

WEDNESDAY, JUNE 23

7:30 – 8:15 **REGISTRATION**

8:15 INTRODUCTION – Jerri Bartholomew & Tony Amandi

MANAGEMENT AND MONITORING

Moderator: Craig Banner

- 8:30 AN OVERVIEW OF LAMPREY HEALTH MONITORING IN OREGON **Sam T. Onjukka**, Glenda M. O'Connor & Julie K. Keniry
- 8:45 THE ROLE OF FISH HEALTH SERVICES IN THE REINTRODUCTION OF ANADROMOUS FISH IN THE DESCHUTES RIVER, OR **Richard W. Stocking**
- 9:00 THE NATIONAL WILD FISH HEALTH SURVEY: SELECTED FINDINGS AND LIMITATIONS **Sonia L. Mumford**
- 9:15 NEW AND IMPROVED WEB-BASED INTERFACE FOR THE NATIONAL WILD FISH HEALTH SURVEY DATABASE Josh Bradley & **Ken Peters**
- 9:30 PROGRESS OF THE NAAHP IN CANADA **Mark J. Higgins**
- 9:45 *CERATOMYXA SHASTA* MYXOSPORE DISTRIBUTION IN KLAMATH RIVER SALMON CARCASSES: CARCASS REMOVAL AN UNLIKELY DISEASE MANAGEMENT OPTION **J. Scott Foott**, Jerri L. Bartholomew, and Josh Strange

10:00-10:30 BREAK

VIROLOGY

Moderator: Scott Foott

- 10:30 DETECTION OF INFECTIOUS HEMATOPOIETIC NECROSIS VIRUS (IHNV) SHED FROM PACIFIC SOCKEYE SALMON (*Oncorhynchus nerka*) & IHNV INACTIVATION IN SEAWAER **Amelia M. Grant**, Jon Richard, Catherine E. Baynes & Kyle A. Garver
- 10:45 STATUS OF THE CUTTHROAT TROUT VIRUS (CTV) IN THE COMMERCIAL RAINBOW TROUT INDUSTRY IN IDAHO **Scott E. LaPatra** & William N. Batts
- 11:00 SHEDDING DYNAMICS OVER THE COURSE OF INFECTION OF TWO INFECTIOUS HEMATOPOIETIC NECROSIS VIRUS (IHNV) GENOTYPES WHICH DIFFER IN VIRULENCE **Robert J. Scott**, Andrew R. Wargo & Gael Kurath

11:15 GENOMIC ANALYSIS OF FOUR NOVEL FISH VIRUSES **William N. Batts**
& James R. Winton

11:30 EMERGENCE OF VIRAL HEMORRHAGIC SEPTICEMIA VIRUS IN THE
NORTH AMERICAN GREAT LAKES REGION IS ASSOCIATED WITH
LOW VIRAL GENETIC DIVERSITY **Tarin M. Thompson**, William Batts,
Paul Bowser, Mohamed Faisal, Kenneth Phillips, Kyle A. Garver, James Winton
& Gael Kurath

11:45-1:15 LUNCH

HERRING PATHOGENS

Moderator: Ted Meyers

1:15 DEVELOPMENT OF IMMUNOLOGICAL TOOLS FOR THE STUDY OF
DISEASE IN PACIFIC HERRING *CLUPEA PALLASII* **James C. Woodson**,
Maureen K. Purcell, Jacob L. Gregg, Samantha M. Badil, Courtney A. Grady,
John D. Hansen, Erin S. Bromage & Paul K. Hershberger

1:30 KINETICS OF VIRAL LOAD AND ERYTHROCYTIC INCLUSION BODY
FORMATION IN PACIFIC HERRING WITH VIRAL ERYTHROCYTIC
NECROSIS (VEN) **Jolene A. VanderPol**, Jacob L. Gregg, Courtney A. Grady,
Sean E. Roon, James R. Winton, Eveline J. Emmenegger & Paul K. Hershberger

1:45 SUSCEPTIBILITY OF LARVAL AND JUVENILE PACIFIC HERRING,
CLUPEA PALLASII, TO INFECTIOUS HEMATOPOIETIC NECROSIS VIRUS
Lucas M Hart, Garth S Traxler, Kyle A Garver, Jon Richard, Jacob L Gregg,
Courtney A Grady, Gael Kurath & Paul K Hershberger

