

Sunday, October 3, 2021					
12:00 - 4:00	VIRTUAL SHORT COURSES				
3:00 - 7:00	REGISTRATION DESK OPENS (Convention Hall Foyer)				
5:00 - 7:00	STUDENT/MENTOR NETWORKING EVENT - Main Convention Hall (C5)				
7:00 - 9:00	SUNDAY NIGHT RECEPTION - Main Convention Hall (C5)				

Monday, October 4, 2021					
8:30	REGISTRATION DESK OPENS (Convention Hall Foyer)				
8:30 - 9:00	Coffee/Networking				
9:00 - 10:00	Opening Remarks / CEW Outstanding Contribution Awards, Karen Kidd and Peter Wells (C1/C2)				
Location	C1/C2		C3		C4
Session	Environmental Effects Monitoring	Virtual/ In Person	OMICS	Virtual/ In Person	Risk Assessment & Management
10:00	Session Introduction		Session Introduction		Session Introduction
10:10	Formalizing the Reclamation Assessment Approach (RAA) to Evaluate Wetland Condition in Reclaimed Oil Sands Watersheds Jan Ciborowski	In Person 1	Identifying Metabolic Indicators of Cyanobacteria by Comparing Temporal Changes Algal Community Composition in Two Lake Ontario Areas of Concern David McNabney	In Person 12 Student	Method for Determining Available Winter Water Use Capacity for Small-Scale Projects in the Northwest Territories Sarah Elasser & Rick Walbourne 22
10:30	Monitoring salinity of Manitoba's surface waters Braedon Humeniuk	In Person 2 Student	Assessing the toxicity of 17 α -ethynylestradiol in rainbow trout using a four-day transcriptomics benchmark dose (BMD) embryo assay Alper James Alcaraz	In Person 13 Student	An amended in vitro-in vivo extrapolation model to consider first pass clearance effects on chemical bioaccumulation in fish Leslie Sanders 23
10:50	Freshwater bivalves as an alternative to fish populations in Canadian Environmental Effects Monitoring (EEM) Catherine Proulx	In Person 3	Linking transcriptomic points-of-departure (IPOD) to apical chronic responses in embryo-larval fathead minnows exposed to fluoxetine Markus Hecker	In Person 14	Using Kelp Pigment Analysis as a Line of Evidence in Aquatic Ecological Risk Assessment Jennifer Trowell 24
11:10	Designing Monitoring Programs from a Fish's Perspective Carolyn Brown	Virtual 4 Student	Transcriptomics of larval yellow perch (<i>Perca flavescens</i>) from seven sites differentially exposed to agricultural run-off in Lake Saint Pierre Jean-Pierre Desforges	Virtual 15	Incorporating Risk-Based Closure into Overall Site Management Lizzy Mos 25
Session	Environmental Effects Monitoring (cont'd)	Virtual/ In Person	Environmental DNA-Applications for Biomonitoring and Bioassessment	Virtual/ In Person	State of the Science for Aquatic Assessment & Monitoring for the Mining Sector
11:30	Determination of Elemental Composition in Soft Biological Tissue Using Laser Ablation Inductively Coupled Plasma Mass Spectrometry: Method Validation Philip Molloy	Virtual 5	How low can you go? Establishing LOD and LOQ for samples with low copy number eDNA Caren Helbing	Virtual 16	Challenges Associated with Risk Assessment and Risk Management of Arsenic and Mercury in Ecosystems Affected by Historic Gold Mining Activities in Nova Scotia Christine Moore 26
11:50	Open		iTrackDNA: Non-Destructive Precision Genomics for Environmental Impact Tracking in a Global Climate Change Era Valerie Langlois	Virtual 17	Evaluating Toxicity of Metals in Mixtures - Use of the Windermere Humic Aqueous Model for Investigation of Cause Mary Murdoch 27
12:10 - 12:45	Lunch / TikTox, Part 1				
12:45 - 1:30	Plenary Speaker - Dr. Jessica Head, Transcriptomics in Ecotoxicology: thoughts on extracting knowledge from big data				
