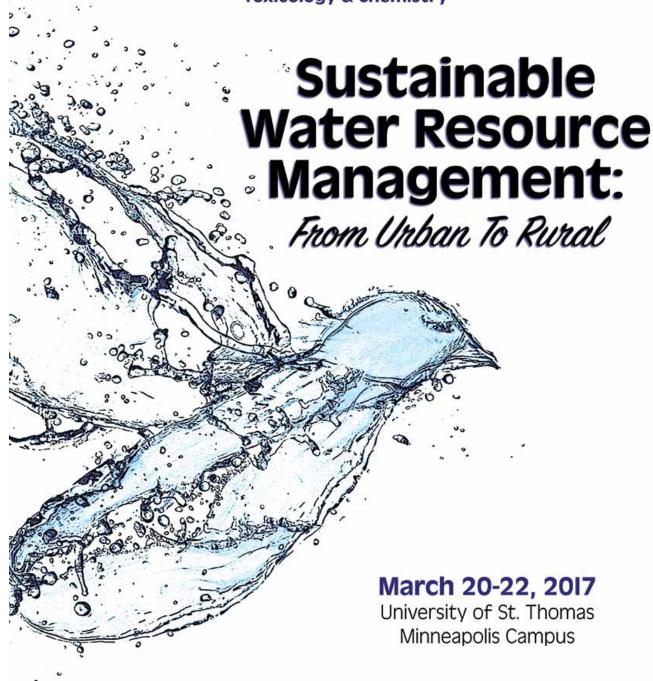
### 25th Annual Meeting

Midwest Chapter of the Society of Environmental Toxicology & Chemistry





to the 25th Annual Meeting of the

Midwest Chapter of the

Society of Environmental Toxicology

and Chemistry (SETAC)!

The 2017 program consists of technical presentations and posters, and social activities. The Midwest Chapter of SETAC holds their annual meeting to provide professionals, academics, and students the opportunity to present their work, exchange ideas, and network with their peers. We hope you find this meeting rewarding!

#### REGISTRATION DESK HOURS

- Monday, March 20: 12:15 1:00 PM, outside Room 127 in Schulze Hall
- Tuesday, March 21: 7:30 10:15 AM, outside Room 260 in Terrence Murphy Hall
- Wednesday, March 22: 7:30 8:45 AM, outside Room 201 in Opus Hall

For those registering onsite, please plan to pay by check; use a credit card for the online registration.

#### PROGRAM

Attendees will receive a printed program upon check-in at the Registration Desk. As part of the commitment to a green meeting, abstract booklets won't be provided; however display copies will be available at the Registration Desk.

### MONDAY BOARD OF DIRECTORS' MEETING

The Midwest Chapter will hold a board of directors' meeting on Monday from 5:15 – 6:45 PM in Room 127, Schulze Hall (open to all members).

#### MONDAY EVENING SOCIAL

Join fellow attendees at an informal Meet-n-Greet at Brits Pub & Eating Establishment (1110 Nicollet Mall) on Monday from 7:30 – 9 PM, or later! "Brits" is walking distance from the meeting location. Please note this event is not included in the registration fees. We hope you can join us!

### PLATFORM PRESENTATION UPLOAD

All platform presenters will upload their presentations onsite the morning of their talk. Presentations can be uploaded at the Registration Desk on Tuesday/Wednesday morning from 7:30 – 8:10 AM. Please make every effort to bring your presentation to the Registration Desk during this time.

#### POSTER PRESENTATIONS

Poster presentations will take place on Tuesday from 5:15 - 7:30 PM in the Terrence Murphy Hall Atrium. Meeting organizers will make an announcement on Tuesday afternoon when the poster displays are ready, which will allow you to hang your poster before the poster session. Posters need to be available for viewing the entire poster social program.

### RAFFLE

The Raffle Returns! Help our Chapter raise money to support the Student Travel Program.

Ticket Prices: 1 ticket for \$1; 6 tickets for \$5. Winning tickets will be drawn during lunch on Wednesday.

Please also consider donating an item – coffee, books, food items, and more! Bring them to the Registration Desk and we will take it from there. Thanks for supporting our Students!

#### GO GREEN!

Please use the recycle bins distributed throughout the conference center. Please also feel free to bring your water bottle/hot beverage container for use at the meeting.

#### VOLUNTEERING

Please consider volunteering for the Midwest SETAC organization! Leadership roles in the Regional Chapters bring your name onto the radar and aids in becoming active at the national level as well as providing you with opportunities to become part of the next generation of leaders. Each year our Midwest Chapter needs Board Members and this year is no exception. We will elect several positions & nominations can be submitted anytime to the President (Dawn Perkins) or during the annual meeting. Please become a Chapter Member and vote for the new Board Members.

### BEST STUDENT PLATFORM AND POSTER AWARDS

Midwest SETAC provides support for the Best Student Platform & Poster Presentations at our annual meeting. The 3M Company & SC Johnson graciously provided \$1,000 cash awards for each category. The best student papers are determined by a panel of environmental scientists, and the winners are announced at the end of the annual meeting. Each award must be used to defray costs to attend and present research results at the next SETAC North America meeting.

