

CURRICULUM VITAE

Dr. Shenglai Yin

University of Oklahoma, and Eastern Ecology Research Center, USGS, USA

✉ shenglai.yin@ou.edu, and shenglai.yin@outlook.com

🌐 shenglai-yin.com



Education

- 2014 – 2018 Wageningen University & Research, the Netherlands.
PhD in Ecology
- 2010 – 2014 Nanjing University, China
MSc in Ecology
- 2006 – 2010 Nanjing University of Information Science & Technology, China
BSc in Ecology

Professional Appointments

- 2022 – present Postdoctoral Research Associate, University of Oklahoma and Eastern Ecology Research Center, USGS, USA
- 2021 – 2022 Postdoctoral Research Associate Nanjing Normal University, China
- 2019 – 2021 Director of the Nature Education Department and Strategic Cooperation Department, Nanjing University Ecological Research Institute of Changshu, China

Research Interests Disease ecology, zoonotic diseases, animal movement, modeling, Agent-based model, network analysis, spatial analysis, GIS, global change biology, invasive ecology, wetland ecology, and nature education.

GRANTS, PROJECTS, AWARDS, and CERTIFICATES

Grants

- 2023 NSF Predictive Intelligence for Pandemic Prevention Phase II: International Center for Avian Influenza Pandemic Prediction and Prevention (participated as senior personnel and grant writer);
- 2020 NSFC Young Scientists Fund Project: Using multiplex network to identify spatial pattern of HPAI occurrence and its landscape driving mechanism (wrote the grant); ¥200,000.
- 2013 Funding of China Scholarship Council (wrote the grant and fully funded for PhD study abroad); ¥550,000.

Projects

- 2022 – present US-China Workshop on Frontiers in Ecology and Evolution of Infectious Diseases (participate as postdoc research associate)
- 2022 – present NSF PIPP Phase 1: International Center for Avian Influenza Pandemic Prediction and Prevention (participate as postdoc research associate)

CURRICULUM VITAE

- 2021 – 2022 NSFC Young Scientists Fund Project: Using multiplex network to identify spatial pattern of HPAI occurrence and its landscape driving mechanism (funded as postdoc research associate)
- 2014 – 2018 Ph.D. Project: How does the migration of geese influence the dispersal and perpetuation of avian influenza viruses? (fully funded by CSC)
- 2012 – 2013 NSFC Project: Investigation project of soil properties in South-north Lake, Jiangsu, China (participated as field technician)
- 2010 – 2014 NSFC Project: Research of assessment techniques for the role of coastal wetlands in global climate change (participated as field technician, Master's thesis project)
- 2010 – 2011 National Science and Technology Major Project for Water Pollution Control and Treatment of China (participated as field and lab technician)
- 2009 – 2010 NSF Project: Effects of land-use type on soil carbon flux (participated as field technician, Bachelor's thesis project)
- 2008 – 2009 NSF: Numerical Simulation Research of Coupled Effects from Enhanced Surface UV-B and O₃ on Crops (participated as field technician)

Awards

- 2017 Funding of Fonds Landbouw Export-Bureau 1916/1918 by Wageningen University & Research
- 2013 Graduate Thesis Award by International Symposium on Modern Ecology series
- 2013 Best Graduate Poster by International Symposium on Modern Ecology series
- 2010 Graduation Scholarship (the 2nd rank), Nanjing University of Information Science and Technology
- 2010 Outstanding Graduates, Nanjing University of Information Science and Technology

Certificates

- 2021 Certified Professional Wetland Scientist (issued by the Society of Wetland Scientist Certification Program)
- 2021 Volunteer Certificate for Translator (issued by the East Asia-Australasian Flyway Partnership)

PUBLICATIONS, REPORTS, BOOKS, and PATENTS

[Google scholar](#): citation = 334, h-index = 8, i10-index = 6.

(* corresponding authorship; †equal contribution)

Peer-reviewed publications

S. Yin et al., Strong and consistent associations of waterbird community composition with HPAI H5 occurrence in European wild birds, *Ecological Applications*, in revision.

Diann Prosser[†], C. Teitelbaum[†], **Shenglai Yin**[†], et al. Climate impacts on birds migration and highly pathogenic avian influenza. 2023. *Nature Microbiology*.

Shenglai Yin, et al. Functional traits explain waterbirds' host status, subtype richness, and community-level infection risk for highly pathogenic avian influenza. 2023. *Ecology Letters*.

