

#### **NASCE 2023 Committees**

Officers and Council of the North American Society for Comparative Endocrinology (NASCE; La Societé Nord-Americaine d'Endocrinologie Comparée; La Sociedad Norteamericana de Endocrinologia Comparada) 2021-2023

(updated with SICB member)

#### Officers

Yun-Bo Shi (President 2021-2023; Past-President in the Executive Committee 2023 - 2025) Section on Molecular Morphogenesis NICHD, National Institutes of Health (NIH) Bethesda Md 20892-5431 Email: shiyu@mail.nih.gov

Aurea Orozco (Past-President in the Executive Committee 2021-2023; Ex-officio Council Member from 2023-2025)

Department of Molecular and Cellular Neurobiology

Neurobiology Institute

National University of Mexico (UNAM)

Juriquilla. Querétaro,

Qro 76230, Mexico

E-mail: aureao@servidor.unam.mx

Valerie Langlois (VP-President/President-Elect 2021-2023; President 2023-2025)
Institut national de la recherche scientifique
Centre Eau Terre Environnement (INRS-ETE)
490, rue de la Couronne, Québec (Québec), Canada G1K 9A9
T 418 654-2547 http://www.ete.inrs.ca/valerie-langlois
E-mail: Valerie.Langlois@inrs.ca

Angela Lange (Secretary/Treasurer; second term 2019-2023)

Research Director
Department of Biology
University of Toronto Mississauga
3359 Mississauga Rd.
Mississauga, ON, L5L 1C6
Canada

Email: angela.lange@utoronto.ca



#### Council

John Chang (Ex-officio Council member from 2021 - 2023)

CW405 Biological Sciences Building Department of Biological Sciences University of Alberta Edmonton, AB, T6G2E9

Canada

Email: john.chang@ualberta.ca

Rachel M. Bowden (ex officio; SICB DCE Chair-elect term 2022-2024)

School of Biological Sciences Illinois State University Campus Box 4120 Normal, IL USA

Email: rmbowde@ilstu.edu.

Pierre Deviche (second term 2019-2023)

Organismal, Integrative and Systems Biology School of Life Sciences Arizona State University, Tempe, AZ 85287-4501 USA

Email: deviche@asu.edu

Jean-Paul Paluzzi (second term 2019-2023)

Department of Biology York University Toronto, ON M3J 1P3 Canada

Email: paluzzi@yorku.ca

#### Cheryl Rosenfeld (second term 2019-2023)

Department of Biomedical Sciences College of Veterinary Medicine 440F Life Sciences Center University of Missouri Columbia, MO 65211, USA

Email: RosenfeldC@missouri.edu

## Rodolfo Cardenas (second term 2021-2025)

Laboratorio de Endocrinología de Peces Unidad de Morfología y Función, F.E.S.-Iztacala U.N.A.M. Mexico

E-mail: rodolf@unam.mx

Marta Romano (second term 2021-2025) Centro de Investigación y Estudios Avanzados del I.P.N., Fisiología, Biofísica y Neurociencias



Mexico

E-mail: mromano@fisio.cinvestav.mx

Hamid Habibi (second term 2021-2025) Department of Biological Sciences, University of Calgary, N.W. Calgary, AB, Canada

E-mail: habibi@ucalgary.ca

#### Chris Martyniuk (second term 2021-2025)

Center for Environmental and Human Toxicology & Department of Physiological Sciences 2187 Mowry Road, Bldg 471 PO Box 110885 Gainesville, FL 32611 USA

E-mail: cmartyn@ufl.edu

#### Kathleen Gilmour (second term 2021-2025)

University of Ottawa,
Department of Biology
30 Marie Curie
Ottawa, ON,
K1N 6N5
Canada

E-mail: kgilmour@uottawa.ca

#### Jim Carr (second term 2021-2025)

Department of Biological Sciences, Texas Tech University, Box 43131 Lubbock, TX 79409 USA

E-mail: james.carr@ttu.edu

#### Cunming Duan, Ph.D. (first term 2021-2025)

Department of Molecular, Cellular and Developmental Biology University of Michigan 1105 N. University Ave. Biological Sciences Building, Room 3268 Ann Arbor, Michigan 48109-1048 Tel: (734) 763-4710 Fax (734) 647-0884

E-mail: cduan@umich.edu

## Matt Vijayan (first term 2019-2023)

Biological Sciences 507 Campus Drive N.W. University of Calgary 2500 University Drive NW Calgary, AB, T2N 1N4



Canada

E-mail: mmvijaya@ucalgary.ca

Maricela Luna (first term 2021-2025)

Department of Cellular and Molecular Neurobiology Institute of Neurobiology National University of Mexico (UNAM) Juriquilla. Querétaro,

Qro 76230,

Mexico

E-mail: lunam@unam.mx

Mark A. Sheridan (North American Editor-in-Chief, General and Comparative Endocrinology)