#### STUDENT TRAVEL AWARD PROGRAM

Midwest SETAC established a program to support student travel to our annual meeting, and a limited number of travel awards, up to \$185, were made for this meeting. The purpose is to encourage student participation and to help defray the cost of attending the annual meeting. Keep this in mind for 2018 and apply early!

### SPECIAL ASSISTANCE, QUESTIONS, SUGGESTIONS

If you require special assistance, if you have any questions or suggestions, please contact Dawn Perkins (T: 608-224-6230).

# Schedule at a glance

### **MONDAY, MARCH 20**

TIME	EVENT	LOCATION
12:15-1pm	Registration	Schulze Hall, Foyer of Room 127
1-5pm	Short Course: Eric Eager, UW-La Crosse	127 Schulze Hall
3-3:15pm	Break	
5:15-6:45pm	Midwest SETAC Board of Directors' Meeting	127 Schulze Hall
7:30-9pm (or later!)	Meet-n-Greet at Brits Pub (food and drink on your own)	Brits Pub 1110 Nicollet Mall

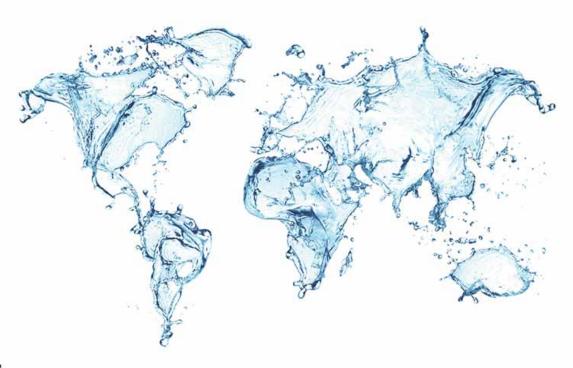
### **TUESDAY, MARCH 21**

TIME	EVENT	LOCATION
7:30-10:15am	Registration	Terrence Murphy Hall, Foyer of Room 260
7:30-8:10am	Presentation Upload	Terrence Murphy Hall, Foyer of Room 260
8:30am	Welcome & Overview of the Day Moderator: Dawn Perkins, Wisconsin State Laboratory of Hygiene, and Regional SETAC Chapter President	260 Terrence Murphy Hall (Thornton Auditorium)
8:40-10:00am	Platform Presentations	260 Terrence Murphy Hall (Thornton Auditorium)
10am	Break	
10:15am	Plenary Speaker: Jeffrey Peterson, University of MN	260 Terrence Murphy Hall (Thornton Auditorium)
11am-noon	Platform Presentations	260 Terrence Murphy Hall (Thornton Auditorium)
noon	Lunch	201 Opus Hall (Great Rooms)
1:10pm	Update on North America SETAC  Teresa Norberg-King, USEPA, Member SETAC NA Board of Directors	260 Terrence Murphy Hall (Thornton Auditorium)
1:30-2:50pm	Platform Presentations Moderator: Teresa Norberg-King, USEPA	
2:50pm	Break	
3:05-4:05pm	Platform Presentations Moderator: Teresa Norberg-King, USEPA	260 Terrence Murphy Hall (Thornton Auditorium)
4:05pm	Stretch Break	
4:15-5pm	Plenary Speaker: Deborah Manning, Metropolitan Council of the Twin Cities	260 Terrence Murphy Hall (Thornton Auditorium)
5:15-7:30pm	Poster Session & Social	Terrence Murphy Hall Atrium (located on 1st floor)

# Schedule at a glance

### **WEDNESDAY, MARCH 22**

MEDITEODA	i, maitori EE	4-4
TIME	EVENT	LOCATION
7:30-8:45am	Registration	Opus Hall, Foyer of Room 201
7:30-8:10am	Presentation Upload	Opus Hall, Foyer of Room 201
8:30am	Welcome & Overview of the Day	201 Opus Hall (Great Rooms)
8:35-10:15am	Platform Presentations Moderator: Liz Miller, UW-Madison	201 Opus Hall (Great Rooms)
10:15am	Break	
10:30-11:50am	Platform Presentations Moderator: David Feifarek, USEPA	201 Opus Hall (Great Rooms)
11:50am	Lunch, Chapter Business Meeting, Raffle, and Awards (please bring your lunch to the meeting room)	201 Opus Hall (Great Rooms)



### **SHORT COURSE**

# Data Management, Statistical Analysis, and Graphics Using "R"



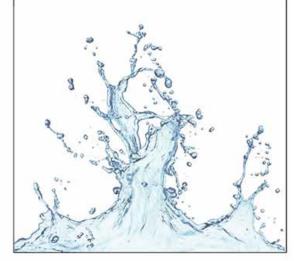
Eric Eager

ASST. PROFESSOR, MATHEMATICS & STATISTICS UNIVERSITY OF WISCONSIN-LA CROSSE

This course will explore ways to implement common statistical approaches to problems in environmental toxicology and chemistry using the statistical software "R."