CURRICULUM VITAE

- John Takekawa, Diann Prosser, Jeffery Sullivan, **Shenglai Yin, et al.** Potential effects of habitat change on migratory bird movements and avian influenza transmission in the East Asian-Australasian Flyway. 2023. *Diversity*.
- Shanyong Zhang, Ning Li, Mingshuai Xu, Zheng YX Huang, Zhujun Gu, **Shenglai Yin***. 2022. Urbanization and habitat characteristics associated with the occurrence of *Peste des Petits ruminants* in Africa. *Sustainability*.
- Fuchao Zheng, Xiaoming Mou, Jinghua Zhang, Tiange Zhang, Lu Xia, **Shenglai Yin, et al.** 2022. Gradual enhancement of the assemblage stability of the reed rhizosphere microbiome with recovery time. *Microorganisms*.
- Fuchao Zheng, Tiange Zhang, **Shenglai Yin, et al.** 2022. Comparison and interpretation of freshwater bacterial structure and interactions with organic to nutrient imbalances in restored wetlands. *Frontiers in Microbiology*.
- Shenglai Yin, et al.** 2022. Habitat loss facilitates infection outbreak and pathogen dispersal: An agent-based model of infected migratory waterfowl. *Plos Computational Biology*.
- Shenglai Yin, et al.** 2021. Do contrasting patterns of migration movements and disease outbreaks between congeneric waterfowl species reflect differing immunity? *Geospatial Health*.
- Shenglai Yin, et al.** 2020. Effects of migration network configuration and migration synchrony on infection prevalence in geese. *Journal of Theoretical Biology*.
- Yanjie Xu, Yali Si, John Takekawa, Qiang Liu, Herbert Prins, **Shenglai Yin, et al.** 2020. A network approach to prioritize conservation efforts for migratory birds. *Conservation Biology*.
- Yanjie Xu, Yali Si, **Shenglai Yin, et al.** 2019. Species-dependent effects of habitat degradation in relation to seasonal distribution of migratory waterfowl in the East Asian–Australasian Flyway. *Landscape Ecology*.
- Shenglai Yin, et al.** 2017. No evidence that migratory geese disperse avian influenza viruses from breeding to wintering ground. *PLoS ONE*.
- Shenglai Yin, et al.** 2015. *Spartina alterniflora* invasions impact CH₄ and N₂O fluxes from a salt marsh in eastern China. *Ecological Engineering*.
- Lingyan Zhou, **Shenglai Yin***, et al. 2015. *Spartina alterniflora* invasion alters carbon exchange and soil organic carbon in eastern salt marsh of China. *CLEAN–Soil, Air, Water*.
- Lijun Ren, Lili Xu, Yuyuan Zhang, Wei Pan, **Shenglai Yin, et al.** 2015. Effects of connection mode and hydraulic retention time on wastewater pollutants removal in constructed wetland microcosms. *CLEAN–Soil, Air, Water*.
- Wen Yang, Hui Zhao, Xinglong Chen, **Shenglai Yin, et al.** 2013. Consequences of short-term C₄ plant *Spartina alterniflora* invasions for soil organic carbon dynamics in a coastal wetland of Eastern China. *Ecological Engineering*.

Reports

- Shuqing An, **Shenglai Yin.** 2012. Technique evaluations about the role of coastal wetlands in global climate change.

Books

- 2023 Shuqing An, **Shenglai Yin, et al.** Chapter 29 Wetlands. In the *Wetzel's Limnology, Fourth Edition*. Elsevier.

CURRICULUM VITAE

- 2018 **Shenglai Yin.** Consequences of Seasonal Migration: How goose relocation strategies influence infection prevalence and pathogen dispersal [D]. Wageningen: Wageningen University & Research.
- 2014 **Shenglai Yin.** Investigation of greenhouse gas emission patterns and the main influential factors in coastal wetlands in Yancheng, Jiangsu Province [D]. Nanjing: Nanjing University.

Patents

- 2011 Shuqing An, Lijun Ren, Xiaoyan Wang, **Shenglai Yin**, et al. Multi-level constructed wetland system and application. China: 201110091785.4, 2011-04-13.

