

Gwangseok Rex Yoon PhD

Current Affiliation

Assistant Professor
School of Marine and Environmental Programs
University of New England
Biddeford, Maine, 04005

Research expertise

Fish physiology, environmental physiology, comparative physiology, conservation, aquaculture

Education

2017 - 2022	PhD	Dept of Biological Sciences	University of Manitoba
2015 - 2017	MSc	Dept of Biological Sciences	University of Manitoba
2005 - 2012*	BSc	Dept of Marine Bio-material and Aquaculture	Pukyong National University
*2006 - 2008	Boatswain's mate	The Third Fleet & Naval Headquarters	Republic of Korea Navy

Research Experience

Principal Investigator · University of New England, ME · 2024.08 - Current

- The leader of Conservation Physiology and Aquaculture (CPA) Lab
- Investigating the effects of anthropogenic stressors on behavior and physiology of aquatic species
- Mentoring and supervising graduate and undergraduate students in the CPA lab

Postdoctoral fellow · University of Toronto, ON · 2022.07 – 2024.06

- Investigating effects of ocean acidification on behaviour and physiology in marine sticklebacks (*Gasterosteus aculeatus*) under the supervision of Dr. Cosima Porteus
- Performed *in vivo* and *in vitro* research techniques (e.g., histology, enzymology, biochemical assays, swimming respirometry, behavioral assays) to evaluate metabolic physiology in aquatic species
- Participating in collaborative projects regarding climate change on invertebrate physiology
- Mentoring and supervising graduate and undergraduate students in the Porteus lab

Postdoctoral fellow · University of Manitoba, MB · 2022.05 – 2022.06

- Investigated intraspecific variation of metabolic rates in age-0 Lake Sturgeon (*Acipenser fulvescens*) under the supervision of Dr. Gary Anderson
- Acted as a decisive and dependable leader to manage research projects among fellow students and maintain high quality operations for raising larval lake sturgeon through effective communications
- Advised research activities in the lab

Graduate Research Assistant · University of Manitoba, MB · 2015.05 – 2022.05

- Investigated the effects of temperature, dissolved oxygen, substratum and diet on the phenotypic development and their influence on overwintering survival in federally endangered age-0 lake sturgeon under the supervision of Dr. Gary Anderson
- Learned advanced *in vivo* and *in vitro* research tools (e.g., mini respirometry, enzyme assay, fatty acid analysis, mRNA expression and body proximate composition analysis) to evaluate metabolic physiology in aquatic species.
- Participated in collaborative projects regarding climate change on invertebrate physiology.
- Advised several undergraduate and graduate students on independent research projects that were outside the scope of my theses research

Yoon Full CV (August 22, 2025)

- Mentored numerous students for graduate school and career advice
- Presented research at national and international conferences.

Undergraduate Research Assistant · Pukyong National University, Korea · 2009.09 – 2012.02

- Maintained and constructed the pond and recirculating aquaculture system, and aided fish spawning and rearing fish and shellfish in the system under the supervision of Drs. Jaeyoon Jo and Inbae Kim
- Learned basic research tools (e.g. respirometry, blood sampling and body proximate composition analysis) to evaluate energy metabolism and growth performance in fish.
- Assisted with research projects on monitoring of fish reared in different temperatures and feeding regimes (e.g., growth, survival, gonado- and hepatosomatic index, haematocrit)