Specific topics will include data management and analysis, hypothesis testing, regression, and graphics. Several hands-on examples will be provided throughout the course.

Dr. Eager received his Ph.D. in Mathematical Biology from the University of Nebraska-Lincoln in 2012. His research interests include theoretical ecology, stochastic processes, dynamical systems, and the scholarship of teaching and learning the interdisciplinary classroom. Notes



### **SPEAKERS**

## The Water-Food Nexus



Jeffrey Peterson

DIRECTOR, WATER RESOURCES CENTER UNIVERSITY OF MINNESOTA

Jeffrey M. Peterson is the Director of the University of Minnesota's Water Resources Center, a partnership of University Extension and the College of Food. Agricultural, and Natural Resource Sciences. As Director, he provides overall leadership for the center's outreach, teaching, and research activities involving faculty and students across the university. He also holds a faculty appointment as a professor in the Department of Applied Economics. He earned his Ph.D. from Cornell University in agricultural and resource economics. Prior to coming to Minnesota he held a faculty position in the Department of Agricultural Economics at Kansas State University for 15 years, including service as Director of Graduate Studies from 2014 to 2015. He is the recipient of national awards for his research on environmental policy analysis, focusing on water use and water quality impacts from agriculture. He currently serves as an editor of the Journal of Agricultural and Resource Economics.

# Wastewater Reuse and Sustainability in the Twin Cities Region



# Deborah Manning

PRINCIPAL ENGINEER
METROPOLITAN COUNCIL OF THE TWIN CITIES

Ms. Deborah Manning, P.E., is Assistant Manager for Plant Engineering with Metropolitan Council's Environmental Services (MCES) and leads MCES' wastewater reuse initiative. MCES provides wastewater conveyance and treatment services for more than 2 million customers in the 7-county Twin Cities metropolitan area, treating 250 million gallons per day of wastewater at 8 wastewater treatment plants. Ms. Manning holds B.S. and M.S. degrees in civil/environmental engineering from Virginia Tech and is a registered professional engineer in MN and VA. Ms. Manning's career in the public and private sectors of the water industry has focused on working with water and wastewater utilities to prepare to meet upcoming regulatory, system expansion, and level of service requirements. Her publications are mainly in the areas of wastewater reuse and residuals management.

## Program

### **MONDAY, MARCH 20**

12:15-1pm	Registration
3.55	Schulze Hall, Foyer of Room 127
1-5pm	Short Course: Data Management, Statistical Analysis, and Graphics Using "R" Eric Eagar, UW-La Crosse Mathematics & Statistics Asst. Professor 127 Schulze Hall
3-3:15pm	Break
5:15-6:45pm	Midwest SETAC Board of Directors Meeting 127 Schulze Hall

### **TUESDAY, MARCH 21**

DI ATEORM PRESENTATIONS &	SPEAKERS LOCATED IN THORNTON AUDITORIUM	

7:30-9pm (or later!) ... Meet-n-Greet at Brits Pub, 1110 Nicollet Mall (food and drink on your own)

7:30-10:15am	TO THE SECTION OF THE
	Terrence Murphy Hall, Foyer of Room 260
7:30-8:10am	Presentation Upload Terrence Murphy Hall, Foyer of Room 260
MODERATOR: DAWN	PERKINS, WISCONSIN STATE LABORATORY OF HYGIENE
8:30am	Welcome & Overview of the Day 260 Terrence Murphy Hall (Thornton Auditorium)
8:40am	Integrating Chemical Monitoring Data With Biological Effects Data To Predict Hazards of Contaminants of Emerging Concern and in Minnesota Streams Dalma Martinović-Weigelt (Presenting Author), Natalia Garcia-Reyero, Alvina C. Mehinto, Mark L. Ferrey
9:00am	Mixture Effects on Plant Uptake and Accumulation of Pharmaceuticals Sara L. Nason, Elizabeth L. Miller (Presenting Author), KG Karthikeyan, Joel A. Pedersen
9:20am	Pollutant Stress in the Maumee River: Impacted Physiology and Reproduction in Fathead Minnows (Pimephales promelas) and Sunfish (Lepomis spp.)  Nicholas Cipoletti (Presenting Author), Heiko L Schoenfuss
9:40am	Reproductive Axis – A Case Study in 21st Century Toxicity Testing Eric C. Randolph (Presenting Author), Gerald Ankley, Brett Blackwell, Jenna Cavallin, Wan-Yun Cheng, David Feifarek, Kathleen Jensen, Michael Kahl, Rebecca Milsk, Shane Poole, Travis Saari, Daniel Villeneuve
10:00am	Break
10:15am	Plenary Speaker Jeffrey Peterson: The Water-Food Nexus

11:00am ...... Development of a Water Quality Sulfate Standard to Protect Wild Rice from

Hydroponic, Mesocosm, and Field Data Edward B. Swain (Presenting Author)

