

Sungsik Kong
Department of Evolution, Ecology
and Organismal Biology
The Ohio State University
375 Jennings Hall & 356 Aronoff Laboratory

Education

2018 - Present	Ph.D.	Evolution, Ecology, and Organismal Biology Advisor: Dr. Laura Kubatko	The Ohio State University
2013 - 2015	M.Sc.	Ecology and Evolutionary Biology Advisor: Dr. Robert Murphy	University of Toronto
2006 - 2012	B.Sc.	Ecology and Evolutionary Biology and Zoology Advisors: Drs. Deborah McLennan and Robert Murphy	University of Toronto

Publications

Peer-reviewed Journal Articles

[‡]Co-correspondence; [†]Equal contribution

10. **Kong S** and Kubatko L. (2021) Comparative performance of popular methods for hybrid detection using genomic data. *Systematic Biology* doi: 10.1093/sysbio/syaa092
9. Sánchez-Pacheco S[‡], **Kong S**[†], Pulido-Santacruz P, Murphy RW, and Kubatko L. (2020) Median-joining network analysis of SARS-CoV-2 genomes is neither phylogenetic nor evolutionary. *Proc. Natl. Acad. Sci. U.S.A* doi: 10.1073/pnas.2007062117
8. Kim M, Nguyen HQ, Yi Y, Ahn J, Kim YE, Jang S, Kim S, **Kong S**, and Borzée A. (2020) Policy recommendation on whaling, trade and watching of cetaceans in the Republic of Korea. *Biodiversity Journal* 11: 255–258 doi: <https://doi.org/10.31396/Biodiv.Jour.2020.11.1.255.258>
7. Weiringa JG, Boot MR, Dantas-Queiroz MV, Duckett D, Fonseca EM, Glon H, Hamilton N, **Kong S**, Lanna FM, Mattingly KZ, Parsons DJ, Smith ML, Stone BW, Thompson C, Zuo L, and Carstens BC. (2020) Does habitat stability structure intraspecific genetic diversity? It's complicated... *Frontiers in Biogeography* e45377 doi:10.21425/F5FBG45377
6. Borzée A, Purevdorj Z, Kim YI, **Kong S**, Choe M, Yi Y, Kim K, Kim A, and Jang Y. (2020) Breeding preferences in the Treefrogs *Dryophytes japonicus* (Hylidae) in Mongolia, the northern limit of their range. *Journal of Natural History* 53: 2685–2698 doi:10.1080/00222933.2019.1704458
5. Groffen J, **Kong S**, Jang Y, and Borzée A. (2019) The invasive American bullfrog (*Lithobates catesbeianus*) in the Republic of Korea: history and recommendation for population control. *Management of Biological Invasions* 10:3 517–535 doi: 10.3391/mbi.2019.10.3.08
4. Bae Y, **Kong S**, Yi Y, Jang Y, and Borzée A. (2019) Additional new type of threat to *Hynobius* salamander eggs: predation by loaches (*Misgurnus* sp.) in agricultural wetlands. *Animal Biology* 69:4 451–461 doi: 10.1163/15707563-20191070

3. Borzée A, **Kong S**, Didingler C, Nguyen HQ, and Jang Y. (2018) A ring-species or a ring of species? Phylogenetic relationship between two treefrog species around the Yellow Sea: *Dryophytes suweonensis* and *D. immaculatus*. *The Herpetological Journal* 28: 160–170
2. Kim K, **Kong S**, Kim YI, Borzée A, Bae Y, and Jang Y. (2018) Japanese hard ticks (*Ixodes nipponensis*) parasitizing on the endangered leopard cat (*Prionailurus bengalensis euptilura*) in the Republic of Korea. *Animal Systematics, Evolution and Diversity* 34:1 23–26 doi: 10.5635/ASED.2018.34.1.032
1. **Kong S[†]**, Sánchez-Pacheco S[†], and Murphy RW. (2016) On the use of Median-Joining Networks in evolutionary biology. *Cladistics* 32: 691–699 doi: 10.1111/cla.12147

