

La Fonda Hotel
Santa Fe, New Mexico
June 17 - 21, 2018

Sunday, June 17

- 4:00 – 8:00 PM **Registration**
Portal
- 5:00 – 6:00 PM **Welcome Ceremony & Ice Breaker**
Lumpkins Ballroom
- 6:00 – 8:00 PM **Poster Session A**
Mezzanine

Monday, June 18

- 8:00 – 12:00 PM **Registration**
Portal
- 8:30 – 9:00 AM **National Science Foundation Q&A**
Purnima Bhanot
NSF Program Director, BIO/Integrative Organismal Systems, Symbiosis, Defense and Self-recognition Program
New Mexico Room
- 9:00 – 10:00 AM **Opening Keynote**
Jules Hoffman, University of Strasbourg
"Innate Immunity from Insects to Humans"
Lumpkins Ballroom
- 10:00 – 10:15 AM **BREAK**
- 10:15 – 12:00 PM **Workshops**
- Workshop A **"Communicating science to the public"**
Ben Hanelt
Senior Lecturer, Adjunct Assistant Professor, University of New Mexico
Santa Fe Room
- Workshop B **"How to be a good mentor"**
Christopher Bayne
Professor Emeritus, Oregon State University
Lumpkins Ballroom South
- Workshop C **"Women in STEM: challenges and opportunities"**
Janeth Peña & Dr. Irene Salinas
PhD Candidate & Associate Professor, University of New Mexico
New Mexico Room
- 12:00 – 1:00 PM **LUNCH**
La Terraza and Garden Patio
- DCI Editorial Board Meeting**
Ballen Board Room

1:00 – 2:45 PM **Concurrent Sessions**

Lumpkins **VERTEBRATE INNATE IMMUNITY**
Ballroom South **Chairs: Maria Forlenza & Jeff Yoder**

Amulya Yaparla
George Washington University
"Paths to functional dichotomy of amphibian macrophages"

Dustin Lillico
University of Alberta
"Examination of SYK and NCK recruitment by catfish leukocyte immune-type receptors during filopodia-mediated target capture and engulfment"

Hiroaki Suetake
Fukui Prefectural University
"Novel degranulation systems in teleost basophils"

Barbara Katzenback
University of Waterloo
"Xela DS2 and Xela VS2: Newly generated *Xenopus laevis* skin epithelial cell lines and their role in sensing viral infections"

Chris Secombes
University of Aberdeen
"Diversification of type I interferons in fish"

Santa Fe Room **MUCOSAL IMMUNITY**
Chairs: Elisa Casadei and Xen Zhu

Fumio Takizawa
Dept of Pathobiology, School of Vet Med, University of Pennsylvania
"An essential role of IgT in pathogen control and commensal homeostasis in gut and gill mucosal surfaces"

Elisa Casadei
Center for Evolutionary & Theoretical Immunology, University of New Mexico
"Commensal bacteria regulate gene expression and differentiation in vertebrate olfactory systems through transcription factor REST"

Sylvia Brugman
Cell Biology & Immunology Group, Animal Sciences, Wageningen University
"T lymphocytes actively suppress intestinal pathobionts in zebrafish"

Ryan Heimroth
Center for Evolutionary & Theoretical Immunology, University of New Mexico
"Effects of terrestrialization on the skin immune system of African lungfish (*Protopterus dolloi*)"

Katherine Buckley
Dept of Biological Sciences, Carnegie Mellon Institute
"Conservation and divergence in the gut-associated immune response of an invertebrate deuterostome"

Geert Wiegertjes
Dept of Basic Sciences and Aquatic Medicine, Norwegian University of Life Sciences
"Characterization of interbranchial lymphoid tissue in the gills of common carp"

Giuseppe Scapigliati
Dept for Innovation in Biological, Agro-food & Forest Systems, Tuscia University
"Characterization of the CD3 positive T lymphocytes of sea bass"

