

Jeffery C.F. Chan

Curriculum vitae

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

Education

- Since 2022 **PhD**, Freshwater Ecology, [The University of Hong Kong](#), Hong Kong
Thesis: Consequences of river fragmentation on diadromous migrants: global and local perspectives
Initial thesis submission: 19 Dec 2025; estimated graduation: July 2026 (after defense & final submission)
Supervisors: [David Dudgeon](#), [Jia Huan Liew](#)
- 2020–2021 **MRes**, Tropical Forest Ecology, [Imperial College London](#), United Kingdom
Thesis (Distinction): Multiple stressors on freshwater ecosystem functioning: biocides and warming
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 Environmental Impact Assessment projects of Hong Kong
Supervisor: [Billy C.H. Hau](#)

Work experience

- Jan – Aug 2026 **Postdoctoral Fellow** (as Research Associate until certificate of graduation), [UC Santa Barbara](#), California
– *modelling riverine thermal discontinuities across the US West Coast* with [Rafael J.P. Schmitt](#)
- Since 2019 **Founder**, [Freshwater Collective](#), Hong Kong - conservation organization www.freshwatercollective.org
- 2025 **Visiting Researcher**, [Lee Kong Chian Natural History Museum](#) & [National University of Singapore](#), Singapore – *morphomeric and genomic analyses of freshwater fishes; invited talks*
- 2022–2025 **Research Associate**, [Lingnan University](#), Hong Kong – *managing fish ladder experiment and fieldwork*
- 2020–2021 **Research Associate**, [Imperial College London](#), United Kingdom – *assessing green corridor biodiversity*
- 2018–2020 **Assistant Ecologist**, [aec Ltd. \(now Aurecon Group\)](#), Hong Kong – *environmental impact assessments*

Research 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)

Fellowships & awards

- 2024–2025 **Outstanding Demonstrator Award:** For my role as Chief Demonstrator in BIOL 2306 – Ecology & Evolution at [The University of Hong Kong](#)
- 2024 **Conference Fund for Research Postgraduate Students:** Travel award for the 155th Annual Meeting of the American Fisheries Society from [The University of Hong Kong](#) (HKD \$13,500, USD convert ~\$1,700)
- 2024 **OA Publishing for HKU Authors:** Selected for an open access publication in *Journal of Fish Biology* from [The University of Hong Kong](#) (worth USD ~\$4,480)
- 2023–2024 **Outstanding Demonstrator Award:** For my role as Chief Demonstrator in BIOL 2102 – Biostatistics at [The University of Hong Kong](#)
- 2022–2025 **The University of Hong Kong Postgraduate Scholarship:** Awardee of four-year fellowship for PhD candidates at [The University of Hong Kong](#) (HKD \$912,000, USD convert ~\$116,000)
- 2021 **App development award:** for mobile app development and hosting from [Outdoor Wildlife Learning Hong Kong](#) (HKD \$2558, USD convert ~\$330)

Teaching experience

[National University of Singapore](#)

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

[The University of Hong Kong](#)

BIOL 2306 – **Ecology & 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)

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

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

Mentoring/advising

- 2024–2025 Chiu Yui Hong, MSc, [The University of Hong Kong](#), Hong Kong
- 2023–2024 Samuel C.L. Ho, Research Assistantship, [Lingnan University](#), Hong Kong
- 2022–2024 Billy Y.K. Lam, Research Assistantship, [Lingnan University](#), Hong Kong
- 2022–2024 Yau Sze-Man, MPhil, [Lingnan University](#), Hong Kong
- 2022–2023 Alex H.B. Liu, Research Assistantship, [Lingnan University](#), 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*, 100(5), 2020–2037. [\[Link\]](#) [\[PDF\]](#)
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 press/ preparation/review/revision (*corresponding author, #Graduate student advisee)

7. Ho*, 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 press at *Oryx*. [\[Preprint\]](#)
8. 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 revision at *Zoological Studies*. [\[Unpublished manuscript\]](#)
9. **Chan*, J.C.F.**, Low, B.W., Tan, H.H. & Liew*, J.H. Species boundaries of the predaceous chub *Parazacco spilurus* (Xenocyprididae) and the description of a new cryptic species from southern China. In review at *Vertebrate Zoology*. [\[Unpublished manuscript\]](#)
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[#], S.-m., **Chan, J.C.F.** & Lau^{*}, A. Homogenization of freshwater fish assemblages in impounded reservoirs inferred by eDNA metabarcoding. In prep.
14. Lam[#], B.Y.K., **Chan, J.C.F.** & Liew^{*}, J.H. A novel structural enhancement improves the passage efficiency of diadromous decapods and fish on an artificial ramp. 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. **WWF-Hong Kong**. [\[Link\]](#) [\[PDF\]](#)
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. [\[Apple Store\]](#)

Talks presented in conferences and invited seminars

1. Ho[#], 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. Lam[#], B.Y.K., **Chan, J.C.F.**, Liew, J.H. (2024) A novel structural enhancement improves the passage efficiency of diadromous decapods and fish on an artificial ramp. In: **Invited seminar, Max Planck Institute for Neurobiology of behaviour-caesar**.
6. Yau[#], S.-M., **Chan, J.C.F.**, Lau, A. (2023) Determining distribution and occupancy of introduced crayfish and freshwater fish in Hong Kong reservoirs and streams. In: **The 10th EAFES international congress**, Korea.
7. **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 & service

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

Outreach

Since 2020	Short documentaries and spotlight videos of freshwater biodiversity, Freshwater Collective (>35,000 views) [Link]
2025	Common diadromous species of Hong Kong database, Freshwater Collective [Link]
2024	Diadromous species of Lantau Island eco-tour, Lingnan University [Link]
2021	Pocket Guide to Freshwater Species of Hong Kong mobile app, Freshwater Collective [Link]
2020	Hong Kong Freshwater Stream Ecology Course, Outdoor Wildlife Learning Hong Kong [Link]
2018	Take Action! 2018 Youth Biodiversity Conservation Leadership Training Scheme, The University of Hong Kong [Link]

Press & media coverage

2025	Global consequences of dams on diadromous species: Croucher Foundation , University of Hong Kong , University of Tasmania , The Independent , The Cool Down , Mirage , Sussex Bylines , Greensavers , Phys.org , Yahoo News , EurekaAlert! , Xinhua
2025	The State of Hong Kong Biodiversity 2025: WWF HK , South China Morning Post ,
2024	Recommendations to the Hong Kong SAR Government for the Biodiversity Strategy and Action Plan (BSAP) 2025–2035: ADM Capital Foundation
2023	Hong Kong Ecologist 3: A television documentary by Radio Television Hong Kong about research on freshwater stream ecology in Hong Kong
2020	Pocket Guide to Freshwater Species of Hong Kong: South China Morning Post , Hong Kong Free Press