Session	Boat Harbour / Community Based Monitoring with First Nations	Virtual/ In Person	Environmental DNA-Applications for Biomonitoring and Bioassessment (cont'd)	Virtual/ In Person	State of the Science for Aquatic Assessment & Monitoring for the Mining Sector (cont'd)
1:30	Boat Harbour Fish Population Assessment Ken Oakes	In Person 6	Benchmarking de novo eDNA metabarcoding assays targeting amphibians of the Grand River watershed with various species detection methods Nathanael Harper	Virtual 18	The effects of winter cold on acute and chronic cadmium bioaccumulation and toxicity in the banded killifish (<i>Fundulus diaphanus</i>) Emily Suominen 28 Student
1:50	Assessing Impacts of Effluent on Nutrient Cycling and Food Web Length in a Coastal Marine Ecosystem using Compound Specific Isotope Analysis Megan Fraser	In Person 7	Monitoring Marine Pollution Effects Through New Targeted Environmental DNA (eDNA) Testing in the Pacific Northwest Neha Acharya-Patel	Virtual 19 Student	Unexpected Modifications of Rare Metal Internalisation Kinetics (Ga, La, Pt) in the Presence of Natural Organic Matter (NOM) in a Freshwater Microalga Océane Hourtané 29 Student
2:10	Toxicological bioassay - sublethal waterborne cadmium effects on juvenile American lobster <i>Homarus americanus</i> behaviour Ella Maltby	Virtual 8 Student	Canadian Standards Association National eDNA Standards Program Ken Clogg-Wright	Virtual 20	Selenium in Fish: A Review of Data and Development of Trophic Transfer Model in Saskatchewan Katherine Woolhouse 30
Session	Agricultural Inputs: Nutrients & Pesticides	Virtual/ In Person	Environmental DNA-Applications for Biomonitoring and Bioassessment (cont'd)	Virtual/ In Person	State of the Science for Aquatic Assessment & Monitoring for the Mining Sector (cont'd)
2:30	Exposure to agricultural retention pond water disrupts metamorphic timing and gene expression in American toad tadpoles Paisley Thomson	In Person 9 Student	eDNA: Navigating Regulatory Hurdles and Considerations Jay Cashubec	Virtual 21	Finalization of Research and Preliminary Selenium Soil Quality Guideline Derivation Viktoria Winter 31
2:50	Development and use of epithelial cell lines from the olfactory mucosa, gill and gut to study the actions of nitrite in rainbow trout Daylan Pritchard	Virtual 10	Open		Mine sediment ponds affect selenium speciation and bioaccumulation Adrian De Bruyn 32
3:10	Influence of Different Catchment Features on Stream Water Quality in An Intensive Agricultural Watershed Sara Burilo	Virtual 11 Student	Open		Development of methodology for early life stage testing with reidside shiners and evaluation of their sensitivity to maternally-derived selenium James Elphick 33
3:30	Poster Social / Student-Mentor Chit Chat				

Tuesday, October 5, 2021						
REGISTRATION DESK OPENS (Convention Hall Foyer)						
Location	C1/2		C3		C4	
Session	Aquatic Toxicology-Metals	Virtual/ In Person	Oil Toxicity-Impact and Assessment	Virtual/ In Person	Ocean Plastics and Microplastics	Virtual/ In Person
8:30	Session Introduction		Session Introduction		Session Introduction	
9:00	Are there downstream impacts of forest harvesting on food webs and their bioaccumulation of mercury? Karen Kidd	In Person 34	CROSERF: Making a Case for Modernization Jennifer Loughery	In Person 46	Do plastics pose a risk to Atlantic Leatherback turtles (Dermochelys coriacea) in coastal Canadian Northwest Atlantic waters? Peter Wells	In Person 58