# Program

### TUESDAY, MARCH 21

PLATFORM PRESENTATIONS &	ODEANCEDO LOGATED	IN THOOMITON AUDITODIUM
PLATEDRM PRESENTATIONS &	SPEAKERS I III A I FI	I IN THURNIUM ATIDITIBLIM

11:20am	Iron Sulfide Precipitates on the Roots of Wild Rice (Zizania palustris) Sophie LaFond-Hudson (Presenting Author), Nathan Johnson, John Pastor, Brad Dewey
11:40am	Septic Seepage in Minnesota Lakes and its Biological Effects on
	Resident Fish Species Les Warren (Presenting Author), Jackie Blomker, Meaghan Guyader, Christopher Higgins, Heiko Schoenfuss
noon	Lunch 201 Opus Hall (Great Rooms)
MODERATOR: TERESA N	ORBERG-KING, USEPA
1:10pm	Update on North America SETAC Teresa Norberg-King, USEPA, Member SETAC NA Board of Directors
1:30pm	Development of ELISA for the Measurement of Vitellogenin (Vtg) in Blood of the Painted Turtle (Chrysemys picta) Stephen E. Bartell (Presenting Author), Kurt R. Illig
1:50pm	Potential Long-Term Endocrine-Disrupting Effects of Crude Oil and Oil Dispersant Corexit EC9500A Utilizing the Sex Determination in the American Alligator Satomi Kohno (Presenting Author), Cameron E. Williams, Nicole A. McNabb, Heiko L. Schoenfuss, Demetri D. Spyropoulos
2:10pm	Chronic Toxicity of Binary-Metal Mixtures of Copper, Cadmium, and Chromium to Daphnia magna Loren Hou (Presenting Author), Tham Hoang
2:30pm	Fathead Minnow Diaries: How a Multi-Generational Exposure to an Urban Contaminant of Emerging Concern Mixture Impacted Apical Endpoints Lina C. Wang (Presenting Author), Utku Hasbay, Josh Robinson, Heiko Schoenfuss
2:50pm	Break
3:05pm	Fate and Predicted Toxicity of Ammonia from Small POTWs in Ohio Streams Tyler Linton (Presenting Author), Craig Voros, Jon VanDommelen, Jack Liggett
3:25pm	In Vitro Assessment of Androgenic Activity of Water Reclamation Plant Effluents in Greater Chicago
	Austin Sovell (Presenting Author), Lily Ward, Abigail Lukowicz, Tom Minarik, Jackie Heitzman, Heiko Schoenfuss, Dalma Martinović-Weigelt
3:45pm	Biological Consequences of Urban Storm Water Runoff on Reproduction and Survival of Aquatic Organisms  Ben Westerhoff (Presenting Author), Heiko Schoenfuss, David Fairbairn
4:05pm	: 사용 및 기계에 있는 사용하게 되었다. 이 이 Best Mark Charles
4:15-5pm	Plenary Speaker Deborah Manning: Wastewater Reuse and Sustainability in the Twin Cities Region
5:15-7:30pm	Poster Session & Social Terrence Murphy Hall Atrium (located on 1st floor)

# Program

### WEDNESDAY, MARCH 22

WEDNEODAI	, MAITOIL EL
PLATFORM PRESENTAT	TIONS & SPEAKERS LOCATED IN 201 OPUS HALL GREAT ROOMS
7:30-8:45am	. Registration
	Opus Hall, Foyer of Room 201
7:30-8:10am	. Presentation Upload Opus Hall, Foyer of Room 201
MODERATOR: LIZ MILLE	ER, UNIVERSITY OF WISCONSIN-MADISON
8:30am	. Welcome & Overview of the Day 201 Opus Hall (Great Rooms)
8:35am	In Vitro Function of the Aryl Hydrocarbon Receptor Predicts In Vivo Sensitivity of Oviparous Vertebrates to Dioxin-like Compounds  Jon Doering (Presenting Author), Steve Wiseman, Alper Alcaraz, John Giesy, Markus Hecker
8:55am	Assessing the Effects of Legacy Contaminants on Egg and Nestling Survival of Tree Swallows in Great Lakes Areas of Concern Christine M. Custer (Presenting Author), Thomas W. Custer, Matthew Etterson, Paul M. Dummer
9:15am	Evaluating Polyethylene Passive Sampler Performance Reference Compound (PRC) Modeling Methods in a Cross-Site Field Study Jay Thompson (Presenting Author), Jason Conder, Jeff Roberts
9:35am	. Meeting the Challenge of Controlling Invasive Aquatic Species to Minimize Environmental and Social Impacts on Our Water Resources  Joel G. Putnam (Presenting Author), Justine E. Nelson, John N. Steiner
9:55am	. Measurement of Blue-Green Algal Toxins in Air and Water at Tainter Lake, Dunn Co., WI Elisabeth Harrahy, Curtis Hedman (Presenting Author), Dawn Perkins, Bruce Eshelman
10:15am	. Break
MODERATOR: DAVID FE	IFAREK, USEPA
10:30am	Screening the ToxCast Phase I Chemical Library for Inhibition of Deiodinase Type I Enzyme Activity  Jeff S. Denny (Presenting Author), Joseph J. Korte, Carsten N. Knutsen, Jennifer H. Olker, Sigmund J. Degitz, Michael W. Hornung, Phillip C. Hartig, Mary C. Cardon
10:50am	Particle Size-Associated Toxicity Profiles of Ambient Particulate Matter from Urban California in an Alveolar Macrophage Model Dagmara S. Antkiewicz (Presenting Author), Jocelyn D.C. Hemming, Chris Ruehl, Martin M. Shafer
11:10am	Evaluation of the Direct Peptide Reactivity Assay (DPRA) to Assess Sensitization Potential of Platinum Species  Jocelyn Hemming (Presenting Author), Mark Mieritz, Joel Overdier, Martin Shafer
11:30am	Animal Alternatives for Whole Effluent Toxicity Testing: Perspectives from a Global Workshop Teresa J. Norberg-King (Presenting Author), Michelle Embry, Scott Belanger, Thomas Braunbeck, Josh Butler, Philip Dorn, Brianna Farr, Patrick Guiney, Sarah Hughes, Marlo Sellin Jeffries, Romain Journel, Marc Leonard
11:50am	. Lunch, Chapter Business Meeting, Raffle, and Awards 201 Opus Hall (Great Rooms) please bring your lunch to the meeting room