Publications

26. **Yoon, G.R.**, Khodikian, E., Ren, G.J., Porteus, C.S. (2025) Effects of simulated ocean acidification on the activity, escape response and muscle physiology of marine threespine stickleback (*Gasterosteus aculeatus*) *Under revision*
25. Khodikian, E., Roggatz, C., **Yoon, G.R.**, Porteus, C.S. (2025) Acute, static, and fluctuating ocean acidification effects on the olfactory system of the yellow shore crab, *Hemigrapsus oregonensis*. *Canadian Journal of Zoology* (*Accepted*)
24. **Yoon GR**, Bozai A, Porteus CS (2024) Could future ocean acidification be affecting the energy budgets of marine fish? *Conservation Physiology* 12: coae069.
23. Porteus CS, Khodikian E, Tigert LR, Ren GJ, **Yoon GR** (2024) Commentary: Best practices for performing olfactory behavioral assays on aquatic animals: A guide for comparative physiologists. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology* 298: 111747.
22. Soor D, Tigert LR, Khodikian E, Bozai A, **Yoon GR**, Porteus CS (2024) Changes in gill neuroepithelial cells and morphology of threespine stickleback (*Gasterosteus aculeatus*) to hypoxia and simulated ocean acidification. *J Comp Physiol B*. doi:10.1007/s00360-024-01575-z
21. Belding, L.D., Thorstensen, M.J., Quijada-Rodriguez, A.R., Bugg, W.S., **Yoon, G.R.**, Loeppky, A.R., Allen, G.J. P., Schoen, A.N., Earhart, M.L., Sutherby, J., Brandt, C., Ali, J.L., Weihrauch, D., Jeffries, K.M., Anderson, W.G. (2024) Transcriptional, Physiological, and Behavioural Responses of Lake Sturgeon Exposed to Interacting pCO₂ and Temperature During Development. *Molecular Ecology* MEC-24-0171 *Under revision*
20. Fehsenfeld, S., **Yoon, G.R.**, Quijada-Rodriguez, A.R., Kandashi-Toujas, H., Calosi, P., Breton, S., Weihrauch, D. (2024) Short-term exposure to high pCO₂ leads to decreased branchial cytochrome C oxidase activity in the presence of octopamine in a decapod. *Comp. Biochem. Physiol. - A Mol. Integr. Physiol.* 291 (2024) 111603
19. **Yoon, G.R.**, Thorstensen, M., Bugg, W.S., Bouyoucos, I.A., Deslauriers, D., and Anderson, W.G. (2023) Comparison of metabolic rate between two genetically distinct populations of lake sturgeon. *Ecology and Evolution* 13(9) e10470. doi.org/10.1002/ece3.10470
18. Deslauriers, D., **Yoon, G.R.**, McCllelan, K.J., Klassen, C.N and Anderson, W.G. (2023) Assessment of family-derived metabolic traits for the conservation of an ancient fish. *Canadian Journal of Zoology* doi.org/10.1139/cjz-2023-0040
17. Bugg, W.S., **Yoon, G.R.**, Shoen, A.N., Weinrauch, A.M., Jeffries, K.M., and Anderson, W.G. (2023) Elevated temperatures dampen the innate immune capacity of developing lake sturgeon (*Acipenser fulvescens*). *Journal of Experimental Biology* jeb.245335. doi.org/10.1242/jeb.245335
16. Nash, N., Klymasz-swartz, A.K., Nash, M.T., Sachs, M., **Yoon, G.R.**, and Weihrauch, D. (2022) Impact of heatwaves and environmental ammonia on energy metabolism, nitrogen excretion, and mRNA expression of related genes in the indicator model system *Daphnia magna*. *Aquatic Toxicology* 249: 106225. doi:10.1016/j.aquatox.2022.106225.