**Department of Biological Studies** 

**Texas Tech University** 

2500 Broadway Lubbock, Texas 79409

USA

E-mail: mark.sheridan@ttu.edu

#### 'Banker'

Chris Martyniuk (second term 2021-2025)

Center for Environmental and Human Toxicology & Department of Physiological Sciences 2187 Mowry Road, Bldg 471

PO Box 110885

Gainesville, FL 32611

E-mail: cmartyn@ufl.edu

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Chair of the NASCE2023 Scientific Program Committee

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President, North American Society for Comparative Endocrinology (NASCE)Aurea Orozco, UNAM (Mexico)



#### **Awards Committee**

Hamid Habibi (second term 2021-2025)
Department of Biological Sciences,
University of Calgary,
N.W. Calgary, AB,
Canada
E-mail: habibi@ucalgary.ca

<u>Communications Committee</u> (website development, social media, communication support)

Jean-Paul Paluzzi

Department of Biology York University Toronto, ON M3J 1P3 Canada

Email: paluzzi@yorku.ca

<u>Development Committee</u> (membership, identifying funding opportunities, other new initiatives) – <u>Jim Carr</u>

Department of Biological Sciences, Texas Tech University, Box 43131 Lubbock, TX 79409 USA

E-mail: james.carr@ttu.edu

## **Local Organizing Committee**

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Consejo de Ciencia y Tecnología del Estado de Querétaro (CONCYTEQ)

Secretaria de Turismo del Estado de Querétaro



## **Meeting Highlights**

#### **Plenary Lectures**

#### PL1. Joëlle Rüegg, Uppsala University, Sweden

Impacts of Endocrine Disruptors on the Developing Brain: from Molecular Insights to Novel Test Methods

## PL2. Hugo A Barrera-Saldaña, Universidad Autónoma de Nuevo León, México

The lives of growth hormone: news from the past, stories with future.

#### PL3. David Parichy, University of Virginia, USA

Thyroid Hormone Dependence of Adult Phenotype in Zebrafish

### PL4. Patricia Pietrantonio, Texas A&M University, USA.

Comparative endocrinology of bloody vectors towards useful outcomes: probing GPCRS from multifunctional neuropeptides in ticks and mosquitoes

#### PL5. William Bendena, Queen's University, Canada

Uncovering roles for allatostatin-like receptors in Caenorhabditis elegans

#### PL6. De-Shou Wang, Southwest University, Chongqing, China

Molecular mechanism analysis of sex determination and differentiation of tilapia based on genome editing.

#### -Gorbman- Bern Memorial Award Lecture. Vance Trudeau, University of Ottawa, Canada

Neuroendocrine control of reproduction: is it love or is it just ovulation?

#### Symposia

- S1. State-of-the-art in invertebrate comparative endocrinology
- S2. Development of sex in animals
- S3. Nothing to stress about: Endocrine and oxidative responses to diet
- S4. Endocrinological changes induced by feeding
- S5. Thyroid hormone and vertebrate development
- S6. Comparative endocrinology of osmoregulation
- S7. Growth hormones: from physiological roles to clinical science
- S8. Role of the endocrine system in ecological tradeoffs
- S9. Trends in the evolution of hormone receptors
- S10. Insulin/Insulin-like growth factor peptides
- S11. Regulation of salinity tolerance in amphibians
- S12. Hormonal control of gonadal development: from biological sex to reproduction
- S13. Estrogenic, Androgenic, Thyroidal, and Steroid biosynthetic (EATS) and
- non-EATS Research Advancements and Testing
- S14. Evolution of neuropeptide and hormonal signaling systems
- S15. Hormone, Behavior and Reproduction
- S16. Hormonal control of regeneration in vertebrates
- S17. Emerging topics in comparative endocrinology 1
- S18. Emerging topics in comparative endocrinology 2