New Mexico Room **PARASITE IMMUNOLOGY**
Chairs: Sam Loker and Patrick Hanington

Lijun Lu
Center for Evolutionary & Theoretical Immunology, University of New Mexico
"Use of three relevant parasites as probes to dissect the immune responses of the vector snail *Biomphalaria glabrata*: Transcriptional responses to the trematodes *Schistosoma mansoni* and *Echinostoma paraensei* and to the nematode *Daubaylia potomaca*"

Tomás Korytář
Institute of Parasitology, Biology Center CAS, České Budějovice
"Fight with a jellyfish: host-parasite interaction of common carp and the myxozoan *Sphaerospora molnari*"

Laura Taggart-Murphy
Department of Microbiology, Oregon State University
"Differential expression of inflammatory and adaptive immune genes in rainbow trout infected by two genetic strains of the myxozoan parasite *Ceratonova shasta*"

Jonathan Schultz
Center for Evolutionary & Theoretical Immunology, University of New Mexico
"Exploiting the host/parasite interaction of the snail *Physella acuta* and *Echinostoma paraensei* (Digenea: Echinostomatidae) to elucidate novel aspects of gastropod immunity"

Eric Kenney
Dept of Biological Sciences, George Washington University
"Drosophila immune gene suppression following the injection of excretory-secretory products from activated infective juveniles of the entomopathogenic nematode *Heterorhabditis bacteriophora*"

Judith Humphries
Biology Dept, Lawrence University
"Potential NF- κ B regulation of a TLR signaling pathway in *Biomphalaria glabrata*"

Maureen Banach
Dept of Microbiology & Immunology, University of Rochester Medical Center
"Exploring the evolutionary relevance of a MHC class I-like/innate-like T cell system in *Xenopus* tumor immunity"

2:45 - 3:15 PM **BREAK**

3:15 - 5:00 PM **Concurrent Sessions**

Lumpkins Ballroom South **VERTEBRATE INNATE IMMUNITY**
Chairs: James Stafford and Chris Secombes

Annelieke Wentzel
Cell Biology and Immunology Group, Wageningen University
"Studying metabolic pathways in macrophages of carp"

Bertrand Collet
INRA, Virologie et Immunologie Moléculaires, Université Paris-Saclay
"Importance of signal transducer and activator of transcription (STAT)-2 for interferon response in salmonid cells: evidence from a CRISPR/CAS9 cell line with a disrupted STAT2 gene"

Tiehui Wang
Scottish Fish Immunology Research Centre, University of Aberdeen
"Interleukin (IL)-2 is a key regulator of the TH1 and TH2 cytokine expression in fish: Functional characterization of two divergent IL-2 paralogues in salmonids"

Leon Grayfer
Dept of Biological Sciences, George Washington University
"Amphibian (*Xenopus laevis*) interleukin-8: A perspective on the evolution of granulocyte chemotaxis"

Jingqun Ao
Key Laboratory of Marine Biogenetic Resources, Third Institute of Oceanography, State Oceanic Administration
"Identification of two IL-4/13 homologues in large yellow croaker (*Larimichthys crocea*) revealed their similar roles in inducing alternative activation of monocytes/macrophages"

Fumihiko Katakura
Laboratory of Comparative Immunology, Dept of Vet Medicine, Nihon University
"Paralogs of carp granulocyte colony-stimulating factor (G-CSF) have different functions with regard to development, trafficking and activation of neutrophils"

Hong-Ye Ong
Dept of Biotechnology and Bioindustry Sciences National Cheng Kung University
"Molecular cloning and characterization of interferons-gamma and interferons-gamma related genes in orange spotted grouper (*Epinephelus coioides*)"

Santa Fe Room **MUCOSAL IMMUNITY**
Chairs: Oriol Sunyer and Erling Koppang

Emily Flowers
Dept of Microbiology and Immunology, University of Maryland Baltimore School of Medicine
"Conservation and function of the Fc-mu/alpha receptor in *Xenopus*"

Bethaney Fehrenkamp
Center for Evolutionary & Theoretical Immunology, University of New Mexico
"Opossum postnatal immune development correlates with abundance of mammary immunoglobulin and Fc receptor transcript abundance"

Yu-Hsien Chou
Dept of Biotechnology and Bioindustry Sciences, National Cheng Kung University
"Adaptive immunity response of orange-spotted grouper immunoglobulin T in mucosal immunity system"