2:00 LOW DOSES OF VIRAL HEMORRHAGIC SEPTICEMIA VIRUS ARE
INFECTIOUS FOR PACIFIC HERRING, *CLUPEA PALLASII* **Courtney A.**
Grady, Jacob L. Gregg, Lilith Taylor, Sean E. Roon, Lucas M. Hart & Paul K.
Hershberger

PARASITES I - SEA LICE

Moderator: Bruce Stewart

2:15 IMMUNE GENE EXPRESSION IN SKIN OF ATLANTIC (*SALMO SALAR*),
CHUM (*ONCORHYNCHUS KETA*) AND PINK (*O. GORBUSCHA*) SALMON
DUE TO *LEPEOPHTHEIRUS SALMONIS* INFECTION **Laura M. Braden**,
Ben F. Koop, Simon R. Jones & Duane E. Barker

2:30 ASSOCIATION OF SEA LICE (*LEPEOPHTHEIRUS SALMONIS*) WITH
INFECTIOUS HAEMATOPOIETIC NECROSIS VIRUS (IHNV) AND THEIR
POTENTIAL AS VIRAL VECTORS **Eva Jakob**, Kyle A. Garver & Duane E.
Barker

2:45 – 3:15 BREAK

3:15 *LEPEOPHTHEIRUS SALMONIS* AS A CARRIER OF *AEROMONA SALMONICIDA* INFECTING ATLANTIC SALMON, *SALMO SALAR* **Danielle L Lewis** & Duane E Barker

3:30 DIFFERENCES BETWEEN MALE AND FEMALE *LEPEOPHTHEIRUS SALMONIS* (COPEPODA: CALIGIDAE) AS POSSIBLE VECTORS OF *AEROMONAS SALMONICIDA* **Colin W. Novak**, Duane E. Barker & Robert S. McKinley

PARASITES II - *CERATOMYXA SHASTA*

Moderator: Sascha Hallett

3:45 SPATIAL, TEMPORAL AND HOST FACTORS STRUCTURE THE *CERATOMYXA SHASTA* (MYXOZOA) POPULATION IN THE KLAMATH RIVER BASIN **Stephen D. Atkinson** & Jerri L. Bartholomew

4:00 VIRULENCE OF *CERATOMYXA SHASTA* GENOTYPES I AND II IN CHINOOK SALMON (*ONCORHYNCHUS TSHAWYTSCHA*) AND RAINBOW TROUT (*ONCORHYNCHUS MYKISS*) **Charlene Hurst** & Jerri Bartholomew

4:15 DISTRIBUTION OF *CERATOMYXA SHASTA* GENOTYPES IN THE PACIFIC NORTHWEST **Matthew E. T. Stinson**, Stephen D. Atkinson & Jerri L. Bartholomew

THURSDAY, JUNE 24

PARASITES III

Moderator: Jerri Bartholomew

8:30 COMPARATIVE EVALUATION OF MOLECULAR DIAGNOSTIC TESTS FOR *NUCLEOSPORA SALMONIS* AND PREVALENCE IN MIGRATING JUVENILE SALMONIDS FROM THE SNAKE RIVER, USA **Samantha M. Badil**, Diane G. Elliott, Tomofumi Kurobe, Ronald P. Hedrick, Kathy Clemens & Maureen K. Purcell.

8:45 *PLEISTOPHORA HYPHESSOBRYCONIS* (MICROSPORIDIA) INFECTING ZEBRAFISH (*DANIO RERIO*) IN RESEARCH FACILITIES **Justin L Sanders**, Christian Lawrence, Donald K Nichols, Jeffrey F. Brubaker, Tracy S Peterson, Katrina N. Murray & Michael L Kent

9:00 TROPICALLY-TRANSMITTED PARASITES OF PACIFIC SARDINES: PARASITE COMMUNITY STRUCTURE AND POPULATION GENETICS OF *ANISAKIS* SPECIES IN THE CALIFORNIA CURRENT SYSTEM **Rebecca Baldwin**

9:15 SPATIAL DYNAMICS OF *TUBIFEX TUBIFEX* IN YELLOWSTONE TRIBUTARIES **Julie Alexander** & Billie Kerans