#### **Panels and Workshops**

## P1. -Women in Science Panel-



		Plenary 6 De-Shou Wang (9:00 - 10:00)			. 10:30)	Session 18 Emerging topics comparative endocrinology. (10:30 - 12:00)	. 12:30)	eo _	:30)	z _			Closing Ceremony and Student Awards Presentation (18:00 - 19:00)	00			
1th June	Registration (8:00 - 9:00)		Coffee Break (10:00 - 10:30)	Session 17 Emerging topics in comparative endocrinology I. (10:30 - 12:00)	Coffee Break (12:00 - 12:30)	Women in Science (12:30 - 13:30)	Lunch (13:30 - 14:30)	NASCE Council Meeting 2 (14:30 - 16:30)			ny and Student Av (18:00 - 19:00)	Closing Banquet 19:00					
			Coff	Session 16 Hormonal control of regeneration in vertebrates. (10:30 - 12:00)	Coff						Closing Ceremo	ច					
			1:30)	Session 15 Hormones, behavior and reproduction. (10:30 - 12:00)				uo									
31th May	Registration (8:00 - 9:00)	Plenary 5 William Bendena (9:00 - 10:00)	Coffee Break (10:00 - 10:30)	Session 14 Evolution of neuropeptide and hormonal signaling systems. (10:30 - 12:00)				Excursionfree afternoon (12:00 - 18:00)		sion/free afferno (12:00 - 18:00)							
		*	Coffee	Session 13 Estrogenic, androgenic, thyroidal, and steroid biosynthetic (EATS) and non- EATS research advancements and testing. (10:30 - 12:00)													
		ę	10:30 )	Session 9 Trends in the evolution of hormone receptors.	12:30)	Gorbman- Bern Lecture (12:30 - 13:30)	30)	Session 12 Hormonal control of gonadal development: from biological sex to reproduction.	(14:30 - 16:00)	N							
30th May	Registration (8:00 - 9:00)	Plenary 4 Patricia Pietrantonio (9:00 - 10:00)	Coffee Break(10:00 - 10:30 )	Session 8 Role of the endocrine system in recological tradeoffs. (10:30 - 12:00)	Coffee Break (12:00 - 12:30)		Lunch (13:30 - 14:30)	Session 11 Regulation of salinity tolerance in phibians.		Poster Session 2							
		ă.	Coffe	Session 7 Growth hormones: from physiological roles to clinical science. (10:30 - 12:00)	Coffe		ŏ		Session 10 Insulin/Insulin- like growth factor peptides. (14:30 - 16:00)								
		Plenary 2 Hugo A Barrera-Saldaña (9:00 - 10:00) offee Break(10:00 - 10:30)	aña 0:30)	aña (0:30)	aña 0:30)	aña	aña		Session 3 Nothing to stress about: Endocrine and oxidative responses to diet. (10:30 - 12:00)	12:30)	(Accept	(0	Session 6 Comparative endocrinology of osmoregulation. (14:30 - 16:00)				
29th May	Registration (8:00 - 9:00)		Coffee Break(10:00 - 1	Session 2 Development of sex in animals. (10:30 - 12:00)	Coffee Break (12:00 - 1	Plenary 3 David Parichy (12:30 - 13:30)	Lunch (13:30 - 14:3	Session 5 Thyroid hormone and vertebrate development. (14:30 - 16:00)		Poster Session 1 (16:00 - 18:00)							
		Hug	Coffe	Session 1 State-of-the-art in invertebrate comparative endocrinology. (10:30 - 12:00)	Coffe		3	Session 4 Endocrinological changes induced by feeding. (14:30 - 16:00)									
28th May	Registration (9:00 - 14:30)						NASCE Council Meeting 1 (13:30 - 15:30)	Opening Ceremony (16:00 -16:30)	Plenary 1 Joëlle Rüegg (16:30 -17:30)	Welcome Reception (17:30 - 19:30)							



## Sunday, May 28<sup>th</sup>

### -Registration-

Misión Juriquilla Hotel Lobby (Starting at 8:00)

## -NASCE Council Meeting 1-

(13:30 - 15:30) Salón Gobernador-Misión Juriquilla Hotel

### -NASCE 2023 Opening Ceremony-

(16:00 - 16:30)
Cultural and Academic Center (CAC)
Auditorium "Dr. Flavio M. Mena Jara "
Campus UNAM Juriquilla

### -Plenary Session 1-

Joëlle Rüegg

Uppsala University, Sweden

# IMPACTS OF ENDOCRINE DISRUPTORS ON THE DEVELOPING BRAIN: FROM MOLECULAR INSIGHTS TO NOVEL TEST METHODS

(16:30 - 17:30) CAC, Campus UNAM Juriquilla

### -Welcome Reception-

(17:30 - 19:30) Institute of Neurobiology, Campus UNAM Juriquilla



# Monday, May 29<sup>th</sup>

## -Registration-

Misión Juriquilla Hotel Lobby (Starting at 8:00)

## -Plenary 2-Hugo A. Barrera-Saldaña

Universidad Autónoma de Nuevo León, México

## THE LIVES OF GROWTH HORMONE: NEWS FROM THE PAST, STORIES WITH FUTURE

Salón Juárez- Misión Juriquilla Hotel (9:00 - 10:00 am)

-Coffee Break-

(10:00 - 10:30)

