# Linda C. Ivany

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## **Education**

Ph.D. in Earth and Planetary Sciences, 1997, Harvard University

Advisor: Stephen Jay Gould

M.S. in Geology, minor in Zoology, 1990, University of Florida-Gainesville

Advisor: Douglas S. Jones

B.S. in Geology, minor in Zoology, 1988, Syracuse University

Advisor: Cathryn R. Newton

## **Academic Positions**

2012-present	Professor of Earth Sciences, Syracuse University
2005-2012	Associate Professor of Earth Sciences, Syracuse University
2001-2005	Assistant Professor of Earth Sciences, Syracuse University
2000-2001	Visiting Assistant Professor of Earth Sciences, Syracuse University
1997-2000	Michigan Society Fellow and Visiting Assistant Professor of Geological
	Sciences, University of Michigan

#### **General Research Interests**

## Evolutionary Paleoecology, Paleoclimatology, Stable Isotopes in Paleobiology

I am a marine paleoecologist and paleoclimatologist. My interests lie broadly in the evolution of the Earth-life system and how ecosystems and their component taxa evolve and respond to changes in the physical environment. Specific areas of interest include biotic and climatic change during the Paleogene (~65-24 million years ago); use of geochemical data, particularly stable isotopes, derived from accretionary biogenic materials for inference about life history, ecology, and paleoclimate; significance of paleoseasonality in Earth history; spatio-temporal patterns in lifespan and growth rate of mollusks; and the long-term dynamics of ecological assemblages.

## Sponsored Research

Ministerio de Cincias de Argentina - Ciencias Exactas y Naturales: 1525 - Ciencias De La Tierra-Geologia

"Paleoclimas del Paleógeno-Neógeno temprano en el sur de la cuenca del Golfo San Jorge" Collaborator, with PIs Maria Sol Raigemborn – Centro de Investigaciones Geologicas and Claudia del Rio – Museo Argentino de Ciencias Naturales, Buenos Aires, Argentina

1,802,000 pesos (~\$17,833)

# Collaboration for Unprecedented Success and Excellence (CUSE) Grant, Syracuse University

II-46-2021

"Characterizing Hydrodynamic Properties of Flow over Shell Sculpture in Orthoconic Cephalopods: Finding New Solutions for Drag Reduction, Stability, and Biofouling" Co-I, with Yiyang Sun and Melissa Green (Mechanical & Aerospace Engineering); 6/1/21 – 5/31/23 \$23,742

# Collaboration for Unprecedented Success and Excellence (CUSE) Grant, Syracuse University

II-38-2020

"The Epeiric Sea Effect - Exploring the Potential for First-Order Bias in Earth's Deep History of Climate and Life"

with co-I Tripti Bhattacharya; 6/1/20-5/31/22 \$29.760

## **National Science Foundation Antarctic Earth Sciences (Division of Polar Programs)**

PLR-1543031 - Supplement - INTERN Program

"Seasonality, Summer Cooling, and Calibrating the Approach of the Icehouse in Late Eocene Antarctica" Written by and for PhD candidate Emily Judd; 1/15/20-7/15/20 \$41,537.00

#### Syracuse University Office of Research Small Equipment Grant

SEG-26-2019

"Proposal to Obtain a Compact Scanning Electron Microscope (SEM) for Shared Use in the Department of Earth Sciences"; 2/15/2019-8/15/2019 \$58,500

# **National Science Foundation Antarctic Earth Sciences (Division of Polar Programs)**

PLR-1543031

"Seasonality, Summer Cooling, and Calibrating the Approach of the Icehouse in Late Eocene Antarctica"

Co-Pls: Scott Samson, Chris Junium, Zunli Lu (Syracuse University); 4/1/16-3/31/21 \$312,182

#### **National Science Foundation Sedimentary Geology and Paleobiology**

EAR-0719645

"Collaborative Research: Exploring the Links among Climate, Ecology, and Evolution in Paleogene Marine Faunas of the U.S. Gulf Coastal Plain"

Co-PIs: Rowan Lockwood (College of William and Mary) and Warren Allmon (Paleontological Research Institution and Cornell University); 9/01/07 – 8/31/11 Syracuse is lead institution \$156,124 to SU

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#### Supplement to EAR-0719645

For extended postdoctoral support; 03/15/10 – 8/31/11 \$33,317

## Research Experience for Undergraduates Supplement to EAR-0719645

08/07/08 - 8/31/10

\$11,920

## **National Science Foundation Major Research Instrumentation**

"Acquisition of a Laser-Ablation System for High Resolution, Micro-Scale Analyses of Environmental Materials"

PI: Karin Limburg (State University of New York College of Environmental Science and Forestry), Co-Pls: Linda **Ivany**, Scott Samson (SU), Donald Stewart (ESF); 8/1/07 – 7/31/10 \$209,929 to ESF

#### **American Chemical Society Petroleum Research Fund**

No. 40418-G2, 2004 - 2007

"Seasonality in the Early Eocene Warm Climate of the U.S. Gulf Coastal Plain" \$35.000

#### Summer Research Fellowship accompanying No. 40418.01-G2

Co-PI Rowan Lockwood (College of William and Mary); 2005-2006 \$8000

#### **National Science Foundation Office of Polar Programs**

Grant No. 5860, 2002 - 2006

"Collaborative Research – Eocene Climate Record of Seymour Island: The Environmental Context for Ecological and Evolutionary Change"
Co-PI Kacey Lohmann (University of Michigan)
Syracuse is lead institution
\$125,073 to SU

#### Research Experience for Undergraduates Supplement to OPP 5860

2002-2005 \$20,000

#### Fund for Scientific Research - Vlaanderen, Belgium

No. G.0093.01, 2001-2004

"Stratigraphy of the Priabonian and Rupelian, the Eocene-Oligocene Transition, in North Belgium as a basis for correlation with the classical marine basins in the Northern Hemisphere"

Co-Pls: Noël Vandenberghe (University of Leuven, Belgium)

Etienne Steurbaut (Royal Belgian Institute of Natural Sciences)

Henk Brinkhuis (University of Utrecht, the Netherlands)

administered in Belgium

~\$220,000 in equivalent US dollars

#### National Science Foundation Postdoctoral Fellowship, 1997-1999

"Biotic and Climatic Evolution in the US Gulf Coastal Plain Paleogene" \$60,000

#### **Peer-Reviewed Articles**

(\*student author; †post-doc author; each under my direct supervision)

- 71) Gavirneni\*, S., **Ivany, L. C.**, Reddin, C. (manuscript) Burning calories, burning ocean: The effects of metabolic rate on selectivity during hyperthermal-driven extinctions. For *Paleobiology,* March 2024.
- 70) Prow, A., Lu, Z., Meehan, K., Yang, Z., **Ivany**, L., and Payne, J. (submitted) Body-size trends of dacryoconarid *Tentaculites* across the Late Devonian *punctata* excursion, Appalachian Basin. *Geosphere*.
- 69) Vellekoop J., Vanhove D., Jelu, I., Claeys P., **Ivany**, L.C., De Winter N.J., Speijer R. P., and Steurbaut E. (submitted) Making sense of variation in sclerochronological stable isotope profiles of mollusks and fish otoliths from the early Eocene southern North Sea Basin. *Climate of the Past*.
- 68) Moss, D.K., **Ivany**, L.C., Surge, D., Thomas, R.D.K., and Fancher, A. (submitted) Latitudinal life history gradients in two Pliocene species of *Glycymeris* (Bivalvia). *Historical Biology*.
- 67) Phillipi\*, D.B., Czekanski-Moir, J., **Ivany**, L.C. (in revision) Global Phanerozoic diversity can variation be explained by spatial sampling intensity? *Paleobiology*.
- 66) Johnson, L.A., Schöne, B.R., Leng, M.J., Bhattacharya, T., Moss, D.K., **Ivany**, L.C., and Duff, R.P. (in revision) Sclerochronological evidence of life history and ambient temperature from Modern and Early Pleistocene *Glycymeris americana* (Mollusca:Bivalvia) of the U.S. Eastern Seaboard. *Palaios*.
- 65) Hensen\*, C.J., Rindsberg, A.K., Allmon, W.D., **Ivany**, L.C. (in press) Rethinking the Lisbon: A new correlation of the Kosciusko, Cook Mountain, and Lisbon formations in the eastern U.S. Gulf Coastal Plain. *Southeastern Geology*.
- 64) Thakor, M.M., Seh, K.H., Gladson, S.R., Fernandez\*, M.L., **Ivany**, L.C., Green, M., Sun, Y. (2023) Effects of annulation on low-Reynolds-number flows over an orthocone. *Journal of Theoretical and Computational Fluid Dynamics*, v. 37, pp. 357-374. <a href="https://doi.org/10.1007/s00162-023-00649-y">https://doi.org/10.1007/s00162-023-00649-y</a>
- 63) Seh, K.H., Thakor, M.M., Gladson, S.R., Fernandez\*, M.L., **Ivany**, L.C., Green, M., Sun, Y. (2022) Numerical analysis of flow over orthoconic structure inspired by *Spyroceras*. AIAA Aviation Forum, p. 1-12. https://doi.org/10.2514/6.2022-3331
- 62) Junium, C.K., Zerkle, A.L., Witts, J.D., **Ivany**, L.C., Yancey, T.E., Liu, C., and Claire, M.W. (2022) Massive perturbations to atmospheric sulfur in the aftermath of the Chicxulub impact. *PNAS*, v. 119, e2119194119. https://doi.org/10.1073/pnas.2119194119.
- 61) **Ivany, L.C.** and Judd, E.J. (2022) Deciphering temperature seasonality in Earth's ancient oceans. *Annual Reviews of Earth and Planetary Sciences*, v. 50, pp. 123-152. <a href="https://doi.org/10.1146/annurev-earth-032320-095156">https://doi.org/10.1146/annurev-earth-032320-095156</a> (*Invited*)
- 60) Wilkinson, B.H., Drummond, C.N., and **Ivany**, L.C. (2021) Dimensions of sedimentary lithotopes and taxonomies of fishes. Festschrift for Gerald R. Smith. Miscellaneous Publications of the Museum of Zoology, University of Michigan, No. 209(3), pp. 1-26. https://dx.doi.org/10.7302/3759
- 59) Wilkinson, B.H., **Ivany**, L.C., and Drummond, C.N. (2021) Estimating vertebrate biodiversity using the tempo of taxonomy A view from Hubbert's Peak. *Biological Journal of the Linnaean Society*, v. 134(2), p. 402-422. https://doi.org/10.1093/biolinnean/blab080.
- 58) Moss, D.K., **Ivany**, L.C., and Jones, D.S. (2021) Fossil bivalves and the sclerochronological reawakening. *Paleobiology*, v. 47(4), pp. 551-573. <a href="https://doi.org/10.1017/pab.2021.16">https://doi.org/10.1017/pab.2021.16</a>

- 57) Moon\*, L.R., Judd\*, E.J., Thomas, J., and **Ivany**, L.C. (2021) Out of the oven and into the fire: unexpected preservation of seasonal δ<sup>18</sup>O cycle following heating experiments on shell carbonate. *Palaeogeography Paleoclimatology Paleoecology*, v. 562. (corresponding author) <a href="https://doi.org/10.1016/j.palaeo.2020.110115">https://doi.org/10.1016/j.palaeo.2020.110115</a>
- 56) Das, S., Judd\*, E.J., Uveges, B.T., **Ivany**, L.C., and Junium, C.K. (2021) Variation in δ<sup>15</sup>N from shell-associated organic matter in bivalves: Implications for studies of modern and fossil ecosystems. *Palaeogeography Paleoclimatology Paleoecology*, v. 562. <a href="https://doi.org/10.1016/j.palaeo.2020.110076">https://doi.org/10.1016/j.palaeo.2020.110076</a>
- 55) Tierney, J.E., Poulsen, C. J., Montañez, I.P., Bhattacharya, T., Feng, R., Ford, H.L., Hönisch, B., Inglis, G.N., Petersen, S.V., Sagoo, N., Tabor, C.R., Thirumalai, K., Zhu, J., Burls, N.J., Goddéris, Y., Foster, G.L., Huber, B.T., Ivany, L.C., Turner, S. K., Lunt, D. J., McElwain, J.C., Mills, B., Otto-Bliesner, B., Ridgwell, A., and Zhang, Y.G. (2020) Past climates inform our future. *Science*, v. 370, eaay3701, https://doi.org/10.1126/science.aay3701.
- 54) Judd\*, E.J., Bhattacharya, T., **Ivany**, L.C. (2020) A dynamical framework for interpreting ancient sea surface temperatures. *Geophysical Research Letters*, v. 47, e2020GL089044, https://doi.org/10.1029/2020GL089044.
- 53) Saulsbury, J.G., Moss, D.K., **Ivany**, L.C., Kowalewski, M., Lindberg, D., Gillooly, J.F., Heim, N.A., McClain, C.R., Payne, J., Roopnarine, P.D., Schöne, B.R., Keating-Bitonti, C., Goodwin, D., Finnegan, S. (2019) Evaluating the influences of temperature, productivity, and evolutionary history on bivalve growth rates. *Paleobiology*, v. 45, pp. 405-420. https://doi.org/10.1017/pab.2019.20 (*Featured Article*)
- 52) Jimenez\*, M.Y., **Ivany**, L. C., Judd\*, E.J., and Henkes, G. (2019) Low and seasonally variable salinity in the Pennsylvanian equatorial Appalachian Basin. *Earth and Planetary Science Letters*, v. 519, pp. 182-191. DOI: 10.1016/j.epsl.2019.04.051
- 51) Judd\*, E.J., **Ivany**, L.C., DeConto, R.M., Halberstadt, A.R.W., Miklus\*, N.M., Junium, C.K., Uveges, B.T. (2019) Seasonally resolved proxy data from the Antarctic Peninsula support a heterogeneous middle Eocene Southern Ocean. *Paleoceanography and Paleoclimatology*, v. 34, pp. 787-799. DOI: 10.1029/2019PA003581
- 50) **Ivany**, L.C. and Czekanski-Moir, J. (2019) Macroevolution: Reined-in richness. *Nature Ecology and Evolution*, v. 3, pp. 520-521. DOI: 10.1038/s41559-019-0863-9.
- 49) **Ivany**, L.S., Pietsch, C., Handley, J.C., Lockwood, R., Allmon, W.D., and Sessa<sup>†</sup>, J.A. (2018) Little lasting impact of the Paleocene-Eocene thermal maximum on shallow marine molluscan faunas. *Science Advances*. v. 4, eaat5528. DOI: 10.1126/sciadv.aat5528 http://advances.sciencemag.org/content/4/9/eaat5528
- 48) Gilbert\*, K.N., **Ivany**, L.C., and Uhen, M.D. (2018) Living fast and dying young: Life history and ecology of a Neogene sperm whale. *Journal of Vertebrate Paleontology*, v. 38. DOI: 10.1080/02724634.2018.1439038.
- 47) Judd\*, E.J., Wilkinson, B.H., and **Ivany**, L.C. (2018) The life and time of clams: Derivation of intra-annual growth rates from high-resolution oxygen isotope profiles. *Palaeogeography, Palaeoclimatology, Palaeoecology,* v. 490, pp. 70-83. DOI: 10.1016/j.palaeo.2017.09.034.
- 46) Moss\*, D.K., **Ivany**, L.C., Silver, R.B., Schue\*, J., and Artruc\*, E.G. (2017) High latitude settings promote extreme longevity in fossil marine bivalves. *Paleobiology*, v. 43, pp. 365-382. DOI: 10.1017/pab.2017.5 (one of PB's top cited papers in the 5 years since publication)
- 45) Moss\*, D.K., **Ivany**, L.C., Judd\*, E.J., Cummings\*, P.W., Bearden\*, C.E., Kim\*, W.-J., Artruc\*, E.G., Driscoll\*, J.R. (2016) Lifespan, growth rate, and body size across latitude in marine Bivalvia, with implications for Phanerozoic evolution. *Proceedings of the Royal Society Series B*, v. 283, 20161364; DOI: 10.1098/rspb.2016.1364.