J. Oriol Sunyer
Dept of Pathobiology, School of Vet Med, University of Pennsylvania
"Identification of primordial semi-organized lymphoid structures in teleost fish"

Louise Rollins-Smith
Dept of Pathology, Microbiology and Immunology, and Biological Sciences, Vanderbilt University
"Immunomodulatory molecules produced by the pathogenic chytrid fungus, *Batrachochytrium dendrobatidis*"

Keiichiro Koiwai
Laboratory of Genome Science, Tokyo University of Marine Science & Technology
"The functional characterization of sessile and circulating hemocytes in kuruma shrimp *Marsupenaeus japonicus*"

Ali Sepahi
Center for Evolutionary & Theoretical Immunology, University of New Mexico
"From olfaction to immunity: the immunological role of crypt olfactory neurons in teleost fish"

New Mexico Room **PARASITE IMMUNOLOGY & B CELLS AND I_G**
Chairs: Coen Adema and Judith Humphries

Jacob Hambrook
School of Public Health, University of Alberta
"*Schistosoma mansoni* modulation of the *Biomphalaria glabrata* immune response using a Leishmanolysin-like matrix metalloprotease"

Hongyu Li
Ocean College, Qinzhou University
"The role of fibrinogen-related proteins (FREPs) in the snail immune response against *Schistosoma mansoni*"

Tae Sung Jung
Vet Medicine, Gyeongsang National University
"Findings of globular-shaped multimeric structural variable lymphocyte receptor B antibody in hagfish (*Eptatretus burgeri*)"

Yang Ding
Dept of Pathobiology, School of Vet Medicine, University of Pennsylvania
"An evolutionarily conserved innate immune role identified in vertebrate plasma cells"

Doaa Waly
Dept of Biological Sciences, University of Alberta
"Antibody affinity maturation in fish: evidence for primordial germinal centers"

Thomas B. Kepler
Department of Microbiology, Boston University School of Medicine
"The Egyptian roussette genome reveals unexpected features of bat antiviral immunity"

DINNER ON YOUR OWN

Tuesday, June 19

9:00 – 10:00 AM **Plenary Talk**
Julie Pfeiffer
University of Texas Southwestern Medical Center
"How gut microbes enhance enteric virus infection"
Lumpkins Ballroom

10:00 - 10:15 AM **BREAK**

10:15 - 12:00 PM **Concurrent Sessions**

New Mexico **VACCINES**
Room **Chairs: David Parra and Sonal Patel**

Marc Nicolas Faber
School of Biological Sciences, University of Aberdeen
"Proliferative kidney disease in rainbow trout: Characterization of biomarkers and field testing of novel treatment strategies"

Noelia Nuñez-Ortiz
Institute of Marine Research
"Adaptive immune responses of Atlantic salmon (*Salmo salar* L.) to stimulation by Salmonid Alphavirus subtype 3 infection or vaccination"

Thu Nguyen
Institute for Marine and Antarctic Studies, University of Tasmania
"Secondary exposure of the tropical rock lobster (*Panulirus ornatus*) to *V. harveyi* enhances antibacterial activity and is evidence of trained immunity"

Ingvill Jenson
Norwegian College of Fishery Science, University of Tromsø - The Arctic University of Norway
"Peritoneal cavity B cells in Atlantic salmon (*Salmo salar* L.) - a contributor to the long term humoral immune response against Salmonid Alphavirus (SAV)"

Yehfang Hu
The Scottish Fish Immunology Research Centre, University of Aberdeen
"Understanding the role of interferon- γ in rainbow trout (*Oncorhynchus mykiss*) immune responses"

Ahmed Attaya
Scottish Fish Immunology Research Centre, University of Aberdeen
"The development of novel nanoparticle based oral vaccines for use in

salmonids"

Lumpkins Ballroom South **INVERTEBRATE INNATE IMMUNITY**
Chairs: Courtney Smith and Maria Castillo

Chadanat Noonin
Dept of Organismal Biology, Comparative Physiology, Uppsala University
"Participation of immune system in neural repair in crayfish"

