

PROGRAM TABLE OF CONTENTS

(note: all content is hyperlinked, use alt+left arrow to return to previous page)

SUMMARY OF INVITED PRESENTATIONS

- KEYNOTE SPEAKERS
 - ANDREW LOVERING, PH.D.
 - BRENT RUBY, PH.D., FACSM

- MSPS AND IPS INVITED SPEAKERS
 - REBEKAH GUNDRY, PH.D.
 - DANIEL CHRISTIAN, PH.D.

- EXHIBITOR PRESENTATIONS
 - KRISTIINA AASA, PH.D.
 - STEVE FESTIN, PH.D.
 - WYATT KERN
 - SHAWN STERNISHA, PH.D.
 - GUS KALOGEROS, PH.D.

SYNCHRONOUS MEETING AGENDA

DAY 1, FRIDAY, OCTOBER 30, 2020

DAY 2, SATURDAY OCTOBER 31, 2020

ASYNCHRONOUS MEETING VIDEO POSTERS

UNDERGRADUATE

GRADUATE.....

POST-DOCTORAL AND FACULTY.....

MEETING ABSTRACTS

IN NUMERICAL ORDER (#3-#59)

Invited Presentations

Keynote Speakers:

Dr. Andrew Lovering, *University of Oregon*

Title: Getting to the Heart of the Matter: The "Hole" Story of Environmental Physiology and Medicine?

Dr. Brent Ruby, *University of Montana*

Title: Normal Humans Demonstrating Big Physiology: Energy and Fluid Demand Extremes

Invited Speakers:

Dr. Rebekah Gundry, *University of Nebraska Medical Center*

Title: An Analytical Chemist's Approach to Cardiac Systems Physiology

Dr. Daniel Christian, *Des Moines University|Medicine and Health Sciences*

Title: Increased NMDA Receptor Function during Protracted Withdrawal from Chronic Intermittent Ethanol Exposure

Exhibitor Presentations:

Dr. Kristiina Aasa, *FujiFilm VisualSonics*

Title: Small Animal Cardiac Physiology with VisualSonics High-Frequency Ultrasound

Dr. Steve Festin, *Charles River*

Title: New at RMS 2020

Wyatt Kern, *Data Sciences International*

Title: Advance Your Research with DSI Preclinical Physiologic Monitoring

Dr. Shawn Sternisha, *Beckman Coulter*

Title: Mechanistic Origins of Activation in Glucokinase Variants Responsible for Hyperinsulinism

Dr. Gus Kalogeros, *Scintica Instrumentation*

Title: From whole animal imaging to cellular function: Choosing the right tools for your research

Schedule, Friday October 30, 2020


🕒 12:30 PM - 01:00 PM | 📍 Zoom

Speaker Check-In (all presenters)

All Speakers are asked to arrive early to ensure all equipment/presentations are in proper working order


🕒 01:00 PM - 01:10 PM | 📍 Zoom

Welcome/Keynote Introduction (IPS President)

-  [Noah J. Marcus, Ph.D.](#)
01:00 PM - 01:10 PM


🕒 01:10 PM - 02:00 PM | 📍 Zoom

Keynote Presentation

-  [Andrew Lovering, Ph.D.](#) **Getting to the Heart of the Matter: The "Hole" Story of Environmental Physiology and Medicine?**
01:10 PM - 02:00 PM


🕒 02:00 PM - 02:10 PM

Questions/Discussion

-  [Andrew Lovering, Ph.D.](#) **Getting to the Heart of the Matter: The "Hole" Story of Environmental Physiology and Medicine?**
02:00 PM - 02:10 PM


🕒 02:10 PM - 02:20 PM | 📍 Zoom

Abstract #26 Graduate Student Presentation

-  [Kajal Kamra](#) **Novel mechanism of neural control of breathing in Acute Lung Injury (ALI)**
02:10 PM - 02:20 PM

🕒 02:20 PM - 02:25 PM


Questions/Discussion

-  [Kajal Kamra](#) **Novel mechanism of neural control of breathing in Acute Lung Injury (ALI)**
02:20 PM - 02:25 PM

Schedule, Friday October 30, 2020


🕒 02:25 PM - 02:35 PM

Abstract #59 Graduate Student Presentation

-  [Kelsey Schwartz](#) **Reproducibility of Laser Doppler Flowmetry and Laser Speckle Contrast Imaging During Whole-Body Cooling**
02:25 PM - 02:35 PM


