Course

9:00-9:30		Tonatiuh Ramírez	WELCOME
9:30-10:00			Visit through IBt facilities
10:00-10:45	TALK	Flavio Zolessi	Introduction to zebrafish development
10:45-11:30	TALK	Miguel Moreno	Direct and reverse genetics CRISPR-Cas9 system
11:30-11:45			Coffee
11:45-12:30	TALK	Mario Mendieta	Introduction to light and fluorescence microscopy.
12:30-13:15	TALK	Christopher Wood	Introduction to confocal microscopy.
14:00-16:00			WELCOME LUNCH "Los Colorines"
16:00			Visit Cuernavaca Down Town
			5, may 2018
8:00-11:30	PRACTICE	Miguel Moreno	sgRNA PCR In vitro transcription
11:30-11:45			Coffee
11:45-14:00	PRACTICE	Miguel Moreno	sgRNA PCR In vitro transcription
14:00-15:00			LUNCH
15:00-16:45	PRACTICE	Miguel Moreno	In vitro transcription
16:45-17:00			Coffee
17:00-18:30	PRACTICE	Miguel Moreno	In vitro transcription
18:30	PRACTICE	Miguel Moreno	Set crosses

8:00-10:45	PRACTICE	Miguel Moreno	Obtain embryos CRISPR-Cas9 Injections Clean and observe embryos
10:45-11:30	TALK	Adán Guerrero	Super resolution
11:30-11:45			Coffee
11:45-14:00	PRACTICE	Mario Mendieta	Time lapse imagining light microscopy
14:00-15:00			LUNCH
15:00-15:45	TALK	Fatuel Tecuapetla	Optogenetics general aspects
15:45-16:45	PRACTICE	Miguel Moreno	Clean and observe embryos
16:45-17:00			Coffee
17:00-17:45	TALK	Stephanie Woo	Optogenetics in zebrafish
17:45-18:30	PRACTICE	Miguel Moreno	Clean and observe embryos
18:30		Stephanie Woo	Set crosses
			7, may 2018
8:00-10:30	PRACTICE	Stephanie Woo	Collect embryos Injection TAEL Clean and observe
10:30-11:30	PRACTICE	Miguel Moreno	Observe injected embryos with CRISPR
11:30-11:45			Coffee
11:45-12:15	PRACTICE	Stephanie Woo	Illumination of embryos
12:15-14:00	PRACTICE	Miguel Moreno	SgRNA design IN SILICO
14:00-15:00			LUNCH

15:15-16:45PRACTICEFlavio ZolessiEmbryo visualization16:45-17:00Coffee17:00-18:30PRACTICEFlavio ZolessiEmbryo visualization18:30Mendieta/ ZolessiSet crosses	15:00-15:15	PRACTICE	Stephanie Woo	Return embryos to dark
17:00-18:30 PRACTICE Flavio Zolessi Embryo visualization	15:15-16:45	PRACTICE	Flavio Zolessi	Embryo visualization
	16:45-17:00			Coffee
18:30 Mendieta/Zolessi Set crosses	17:00-18:30	PRACTICE	Flavio Zolessi	Embryo visualization
	18:30		Mendieta/ Zolessi	Set crosses



8:00- 10:30	Simultaneous PRACTICE	Flavio Zolessi	Collect embryos Injection Clean and observe
10:30-11:30	Simultaneous PRACTICE	Miguel Moreno	Analyse Crispr/Cas Phenotype
11:30-11:45			Coffee
11:45-14:00	Simultaneous PRACTICE	Stephanie Woo	Analyse Light Induced gene expression embryos
14:00-15:00			LUNCH
15:00-15:45	PRACTICE	Monica Ryff	Zebrafish as a model for behaviour studies
15:45-16:45	PRACTICE	Monica Ryff	Optomotor response
16:45-17:00			Coffee
17:00-18:30	PRACTICE	Monica Ryff	Aversive behaviour
18:30	PRACTICE	Mendieta/ Zolessi	Set crosses
18:30	PRACTICE	Nora Calcaterra	Fix Embryos 4-6dpf

8:00- 10:45	PRACTICE	Mario Mendieta	Collect embryos Injection Sytox Clean and observe
10:45-11:30	TALK	Enrique Salas	Using zebrafish for screening
11:30-11:45			Coffee
11:45-13:15	PRACTICE	Enrique Salas	Screenings
13:15-14:00	TALK	Nora Calcaterra	Modelling craneofacial diseases in zebrafish
14:00-15:00			LUNCH
15:00-15:45	Simultaneous PRACTICE	Mario Mendieta	Analysis of embryos with Confocal microscopy
15:45-16:45	Simultaneous PRACTICE	Nora Calcaterra	Cartilages staining
16:45-17:00			Coffee
17:00-18:00	Simultaneous PRACTICE	Mario Mendieta	Analysis of embryos with Confocal microscopy
18:00-19:00	Simultaneous PRACTICE	Nora Calcaterra	Cartilages staining
19:00-20:00	Simultaneous PRACTICE	Flavio Zolessi	Overnight time lapse