- 44) Beard\*, J.A., **Ivany, L.C.**, and Runnegar, B. (2015) Gradients in seasonality and seawater oxygen isotopic composition along the Early Permian Gondwanan Coast, SE Australia. *Earth and Planetary Science Letters*, v. 425, pp. 219-231. doi:10.1016/j.epsl.2015.06.004
- 43) Douglas, P.D., Affek, H.P., **Ivany, L.C.**, Houben, A.J., Sijp, W.P., Sluijs, A., Schouten, S. Pagani, M. (2014) Pronounced zonal heterogeneity in Eocene southern high-latitude sea surface temperatures. *Proceedings of the National Academy of Sciences USA*, v. 111, p. 6582-6587. DOI: 10.1073/pnas.1321441111
- 42) **Ivany, L.C**. (2012) Reconstructing paleoseasonality from accretionary skeletal carbonates: Challenges and opportunities. *In* L. C. **Ivany**, and B. T. Huber (eds.), *Reconstructing Earth's Deep-Time Climate*. Paleontological Society Papers, v. 18, pp. 133-165.
- 41) Sessa<sup>†</sup>, J.A., **Ivany, L.C.**, Schlossnagle\*, T., Samson, S.D., and Schellenberg, S.A. (2012) The fidelity of oxygen and strontium isotope values from shallow shelf settings: implications for temperature and age reconstructions. *Palaeogeography, Palaeoeclimatology*, *Palaeoecology* v. 342-343, pp. 27-39.
- 40) Sessa<sup>†</sup>, J.A., Bralower, T.J., Patzkowsky, M.E., Handley, J.C. and **Ivany, L.C**. (2012) Environmental and biological controls on the diversification and ecological reorganization of Late Cretaceous and early Paleogene marine ecosystems in the Gulf Coastal Plain. *Paleobiology* v. 38, pp. 218-239.
- 39) Wall\*, P.D., **Ivany, L.C.**, and Wilkinson, B.H. (2011) Impact of outcrop area on estimates of Phanerozoic terrestrial biodiversity trends. In A. McGowan and A.B. Smith (Eds.) *Comparing the Geological and Fossil Records: Implications for Biodiversity Studies*. Geological Society of London, Special Publication 358, p. 53-62.
- 38) **Ivany, L.C.**, Brey, T., Huber, M., Buick, D.P., and Schöne, B.R. (2011) El Niño in the Eocene greenhouse recorded by fossil bivalves and wood from Antarctica. *Geophysical Research Letters.* v. 38, L16709, doi:10.1029/2011GL048635.
- 37) Keating-Bitonti\*, C.R., **Ivany, L.C.**, Affek, H.P., Douglas, P., Samson, S.D. (2011) Warm, not super-hot, temperatures in the early Eocene subtropics. *Geology* v. 39, pp. 771-774.
- 36) Visaggi\*, C.C. and **Ivany, L.C.** (2010) The influence of data type and selection on interpretations of stability in Oligocene faunas of Mississippi. *Palaios* v. 25, pp. 769-779.
- 35) Ivany, L.C. and Runnegar, B. (2010) Early Permian seasonality from bivalve δ<sup>18</sup>O and implications for the oxygen isotopic composition of seawater. *Geology* v. 38, pp. 1027-1030.
- 34) Haveles\*, A.W., and **Ivany, L.C.** (2010) Rapid growth explains large size of mollusks in the Eocene Gosport Sand, US Gulf Coast. *Palaios* v. 25, pp. 550-564. <a href="https://doi.org/10.2110/palo.2009.p09-148r">https://doi.org/10.2110/palo.2009.p09-148r</a>
- 33) **Ivany, Linda C.**, Brett, Carlton E., Wall\*, Heather L.B., Wall\*, Patrick D., Handley, John C. (2009) Relative taxonomic and ecologic stability in Devonian marine faunas of New York State: A test of coordinated stasis. *Paleobiology*, v. 35, p. 499-524.
- 32) Brett, C.E., **L.C. Ivany**, A.J. Bartholomew, M.K. DeSantis, and G.C. Baird. (2009) Devonian ecological-evolutionary subunits in the Appalachian Basin: A revision and a test of persistence and discreteness. In Koenigshof, P. (ed.) Devonian Change: Case Studies in Palaeogeography and Palaeoecology. *Journal of the Geological Society of London*, Special Publication v. 314, p. 7-34.
- 31) Aronson, R.B., Moody, R.M., **Ivany, L.C.**, Blake, D.B., Werner, J.E., and Glass, A. (2009) Climate change and trophic response of the Antarctic bottom fauna. *PLoS One*, v. 4, e4385, doi: 10.1371/journal.pone.0004385.

- 30) Wall\*, Patrick D., **Ivany, Linda C**., and Wilkinson, Bruce H. (2009) Revisiting Raup: Exploring the influence of outcrop area on diversity in light of modern sample-standardization techniques. *Paleobiology*, v. 35, p. 149-170.
- 29) Allmon, W.D., Morris, P.J., **Ivany**, L.C. (2009) A tree grows in Queens: Stephen Jay Gould and ecology. In W.D. Allmon, P.H. Kelley, R.M. Ross (eds.) *Stephen Jay Gould: Reflections on His View of Life*. New York: Oxford University Press, pp. 147-170.
- 28) **Ivany, L.C.**, Lohmann, K.C, Blake, D.B., Hasiuk, F., Aronson, R.B., Glass, A., and Moody, R. (2008) Eocene climate record of a high southern latitude continental shelf: Seymour Island, Antarctica. *GSA Bulletin*, V. 120, no. 5/6, p. 659-678. https://doi.org/10.1130/B26269.1
- 27) Alroy, John, and the NCEAS Marine Inverteberate Working Group (2008) Phanerozoic trends in the global diversity of marine invertebrates. *Science*, v. 321, p. 97-100.
- 26) Ivany, L.C. 2007. Contributions to the Eocene climate record of the Antarctic Peninsula. in Antarctica: A Keystone in a Changing World Online Proceedings of the 10th International Symposium on Antarctic Earth Sciences X, edited by A. K. Cooper and C. R. Raymond et al., USGS Open-File Report 2007-1047, Extended Abstract 068, p. 1-4.
- 25) **Ivany, Linda C.,** Van Simaeys, Stefaan\*, Domack, Eugene W., Samson, Scott D. (2006) Evidence for an earliest Oligocene ice sheet on the Antarctic Peninsula. *Geology*, v. 34, p. 377-380.
- 24) **Ivany, Linda C.,** Blake, Daniel B., Lohmann, Kyger C, Aronson, Richard B. (2004) Eocene cooling recorded in the chemistry of La Meseta Formation mollusks, Seymour Island, Antarctic Peninsula. GeoSur 2004 International Symposium on the Geology and Geophysics of the Southernmost Andes, the Scotia Arc and the Antarctic Peninsula. Bollettino di Geofisica, v. 45, supplement 2, pp. 242-245.
- 23) De Man\*, Ellen M., **Ivany, Linda C**., and Vandenberghe, Noël (2004) Stable oxygen isotope record of the Eocene-Oligocene transition in the southern North Sea Basin: positioning the Oi1-event. *The Netherlands Journal of Geosciences*, v. 83, pp 193-197.
- 22) Buick\*, Devin P. and **Ivany**, **Linda C.** (2004) 100 years in the dark: extreme longevity of Eocene bivalves from Antarctica. *Geology*, v. 32, pp. 921-924. DOI:10.1130/G20796.1
- 21) **Ivany, Linda C.,** Peters, Stephen C., Wilkinson, Bruce H., Lohmann, Kyger C, Reimer\*, Beth A. (2004) Seawater Sr/Ca and Mg/Ca records from an Oligocene coral. *Geobiology*, v. 2, pp. 97-106.
- 20) Kobashi, Takuro, Grossman, Ethan L., Dockery, David T., and **Ivany, Linda C.** (2004) Watermass stability reconstructions from greenhouse (Eocene) to icehouse (Oligocene) for the northern Gulf Coast continental shelf (U.S.A.). *Paleoceanography*, v. 19, PA 1022, doi: 10.1029/2003PA000934 (16 pages).
- 19) **Ivany, Linda C.,** Wilkinson, Bruce W., Lohmann, Kyger C, Johnson, Emily R., McElroy, Brandon J., and Cohen\*, Gregory J. (2004) Intra-annual isotopic variation in *Venericardia* bivalves: Implications for early Eocene climate, seasonality, and salinity on the US Gulf Coast. *Journal of Sedimentary Research*, 74, pp. 7-19.
- 18) **Ivany, Linda C.,** Wilkinson, Bruce H., and Jones, Douglas S. (2003) Using stable isotopic data to resolve rate and duration of growth throughout ontogeny: an example from the surf clam, *Spisula solidissima*. *Palaios* 18, pp. 126-137.
- 17) Ivany, Linda C., Lohmann, Kyger C, and Patterson, William P. (2003) Paleogene temperature history of the US Gulf Coastal Plain inferred from fossil otoliths. In Prothero, D., Ivany, L.C., and Nesbitt, E. (eds) From Greenhouse to Icehouse: The Marine Eocene-Oligocene Transition. New York: Columbia University Press, pp. 232-251
- 16) **Ivany, Linda C.**, Nesbitt, Elizabeth A., and Prothero, Donald R. (2003) The marine Eocene-Oligocene transition: a synthesis. In Prothero, D.R., Ivany, L.C., and Nesbitt,

- E.A. (eds) *From Greenhouse to Icehouse: The Marine Eocene-Oligocene Transition*. New York: Columbia University Press, pp. 522-534.
- 15) Wilkinson, Bruce H. and **Ivany, Linda C.** (2002) Paleoclimatic inference from stable isotopic compositions of accretionary biogenic hardparts a quantitative approach to the evaluation of incomplete data. *Palaeogeography, Palaeoclimatology, Palaeoecology,* 185, pp. 95-114. https://doi.org/10.1016/S0031-0182(02)00279-1
- 14) Bonuso, Nicole B., Newton, Cathryn R., Brower, James C., and **Ivany, Linda C.** (2002) Does coordinated stasis yield taxonomic and ecologic stability? Middle Devonian Hamilton Group of Central New York State. *Geology* 30, pp. 1055-1058.
- 13) Bonuso, Nicole B., Newton, Cathryn R., Brower, James C., and **Ivany, Linda C.** (2002) Statistical testing of community patterns: Uppermost Hamilton Group, Middle Devonian (New York State, U.S.A.). *Palaeogeography, Palaeoclimatology, Palaeoecology*, 185, pp.1-24.
- 12) Walker, Luke J., Wilkinson, Bruce H., and **Ivany, Linda C.** (2002) Continental drift and Phanerozoic carbonate accumulation in shallow shelf and deep marine settings. *Journal of Geology* 110, pp 75-87.
- 11) Alroy, John, and the NCEAS Phanerozoic Diversity Working Group (2001) Effects of sampling standardization on estimates of Phanerozoic marine diversification.

