

Sungsik Kong

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and Organismal Biology
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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

9. **Kong S** and Kubatko L. (*in press*) Comparative performance of popular methods for hybrid detection using genomic data. *Systematic Biology* doi: 10.1093/sysbio/syaa092
8. 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
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**, Didinger 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

Policy Recommendations

2. 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>
1. Borzée A, Nguyen HQ, Ahn J, Kim M, Kim S, Jang S, **Kong S**, Kim YE, and Yi Y. (2017) Policy recommendation on the negative impact of infrastructure development on the population of endangered Long-Tailed Goral in Oseck-Kkeutchong. *Society for Conservation Biology Korean Chapter*

Other Writings for a Popular Audience

2. **Kong S** (2019) The giving tree: how the branching pattern of a tree is used in evolutionary biology. Available on <http://eeobcourseblogwolfestudents.blogspot.com/2019/11/the-giving-tree-how-branching-pattern.html>
1. **Kong S** and Fonseca EM. (2019) So far and yet so similar: Convergent evolution in helicopter damselflies. Available on <https://minglabaaa.github.io/posts/2019/01/blog-post-1/>

Presentations

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| 2020 | Talk E&E Club, The Ohio State University, OH., USA. <i>Which tool to use to detect hybridization?</i> |
| 2020 | Talk SSB Meeting, Gainesville, FL., USA. <i>Comparison and evaluation on the accuracy of popular hybrid detection methods using simulated data.</i> |
| 2019 | Talk E&E Club, The Ohio State University, OH., USA. <i>The giving tree: how the branching pattern of a tree is used in evolutionary biology.</i> |
| 2019 | Poster Evolution, Providence, RI., USA. <i>Performance and accuracy of Median-Joining Networks and comparisons with bayesian phylogenies.</i> |
| 2019 | Invited Talk The Stone Laboratory: EEOB 1930, Gibraltar Island, OH., USA. <i>Phylogenetic networks and behavioral evolution of Primates.</i> |
| 2019 | Poster The Ohio State University Department of EEOB Recruitment weekend <i>My first year of Ph.D. experience at the Ohio State University.</i> |
| 2017 | Poster Annual Conference of the Korean Association of Biological Sciences, Yongin, South Korea. <i>Performance and accuracy of Median-Joining Networks and comparisons with bayesian phylogenies.</i> |
| 2017 | Talk Ewha Womans University Animal Communication Symposium, Seoul, South Korea. <i>Illustrating hybridization.</i> |
| 2016 | Invited Talk Ewha Womans University Eco-science/Eco-creative seminar for graduate students, Seoul, South Korea. <i>On the use of Median-Joining network.</i> |
| 2014 | Poster Korean-American Scientists and Engineers Association (KSEA) Young Generation Technical and Leadership Conference (YGTLC), Houston, TX., USA. <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> |