🕒 02:35 PM - 02:40 PM

Questions/Discussion

-  [Kelsey Schwartz](#) **Reproducibility of Laser Doppler Flowmetry and Laser Speckle Contrast Imaging During Whole-Body Cooling**
02:35 PM - 02:40 PM

🕒 02:40 PM - 02:50 PM | 📍 Zoom

Exhibitor Presentation (FUJIFILM VisualSonics)


-  [Kristiina Aasa, Ph.D.](#) **Small Animal Cardiac Physiology with VisualSonics High-Frequency Ultrasound**
02:40 PM - 02:50 PM

🕒 02:50 PM - 03:00 PM

Break


🕒 03:00 PM - 03:10 PM

Abstract #23 Graduate Student Presentation

-  [Sumit Kar](#) **Hydrogen Sulfide Protects the Heart against Ferroptosis in Diabetic Cardiomyopathy**
03:00 PM - 03:10 PM

🕒 03:10 PM - 03:15 PM

Questions/Discussion

-  [Sumit Kar](#) **Hydrogen Sulfide Protects the Heart against Ferroptosis in Diabetic Cardiomyopathy**
03:10 PM - 03:15 PM

Schedule, Friday October 30, 2020

🕒 03:15 PM - 03:25 PM

Abstract #43 Graduate Student Presentation



[Patrick Walsh](#)

Dysfunction of Renal Glucose Handling is Restored by Central Leptin Receptor Blockade in Model of Estrogen Deficiency.

03:15 PM - 03:25 PM

🕒 03:25 PM - 03:30 PM

Questions/Discussion



[Patrick Walsh](#)

Dysfunction of Renal Glucose Handling is Restored by Central Leptin Receptor Blockade in Model of Estrogen Deficiency.

03:25 PM - 03:30 PM

🕒 03:30 PM - 03:45 PM

Abstract #10 Post-Doctoral Scholar Presentation



[Craig Workman, Ph.D.](#)

Dorsolateral Prefrontal Cortex tDCS Does Not Immediately Affect Cerebral Blood Flow in People with Multiple Sclerosis

🕒 03:50 PM - 04:05 PM

Abstract #58 Post-Doctoral Scholar Presentation



[Maia Kelly, Ph.D.](#)

Glycan signatures as mechanistic markers of beta cell injury in diabetes

03:50 PM - 04:05 PM

🕒 04:05 PM - 04:10 PM

Questions/Discussion



[Maia Kelly, Ph.D.](#)

Glycan signatures as mechanistic markers of beta cell injury in diabetes

04:05 PM - 04:10 PM

🕒 04:10 PM - 04:20 PM

Exhibitor Presentation (Charles River)



[Steve Festin, Ph.D.](#)



New at RMS 2020

04:10 PM - 04:20 PM

Schedule, Saturday October 31, 2020

🕒 04:20 PM - 04:45 PM

Day 1 Awards/Closing

-  [Noah J. Marcus, Ph.D.](#)
04:20 PM - 04:30 PM
-  [Dustin Slivka, Ph.D.](#)
04:30 PM - 04:40 PM

30 OCTOBER
Friday

31 OCTOBER
Saturday


🕒 08:00 AM - 08:30 AM | 📍 Zoom

Speaker Check-In (all presenters)

All Speakers are asked to arrive early to ensure all equipment/presentations are in proper working order


🕒 08:30 AM - 08:35 AM | 📍 Zoom

Welcome (MSPS President)

-  [Dustin Slivka, Ph.D.](#)
08:30 AM - 08:35 AM


🕒 08:35 AM - 08:55 AM | 📍 Zoom

Invited Presentation (MSPS)

-  [Rebekah Gundry, Ph.D.](#)
08:35 AM - 08:55 AM
- An Analytical Chemist's Approach to Cardiac Systems Physiology**

🕒 08:55 AM - 09:00 AM | 📍 Zoom

Questions/Discussion

-  [Rebekah Gundry, Ph.D.](#)
08:55 AM - 09:00 AM
- An Analytical Chemist's Approach to Cardiac Systems Physiology**

Schedule, Saturday October 31, 2020

🕒 09:00 AM - 09:20 AM | 📍 Zoom

Invited Presenter (IPS)

-  [Daniel Christian](#), Ph.D. **Increased NMDA Receptor Function during Protracted Withdrawal from Chronic Intermittent Ethanol Exposure**
09:00 AM - 09:20 AM