9:20	Use of otolith microchemistry in a study of heavy metal contamination in fish from a natural tundra wastewater wetland: a case study in Baker Lake, NU Bronte McPhedran	In Person 35 Student	Latent effects of a brief exposure to physically and chemically dispersed crude oil on the survival of Snow crab (Chionoecetes opilio) larvae Benjamin Dejourdan	In Person 47	Comparing levels of microplastics in caged and wild-caught organisms near a municipal wastewater treatment plant outfall Ellie Weir	Virtual 59 Student
9:40	Open		Effect of physically and chemically dispersed crude oil on the occurrence of blue-sac disease symptoms in larval Atlantic cod (Gadus morhua) Allie Scovil	In Person 48 Student	The "Trojan Horse" Effect of Nanoplastics: Potentiation of PAHs Uptake in Rainbow trout and the Mitigating Effects of Natural Organic Matter Yueyang Zhang	Virtual 60
10:00	Open		Toxicity Assessment of Chemical Dispersants to Commercially Valuable Marine Species Tahereh Boloori	In Person 49	Open	
10:20 – 10:50	Break					
Session	Aquatic Toxicology-Water & Wastewaters	Virtual/ In Person	Oil Toxicity-Impact and Assessment (cont'd)	Virtual/ In Person	Sediment & Soil Toxicity	Virtual/ In Person
10:50	Risk Based Approach to Hardness Modified Joint Action Sulfate and Chloride Toxicity in an Industrial Process Water Discharge. Richard Nesbitt	In Person 36	The Development of an Artificial Sediment to Assess the Inherent Toxicity of Dispersants on Sediment Species Megan Bauer	Virtual 50	Characterizing the desorption kinetics of antipsychotics in submerged sediments using diffusive gradients in thin films Xiaowen Ji	In Person 61 Student
11:10	Exploring the Target Lipid Model to Derive PAH Guidelines Angeline Tillmans	Virtual 37	Implications of Salinity in Influencing the Macroinvertebrate Community in Natural Wetlands of the Alberta Oil Sands Region Brenten Vercausse	In Person 51 Student	An overview of the Newfoundland and Labrador Small Craft Harbour Sediment Investigation Program Jody Berry	In Person 62
11:30	Seasonal Characterization and Ecotoxicity of Wastewaters: A case study in Istanbul Iclal Birtek	Virtual 38 Student	A battery of in vitro bioassays to predict the impact of oil sands processed water (OSPW) on receiving aquatic environments Kia Barrow	In Person 52 Student	Lucy Islands Conservatory - A Focus on Metals in Soil for the Protection of the Local Rhinoceros Auklet Population and Other Receptors of Concern Andrew Wan	In Person 63
11:50	Development of a Chloride Water Quality Guideline Based on Hardness and Consideration for Cation Toxicity Anthony Knafla	Virtual 39	Transcriptomics analysis workflow for non-model species: case study of American lobster (Homarus americanus) larvae after exposure to crude oil Elena Legrand	Virtual 53	Open	
12:10 – 12:45	Lunch / TikTox, Part 2					
12:45 – 1:30	Plenary Speaker - Chief Andrea Paul, Reclaiming A'se'K, The room					
Session	Aquatic Toxicology-Organisms	Virtual/ In Person	Perfluoralkylated Substances	Virtual/ In Person		
1:30	A toxicity testing protocol for an Arctic diatom and sensitivity comparison with a standard temperate species Rebecca Eldridge	In Person 40 Student	Assessing Cattle Health from Exposure to Emerging Contaminants Sasha Richards	Virtual 54	Open	
1:50	But first, let me take a shell-fie: Assessment of the effects of metals on embryo development in freshwater snails using macrophotography Rebecca Osborne	In Person 41 Student	Open		Open	
Session	Aquatic Toxicology-Organisms (cont'd)	Virtual/ In Person	Ecotoxicology in Changing Climate	Virtual/ In Person	Pharmaceuticals & Personal Care Products	Virtual/ In Person