### 25th Annual Meeting of Midwest Regional Chapter of SETAC Platform presentations

- Integrating Chemical Monitoring Data With Biological Effects Data To Predict Hazards
  of Contaminants of Emerging Concern and in Minnesota Streams
  Dalma Martinović-Weigelt (Presenting Author), Natalia Garcia-Revero, Alvina C. Mehinto, Mark L. Ferrev
- Mixture Effects on Plant Uptake and Accumulation of Pharmaceuticals
   Sara L. Nason, Elizabeth L. Miller (Presenting Author), KG Karthikeyan, Joel A. Pedersen
- Pollutant Stress in the Maumee River: Impacted Physiology and Reproduction in Fathead Minnows (Pimephales promelas) and Sunfish (Lepomis spp.) Nicholas Cipoletti (Presenting Author), Heiko L Schoenfuss
- Effects of the Fungicide Imazalil on the Fathead Minnow (Pimephales promelas) Reproductive Axis –
   A Case Study in 21st Century Toxicity Testing
   Eric C. Randolph (Presenting Author), Gerald Ankley, Brett Blackwell, Jenna Cavallin, Wan-Yun Cheng, David Feifarek,
   Kathleen Jensen, Michael Kahl, Rebecca Milsk, Shane Poole, Travis Saari, Daniel Villeneuve
- Development of a Water Quality Sulfate Standard to Protect Wild Rice from Hydroponic, Mesocosm, and Field Data Edward B. Swain (Presenting Author)
- Iron Sulfide Precipitates on the Roots of Wild Rice (Zizania palustris)
   Sophie LaFond-Hudson (Presenting Author), Nathan Johnson, John Pastor, Brad Dewey
- Septic Seepage in Minnesota Lakes and its Biological Effects on Resident Fish Species
   Les Warren (Presenting Author), Jackie Blomker, Meaghan Guyader, Christopher Higgins, Heiko Schoenfuss
- Development of ELISA for the Measurement of Vitellogenin (Vtg) in Blood of the Painted Turtle (Chrysemys picta)
   Stephen E. Bartell (Presenting Author), Kurt R. Illia
- Potential Long-Term Endocrine-Disrupting Effects of Crude Oil and Oil Dispersant Corexit EC9500A
   Utilizing the Sex Determination in the American Alligator
   Satomi Kohno (Presenting Author), Cameron E. Williams, Nicole A. McNabb, Heiko L. Schoenfuss,
   Demetri D. Spyropoulos
- Chronic Toxicity of Binary-Metal Mixtures of Copper, Cadmium, and Chromium to Daphnia magna Loren Hou (Presenting Author), Tham Hoang
- Fathead Minnow Diaries: How a Multi-Generational Exposure to an Urban Contaminant of Emerging Concern Mixture Impacted Apical Endpoints
   Lina C. Wang (Presenting Author), Utku Hasbay, Josh Robinson, Heiko Schoenfuss
- Fate and Predicted Toxicity of Ammonia from Small POTWs in Ohio Streams
   Tyler Linton (Presenting Author), Craig Voros, Jon VanDommelen, Jack Liggett