- 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.*

Additional Academic Experiences

- 2020 **Invited Panelist** EEOB 8894: EEOB Graduate Student Seminar, the Ohio State University, virtual
- 2020 **Moderator** Strategies for Responding to Harassment and Bullying: Improving Workplace Climate, Evolution Community Resources for Early Career Researchers 2020 (ECR²), virtual
- 2020 **Moderator** Fireside ECR Chat, ECR², virtual
- 2020 **Invited Guest** TDAI Kickoff Event, College of Arts and Sciences, the Ohio State University, Columbus, OH., USA
- 2020 **Participant** Future of Systematics Workshop, SSB Meeting, funded by NSF, hosted by Dr. Emily Sessa, University of Florida, Gainesville, FL., USA
- 2020 **Participant** SSB Meeting, Gainesville, FL., USA
- 2019 **Participant** Evolution, Providence, RI., USA
- 2019 **Participant** Midwest Phylogenetics Workshop, Itasca Biological Station, funded by NSF, hosted by Dr. Emma Goldberg, University of Minnesota, MN., USA
- 2019 **Volunteer** Museum of Biological Diversity's Open House, the Ohio State University, OH., USA
- 2017 **Participant** Society for Conservation Biology (SCB) Asia Section Workshop on Conservation policy, funded and hosted by SCB, Bangkok, Thailand
- 2016 - 2017 **Researcher** with Dr. Yikweon Jang, Ewha Womans University, Division of Ecoscience, Seoul, South Korea
- 2016 - 2017 **Communication Officer** Society for Conservation Biology, Korean Chapter, South Korea
- 2016 **Researcher** Konkuk University, School of Medicine, Seoul, South Korea
- 2016 **Participant** World Congress of Herpetology, Hangzhou and Tonglu, China
- 2016 **Volunteer** Kuang Si Butterfly Park, Luang Prabang, Laos
- 2015 **Participant** Phylogenomics Symposium and Software School, funded by NSF, hosted by Dr. Tandy Warnow (University of Illinois at Urbana-Champaign), University of Michigan, Ann Arbor, MI., USA
- 2015 **Participant** Society for Systematic Biologists (SSB) Meeting, Ann Arbor, MI., USA
- 2013 **Researcher** with Dr. Jae Chun Choe, Ewha Womans University, Division of Ecoscience, Seoul, South Korea
- 2012 **Student Researcher** with Dr. Robert Murphy, Centre for Biodiversity and Conservation Biology, Royal Ontario Museum, Toronto, ON., Canada
- 2011 - 2013 **Biodiversity Technician** with Dr. Sandy Smith and Eric Davies, Urban Biodiversity and Forestry Laboratory, University of Toronto, ON., Canada
- 2011 - 2012 **Student Researcher** with Dr. Deborah McLennan, McLennan Laboratory, University of Toronto, Canada
- 2011 - 2011 **Work-Study Student** Wildlife Ecology Laboratory, University of Toronto, Canada
- 2010 **Field Research Assistant** Cities Centre, University of Toronto, Canada

Students advising

2020 Summer Shelby Jansens and Kimberly Wiles, co-advised with Dr. Laura Kubatko, MBI REU program.
Detecting shifts in the evolutionary process in SARS-CoV-2 genomes.

Grants and Awards

2020	SSE Graduate Research Excellence Grant (GREG) – R.C. Lewontin Award competition	\$1800
2020	Ray Travel Award for Service and Scholarship, the Ohio State University	Unfunded
2019	Ray Travel Award for Service and Scholarship, the Ohio State University	Unfunded
2014	E.M. Walker Graduate Award in Biodiversity, University of Toronto	\$2615
2013 - 2014	University of Toronto Fellowship (for the first 18 months of M.Sc. study)	
2011	University of Toronto Undergraduate Bursary	Funded

Professional Services

2019 - Present	Journal reviewer for: <i>Systematic Biology</i> ; <i>Frontiers of Biogeography</i> ; <i>Infection, Genetics and Evolution</i> ;
2015 - Present	Society Memberships: Society of Systematic Biologists, Society for Study of Evolution
2020 - Present	Graduate Studies Committee, Department of Evolution, Ecology and Organismal Biology, The Ohio State University, OH., USA
2019 - Present	Mentor, Department of Evolution, Ecology and Organismal Biology Graduate mentoring program, The Ohio State University, OH., USA
2020 - Present	GSMI Mentor, Científico Latino
2019 - 2020	Admissions Committee, Department of Evolution, Ecology and Organismal Biology, The Ohio State University, OH., USA

Teaching Experiences

Courses taught

2018 - Present	Teaching Assistant The Ohio State University <i>BIOL 1113</i> Energy Transformation and Development <i>EEOB 3310</i> Evolution <i>EEOB 1930</i> Introduction to Biological Studies - Aquatic Biology
2013 - 2015	Teaching Assistant University of Toronto <i>BIO 120</i> Adaptation and Biodiversity <i>BIO 220</i> From Genomics to Ecosystems in a Changing World <i>EEB 362</i> Macroevolution <i>EEB 386</i> Avian Biology

References

1. Prof. Dr. Laura S. Kubatko
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And Professor of Ecology and Evolutionary Biology
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