15. **Yoon, G.R.**, Bugg, W.S., Fehrman, F., Yushishen, M.E., Suh, M., Anderson, W.G. (2022) Long-term effects of temperature during early life on growth and fatty acid metabolism in age-0 Lake Sturgeon (*Acipenser fulvescens*). *Journal of Thermal Biology* 105, 103210. <https://doi.org/10.1016/j.jtherbio.2022.103210>
14. **Yoon, G.R.**, Amjad, H., Weinrauch, A.M., Laluk, A., Suh, M., Anderson, W.G. (2022) Long-term effects of EPA and DHA enriched diets on digestive enzyme activity, aerobic scope, growth and survival in age-0 Lake Sturgeon (*Acipenser fulvescens*). *Aquaculture* 552, 737972. <https://doi.org/10.1016/j.aquaculture.2022.737972>
13. Tripp, A., Allen, G.J.P., Quijada-Rodriguez, A.R., **Yoon, G.R.**, Weihrauch, D. (2022) Effects of single and dual- stressor elevation of environmental temperature and PCO₂ on metabolism and acid-base regulation in the Louisiana red swamp crayfish, *Procambarus clarkii*. *Comp. Biochem. Physiol. Part A Mol. Integr. Physiol.* 266, 111151. <https://doi.org/10.1016/j.cbpa.2022.111151>
12. **Yoon, G.R.**, Laluk, A., Bouyoucos, I.A., Anderson, W.G. (2022) Effects of Dietary Shifts on Ontogenetic Development of Metabolic Rates in Age 0 Lake Sturgeon (*Acipenser fulvescens*). *Physiological Biochemical Zoology* 95, 135–151. <https://doi.org/10.1086/718211>
11. **Yoon, G.R.**, Groening, L., Klassen, C.N., Brandt, C., & Anderson, W.G. (2022) Long-term effects of temperature on growth, energy density, whole-body composition and aerobic scope of age-0 Lake sturgeon (*A. fulvescens*). *Aquaculture*, 737505. doi: 10.1016/ j.aquaculture.2021.737505
10. **Yoon, G.R.**, Earhart, M., Wang, Y., Suh, M., & Anderson, W.G. (2021). Effects of temperature and food availability on liver fatty acid composition and plasma cortisol concentration in age-0 lake sturgeon: Support for homeoviscous adaptation. *Comp. Biochem. Physiol. - A Mol. Integr. Physiol.* 261, 111056. doi.org/10.1016/j.cbpa.2021.111056
9. **Yoon, G. R.**, Bjornson, F., Deslauriers, D., & Anderson, W. G. (2021). Comparison of Methods to Quantify Metabolic Rate and Its Relationship with Activity in Larval Lake Sturgeon *Acipenser fulvescens*. *Journal of Fish Biology* 99, 73-86. doi: 10.1111/jfb.14700
8. Bugg W.S., **G.R. Yoon**, C. Brandt, M.L. Earhart, W.G. Anderson, & K.M. Jeffries. (2021). The effects of population and thermal acclimation on the growth, condition, and cold responsive mRNA expression of age-0 lake sturgeon (*Acipenser fulvescens*). *Journal of Fish Biology* doi:10.1111/jfb.14897
7. **Yoon, G. R.**, Deslauriers, D., & Anderson, W. G. (2020). Influence of Prey Condition and Incubation Method on Mortality, Growth and Metabolic Rate during Early Life History in Lake Sturgeon, *Acipenser fulvescens*. *J. App. Ichthy.*, 36, 759-767.
6. Bugg, W. S., **Yoon, G. R.**, Schoen, A. N., Laluk, A., Brandt, C., Anderson, W. G., & Jeffries, K. M. (2020). Effects of Acclimation Temperature on the Thermal Physiology in Two Geographically Distinct Populations of Lake Sturgeon (*Acipenser fulvescens*). *Cons. Phys.* 08, 1–19.
5. Yusishen, M. E., **Yoon, G. R.**, Bugg, W., Jeffries, K. M., Currie, S., & Anderson, W. G. (2020). Love Thy Neighbor: Social Buffering Following Exposure to an Acute Thermal Stressor in a Gregarious Fish, the Lake Sturgeon (*Acipenser fulvescens*). *Comp. Biochem. Physiol. - A Mol. Integr. Physiol.* 243, 110686.
4. Klymasz-Swartz, A.K., Allen, G.J.P., Treberg, J.R., **Yoon, G.R.**, Tripp, A., Quijada-Rodriguez, A.R., & Weihrauch, D. (2019). Impact of climate change on the American lobster (*Homarus americanus*): Physiological responses to combined exposure of elevated temperature and pCO₂. *Comp. Biochem. Physiol. Part A Mol. Integr. Physiol.* 235, 202–210. Elsevier. doi:10.1016/j.cbpa.2019.06.005.
3. **Yoon, G. R.**, Deslauriers, D., & Anderson, W. G. (2019). Influence of a Dynamic Rearing Environment on Development of Metabolic Phenotypes in Age-0 Lake Sturgeon, *Acipenser fulvescens*. *Cons. Phys.* 7, 1–14.
2. **Yoon, G.R.**, Deslauriers D., Enders E.C., Treberg J.R., & Anderson W.G. (2019). Effects of Temperature, Dissolved Oxygen and Substrate on the Development of Metabolic Phenotypes in age-0 Lake Sturgeon, *Acipenser fulvescens*: Implications for Overwintering Survival. *Can. J. Fish. Aquat. Sci.* doi:doi.org/10.1139/cjfas-2018-0399.
1. Deslauriers D., **Yoon G.R.**, Earhart M.L., Long C., Klassen C.N., & Anderson W.G. (2018) Over-wintering physiology of age-0 lake sturgeon (*Acipenser fulvescens*) and its implications for conservation stocking programs. *Environ. Biol. Fishes.* doi:10.1007/s10641-018-0724-4

Yoon Full CV (August 22, 2025)

Courses Teaching at University of New England

Ecology and Evolution of Marine Organisms Lab (MAR 105L)

