Annual Meeting 2018. Chicago (2018).
- 7. Sarmento-Cabral A, del Rio-Moreno M. Gutierrez-Casado E, Mahmood M, Guzman G, Subbaiah PV, Cordoba-Chacon J, Yakar S, Kineman RD. GH directly regulates hepatic steatosis and de novo

- lipogenesis (DNL), independent of IGF1, while hepatocyte IGF1 protects against liver injury and bone loss. 4th FASEB SRC GH & PRL Family in Biology and Disease, West Palm Beach, FL (July 7-12, 2019). Selected for a short talk travel award.
- 8. Muratalla J, Lee SM, Remon-Ruiz P, Norris GH, Cordoba-Chacon J. Hepatocyte Peroxisome Proliferator-activated Receptor Gamma (pparg) Offsets The Anti-steatogenic Effects Of Thiazolidinediones In Obese Male Mice. Endocrine Society Meeting. San Francisco (2020). Meeting not celebrated due to COVID-19. This presentation was selected for the virtual ENDOonline2020 (June 9th, 11:15-11:30am EST).
- 9. *** Lee S, Muratalla J, Diaz-Ruiz A, <u>Cordoba-Chacon J</u>. Contribution of hepatocyte-specific PPAR gamma to the development of non-alcoholic steatohepatitis (NASH), insulin resistance and obesity. Midwest Clinical and Translational Research Meeting of the Central Society for Clinical & Translational Research and Midwestern American Federation for Medical Research. Chicago, IL (2020). Meeting not celebrated due to COVID-19.
- 10. Vázquez-Borrego MC, del Río Moreno M, Sarmento-Cabral A, Mahmood M, Subbaiah PV, Yakar S, <u>Cordoba-Chacon J</u>, Puchowicz M, Kineman RD. Hepatocyte GH signaling regulates carbohydrate processing in a STAT5b-independent manner. 23rd European Congress of Endocrinology (European Society of Endocrinology), Virtual May 2021.
- 11. Herman-Sanchez N, Lopez-Canovas JL, Garcia-Estrada A, del Rio-Moreno M; Saez-Martinez P, Sánchez-Frias ME, Amado V, de la Mata M, <u>Córdoba-Chacón J</u>, Rodríguez-Perálvarez M, Luque RM, Gahete MD. Somatostatin and ghrelin systems characterization reveals a central role in chronic liver disease European Society of Endocrinology. Young Endocrinologists and Scientists (EYES) Annual Meeting. (2021).
- 12. Kineman RD, Vazquez-Borrego MC, del Rio-Moreno M, Sarmento-Cabral A, <u>Cordoba-Chacon J</u> GH regulation of hepatocyte metabolism and health; lessons learned from the aHepGHRkd mouse model. The Growth Hormone (GH)/ Prolactin (PRL) Family in Biology and Disease Conference, Athens, OH (May 15-19, 2022).
- 13. del Rio-Moreno M, Vazquez-Borrego MC, <u>Cordoba-Chacon J,</u> Kineman Hepatocyte GHR/STAT5b signaling: The good the bad and the ugly. The Growth Hormone (GH)/ Prolactin (PRL) Family in Biology and Disease Conference, Athens, OH (May 15-19, 2022).

Oral Communications - Local/Regional

- 1. <u>Cordoba-Chacon J.</u> Somatostatin receptor subtype expression in hypothalamus and pituitary of male and female, wildtype and somatostatin knock-out mice under fed and fasted conditions. *I Congreso científico de investigadores en formación.* Oral Communication. Córdoba, (Spain) 2009.
- 2. <u>Cordoba-Chacon J.</u> Hepatocyte-specific molecular mechanisms regulated by PPARγ that could promote NAFLD in mice. 2017 UIC Obesity and Diabetes Research Day. Chicago, IL. (2017)

Posters - National/International

- Cordoba-Chacon J, Luque R.M, Gahete M.D, Duran-Prado M, Gracia-Navarro F, Kineman R. D, Malagon M.M and Castano J.P. Identification and molecular characterization of new somatostatin receptor subtype 5 truncated isoforms rodents. 10th European Congress of Endocrinology. Poster. Berlin (Germany). 2008
- Cordoba-Chacon J, Gahete MD, Duran-Prado M, Pozo A, Malagon MM, Kineman R. D, Luque R.M and Castaño JP. Identification and Characterization of New Truncated but Funtional Isoforms of Somatostatin Receptor Subtype 5 in Rodents. The Endocrine Society's 91st Annual Meeting. Poster. Washington, DC (USA). 2009.
- Cordoba-Chacon J, Castaño JP, Kineman RD, Luque RM. Low doses of somatostatin dramatically increase GH release in primary pituitary cell cultures from a non-human primate (baboon, Papio anubis) acting via receptor subtype 5 (Sstr5) / Adenylyl cyclase / Protein Kinase A. 1st Basic postgraduate course of the European Society of Endocrinology. Poster. Turin, (Italy) 2009
- 4. <u>Cordoba-Chacon J</u>, Luque RM, Gahete MD, Kineman RD, Tena-Sempere M, Castaño JP Kisspeptin selectively increases LH and GH, but not FSH, ACTH, PRL or TSH, release in primary pituitary cell