  Proceedings of the National Academy of Sciences USA, 98(11), pp. 6261-6266.
- 10) **Ivany, Linda C.**, Patterson, William P., and Lohmann, Kyger C (2000) Cooler winters as a possible cause of mass extinctions at the Eocene-Oligocene boundary. *Nature*, 407, pp. 887-890.
- 9) **Ivany, Linda C.** (1999) So...now what? Thoughts and ruminations about coordinated stasis. *Palaios*, 14(4), pp. 297-300.
- 8) **Ivany, Linda C.** (1998) Sequence stratigraphy of the middle Eocene Claiborne Stage, US Gulf Coastal Plain. *Southeastern Geology*, 38(1), pp. 1-20.
- 7) Schopf, Kenneth M. & **Ivany, Linda C.** (1998) Scaling the ecosystem: a hierarchical view of stasis and change, *in* McKinney, Michael L. and Drake, James A. (eds) *Biodiversity Dynamics: Turnover of Populations, Taxa, and Communities*. Columbia University Press, New York, pp. 187-211.
- 6) **Ivany, Linda C.** (1996) Coordinated stasis or coordinated turnover? Exploring intrinsic versus extrinsic controls on pattern. *Palaeogeography, Palaeoclimatology, Palaeoecology,* Volume 127(1-4), pp. 239-256.
- 5) Brett, Carlton E., **Ivany, Linda C.**, & Schopf, Kenneth M. (1996) Coordinated stasis in marine communities: an overview. *Palaeogeography, Palaeoclimatology, Palaeoecology*, Volume 127(1-4), pp. 1-20.
- 4) Morris, Paul J., **Ivany, Linda C.**, Schopf, Kenneth M., & Brett, Carlton E. (1995) The challenge of paleoecological stasis: Reassessing sources of evolutionary stability. *Proceedings of the National Academy of Sciences USA*, Volume 92, no. 24, pp. 11269-11273.
- 3) **Ivany, Linda C.**, Newton, Cathryn R., & Mullins, Henry T. (1994) Benthic invertebrates of a modern carbonate ramp: a preliminary survey. *Journal of Paleontology*, Volume 68, pp. 417-433.
- 2) **Ivany, Linda C.** & Salawitch, Ross J. (1993) Carbon isotopic evidence for biomass burning at the K-T boundary. *Geology*, Volume 21, pp. 487-490.
- 1) **Ivany, Linda C.**, Portell, Roger W., & Jones, Douglas S. (1990) Animal-plant relationships and paleobiogeography of an Eocene seagrass community from Florida. *Palaios*, Volume 5, pp. 244-258.

# Other Publications (non-reviewed articles, reviews, and comment/reply)

- Saulsbury, J.G., Moss, D.K., **Ivany**, L.C., Kowalewski, M., Lindberg, D., Gillooly, J.F., Heim, N.A., McClain, C.R., Payne, J., Roopnarine, P.D., Schöne, B.R., Keating-Bitonti, C., Goodwin, D., Finnegan, S. (2020) Idiographic and nomothetic approaches to heterogeneity are complementary: Response to comments on "Evaluating the influences of temperature, primary production, and evolutionary history on bivalve growth rates". *Paleobiology* v. 46, pp. 275-277.
- Ver Straeten, C., Brett, C., Baird, G., Boyer, B., Lindemann, R., **Ivany**, L., Over, D., and Witzke, B. (2019) Drowning the shallow-water model for Middle and Upper Devonian black shales, New York State. Comment on Smith, L.B., Schieber, J., and Wilson, R.D. (2019) Shallow-water onlap model of the deposition of Devonian black shales in New York, USA. *Geology*. https://doi.org/10.1130/G46928C.1
- **Ivany**, Linda C., Ausich, William I., and Baumiller, Tomasz K. (2018) Memorial A fond farewell to James C. Brower (1934-2018). Journal of Paleontology. v. 92, p. 938-941.
- Allmon, W.D. and **Ivany, L.C.** (2008) Testing for causal relationships between environmental and evolutionary change in the marine Paleogene of the US Gulf Coastal Plain: The nature of the problem. Transactions of the Gulf Coast Association of Geological Societies, v. 58, p. 25-44.
- Wall\*, H.L.B. and **Ivany, L.C.** (2008) Ecospace utilization in high-diversity shallow shelf marine communities of the U.S. Gulf Coastal Plain. Transactions of the Gulf Coast Association of Geological Societies, v. 58, p. 895-900.
- Haveles\*, A. and **Ivany, L.C.** (2008) Rapid growth of mollusks in the Eocene Gosport Sand, US Gulf Coast. Transactions of the Gulf Coast Association of Geological Societies, v. 58, p. 343-353.
- **Ivany, Linda C.**, Blake, Daniel B., Aronson, Richard B., and Lohmann, Kyger C (2004) Studying the effects of global cooling on Antarctic marine ecosystems. *American Paleontologist*, v. 12, pp.18-21.
- **Ivany, Linda C.** (2002) Review of Palaeobiology II, by Derek E. G. Brigss and Peter R. Crowther (Editors), from Blackwell Science Ltd. In 2001. *American Paleontologist*.
- Prothero, Donald, **Ivany, Linda C.**, and Nesbitt, Elizabeth (2000) The marine Eocene-Oligocene transition Penrose Conference report. *GSA Today*, 10(7), pp 10-11.
- Schopf, Kenneth M. & Ivany, Linda C. (1997) "Long term faunal stasis without evolutionary coordination: Jurassic benthic marine paleocommunities, Western Interior, United States" Comment. *Geology*, 25(5), p. 473.
- **Ivany, Linda C.** & Salawitch, Ross J. (1993) Carbon isotopic evidence for biomass burning at the K-T boundary Comment and Reply. *Geology*, Volume 21, pp. 1149-1151.

# **Edited Volumes**

- Prothero, D., **Ivany**, L.C., Lieberman, B., Kelley, P., and Yacobucci, M.M. (Editors) 'Punctuated Equilibria 50 Years Later'; special issue of *Paleobiology*. Anticipated release in 2025.
- **Ivany, L.C.** and Huber, B. (Editors) (2012) *Reconstructing Earth's Deep-Time Climate*. Short Course for the Paleontological Society at the 2012 Geological Society of America meeting. Paleontological Society Papers, v. 18, 262 p.

Prothero, Donald, **Ivany, L.C.**, and Nesbitt, Elizabeth (Editors) (2003) *From Greenhouse to Icehouse: The Marine Eocene-Oligocene Transition*. New York: Columbia University Press, 541 p.

**Ivany, Linda C.** & Schopf, Kenneth M. (Editors) (1996) "New perspectives on faunal stability in the fossil record", a special issue of *Palaeogeography, Palaeoclimatology, Palaeoecology*, Volume 127, no. 1-4.

## Published Abstracts and Invited Lectures are listed at the end of this document

## **Honors and Awards**

Fellow of the Paleontological Society, 2015

Fellow of the Geological Society of America, 2015

Outstanding Educator Award, Association for Women Geoscientists, 2023

Excellence in Graduate Education Faculty Recognition Award, 2019

Writing Across the Curriculum Faculty Fellow, 2018

2010 Honorary Award for Distinguished Achievement in the Field of Earth Sciences, American Federation of Mineralogical Societies, Eastern Federation (comes with the privilege of selecting 2 SU graduate students to receive \$4000 research awards each from the AFMS Scholarship Foundation)

Antarctic Service Medal of the United States of America, 2005

Honorable Mention, Best Paper Award, Journal of Sedimentary Research, 2004

Michigan Society of Fellows Postdoctoral Scholar, 1997-2000

National Science Foundation Postdoctoral Research Fellow, 1997-1999

Miller Postdoctoral Fellowship, UC Berkeley, declined 1997

American Fellow, American Association of University Women, 1995-1996

Certificate of Distinction in Teaching, Spring 1992, Fall 1992, Spring 1993

Honorable Mention, Outstanding Paper of 1990, Palaios, 1991

Syracuse University Scholar (equivalent of valedictorian), May 1988

Phi Beta Kappa

Phi Kappa Phi

## Recognition

Research and career profiled in PRI Women in Paleo online and physical exhibit: https://www.museumoftheearth.org/daring-to-dig/bio/ivany

Wilkinson Ivany and Drummond (2021) was among the most viewed papers in the journal in the months following publication; picked up by a number of news sites

Judd et al. (2020) was among the top 10% of papers downloaded from the journal in 2020 Ivany and Artruc (2020) GSA talk was featured by *New Scientist* and picked up by multiple sites. <a href="https://www.newscientist.com/article/2258764-squid-like-creature-that-looked-like-a-giant-paperclip-lived-200-years/">https://www.newscientist.com/article/2258764-squid-like-creature-that-looked-like-a-giant-paperclip-lived-200-years/</a>

Ivany et al. (2018) featured in *Popular Science* – "An ancient era of global warming could hint at our scorching future", by Riley Black. Aug 16 2021 <a href="https://www.popsci.com/environment/petm-climate-change/">https://www.popsci.com/environment/petm-climate-change/</a>

- Featured in Harvard University's Department of Earth and Planetary Science Alumni
  Magazine: "Quintet of EPS Alumni Combat Climate Change from Upstate New York"
  2019
- Invited participant, workshop on the Paleocene-Eocene Thermal Maximum, UC Santa Cruz, September 2019
- Invited participant, workshop on the Future of Past Climate, Aspen Global Change Institute, Aspen CO, May 2019
- Interviewed on site at the Smithsonian Institution for PBS Nova documentary called "Polar Extremes", Windfall Films Ltd., related to research in Antarctica, 2018
- Guest appearances in "Speaking Evolution", an hour-long PBS documentary airing on Alabama Public Television Nov 6 2017 with the potential for national PBS broadcast.
- Quoted in LiveScience <a href="https://www.livescience.com/60004-what-if-sun-blocked-years.html">https://www.livescience.com/60004-what-if-sun-blocked-years.html</a>, Aug 1, 2017
- Douglas et al. (2014) discussed on a number of web sites and in the Syracuse Post Standard Work profiled in the College of Arts and Sciences magazine "The science behind our changing climate", by Judy Holmes, Fall 2012
- Ivany et al. (2011) featured in many science online news sites, including Nature, Discover, Spiegel Online, US News and World Report; in print in *Nature* v. 477, no. 373, doi:10.1038/477373c
- Profiled on The Paleontology Portal web site:
  - http://www.paleoportal.org/index.php?globalnav=paleopeople&interview\_id=9
- Figure from Ivany et al. (2009) featured in textbook on Stratigraphic Paleobiology by Mark Patzkowsky and Steve Holland, U of Chicago Press
- Buick and Ivany (2004) featured in Science and assorted online news sites
- Ivany et al. (2000) was featured in an accompanying "News and Views" article in *Nature*, and featured in *Science News, New Scientist, Newsday,* and a variety of online news sites including *National Geographic, The New York Times*, MSNBC, and *Discovery*
- Ivany et al. (2000) featured in the textbooks *Environmental Geochemistry*, by Nelson Eby (2003, Prentice-Hall, pp. 266-267), and *Principles of Paleontology*, by Michael Foote and Arnold Miller (2007, W.H. Freeman and Co., pp. 278-279)
- Ivany and Salawitch (1993) was written up in *Science News* and *New Scientist*, and featured as one of the "Top 50 Science Stories of 1993" in *Discover* magazine

# **Courses Taught**

#### Syracuse University

- History of Earth and Life: EAR 210, introductory course with laboratory for majors annual (2011-2017; 2019-)
- Earth Science: EAR 105, large introductory course for non-majors annual or twice annual (2001-2009, 2016)
- Introduction to Paleobiology: EAR 325, upper level course with laboratory for majors annual
- Mass Extinctions Perspectives from the Past, Lessons for the Future: upper division seminar-style class (2021)
- Topics in Paleobiology: EAR 429/629, graduate seminar in paleobiology; past topics have included Evolution of the Vertebrates, Extinctions Past and Present, Stable Isotope Paleobiology, Paleozoic Macroevolution, Evolutionary Paleoecology, The Writings of Stephen Jay Gould, Greenhouse Paleoclimates; biennial

- Geochemical Patterns in the History of Earth and Life: EAR 455/655, upper level course for majors and graduate students team-taught, as requested
- Foundations of Geoscience: EAR 600 1-credit team-taught seminar course required of new graduate students in Earth and Environmental Sciences (2021-2022)
- PaleoX: EAR 600 graduate seminar-style discussion about ongoing research in paleoclimate and paleontology offered every semester since 2019, rotated among faculty

Paleoecology: EAR 624, graduate course – as requested

First-Year Forum: CAS 101, seminar course with freshman to orient them in the college

#### Other Schools

- Field Methods in the Geological Sciences: University of Missouri-Columbia, 2004-2009, field geology taught in the Wind River Mts and Basin in Wyoming; fulfills field course requirement for majors in most US Earth Science departments
- *Proxies for Paleoclimate Change:* Geological Sciences 531, University of Michigan, 2000, seminar for graduate students on pre-Quaternary climate records
- Dinosaur Extinction and Other Controversies: Geological Sciences 150, University of Michigan, 1999, introductory freshman seminar in paleobiology and earth history
- Marine Awareness Research Expedition, *Mariners* and *Voyagers* Programs, Franklin Pierce College, summers 1996-1999; geology and natural history of the Gulf of Maine taught on board the schooner *Harvey Gamage*; introductory course
- Marine Awareness Research Expedition, *Teachers Program*, Franklin Pierce College, summer 1997; geology and natural history of the Gulf of Maine taught from sea kayaks in Acadia National Park; K-12 teachers

#### **Informal Education**

- Collaborative learning in 'Drawing Nature' course (ARI 233 Prof. Susan D'Amato) in the School of Art and Design <a href="https://thecollege.syr.edu/news-all/news-2023/through-as-vpa-collaboration-syracuse-university-students-gain-unique-opportunity-to-draw-modern-and-ancient-lifeforms/">https://thecollege.syr.edu/news-all/news-2023/through-as-vpa-collaboration-syracuse-university-students-gain-unique-opportunity-to-draw-modern-and-ancient-lifeforms/</a>
- Co-leader of Department field trip to Newfoundland, summer 2023; 10 days
- Participant on and contributor to Department field trips to the Canadian Rockies (2019; 7 days) and Iceland (2021; 10 days)
- Short course on Stable Isotope Paleobiology for students from SU, Cornell, and visiting scientists; December 2007
- Co-leader of a 2-week geological field trip to the Colorado Plateau, including the Grand Canyon and other national parks, for 20-30 students in the Dept. of Earth Sciences 2008
- Received \$6250 grant in co-curricular funds from the College of Arts and Sciences to support the Colorado Plateau trip; 2012.
- Co-leader of 3-day CNY Paleo field trip to eastern NY, October 2015, 2017 (24 students and faculty from SU, SUNY Cortland, Hamilton College, OCC, SUNY Oswego, and Hobart & William Smith Colleges, NY State Museum)
- Co-leader of 2-day CNY Paleo field trip to NY's Southern Tier, September 23-24, 2017 (26 students and faculty from SU, SUNY-Cortland, Binghamton University, SUNY-Geneseo, Paleontological Research Institution, NY State Museum)