- 9:30 OCCURRENCE OF THE SALMONID FISH PATHOGEN, *CERATOMYXA SHASTA*, IN THE CLACKAMAS RIVER **Richard A. Holt** & Jerri L. Bartholomew
- 9:45 COMPARISON OF HOST RESPONSES TO *CERATOMYXA SHASTA* INFECTIONS IN SUSCEPTIBLE AND RESISTANT STRAINS OF CHINOOK SALMON **Sarah J. Bjork**, Yong-An Zhang, J. Oriol Sunyer & Jerri L. Bartholomew
- 10:00 LINKING PARASITE ABUNDANCE WITH BIOLOGICAL EFFECTS ON SALMON IN THE KLAMATH RIVER **Sascha L. Hallett**, R. Adam Ray, Richard Holt, Susan Corum, J. Scott Foott & Jerri L. Bartholomew

10:15-10:45 BREAK

BACTERIOLOGY

Moderator: Ken Cain

- 10:45 ECOLOGICAL ASPECTS OF BACTERIAL KIDNEY DISEASE **Linda D. Rhodes**, Casimir A. Rice, Correigh M. Greene, David J. Teel, Marc Trudel, Shelly L. Nance, Tyler Zubkowski, Michael C. Riederer, Elizabeth Smith & Paul Moran
- 11:00 COMPARATIVE GENOMICS WITHIN THE GENUS *FRANCISELLA* REVEALS CONSERVATION OF VIRULENCE FACTORS **John D. Hansen**, Lucia N. Vojtech, Esteban Sato, John P. Hawke & Michael J. Calcutt
- 11:15 IS VACCINATION WITH *FLAVOBACTERIUM PSYCHROPHILUM* GLIDING MOTILITY PROTEIN N (GldN) EFFECTIVE? **Karen P. Plant**, Scott E. LaPatra, Douglas R. Call and Kenneth D. Cain
- 11:30 ASSESSING CANDIDATE PROBIOTIC USE FOR THE POSSIBLE CONTROL OF *FLAVOBACTERIUM PSYCHROPHILUM* IN RAINBOW TROUT *ONCORHYNCHUS MYKISS* **Kenneth D. Cain**, David R. Burbank, Wade P. Cavender, Christine M. Swan, Chris Wilson & Scott E. LaPatra
- 11:45 COMPARISON OF TWO MACROLIDE ANTIBIOTICS AND DRUG INJECTION SITE TO REDUCE PRESPAWN MORTALITY DUE TO BACTERIAL KIDNEY DISEASE IN MATURING CHINOOK SALMON **Sally A. Gee**, Linda D. Rhodes & Timothy L. Hoffnagle

12:00 CLOSING REMARKS

POSTER SESSION ~ TUESDAY JUNE 23RD 5:00 – 7:00PM

MYXOZOA AND OTHER FISH PARASITES IN BRAZILIAN FRESH WATER FISH FARMS **Edson A. Adriano**

GEOGRAPHIC DISTRIBUTION AND HOST ASSOCIATIONS OF *CERATOMYXA SHASTA* GENOTYPES IN THE KLAMATH RIVER **Stephen D. Atkinson** & Jerri L. Bartholomew

PARASITES OF SUBYEARLING CHINOOK SALMON (*ONCORHYNCHUS TSHAWYTSCHA*) COLLECTED FROM THE COLUMBIA RIVER ESTUARY: IMPLICATIONS FOR LIFE HISTORY STRATEGY AND HABITAT USE **Andrew Claxton** & Kym Jacobsen

CERATOMYXA SHASTA IN THE WILLIAMSON RIVER: IMPLICATIONS FOR SALMONID REINTRODUCTION AND MANAGEMENT IN THE UPPER KLAMATH BASIN **Charlene N. Hurst** & Jerri L. Bartholomew

HYDRAULIC DETERMINANTS OF HABITAT FOR *MANAYUNKIA SPECIOSA*, THE DEFINITIVE HOST OF THE SALMONID PARASITE *CERATOMYXA SHASTA* **Michelle Jordan**, Julie Alexander, Gordon Grant & Jerri Bartholomew

CORRELATION BETWEEN POLYCHAETE HOST GENOTYPE AND INFECTION WITH *CERATOMYXA SHASTA* **Sue Jie Koo**, Daniel P. Horner, Stephen D. Atkinson, Sascha L. Hallett & Jerri L. Bartholomew

THE LUNA STAIN, AN IMPROVED SPECIAL STAIN FOR DETECTION OF MICROSPORIDIAN SPORES IN HISTOLOGICAL SECTIONS **Trace Petersen** & Michael L. Kent

Mary Beth Rew & Kym Jacobsen