- cultures from a non-human primate (Papio Anubis) via distinct signaling pathways and under influence of sex steroids. 12th European Congress of Endocrinology. Poster. Prague (Czech Republic). 2010
- Cordoba-Chacon J, Gahete MD, Chanclon C, Pozo-Salas AI, Gracia-Navarro F, Martínez-Fuentes AJ, de Lecea L, Kineman RD, Castaño JP, Luque RM. Endocrine-metabolic characterization of cortistatin knockout (CST-KO) mice unveils a gender-dependent role of CST, distinct from SST, in regulating growth hormone (GH)- and Adrenocorticotropic (ACTH)-axis function. The Endocrine Society's 92st Annual Metting. Poster. San Diego, CA (USA). 2010.
- Cordoba-Chacon J, Gahete MD, Pozo-Salas AI, Martínez-Fuentes AJ, Gracia-Navarro F, De Lecea L, Kineman RD, Castaño JP, Luque RM. Cortistatin is not a somatostatin analogue but stimulates prolactin release and its deficit causes plasma insulin decrease and male-selective glucose impairment: role of ghrelin. The Endocrine Society's 93st Annual Meeting. Poster. Boston, MA (USA). 2011.
- 7. <u>Cordoba-Chacon J</u>, Gahete MD, Pokala N, Luque RM, Kineman RD. <u>Glucose intolerance in dietinduced obese</u>, adult-onset isolated <u>GH-deficient mice cannot be explained by alteration in beta-cell mass</u>. *The Endocrine Society's 94st Annual Meeting*. Poster. Houston, TX (USA). 2012.
- 8. <u>Cordoba-Chacon J</u>, Gahete MD, Pozo-Salas Al, Moreno-Herrera A, Castaño JP, Kineman RD, Luque RM. Age at onset of diet-induced obesity differentially modifies the metabolic phenotype observed in adults. *The Endocrine Society's 94st Annual Meeting.* Poster. Houston, TX (USA). 2012.
- 9. <u>Cordoba-Chacon J</u>, Gahete MD, Pokala N, Luque RM, Kineman RD <u>Endogenous GH levels in adult mice are positively associated with β-cell function but not β-cell mass</u>. *73rd scientific sessions of the American Diabetes Association*. Poster. Chicago, IL (USA). 2013.
- 10. <u>Cordoba-Chacon J</u>, Gahete MD, Pozo-Salas AI, de Lecea L, Castaño JP, Luque RM. <u>Cortistatin is a key factor regulating the gender-dependent response of the growth hormone (GH) and adrenocorticotropin (ACTH) axes to fasting in mice. The Endocrine Society's 96st Annual Meeting/16th International Congress of Endocrinology. Poster. Chicago (IL). 2014.</u>
- 11. <u>Cordoba-Chacon J.</u> Majumdar N, List EO, Kopchick JJ, Kineman RD. **Sexual dimorphic impact of adult-onset hepatic GH resistance on glucose and lipid metabolism. The Endocrine Society's 96th Annual Meeting/16th International Congress of Endocrinology. Poster. Chicago (IL). 2014.**
- 12. <u>Cordoba-Chacon J,</u> Gahete MD, Luque RM, Kineman RD. **GH as a metabolic hormone.** 14th International Pituitary Congress. Keynote lecture. San Diego, (CA). 2015.
- 13. Wolf Greenstein A, Majumdar N, Yang P, Subbaiah PV, Kineman RD, <u>Cordoba-Chacon J*</u>. Impact of loss of hepatocyte PPARγ on liver steatosis mechanisms in male mice. 76th scientific sessions of the American Diabetes Association. Poster. New Orleans (LA). 2016.
- 14. <u>Cordoba-Chacon J</u>, Khalid S, Nieto N, Guzman G, Kineman RD. <u>Hepatocyte Growth Hormone (GH)</u> Signaling Protects the Adult Liver from Injury through Direct and Indirect Mechanisms. *The Endocrine Society's* 99th Annual Meeting & Expo. Oral Presentation. Orlando (FL). 2017
- 15. Cordoba-Chacon J. Hepatocyte PPARγ may regulate intestinal absorption and/or hepatic clearance of triacylglycerols, to prevent postprandial dyslipidemia. Digestive Disease Week 2017. Poster. Chicago (IL). 2017.
- 16. Cordoba-Chacon J, White, ZC, Tummala A, Yalagala PCR, Dhavamani S, Nagao T, Kineman RD, Subbaiah PV. Impact of dietary trans10-cis12-conjugated linoleic acid on hepatic glucose and lipid metabolism in adult male mice. Endocrine Society Meeting. Chicago (2018) Poster.
- 17. Sarmento-Cabral A, <u>Cordoba-Chacon J</u>, Kineman RD. <u>Adult-onset hepatic GH resistant male mice develop age-dependent non-alcoholic steatohepatitis (NASH) associated with enhanced hepatic de novo lipogenesis (DNL), without adipose tissue lipolysis. 100th Annual Meeting of the Endocrine Society, Chicago IL (2018) Received an Endocrine Society Outstanding Abstract Award.</u>
- 18. Pins DC, Tummala A, Norris GH, <u>Cordoba-Chacon J</u>. Hepatocyte-Specific Ppar gamma contributes to <u>Diet-Induced Steatosis and May Lead to Non-Alcoholic Steatohepatitis (NASH)</u>. The liver meeting American Association for the Study of Liver Diseases. San Francisco, CA (2018)..
- 19. Tummala A, Norris GH, Pins DC, <u>Cordoba-Chacon J</u>. Loss of hepatocyte PPAR_γ expression ameliorates steatosis in mice fed a high-fat, cholesterol, and frunctose diet, but not in mice fed a