Benyamin Rosental
Institute for Stem Cell Biology and Regenerative Medicine, and Ludwig Center, Stanford University
"Evolutionary origin of the mammalian hematopoietic and immune systems found in a colonial chordate"

Juris A Grasis
School of Natural Sciences, University of California, Merced
"Holoboint-Virome interactions in the basal metazoan *Hydra*"

Matthew L Nicotra
Starzl Transplantation Institute, Department of Surgery, University of Pittsburgh
"Genomic complexity of an invertebrate allorecognition system"

Megan Barela Hudgell
Dept of Biological Sciences, George Washington University
"A method for lipofection of nucleic acids in high salinity and low temperature"

Irene Söderhäll
Dept of Comparative Physiology, Uppsala University
"Crustacean hematopoiesis"

Elisabeth Dyrinda
Institute of Life and Earth Sciences, Heriot Watt University
"Tissue distribution of crustins: Deposition or expression?"

Valerie Smith
Scottish Oceans Institute, University of St. Andrews
"Carcinin, a crustin antimicrobial protein, interacts with bacteria in multiple ways"

Santa Fe Room **IMMUNE RESPONSES TO BACTERIA**
Chairs: Jacques Robert and Junichi Hikima

Kimberly Veenstra
School of Biological Sciences, University of Aberdeen
"Immune changes in rainbow trout adipose following vaccination bacterial infection and stimulation with pro-inflammatory molecules"

Ramya Kumar
Department of Biotechnology and Bioindustry Sciences, National Cheng Kung University
"Role of bile acid and bile acid transporters in acute hepatopancreatic necrosis disease pathogenesis in white shrimp *Litopenaeus vannamei*"

Estefanía Muñoz-Atienza
Animal Health Research Centre (CISA-INIA), Valdeolmos
"CK11, a teleost chemokine with a potent antimicrobial activity"

Kun Hyoe Rhoo
Dept of Immunology, Microbiology, and Virology, University of Rochester
"Roles of MHC class I-like and innate-like T cells in macrophage response to *Mycobacterium marinum* in *Xenopus*"

Hidehiro Kondo
Laboratory of Genome Science, Graduate School of Tokyo University of Marine Science & Technology
"Binding of Fc receptor-like proteins to IgM and bacteria in Japanese flounder (*Paralichthys olivaceus*)"

Shawna Semple
Dept of Biology, University of Waterloo
"Revealing immune differences between eight outbred chinook salmon populations when challenged with *Vibrio anguillarum*"

Jules Petit
Cell Biology and Immunology Group, Wageningen University
"Training carp macrophages: establishment of an *In Vitro* screening model for trained immunity in teleost fish"

12:00 - 1:00 PM **LUNCH**
La Terraza and Garden Patio

1:00 - 2:15 PM **Concurrent Sessions**

New Mexico **T CELLS, TCR, AND MHC**
Room **Chairs: Michael Criscitiello and Rob Miller**

Jiro Miyamae
Dept of Veterinary Medicine, Nihon University School of Bio Resource Science
"Quantification and characterization of alloreactive T cells in dogs"

Julie M Old
School of Science & Health, Western Sydney University
"An investigation of the level of MHC class II diversity in wombats using non-invasive techniques"

Yogesh B Khandokar
Dept of Biochemistry & Molecular Biology, Biomedicine Discovery Institute, Monash University
"Structural investigations into the avian MHC-I like protein YF1*7.1"

Dustin J Wcisel
Dept of Molecular Biomedical Sciences, North Carolina State University
"An evolutionary perspective of novel immunoglobulin like transcripts (NILTS)"

Carolina Tafalla
Centro de Investigación en Sanidad Animal (CISA-INIA)
"Dysregulation of B cell activity during the progression of Proliferative Kidney

Disease (PKD) in rainbow trout"

Lumpkins INVERTEBRATE INNATE IMMUNITY
Ballroom South **Chairs: Kenneth Söderhäll and Linsheng Song**

Linsheng Song
Dalian Ocean University
"The immune defense mechanisms of marine bivalves"

