Lok Poon

4110 Libra Dr, Orlando, FL 32816
(425) 205-8017 poonchiulok@gmail.com
Personal website Google Scholar ResearchGate

EDUCATION

Ph.D. in Integrative and Conservation Biology
Advisor: Dr. William Crampton
University of Central Florida, Orlando, FL *2019–2026*

B.S. in General Biology, Minor in Marine Biology
University of Washington, Seattle, WA *2014–2016*

APPOINTMENTS

Graduate Teaching Associate, Ecology Laboratory
University of Central Florida, Orlando, FL *2019, 2020, 2023, 2025*

Graduate Student Assistant, Aquarium Maintenance
University of Central Florida, Orlando, FL *2019–2024*

Sales Associate & Fish Husbandry Specialist
The Fish Store, Seattle, WA *2017–2019*

Seasonal Research Field Technician
Bat Conservation International, Austin, TX *Summer 2017*

Interpretive Guide Internship
Kentucky Reptile Zoo, Slade, KY *Spring 2017*

Collection Volunteer
Burke Museum Malacology Collection, Seattle, WA *2016–2017*

Undergraduate Researcher
Friday Harbor Laboratories, San Juan Island, WA *Fall 2015*

AWARDS

Presentation Fellowship (total $1,800)
U. of Central Florida College of Graduate Studies *2023, 2024, 2025*

Travel and Research Award Chronobiology in Animals ($1,000)
Melius Consulting *2024*

Student Travel Award ($1,280)
SPP 2205 Evolutionary Optimization of Neural Processing *2024*

Department Travel Grant (total $1,300)
U. of Central Florida Biology Department *2021, 2024*

Lewis and Clark Fund Grant ($5,000)
American Philosophical Society *2022*

Graduate Research Fellowship ($147,000)
National Science Foundation *2021*

Mary Gates Endowment Scholarship ($1,200)
U. of Washington *2015*

PEER-REVIEWED ARTICLES

1. **Poon, L.** & Crampton, W. G. R. **(under review)**. Life stage reshapes condition-dependent foraging under predation risk in an electric fish. Royal Society Open Science.
2. **Poon, L.** & Crampton, W. G. R. (2026). Timescapes of fear: Exogenous and endogenous control of moonlight-mediated circalunar foraging rhythms in a weakly electric fish. *Biology Letters,* 22(4), 20250704. https://doi.org/10.1098/rsbl.2025.0704
3. **Poon, L.** & Crampton, W. G. R. (2026). Electric stealth: Reciprocal signal suppression in electric eels and their knifefish prey. *Current Biology,* 36(7), 1621–1632.e7. https://doi.org/10.1016/j.cub.2026.02.026
4. **Poon, L.**, Haag, M. A., Molina, J., & Crampton, W. G. R. (2025). A sensory ecology of fear: Eye size predicts moonlight avoidance responses in Neotropical electric fishes. *Ecology*, 106(6), e70133. https://doi.org/10.1002/ecy.70133
5. **Poon, L.**, Jenks, I. T., & Crampton, W. G. R. (2024). MoonShine: A software-hardware system for simulating moonlight ground illuminance and re-creating artificial moonlight cycles in a laboratory environment. *Methods in Ecology and Evolution*, 15(4), 701–715. https://doi.org/10.1111/2041-210X.14299
6. Crampton, W. G. R., & **Poon, L.** (2024). Silent signals in the dark: Electric communication in fishes. In Encyclopedia of Fish Physiology (2nd ed., pp. 516–529). *Academic Press.* https://doi.org/10.1016/B978-0-323-90801-6.00108-7

ONLINE RESOURCES

1. **Poon, L.**, Haag, M. A., Molina, J., & Crampton, W. G. R. (2025). Why some electric fish species avoid the moon while others don't: Visual capacity shapes risk perception. *The Bulletin of the Ecological Society of America*, 106(4), e70037. https://doi.org/10.1002/bes2.70037
2. **Poon, L.** & Crampton, W. G. R. (2023). MoonShine instructional manual. https://lokpoon.github.io/MoonShine_manual/overview.html

---

CONTRIBUTED PRESENTATIONS

1. **Poon, L.**, Haag, M. A., Molina, J., Crampton, W. G. R., "A sensory ecology of fear: Eye size predicts moonlight avoidance responses in Neotropical electric fishes". Joint Meeting of Ichthyologists and Herpetologists 2025. St. Paul, MN. *Oral presentation.* *2025*
2. **Poon, L.** & Crampton, W. G. R., "Timescapes of fear: Circalunar activity rhythms in electric knifefish and their exogenous and endogenous control". Joint Meeting of Ichthyologists and Herpetologists 2025. St. Paul, MN. *Poster.* *2025*
3. **Poon, L.**, Haag, M. A., Molina, J., Crampton, W. G. R., "Eye size predicts Neotropical electric fish response to moonlight: the role of visual acuity and light intensity in determining foraging trade-offs". 15th International Congress of Neuroethology. Berlin, Germany. *Oral presentation.* *2024*
4. **Poon, L.**, Jenks, I. T., & Crampton, W. G. R., "How to predict moonlight illuminance and re-create an artificial moonlight cycle in the lab: MoonShine—a

software-hardware system". *Ecological Society of America 2023.* Portland, OR. *Oral presentation.* *2023*

5. **Poon, L.** & Crampton, W. G. R., "Overriding the fear of moonlight: state-dependent risk taking in electric sand knife fish". Animal Behavior Society 2023. Portland, OR. *Oral presentation.* *2023*
6. **Poon, L.**, Lambert, J. C., Waddell, J. C., Roldan, E. C., & Crampton, W. G. R., "Circadian Rhythms of Electrolocation Pulse Rate in Neotropical Electric Fish". Chronobiology: Wildclocks 2021. Vienna, Austria. *Abstract accepted, canceled due to COVID.* *2021*

CO-AUTHORED PRESENTATIONS

1. Crampton, W. G. R., Janzen, F. R., Waddell, J. C., **Poon, L.,** & Lovejoy, N. R., "Reproductive Signals and Signal Evolution in Wild Electric Fishes: Perspectives from *Brachyhypopomus*". 15th International Congress of Neuroethology. Berlin, Germany. *Oral presentation.* *2024*
2. Crampton, W. G. R., Haag, M. A., & **Poon, L**., "A Field-Portable 'EOD Machine' for Recording EOD Waveforms and Pulse Rate Variation in Free-Swimming Electric Fish: An Integrated Open-Source Hardware and Software Solution". 15th International Congress of Neuroethology. Berlin, Germany. *Poster.* *2024*

SOFTWARE/HARDWARE TOOLS

1. R package: MoonShineR
   Predicts moonlight ground illuminance
   https://github.com/Crampton-Lab/MoonShineR_package *2023*
2. Python/Raspberry Pi system: MoonShineP
   Re-creates moonlight cycles using RGBW LEDs
   https://github.com/Crampton-Lab/MoonShine *2023*

FIELD RESEARCH EXPERIENCE

1. Dissertation Data Collection (Reserva Tanimboca, Leticia, Amazonas, Colombia)
   Autonomous electric-signal loggers, moonlight measurements, stream surveys *2022*
2. Field Technician, Bat Conservation International (McAllen, TX)
   Bat carcass surveys under wind turbines *2017*

MENTORSHIP

Undergraduate Research Mentor
U. of Central Florida
Supervised 26 undergraduate students on projects in electric fish behavior
2019–2025

LANGUAGES

English (fluent), Mandarin (fluent), Cantonese (native)