- **methionine- and choline-deficient diet.** Endocrine Society Meeting. New Orleans (2019).. *Outstanding Abstract Travel Award*.
- 20. Pusec CM, Norris GH, Guzman G, Green R, Nieto N, Layden BT, <u>Cordoba-Chacon J</u>. Hepatocyte-specific PPARγ contributes to the development of non-alcoholic steatohepatitis (NASH) in male mice. The liver meeting American Association for the Study of Liver Diseases. Boston, MA. (2019).
- 21. Sarmento-Cabral A, del Rio-Moreno M. Gutierrez-Casado E, Mahmood M, Subbaiah PV, del la mata M, Luque RM, <u>Cordoba-Chacon J</u>, Kineman RD. **Stat5b as a potential therapeutic target to treat non-alcoholic steatohepatitis (NASH).** 4th FASEB SRC GH & PRL Family in Biology and Disease, West Palm Beach, FL (July 7-12, 2019).
- 22. Brie B, Sarmento-Cabral A, <u>Cordoba-Chacon J</u>, Becu-Villalobos D, Kineman RD. <u>Differential alterations in the GHRH-GH-GHR-STAT5-IGF-1 axis reveals unique sexual dimorphic hepatic signatures of the male-dominant, metabolic genes Asns and Lcn13. The Growth Hormone (GH)/ Prolactin (PRL) Family in Biology and Disease Conference Federation of American Societies for Experimental Biology (FASEB). West Palm Beach, FL (July 7-12, 2019).</u>
- 23. Pusec CM, Norris GH, Guzman G, Green R, Nieto N, Layden BT, Cordoba-Chacon J. Hepatocyte-specific PPARγ contributes to the development of non-alcoholic steatohepatitis (NASH) in male mice. The liver meeting American Association for the Study of Liver Diseases. Boston, MA. (2019).
- 24. De La Rosa IA, Torres-Granados C, Ibanez-Costa A, Abalos-Aguilera MC, Patino-Trives A, Luque-Tevar M, Perez-Sanchez C, <u>Cordoba-Chacon J</u>, Ortega R, Calvo-Guiterrez J, Collantes-Estevez E, Escudero A, Lopez-Pedrera C, Barbarroja N. <u>Liver dysfunction associated with rheumatoid arthritis. Impact of obesity and effects of DMARDs in hepatic alterations.</u> American College of Rheumatology ACR/ARP Annual Meeting Atlanta, GA. (2019).
- 25. Sarmento-Cabral A, del Rio-Moreno M, Vazquez-Borrego MC, Mahmood M, Gutierrez-Casado M, Guzman G, Subbaiah PV, <u>Cordoba-Chacon J</u>, Yakar S, Kineman RD. The protective effects of hepatocyte GH receptor (GHR) signaling against steatosis and liver Injury is sexually dimorphic and autonomous of IGF1. 102st Annual Meeting of the Endocrine Society, San Francisco, CA (2020).
- 26. Lee S, Pusec CM, De Jesus A, Layden BT, <u>Cordoba-Chacon J</u>. Hepatocyte PPARgamma negatively regulates methionine metabolism and contributes to the development of NASH. The liver meeting American Association for the Study of Liver Diseases. (2020). Virtual meeting.
- 27. del Rio Moreno M, Vazquez-Borrego MC, Mahmood M, Sarmento-Cabral A, Guzman G, Subbaiah PV, Cordoba-Chacon J, Kineman RD. Hepatocyte GHR/STAT5b signaling protects against liver injury in NAFLD/NASH mouse models independent of steatosis. 103rd Annual Meeting of the Endocrine Society, Virtual Meeting (2021). Poster Selected for Rising Stars Power Talks.
- 28. Lee S, Muratalla J, Diaz-Ruiz A, <u>Cordoba-Chacon J</u>. PPAR gamma expression in hepatocytes contributes to increase hepatic fibrosis independently of steatosis when NASH is induced after established diet-induced obesity. The liver meeting American Association for the Study of Liver Diseases. (2021). *Poster of distinction*.
- 29. Vazquez-Borrego MC, del Rio Moreno M, Wnek M, Mahmood M, Cordoba-Chacon J, Puchowicz M, Kineman RD. The importance of hepatocyte STAT5b, glucokinase and ChREBP in GH receptor-mediated regulation of steatosis and de novo lipogenesis is dependent on the nutritional state. 24th European Congress of Endocrinology (European Society of Endocrinology). Milan, Italy. (2022)
- 30. O-Sullivan I, Bhattacharyya S, Lee SM, <u>Cordoba-Chacon J</u>, Liew CW, Perry R, Shulman G, Unterman T. FoxO1/ATGL/Sirt1/FoxO1 Feed Forward Signaling Mediates Effects on Hepatic Gene Expression and Glucose Homeostasis in LIRKO Mice. 82nd Scientific Sessions of the American Diabetes Association. New Orleans, LA. (2022).
- 31. Herman-Sanchez N, Lopez-Canovas JL, Garcia-Estrada A, del Rio-Moreno M; Saez-Martinez P, Sánchez-Frias ME, Amado V, de la Mata M, <u>Cordoba-Chacon J</u>, Sarmento-Cabral A, Rodríguez-Perálvarez M, Luque RM, Gahete MD. Caracterización y potencial terapéutico de los sistemas somatostatina y ghrelina en la enfermedad hepática crónica. 47th congreso Asociacion Espanola para el estudio del higado. Madrid, Spain. (2022).
- 32. Herman-Sanchez N, Lopez-Canovas JL, Garcia-Estrada A, Saez-Martinez P, Amado V, de la Mata M, Cordoba-Chacon J, Sarmento-Cabral A, Rodríguez-Perálvarez M, Luque RM, Gahete MD. Characterization of the somatostatin and ghrelin hormonal systems revealed their potential