## -Morning Symposia (S1-S3)-

	Sumposium 1 Sumposium 2 Sumposium 2							
	Symposium 1	Symposium 2			Symposium 3			
State-of-the-art in invertebrate comparative endocrinology Co-Chairs:  Jean-Paul Paluzzi and Meet Zandawala  -Salón Juárez-			evelopment of sex in animals Co-Chairs: Chun Peng and Yong Zhu -Claustro II-	Nothing to stress about: Endocrine ar oxidative responses to diet Co-Chairs: Pierre Deviche and Karen Sweazea -Claustro III-				
			Symposium Speakers	I				
Reconstructing the evolution of neuropeptide signalling in non-bilaterian metazoa		S2-1	Kataaki Okubo Sex steroid regulation of sexually dimorphic behavioral responses to conspecifics in medaka	\$3-1	Clara Cooper-Mullin How Birds During Migration Maintain (Oxidative) Balance			
S1-2	Farwa Sajadi An anti-diuretic signaling system in the female mosquito, Aedes aegypti	S2-2	<b>Bon-chu Chung</b> Single-cell analysis of zebrafish germ cell lineage and sex development	\$3-2	Jose Pablo Vazquez-Medina Prolonged fasting stimulates endogenous antioxidant production in elephant seals			
S1-3	Meet Zandawala Visualizing context-dependent modulation in-vivo using TANGO- Map MkII neuropeptide activity sensors		Wei Ge Genetic analysis for roles of gonadotropins in zebrafish sex differentiation, gonadal development, and function	S3-3	Karen Sweazea Acute metformin induces hyperglycemia in healthy adult mourning doves, Zenaida macroura?			
			Oral Presentations					
OR1-1  OR1-1  Areej N. Al-Dailami  Glycoprotein hormone (GPA2/GPB5)  and corticotropin-releasing factor  (CRF) signaling are involved in  reproduction in adult female  rhodnius prolixus		OR2-1	<b>John Postlethwait</b> Gonadal development in zebrafish with chromosomal sex determination	OR3-1	Juan R. Riesgo-Escovar Moderate activation of NRF2 in insulin-signaling impaired drosophila melanogaster improves resistance to oxidative stress			
OR1-2	Elias Taylor Thyroid Hormones Signaling Mechanisms in Sea Urchins and Other Echinoderms	OR2-2	<b>Yong Zhu</b> Adamts9 modulates gonad sex in juvenile zebrafish	OR3-2	Elizabeth Brammer-Robbins  Do healthy manatees from a poor- quality habitat exhibit evidence physiological of stress?			



## -Plenary 3-David Parichy

University of Virginia, USA

## THYROID HORMONE DEPENDENCE OF ADULT PHENOTYPE IN ZEBRAFISH

Salón Juárez- Misión Juriquilla Hotel (12:30 - 13:30)

#### -Lunch-

Misión Juriquilla Hotel (13:30 - 14:30)

## -Afternoon Symposia (S4-S6)-

(10:30 - 12:00)

			(10:30 - 12:00)			
	Symposium 4		Symposium 5	Symposium 6		
Endocrinological changes induced by feeding Co-Chairs: Ian Orchard and Angela Lange -Salón Juárez-			yroid hormone and vertebrate development. Co-Chairs: -bo Shi and Aurea Orozco Rivas -Claustro II-	Comparative endocrinology of osmoregulation. Co-Chairs: Jason P. Breves and Stephen D. McCormick -Claustro III-		
		•	Symposium Speakers	•		
	Mark Sheridan		Sheue-Yann Cheng		Nicholas Bernier	
\$4-1	Integration of feeding with the control of growth and metabolism: insights from studies in fish	S5-1	Thyroid Hormone Receptor alpha 1 in Uterus Functions	\$5-1	Central and peripheral contributions of the corticotropin-releasing factor (CRF) system to smoltification and seawater acclimation in atlantic salmon	
	Jimena Leyria	\$5-2	Yuki Shibata		Ningping Gong	
S4-2	Insulin like peptides as multitaskers for successful reproduction in rhodnius prolixus, a vector of chagas disease		Genetic analysis of thyroid hormone regulation of intestinal remodeling in Xenopus	S5-2	Strategies of anadromous sea lamprey for coping with salinity challenges by regulating hormone signaling systems and ion- transporters in the gill	
S4-3	Monika Gulia-Nuss Regulation of blood digestion in lyme disease vector tick, ixodes scapularis	S5-3	Laurent Sachs Thyroid hormone and glucocorticoid effects on Transcriptome and Methylome in Xenopus tropicalis tadpoles	\$5-3	Andre Seale The prolactin cell as a nexus for the integration of osmotic and thermal sensory modalities?	
			Oral Presentations			
OR4-1	Valeria Urban Effects of fasting upon the somatotropic axis and metabolism in the green iguana	OR5-1	Hui Zhao Disruption of thyroid hormone receptor alpha a (THRaa) promotes heart regeneration in zebrafish	OR5-1	Britney Picinic The influence of diuretic and anti- diuretic factors on aquaporin expression in female A. aegypti	
OR4-2	Dina lathzil Vázquez Carrillo Sulpiride reduces hyperglycemia and insulin resistance in diet- induced obese female and male mice	OR5-2	Aurora Olvera Vidal Specific temporal windows of T3 action in oligodendrogenesis. Lessons from the zebrafish.	OR5-2	Ciaran Shaughness Regulation of the hypothalamus- pituitary-interrenal (HPI) axis in atlantic sturgeon (acipenser oxyrinchus) during salinity acclimation and acute stress?	