## Platform presentations

- In Vitro Assessment of Androgenic Activity of Water Reclamation Plant Effluents in Greater Chicago
  - Austin Sovell (Presenting Author), Lily Ward, Abigail Lukowicz, Tom Minarik, Jackie Heitzman, Heiko Schoenfuss, Dalma Martinović-Weigelt
- Biological Consequences of Urban Storm Water Runoff on Reproduction and Survival of Aquatic Organisms
   Ben Westerhoff (Presenting Author), Heiko Schoenfuss, David Fairbairn
- In Vitro Function of the Aryl Hydrocarbon Receptor Predicts In Vivo Sensitivity of Oviparous Vertebrates to Dioxin-like Compounds
  - Jon Doering (Presenting Author), Steve Wiseman, Alper Alcaraz, John Giesy, Markus Hecker
- Assessing the Effects of Legacy Contaminants on Egg and Nestling Survival of Tree Swallows in Great Lakes Areas of Concern
  - Christine M. Custer (Presenting Author), Thomas W. Custer, Matthew Etterson, Paul M. Dummer
- Evaluating Polyethylene Passive Sampler Performance Reference Compound (PRC) Modeling Methods in a Cross-Site Field Study Jay Thompson (Presenting Author), Jason Conder, Jeff Roberts
- Meeting the Challenge of Controlling Invasive Aquatic Species to Minimize Environmental and Social Impacts on Our Water Resources Joel G. Putnam (Presenting Author), Justine E. Nelson, John N. Steiner
- Measurement of Blue-Green Algal Toxins in Air and Water at Tainter Lake, Dunn County, WI Elisabeth Harrahy, Curtis Hedman (Presenting Author), Dawn Perkins, Bruce Eshelman
- Screening the ToxCast Phase I Chemical Library for Inhibition of Deiodinase Type I Enzyme Activity
  Jeff S. Denny (Presenting Author), Joseph J. Korte, Carsten N. Knutsen, Jennifer H. Olker, Sigmund J. Degitz,
  Michael W. Hornung, Phillip C. Hartig, Mary C. Cardon
- Particle Size-Associated Toxicity Profiles of Ambient Particulate Matter from Urban California in an Alveolar Macrophage Model
  - Dagmara S. Antkiewicz (Presenting Author), Jocelyn D.C. Hemming, Chris Ruehl, Martin M. Shafer
- Evaluation of the Direct Peptide Reactivity Assay (DPRA) to Assess Sensitization Potential of Platinum Species
  - Jocelyn Hemming (Presenting Author), Mark Mieritz, Joel Overdier, Martin Shafer
- Animal Alternatives for Whole Effluent Toxicity Testing: Perspectives from a Global Workshop
   Teresa J. Norberg-King (Presenting Author), Michelle Embry, Scott Belanger, Thomas Braunbeck, Josh Butler, Philip Dorn,
   Brianna Farr, Patrick Guiney, Sarah Hughes, Marlo Sellin Jeffries, Romain Journel, Marc Leonard

### Poster presentations

- 1 Leveraging Recent Advances in Targeted and Non-Targeted Mass Spectrometry Instrumentation for the Analysis of Emerging Toxins (peptides/small molecules) in Surface Waters
  - Frank Kero (Presenting Author), Josh Ye, Jamie Foss, Desmond Wichems, Jason Weisenseel
- 2 Methylmercury Contamination in the Lower Food Web of At-Risk Minnesota Rivers Phoenix A. Rogers (Presenting Author), Marissa C. Despins, Khadel Akindolire-King, Kristofer R. Rolfhus
- 3 Exploring Different Service Loss Estimation Approaches for Assessing Sediment Injury in Natural Resource Damage Assessment
  Michael Kierski (Presenting Author), Pieter Booth, Melanie Edwards, Jane Ma
- 4 Applying the Virtual Ecologist Approach to Assessing the Risks of Pesticides to Listed Species Pamela Rueda-Cediel (Presenting Author), Richard Brain, Amelie Schmolke, Nika Galic, Valery E. Forbes
- Temperature and Estrogenic Exposure: Effects on the Predator-Prey Relationship Between Bluegill Sunfish and Fathead Minnows Victoria R. Korn (Presenting Author), Jessica L. Ward, Heiko L. Schoenfuss
- Impaired Swim Bladder Inflation in Early-Life Stage Fathead Minnows Exposed to a Deiodinase Inhibitor, Iopanoic Acid

  Jenna E. Cavallin (Presenting Author), Gerald T. Ankley, Brett R. Blackwell, Chad Blanksma, Kellie A. Fay, Kathleen M. Jensen, Michael D. Kahl, Dries Knapen, Patricia A. Kosian, Shane Poole, Eric C. Randolph, Anthony L. Schroeder, Lucia Vergauwen, Daniel L. Villeneuve
- Reevaluating the Significance of Estrone as an Environmental Estrogen

  David J. Feifarek (Presenting Author), Brett R. Blackwell, Jenna E. Cavallin, Kathleen M. Jensen, Michael D. Kahl, Shane T. Poole, Eric C. Randolph, Travis W. Saari, Daniel L. Villeneuve, Gerald T. Ankley
- 8 Impacts of Embryonic Exposure to Triclosan on the Ability of Zebrafish Larvae to Capture Prey Rosalea Botka (Presenting Author), Tisha King-Heiden
- 9 Agricultural Runoff Deposits Nutrients, Hormones, and Fecal Bacteria Into Surface Water with Levels Correlating with Land Use Michael Walsh (Presenting Author), Sarah Reichert, Krassimira Hristova
- 10 Exploring Impacts of Complex Nanomaterials Using the Nematode *C. elegans*Nicholas J. Niemuth (Presenting Author), Mimi N. Hang, Robert J. Hamers, Xi Zhang, Catherine J. Murphy, Rebecca D. Klaper
- 11 Comparison of Amphibian and Mammalian Thyroperoxidase Inhibition by Xenobiotics