## **Student Research Supervision**

#### Ph.D. Candidates - Primary Advisor

- Daniel Phillipi (begin 2018) "Evaluating bias in Phanerozoic diversity from paleogeography and outcrop area"
- Corey Hensen expected 2024, "The ecological response to environmental change on a Middle Eocene shallow shelf, Eastern Gulf Coastal Plain, US (Cornell University, Earth and Atmospheric Sciences; co-advisor with Warren Allmon)
- Emily Judd "Antarctic seasonality in a greenhouse earth: a high-resolution record of changes in Eocene temperature and precipitation" (2020) Chancellor's Citation Award for Excellence in Student Research Smithsonian Institution Postdoctoral Scholar
- David Moss "Evolution of extreme longevity in bivalves" (2016) awarded the *All-University Doctoral Prize* Assistant Professor at Sam Houston State University (https://www.shsu.edu/academics/geography-geology/people/moss.html)
- Patrick Wall "Incorporating spatial datasets into paleontology: Effects on estimates of diversity, origination, & extinction." (2009) SU Dissertation Fellow Exxon-Mobil
- Heather Wall "Molluscan diversity dynamics at the middle-late Eocene boundary in the U.S. Gulf Coastal Plain: faunal response to global climate change?" (MPhil in 2012)
- Ellen De Man "Foraminifer biofacies and stable isotope analyses as paleoproxies for Oligocene environments, southern North Sea Basin" (University of Leuven, Belgium) (2006) (Co-supervisor with Noel Vandenberghe) Exxon-Mobil

## Master of Science Candidates - Primary Advisor

- Siddharth Gavirneni (expected 2024) "Metabolism in a changing ocean: Extinction selectivity during hyperthermal events in the fossil record"
- Josh Owens (did not finish) "Oxygen isotope values of Devonian Hamilton Group brachiopods" (Ward's Scientific, Rochester NY)
- Jessie McCraw (2020) "Modeling intra-annual modes of coral extension rate using multiproxy geochemical records from a Little Ice Age Galapagos coral" (PhD in progress U of Alabama)
- Marie Jimenez (2108) "Seasonally resolved primary aragonite profiles from the Pennsylvanian Appalachian Basin" (science teacher, Thayer Academy, Braintree MA prestigious college preparatory school)
- Daren McGregor (did not finish) "Paleoseasonality along a late Cretaceous latitudinal gradient" (Trafigura, Geneva Switzerland, commodities trader for North Sea oil)
- Andrew Beard "Regional variation in seasonal oxygen isotope values of Permian bivalves from Southeastern Australia" (2012) (PhD in progress, U of Connecticut)
- Kwasi Gilbert "Life history and ecology of the Neogene sperm whale *Physeterula dubusii* from the Atlantic Coastal Plain" (2011) *NSF Dissertation Fellow* (began PhD research, UC Santa Cruz)
- Andrew Haveles "Rapid growth explains large size of mollusks in the Eocene Gosport Sand, US Gulf Coast" (2009) (PhD, U of Minnesota; SERC and faculty member at Univ. Wisconsin River Falls)
- Nicole Miklus "The high-latitude response of temperature seasonality to global Eocene cooling" (2008) (currently science writer for Johns Hopkins University's Chemical Propulsion Information Analysis Center, <a href="http://cpiac.jhu.edu/">http://cpiac.jhu.edu/</a>, as managing editor for the JANNAF Journal of Propulsion and Energetics)
- Christy Visaggi "Testing for Patterns of Faunal Persistence in the Byram Formation (early Oligocene) of Mississippi" (2004) (PhD 2012 UNC Wilmington; Senior Lecturer in Geosciences and Undergraduate Program Director at Georgia State University; 2022 winner of the Biggs Award for Earth Science Teaching from the Geological Society of

- America; 2022 winner of the Dorothy Stout Lecture Award for Education and Outreach from the American Geophysical Union; president of the National Association of Geoscience Teachers 2022)
- Christina Hartman "High Resolution Stable Isotope Paleoclimatology of the Jurassic Great Estuarine Group" (2004) (K-12 educator)
- Laura Stafford "Census populations of early Eocene *Venericardia hatcheplata* (Bivalvia) from the US Gulf Coast" (2003) (free-lance science writer)

# **Thesis Committee Member for the following candidates:** Ph.D.

Andrew Moura – begin Fall 2022, Department of Biology (Adv. Austin Garner)

Adrian Castillo – begin Fall 2022 (SUNY-ESF, Adv. Karin Limburg)

- Heather Gunn begin Fall 2021 "Nutrient cycling dynamics in modern and near-past estuary and aquatic systems using bivalve shells"
- Julia Zeh expected 2024, Department of Biology (Adv. Susan Parks)
- Jesse Czekanski Moir expected 2024, "Patterns and processes of species richness" (SUNY-ESF, Environmental and Forest Biology, Adv. Rebecca Rundell)
- Katherina Searing expected 2024, "Climate change drives morphological shifts in North American mammals" (SUNY-ESF, Environmental and Forest Biology, Adv. Mark Lomolino)
- Peter Brennan 2023; "Paleoclimate and historical perspectives on warming impacts on North Pacific ocean surface temperatures and western US hydroclimate"; and Chair of Qualifying Exam
- Ruliang He 2022 "Studying redox conditions of Devonian and Neoproterozoic oceans using I/Ca proxy from bulk carbonate rocks"; and Chair of Qualifying Exam
- Shibajyoti Das 2022 "Stable carbon and nitrogen isotopes of shell bound organic matter, implications for modern and ancient food web dynamics"
- Justin King 2021, Chair of PhD Defense, "The influence of trailing edge shape and kinematics on bio-inspired pitching panels", Mechanical and Aerospace Engineering
- David Bullis 2020 "Molecular phylogenetics and conservation of the punctoid land snails of Palau and the systematics of land snails in Burmese amber (SUNY-ESF, Environmental and Forest Biology; examining committee)
- Saurav Dutta 2020 "Response of shallow marine bivalve fauna to climatic and tectonic shifts: Insights from Oligocene–early Miocene shellbeds of the Kutch basin, India" (Indian Institute of Science Education and Research (IISER) Kolkata; external reviewer)
- Wanyi Lu "Earth's oceanic oxygen history from Phanerozoic to Pleistocene glacial cycles: insights from the carbonate iodine-to-calcium proxy" (May 2020)
- Niels de Winter "How does Earth's climate and environment respond to the seasonal cycle now and in the past?" (Vrije Universiteit Brussel, Jury member, 2019)
- Stoney Gan "Seeking proxy signals of climatic rhythms in the sediment profile from the Lake Bosumtwi, Ghana, West Africa" (2019)
- Brendan Anderson "Stable isotopic investigation of turritelline-dominated assemblages" (Cornell University, Adv. Warren Allmon) (2018)
- Sarah Kolbe "Regional morphological variation in venerid and arcid bivalves: dissection along onshore-offshore gradients in the southeastern Gulf Coastal Plain" (University of Cincinnati) (external committee member; 2011)
- Bryan Sell "Tephrachronology and correlation of late Ordovician K-bentonites in eastern North America" (2010)
- Jocelyn Sessa "The Diversity, Ecology, Climate, and Preservation of Marine Communities in the Twenty Million Years Following the End Cretaceous Mass Extinction" (The Pennsylvania State University) (external committee member; 2009)

- Chad Ferguson "Stratigraphic resolution in the fossil record: Using subfossil assemblages as a model for understanding past faunal and environmental changes" (University of Cincinnati) (external committee member; 2009)
- Adam Stein "Plumage evolution in bearded manakins (*Manacus spps.*)" (Dept. of Biology, 2009); Chair of Defense
- Kenneth Sagendorf "Background experiences, time allocation, time on teaching and perceived support of early-career college science faculty" (Dept. of Science Teaching, 2007)
- Lan (Simone) Li "Disparity averaging mechanisms in stereopsis" (Dept. of Biomedical and Chemical Engineering, 2007); Chair of Defense
- Adam Bjork "Postcopulatory sexual selection in *Drosophila*" (Dept. of Biology, 2006); Chair of Defense
- Martin Otz "Using spectro-fluorometry and fluorescent dye-tracing to investigate hydrologic processes in organic-rich environments" (2005)
- Jeff McKenzie "Wetland geochemical and thermal processes at the watershed scale" (2005)
- Daan Vanhove "Geochemical proxies for paleoclimate in the Eocene record of the North Sea basin" (University of Leuven, Belgium) (expected TBA)
- Katherina Bendz Searing "The effects of recent climate change on body size evolution in small mammals" (SUNY-ESF, Environmental and Forest Biology; expected TBA)

#### M.S.

- Martin Welych-Flanagan begin Fall 2023 "Middle Devonian stratigraphy and faunas of the Illinois Basin in Indiana and Ohio" (Univ of Cincinnati, Adv. Carlton Brett)
- Vicky Wang "Stable isotope records in dolomites of the Franceville Basin, Republic of Gabon: Shifting oxidation states in the Paleoproterozoic and the co-evolution of early life and ocean chemistry" (did not finish)
- Kara Dennis "Using the sulfur cycle to constrain rapid changes in seawater chemistry during the Paleogene" (2015)
- Allison Burnett "Abrupt climatic events observed in organic-rich sediments from Lake Tanganyika, tropical East Africa, over the past 60+ kyr" (2008); Chair of Defense
- Nicole Bonuso "Statistical testing of community patterns: uppermost Hamilton Group, Devonian (New York State: USA)" (2000)
- Peter Kaplan "Taphonomic inferences on boring habit in the Richmondian *Onniella meeki* epibole" (1999) (University of Michigan)

## **Undergraduate Research**

- Martin Fernandez "Ecological and evolutionary morphology of the Devonian cephalopod Spyroceras" – 2021-24 SOURCE funded
- Benjamin Weinzapfel "Evaluating the lifespans of *Arctica islandica* fossil specimens from the Tjornes beds of Iceland" Honors Thesis; SOURCE funded; 2022-23
- Aysia Cobb "Life history and ecology of the Eocene oyster *Cubitostrea*" SOURCE funded, 2022-23
- Kevin D'Aniello contributed to several ongoing projects; aided with curation and return of borrowed fossil materials (2022)
- Bella Duati "Climate in the Pliocene a Window on our Future" SOURCE funded, coadvised with Tripti Bhattacharya – SEA Grant internship in summer 2021, Sea Semester in Fall 2021
- Lindsay Moon "Effects of drill speed on stable isotope values of shell carbonate" and "Effect of heating on preservation of seasonal cycles in δ<sup>18</sup>O of shell carbonate" published as Moon\*, L.R., Judd\*, E.J., Thomas, J., and Ivany, L.C. (2021) Out of the oven and into

- the fire: unexpected preservation of seasonal  $\delta^{18}O$  cycle following heating experiments on shell carbonate. *Palaeogeography Paleoclimatology Paleoecology*, v. 562. https://doi.org/10.1016/j.palaeo.2020.110115
- Alex MacKnight (2020) scanning electron microscopy of fossil mollusk shells; contributed to Moon et al. 2021
- Emily Artruc (SUNY-ESF) "Measuring growth rate of the heteromorph ammonite *Diplomoceras maximum* using stable isotopes of accretionary shell carbonate" Honors thesis 2015; contributor to Moss et al. 2016
- Claire Bearden "Meridional gradient in seasonality during the mid-Pliocene warm period" (2016); contributor to Moss et al. 2016
- Woo-Jun Kim 2015; contributor to Moss et al. 2016 and MS research by Daren McGregor Patrick Cummings "Stable isotope values of Devonian brachiopod shells"; contributor to Moss et al. 2016
- Steven Harris contributor to PhD and other research by David Moss (2014-2016)
- Jeremy Driscoll (SUNY-ESF) management and organization of the Squires Collection of modern mollusks according to phylogenetic affiliations (2014)
- Zoe Schapira contributed to my stable isotope work (2014)
- Lauren Williamson (Colorado College, 2014) "How latitude relates to lifespan in Pliocene *Glycymeris americana* from the Atlantic coastal plain"
- Madeline O'Connor (SUNY-ESF) "Effects of habitat loss and fragmentation on Holocene wetland plants, Miller Woods, Gary Indiana" (Honors thesis 2012)
- Trevor Schlossnagle (SUNY-ESF) contributor to Sessa et al. 2012 "The fidelity of oxygen and strontium isotope values from shallow shelf settings: implications for temperature and age reconstructions"
- Caitlin Keating-Bitonti "How warm was the early Eocene? Paleotemperature reconstructions for the US Gulf Coast from the shells of *Venericardia* (Bivalvia)", Senior Thesis, 2009; published as Keating-Bitonti\*, C.R., Ivany, L.C., Affek, H.P., Douglas, P., Samson, S.D. (2011) Warm, not super-hot, temperatures in the early Eocene subtropics. *Geology* v. 39, pp. 771-774. M.S. U of Wisconsin (2011), PhD Stanford Univ., NSF Graduate Fellow; Congressional Fellow
- Kwasi Gilbert "Life History and Paleoecology of Pliocene Sperm Whales from the Atlantic Coastal Plain", Senior Thesis, 2009 (McNair scholar)
- Erin Fenlon "Quantifying the morphology and reconstructing the phylogeny of venericard bivalves along the Gulf Coastal Plain during the Paleocene and Eocene" (College of William and Mary senior honors thesis, co-advised with Rowan Lockwood; 2007)
- Devin Buick "100 Years in the Dark: Extreme Longevity of Eocene Bivalves from Antarctica" 2002-2003; published as Buick, Devin P.\* and Ivany, Linda C. (2004) 100 years in the dark: extreme longevity of Eocene bivalves from Antarctica. *Geology.* PhD U of Cincinnati, post-doc at U of Hawaii
- Ethan Underwood "Relation between skeletal accretion rate and age in the bivalve *Spisula solidissima*" spring, fall 2004
- Alison Cattani "Comparison of life histories of two Eocene bivalves from Antarctica using high-resolution stable isotope data" fall 2003
- Meghan Hazer "Color banding in Eocene naticid gastropods from Seymour Island, Antarctic Peninsula" 2002-2003
- Greg Cohen, Matthew Heumann, and Matthew Streubert supervisor for independent study and research projects in isotope paleobiology, Spring 2001; published as Ivany, Linda C., Wilkinson, Bruce W., Lohmann, Kyger C, Johnson, Emily R.\*, McElroy, Brandon J.\*, and Cohen, Gregory J.\* (2004) Intra-annual isotopic variation in *Venericardia* bivalves: Implications for early Eocene climate, seasonality, and salinity on the US Gulf Coast. *Journal of Sedimentary Research*, 74, pp. 7-19.