Kingkamon Junkunlo
Dept of Comparative Physiology, Uppsala University
"PDGF/VEGF-related receptor affects transglutaminase activity in controlling hematopoietic progenitor cell behavior in crustacean hematopoiesis"

Michael G Tassia
Dept of Biological Sciences, Auburn University
"Evolution of the toll like receptor signaling pathways in deuterostomes"

Kejian Wang
State Key Laboratory of Marine Environmental Science, College of Ocean & Earth Science, Xiamen University
"Molecular basis of immunity in the early developmental stages of *Scylla paramamosain* analyzed using transcriptomics"

Deblina Misra
Dept of Biology, New Mexico State University
"Expression of the immune-related thioester-containing proteins (TEPs) in the *Biomphalaria glabrata* embryonic (Bge) cell line"

Santa Fe Room IMMUNE RESPONSES TO BACTERIA
Chairs: Brian Dixon and Martha Reyes-Bercerril

Jiannong Xu
Dept of Biology, New Mexico State University
"ARYL hydrocarbon receptor mediates negative immune regulation in mosquito and fruit fly"

Tejashree Modak
University of Rhode Island
"Immunological response of American oyster, *Crassostrea virginica*, larvae to pathogen *Vibrio corallilyticus* re22 and probiotics *Bacillus pumilus* RI06-95 and *Phaeobacter inhibens* S4"

Sven Ostermann
Friedrich-Loeffler Institute, Dept of Immunology, Greifswald-Insel Riems
"Comparing two models for characterizing the innate immune response of *Oncorhynchus mykiss* after stimulation with bacterial antigens"

2:15 - 2:45 PM **BREAK**

2:45 - 4:00 PM **Concurrent Sessions**

New Mexico T CELLS, TCR, AND MHC
Room **Chairs: Pierre Boudinot and Martin Flajnik**

Thaddeus C Deiss
Dept of Vet Pathobiology, College of Vet Medicine & Biomedical Sciences,
Texas A&M University
"Sequencing of ancient TCR $\alpha\delta$ locus reveals complex amalgamation of
several adaptive immune receptor lineages"

Matthieu Paiola
Normandy University
"Oestrogen, a regulator of T cell differentiation and immune tolerance in
European sea bass, *Dicentrarchus labrax* (L.)"

Jacques Robert
Dept of Microbiology & Immunology, University of Rochester Medical Center
"Prominence of an ancestral MHC class I-like/innate-like T cell immune
surveillance system in *Xenopus* tadpoles"

Karen Tracy
Dept of Animal Science, University of California, Davis
"Immune repertoire analysis during Newcastle Disease virus infection in two
genetically distinct chicken lines"

Breanna L Breaux
Comparative Immunogenetics Laboratory, Dept of Vet Pathobiology, Texas
A&M University
"The Florida manatee (*Trichechus Manatus latirostris*) T cell receptor loci
exhibit V segment locus synteny and chain-specific evolution"

Lumpkins
Ballroom South

IMMUNE RESPONSES TO VIRUSES
Chairs: Katherine Magor and Bertrand Collet

Tze Hann Ng
Dept of Biotechnology & Bioindustry Sciences, National Cheng Kung
University
"*Penaeus monodon* Dscam gene structure is more complex and has selective
expression of isoforms in WSSV-resistant shrimp"

Shu-Ting He
Department of Biotechnology & Bioindustry Sciences, National Cheng Kung
University
"WSSV activates glutaminolysis and reductive glutamine metabolism during
replication"

Gül Gizem Korkut
Department of Comparative Physiology, Uppsala University
"White Spot Syndrome interactions with a crayfish, *Pacifastacus leniusculus*"

Han-Ching Wang
Dept of Biotechnology and Bioindustry Sciences, National Cheng Kung
University
"A comprehensive study of shrimp Acute Hepatopancreatic Necrosis Disease
(AHPND)"

Hai-peng Liu
State Key Laboratory of Marine Environmental Science, Xiamen University
"The infection mechanism of White Spot Syndrome virus in a crustacean red
claw crayfish *Cherax quadricarinatus*"