### -Poster Session 1-Even numbered Posters-

Portal Capilla Misión Juriquilla Hotel (16:00 - 18:00)



# Tuesday, May 30<sup>th</sup>

### -Registration-

Misión Juriquilla Hotel (Starting at 8:00)

## -Plenary 4-Patricia Pietrantonio

Texas A&M University, USA

# COMPARATIVE ENDOCRINOLOGY OF BLOODY VECTORS TOWARDS USEFUL OUTCOMES: PROBING GPCRS FROM MULTIFUNCTIONAL NEUROPEPTIDES IN TICKS AND MOSQUITOES

Salón Juárez- Misión Juriquilla Hotel (9:00 - 10:00)

-Coffee Break-

(10:00 - 10:30)

## -Morning Symposia (S7-S9)-

	Symposium 7 Symposium 8 Symposium 9						
	Symposium 7	<u>symposium 8</u>			Symposium 9		
Growth hormones: from physiological roles to clinical science.  Co-Chairs:  Farwa Sajadi and Santiago Pech-Pool  -Salón Juárez-			ole of the endocrine system in ecological tradeoffs. Co-Chairs: Imes Carr and Breanna Harris -Claustro II-	Trends in the evolution of hormono receptors. Chair: Robert Dores			
			Symposium Speakers				
	Stephanie Thebault		James A. Carr		Ciaran A. Shaughnessy		
\$7-1	Current insights into the spontaneous activity of the retina: from basics to clinics	\$8-1	Visual system neuropeptides modulate predator/prey tradeoffs	\$9-1	Applying ancestral sequence reconstruction to resolve the functional evolution of melanocortin 2 receptor (mc2r)		
\$7-2	Carlos Guillermo Martínez Moreno Neural growth hormone (GH): from basic to applied research	\$8-2	Breanna Harris Stress and Ecological Tradeoffs: Predictions, perseverance, and the pacing of pandemic productivity	\$9-2	<b>Mathilakath Vijayan</b> Functional evolution of the corticosteroid receptors in a piscine model		
S7-3	John Chang PI3K and ERK signalling in goldfish acute basal and agonist-stimulated GH secretion, and long-term basal hormone release and availability in vitro	\$8-3	Gabriela González-Mariscal A comparative approach to the study of mammalian maternal behavior: nest-building in rabbits, sows, and rats	S9-3	Femilarani Antomagesh Both gr and mr are important for the increased metabolic flux of glucose during stress in the zebrafish brain		
			Oral Presentations				
OR7-1	Juan David Olivares Hernández Neuroprotective and regenerative effects of GH in the embryonic chicken cerebral pallium exposed to hypoxic-ischemic (hi) injury	OR8-1	Alexander Baugh Sex is stressy. Is stress sexy? Glucocorticoids and mate choosiness in Cope's gray treefrogs	OR9-1	<b>Laura Cristina Berumen</b> Ace-2 differential expression in a549 type Ilalveolar cell line		
María Magdalena Zamora Corona Vasoinhibin acts directly on cancer cells to inhibit thrombin-induced proliferation and invasion		OR8-2	Ya-Xiong Tao Unique pharmacology of fish neural melanocortin receptors and origin of melanocortin receptors	OR9-2	Jinghan Tan Characterization and insight into the physiological role of the CCHamides in the yellow fever mosquito, Aedes aegypti		



## -Gorbman – Bern Lecture-Vance Trudeau

**University of Ottawa** 

## NEUROENDOCRINE CONTROL OF REPRODUCTION: IS IT LOVE OR IS IT JUST OVULATION?

Salón Juárez- Misión Juriquilla Hotel (12:30 - 13:30)

#### -Lunch-

Misión Juriquilla Hotel (13:30 - 14:30)

## -Afternoon Symposia (S10 - S12) -

(10:30 - 12:00)

			(10.50 12.00)				
	Symposium 10	Symposium 11			Symposium 12		
Insulin/Insulin-like growth factor peptides Chair: Cunming Duan			Regulation of salinity tolerance in amphibians Co-Chairs: Dan Buchholz and Erica Crespi		Hormonal control of gonadal development: from biological sex to reproduction Co-Chairs: Juan I Fernandino and		
	-Salón Juárez-		-Claustro II-		Diana Castañeda-Cortés		
					-Claustro III-		
			Symposium Speakers				
S10-1	<b>Nicolas Rohne</b> Insulin resistance and metabolic adaptation in cavefish	S11-1	Molly Albecker Salt-regulation in anurans: What do we know?	S12-1	Juan I. Fernandino Thyroid axis participates in heat temperature-induced male sex reversal through its activation by the stress response		
S10-2	Andrew Nuss Insulin-mediated nutrient partitioning in a non-model insect: the western tarnished plant bug, Lygus hesperus	S11-2	Brian Tornabene  Determining whether adrendal  steroids mediate phenotypic  and physiologic effects of  eleveated salinity on larval  amphibians	S12-2	Diana Castañeda-Cortés Role of steroid-5?-reductase type 2 on development and reproduction in amphibians		
\$10-3	Cunming Duan Regulation of cell plasticity by IGF signaling: Lessons from fish ionocytes	S11-3	Myra Hughey Integrating the gut microbiota into our understanding of amphibian responses to salinity and pathogen stress	S12-3	Benjamin Parrot Epigenome-by-environment interactions underlying temperature-dependent sex determination		
			Oral Presentations				
OR10-1	Yudong Jia Characterization of IGF3 in turbot and its expression patterns during ovarian and embryonic development	OR11-1	Erica Crespi Salinity increases differentiation of mucus secreting cells and secretion of mucus in amphibian embryos: a potential role for leptin?	OR12-1	Verónica Angélica Alves Gonadal development in the frog Silurana tropicalis: does thyroid hormone signaling play a role?		
OR10- 2	Viral Incillin/II-1 like nentides		Dan Buchholz Role of mineralocorticoid receptor in tadpoles of Xenopus tropicalis.	OR12- 2	Gaganpreet Sidhu NDR3 in zebrafish sex differentiation and fertility regulation		