Presentations

- 2021 **Talk** EEOB Recruitment Speed Talk, The Ohio State University, OH., USA. *High performance computing environment at the Ohio State University.*
- 2021 **Talk** EEOB Annual Darwin Series, The Ohio State University, OH., USA. *Comparative performance of popular methods for hybrid detection using genomic data.*
- 2020 **Talk** E&E Club, The Ohio State University, OH., USA. *Which tool to use to detect hybridization?*
- 2020 **Talk** SSB Meeting, Gainesville, FL., USA. *Comparison and evaluation on the accuracy of popular hybrid detection methods using simulated data.*
- 2019 **Talk** E&E Club, The Ohio State University, OH., USA. *The giving tree: how the branching pattern of a tree is used in evolutionary biology.*
- 2019 **Poster** Evolution, Providence, RI., USA. *Performance and accuracy of Median-Joining Networks and comparisons with bayesian phylogenies.*
- 2019 **Invited Talk** The Stone Laboratory: EEOB 1930, Gibraltar Island, OH., USA. *Phylogenetic networks and behavioral evolution of Primates.*
- 2019 **Poster** The Ohio State University Department of EEOB Recruitment weekend *My first year of Ph.D. experience at the Ohio State University.*
- 2017 **Poster** Annual Conference of the Korean Association of Biological Sciences, Yongin, South Korea. *Performance and accuracy of Median-Joining Networks and comparisons with bayesian phylogenies.*
- 2017 **Talk** Ewha Womans University Animal Communication Symposium, Seoul, South Korea. *Illustrating hybridization.*
- 2016 **Invited Talk** Ewha Womans University Eco-science/Eco-creative seminar for graduate students, Seoul, South Korea. *On the use of Median-Joining network.*
- 2014 **Poster** Korean-American Scientists and Engineers Association (KSEA) Young Generation Technical and Leadership Conference (YGTLC), Houston, TX., USA. *Matrilineal relationships of green pitvipers with the description of a new species of the genus Trimeresurus (Squamata: Viperidae: Crotalinae) from the central highlands of Vietnam.*
- 2013 **Talk** Ewha Womans' University, Laboratory of Behavior and Ecology Weekly Seminar, Seoul, South Korea. *The evolution of infanticide and male takeover in primates in a macro-evolutionary framework.*
- 2012 **Poster** University of Toronto Ecology and Evolutionary Biology Undergraduate Research Fair, Toronto, ON., Canada. *The evolution of infanticide and male takeover in primates in a macro-evolutionary framework.*

Students advising

2021–Present	Mentor Woodsworth Mentorship Program, University of Toronto, Canada Mentee: Alanna Kong, University of Toronto (2021-2022)
2019–Present	Mentor Department of EEOB Graduate Mentoring, The Ohio State University, OH., USA Mentee: McKenna Molnar, The Ohio State University (2020-2021)
2020–Present	Mentor Graduate Student Mentorship Initiative Mentor, Científico Latino Mentee: Devansh Pandey (2021-2022)
2020 Summer	Shelby Jansens and Kimberly Wiles, co-advised with Dr. Laura Kubatko, MBI REU program. <i>Detecting shifts in the evolutionary process in SARS-CoV-2 genomes.</i>
2015 Spring	Tulio Soares and Ellen Southam, University of Toronto and Royal Ontario Museum. <i>On the use of Median-Joining Networks: A philosophical and empirical evaluation of its suitability in evolutionary biology.</i>
2014 Summer	Shreeram Senthivasan, University of Toronto and Royal Ontario Museum. <i>Matrilineal relationships of green pitvipers with the description of a new species of the genus Trimeresurus (Squamata: Viperidae: Crotalinae) from the central highlands of Vietnam.</i>

Teaching Experiences

Teaching Assistantship

The Ohio State University

2021 Fall	<i>EEOB 3310</i> Evolution
2021 Summer	<i>EEOB 2520</i> Human Physiology
2021 Spring	<i>EEOB 3310</i> Evolution
2020 Fall	<i>EEOB 3310</i> Evolution
2020 Summer	<i>EEOB 3310</i> Evolution
2020 Spring	<i>EEOB 3310</i> Evolution
2019 Fall	<i>EEOB 3310</i> Evolution
2019 Summer	<i>EEOB 1930</i> Introduction to Biological Studies–Aquatic Biology
2019 Spring	<i>EEOB 3310</i> Evolution
2018 Fall	<i>BIOL 1113</i> Energy Transformation and Development

University of Toronto

2015 Summer	<i>BIO 120</i> Adaptation and Biodiversity
2015 Spring	<i>BIO 220</i> From Genomics to Ecosystems in a Changing World
2014 Fall	<i>EEB 362</i> Macroevolution
2014 Summer	<i>BIO 120</i> Adaptation and Biodiversity
2014 Spring	<i>EEB 386</i> Avian Biology
2013 Fall	<i>BIO 120</i> Adaptation and Biodiversity