  Carsten N.F. Knutsen (Presenting Author), Michael W. Hornung
- 12 Novel Assessment of the Toxicity of Natural Water Impacted by Petroleum Hydrocarbons at the National Crude Oil Biodegradation and Natural Attenuation Research Site Near Bemidji, MN, USA Hannah N. Link (Presenting Author), Jennifer T. McGuire, Dalma Martinović-Weigelt
- 13 Process for Evaluation of Cleaning Product Biodegradation
  Magdalena Osorio (Presenting Author), Clint Sowle, Kim D'Aloia, Owen Kinsky

### Poster presentations

14 Determining the Impacts of Environmental Contaminants to Zebra Mussels Using Gene Expression Biomarkers

Nicklaus J. Neureuther (Presenting Author), W. Edward Johnson, Kimani L. Kimbrough, Annie Jacob, Marc A. Mills, Chris Suchocki, Rebecca Klapper

15 Quantifying Human-Associated Indicator Bacteria Contamination in Urban Stormwater Outfalls in Metropolitan Milwaukee Sandra L. McLellan, Deborah K. Dila, Alexis McAdams (Presenting Author)

16 Examining the Effects of Coal Fly Ash and Food Ration at the Molecular, Individual, and Population Levels in Daphnia magna

Brooke L. Wilder-Corrigan (Presenting Author), Madison K. Runge, Chad M. Larson, Paul C. Pickhardt

17 Nanotoxicology: Impacts of NMC, LCO and Olivine-Structured Nanomaterials to Drosophila melanogaster and Chironomus riparius Becky Curtis (Presenting Author), Nicholas Niemuth, Mimi N. Hang, Robert J. Hamers, Rebecca D. Klaper

- 18 Acute Toxicity of D. magna to Olivine Structure Energy Storage Nanomaterials
  Meagan N. Stettnisch (Presenting Author), Mimi N. Hang, Robert J. Hamers, Rebecca D. Klaper
- Methylmercury and the St. Louis River Estuary: A Comprehensive Survey of a Freshwater Coastal Wetland Estuary System Impacted by Mercury Accumulation Amber White (Presenting Author), Nathan Johnson, Jeff Jeremiason
- 20 Effects of the Neonicotinoid Insecticide, Imidacloprid, on Early Development in the Pond Snail, Physa gyrina Nadia Carmosini (Presenting Author), Gregory Sandland, Anna Holman
- 21 Evaluation of the Effectiveness of Best Management Practices for Attenuation of the Stormwater Toxicity – Bioeffects-Based Approach Chantel R. Wang (Presenting Author), Austin Sovell, Dalma Martinović-Weigelt, Mark Ferrey, David Fairbairn
- 22 Environmental Temperature Moderates Estrogen Exposure, Predator Escape Performance, and Gene Expression in Larval Fathead Minnows

  Megan K. Cox (Presenting Author), Jessica L. Ward, Heiko L. Schoenfuss
- 23 An Analysis of Physical and Chemical Soil Properties as Environmental Risk Factors in the Spread of Chronic Wasting Disease Janek S. Walker (Presenting Author), Dustin P. Martin, Nadia Carmosini
- 24 Toxicity Testing of Four Formulations of 2,4-Dichlorophenoxyacetic Acid (2,4-D) Herbicide at Environmentally Relevant Levels Camille G. Danielson (Presenting Author), Jocelyn D.C. Hemming, Dagmara S. Antkiewicz, Dawn A.K. Perkins
- 25 Does Triclosan Disrupt the Thyroid Hormone Axis in Zebrafish?

  Amanda Stenzel (Presenting Author), Briannae Theodore, Cole Fuchs, Nadia Carmosini, Tisha King-Heiden
- 26 Synthetic Polymers in Two American Consumer Products and Global Tap Water Mary Kosuth (Presenting Author)

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Environmental Quality Through Science®

#### SUSTAINING SPONSOR



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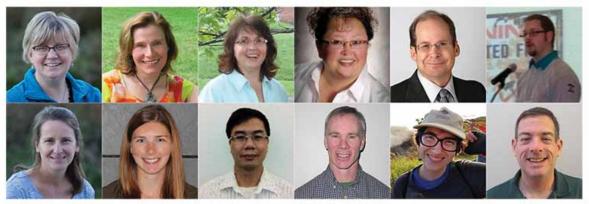




# 25th Annual Meeting of Midwest Regional Chapter of SETAC Thank you for attending

On behalf of the 2017 Midwest Chapter Board of Directors, thank you for joining us at this meeting. Below are photos of the current members of the Board of Directors. If you have suggestions, if you want to become involved, you can find out more from any one of us!