Cellular and Molecular Biology of Marine Organisms (MAR 106)

Cellular and Molecular Biology of Marine Organisms Lab (MAR 106L)

Techniques in Finfish and Shellfish Culture (BIO222)

Techniques in Finfish and Shellfish Culture Lab (BIO222L)

Health, Feeding and Nutrition of Cultured Organisms (BIO223)

Health, Feeding and Nutrition of Cultured Organisms Lab (BIO223L)

Teaching Experience

Workshop instructor. · University of New England, ME. · 2024

- Offered a lecture for the graduate students (15 participants) regarding basic and advanced statistical theories for inferential statistics about parametric tests such as ANOVA, generalized linear mixed model and principal component analysis as well as analysis of biological data on R Studio.

Guest Lecturer · University of Toronto, ON · 2023

- Conservation Physiology (Undergraduate; 12 students). Provided a lecture on the principles of respirometry and the biological significance of metabolic rate in fish, and their implications on developing conservation and management strategies for the sustainable environment in the Anthropocene

Grader/Marker · University of Manitoba, MB · 2022

- Evolutionary Biology (Undergraduate; 31 students). Graded quizzes and left feedback for individual students to improve understanding of course material and lectures. Assisted with designing the final exam.

Guest Lecturer · University of Manitoba, MB · 2021

- Computation Biology (Undergraduate; 25 students). Provided a lecture on how to summarize, visualize and analyze fish respirometry data on R, and discussed biological significance of phenotypic variation in metabolic phenotypes and its influences on individual fitness

Workshop instructor. · Association of Korean - Canadian Scientists and Engineers, MB. · 2020

- Offered a series of lectures for the young professionals (15 participants) teaching basic and advanced statistical theories for descriptive and inferential statistics (i.e. central limit theorem, probability distribution, hypothesis, t-test, ANOVA, generalized linear mixed model and principal component analysis) as well as analysis of biological data on R.

Workshop instructor · Association of Korean - Canadian Scientists and Engineers, MB · 2019

- Offered a workshop for the young professionals (15 participants) introducing about statistics, and demonstrated how to analyze data on R with a hypothetical example of coffee sales data to predict sales and profits in variable situations.

Teaching assistant · University of Manitoba, MB · 2015-2017

- Environmental Physiology in Animals I and II (20 students). Assisted with *in vivo* comparative lab experiments with vertebrates and invertebrates, and graded written assignments and mentored individual students to improve their academic writing skills

Teaching assistant · Pukyong National University, Busan, Korea · 2009-2011

Yoon Full CV (August 22, 2025)

- Limnology (20 students). Assisted with conducting experiments to determine water quality (e.g. Secchi disc, a spectrophotometer for ammonia, nitrite and nitrate and vacuum pump for total suspended solids and volatile suspended solids) and graded written assignments.

Teaching assistant

· Pukyong National University, Busan, Korea · 2009-2011

- Finfish Aquaculture & Lab (25 students). Assisted with conducting lab experiments to monitor growth performance of common carp and tilapia in the recirculating aquaculture system and graded written assignments.

Teaching assistant

· Pukyong National University, Busan, Korea · 2009-2011

- Aquaculture Special Lecture (10 students). Assisted with preparing the class and gave a lecture on recirculating aquaculture system on fin fish aquaculture

Teaching assistant

· Pukyong National University, Busan, Korea · 2009-2011

- Finfish Aquaculture (20 students). Assisted with preparing the class specifically designed for international fisheries professionals and conducting experiments to determine water quality in the recirculating aquaculture system, and graded written assignments.

Sessional Teacher

· Pocheon Elementary School, Busan, Korea · 2011

- Taught Grade 4 – 6 students (10 students) Korean, English and Math, and mentored students in social program

Communications and Presentations (# for invited talks)