Santa Fe Room **MUCOSAL IMMUNITY**
Chairs: Larry Dishaw and Kate Buckley

Yasuhiro Shibasaki
Dept of Pathobiology, School of Vet Med, University of Pennsylvania
"Perforin-expressing IgT⁺ B cell with cytotoxic activity, a novel player in the innate immune response of teleost fish"

Ryan Brown
Dept of Biochemistry, University of New Mexico
"Characterization of the microbiome of *Flavobacterium psychrophillum* resistant trout"

Zhen Xu
Dept of Aquatic Animals Medicine, Fisheries College, Huazhong Agriculture University
"The swimbladder plays a previously unrecognized new function in mucosal immunity"

Jun-ichi Hikima
University of Miyazaki, Interdisciplinary Graduate School of Agriculture and Engineering
"Role of IL-17/F1 in the intestine of genome edited Japanese Medaka, *Oryzias latipes*"

Goshi Kato
Dept of Marine Biosciences, Tokyo University of Marine Science & Technology
"Gill-epithelial antigen sampling cells in rainbow trout"

4:00 - 6:00 PM **ISDCI Executive Meeting**
New Mexico Room

DINNER ON YOUR OWN

Wednesday, June 20

8:00 – 9:00 AM **Plenary Talk**
Xinnian Dong
Duke University
"Precision in plant immune expression: Not lost in translation"
Lumpkins Ballroom

9:00 – 2:00 PM **Half Day Trips**
Meet at Portal to get on buses

2:00 – 4:00 PM **Special Session**

Lumpkins **EVOLUTION AND ORIGINS OF IMMUNE SYSTEM**
Ballroom **Chair: Chris Amemiya**

Martin Flajnik
Dept of Microbiology & Immunology, University of Maryland
"Ushering in the molecular era of Comparative Immunology, a tribute to Gary Litman"

Anthony De Tomaso
Dept of Molecular, Cellular & Developmental Biology, University of California,
Santa Barbara
"Histocompatibility in the colonial chordate, *Botryllus schlosseri*"

Jonathan Rast
Dept of Pathology & Laboratory Medicine, Emory University School of
Medicine
"Developmental gene regulatory networks and the origins of vertebrate
adaptive immune systems"

Larry Dishaw
University of South Florida
"Immune Effectors and Trans-Kingdom interactions in the gut: A tunicate
perspective"

Sebastian Fugmann
Dept of Biomedical Sciences, Chang Gung University
"Novel immune response genes in the transcriptome of *Strongylocentrotus*
purpuratus coelomocytes"

Jeannine Ott
Dept of Veterinary Pathobiology, College of Vet Med & Biomedical Sciences,
Texas A&M University
"Somatic hypermutation of the tcr alpha contributes to thymic positive selection in
sharks"

Yuko Ota
Dept of Microbiology & Immunology, University of Maryland
"Discovery of multiple lineages in the most evolutionarily conserved NK
receptor family, NCR3 (NKp30)"

Jeffrey Yoder
Dept of Molecular Biomedical Sciences, North Carolina State University
"On the function and evolution of novel immune-type receptors (NITRS) in ray
finned fish"

4:00 – 6:00 PM **Poster Session B**
Mezzanine

Book Signing
Edwin L. Cooper
Mezzanine

6:00 – 10:00 PM **Gala Dinner**
***Peter's Project, 1011 Paseo De Peralta, Santa Fe**
*Walk there on your own or meet at Portal at 5:45 PM

6:30 – 6:45 PM **Edwin L. Cooper**
Laboratory of Comparative Immunology, Dept of Neurobiology, David Geffen
School of Medicine, UCLA
"Individuality differentials \leftrightarrow self/not self?"

