3rd International Conference on Integrative Salmon Biology - ICISB 2016

Cumbres Hotel - Puerto Varas – Chile / April 24th to 27th – 2016

Date	Time	Activity/Speakers	
Sunday April 24th.	19.30 – 21.30	***Registration and Welcome Cocktail***	
Monday April 25th.	08.15 – 08.25	***Welcome Session*** **Marcela Angulo, CORFO, Chile** **Tonny Brooks, Genome BC, Canada** **Steinar Bergseth, The Research Council of Norway, Norway**	
	8.25 – 8.55	***Opening Talk*** **Sigbjørn Lien, Norwegian University of Life Sciences, Norway**	
		Session 1: Breeding Programs & Genomics Selection **Chairs:** Jean Paul L'horente (Aquainnovo, Chile) & Matías Medina (Blue Genomics, Chile)	
	09.00 – 09.30	Genomic selection for bacterial cold water disease resistance in rainbow trout reveals large within-family variation that cannot be exploited in traditional family-based selective breeding **Yniv Palti, Agricultural Research Service, USA**	
	09.30 – 10.00	Genetics and genomics of disease resistance in the Chilean salmon and trout aquaculture **José Yáñez, Universidad de Chile, Chile**	
		Oral presentations	
	10.00 – 10.15	Improved resistance for SRS in rainbow trout with genomic selection	Sissel Kjøglum, Aquagen, Norway
	10.15 – 10.30	Are genomic predictions an efficient approach to control Salmon Rickettsial Syndrome (SRS) in Chilean salmon industry?	Rama Bangera, Aquainnovo, Chile
	10.30 – 10.45	Selection for *Piscirickettsia salmonis* (SRS) resistance in Atlantic salmon (*Salmon salar*) Using genotyping by sequencing (GBS) (GBS)	Theódór Kristjánsson, Stofnfiskur, Iceland
	10.45 – 11.00	Session of Questions	
	11.00 – 11.30	Coffee break & Poster Viewing	
	11.30 – 12.00	Genomic selection in salmonid species – experiences and possibilities **Jørgen Ødegård, AquaGen, Norway**	
		Oral presentations	
	12.00 – 12.15	The genetics of sea lice resistance in Atlantic salmon	Thomas Moen, Aquagen, Norway
	12.15 – 12.30	Evaluation of genomic selection for sea louse resistance (*Caligus rogercresseyi*) in Atlantic salmon (*Salmo salar*) using different methods	Katharina Correa Orphanópoulos, Universidad de Chile, Chile
	12.30 – 12.45	Rapid implementation of genomic selection for salmon louse resistance in a North American *Salmo salar* breeding	Elizabeth Boulding, University of Guelph, Canada

		program using the offspring™ na_ssa_50k SNP chip and the offspring™ low density SNP assay	
	12.45 – 13.00	Reducing genotype densities for G-BLUP	Sergio Vela-Avitua, Norwegian University, Norway
	13.00 – 13.15	Session of Questions	
	13.15 – 14.30	Lunch & Poster Viewing	
	Session 2: Diseases & Pathogens **Chairs:** Verónica Cambiazo (Universidad de Chile) & Kristi Miller (Fisheries & Oceans Canada)		
	14.30 – 15.00	Immune gene expression profiling in Atlantic salmon during Amoebic Gill Disease **Barbara Nowak, University of Tasmania, Australia**	
	Oral presentations		
	15.00 – 15.15	Analysis of host-pathogen interaction between Infectious Salmon Anemia virus and Atlantic salmon, considering different backgrounds of disease resistance	Phillip Dettleff, Universidad de Chile, Chile
	15.15 – 15.30	Salmonid susceptibility and host responses to piscine orthoreovirus from western north america	Kyle Garver, Fisheries & Oceans Canada, Canada
	15.30 – 15.45	Genome-scale reconstruction of *Piscirickettsia salmonis* metabolic network	María Paz Cortés, Universidad Adolfo Ibáñez, Chile
	15.45 – 16.00	Session of Questions	
	16.00 – 16.30	Coffee & Poster Viewing	
	16.30 – 17.00	Genomic basis of Atlantic salmon sea lice resistance **Fabian Grammes, Norwegian University of Life Sciences, Norway**	
	Oral presentations		
	17.00 – 17.15	Transcriptomic analysis of *Piscirickettsia salmonis* lf-89 infecting salmon macrophages reveals the bacterial mechanisms of intracellular survival	Alejandro Zúñiga, Universidad de Chile, Chile
	17.15 – 17.30	*In vivo* cell imaging of *Piscirickettsia salmonis* infection in a zebrafish model	Javiera Ortíz, Universidad de Chile, Chile
	17.30 – 17.45	Transcriptomic response of Atlantic salmon (*Salmo salar*) associated to infestation with adult sea lice *Caligus rogercresseyi* using RNA sequencing	Alvaro Machuca, Universidad de Chile, Chile
	17.45 – 18.00	Session of Questions	
	18.00 – 19.00	Brokerage / Poster session	