Poster Presentation

Oral Presentation	Tigert, L.R, Yoon, G. , Solgani, A., and Porteus, C.S. (2025) The effects of increased temperature and elevated carbon dioxide on the gill morphology of threespine stickleback (<i>Gasterosteus aculeatus</i>)	2025 Canadian Society of Zoologist Annual Meeting (Waterloo, ON, May 2025)
Invited Seminar [#]	Yoon, G.R. (2025) Conservation Physiology & Aquaculture	2025 University of Maine School of Marine Science Seminar Series (Virtual, Feb 2025)
Oral Presentation	Yoon, G.R., Ren. J.G., Khodikian, E., and Porteus C.S. (2024) A coastal fish can be vulnerable to the intensification of heat waves with ocean acidification.	Canadian Society of Zoologists Annual Meeting (Moncton, May 2024)
Invited Seminar [#]	Yoon, G.R. (2024) Journey to my first academic position (Lesson and Tips learned last years)	2024 University of Toronto Scarborough Postdoc Palooza Research Day (Toronto, ON, Apr 2024)
Poster Presentation	Yoon, G.R. , Junlin, G.R., Khodikian, E., and Porteus C. (2024) Fish in warm sparkling water: effects of ocean acidification and temperature on the swimming performance of marine sticklebacks (<i>Gasterosteus aculeatus</i>)	33 rd Annual Comparative Physiology and Biochemistry Workshop (Keene, ON, Feb 2024)

Yoon Full CV (August 22, 2025)

Poster Presentation	Yoon, G. , Tigert, L. R., Khodikian, E., Porteus, C. (2023) Understanding how ocean acidification influences activity and metabolism of a coastal marine fish	Society of Experimental Biology Annual meeting (Edinburgh, UK, July 2023)
Oral Presentation	Yoon, G. , Tigert, L. R., Khodikian, E., Porteus, C. (2023) Effects of ocean acidification on the activity and metabolism of threespine stickleback (<i>Gasterosteus aculeatus</i>)	Canadian Society of Zoologists Annual Meeting (Saskatoon, SK, May 2023)
Oral Presentation	Belding, L. D., Thorstensen, M. J., Quijada-Rodriguez, A.R., Bugg, W. S., Yoon, G. R. , et al (2023) Transcriptional, Physiological, and Behavioural Responses of Lake Sturgeon Exposed to Interacting pCO ₂ and Temperature During Development	Canadian Society of Zoologists Annual Meeting (Saskatoon, SK, May 2023)
Oral Presentation	Khodikian, E., Yoon, G.R. , Porteus, C.S. (2023) Effect of simulated ocean acidification on olfaction in the coastal yellow shore crab.	Canadian Society of Zoologists Annual Meeting (Saskatoon, SK, May 2023)
Oral Presentation [#]	Yoon, G.R. , Fish in sparkling water: effects of elevated CO ₂ on the swimming performance and metabolism of marine sticklebacks (<i>Gasterosteus aculeatus</i>)	2023 University of Toronto Scarborough Postdoc Palooza Research Day (Toronto, ON, Apr 2023)
Poster Presentation	Yoon, G.R. , Tigert, L.R., Khodikian, E., and Porteus C. (2023) Fish in sparkling water: effects of ocean acidification on the behaviour and physiology of marine sticklebacks (<i>Gasterosteus aculeatus</i>)	32 nd Annual Comparative Physiology and Biochemistry Workshop (Keene, ON, Feb 2023)
Poster Presentation	Tigert, L.R., Yoon, G.R. , Khodikian, E., and Porteus C. (2023) Does hypoxia affect the olfaction of marine fish?	32 nd Annual Comparative Physiology and Biochemistry Workshop (Keene, ON, Feb 2023)
Public Seminar [#]	Yoon, G.R. , (2023) Factors affecting Developmental Plasticity of Lake Sturgeon, <i>Acipenser fulvescens</i> : a culturally important species	Department of Biological Sciences Seminar Series, University of Toronto Scarborough (Toronto, ON, Sept 2023)
Oral Presentation	Thorstensen, M.J., Weinrauch, A.M., Bugg, W.S., Bouyoucos, I.A., Yoon, G.R. , Haghighi, H., Jeffries, K.M., and Anderson, W.G. (2022) Thirteen tissue-specific transcriptomes for the Lake sturgeon (<i>Acipenser fulvescens</i>) reveal mechanisms of digestion and microbiome regulation	International Congress of Biology of Fishes Annual Meeting (Montpellier, France, June 2022)
Oral Presentation	Yoon, G.R. , Bugg, W.S., Weinrauch, A.M., Edwards, T., Suh, M., Jeffries, K.M., Anderson, W.G. (2022) Effect of temperature and diet on plasticity of physiological phenotypes in age-0 Lake sturgeon (<i>Acipenser fulvescens</i>)	Canadian Society of Zoologists (Virtual, May 2022)
Oral Presentation	Yoon, G.R. , Amjad, H., Weinrauch, A.M., Laluk, A., Suh, M., and Anderson, W.G. (2021) Effects of omega-3 fatty acids enriched diets on growth and metabolic processes in age-0 Lake Sturgeon (<i>Acipenser fulvescens</i>)	North American Sturgeon and Paddlefish Society Annual Meeting (Virtual, Oct 2021)

