

# Jeffery C.F. Chan

## Curriculum vitae

[Personal website](#) | [Freshwater Collective](#) | [Google Scholar](#) | [Research Gate](#) | Email address: [jefferychan@connect.hku.hk](mailto:jefferychan@connect.hku.hk)

### Education

- Since 2022     **PhD**, Freshwater Ecology, [The University of Hong Kong](#), Hong Kong  
Thesis: The ecology and conservation of diadromous animals with a special reference to dams  
Supervisors: David Dudgeon, Jia Huan Liew
- 2020-2021     **MRes**, Tropical Forest Ecology, [Imperial College London](#), United Kingdom  
Thesis (Distinction): Multiple stressors on stream ecosystem functioning  
Supervisor: Guy Woodward
- 2015-2019     **BSc**, Environmental Science, [The University of Hong Kong](#), Hong Kong  
Thesis (Distinction): A review on mitigation measures of streams and rivers in past EIA projects of Hong Kong  
Supervisor: Billy C.H. Hau

### Work experience

- Since 2019     **Founder**, [Freshwater Collective](#), Hong Kong, [www.freshwatercollective.org](http://www.freshwatercollective.org)
- 2025            **Visiting Researcher**, [Lee Kong Chian Natural History Museum](#) & [National University of Singapore](#), Singapore
- 2022–2025     **Research Associate**, [Lingnan University](#), Hong Kong
- 2021            **Technical Assistant**, [The University of Hong Kong](#), Hong Kong
- 2020-2021     **Research Associate**, [Imperial College London](#), United Kingdom
- 2018-2020     **Assistant Ecologist**, [aec Ltd. \(now Aurecon Group\)](#), Hong Kong

### Funding awarded

- 2026-2028     **Lantau Conservation Fund**: Ecology and conservation of freshwater eels in Lantau (**HKD \$1.5million, USD convert ~\$192,000**) (co-developed idea and co-wrote proposal, Anthony Lau as official PI)
- 2022-2025     **Lantau Conservation Fund**: A comprehensive survey of the diadromous animals of Lantau: assessment of distribution, population status, and conservation strategies (**HKD \$1.7million, USD convert ~\$230,300**) (co-developed idea and lead in writing proposal and managing funds, Jia Huan Liew as official PI)
- 2022-2025     **The University of Hong Kong Postgraduate Scholarship**: Diadromous species of Hong Kong: population status, threats, conservation strategies (**HKD \$912,000, USD convert ~\$116,000**)
- 2024            **The University of Hong Kong**: Conference Fund for Research Postgraduate Students (HKD \$13,500, USD convert ~\$1,700)
- 2021            **Outdoor Wildlife Learning Hong Kong**: App development fund (**HKD \$3000, USD convert ~\$380**)

# Teaching

National University of Singapore

LSM4264 – **Freshwater Biology** (guest lecture, 2025)

The University of Hong Kong

**Outstanding Demonstrator Award:** 2023-2024, 2024-2025

BIOL 2306 – **Ecology and evolution** (demonstrator, 2022, 2023, 2024)

BIOL 2102 – **Biostatistics** (demonstrator, 2023, 2024)

BIOL 1309 – **Evolutionary diversity** (demonstrator, 2023)

Lingnan University

MScESGM - Master of Science in **Environmental, Social, and Governance Management** (demonstrator, 2025)

CLA 9026 - **Nature Appreciation through Arts and Creative Media** (guest lecture, 2022)

CLD 9017 - **Ecology: The Science of Environmental Issues** (demonstrator, 2022, 2023)

## Mentoring/advising

- |           |   |
|-----------|---|
| 2024-2025 | Chiu Yui Hong, MSc, <u>The University of Hong Kong</u> , Hong Kong            |
| 2023-2024 | Samuel C.L. Ho, Research Assistantship, <u>Lingnan University</u> , Hong Kong |
| 2022-2024 | Yau Sze-Man, MPhil, <u>Lingnan University</u> , Hong Kong                     |
| 2022-2024 | Alex H.B. Liu, Research Assistantship, <u>Lingnan University</u> , Hong Kong  |

## Publications & manuscripts

Published papers (\*corresponding author)