## -Poster Session 2-Odd numbered Posters-

Portal Capilla Misión Juriquilla Hotel (16:00 - 18:00)



## Wednesday, May 31<sup>th</sup>

## -Registration-

Misión Juriquilla Hotel (Starting at 8:00)

## -Plenary 5-William Bendena

Queen's University, Canada

## UNCOVERING ROLES FOR ALLATOSTATIN-LIKE RECEPTORS IN Caenorhabditis elegans

Salón Juárez- Misión Juriquilla Hotel (9:00 - 10:00)

> -Coffee Break-(10:00 - 10:30)

## -Morning Symposia (S13-S15)-

			(10:30 - 12:00)			
	Symposium 13		Symposium 14	Symposium 15		
steroi res	ogenic, androgenic, thyroidal, and d biosynthetic (EATS) and non-EATS earch advancements and testing Co-Chairs: ki Marlatt and Valerie Langlois -Salón Juárez-		volution of neuropeptide and hormonal signaling systems Chair: Andreas Heyland -Claustro II-	Hormones, behavior and reproductio Co-Chairs: <b>Rebeca Corona and Maricela Luna</b> -Claustro III-		
			Symposium Speakers			
S13-1	Celia Marti Identification of molecular markers on zebrafish embryo for thyroid disruption by transcriptomic analysis	S14-1	Andreas Heyland Function and Evolution of Thyroid Hormone Signaling in Sea Urchin Embryonic and Post- Embryonic Development	S15-1	Wendy Portillo Martínez Adult neurogenesis induced by socio-sexual behavior in the prairie vole, a social monogamous mammal	
S13-2	Chris Martyniuk  Knock(in) knock(out): who?s there? Gene editing approaches for developing ?non-eats?  Zebrafish screens.	S14-2	Joao CR Cardoso Neuropeptide regulation of shell biomineralization in bivalves	S15-2	Angela Nava Bolaños Reproductive isolation barriers in argia damselflies	
\$13-3	Emmanuelle Monniez Rapid screening tool for disruption of endocrine stress responses linked to the developmental origins of disease	\$14-3	María Fernanda Vergara Martínez Oxytocin/vasopressin-related neuropeptide distribution in ovaries of pogonomyrmex barbatus ant	\$15-3	Rebeca Corona Prolactin modulates the olfactory system response to reproductive chemosignals?	
			Oral Presentations			
OR13-1	Michael McKay Copper impacts on endocrine processes in the liver of developing rainbow trout (Oncorhynchus mykiss)	OR14-1	Chunyu Lu Simultaneous extraction and detection of neuropeptides, steroids, and proteins in small tissue samples	OR15-1	Enezi Khalid Small GTPase involvement in basal and GNRH-dependent luteinizing hormone and growth hormone secretion from dispersed goldfish pituitary cells	
OR13- 2	Paisley Thomson Emerging evidence that the synthetic progestin, melengestrol acetate, disregulates three of the major endocrine pathways in silurana tropicalis	OR14- 2	Robin Warne Microbiome mediation of animal life histories via metabolites and insulin-like signaling.	OR15- 2	Elizabeth Brammer-Robbins Do healthy manatees from a poor-quality habitat exhibit evidence physiological of stress?	

## NASCE 2023 Schedule



-Excursion/free afternoon-

Trip to Bernal, Querétaro (12:00 - 18:00)



## Thursday, June 1<sup>st</sup>

## -Registration-

Misión Juriquilla Hotel (Starting at 8:00)

## -Plenary 6-De-Shou Wang

Southwest University, Chongqing, China

# MOLECULAR MECHANISM ANALYSIS OF SEX DETERMINATION AND DIFFERENTIATION OF TILAPIA BASED ON GENOME EDITING

Salón Juárez- Misión Juriquilla Hotel (9:00 - 10:00 am)

-Coffee Break-

(10:00 - 10:30)

