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Education

Ph.D., Cornell University, 1977
M.A., The Johns Hopkins University, 1974
B.A., University of California, Santa Barbara, 1973

No Current Instructional Responsibilities***Recent Instructional Activities***

ERTH 135 – Natural Disasters and Human History, Fall 2019
GG 423 – Marine Geology, Fall 2018
GG 135 – Natural Disasters and Human History (new Manoa Foundations Course – FGC), Sp 2018
GG 711 – Graduate Seminar – Multibeam Bathymetry, Fall 2017
GG 130 – Geologic Hazards, Sp 2017

Graduate Students Supervised (Last 12 years):

Hannah Tilley, Ph.D., 2021
Jason Lackey, Ph.D., 2019
Nipaporn Nakrong, M.S., 2019
Katie Taladay, M.S., 2015
Brian Boston, Ph.D., 2015
Jessica Barnes, M.S., 2013

Professional Experience

Professor Emeritus, Aug. 2020 – present

Professor, University of Hawaii, 1988-July, 2020
Chair, Dept. Geology & Geophysics, 2010-2014
Assoc. Chair, Dept. Geology & Geophysics, 1996-1997, 2004-2005, 2014-2015
Chair, Marine Geophysics Division, HIG/SOEST, 1989-1994, 1997
Visiting Research Scientist, IFREE/JAMSTEC, 2008-present
Visiting Professor, Earth Observatory of Singapore, Aug-Nov, 2015
Advisor to the Director General of CDEX/JAMSTEC, 1/2006-6/2008
Visiting Professor, University of Tokyo, Ocean Research Institute, 2001
Associate Professor, University of Tulsa, 1983-1988
Research Geologist, Cities Service Research Lab, 1982-1983
Assistant Research Geologist, Scripps Institution of Oceanography, 1979-1982
Lecturer, Scripps Institution of Oceanography, 1980-1984
Postgraduate Research Geologist, Scripps Institution of Oceanography, 1978-1979
Postdoctoral Associate, Cornell University, 1977

Research Grants at U.H. since 1989

Total: \$9,486,708; (PI) \$8,102,052; (Co-PI) \$1,384,656

Professional Recognition

Miyashiro International Prize, Geological Society of Japan, September, 2024
Wing Ip Medal: “For unselfish cooperation/leadership in Geoscience in the Asia Oceania Region”
Asia Oceania Geosciences Society, August, 2021
Excellence Professorship/Petersen Prize (€20,000), Kiel Univ., GEOMAR, April, 2016

Professional Organizations

Geological Society of America (Fellow)
American Geophysical Union
Society of Exploration Geophysicists
American Association of Petroleum Geologists
Japan Geoscience Union
Asia-Oceania Geosciences Society
Myanmar Applied Earth Sciences Association (International Advisory Committee)
Myanmar Institute of Earth and Planetary Sciences

BIBLIOGRAPHY (Last 10 years only)

Citations of Published Papers (From Google Scholar, 14 August 2024)

Citations 11,136

h-index 63

i10-index 139

(* = Student or Post-doc First Author)