1. **Chan, J.C.F.**, Lam, B.Y.K., Dudgeon, D. & Liew\*, J.H. (2025). Global consequences of dam-induced river fragmentation on diadromous migrants: a systematic review and meta-analysis. *Biological Reviews*. [\[Link\]](#) [\[PDF\]](#)
2. **Chan, J.C.F.**, Liew, J.H. & Dudgeon\*, D. (2025). Small dams fragment assemblages of diadromous and freshwater decapods in Hong Kong lowland streams. *Hydrobiologia*, 852, 2871–2886. [\[Link\]](#) [\[PDF\]](#)
3. **Chan\***, **J.C.F.**, Liew, J.H. & Dudgeon, D. (2024). High spatial variability in a species-rich assemblage of diadromous fishes in Hong Kong, southern China. *Journal of Fish Biology*, 105(3), 663–681. [\[Link\]](#) [\[PDF\]](#)
4. Chow, L.H., **Chan, J.C.F.** & Tsang\*, L.M. (2024). *Caridina ngankeeae* sp. nov., a new species of freshwater shrimp (Decapoda: Caridea: Atyidae) from Hong Kong. *Zootaxa*, 5476(1), 44–50. [\[Link\]](#) [\[PDF\]](#)
5. **Chan\***, **J.C.F.**, Tsang, A.H.F., Yau, S.-m., Hui, T.C.H., Lau, A., Tan, H.H., Low, B.W., Dudgeon, D & Liew J.H. (2023). The non-native freshwater fishes of Hong Kong: diversity, distributions, and origins. *Raffles Bulletin of Zoology*, 71, 128–168. [\[PDF\]](#)
6. Chow, L.H., **Chan, J.C.F.** & Tsang\*, L.M. (2022). A synopsis of *Macrobrachium* Spence Bate, 1868 (Decapoda: Caridea: Palaemonidae) from Hong Kong, with description of a new species. *Journal of Crustacean Biology*, 42(3), ruac039. [\[Link\]](#) [\[PDF\]](#)

### In preparation/review/revision (\*corresponding author, #Graduate student advisee)

7. Ho<sup>#</sup>, S.C.L., **Chan, J.C.F.**, Lee, W.H., Sung, Y.H. & Liew\*, J.H. Highlighting the species diversity, pricing trends, and conservation concerns in a major ornamental fish hub. In revision at **Oryx**. [[Preprint](#)]
8. **Chan\***, **J.C.F.**, Low, B.W., Tan, H.H. & Liew\*, J.H. Species boundaries of the predaceous chub *Parazacco spilurus* (Xenocypridae) and the description of a new cryptic species from southern China. In review at **Vertebrate Zoology**. [[Unpublished manuscript](#)]
9. Chow, L.H., **Chan, J.C.F.** & Tsang\*, L.M. Three new cryptic species of the genus *Caridina* (Decapoda:Caridea: Atyidae) from Hong Kong, with notes on the *C. serrata* species group. In review at **Zoological Studies**. [[Unpublished manuscript](#)]
10. **Chan\***, **J.C.F.**, Low, B.W., Lau, A., Rheindt, F.E., Dudgeon, D. & Liew\*, J.H. Dams have a rapid impact on genetic structuring but not diversity of landlocked amphidromous goby fish populations. In review at **Journal of Applied Ecology**.
11. **Chan\***, **J.C.F.**, Tsang, A.H.F., Lau, A. & Lam\*, V.W.Y. From village to metropolis: reconstructing freshwater fisheries amid urban growth. In prep for invited submission to **Reviews in Fish Biology & Fisheries**.
12. **Chan\***, **J.C.F.**, Lin, B.A., Ying, C., Liew, J.H. & Dudgeon, D. A century of population declines and genetic attrition of a commercial migratory fish (*Plecoglossus altivelis altivelis*: Plecoglossidae) across China. In prep.
13. Yau<sup>#</sup>, S.-m., **Chan, J.C.F.** & Lau\*, A. Homogenization of freshwater fish assemblages in impounded reservoirs inferred by eDNA metabarcoding. In prep.

