Isabel Hong

Department of Geography and the Environment
Villanova University
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PROFESSIONAL EXPERIENCE

2022-Pres *Assistant Professor, Environmental Science*
Department of Geography and the Environment, Villanova University
2020-2022 *National Science Postdoctoral Research Fellow*
Department of Earth Sciences, Simon Fraser University
2014-2019 *Graduate Assistant*
Department of Marine & Coastal Sciences, Rutgers University
2012-2014 *Research Assistant*
Department of Geological Sciences, Central Washington University

EDUCATION

2014-2019 PhD Oceanography | Rutgers University, New Brunswick, NJ
Dissertation: *Developing proxies to reconstruct the intensity and magnitude of prehistoric tropical cyclones and earthquakes*
2012-2014 MS Geology | Central Washington University, Ellensburg, WA
Thesis: *Proxy-Based Reconstructions of Earthquakes and Tsunamis at Quidico, South-Central Chile*
2007-2011 BA Geology with Honors | Whitman College, Walla Walla, WA
Thesis: *Paleoclimate Effects on Soil Development in the Columbia River Basalt Group*

TEACHING EXPERIENCE

2023 GEV 4320/8320: Coastal Geohazards (Lecture and Laboratory, spring semester)
2023 GEV 7020: Advanced Environmental Issues (Lecture, spring semester)
2017 Introduction to Oceanography, Rutgers University (Teaching Assistant, spring semester)
2011-2012 English, Berufsschule Freising, Germany (teaching Assistant, full year)

GRANTS AND FELLOWSHIPS

2023 NSF RAPID Grant (PI: $49,726)
2020-2022 NSF Earth Sciences Postdoctoral Fellowship (PI: $261,000)
2019 SSA Student Travel Grant ($1270)
2018 IGCP Travel Grant ($1000)
2015 Rutgers Professional Development Fund ($1000)
2011-2012 Fulbright ETA Fellowship ($10,000)

PEER-REVIEWED PUBLICATIONS

Joyse, K., Khan, N. S., Moyer, R. P., Radabaugh, K., **Hong, I.**, Chappel, A. R., Walker, J. S., Sanders, C. J., Engelhart, S. E., Horton, B. P. The preservation of Hurricane Irma's overwash deposit in southern Florida, USA. (in review) *Marine Geology*.

Hong, I., Horton, B.P., Hawkes, A.D., O'Donnell III, R.J., Padgett, J.S., Dura, T., Engelhart, S.E., 2021. Diatoms of the intertidal environments of Willapa Bay, Washington, USA as a sea-level indicator. *Marine Micropaleontology* 167. DOI: 10.1016/j.marmicro.2021.102033.

Hong, I., Pilarczyk, J.E., Horton, B.P., Fritz, H.M., Kosciuch, T.J., Wallace, D.J., Dike, C., Rarai, A., Harrison, M.J., and Jockley, F.R., 2018. Sedimentological characteristics of the 2015 Tropical Cyclone Pam sediment from Vanuatu, South Pacific. *Marine Geology* 396: 205-214.

Kosciuch, T.J., Pilarczyk, J.E., **Hong, I.**, Fritz, H.M., Horton, B.P., Rarai, A., Harrison, M.J., Jockley,

F.R., 2018. Foraminifera reveal a shallow nearshore origin for overwash sediments deposited by Tropical Cyclone Pam in Vanuatu (South Pacific). *Marine Geology* 396: 171-185.

Dura, T., Horton, B.P., Cisternas, M., Ely, L.L., **Hong, I.**, Nelson, A.R., Wesson, R.L., Pilarczyk, J.E., Parnell, A., Nikitina, D., 2017. Subduction zone slip variability during the last millennium, south-central Chile. *Quaternary Science Reviews* 175: 112-137.

Hong, I., Dura, T., Ely, L.L., Horton, B.P., Nelson, A.R., Cisternas, M., Nikitina, D., and Wesson, R.L., 2016. A 600-year long stratigraphic record of tsunamis in south-central, Chile. *The Holocene* 27: 39-51.

RECENT INVITED TALKS

2021 *NamiLinks 1.0*, INQUA Project 2101, Virtual
2021 *Diatom Web Academy Webinar*, Diatoms of North America, Virtual
2021 *Department of Earth and Space Sciences Distinguished Lecture Series*, University of Washington, USA
2021 *Geological Society of America Connects*, Geological Society of America, USA
2020 *WGS Departmental Meeting,* Washington Geological Survey, USA
2020 *Department of Geological Sciences Seminar*, Central Washington University, USA
2020 *Department of Earth and Atmospheric Sciences Seminar*, Cornell University, USA
2019 *Department of Earth Sciences Seminar*, Simon Fraser University, Canada
2018 *Department of Earth Sciences Seminar*, Trinity College Dublin, Ireland

RECENT CONFERENCE ABSTRACTS (*students)

*Giang, A, **Hong, I.**, Pilarczyk, J. E, 2022 UK Coasts and Sea Level meeting, IGCP, Durham, UK, "Elemental Composition (XRF) of Salt Marsh Surface Sediments at Willapa Bay and their Potential for Reconstructing Land-level Change along Cascadia Coastlines", Academic, International, proposal peer-reviewed/refereed, Accepted. (September 19, 2022).

*Riou, L, **Hong, I.**, Pilarczyk, J. E., Huntley, D., Hawkes, A., 2022 UK Coasts and Sea Level meeting, IGCP, Durham, UK, "Reconstructing the last 500 years of relative sea level change in the northern part of Cascadia: implications for dynamic rupture models for the Cascadia subduction zone", Academic, International, proposal peer-reviewed/refereed, Accepted. (September 13, 2022).

Hong, I., Cahill, N., Engelhart, S.E., Hawkes, A.D., Padgett, J.S., Nelson, A.R., Horton, B.P. Bayesian diatom-based estimates of coastal deformation during megathrust earthquakes at the Cascadia subduction zone. Seismological Society of America Annual Meeting, April 2019.

Hong, I., Horton, B.P., Engelhart, S.E., Hawkes, A.D., O'Donnell III, R.J., Padgett, J.S., Nelson, A.R., Dura, T.,. Establishing a modern database of intertidal diatoms to reconstruct paleoearthquake land-level change. IGCP Project 639 – Sea level change from minutes to millennia, September 2018.

Hong, I., Horton, B.P., Hawkes, A.D., O'Donnell III, R.J., Engelhart, S.E., Padgett, J.S.,. Assessing environmental controls on diatom variability in paleomarsh reconstructions. International Symposium for Diatom Research, June 2018.

MENTORING AND SERVICE

Thesis committee member

2020-pres. Louise Riou (MS), Simon Fraser University
2019-pres. Lourdes Garcia (MS), Central Washington University

Conference Session Chair

2022 American Geophysical Union, *Dynamic Coastlines: Advancements in Understanding of Coastal Hazards and Climate Change Impacts*. Two oral sessions, virtual poster session, and in-person poster session