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Oral Presentation	Bugg, W.S., Yoon, G.R. , Brandt, C., Earhart, M.L., Anderson, W.G., and Jeffries, K.M. (2021) The effects of population and thermal acclimation on the growth, condition, and cold responsive mRNA expression of age-0 lake sturgeon (<i>Acipenser fulvescens</i>).	North American Sturgeon and Paddlefish Society Annual Meeting (Virtual, Oct 2021)
Oral Presentation	Bouyoucos, I.A., Yoon, G.R. and Anderson, W.G. (2021) Measuring metabolic rate post-feeding in age-0 lake sturgeon	North American Sturgeon and Paddlefish Society Annual Meeting (Virtual, Oct 2021)
Public Seminar#	Yoon, G.R. (2021) What you experienced during early life will shape who you become later in life: long-term effects of temperature on growth and metabolism of age-0 lake sturgeon (<i>Acipenser fulvescens</i>)	Association of Korean-Canadian Scientists and Engineers Seminar Series (Virtual, Oct 2021)
Oral Presentation	Nash, N. M.*, Klymasz-Swartz, A. K., Quijada-Rodriguez, A. R., Yoon, G. R. , Weihrauch, D. (2021) Physiological response of the common water flea, <i>Daphnia magna</i> , to environmentally relevant elevations in isolated and combined temperature and ammonia levels	Canadian Society of Zoologists Annual Meeting (Virtual, May 2021)
Oral Presentation	Klymasz-Swartz, A. K.*, Yoon, G. R. , Treberg, J. R., and Weihrauch, D. (2021) Northern Crayfish (<i>Faxonius virilis</i>) demonstrate a wide range of thermal tolerance with distinct physiological and metabolic responses to acute heat stress	Canadian Society of Zoologists Annual Meeting (Virtual, May 2021)
Oral Presentation	Bouyoucos, I.A., Yoon, G.R. and Anderson, W.G. (2021) Preliminary insight into post-prandial metabolic rates in age-0 lake sturgeon <i>Acipenser fulvescens</i>	Canadian Society of Zoologists Annual Meeting (Virtual, May 2021)
Oral Presentation	Yoon, G.R. , Earhart, M., Wang, Y., Suh, M., Anderson, W.G. (2020) Effects of temperature and food availability on the homeoviscous adaptation of age-0 Lake sturgeon	North American Sturgeon and Paddlefish Society Annual meeting (Virtual, October 2020)
Poster Presentation	Laluk, A.*, Yoon, G.R. , and Anderson, W.G. (2019) Development of metabolic rates in age-0 lake sturgeon (<i>Acipenser fulvescens</i>)	Undergraduate Poster Competition, University of Manitoba (October 2019)
Oral Presentation	Bugg, W.S., Yoon, G.R. , Laluk, A., Anderson, W.G., and Jeffries, K.M (2019) Thermal Physiology of age-0 Lake Sturgeon from geographically different populations	70th Annual Northwest Fish Culture Concepts Annual Meeting (Victoria, BC, Dec 2019)
Oral Presentation	Yusishen, M.E. *, Yoon, G.R. , Bugg, W.S., Jeffries, K.M., Currie, S. and W.G. Anderson (2019) Effects of conspecific presence on thermal tolerance and stress response in juvenile lake sturgeon (<i>Acipenser fulvescens</i>)	Canadian Society of Zoologists Annual Meeting (Windor, ON, May 2019)
Oral Presentation	Yoon, G.R. , Yusishen, M.E., Suh, M. and Anderson, W.G. (2018) Effects of Enriched Artemia on growth, fatty acid compositions, energy density and aerobic scope of age-0 Lake Sturgeon, <i>Acipenser fulvescens</i>	North American Sturgeon and Paddlefish Society Annual Meeting (Missouri, CO, Oct 2018)
Oral Presentation	Belding, L., Quijada-Rodriguez A., Yoon, G.R. , Ali, J., and Anderson, W.G. (2018) Physiological and Behavioural Responses of Age-0 Lake Sturgeon (<i>Acipenser fulvescens</i>) to Acute Freshwater Acidification Following an Over-	Canadian Society of Zoologists (St John's, NL, May 2018)