8:00-915	Simultaneous PRACTICE	Flavio Zolessi	Analysis time lapse
9:15-10:00	Simultaneous PRACTICE	Enrique Salas	Analysis screening
10:00-10:45	Simultaneous PRACTICE	Nora Calcaterra	Cartilage staining results
10:45-11:30	TALK	Herman Spaink	Zebrafish high through put screening in disease research
11:30-11:45			Coffee
11:45-12:30	TALK	Arndt Siekmann	Cells on the move: Imaging tissue development and regeneration in zebrafish
12:30-13:15	TALK	Kathleen Whitlock	The nose is like the eye: development of the olfactory sensory system
13:15-14:00	TALK	Marco Brocca	Latest on zebrafish housing and husbandry needs.
14:00-15:00			LUNCH
15:00-17:00			FINISH presentation with results
16:45-17:00			Coffee
17:00-20:00			Round table results discussion (4 teams)

Symposium



8:00-			Registration
8:30-8:50		Tonatiuh Ramírez	WELCOME
8:50-9:00		Enrique Salas	Introduction
9:00-10:00	Opening lecture	Arndt Siekmann (Germany)	Forcing trees into shapes: How blood vessels self- organize.
10:00-10:15			Coffee
		Session 1	
10:15-10:35	TALK	Kathleen Whitlock (Chile)	Neural immue interactions in the developing olfactory epithelium: implications for olfactory imprinting and immune response
10:35-10:55	TALK	Marleny Salazar (Colombia)	Effect of neonicotinoid - thiamethoxam in the zebrafish (Danio rerio) embryonic development
10:55-11:15	TALK	Monica Ryff (Brazil)	Modelling Alzheimer´s disease in zebrafish larvae
		Session 2	
11:15-11:35	TALK	S. J. Ponce-Jahén (México)	Evaluation of adverse effects of Selective Serotonin Reuptake Inhibitors on different levels of biological organization
11:35-11:55	TALK	Jorge Carretero (USA/ México)	GIPC proteins pattern the vasculature by limiting the antiangiogenic activity of the semaphorin receptor PLEXIND1.
11:55-12:15	TALK	Enrique Salas (México)	Traditional medicinal plants as sources of novel therapeutic compounds: hundreds of years of knowledge.
12:15-12:30			Coffee
		Session 3	
12:30-12:50	TALK	Mario Mendieta (México)	NADPH-Oxidase-derived reactive oxygen species are required for cell motility during zebrafish epiboly
12:50-13:10	TALK	Nora Calcaterra (Argentina)	Zebrafish as a tool for studying the role of miRNAs in melanocyte differentiation.
13:10-13:30	TALK	Denhi Schnabel (México)	RhoA activity is essential for the correct localization of the germ plasm mRNAs.
13:30-14:30			LUNCH
14:30-16:30		Poster sessi	on 1.
16:30-17:30.	Plenary Talk	Stephanie Woo (USA)	Dynamic cell behaviours contribute to endoderm development.
17:30-17:45			Coffee
17:45-18:45	Plenary Talk	Herman Spaink (Netherlands)	Zebrafish as a model for Immuno-metabolism research.
19:00-20:00	LAZEN board		

Symposium



9:00-10:00	Plenary Talk	Miguel A. Moreno- Mateos (Spain)	CRISPRing zebrafish to understand early vertebrate development and human diseases
10:00-10:15			Coffee
		Session 4	
10:15-10:35	TALK	Ernesto Maldonado (Mexico)	New and Unexpected Functions for the Scarb2/ Limp2 Lysosomal Receptor in Zebrafish development
10:35-10:55	TALK	Flavio Zolessi (Uruguay)	A combined role for laminin and Slit signaling in neuronal orientation in the retina
10:55-11:15	TALK	Hilda Lomelí (Mexico)	The subunit Baf57 mediates repression of cardiac transcription factors in zebrafish
11:15-11:30			Coffee
		Session 5	
11:30-11:50	TALK	María Jimena Prieto (Argentina)	Ecotoxicology of nanoparticles: Relation between biophysical properties of nanostructures and their toxicity on zebrafish
11:50-12:10	TALK	Maria Natalia Calienni (Argentina)	Toxicity evaluation of doxorubicin-loaded mixed micelles on larvae of zebrafish
12:10-12:30	TALK	Marco Brocca (Italy)	Tecniplast Aquatic Solutions
12:30-14:00			LUNCH
14:30-16:30		Poster sessi	on 2.
16:30-17:30	Plenary Talk	Edward Málaga-Trillo (Perú)	Zebrafish embryos to dissect neurotoxic pathways in prion and Alzheimer's diseases
17:30-19:00	Closing ceremony	Celso Duarte	
19:30			DINNER