- Mark Suchter, Sarah DeLong, Derek Grossman, Shaleena Kyser, Sarah Jacobsen research supervisor for students in the University of Michigan Undergraduate Research Opportunities Program, 1998-2000
- Beth Reimer (University of Mississippi) and Lisa Vosburgh (Colorado College) supervised summer research projects in geochemistry and paleobiology, summer 2000; published as Ivany, Linda C., Peters, Stephen C., Wilkinson, Bruce H., Lohmann, Kyger C, Reimer, Beth A.\* (2004) Seawater Sr/Ca and Mg/Ca records from an Oligocene coral. *Geobiology*, v. 2, pp. 97-106.

## **High-School Student Research Supervision**

- Martin Fernandez Jamesville-Dewitt High School (2019-2020) Hamilton Group fossil curation, research on *Spyroceras*
- Terry-Lee Bixby Liverpool High School, Liverpool NY spring semester science class project (2011)
- Philippa Stoddard The Winsor School, Boston MA intensive 6-week summer internship and independent research (2010) (went on to undergrad at Yale University)
- John Schue Liverpool High School, Liverpool NY spring semester science class and science fair project (2006); co-author on Moss et al. (2017)

#### Postdoctoral Scholar Supervision

- Lars Beierlein (2015) PhD Alfred Wegener Institute for Polar Research; funded through the IMCONet program for climate change in Western Antarctica; "Intrannual variation in Antarctic bivalve growth during the Eocene"
- Jocelyn Sessa (2009-2010) PhD Penn State; funded by NSF EAR-0719645 to Ivany "Collaborative Research: Exploring the Links among Climate, Ecology, and Evolution in Paleogene Marine Faunas of the U.S. Gulf Coastal Plain" (followed by postdoctoral positions at the Smithsonian Institution and the American Museum of Natural History; currently faculty member at Drexel University and Academy of Natural Sciences)

# Service to the Scientific Community

Paleontological Research Institution, Ithaca NY

Member, Board of Trustees, 2008-2014; 2020-present

Vice President, Board of Trustees, 2010-2012

President, Board of Trustees, 2012-2014

Member Emeritus. Board of Trustees. 2014-2020

Science Committee, PRI Board of Trustees, 2008-present

J. Thomas Dutro Student Award in Systematic Paleontology - Awards Committee Collections Subcommittee of the Science Committee, PRI Board of Trustees, 2016-present

Consultant on Climate and Energy Exhibit (online and permanent) – opened 2020 Consultant on Women in Paleontology Exhibit (online and temporary) – opened 2021 Keynote speaker, Summer Symposium 2014

#### Paleontological Society

Co-Editor, *Paleobiology* special issue: 'Punctuated Equilibria 50 Years Later', with D. Prothero, P. Kelley, M. Yacobucci, B. Lieberman

Medal Committee, 2017-2022

Committee on Fellows, 2016-2020

Led successful nominations for Drs. Sally Walker, Douglas Jones, and Carlos Jaramillo as PS Fellows

Letters of support for a number of candidates for various awards

Worked to raise \$15,500 to secure endowment for S.J. Gould student research grants, with P. Kelley, A. Raymond, M. Yacobucci, 2022

Councilor-at-Large Unrestricted, 2010-2012

Distinguished Lecturer, 2003-2005

Associate Editor, Paleobiology, Paleontological Society, 2011-2014

Co-Convenor of 2012 PS Short Course, *Reconstructing Earth's Deep-Time Climate – The State of the Art*, and accompanying edited volume, with Brian Huber.

Nominating Committee member, 2004-2007

Geological Society of America

Associate Editor, Geology, 2006-2010

Advocate, Topical Session T115 - "Punctuated Equilibrium – 50 Years Later" 2022
Annual Meeting; with Don Prothero, Peg Yacobucci, Tricia Kelley, and Bruce Lieberman

Co-Convenor of "Advances in Paleoclimatology and Paleoceanography" theme session at 2016 Annual Meeting

Co-Convener, 1999 Annual Meeting, Theme Session 41: "From Greenhouse to Icehouse: The Marine Eocene-Oligocene Transition", with Don Prothero and Elizabeth Nesbitt

Co-Convener, Penrose Conference "The Marine Eocene-Oligocene Transition", with Don Prothero and Elizabeth Nesbitt, August 16-21, 1999, at Evergreen State College in Olympia, WA.

Co-Convenor, 1994 Annual Meeting, Theme Session 38: "New Perspectives on Faunal Stability in the Fossil Record", with Kenneth M. Schopf

Letters of support for a number of candidates for Fellow and other awards

European Geosciences Union Session co-convenor 2023 BG5.2 – Biogeosciences,

<u>BG5 – Palaeobiogeosciences;</u> *Biotic responses to past hyperthermal events*; Co-Convenor, with Wolfgang Kiessling, Kenneth De Baets, Alex Dunhill, Linda Ivany, Carl Reddin

American Association for University Women

Fellowships & Grants Selection Panel - 2020-2021

American Geophysical Union

Session convenor: PP002 – "A high-temporal-resolution view of deep-time "greenhouse climates" – with Yige Zhang and Jiang Zhu (Fall 2021 meeting, both oral and poster) https://agu.confex.com/agu/fm21/prelim.cgi/Session/122421

URGE –Unlearning Racism in the Geosciences – member of the Northeast Faculty Pod -- <a href="https://urgeoscience.org/">https://urgeoscience.org/</a>

Invited participant, workshop on the Paleocene-Eocene Thermal Maximum, UC Santa Cruz, September 2019

Invited participant, workshop on *The Future of Past Climate*, Aspen Global Change Institute, Aspen CO, May 2019

Invited participant of a Smithsonian Institution workshop to derive a global paleotemperature curve for the Phanerozoic, March 30-31, 2018

One of 4 scientists invited to speak about paleoclimate change to science educators and the press – Smithsonian Institution 'Paleoclimate Day', March 29, 2018

Planning Committee Member, 4<sup>th</sup> International Sclerochronology Conference, Portland ME, 2016

Founder and Coordinator of *Central New York Paleontology*, group of paleontologists (students and faculty) from regional colleges and universities that meets 1-2 times every semester to discuss ongoing research

Invited participant in NSF-sponsored workshops on:

Paleobiology Database, January 2013

"Austral Portals: Plate Tectonics, Paleobiogeography and Paleogeography" 2010 Paleoecology, September 2008

Paleoclimate, May 2003, 2004; helped to write the report and organize the follow-up workshop for 2004

Paleoecology, 1998

Member, Paleobiology Database Marine Invertebrate Working Group, since inception Keynote Speaker, 3<sup>rd</sup> International Sclerochronology Conference, May 2013, Caernarfon, North Wales

Keynote Speaker, 5<sup>th</sup> International Sclerochronology Conference, June 2019, Split, Croatia Distinguished Lecturer, AAPG European Division, Fall 2012 (canceled due to administrative problems)

Union College Department of Geology External Review Committee member, 2016
Review Panel member, National Science Foundation Division of Earth Sciences, Antarctic
Earth Sciences, Sedimentary Geology and Paleobiology, Postdoctoral Fellows
External Reviewer, Promotion and Tenure packages for pre-tenure and Associate faculty

Associate Editor for Paleontology - Frontiers in Earth Sciences, Frontiers in Ecology and Evolution 2021-2022

Associate Editor, Geology 2006-2010

Editorial Advisory Board member, Geobiology, until 2011

Reviewer of manuscripts and books for Paleobiology, Geology, Science, Science Advances, Nature, Nature Geoscience, Nature Ecology and Evolution, Nature Communications, Proceedings of the National Academy of Sciences (PNAS), Palaios, Palaeogeography Palaeoclimatology Palaeoecology, Earth and Planetary Science Letters, G-Cubed, Paleoceanography and Paleoclimatology, Chemical Geology, The Holocene, Climate of the Past, Global and Planetary Change, Geochimica et Cosmochimica Acta, Rivista Italiana di Paleontologia e Stratigrafia, Newsletters on Stratigraphy, Bulletin of Marine Science, Estuarine Coastal and Shelf Science, Antarctic Science, Polar Biology, PalaeoWorld, Journal of Geology, Journal of Geophysical Research, Marine Micropaleontology, Journal of the Geological Society of London, Facies, Journal of Taphonomy, Biogeosciences, Geoscientific Model Development

Reviewer of book manuscripts for McGraw-Hill Publishers, University of Chicago Press, Blackwell Publishing, Wiley Publishing, Oxford University Press, Columbia University Press, CRC Press / Taylor and Francis Group

Reviewer of proposals for the National Science Foundation [Polar Programs, Sedimentary Geology and Paleobiology, Marine Geology and Geochemistry, Geoinformatics; Frontier Research in Earth Sciences (FRES)], American Chemical Society's Petroleum Research Fund, Belgian Science Policy Office, WOTRO (Foundation for Advancement of Tropical Research, Amsterdam), Netherlands Organisation for Scientific Research (NOW), VolkswagenStiftung, Natural Environment Research Council of the UK (NERC), The Leverhulme Trust

Co-Editor of Florida Paleontological Society Newsletter, with Daniel Bryant, 1989-1990

# Service to the University

## **Syracuse University**

Postdoc Lunch and Learn Mentoring Discussion, Office of Research, April 2024

SOURCE Mentor Panel for faculty, summer 2022

Outside mentor for Professor Austin Garner, Biology (2023-

Goldwater Scholar Selection Committee 2021, 2022

SOURCE proposal reviewer

CUSE proposal reviewer

Outstanding TA Award Selection Committee 2021

Faculty Focus Group for Online Lab Instruction – College of Arts and Sciences, Summer 2020

Led panel discussion about the film "Chasing Coral" Oct 15, 2020 – SU Sustainability and Dept. of Earth and Environmental Sciences

Led panel discussion on the film "Picture a Scientist" for the WiSE program – Dec 15, 2020

BIOINSPIRE SU senior personnel; Form and Function subgroup member

Search Committee Member, BIOINSPIRE position in Department of Biology, 2021

SEM 100 curriculum revisions committee, 2019

Panelist for the Reimagining Student Writing Series event "Writing Across the Curriculum: Developing Strategies to Teach Writing in the Disciplines" Nov 12, 2018

Promotion and Tenure Review Committee, College of Arts and Sciences, 2008-2009, 2010-2011, 2012-2013

Coordinator for Undergraduate Research, Women in Science and Engineering (WiSE) program, Colleges of Arts and Sciences and Engineering, 2008-2017

- Organize and oversee the competition for the Norma Slepecky Prize for Undergraduate Research and the accompanying annual Norma Slepecky Lecture

Lower Division (Freshman/Sophomore) Academic Advising, 2001, 2002, 2005, 2008, 2009, 2011

First-Year Forum instructor (2002, 2005, 2008, 2011, 2014, 2016)

LSAMP Advisory Board Member (2013-2017)

Selection Committee Member for ACC's Meeting of the Minds (M.O.M.) Conference for Undergraduate Research (2015, 2016)

Search Committee Member, Department of Science Teaching, 2009

Search Committee Member, Department of Physics (2 searches), 2008

Search Committee Member, Biology Department, Ecology and Evolution, 2005

Faculty Address, College of Arts and Sciences Convocation, Graduation 2007

Faculty Address, Phi Beta Kappa Induction Ceremony, 2006 Why Science Matters: Myth and Misconception in the Public Understanding of Science

Guest lecturer in a number of classes outside of EAR ranging from First-Year Forum to graduate seminars

Chancellor's Committee on the Environment Initiative, 2005-2007

Coronat Scholars Selection Committee, 2005-2006

Senior Thesis Review Committee, Syracuse University Honors Program, 2005

Planning Committee member for the Syracuse Symposium 2003

Organizing Committee to host Dr. Meave Leakey in March 2004

Contributing Member of WISE - Women in Science and Engineering

Member of faculty advisory committee to the Dean of the College of Arts and Sciences, Fall 2001

#### **University of Michigan**

Faculty Supervisor for students in the U of M Undergraduate Research Opportunities Program, 1998-2000

Selection Committee member for the University of Michigan Distinguished Dissertation Awards 1997-2000

Selection Committee member for the Michigan Society of Fellows, University of Michigan 1997-2000

#### **Harvard University**

GSAS Women's Group Steering Committee member, Graduate School of Arts and Sciences, Harvard University, 1994