CONFERENCE, WORKSHOPS, and SEMINARS

- 2023 IUCN 20th Goose Specialist Group Meeting, Mongolia [Presentation]
- 2022 [Webinar] International Forum on Ecology & Evolution of Avian Influenza [Presentation]
- 2022 [Webinar] Asian Flyways Collaborative for Waterbirds [Presentation]
- 2022 20th Conference of Ecological Society of China, China [Presentation]
- 2022 9th International Congress of East Asian Federation of Ecological Societies, China [Presentation]
- 2017 Summer School in Individual- and Agent-Based Modeling, Germany [Presentation]
- 2017 Impact of Environmental Change on Infectious Diseases, Italy [Poster]
- 2017 Masterclass One Health Approach to Infectious Disease, the Netherlands [Presentation and poster]
- 2016 Netherlands Annual Ecology Meeting 2016, the Netherlands [Presentation and coordination]
- 2015 Netherlands Annual Ecology Meeting 2015, the Netherlands [Poster]
- 2015 Ph.D. Symposium 2015, Wageningen University & Research, the Netherlands
- 2014 Netherlands Annual Ecology Meeting 2014, the Netherlands
- 2013 The 7th International Symposium on Modern Ecology Series, China [Awarded poster]
- 2011 The 6th International Symposium on Modern Ecology Series [Poster]
- 2011 The 2th International Young Ecologist Forum, China [Poster]
- 2011 Annual Meeting of Ecological Society of China
- 2011 The 8th Ecology Summer School in Fudan University, China

TEACHINGS, MENTORING, PROFESSIONAL SERVICES, and JOURNAL REVIEWS

Teachings

- 2017 – 2018 Teaching assistant in disease ecology (modelling part), Wageningen University & Research
- 2016 – 2017 Committee member of Wageningen evolution and ecology seminars, Wageningen University & Research
- 2015 – 2017 Teaching assistant in ecology method-1 (statistic part), Wageningen University & Research
- 2015 – 2017 Teaching assistant in animal ecology (modelling part), Wageningen University & Research

Mentoring

CURRICULUM VITAE

(* master student, **Ph.D. student)

Nanjing University

**Fuchao Zheng, 2020 – 2022

Nanjing Normal University

*Shanyong Zhang, 2021 – 2022

Professional Services

- 2022 – present Committee member of the webinar series Asian Flyways Collaborative for Waterbirds
- 2022 – present Coordinator of webinar series International Forum on Ecology and Evolution of Avian Influenza
- 2021 – 2022 Volunteer translator for the East Asian-Australasian Flyway Partnership
- 2011 Coordinator in the 6th International Symposium on Modern Ecology Series, China
- 2011 Coordinator in the 2nd International Young Ecologist Forum, China

Journal Reviews

PLoS ONE, Journal of Animal Ecology, Ecology and Evolution.

PUBLIC WELFARE SERVICES

- 2014 – present Meditation instructor
- 2019 – 2022 Nature education lecturer in Nanjing University Ecological Research Institute of Changshu
- 2022 Guest nature education lecturer in Poyang Lake National Wetland Park
- 2021 Invited nature education lecturer in Changshu Meili Middle School
- 2020 – 2021 Invited nature education lecturer in Shajiabang National Wetland Park
- 2020 – 2021 Invited nature education lecturer in Changshu Experimental Primary School
- 2020 – 2021 Invited nature education lecturer in Changshu Dayi Center Primary School
- 2020 – 2021 Invited nature education lecturer in Changshu Xingfu Primary School

POPULAR PRESS

- 2023 The role of waterfowl functional morphology in the transmission of avian influenza. [Click for Link](#) (in Chinese)

LANGUAGE PROFICIENCY

Chinese Mandarin (Native speaker)

English (Proficient)

REFERENCES

Dr. Fred de Boer, Associate Professor, Wageningen University & Research, Wageningen, The Netherlands

Email: fred.deboer@wur.nl

Phone: +31 317 48 26 91

Dr. Herbert H.T. Prins, Emeritus Professor, Wageningen University & Research, Wageningen, The Netherlands

CURRICULUM VITAE

Email: herbert.prins@wur.nl

Phone: +31 317 48 60 20

Dr. Zheng YX Huang, Professor, Nanjing Normal University, Nanjing, China

Email: zyx.huang@outlook.com

Phone: +86 139 2143 1410

Dr. Xiangming Xiao, Professor, University of Oklahoma, Norman, USA

Email: xiangming.xiao@ou.edu

Phone: +1 405 325 8941