

# Gar 2024 - Virtual Conference for Gar & Holostean Fish Research

June 3-4, 2024

**Co-Organizers:** Ingo Braasch (Michigan State University), Solomon R. David (University of Minnesota), and Allyse Ferrara (Nicholls State University)

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***Sponsored by the NSF EDGE Program***

**Program** All times are in the Eastern Time Zone (EST).

## **Monday, June 3, 2024**

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- 11:00 - 11:15AM Welcome by the Organizers
- 11:15 - 12:15 AM **Session 1: Holostean Ecology and Conservation**  
Chair: Solomon David
- 11:15 - 11:30 AM **Solomon David** - University of Minnesota, USA  
*State of the [G]art: Advancements in Gar and Bowfin Research, Conservation, and Management*
- 11:30 - 11:45 AM **Melanie Croft-White** - Fisheries and Oceans Canada  
*Gar go far: movement ecology of Longnose Gar in Lake Ontario*
- 11:45 - 12:00 PM **Dan Sinopoli** - Louisiana State University, USA  
*Ecomorphology of Longnose Gar *Lepisosteus osseus* Linnaeus 1758: on the influence of size, sex and river location*
- 12:00 - 12:15 PM **Kayla Kimmel** - United States Fish and Wildlife Service, USA  
*Communication and Collaboration through Committees for Conservation*
- 12:15 - 12:45 PM Break: Breakfast/Lunch/Dinner - depending where you are  
*Join the [Gar 2024 Social Zoom](#) & bring your meal*

- 12:45 - 1:45 PM     **Session 2: Holostean Reproduction & Aquaculture**  
Chair: Allyse Ferrara
- 12:45 - 1:00 PM     **Quenton Fontenot** - Nicholls State University, USA  
*A comparison of embryonic, larval, and adult Spotted Gar (Lepisosteus oculatus) from the Atchafalaya River Basin and the upper Barataria Estuary*
- 1:00 - 1:15 PM     **Carlos Alfonso Alvarez-González** - Universidad Juárez Autónoma de Tabasco, Mexico  
*Studies of digestive physiology and nutrition of Tropical Gar (Atractosteus tropicus)*
- 1:15 - 1:30 PM     **Rafael Martínez-García** - Universidad Juárez Autónoma de Tabasco, Mexico  
*Unraveling cannibalism in Tropical Gar (Atractosteus tropicus)*
- 1:30 - 1:45 PM     **Wilfrido Contreras-Sánchez** - Universidad Juárez Autónoma de Tabasco, Mexico  
*A Review on Tropical Gar Aquaculture and Stocking Efforts in Tabasco*
- 1:45 - 2:00 PM     Break
- 2:00 - 2:30 PM     **Community Discussion 1: Holostean Ecology, Conservation, Management & Husbandry**  
*bring a drink*
- Discussion Leaders: Allyse Ferrara, Ingo Braasch

## Tuesday, June 4, 2024

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- 11:00 - 11:45 PM **Session 3: Holostean Genomics**  
Chair: Ingo Braasch
- 11:00 - 11:15 AM **Ingo Braasch** - Michigan State University, USA  
*Updates on the Gar and Bowfin Genome Projects*
- 11:15 - 11:30 AM **Christabel Floi Bucao** - University of Lausanne, Switzerland  
*Are genes with variable expression more evolvable? Expression variability in spotted gar is associated with ohnolog retention in teleosts*
- 11:30 - 11:45 PM **Kerry Lynn Gendreau** - University of Heidelberg, Germany  
*Cellular Evolution in the Gar Forebrain*
- 11:45 - 12:00 PM Break
- 12:00 - 1:00 PM **Session 3: Holostean Evolution, Development & Physiology**  
Chair: Andrew Thompson
- 12:00 - 12:15 PM **Andrew Thompson** - Western Michigan University, USA  
*A gene regulatory atlas of holostean development reveals deep homology across the vertebrate tree of life*
- 12:15 - 12:30 PM **Peter Allen** - Mississippi State University, USA  
*Effects of salinity on gill ultrastructure of alligator gar *Atractosteus spatula**
- 12:30 - 12:45 PM **Chase Brownstein** - Yale University, USA  
*The genomic signatures of evolutionary stasis*
- 12:45 - 1:00 PM **Amin Benadjal** - Institut de la Vision Paris, France  
*Evolution and development of visual laterality from fish to human*
- 1:00 - 1:30 PM Break: Breakfast/Lunch/Dinner - depending where you are  
*Join the Gar 2024 Social Zoom & bring your meal*

1:30 - 2:15 PM      **Keynote: Robert Cerny** - Charles University, Prague, Czech Rep.  
*Non-teleost fish embryos as a unique model of early vertebrate head evolution*

2:15 - 2:30 PM      Break

2:30 - 3:00 PM      **Community Discussion: The Future of Holostean Research**  
*bring a drink*

Discussion Leaders: Ingo Braasch, Solomon David, Andrew Thompson