Earth History and Paleobiology Lecture Series coordinator, Harvard University, 1991-1993

## Service to the Department of Earth Sciences, Syracuse University

Associate Chair (2019-2020; 2021- 2023)

Director of Undergraduate Studies (2011-2017)

Coordinator, Department of Earth Sciences *K. Douglas Nelson Lecture Series* (2002-2008, 2018-2020)

Honors Program departmental representative (2006-present)

Curriculum Committee member (2011-2017; 2021-2023)

Chair, Curriculum Committee (2008-2011; 2019-2020)

Executive Committee member (2012-2017, 2019-2023)

Justice Equity Diversity and Inclusion (JEDI) Committee – motivated and advocated for formation of department committee, helped draft mission and shared values statements

Faculty Mentoring and Review:

Departmental Promotion and Tenure Review Committee (2022-2024)

Chair, Promotion and Tenure Review Committee for Prof. Tripti Bhattacharya (2023)

Chair, Faculty Mentoring Committee for Prof. Tripti Bhattacharya

Chair, Faculty Mentoring Committee Prof. Chris Junium

Faculty Mentoring Committee for Prof. Melissa Chipman

Faculty Mentoring Committee for Prof. Greg Hoke

Faculty Mentoring Committee for Prof. Zunli Lu

Faculty Mentoring Committee for Prof. Rob Moucha

Faculty Mentoring Committee for Prof. Laura Lautz

Faculty Mentoring Committee for Prof. Connie Wehenmeyer

Chair, Third Year Review Committee for Prof. Chris Junium (2014)

Chair. Third Year Review Committee for Prof. Tripti Bhattacharva (2020)

Third Year Review Committee for Prof. Zunli Lu (2013)

Third Year Review Committee for Prof. Rob Moucha (2014)

Chair, Promotion and Tenure Review Committee for Prof. Chris Junium (2018)

Chair, Promotion and Tenure Review Committee for Prof. Laura Lautz (2011)

Chair, Promotion Review Committee for Prof. Zunli Lu (2020)

Promotion and Tenure Review Committee member for Prof. Rob Moucha (2016)

Promotion and Tenure Review Committee member for Prof. Zunli Lu (2016)

Promotion and Tenure Review Committee member for Prof. Greg Hoke (2014)

Promotion Review Committee for Prof. Greg Hoke (2021)

#### Faculty Development:

Search Committee Member, Climate Science (2017-2018)

Chair, Paleoclimate Search Committee (2010-2011)

Search Committee Member, Environmental Geoscience position, 2006

Search Committee Member, Stable Isotope Geochemistry position, 2003

Founder and co-organizer for PaleoX, a departmental research seminar for the paleoclimate group

Coordinator for the Department's preparations for the Middle States Assessment related to undergraduate degree programs (2016-2019)

Revision of folios on degree programs in Earth Sciences and the Energy ILM

Revision of undergraduate and graduate degree programs in Earth and Environmental Sciences (2020-2021)

Host of many visiting lecturers in the *K. Douglas Nelson Lecture Series* Contributed to writing the self-study document for External Review in 2009 Faculty Advisor for GeoClub, the student-run geology club (2008-2010)

## Service/Outreach to the Community

Host, teach, and arrange logistics for a group of high school senior girls from the Winsor School, Boston MA, for 2 days of science in the field and on SU campus with women earth scientists – October 2019, October 2023

All-day, on-campus workshop at the Winsor School, Boston MA, for high school girls about paleontology – April 8, 2022

Guest visit/lectures for sophomore BIO class (~90 students) in Oregon Charter Academy – March 30 2021, February 22 2022, Feb 23 2023, Feb 22 2024

Talk for Illinois geology club - 1/16/21

Met with 2<sup>nd</sup> graders in Jana Silvestro's class from C. Grant Grimshaw Elementary School in Lafayette - Dec 9 2021 – to discuss fossils and the coral reef discovery

PRI Women in Paleontology exhibit:

contributor <a href="https://www.museumoftheearth.org/daring-to-dig">https://www.museumoftheearth.org/daring-to-dig</a>

profiled in: https://www.museumoftheearth.org/daring-to-dig/bio/ivany

Daring to Dig panel discussion on Women in Paleo livestreamed on WSKG Public Media Oct 26 2021 <a href="https://www.youtube.com/watch?v=igvsh2Fbayg">https://www.youtube.com/watch?v=igvsh2Fbayg</a>

Press coverage: <a href="https://thecollege.syr.edu/news-all/news-from-2021/professor-linda-ivany-featured-in-exhibit-highlighting-the-work-of-women-paleontologists/">https://thecollege.syr.edu/news-all/news-from-2021/professor-linda-ivany-featured-in-exhibit-highlighting-the-work-of-women-paleontologists/</a>

Interface with homeowner about fossil corals on their property written up as

https://www.syracuse.com/news/2021/11/discovered-on-a-cny-hilltop-remarkableevidence-of-a-time-this-place-was-a-tropical-sea.html appeared in the Post Standard newspaper on Dec 5 2021

Science Book Club, Community Library of DeWitt & Jamesville – lead discussion on Bill Bryson's *A Short History of Everything*, July 2019

Interviewed on camera at the Smithsonian Institution for PBS Nova documentary called "Polar Extremes", Windfall Films Ltd., related to research in Antarctica, 2018

Featured in Harvard University's Department of Earth and Planetary Science Alumni Magazine: "Quintet of EPS Alumni Combat Climate Change from Upstate New York" 2019

Comments for SU News on assorted climate events, especially related to Antarctica Interviewed on camera in downtown Syracuse by Spectrum News for story about the fossils in the Onondaga Limestone building stone at the Church of the Immaculate Conception, December 2018

One of 4 scientists invited to speak at a Smithsonian Institution's 'Paleoclimate Day' - workshop for science educators and the press about paleoclimate change, March 29, 2018

Member, Advisory Council, Talcott Mountain Science Center for Student Involvement, Inc., Avon CT

Featured scientist on *Speaking Evolution* - web/PBS documentary about evolution produced at the University of Alabama http://www.speakingevolution.org/

Leader of a 'Fossil Walk' for the Cazenovia Preservation Foundation, Aug 26, 2017

Participant in the March for Science in Washington DC, with 3 graduate students, 2017

Speaker for TACNY's Jr. Café Scientifique, Syracuse NY, 2010, 2012, 2014

Guest speaker, Jamesville-DeWitt Middle School (on several occasions)

Communicate with members of the public stemming from my online PaleoPortal profile, including email inquiries and visits to the department

Identify fossils and rocks for members of the public who contact me through the department

Advisor to Liverpool High School students competing in Science Fair projects Workshop leader for Science Horizons summer program for middle school students Workshop leader for the Sonya Kovalevsky Festival for girls in science and math Science advisor for the MoST (Museum of Science and Technology), Syracuse NY

- consultant on dinosaur exhibit, helped to train docents

Interfaced with Technology Alliance of Central New York (TACNY) to sponsor a large public lecture by Eugenie Scott, Director of the National Center for Science Education, on evolution, intelligent design, and the nature of science, that targeted K-12 science teachers and school board members as well as the general public

guest speaker and consultant, Talcott Mountain Science Center for Student Involvement, Inc., Avon CT

Merit Badge Counselor, Boy Scouts of America (geology) guest speaker, Girl Scouts of America, Onondaga Hill, NY

meet with students/teachers from Liverpool High School to discuss/mentor research projects

#### **Professional Societies**

Paleontological Society (PS)

Geological Society of America (GSA)

Paleontological Research Institution (PRI)

Society for Sedimentary Geology (SEPM)

American Geophysical Union (AGU)

Sigma Xi

American Geosciences Institute (AGI)

National Association of Geology Teachers (NAGT)

Ecological Society of America (ESA)

# **Collaborative Working Groups**

<u>BioInspired Syracuse</u> – Form and Function Subgroup – The institute supports research into complex biological systems, developing and designing programmable smart materials to address global challenges in health, medicine and materials innovation. The Form and Function subgroup works to develop solutions to technological problems by understanding the functional mechanisms found in nature at the whole-organism level. <a href="https://bioinspired.syr.edu/">https://bioinspired.syr.edu/</a>

- <u>Paleobiology Database</u> The Database is an NSF-funded project involving more than 80 professional scientific researchers and scores of graduate students. Its goal is to provide global, collection-based occurrence and taxonomic data for marine and terrestrial animals and plants of any geological age from the last 600 million years. Primary data and a variety of analytical tools are available on the web. I am one of the original members of the Marine Invertebrate Working Group. <a href="http://paleodb.org/">http://paleodb.org/</a>
- <u>CHRONOS</u> The Database is an NSF-funded project that aimed to create a dynamic, interactive and time-calibrated framework for Earth history. Its main objective is to develop a network of databases and visualization and analytical methodologies that broadly deal with chronostratigraphy (time). Data and analytical tools are being compiled for web availability. I was part of the Geochemical Cycling Working Group. <a href="https://www.chronos.org">www.chronos.org</a> (no longer active)

## Field Research Experience

## Geological / Paleontological:

- Seymour Island, Antarctic Peninsula; evolutionary paleoecology, stratigraphy of Paleogene sediments, collection of specimens for geochemistry and paleoclimate inference
- US Gulf Coastal Plain Alabama, Mississippi, Louisiana, and Texas; Paleogene stratigraphy, sedimentology, paleoecology, and paleontological collections; K-Pg boundary
- Iceland, NE coast opportunistic collecting of fossil bivalves for life history research and diagenesis experiments during departmental field trip
- New South Wales and Tasmania, Australia; lower Permian stratigraphy and paleontology, collection of samples for isotope geochemistry and sclerochronology
- Wind River Basin, Wyoming; Jurassic Sundance Formation sequence stratigraphy, paleontology, paleoenvironments; Triassic Popo Agie Formation stratigraphy and depositional environments
- Central New York; Devonian stratigraphy, paleontology, paleoecology, special emphasis on the Hamilton Group
- South Florida and Florida Keys; modern and ancient carbonate environments, paleoecology of Plio-Pleistocene shell beds, particularly the Pinecrest Sand
- Citrus and Levy Counties, Florida; Middle Eocene stratigraphy and paleoecology, particularly of fossil seagrass ecosystems and associated facies

#### **Ecological**:

- Stazione Zoologica di Napoli; Ischia, Italy; Ecology, physiology, and molecular biology of seagrasses; research on application of DNA fingerprinting techniques to modern and sub-fossil population dynamics, RFLP analyses for molecular phylogeny of seagrasses, collection of modern seagrass-dwelling invertebrates and sub-fossil seagrasses
- Venezuela (cerca Merida, La Mucuy, Mucubaji, Tico Poro, Barinas, Rancho Grande); tropical terrestrial ecosystems, including paramo, cloud forest, tropical dry forest, and savana; research on bryophytes, epilithic lichens, and grassland fire ecology
- Florida Keys, Marquesas, Dry Tortugas; Research Cruise, *R/V Bellows* (UF vessel); marine biology, ecology of shelf/slope benthos and shallow sublittoral seagrass, coralline algae, and coral ecosystems; special emphasis on seagrass-dwelling regular echinoids
- Long Island Sound, CT; coastal and estuarine ecology, high salt marsh to deep-water infaunal benthos; special emphasis on nuculid bivalve ecology

#### Oceanographic:

Research Cruise 97/09 on the R/V *Maurice Ewing* in the equatorial Pacific Ocean 12/12/97-1/18/98 - ODP Reconnaissance cruise; piston and gravity cores, Hydrosweep bottom imaging, shallow seismic profiles of sediments, rock dredge; special emphasis on Eocene sediments and microfossils

## **Invited Lectures** (all in Earth Science Departments unless otherwise indicated)

Universität Hamburg - 'Mass Extinctions & Climate Change' seminar series Jan. 11, 2022 https://lecture2go.uni-hamburg.de/l2go/-/get/v/60080

University of California Davis – invited speaker in graduate seminar on sclerochronology Nov 23, 2020 Invited Speaker – "Session T70. Cephalopods Present and Past: Insights into Evolution, Paleobiology, and Links to Paleoenvironmental Change" – Geological Society of America Annual Meeting, October 2020.

Keynote Speaker - 5th International Sclerochronology Conference, June 2019, Split, Croatia

Keynote Speaker - "Session T117: Greenhouse to Icehouse Transition: Global Events of the Devonian, Carboniferous, and Early Permian" Geological Society of America Annual Meeting, November 2018, Indianapolis IN

Keynote Speaker - "Session 8c: Applications of High Resolution Geochemical Proxies: Seasonality and Past Climate Variability, Goldschmidt Conference, August 2018, Boston MA

Keynote Speaker - Smithsonian Institution 'Paleoclimate Day', one of 4 scientists invited to speak about paleoclimate change to science educators and the press – March 29, 2018

Keynote speaker - Empire State Association of Two-Year College Biologists conference April 13, 2018 at Jefferson Community College in Watertown, NY

University of North Carolina at Chapel Hill, 10/5/2017

Syracuse University, 3/23/2017

Sweet Science Series (TACNY) lecture and discussion leader, with Chris Junium – 3/9/2017 "Global Warming Then and Now"

ALLELE - Alabama Lectures in Life's Evolution – large public lecture series at the University of Alabama "The Pace Of Life – The (Often) Missing Element In Studies Of Evolution Using Fossils" 10/15/15 <a href="https://vimeo.com/157596819">https://vimeo.com/157596819</a>

University of Alabama, 10/1615

Keynote speaker, Paleontological Research Institution's Summer Symposium, 8/2/14

Cornell University, Darwin Days speaker and discussion participant, 2/12/14

Syracuse University, 1/30/14

Princeton University, Environmental Geology & Geochemistry Lecture Series, 12/5/2013

Keynote speaker, 3<sup>rd</sup> International Sclerochronology Conference, May 2013

University of Arizona, 3/22/2013

Iowa State University, 3/1/2013

University of Minnesota, 2 lectures, 2/9/2012

Binghamton Evolutionary Studies Program, 11/14/2011

University of Cincinnati, 12/3/10

State University of New York College of Environmental Science and Forestry, Dept. of Environmental and Forest Biology, 9/16/10

Invited speaker for special session at the Ecological Society of America meeting August 2010 - "Ecological Responses to Abrupt Climate Changes: Looking Back to See Ahead" – I spoke on the effects of greenhouse warming on marine ecosystems

Invited speaker and participant for an NSF-sponsored workshop entitled "Austral Portals: Plate Tectonics, Paleobiogeography and Paleogeography", the purpose of which is to explore geological and biological ramifications of the disruption of connections between South America, Antarctica and India-Madagascar during the Mesozoic and early Cenozoic. August 2010.