Dawn Perkins President, Midwest SETAC



1st Row: Dawn Perkins, Nadia Carmosini, Teresa Norberg-King, Jodi Mohs-Davis, Michael Kierski, Zachary Jorgenson 2nd Row: Camille Danielson, Jenna Cavallin, Tham Hoang, Tyler Linton, Elizabeth Miller, Joel Putnam

### MIDWEST SETAC REGIONAL CHAPTER BOARD OF DIRECTORS

Officer (Years of Term)	Name	Email
President (16-17)	Dawn Perkins	dawn.perkins@slh.wisc.edu
Vice President (16-17)	Nadia Carmosini	ncarmosini@uwlax.edu
Past President (16-17)	Teresa Norberg-King	norbe010@d.umn.edu
Secretary (15-17)	Jodi Mohs-Davis	jmohs-davis@hotmail.com
Treasurer (16-18)	Michael Kierski	mkierski@exponent.com
Member (15-18)	Zachary Jorgenson	zjorgens@hotmail.com
Member (14-17)	Camille Danielson	Camille.danielson@slh.wisc.edu
Member (15-18)	Jenna Cavallin	jennacav@gmail.com
Member (14-17)	Tham Hoang	thoang@luc.edu
Member (16-19)	Tyler Linton	tlinton@glec.com
Student Representative (16-18)	Elizabeth Miller	liz.miller@wisc.edu
Web Administrator	Teresa Norberg-King	tjnorberg@gmail.com
Web Administrator	Joel Putnam	jputnam2@vols.utk.edu



#### Minneapolis Campus

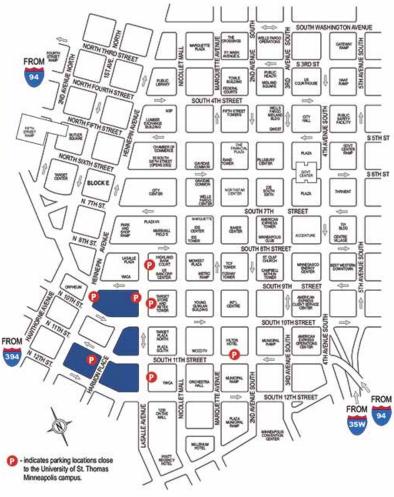
1000 LaSalle Avenue Minneapolis, Minnesota 55403



- 1. School of Law (MSL)
- Terrence Murphy Hall (TMH)
   College of Business
- College of Business
  3. Opus Hall (MOH)
  School of Education
- Parking at 11th Street and Harmon Place
- 5. Schulze Hall (SCH)

Schulze School of Entrepreneurship

 West Metropolitan Education Program (with underground parking garage)



#### FROM THE WEST

OPTION ONE: I-394 East to I-394 Downtown Exit to 12th Street North (exit 9A); to LaSalle Avenue; turn left (north) on LaSalle Avenue to 11th Street; turn left (west) on 11th Street. The campus will be on your right.

OPTION TWO: I-94 East to Downtown Exit to 4th Street, take Fourth Street to First Avenue; turn right on First Avenue to 10th Street, turn left on 10th Street to LaSalle Avenue; turn right on LaSalle Avenue to 11th Street, turn right on 11th Street. The campus will be on your right.

#### FROM THE EAST

I-94 West to 11th Street Exit (exit 233A); turn left. West on 11th Street to LaSalle Avenue (one block past Nicollet Mail). Campus will be on your right.

#### FROM THE SOUTH

I-35W North to Downtown Exits to 11th Street / Grant Street Exit (exit 16A); turn left. West on 11th Street to LaSalle Avenue (one block past Nicollet Mall). Cross LaSalle Avenue. Campus will be on your right.

#### FROM THE NORTH

I-35W South to West I-94. West on I-94 to 11" Street Exit. West on 11" Street to LaSalle Avenue (one block past Nicollet Mall). Cross LaSalle Avenue. Campus will be on your right.

#### FROM THE AIRPORT

I-494 West to I-35W North. Downtown Exits to 11th Street / Grant Street Exit (exit 16A); turn left. West on 11th Street to LaSalle Avenue (one block past Nicollet Mall). Cross LaSalle Avenue. Campus will be on your right.



MINNEAPOUS CAMPUS 1000 LaSalle Ave. Minneapolis, MN 55403 USA GENERAL INFORMATION Phone: (651) 962-5000 PARKING SERVICES Phone: (651) 962-4100 PUBLIC SAFETY
On Campus Emergency; (651) 962-5555
Off Campus Emergency; 911
Non Emergency; (651) 962-5100

#### **BUILDINGS & SPACES**

- ▲ Accessible Building
- ♦ Partially Accessible Building

Opus Hall (MOH)
School of Education
Terrence Murphy Hall (TMH)
College of Business
Schulze Hall (SCH)
Schulze School of Entrepreneurship
School of Law (MSL) 4
Parking at 11th Street and Harmon Place ▲ 5
MacPhail





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