173. Kimura, G., ... **Moore, G.F.**, 2024, Frontal Thrust ramp-up and Slow Earthquakes due to Underthrusting of Basement High in the Nankai Trough: *Geochem., Geophys., Geosyst.*, v. 25, e2024GC011468, doi: 10.1029/2024GC011468.
172. Bangs, N.L.B., ... **Moore, G.F.**, et al., 2023, Slow slip along the Hikurangi margin linked to fluid-rich sediments trailing subducting seamounts: *Nature GeoSci.*, v. 16, p.505-512, doi: <https://doi.org/10.1038/s41561-023-01186-3>
171. Wang, M., Barnes, P.M., Morgan, J.K., Bell, R.E., **Moore, G.F.**, et al., 2023, Compactive deformation of incoming calcareous pelagic sediments, northern Hikurangi subduction margin, New Zealand: Implications for subduction processes: *Earth Planet. Sci. Lett.*, v. 605, 118022, doi:10.1016/j.epsl.2023.118022
170. Bassett, D., Arnulf, A., Kodaira, S., Nakanishi, A., Harding, A., **Moore, G.F.**, 2022, Crustal structure of the Nankai subduction zone revealed by two decades of onshore-offshore and ocean-bottom seismic data: Implications for the dimensions and slip behavior of the seismogenic zone: *Jour. Geophys. Res.*, v. ; doi: 10.1029/2022JB024992.
169. *Cornard, P. H., Moernaut, J., **Moore, G. F.**, Kioka, A., Kopf, A., dos Santos Ferreira, C., and Strasser, M., 2022, Sequence stratigraphic evolution of the Kumano forearc basin during the last deglaciation: Influence of eustatic and tectonically-controlled shelf morphology on deep-marine sediment dynamics: *Sedimentary Geology*, 106100. doi:<https://doi.org/10.1016/j.sedgeo.2022.106100>
168. Hashimoto, Y., Sato, S., Kimura, G., Kinoshita, M., Miyakawa, A., **Moore, G. F.**, Nakano, M., Shiraishi, K., and Yamada, Y., 2022, Décollement geometry controls on shallow very low frequency earthquakes: *Scientific Reports*, v. 12(1), 2677. doi:10.1038/s41598-022-06645-2
167. Arnulf, A., Bassett, D., Harding, A., Kodaira, S., Nakanishi, A., and **Moore, G.F.**, 2022, Upper-plate controls on subduction zone geometry, hydration and earthquake behaviour: *Nature Geoscience*, v. 15, No. 2

166. *Tilley, H.L., **Moore, G.F.**, Underwood, M.B., Hernandez-Molina, J., Yamashita, M., Kodaira, S., and Nakanishi, A., 2021, Heterogeneous sediment input at the Nankai Trough subduction zone: Implications for shallow slow earthquake localization: *Geochem., Geophys., Geosyst.*, v. 22, e2021GC009965. <https://doi.org/10.1029/2021GC009965>.
165. Maunde, A., Alves, T.M., and **Moore, G.F.**, 2021, Shallow fault systems of thrust anticlines responding to changes in accretionary prism lithology (Nankai, SE Japan): *Tectonophysics*, v. 812, 228888, <https://doi.org/10.1016/j.tecto.2021.228888>
164. Umino, S., **Moore, G. F.**, Boston, B., Coggon, R., Crispini, L., D'Hondt, S., . . . Inagaki, F., 2021, Workshop report: Exploring deep oceanic crust off Hawai'i: *Sci. Dril.*, 29, 69-82. doi:10.5194/sd-29-69-2021
163. *Tilley, H.L., **Moore, G.F.**, Yamashita, M., and Kodaira, S., 2021, Along-strike variations in protothrust zone characteristics at the Nankai Trough subduction margin: *Geosphere*, v. 17, No.2, doi:10.1130/GES02305.1
162. Asada, M., **Moore, G.F.**, Kawamura, K., Noguchi, T., 2021, A mud volcano located at a fault zone possibly linked to seismogenic faults in the Kumano Basin, Nankai Trough, Japan: *Marine Geophysical Research*, v. 42:4, doi: 10.1007/s11001-020-09425-7.
161. Ito, G. and **Moore, G.F.**, 2021, Widths of imbricate thrust blocks and the strength of the front of accretionary wedges and fold-and-thrust belts: *Tectonophysics*, v. 799, p. 228704.