University of South Carolina, 2/18/10

Syracuse University Department of Biology, Behavior, Ecology & Evolution Research Seminar, 2/15/10

Yale University, Paleoclimate Group seminar series, 2/12/10

Wesleyan University, 2/11/10

Invited speaker for symposium session at American Geophysical Union Fall 2009 meeting – "Cenozoic Greenhouse Climates and Carbon Cycle Dynamics"

State University of New York College of Environmental Science and Forestry, Dept. of Environmental and Forest Biology, 2/23/09

State University of New York at Oswego, Science Today lecture series, 11/11/08

University at Buffalo, Graduate Program in Evolution, Ecology, and Behavior, 9/19/08

Syracuse University, Nelson Lecture, 8/28/08

State University of New York at Binghamton, 3/14/08

University of Rochester, Department of Biology, 11/9/07

Yale University, Topics in Global Change Symposium, 10/22/07

SU College of Arts and Sciences Graduation Convocation, Faculty Address, 5/12/07

Phi Beta Kappa Induction Ceremony, faculty lecture: *Why Science Matters: Myth and Misconception in the Public Understanding of Science*, 5/12/06

Frontiers of Science Lecture Series, Syracuse University, 4/5/06

University of Florida, Departmental Colloquium, 3/9/06

Hamilton College, Antarctic Science lecture, 3/1/06

Café Scientifique, public lecture/discussion in Syracuse, 2/7/06

Denver Museum of Nature and Science, featured speaker for Prehistoric Journey Symposium, 12/3/05

Syracuse University Department of Geography, 9/23/05

State University of New York at Cortland, 2/23/05

Central NY Association of Professional Geologists, featured speaker, 2/17/05

Colgate University, Departmental Colloquium, 9/28/04

US Coast Guard Academy, New London CT, Science Lecture Series, 9/23/04

Lehigh University, Departmental Colloquium, 9/17/04

University of Oregon, Departmental Colloquium, 5/27/04

University of Illinois, Departmental Colloquium, 4/2/04

SUNY-ESF, Environmental and Forest Biology, Departmental Colloquium, 2/5/04

Rochester Academy of Sciences, 2/3/04

University of North Dakota, Departmental Colloquium, 1/23/04 (2 lectures)

University of Wisconsin at Madison, Weeks Lecturer, 11/14/03 (2 lectures)

Cornell University and Paleontological Research Institute, Frontiers in Paleobiology Symposium, keynote speaker, 10/6/03

University of Buffalo, seminar with paleontologists, 4/22/03

Girl Scouts of America, Onondaga Hill, NY, 4/4/03

Syracuse University Honors Program Welcoming Dinner, 8/25/02

Talcott Mountain Science Center for Student Involvement, Inc., featured lecturer, 5/22/02

Pennsylvania State University, Departmental Colloquium, 5/3/01 (2 lectures)

Virginia Polytechnic Institute, Departmental Colloquium, 4/12/01 (2 lectures)

Colgate University, Seminar for Paleontologists, 4/6/01

University of Kansas, Departmental Colloquium, 3/29/01 (2 lectures)

University of Cincinnati, Departmental Colloquium, 4/28/99

University of Rochester, Departmental Colloquium, 3/?/99

Syracuse University, Departmental Colloquium, 11/19/98

University of Michigan, Turner Lecturer, 9/18/98

Michigan Society of Fellows Colloquium, University of Michigan, 9/14/98

Penrose Conference, "Linking Spatial and Temporal Scales in Paleoecology and Ecology", Keynote Speaker, 5/16/98

University of Rochester, Departmental Colloquium, 5/8/98

Indiana University of Pennsylvania, Departmental Colloquium, 3/27/98 (2 lectures)

Department of Integrative Biology, Paleobiology Group, University of California-Berkeley, 12/18/96

University of Wisconsin-Oshkosh, Departmental Colloquium, 4/24/96 (2 lectures)

National Museum of Natural History, Smithsonian Institution, Paleobiology Department, 4/4/96 (2 lectures)

Boston Bay Group (amateur geologists in the Boston area), 3/13/96

The Backcountry Club, Harvard University Graduate School, 2/21/96

University of California at Santa Cruz, Departmental Colloquium, 3/14/95

Atmospheric Chemistry Lecture Series, Department of Earth and Planetary Sciences, Harvard University, 11/5/93

Harvard University Marine Program, Department of Organismic and Evolutionary Biology, 2/93 Florida Paleontological Society Fall Meeting, keynote speaker, 10/28/89

# Published Abstracts (\*student author; †post-doc author; under my direct supervision)

- Vellekoop J., Vanhove D., Jelu, I., Claeys P., **Ivany**, L.C., De Winter N.J., Speijer R. P., and Steurbaut E. (submitted) A comparison of bivalve, gastropod and fish otolith stable isotope profiles from the Aalter Sands, early Eocene southern North Sea Basin. European Geosciences Union General Assembly. EGU24-9755
- Gavirneni\*, S., **Ivany**, L.C., and Reddin, C.J. (2023) Burning calories in a burning ocean: The effects of metabolic rate on selectivity during hyperthermal-driven extinctions. Abstracts with Programs, Geological Society of America Annual Meeting, Pittsburgh PA.
- Prow, A., Yang, Z., Lu, Z., Meehan, K., Payne, J., and **Ivany**, L. (2023) Exploring dacryoconarid body size trends across the late Devonian Punctata event: insights into their ecological responses to paleoenvironmental shifts. Abstracts with Programs, Geological Society of America Annual Meeting, Pittsburgh PA.
- Hensen\*, C.J., **Ivany**, L.C., and Allmon, W.D. (2023) Gradient ecology and community structure of a mixed carbonate-clastic shelf: an example from the middle Eocene U.S. Gulf Coastal Plain. Abstracts with Programs, Geological Society of America Annual Meeting, Pittsburgh PA.
- Rindsberg, A.K., Hensen\*, C.J., and **Ivany**, L.C. (2023) Network crustacean burrows in an offshore firmground: an example from the middle Eocene Lisbon Formation of Alabama. Abstracts with Programs, Geological Society of America Annual Meeting, Pittsburgh PA.
- Brett, C. E., Baird, G. C., Bartholomew, A. J., **Ivany**, L. C., and Zambito , J. J. (2023) Environmental stasis and volatility: drivers of ecological-evolutionary pattern and macroevolutionary process in the Devonian Appalachian Basin. Subcommission on Devonian Stratigraphy meeting, Geneseo NY July 26-Aug 7 2023.
- **Ivany**, L. C., Welych-Flanagan\*, M., and Owens, J. C. (2023) Variability, reliability, and significance of brachiopod δ<sup>18</sup>O values from the Middle Devonian Hamilton Group. Subcommission on Devonian Stratigraphy meeting, Geneseo NY July 26-Aug 7 2023.
- Gavirneni\*, S., **Ivany**, L.C., and Reddin, C.J. (2023) Metabolic rate and the vulnerability of mollusks to hyperthermal-driven extinction events. European Geosciences Union General Assembly, Vienna AU April 23-28 2023. EGU23-16724, https://doi.org/10.5194/egusphere-egu23-16724.
- Weinzapfel\*, B.H., Duati\*, B.P., and **Ivany**, L.C. (2023) Lifespans of *Arctica islandica* from the Pliocene Tjörnes beds of Iceland. Joint 72nd Annual Southeastern and 58<sup>th</sup> Annual Northeastern Section Meeting. Abstracts with Programs, Geological Society of America, March 17-19, Reston VA.
- Cobb\*, A.A., **Ivany**, L.C., Hensen\*, C.J., and Allmon, W.D. (2023) Life history and paleoenvironment of the iconic middle Eocene oyster *Cubitostrea* from stable isotope analysis. Joint 72nd Annual Southeastern and 58<sup>th</sup> Annual Northeastern Section Meeting. Abstracts with Programs, Geological Society of America, March 17-19, Reston VA.
- Hensen\*, C.J., Rindsberg, A.K., and **Ivany**, L.C. (2023) Marine firmgrounds of the middle Eocene Cook Mountain and Lisbon Formations: Understanding shelf evolution during the late Lutetian highstand, Eastern U.S. Gulf Coastal Plain. Joint 72nd Annual Southeastern and 58<sup>th</sup> Annual Northeastern Section Meeting. Abstracts with Programs, Geological Society of America, March 17-19, Reston VA.
- Gavirneni\*, S., **Ivany** L.C., and Reddin, C.J. (2022) Metabolism in a changing ocean: extinction selectivity during hyperthermal episodes in the fossil record. Annual Meeting, Abstracts with Programs V 54, no. 5, Geological Society of America. <a href="https://doi.org/10.1130/abs/2022AM-382570">https://doi.org/10.1130/abs/2022AM-382570</a>)

- Phillipi\*, D.B., Czekanski-Moir, J., **Ivany**, L.C. (2022) Global Phanerozoic diversity is a function of geographic sampling intensity. Annual Meeting, Abstracts with Programs v. 54, no. 5, Geological Society of America. <a href="https://doi.org/10.1130/abs/2022AM-382744">https://doi.org/10.1130/abs/2022AM-382744</a>)
- Hensen\*, C.J., Rindsberg, A.K., **Ivany**, L.C., Allmon, W.D. (2022) Correlating the Cook Mountain: a synthetic approach towards a regional stratigraphic framework, middle Eocene (Lutetian Bartonian) of Mississippi and Alabama. Annual Meeting, Abstracts with Programs v. 54, no. 5, Geological Society of America. https://doi.org/10.1130/abs/2022AM-383108)
- Brett, C.E., Baird, G.C., **Ivany**, L.C., and Zambito, J. (2022) Environmental stasis and volatility: Drivers of ecological-evolutionary pattern and macroevolutionary process. Annual Meeting, Abstracts with Programs v. 54, no. 5, Geological Society of America. <a href="https://doi.org/10.1130/abs/2022AM-382793">https://doi.org/10.1130/abs/2022AM-382793</a>)
- Hensen\*, C.J., Ivany, L.C., and Rindsberg, A.K. (2022) Extracting the ichnologic record from Coastal Plain strata: the Eocene upper Lisbon to Moodys Branch section of Mississippi and Alabama (USA) Joint 56th Annual North-Central/ 71st Annual Southeastern Section Meeting. Abstracts with Programs, Geological Society of America, Vol. 54, No. 4; doi: 10.1130/abs/2022NC-375769.
- Rich, M., Visaggi, C.C., Cantrell, M.P., Hoffman, K.F., Gluck, C.E., Swann, C.C., Armstrong, K.E., Dunham, J.I., Martinez, J., Ivany, L.C. and Kelley, P. (2022) Patterns of molluscan predation in the Oligocene Byram Formation of Vicksburg, MS. Joint 56th Annual North-Central/ 71st Annual Southeastern Section Meeting. Abstracts with Programs, Geological Society of America, Vol. 54, No. 4; doi: 10.1130/abs/2022NC-375111.
- Phillipi\*, D.B., Czekanski-Moir, J., **Ivany**, L.C., 2022, Global Phanerozoic biodiversity can variation be explained by spatial sampling intensity? International Biogeography Society 10th Biennial Conference, Vancouver, BC.
- Gladson, S., Seh, R., Fernandez\*, M., **Ivany**, L.C. Green, M.A., and Sun, Y., (2022) Experimental and Numerical Analysis of Flow Over Orthoconic Structure Inspired by *Spyroceras*. American Institute of Aeronautics and Astronautics Aviation Forum 2022.
- Judd, E.J., **Ivany**, L.C., and Ziegler, M. (2021) Paleoseasonality of sea surface temperatures: Insights from the Eocene of Antarctica (Invited). *A high-temporal-resolution view of deep-time* "greenhouse climates" (PP002) 2021 AGU Fall Meeting.
- Phillipi\*, D.B., Czekanski-Moir, J., and **Ivany**, L.C. (2021) Global Phanerozoic biodiversity can variation be explained by spatial sampling intensity? Geological Society of America Abstracts with Programs, v. 53, no. 6 Annual Meeting, Portland OR, <a href="https://doi.org/10.1130/abs/2021AM-367480">https://doi.org/10.1130/abs/2021AM-367480</a>.
- Fernandez\*, M., Gladson, S., King, J., Seh, R., Sun, Y., Green, M.A., and **Ivany**, L.C. (2021) Preliminary investigations into the ecology and functional morphology of the annulated orthoconic cephalopod *Spyroceras*. Geological Society of America Abstracts with Programs, Annual Meeting, Portland OR, https://doi.org/10.1130/abs/2021AM-370502.
- Seh, K.H., Gladson, S., King, J., Green, M., Fernandez\*, M., Ivany, L.C., Sun, Y. (2021) Numerical investigation of flow over orthoconic structure. American Physical Society Division of Fluid Dynamics, 74<sup>th</sup> Annual Meeting, Phoenix AZ.
- Arens, N.C., Garcia, C. A., and **Ivany**, L.C. (2021) Leaves and pollen from the lower Eocene of Hatchetigbee Bluff, Alabama. Geological Society of America Abstracts with Programs, Annual Meeting, Portland OR, https://doi.org/10.1130/abs/2021AM-368104.
- Hensen\*, C., **Ivany**, L.C., Allmon, W.D., Rindsberg, A.K. (2021) Integrating subsurface and outcrop data to build a unified model for the Cockfield-Gosport shore zone, middle Eocene of Mississippi and Alabama. Geological Society of America Abstracts with Programs, Annual Meeting, Portland OR, https://doi.org/10.1130/abs/2021AM-366686.
- Ivany, L.C. and Artruc\*, E.A. 2020. Lifespan, growth rate, and ecology of a giant heteromorph ammonite from Antarctica. Geological Society of America Abstracts with Programs, Annual Meeting.135-9. Paleontological Society sponsored topical session T70. Cephalopods Present and Past: Insights into Evolution, Paleobiology, and Links to Paleoenvironmental Change. Invited
- Philippi\*, Daniel B., **Ivany**, Linda C., Scotese, Christopher R. 2020. Quantitatively assessing the extent of epeiric seas through the Phanerozoic. Geological Society of America Abstracts with Programs, Annual Meeting. DOI: <u>10.1130/abs/2020AM-358790</u>