Date	Time	Topics	
Tuesday April 26th		**Session 3: Environmental, Conservation and Evolution** **Chairs:** Kerry Naish (University of Washington, USA) & Bob Iwamoto (Riverence)	
	09.30 – 10.00	The salmonid genome duplication: an extensive substrate for lineage-specific adaptation **Daniel Macqueen, University of Aberdeen, UK**	
		Oral presentations	
	10.00 – 10.15	Free-living salmonids in Chile: biological, environmental and societal issues	Daniel Gómez-Uchida, Universidad de Concepción, Chile
	10.15 – 10.30	Mixed-stock analysis of an emergent illegal fishery supported by a naturalized Chinook salmon population in South America	Selim Musleh, Universidad de Concepción, Chile
	10.30 – 10.45	Population genomic in naturalized populations of rainbow trout from lake Llanquihue using Radseq	Cristian B. Canales-Aguirre, Universidad de Los Lagos, Chile
	10.45 – 11.00	Session of Questions	
	11.00 – 11.30	Coffee & Poster Viewing	
	11.30 – 12.00	Sex-dependent dominance at a single locus maintains variation in age at maturity in salmon **Nicola Barson, Norwegian University of Life Sciences, Norway**	
		Oral presentations	
	12.00 – 12.25	Pathogens of plenty: genomic approaches to identify biosecurity risks in wild and cultured populations of salmon	Kristi Miller-Saunders, Fisheries & Oceans Canada, Canada
	12.25 – 12.50	Understanding the functional effects of artificial and natural selection between hemispheres using whole genome sequence data	Víctor Martínez, Universidad de Chile, Chile
	12.50 – 13.00	Session of Questions	
	13.00 – 14.30	Lunch & Poster Viewing	
		Session 4: Genome Resources **Chair:** Alejandro Maass (Universidad de Chile)	
	14.30 – 15.00	The genetic basis of pathogen resistance across outbred salmon populations: a comparative analysis using Random Forest **Kerry Naish, University of Washington, USA**	
	15.00 – 15.30	A new and improved Rainbow Trout (*Oncorhynchus mykiss*) reference genome assembly **Guangtu Gao, Agricultural Research Service, USA**	
	15.30 – 16.00	The second version of the northern pike (*Esox lucius*) genome helps trace the evolution of the salmonids post whole-genome duplication **Eric B. Rondeau, University of Victoria, Canada**	
		Oral presentations	

	16.00 – 16.15	The genomic architecture of arctic charr: using a SNP based linkage map to characterize chromosomal evolution after whole genome duplication	Cameron Nugent, University of Guelph, Canada
	16.15 – 16.30	Tools for the dissemination of genetic material through females in a multiplication hatchery setting	James Webb, Cryoocyte, USA
	16.30 – 17.00	Coffee & Poster Viewing	
	Session 5: Industry Session **Chairs:** Roberto Neira (Universidad de Chile) & Ashie Norris (Marine Harvest)		
	17.00 – 17.30	Standing-up to the challenges a global to local perspective **Alfredo Tello, Salmon Research Institute, Chile**	
	17.30 – 18.00	Translating salmon genomics science into innovation and business **Odd Magne Rødseth, Aquagen, Norway**	
	18.00 – 18.30	Can investments in new technologies help the industry overcome it's most persistent challenges? **Petter Arnesen, Marine Harvest, Norway**	
	18.30 – 19.00	To be announced **Michael Adler, BioMar, Chile**	
	20:30	Gala Dinner	

Date	Time	Topics	
Wednesday April 27th	**Session 6: Functional Genomics** **Chairs:** Rodrigo Vidal (Universidad de Santiago) & Alan Tinch (Hendrix Genetics)		
	09.00 – 9.30	Functional studies in Atlantic salmon reveal genetics behind reproductive traits (*Salmo salar* L.) **Anna Wargelius, Institute of Marine Research, Norway**	
	09.30 – 10.00	Toward chromosome-length genome assemblies **Jason Miller, J. Craig Venter Institute, USA**	
	Oral presentations		
	10.00 – 10.15	Fermented soybean meal inclusion in Atlantic salmon diets modulates the expression of intestinal nutrient transporters and reduce the production of IL-1 *beta* in distal intestine enterocytes	Jurij Wacyk, Universidad de Chile, Chile
	10.15 – 10.30	Host pathogen interaction and transcriptional response of Coho salmon (*Oncorhynchus kisutch*) to the intracellular pathogen *Piscirickettsia salmonis*	Cristián Bravo, Universidad de Chile, Chile
	10.30 – 10.45	Cortisol-mediated non-genomic signaling in the stress response of rainbow trout	Juan Antonio Valdés, Universidad Andrés Bello, Chile
	10.45 – 11.00	Session of Question	

	11.00 – 11.30	Coffee & Poster Viewing
	11.30 – 12.00	Improvement through understanding: using functional genomics to accelerate the growth of the salmonid aquaculture industry **Tiago S Hori, The Center for Aquaculture Technologies, Canada**
	12.00 – 12.30	Understanding the biology behind selective improvement of salmonids for traits linked to enhanced growth and utilization of plant protein-based feeds **Kenneth Overturf, U.S. Department of Agriculture, USA**
	12.30 – 13.00	Sex determination in Atlantic salmon **Willie Davidson, Simon Fraser University, Canada**
	13.00-13:15	**Closing Ceremony:** **Marcela Angulo - Steinar Bergseth – Rachael Ritchie – Alfredo Tello**
	13.15 – 14.30	**Lunch**

(Programming could be changed)