Yoon Full CV (August 22, 2025)

Wintering Period

Oral Presentation	Yoon, G.R. , Deslauriers, D., and Anderson, W.G. (2018) Effects of Hatching Conditions on Energy Density and Aerobic Scope of age-0 Lake Sturgeon, <i>Acipenser fulvescens</i>	Canadian Society of Zoologists (St John's, NL, May 2018)
Public Seminar [#]	Yoon, G.R. (2018) How Ectotherms Can Survive Freezing Environments: implications for conservation aquaculture of Lake Sturgeon in Manitoba?	Association of Korean-Canadian Scientists and Engineers Seminar Series (Winnipeg, MB, Feb 2018)
Public Seminar	Yoon, G.R. (2018) Cold Acclimation in fish	Association of Korean-Canadian Scientists and Engineers Seminar Series (Winnipeg, MB, Feb 2018)
Oral Presentation	Yoon, G.R. , Deslauriers, D., and Anderson, W.G. (2017) Influence of Temperature, Dissolved oxygen and Substrate on the Development of Metabolic Phenotypes in Lake Sturgeon (<i>Acipenser fulvescens</i>)	American Fisheries Society (Tampa, FL, Aug 2017)
Public Seminar [#]	Yoon, G.R. (2017) The Reason I Study Fish: Ecological Traits of Fish and Efforts in Conservation Aquaculture	Association of Korean-Canadian Scientists and Engineers Seminar Series (Winnipeg, MB, June 2017)
Oral Presentation	Tripp, A.*, Quijada-Rodriguez, A., Allen, G.J.P., Yoon, G.R. , and Dirk Weihrauch (2017) The effect of climate change on the physiology of the Louisiana red swamp crayfish (<i>Procambarus clarkii</i>)	Society of Experimental Biology Annual Meeting (Gothenberg, Sweden, July 2017)
Public Seminar	Yoon, G.R. (2017) The Living Fossil Lake Sturgeon (<i>Acipenser fulvescens</i>): Current Status and Efforts in Conversation Aquaculture	Association of Korean- Canadian Scientists and Engineers Seminar Series (Winnipeg, MB, Apr 2017)
Oral Presentation	Yoon, G.R. , Deslauriers, D., and Anderson, W.G. (2016) Influence of Temperature, Dissolved oxygen and Substrate on the Development of Metabolic Phenotypes in Lake Sturgeon (<i>Acipenser fulvescens</i>)	Canadian Society of Zoologists Annual Meeting (Winnipeg, MB, May 2016)
Poster Presentation	Belding, L., Quijada-Rodriguez, A., Yoon, G.R. , Weihrauch, D., and Anderson, W.G. (2016) Responses from Acute Exposure to Increased Aquatic pCO ₂ in Lake Sturgeon (<i>Acipenser fulvescens</i>)	Canadian Society of Zoologists Annual Meeting (Winnipeg, MB, May 2016)
Oral Presentation	Yoon, G.R. , Deslauriers, D., Enders, E., Treberg, J.R. and Anderson, W.G. (2016) Effects of Temperature, Dissolved oxygen and Substrate on the Development of Metabolic Phenotypes in Lake Sturgeon (<i>Acipenser fulvescens</i>)	North American Sturgeon and Paddlefish Society Annual Meeting (Hood River, OR, Oct 2016)
Poster Presentation	Deslauriers, D., Long, C., Yoon, G.R. , and Anderson, W.G. (2016) Over-wintering physiology of age-0 Lake Sturgeon: Implications for Conservation Aquaculture	American Fisheries Society Annual Meeting (Kansas City, MO, Aug 2016)
Oral Presentation	Yoon, G.R. , Deslauriers, D., Enders, E., Treberg, J. and Anderson, W.G. (2016) Effects of temperature, dissolved oxygen and substrate on metabolic scope and energy density of age-0 Lake Sturgeon (<i>Acipenser fulvescens</i>)	International Congress of Biology Fish Annual Meeting (San Marcos, TX, June 2016)

Grant

UNE/GMRI Accelerator Fund	University of New England / Gulf of Marine Research Institute	2025	\$10,000
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Fellowships/Awards