## -Morning Symposia (\$16-\$18)-

Symposium 16			Symposium 17 Symposium 18		Symposium 18	
Hormonal control of regeneration in vertebrates. Chair: José Ávila-Mendoza			Emerging topics in comparative endocrinology I. Chair: Chris Martyniuk		Emerging topics in comparative endocrinology II. Co-Chairs: Aurora Olvera Vidal and Ivan Lazcano	
	-Salón Juárez-		-Claustro II-		-Claustro III-	
	Symposium Speakers		Oral Pres	entatio	ns	
\$16-1	José Luis Quintanar Stephano Neuronal regeneration in spinal cord injury by gonadotropin- releasing hormone		Tracy Larson Seasonal plasticity in songbirds as novel model for uncovering mechanisms that limit neural degeneration and regeneration	OR18 -1	Glen Van der Kraak Ammonia inhibits oocyte maturation, ovulation and spawning in zebrafish	
\$16-2	Robyn Reeve Pleiotrophic roles of leptin signaling in xenopus tail tip regeneration	OR17 -2	Robert M. Dores  Re-evaluation the evolution of the POMC gene: a study on melanocortin peptides and melanocortin receptors of the hagfish, eptatretus stoutii	OR18 -2	Yuta Tanizaki Thyroid hormone regulates iron transport via ferroportin to stimulate erythropoiesis during postembryonic development	
\$16-3	José Ávila Mendoza Comparative analysis of KLF transcription factors in axonal regeneration: insights from fish and mammalian studies	OR17 -3	Jessica Paloma Alvarez-Rendón Characterization of behavioral changes in insulin-signaling impaired males and females in Drosophila Melanogaster.	OR18 -3	Glen Van der Kraak Ammonia inhibits oocyte maturation, ovulation and spawning in zebrafish	
	Oral Presentations	Oral Presentations			ns	
OR16-1	David Epardo  Neuroprotective effects of growth hormone in an optic nerve crush model as an experimental model for glaucoma	OR17-4	Andre Barany In vitro and in vivo studies on the function and osmoregulatory action of neurohypophysial hormones and receptors in the sea lamprey (Petromyzon marinus)	OR18- 14	Rosario Baltazar-Lara Effect of growth hormone (GH) on neuroinflammation in the postnatal cerebellum of rats subjected to hypoxia	
OR16- 2	Ana Luisa Ocampo-Ruíz	OR17- 5	Sajid Alvi	OR18- 5	Yorgui Santiago Andres	

### **NASCE 2023 Schedule**



Prolactin receptor deficiency promotes hypomyelination during central nervous system maturation of suckling and prepubertal mice		The role of NDR1 and NDR2 in regulating zebrafish ovarian function		The contribution of the communication systems in the hypothalamus-pituitary unit is plastic among vertebrates
	OR17- 6	Liezhen Fu Disruption of T3-induced epigenetic regulator mbd3 leads to growth inhibition and development retardation in xenopus	OR18- 6	Brianna Raven Effects of kisspeptins on gene expression in the hypothalamo- pituitary-gonadal axis of the female western clawed frog, silurana tropicalis

### -Coffee break-

Misión Juriquilla Hotel (12:30 - 13:30)

#### -Women in Science Panel-

## Dra. Aurea Orozco, Dra. Veerle Darras and Dra. Angela Lange

Salón Juárez- Misión Juriquilla Hotel (12:30 - 13:30)

#### -Lunch-

Misión Juriquilla Hotel (13:30 - 14:30)

## -NASCE Council Meeting 2-

Salón Gobernador- Misión Juriquilla Hotel (14:30 - 16:30)

### -Closing Ceremony and Student Awards Presentation-

Salón Juárez- Misión Juriquilla Hotel (18:00 - 19:00)

-Closing Banquet-

(19:00 - ∞)