2:10	Interspecies Variation in Sensitivity to Activation of the Aryl Hydrocarbon Receptor by Polycyclic Aromatic Hydrocarbons in Zebrafish, Japanese Medaka Justin Dubiel	In Person 42 Student	Climate Change as a Stress Multiplier Governing Algal Blooms in Oligotrophic Lakes. Neil Hutchinson	In Person 55	Laxative and Oil Dispersant Component Dioctyl Sodium Sulfosuccinate is a Disruptor of Thyroid Hormone Signaling in American Bullfrog Tadpoles Lorissa Corrie	In Person 64 Student
2:30	The effects of temperature on nickel bioaccumulation and toxicity to the freshwater snail, Lymnaea stagnalis Megan Mattsson	In Person 43 Student	Understanding the risk of climate change on water quality in Canada - development of a nation-wide database for machine learning application Carrie Rickwood	Virtual 56	Impacts of Wastewater Effluent Stressors: Using Reactive Oxygen Enzymes as a Marker of Neurodegeneration in Darters (Etheostoma sp.) Nicole Gauvreau	Virtual 65 Student
2:50	Non-lethal blood sampling from Rainbow trout in the laboratory and in situ. Simon Pollard	In Person 44 Student	Effects of oscillating temperature (short cycle: 24 h) on metal accumulation in Daphnia magna in freshwater Fan Qin	Virtual 57 Student	Draft Federal Environmental Quality Guidelines for Triclocarban Allison Dunn	Virtual 66
3:10	Toxicity monitoring at Snap Lake, Northwest Territories: A historical overview (2012 – 2020) Lindsey Felix	Virtual 45	Open		Open	
3:30 – 4:30	Poster Social (with Bar) / Poster Judging					
7:00 – 8:30	CEW Banquet					
8:30	Trivia (Hybrid event)					

Wednesday, October 6, 2021

9:00	Registration Desk Opens (Convention Hall Foyer)			
9:00	Coffee/ Networking			
9:30	CEW Outstanding Service Award - Gordon Craig, Outstanding Contribution Award - Jennifer Miller (C1/C2)			
Location	C1/2		C4	
Session	Wildlife Toxicology		Reproductive & Developmental Toxicology	
10:00	Session Introduction		Session Introduction	
10:10	Invertebrate and vertebrate species sensitivity distribution for insecticides derived from insecticidal toxins of <i>Bacillus thuringiensis</i> Madelaine Empey	Virtual/ In Person 67 Student	Developmental outcomes and gene expression profiling reveals early toxicological mechanisms of lead effects in an early-life stage amphibian Natacha Hogan	Virtual/ In Person 71
10:30	Identifying the mechanism of action of polycyclic aromatic compound exposure in multiple bird species exposed in ovo to diluted bitumen Sarah Wallace	In Person 68 Student	Inhibition of oocyte maturation by organophosphate insecticides in zebrafish (<i>Danio rerio</i>) after in vitro and in vivo exposure Justin Miller	In Person 72 Student
10:50	Water additives used in forest and municipal firefighting can cause adverse effects in terrestrial biota Jenna Anderson	Virtual 69 Student	Effects of exposure to conventional heavy crude oil on wild fathead minnow larvae from IISD-Experimental Lakes Area, Northwestern Ontario Vince Palace	Virtual 73
11:10	Variation in habitat use and its consequences for mercury exposure in bats (<i>M. lucifugus</i> and <i>E. fuscus</i>) in the Cornwall region of Eastern Ontario Bailey Bedard	Virtual 70 Student	The effects of environmentally relevant and supra-environmental concentrations of metformin on embryonic and larval zebrafish (<i>Danio rerio</i>) Shemar Williams	Virtual 74 Student
11:30	Open		Effects of methylmercury on songbird brain during spring reproductive onset. Claire Bottini	Virtual 75 Student
11:50	Open		Open	
11:50 – 12:45	Lunch			
12:45 – 2:00	Annual General Meeting/ Playle Awards/ Student Awards Presentation/ Closing Remarks			
2:00	CEW 2021 Concludes			