

Jeffery C.F. Chan

Curriculum vitae

[Personal website](#) | [Freshwater Collective](#) | [Google Scholar](#) | [Research Gate](#) | Email address: jcfchan@ucsb.edu

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

- From Oct 2026 - 2028 **Croucher Fellow**, [UC Berkeley](#), United States – modelling extreme events and the global redistribution of diadromous fishes, hosted by [Albert Ruhí](#)
- 2026 - present **Postdoctoral Fellow** (as Visiting Specialist), [UC Santa Barbara](#), United States – *modelling optimal tradeoffs for river restoration and hydropower across the US West Coast*, hosted by [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 – *morphometric 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

2026 - 2028 **Croucher Fellowship:** Awarded by the Croucher Foundation for a postdoctoral fellowship at UC Berkeley (**USD \$187,000**)

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)

Supervision

- 2026-present Katie Zhang, BA student, [UC Santa Barbara](#), United States
- 2026-present Ariel Y.L. Yau, MRes student, [The University of Hong Kong](#), Hong Kong
- 2025-present Ricardo Platero, PhD student, [Lingnan University](#), Hong Kong
- 2024–2025 Chiu Yui Hong, MSc student, [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 student, [Lingnan University](#), Hong Kong
- 2022–2023 Alex H.B. Liu, Research Assistantship, [Lingnan University](#), Hong Kong

Publications & manuscripts

Published and in press papers (*corresponding author)

1. **Chan, J.C.F.**, Liew*, J.H. & Dudgeon, D. Conservation of tropical and subtropical marine-freshwater migrants for ecosystem service. In press at *Trends in Ecology & Evolution*.
2. 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](#)]
3. 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](#)]
4. **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](#)]
5. **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](#)]
6. **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](#)]
7. 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](#)]
8. **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](#)]
9. 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 revision/review/prep (*corresponding author, #Graduate student advisee)

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 revision at *Molecular Ecology*.
11. **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*. [\[Unpublished manuscript\]](#)
12. **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*.
13. **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.
14. Yau**, S.-m., **Chan, J.C.F.** & Lau*, A. Homogenization of freshwater fish assemblages in impounded reservoirs inferred by eDNA metabarcoding. In prep.
15. 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. 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.
6. **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

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| Since 2024 | Peer reviewer for: Biodiversity and Conservation (2025); Hydrobiologia (2025, 2026); Journal of Fish Biology (2024,2025); Biological Invasions (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

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| 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] |
| 2018 | K11-HKU Eco Leaders Program (<i>funded training scheme to Sulawesi, Indonesia</i>), 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](#)
- 2020 Pocket Guide to Freshwater Species of Hong Kong: [South China Morning Post](#), [Hong Kong Free Press](#)