### Technical reports

1. Or, C.K.M. & Chan, B.P.L. (Eds.). (2025). The State of Hong Kong Biodiversity 2025. WWF-Hong Kong. [[Link](#)] [[PDF](#)]
2. WWF-Hong Kong. (2025). Hong Kong Terrestrial Biodiversity Hotspot Map. [[Link](#)] [[PDF](#)]
3. Hong Kong Biodiversity Expert Group. (2024). Recommendations to the Hong Kong SAR Government for the Biodiversity Strategy and Action Plan (BSAP) 2025–2035. ADM Capital Foundation, Hong Kong. [[Link](#)] [[PDF](#)]

### Mobile applications

1. Freshwater Collective. (2021). Pocket Guide to the Freshwater Species of Hong Kong. [[Apple Store](#)] [[SCMP press release](#)] [[HKFP press release](#)]

### Talks presented

1. Ho<sup>#</sup>, S.C.L., **Chan, J.C.F.**, Lee, W.H., Sung, Y.H., Liew, J.H. (2025) Highlighting the species diversity, pricing trends, and conservation concerns in a major ornamental fish hub. In: **International Congress for Conservation Biology 2025**, Australia.
2. **Chan, J.C.F.**, Liew, J.H., Dudgeon, D. (2025) The impacts of fragmentation by dams on a species-rich diadromous fish assemblage in Hong Kong, southern China. In: **Joint conference of the Asian Society of Ichthyologists Annual Meeting and the 12th Indo-Pacific Fish Conference**, Taiwan.
3. **Chan, J.C.F.**, Lam, B.Y.K., Liew, J.H., Dudgeon, D. (2025) The impact of dams on migratory fishes and decapods: global and local perspectives. In: **Invited seminar, National University of Singapore**, Singapore.

4. **Chan, J.C.F.**, Liew, J.H., Dudgeon, D. (2024) Influence of barriers on diadromous fish assemblages in tropical Hong Kong. In: **155th Annual Meeting of the American Fisheries Society**, Hawaii.
5. **Chan, J.C.F.**, Liew, J.H., Dudgeon, D. (2023) The influence of in-stream barriers on a species rich diadromous fish assemblage in Hong Kong. In: The 3rd Ecology & Biodiversity Research Symposium, Hong Kong

## Working groups and service

Since 2024	<b>Peer reviewer, Journal of Fish Biology</b> (2024,2025), <b>Biological Invasions</b> (2025)
2024-2025	<b>Hong Kong Biodiversity Expert Group</b> , Recommendations to the Hong Kong SAR Government for the Biodiversity Strategy and Action Plan (BSAP) 2025–2035, <b>ADM Capital Foundation</b>
2023-2025	<b>Lead Assessor of freshwater fishes and crustaceans</b> , The State of Hong Kong Biodiversity 2025, <b>WWF Hong Kong</b>
2020-2021	<b>Founding President</b> , ICL Society for Freshwater Science, <b>Imperial College London</b>

## Outreach

Since 2020	Short documentaries and spotlight videos of freshwater biodiversity, <b>Freshwater Collective</b> (>35,000 views) <a href="https://www.youtube.com/@FreshwaterCollective/videos">https://www.youtube.com/@FreshwaterCollective/videos</a>
2025	Common diadromous species of Hong Kong database, <b>Freshwater Collective</b> <a href="https://www.freshwatercollective.org/species-database">https://www.freshwatercollective.org/species-database</a>
2024	Diadromous species of Lantau eco-tour, <b>Lingnan University</b>
2021	Pocket Guide to Freshwater Species of Hong Kong mobile app, <b>Freshwater Collective</b> <a href="https://apps.apple.com/is/app/freshwater-species-hong-kong/id1540616520">https://apps.apple.com/is/app/freshwater-species-hong-kong/id1540616520</a>
2020	Hong Kong Freshwater Stream Ecology Course, <b>Outdoor Wildlife Learning Hong Kong</b> <a href="https://www.owlhk.org/en/ecology-training/freshwater-stream-ecology-course/0250001/Hong+Kong+Freshwater+Stream+Ecology+Course">https://www.owlhk.org/en/ecology-training/freshwater-stream-ecology-course/0250001/Hong+Kong+Freshwater+Stream+Ecology+Course</a>
2018	Take Action! 2018 Youth Biodiversity Conservation Leadership Training Scheme, <b>The University of Hong Kong</b> <a href="https://takeactionhk.wixsite.com/hku-ke/schedule-of-events">https://takeactionhk.wixsite.com/hku-ke/schedule-of-events</a>