----- Emeritus Status granted -----

160. Lin Thu Aung, Kyaw Zin Oo, Kyaw Myo Min, **Moore, G.F.**, Soe Thura Thun and Win Naing, 2020, Active deformation of the Central Myanmar Forearc Basin: Insight from post-Pleistocene inversion of the Pyay Fault: *Jour. Asian Earth Sci*: X, v. 4 , #100037.
159. *Lackey, J.K., Regalla, C.A., and **Moore, G.F.**, 2020, Tectonic Influences on Trench Slope Basin Development via Structural Restoration Along the Outer Nankai Accretionary Prism, Southwest Japan: *Geochem., Geophys., Geosyst.*, v. 21, e2020GC009038, doi:10.1029/2020GC009038.
158. **Moore, G.F.**, Lackey, J.K., Strasser, M. and Yamashita, M., 2019, Submarine landslides on the Nankai Trough accretionary prism: *Submarine landslides: subaqueous mass transport deposits from outcrops to seismic profiles*, Am. Geophys. Union Monograph 246, p. 247-259.
157. Shiraishi, K., **Moore, G.F.**, Yamada, Y., Kinoshita, M., Sanada, Y., and Kimura, G., 2019, Seismogenic zone structures revealed by improved 3D seismic images in the Nankai Trough off Kumano: *Geochem., Geophys., Geosyst.*, doi: 10.1029/2018GC008173.
156. **Moore, G.F.**, Lin Thu Aung, R. Fukuchi, J.C. Sample, E. Hellebrand, A. Kopf, W. Naing, Win Min Than and Tin Naing Tun, 2019, Tectonic, diapiric and sedimentary chaotic rocks of the Rakhine coast, western Myanmar: *Gondwana Research*, v. , <https://doi.org/10.1016/j.gr.2019.04.006>.
155. *Lackey, J.K., **Moore, G.F.**, Strasser, M., 2018, Three-dimensional Mapping and Kinematic Characterization of Mass Transport Deposits Along the Outer Kumano Basin and Nankai Accretionary Wedge, Southwest Japan: *Prog. Earth Planet. Sci.*, Special Issue, v. 5/65, <https://doi.org/10.1186/s40645-018-0223-4>.

154. Ohira, A., Kodaira, S., **Moore, G.F.**, Fujiwara, T., Kaiho, Y., Miura, S., Fujie, G., 2018, Active-source seismic survey on the northeastern Hawaiian Arch: Insights into crustal structure and mantle reflectors: *Earth Planets Space*, 70:121, <https://doi.org/10.1186/s40623-018-0891-8>
153. Weiss, J.R., Ito, G., Brooks, B. A., Olive J.A., **Moore, G.F.**, and Foster, J.J., 2018, Formation of the frontal thrust zone of accretionary wedges: *Earth Planet. Sci. Lett.*, v. 495, p. 87-100.
152. *Lackey, J.K., **Moore, G.F.**, Strasser, M., Kopf, A., and Ferreira, C., 2018, Spatial and temporal cross-cutting relationships between fault structures and slope failures along the outer Kumano Basin and Nankai accretionary wedge, SW Japan: Lintern, D. G. et al., (eds) Subaqueous Mass Movements. Geological Society, London, Special Publications, 477, <https://doi.org/10.1144/SP477.10>
151. Azevedo, M.C., Alves, T.M., Fonseca, P.E., and **Moore, G.F.**, 2018, Strike-slip deformation reflects complex partitioning of strain in the Nankai accretionary prism (SE Japan): *Tectonophysics*, v. 723, p. 81-94, doi.org/10.1016/j.tecto.2017.11.023
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149. *Taladay, K., Boston, **Moore, G.F.**, 2017, Gas-in-place estimate for potential gas hydrate concentrated zone in the Kumano Basin, Nankai Trough forearc, Japan: *Energies*, v. 10, #1552, [doi:10.3390/en10101552](https://doi.org/10.3390/en10101552).
148. *Boston, B., **Moore, G.F.**, Nakamura, Y., and Kodaira, S., 2017, Forearc Slope Deformation above the Japan Trench Megathrust: Implications for Subduction Erosion: *Earth Planet. Sci. Lett.*, v. 462, p. 26-34.
147. Laberg, J.S., Strasser, M., Alves, T.M., Gao, S., Kawamura, K., Kopf, A., and **Moore, G.F.**, 2016, Internal deformation of a muddy gravity flow and its interaction with the seafloor (Site C0018 of IODP Expedition 333, Nankai Trough, SE Japan): *Landslides*, v. 14, p. 849-860, [doi: 10.1007/s10346-016-0766-7](https://doi.org/10.1007/s10346-016-0766-7).
146. *Boston, B., **Moore, G.F.**, Jurado, M.J., and Sone, H., 2016, Deformation of the Nankai Trough inner accretionary prism: The role of inherited structures: *Geochem. Geophys. Geosyst.*, v. 17, p. 485-500, [doi: 10.1002/2015GC006185](https://doi.org/10.1002/2015GC006185).
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144. **Moore, G.F.**, Boston, B.B., Strasser, M., Underwood, M.B., and Ratliff, R.A., 2015, Evolution of tectono-sedimentary systems in the Kumano Basin, Nankai Trough forearc: *Mar. Petrol. Geology*, v. 67, p. 604-616.
143. Van Tuyl, J., Alves, T. M., and **Moore G. F.**, 2015, Strain decoupling reveals variable seismogenic risk in SE Japan (Nankai Trough): *Geochem. Geophys. Geosyst.*, 16, 2025–2037, [doi:10.1002/2015GC005778](https://doi.org/10.1002/2015GC005778).
142. Hino, R., Tsuji, T., Bangs, N., Sanada, Y., Park, J-O, von Huene, R., **Moore, G.F.**, Araki, E. and Kinoshita, M., 2015, Qp structure of the accretionary wedge in the Kumano Basin, Nankai