🕒 09:20 AM - 09:25 AM | 📍 Zoom

Questions/Discussion

-  [Daniel Christian](#), Ph.D. **Increased NMDA Receptor Function during Protracted Withdrawal from Chronic Intermittent Ethanol Exposure**
09:20 AM - 09:25 AM

🕒 09:25 AM - 09:35 AM

Exhibitor Presentation (Data Sciences International)


-  [Wyatt Kern](#) **Advance Your Research With DSI Preclinical Physiologic Monitoring**
09:25 AM - 09:35 AM

🕒 09:35 AM - 09:40 AM

Break


🕒 09:40 AM - 09:47 AM | 📍 Zoom

Abstract #21 Undergraduate Presenter

-  [Cody Anderson](#) **Effects of Heated-Water-Based versus Land-Based Exercise Training on Vascular Function in Individuals with Peripheral Artery Disease**
09:40 AM - 09:43 AM

🕒 09:47 AM - 09:50 AM | 📍 Zoom


Questions/Discussion

-  [Cody Anderson](#) **Effects of Heated-Water-Based versus Land-Based Exercise Training on Vascular Function in Individuals with Peripheral Artery Disease**
09:47 AM - 09:50 AM

Schedule, Saturday October 31, 2020


🕒 09:50 AM - 09:57 AM | 📍 Zoom

Abstract #28 Undergraduate Presenter

-  [Kayla Olstinski](#) **Protective Effects of Low-dose Metformin Treatment in a Mouse Model of Diabetic Kidney Disease**
09:50 AM - 09:57 AM


🕒 09:57 AM - 10:00 AM | 📍 Zoom

Questions/Discussion

-  [Kayla Olstinski](#) **Protective Effects of Low-dose Metformin Treatment in a Mouse Model of Diabetic Kidney Disease**
09:57 AM - 10:00 AM


🕒 10:00 AM - 10:07 AM | 📍 Zoom

Abstract #54 Undergraduate Presenter

-  [Madeleine Nelson](#) **Impact of Synthetic Cannabinoids on Cardiovascular Health.**
10:00 AM - 10:07 AM

🕒 10:07 AM - 10:10 AM | 📍 Zoom

Questions/Discussion

-  [Madeleine Nelson](#) **Impact of Synthetic Cannabinoids on Cardiovascular Health.**
10:07 AM - 10:10 AM


🕒 10:10 AM - 10:17 AM | 📍 Zoom

Abstract #52 Undergraduate Presenter

-  [Manar Yaseen](#) **Effects of Playing Breath-Controlled Instruments on Heart Rate and Mean Arterial Pressure**
10:10 AM - 10:17 AM

🕒 10:17 AM - 10:20 AM | 📍 Zoom

Questions/Discussion

-  [Manar Yaseen](#) **Effects of Playing Breath-Controlled Instruments on Heart Rate and Mean Arterial Pressure**
10:17 AM - 10:20 AM

Schedule, Saturday October 31, 2020

🕒 10:20 AM - 10:30 AM | 📍 Zoom

Exhibitor Presentation (Beckman Coulter)



[Shawn Sternisha, Ph.D.](#)

Mechanistic Origins of Activation in Glucokinase Variants Responsible for Hyperinsulinism

10:20 AM - 10:30 AM

🕒 10:30 AM - 10:40 AM

Break

🕒 10:40 AM - 11:30 AM | 📍 Zoom

Keynote Presentation



[Brent Ruby, Ph.D., FACS](#)

Normal Humans Demonstrating Big Physiology: Energy and Fluid Demand Extremes

10:40 AM - 11:30 AM

🕒 11:30 AM - 11:40 AM

Questions/Discussion



[Brent Ruby, Ph.D., FACS](#)

Normal Humans Demonstrating Big Physiology: Energy and Fluid Demand Extremes

11:30 AM - 11:40 AM

🕒 11:40 AM - 11:50 AM | 📍 Zoom

Exhibitor Presentation (Scintica Instrumentation)



[Gus Kalogeros, Ph.D.](#)

From whole animal imaging to cellular function: Choosing the right tools for your research

11:40 AM - 11:50 AM

🕒 11:50 AM - 12:00 PM | 📍 Zoom

Awards/Closing Remarks



[Dustin Slivka, Ph.D.](#)
11:50 AM - 11:55 AM



[Erika Boesen, Ph.D.](#)
11:55 AM - 12:00 PM