University of Toronto Scarborough Postdoctoral Fellowship	University of Toronto	2024	\$90,000 (Declined)
The Centre for Environmental Research in the Anthropocene (CERA) Travel Grant	University of Toronto	2023	\$2,000
The Company of Biologists Travel Grant	Society of Experimental Biology	2023	£500.00 (C\$850)
CERA Research Enhancement Funding	University of Toronto	2023	\$7,500
The Most Comprehensive Talk Award	University of Toronto Postdoc Palooza Research Day	2023	
2022 Best Young Professional Member Award	Association of Korean Canadian Scientists and Engineers	2022	\$300
CERA Postdoctoral Fellowship	University of Toronto	2022-2024	\$45,000
University of Toronto Scarborough Postdoctoral Fellowship	University of Toronto	2022-2024	\$45,000 (Declined)
University of Manitoba Graduate Fellowship	University of Manitoba	2021	\$6,000
6 th Prairie Conservation and Endangered Species Conference Fellowship	6 th Prairie Conservation and Endangered Species Conference	2019-2020	\$1,625
University of Manitoba Graduate Fellowship	University of Manitoba	2019-2021	\$36,000
FGS Research Completion Scholarship	University of Manitoba	2018-2019	\$6,250
International Graduate Student Scholarship	University of Manitoba	2018-2019	\$5,954
Josephine C. Rauch Memorial Prizes	University of Manitoba	2017	\$200
International Graduate Student Entrance Scholarship	University of Manitoba	2017-2018	\$5,400
Major G.E.H Barrett-Hamilton Memorial Scholarship	University of Manitoba	2016-2017	\$7,975
Roger Evans Memorial Scholarship	University of Manitoba	2016-2017	\$3,050
Faculty of Science Graduate Studentship	University of Manitoba	2015-2016	\$10,000
International Graduate Student Entrance Scholarship	University of Manitoba	2015-2016	\$5,450
Student Fellowship	Aquaculture Development Scholarship Foundation Korea	2010-2012	\$5,000
Exemplary Academic Achievement Award	National Federation of Fisheries Cooperatives Korea	2012	\$350
Honor Scholarship for Academic Excellence	Pukyong National University	2011	\$4,400
Honor Scholarship for Academic Excellence	Cargill Agri Purina Foundation	2010	\$3,300

Yoon Full CV (August 22, 2025)

Honor Scholarship for Academic Excellence	Pukyong National University	2010	\$2,200
Honor Scholarship for Academic Excellence	Pukyong National University	2009	\$4,400
Exemplary Performance Award	Republic of Korea Navy	2008	
Student Scholarship	Pukyong National University	2005	\$350

Service

2023 – 2024	Council Member	Rene Gordon Elementary School	
2017 – Current	Reviewer	Conservation Physiology, Marine Environmental Research, Environmental Biology of Fishes, Canadian Journal of Zoology, Journal of Great Lake Research, Aquaculture, Fishes, Fisheries, Aquaculture, Journal of Applied Ichthyology	
2023 – Current	Member At Large	Early Career Researcher Subunit	North American Sturgeon and Paddlefish Society
2022	Organizing Committee	Postdoc Palooza Research Day	University of Toronto Scarborough
2019 – 2022	Vice-president	Manitoba Chapter Young Profession in Manitoba Chapter	Association of Korean-Canadian Scientists and Engineers
2018 – 2019	President	Young Profession in Manitoba Chapter	Association of Korean-Canadian Scientists and Engineers
2018	Vice-president	Biological Sciences Graduate Student Association	Association of Korean-Canadian Scientists and Engineers
2017 – 2018	Graduate Student Representative Communication Coordinator	Manitoba Chapter	University of Manitoba
2017 – 2019	Member At Large	Student Subunit	Association of Korean-Canadian Scientists and Engineers
2015 – 2018	Volunteer	Social Programs	North American Sturgeon and Paddlefish Society
2012 – 2013			Gwangan Chamsarang Hospital

Professional Membership

2025 - Current	Member	Korean Society of Maine	
2022 – 2024	Member	Ontario Chapter	Association of Korean-Canadian Scientists and Engineers
2023 – Current	Member at Large	Early Career Researcher Subunit	North America Sturgeon and Paddlefish Society
2015 - Current	Member	Canadian Society of Zoologists	

Technical Skills and Competencies

R (data analysis)
 Taking pictures
 Photoshop
 Video editing
 Electronic repair (e.g. computer and phones)