## **NASCE 2023 Posters**



Poster	· Presentation Abs	tract
P1	Ryan Chang	Changes in cortisol, glucose and corticosteroid receptors during dynamic salinity challenges in Mozambique tilapia
P2	Yiming Yue	Disruption of bone morphogenetic protein type II receptors results in reproductive and non-reproductive dysfunction in zebrafish
Р3	Alma Lorena Pérez Gómez	Effect of the vasoinhibin analogue crivi45-51 on melanoma leukocyte infiltration and metastasis in mice
P4	Oscar Fernando Martínez Díaz	Vasoinhibin analogs as a new therapeutic strategy for the treatment of arthritis
P5	Nancy Denslow	Lipid profiles in different regions of the brain of fathead minnows are altered upon exposure to steroid hormones
P6	Edgar Rodrigo Juvera	Molecular iodine decreases the invasive potential of neuroblastoma xenografts in zebrafish.
P7	Ruijing Geng	NMN supplementation reverses female reproductive aging and rescues Nampta and Namptb deficiency-induced gonadal ageing in female and male zebrafish respectively
P8	A.F. Boan	Knockout of somatostatin receptor 5 has no effect on medaka growth
P9	Juan Manuel Murillo-Maldonado	A comparative study of lifestyles and metabolism of <i>Drosophila lutzii</i> , a floridosa group of species, and sympatric <i>D. simulans</i> , a generalist species
P10	José Luis Dena- Beltrán	Milk prolactin participates on enterocyte maturation in lactating mice
P11	Melissa Pamela Lozano Staines	Adiponectin, resistin and chemerin as obesity associated biomarkers in a murine model supplemented with probiotics and prebiotics
P12	Isui Abril Garcia- Montoya	Transcriptional and histological response of liver in an obese mice model due to the effect of a synbiotic supplementation.
P13	David Salvador Diaz Ortegon	Thyrotropin-Releasing Hormone (TRH) decreases hyperglicemia in adult zebrafish (danio rerio)
P14	Jose Fernando Garcia Rodrigo	Mechanisms mediating dual actions of prolactin in joint inflammation
P15	Erandi Arvizu- Hernández	A laurencia johnstonii extract reverses the effect of 17b-estradiol in early lesions in the k14e7hpv16 murine model of cervical carcinogenesis
P16	Denisse Guadalupe Rivera Bautista	Epigenetic changes associated with pair bond formation in the prairie vole female
P17	Maria Magdalena Zamora Corona	Vasoinhibin acts directly on cancer cells to inhibit thrombin-induced proliferation and invasion
P18	Francisco Freinet Nuñez Ramirez	Renin generates vasoinhibin in the retina of newborn mice
P19	Elva Adán-Castro	The vasoinhibin analogue crivi45-51 inhibits excessive vasopermeability in the retina of rats
P20	Juan Pablo Robles	Identification of the antiangiogenic determinant of vasoinhibin and design of a therapeutic orally active oligopeptide
P21	Miriam Ulloa	Prolactin regulates the antioxidant response of astrocytes through the activation of STAT3 signaling pathway
P22	Lourdes Montserrat Siqueiros Márquez	Sulpiride-induced hyperprolactinemia protects retinal function in streptozotocin-induced diabetes
P23	Jerusa Elienai Balderas-Márquez	Effect of growth hormone (GH) in the retinal microglia during inflammation
P24	Pamela Reyes Ortega	Clinical relevance of the contribution of the retina to the spontaneous oscillations detected by electroretinogram (ERG) in mice and humans
P25	Fernando Macias	Prolactin protects hippocampal neurons <i>in vitro</i> from H <sub>2</sub> O <sub>2</sub> -induced oxidative stress and reduces NOX4 activation via NF-kB inhibition
P26	Erin Legacki	The pre and post ovulatory steroid hormone profile of North American Atlantic salmon ( <i>Salmo salar</i> ) as measured by Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)
P27	Maya Zanardini	Role of arginine vasotocin in the regulation of zebrafish spermatogenesis
P28	Alma Guadalupe Petry Ticante Carrizales	Growth hormone effects on axon regeneration in Klf13-deficient retinal ganglion cells
P29	Karen Delgado Rueda	Depletion of Krüppel-like factor 13 (KLF13) enhances GH-dependent JAK/STAT activity in hippocampal neurons
P30	David González Aretia	Sphingosine-1-phosphate (S1P) synthesis in granulosa cells and its effects on cell survival and steroidogenesis

## **NASCE 2023 Posters**



]	P31	Yudong Jia	Melatonin improves turbot oocyte meiotic maturation and antioxidant capacity, inhibits apoptosis-related genes mRNAs in vitro
]	P32	Zaire Belen Medina Moctezuma	Importance of Sphingosine 1-Phosphate (S1P) synthesis stimulated by Follicle Stimulating Hormone (FSH) and Luteinizing Hormone (LH) on viability of bovine theca and granulosa cells
]	P33	Lydia Marín López	Does Sphingosine 1-Phosphate (S1P) promote the viability and steroidogenesis of bovine theca cells in culture?
]	P34	Veronica Viñuela- Berni	The neuroendocrine interactions during chronic kidney disease: the role of prolactin
]	P35	Cynthia Alejandra Rodriguez Arzate	Sex impact on the alterations of spontaneous activity of the retina induced by obesity: comparison between humans and mice
]	P36	Victoria Giovanna Spadacini	Glutamatergic activation of Erk expression in neurons and pituitary cells of the female zebrafish
]	P37	Laura Nayeli Del Pilar Martinez	Olfactory alterations in a model of chronic kidney disease in female mice
]	P38	Jazmin Wynter	Identifying the implications of hypoxia and DMOG on reproductive processes in adult female zebrafish ( <i>Danio rerio</i> )
]	P39	Jesus Angel Aguirre	Mineralocorticoids regulate the expression of Na+/K+ ATPase in T. crassiceps WFU cysticerci
]	P40	Samuel Palacios Pérez	Alterations in the myelination patterns in a hyper- or hypothyroidism state in early zebrafish development
]	P41	Fernanda Maldonado-Lira	Thyroid hormone status modifies retinal morphology and color preference during zebrafish development
]	P42	Robert M. Dores	Trends in the evolution of elasmobranch melanocortin-2 receptors (MC2Rs): insights from an analysis of the pacific dogfish MC2R