Thursday, June 21

9:00 – 10:00 AM **Plenary Talk**
Chris Amemiya
University of California, Merced
"Novel evolutionary connections in vertebrate immunity revealed through genomic analyses"
Lumpkins Ballroom

10:00 – 10:15 AM **BREAK**

10:15 – 12:00 PM **Concurrent Sessions**

Lumpkin Ballroom South **IMMUNE RESPONSES TO VIRUSES**
Chairs: Katherine Magor and Hai-peng Liu

Aurora Kraus
Center for Evolutionary & Theoretical Immunology, Dept of Biology, University of New Mexico
"Characterization of rapid nasal epithelium response to viral delivery in zebrafish"

Katherine Magor
Dept of Biological Sciences, University of Alberta
"Influenza detection and interferon stimulated genes in the reservoir host"

Kelsey Abernathy
Dept of Microbiology & Immunology, University of Maryland School of Medicine
"The zebrafish tandem-repeat galectin 9 (DRGAO9-L1) promotes in vitro adhesion and infection of the Infectious Hematopoietic Necrosis Virus (IHNV)"

Szu-Hsuan Mao
Dept of Biotechnology & Bioindustry Sciences, National Cheng Kung University
"Role of orange-spotted grouper (*Epinephelus coioides*) autophagy marker LC3 in immune response"

Takahiro Nagasawa
Dept of Bioscience & Biotechnology, Kyushu University
"Viral ligands recognition of carp thrombocytes as natural type I interferon producing cells"

Yi-Ting Zeng
Dept of Biotechnology & Bioindustry Sciences
"RAS mediates WSSV-induced Warburg effect for viral replication in *Litopenaeus vannamei*"

La Terraza **B CELLS AND IG II**
Chairs: Susana Magadan and Jerome Le Nours

Irene Soletto
Animal Health Research Centre (CISA-INIA)
"APRIL is a strong inducer of B cell proliferation and differentiation in rainbow trout"

Ma. Michelle D. Peñaranda
Fish Immunology & Vaccinology Group, the Norwegian College of Fishery Science
"A proliferation inducing ligand (APRIL) is a survival factor that plays an important role in the immune response of Atlantic salmon"

Aitor G Granja
Animal Health Research Centre (CISNA-INIA)
"Role of rainbow trout CD40L in the initiation of B cell mediated immune responses"

Helen Dooley
School of Biological Sciences & Centre for Genome-Enabled Biology & Medicine, University of Aberdeen
"The TNF superfamily ligand and receptor repertoire of cartilaginous fishes"

Pierre Boudinot
INRA, Virologie et Immunologie Moléculaires, Université Paris-Saclay
"Origin of public antiviral memory B cell clones in vaccinated fish"

Susan Magadán
Center for Evolutionary & Theoretical Immunology, Dept of Biology, University of New Mexico
"Characterizing the complexity of nasal immunoglobulin repertoire in rainbow trout"

Andrew Collins
University of New South Wales
"The Inferred Allele Review Committee (IARC) and a pathway for the discovery, evaluation and reporting of antibody genes"

New Mexico Room **ECOIMMUNOLOGY & STRESS**
Chairs: Daniel Barreda and Magdalena Chadzinska

George A Bruschi IV
School of Life Sciences, Arizona State University
"A mechanistic approach to understanding the relationship between dehydration and enhanced immune function"

Débora Torrealba
Dept of Agricultural, Food & Nutritional Sciences, University of Alberta
"Fever improves the response of goldfish to in vivo *Aeromonas veronii* challenge"

Magdalena Chadzinska
Dep of Evolutionary Immunology, Institute of Zoology and Biomedical Research, Jagiellonian University
"Mechanisms involved in stress-induced neutrophil redistribution in carp"

Marco Gerdol
Dept of Life Sciences, University of Trieste
"Comparative genomics sheds light on expansion and molecular diversification of immune receptors and effectors in bivalve mollusks: trade-offs between evolutionary costs and survival"

Daniel Barreda
Dept of Biological Sciences, University of Alberta
"Contributions of temperature to the efficiency of fish cellular immunity"

Coen Adema
Center for Evolutionary & Theoretical Immunology, Dept of Biology,
University of New Mexico
"NGS expression profiling of *Lymnaea stagnalis* snails exposed to different
immune elicitors and environmental stressors"

Stanislava Chtarbanova
Dept of Biological Sciences, University of Alabama
"Role of brain-specific NF- κ B dependent immune activation in *Drosophila*
age-related neurodegeneration and lifespan determination"

12:00 PM **Closing Remarks**

Business Meeting
Awards Ceremony
Lumpkins Ballroom