Trough, Japan, revealed by long-offset walk-away VSP: *Earth Planets Space*, v. 67, doi:10.1186/s40623-014-0175-x.

141. *Boston, B., **Moore, G.F.**, Nakamura, Y., and Kodaira, S., 2014, Outer-rise normal fault development and influence on near-trench décollement propagation along the Japan Trench, off Tohoku: *Earth, Planets, Space*, v. 66, # 135, p. 1-17, doi:10.1186/1880-5981-66-135.
140. Alves, T.M., Strasser, M., and **Moore, G.F.**, 2014, Erosional features as indicators of thrust fault activity (Nankai Trough, Japan): *Marine Geology*, v. 356, p.5-18, doi:10.1016/j.margeo.2013.07.011.
139. **Moore, G.F.**, Kanagawa, K., Strasser, M., Dugan, B., Maeda, L., Toczko, S., and IODP Exp 338 Sci. Party, 2014, IODP Expedition 338: NanTroSEIZE State 3: NanTroSEIZE plate boundary deep riser 2: *Sci. Dill.*, v. 17, p. 1-12, doi: 10.5194/sd-17-1-2014.
138. Bale, S., Alves, T.M., and **Moore, G.F.**, 2014, Distribution of gas hydrates on continental margins by means of a mathematical envelope: A method applied to the interpretation of 3D seismic data: *Geochem. Geophys. Geosyst.*, v. 15, p. 52-68, doi:10.1002/2013GC004938.
137. Alves, T.M., Kurtev, K., **Moore, G.**, and Strasser, M., 2014, Assessing the internal character, reservoir potential and seal competence of Mass-Transport Deposits using seismic texture: a geophysical and petrophysical approach: *AAPG Bull.*, v.98, p. 793-824.
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133. *Strasser, M., Henry, P., Kanamatsu, T., Thu, M.K., **Moore, G.F.**, and IODP Exp. 333 scientists, 2012, Scientific drilling of mass-transport deposits in the Nankai accretionary wedge: First results from IODP Exp. 333: in Y. Yamada et al. (eds.), *Submarine Mass Movements and Their Consequences*, *Advances in Natural and Technological Hazards*, v. 31, Springer Book Series, p. 671-681.