- therapeutic role in chronic liver disease. European Congress of Endocrinology (European Society of Endocrinology). Milan, Italy (2022).
- 33. Lee SM, Muratalla J, Karimi S, Frutos MD, Guzman G, Ramos-Molina B, Cordoba-Chacon J. Hepatocyte PPARγ contributes to the progression of non-alcoholic steatohepatitis in male and female mice after pre-established diet-induced obesity. The liver meeting American Association for the Study of Liver Diseases. (2022). Washington D.C.
- 34. Muratalla J, Lee SM, <u>Cordoba-Chacon J.</u> The composition of high fat diets with cholesterol and fructose, and the expression of hepatocyte PPAR gamma, impact NASH development in male mice with pre-established diet-induced obesity. The liver meeting American Association for the Study of Liver Diseases. (2022). Washington D.C.
- 35. Del Rio-Moreno M, Vazquez-Borrego MC, <u>Cordoba-Chacon</u>, Kineman RD. Role of hepatocyte growth hormone receptor (GHR) and STAT5b in diet-induced NASH and tumor development. The liver meeting American Association for the Study of Liver Diseases. (2022). Washington D.C.
- 36. Muratalla J, Lee SM, Sierra-Cruz M, <u>Cordoba-Chacon J.</u> High fat diets with cholesterol and fructose have a differential impact in NASH and adiposity in mice with pre-established diet-induced obesity. Midwest Clinical and Translational Research Meeting of the Central Society for Clinical & Translational Research and Midwestern American Federation for Medical Research. Chicago, IL (April 24th-25th 2023). Poster
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