- Judd, E.J., Bhattacharya, T., and **Ivany** L.C. 2020. A modern perspective on ancient oceans. *Invited*, INV07 Subdecadal Ocean–Atmosphere Variability: Insights from Proxies, Models, and Uncertainty Examinations PART 2; AGU Annual Meeting.
- **Ivany**, L.C. 2019. The frustratingly incomplete shelf macrofossil record across the PETM. PETM Terrestrial and Coastal Workshop, Santa Cruz CA, September 2019.
- Judd\*, E.J., Bhattacharya, T., and **Ivany**, L.C. 2019. Dynamic controls on zonal variability of sea surface temperatures and implications for paleoclimate reconstruction. American Geophysical Union Fall Meeting, San Francisco CA, PP13C-1462
- McCraw\*, J.R.C., Judd\*, E.J., Cole, J.E., Vetter, L., Tudhope, A., Edwards, L., and **Ivany**, L.C. 2019.

  Modeling intra-annual modes of coral extension rate using multiproxy geochemical records from a Little Ice Age Galapagos coral. American Geophysical Union Fall Meeting, San Francisco CA.
- Moss, D.K., **Ivany**, L.C., Jones, D.S. 2019. Paleobiology meets sclerochronology (again): using growth increments in fossil bivalves to answer evolutionary questions. North American Paleontological Convention, Riverside CA, June 2019.
- Dawson, R.R., Petersen, S.V., Hull, P.M., **Ivany**, L.C., and Affek, H.P. 2019. Cretaceous temperature estimates from fossil mollusks: an interlaboratory comparison. International Clumped Isotope Workshop, Long Beach CA, January 2019.
- **Ivany**, L.C., Sessa, J.A., Judd, E.J., Grossman, E.L., Affek, H.P., and Douglas, P.D. (2018) Winter temperatures drive climate change in the Paleogene subtropics. Goldschmidt Conference, Boston MA. *invited keynote* for Session 8c: Applications of High Resolution Geochemical Proxies: Seasonality and Past Climate Variability.
- Judd\*, E.A., **Ivany**, L.C., DeConto, R.M., Haldberstadt, A.R.W., Miklus, N.M., Junium, C.K., and Uveges, B.T. (2018) Middle Eocene seasonality: Insights from the geochemistry of fossil bivalves and driftwood. Goldschmidt Conference, Boston MA.
- **Ivany**, L.C., Jimenez\*, M.Y., and Henkes, G. (2018) Depleted and seasonal precipitation in the Pennsylvanian interglacial tropics inferred from serial oxygen isotope values of mollusk aragonite. Geological Society of America Abstracts with Programs, Annual Meeting, Indianapolis IN. *invited* talk for Session T117: Greenhouse to Icehouse Transition: Global Events of the Devonian, Carboniferous, and Early Permian
- Dawson, R.R., Hull, P.M., O'Brien, C.L., Pagani, M., Sageman, B.G., McGregor, D.A., **Ivany**, L.C., Landman, N.H., Cochran, J.K., and Affek, H.P. (2018) Evolution of Late Cretaceous meridional temperature gradients. Geological Society of America Abstracts with Programs, Annual Meeting, Indianapolis IN.
- Moss, D.K., **Ivany**, L.C., Thomas, R.D., and Surge, D. (2018) Latitudinal life-history gradients in fossil bivalves. Geological Society of America Abstracts with Programs, Annual Meeting, Indianapolis IN.
- E.L. Grossman, M.M. Joachimski. B., Barney, G.A. Henkes, L.C. **Ivany**, D.J. Lunt, K.G. Macleod, I.P. Montañez, C.R. Scotese, S.L. Wing (2018) Toward a Phanerozoic history of earth's surface temperature: the oxygen isotope record of the Paleozoic to early Cretaceous time slice (PalECTS). American Geophysical Union Fall Meeting, Washington D.C.
- Judd\*, E.J. **Ivany**, L.C., and Bhattacharya, T. (2018) A statistical model to better understand the heterogenous global distribution of seasonal temperature ranges in the modern world with implications for deep time. American Geophysical Union Fall Meeting, Washington D.C.
- **Ivany**, L.C., McGregor\*, D.A., Dawson, R.R., Dietl, G.P., and Affek, H.P. (2018) Seasonally resolved multiproxy paleotemperatures from the Campanian North Atlantic coastal plain. American Geophysical Union Fall Meeting, Washington D.C. PP11F-1328..
- **Ivany**, L.C. and Judd\*, E.J. 2017. Using accretionary hard parts to study changes in seasonality over geologic time. PP51C-1094. American Geophysical Union Fall Meeting, New Orleans, LA, 11-15 Dec.
- Judd\*, E.J., **Ivany**, L.C., Miklus, N.M., Uveges, B.T., and Junium, C.K. 2017. Eocene Antarctic seasonality inferred from high-resolution stable isotope profiles of fossil bivalves and driftwood. PP11B-1033. American Geophysical Union Fall Meeting, , New Orleans, LA, 11-15 Dec.
- Hickey, A.N., Junium, C.K., Uveges, B.T., **Ivany**, L.C., Martindale, R.C. 2017. Carbon and nitrogen isotopic analysis of coral-associated nitrogen in rugose corals of the Middle Devonian,

- implications for paleoecology and paleoceanography. PP13A-1068. American Geophysical Union Fall Meeting., New Orleans, LA, 11-15 Dec.
- Moss, D.K., **Ivany**, L.C., Thomas, R.D., and Surge, D.M. 2017. Latitudinal gradients in lifespan and growth rate for two species of *Glycymeris* (Bivalvia) from the mid-Pliocene of the Atlantic Coastal Plain. Geological Society of America Abstracts with Programs, Annual Meeting.
- Jimenez\*, M.Y. and **Ivany**, L.C. 2017, High-resolution isotopic records of Pennsylvanian Appalachian Basin mollusk shells. Geological Society of America Abstracts with Programs, Annual Meeting.
- Junium, C.K., Uveges, B.T.I., **Ivany**, L.C., Martindale, R.C., Cohen, P., Das, S., Hickey, A. 2017. New approaches to accessing high resolution biogeochemical signals from ancient organic materials. Geological Society of America Abstracts with Programs, Annual Meeting.
- Das, S., **Ivany**, L.C., and Junium, C.K. 2017. Using stable nitrogen and carbon isotope values of bivalve-shell-bound organics to understand food web dynamics. Geological Society of America Abstracts with Programs, Annual Meeting.
- Saulsbury, James, Finnegan, Seth, Lindberg, David R., Moss, David K., Ivany, Linda C., Gilooly, James F., Goodwin, David, Heim, Noel A., Keating-Bitonti, Caitlin, Kowalewski, Michal, Mcclain, Craig R., Payne, Jonathan L., Roopnarine, Peter D. and Schoene, Bernd R. 2017. Evaluating the influences of temperature, productivity, and phylogenetic constraint on bivalve growth rates. Geological Society of America Abstracts with Programs, Annual Meeting.
- **Ivany**, L.C., Sessa, J.A., Affek, H.P., Grossman, E.L., and Douglas, P. 2017. Winter temperatures drive climate cooling in the Paleogene subtropics. p. 62, Climatic and Biotic Events of the Paleogene, Sept 3-7, 2017.
- Judd\*, E.J., **Ivany**, L.C., and Miklus, N.M. 2017. Late Eocene reduction in Antarctic seasonality inferred from the isotopic composition of nearshore marine bivalves. Climatic and Biotic Events of the Paleogene, p. 63 Sept 3-7, 2017.
- **Ivany**, L.C. and Artruc\*, E.G. (2016) Isotope ecology of a giant heteromorph ammonite from Antarctica. Geological Society of America Abstracts with Programs, Annual Meeting.
- Judd\*, E.J., **Ivany**, L.C., Miklus\*, N.M., Sijp, W.P., and Affek, H.P. 2016. Seasonal variations of temperature and precipitation in Antarctica during the Eocene greenhouse. Geological Society of America Abstracts with Programs, Annual Meeting.
- Pietsch, C., Ivany, L.C., Sessa, J.A., Allmon, W.D., Handley, J.C. and Lockwood, R. 2016. A multi-scale biotic analysis of the Paleocene-Eocene thermal maximum shows little impact on shallow marine mollusks. Geological Society of America Abstracts with Programs, Annual Meeting.
- Hickey, A.N., Uveges, B.T.I., **Ivany**, L.C., and Junium, C.K. 2016. Paleoecological implications of nitrogen and carbon isotopic data from organic material in Devonian rugose corals. Geological Society of America Abstracts with Programs, Annual Meeting.
- Das, S., Uveges, B.T.I., **Ivany**, L.C., and Junium, C.K. 2016. Ontogenetic variation in δ<sup>13</sup>C and δ<sup>15</sup>N in modern bivalves and gastropods. Geological Society of America Abstracts with Programs, Annual Meeting.
- **Ivany**, L.C. and Artruc\*, E.G. 2016. Growing a sea monster: Isotope ecology of a giant heteromorph ammonite. 4<sup>th</sup> International Sclerochronology Conference, Portland, Maine.
- Moss\*, D.K. and **Ivany**, L.C. 2016. Latitudinal patterns of growth rate and lifespan in modern marine bivalves. 4<sup>th</sup> International Sclerochronology Conference, Portland ME.
- Judd\*, E.J., Miklus\*, N.M., Ivany, L.C. Affek, H.P. and Wilkinson, B.H. 2016. Seasonal variation in temperature and precipitation during Eocene cooling inferred from Antarctic bivalves. 4<sup>th</sup> International Sclerochronology Conference, Portland ME.
- Das, S., Junium, C.K., and **Ivany**, L.C. 2016. Diet of fossil and modern bivalves and gastropods revealed by carbon and nitrogen isotopes of shell-associated organic matter. 4<sup>th</sup> International Sclerochronology Conference, Portland ME.
- Hickey, A.N., Junium, C.K., and **Ivany**, L.C. 2016. Paleoecological implications of nitrogen and carbon isotopic data from organic material in Devonian rugose corals. 4<sup>th</sup> International Sclerochronology Conference, Portland ME.
- Artruc\*, E. and **Ivany**, L.C. 2016. Growth rate and ecology of the giant heteromorph ammonite *Diplomoceras maximum* using stable isotopes of accretionary shell carbonate. Geological Society of America Abstracts with Programs, NE Section.

- Runnegar, B., Beard, J.A., and **Ivany**, L.C. 2016. Cold temperate biotas and glacial conditions during the Late Paleozoic Ice Age (LPIA): New timing and better temperatures. ICPSG International Congress on "Palaeozoic Stratigraphy of Gondwana" April 14-16, 2016 Perugia, Italy.
- Canavan, R.R., McGregor\*, D.A., Affek, H.P., **Ivany**, L.C., Pagani, M. 2015. Clumped isotope sea surface temperature estimates: analysis of paleoclimate and diagenesis. Goldschmidt Conference.
- Clapham, M.E., Beard, J.A., **Ivany**, L.C., and Runnegar, B. 2015. Paleophysiology, thermal tolerance, and extinction of the Permian glacial bivalve *Eurydesma*. Geological Society of America Abstracts with Programs, Annual Meeting.
- Moss\*, D.K., Ivany, L.C., Judd\*, E.J., Bearden\*, C.E., Kim\*, W.-J., Cummings\*, P.W., Driscoll\*, J.R. and Artruc\*, E.G. 2015. Latitudinal patterns in lifespan and growth rate across modern marine bivalves. Geological Society of America Abstracts with Programs, Annual Meeting, v. 47, p. 668.
- Judd\*, E.J., Miklus, N.M., Ivany, L.C., Sijp, W.P., and Affek, H.P. 2015. High latitude seasonality in a greenhouse Earth: variations in temperature and precipitation throughout the Eocene inferred from Antarctic bivalves. Geological Society of America Abstracts with Programs, Annual Meeting, v. 47, p. 125.
- Visaggi, C.C., Dunham, J.I., Martinez, J., Kelley, P.H. And **Ivany**, L.C. 2015. Temporal and spatial patterns in naticid drilling predation of dominant bivalve species in the Byram Formation of Mississippi. Geological Society of America Abstracts with Programs, Annual Meeting.
- Vanhove D., Speijer R.P., Steurbaut E., Claeys, P., and **Ivany** L.C., (2014) Temperature, seasonality and salinity history of the early Eocene North Sea Basin inferred from fish otoliths and mollusks. Climatic and Biotic Events of the Paleogene 2014. Ferrara Italy.
- **Ivany**, L.C., Miklus, N., Aronson, R.B., Blake, D.B. (2014) Seasonality, climate change, and the late Eocene initiation of the modern Antarctic biota. North American Paleontological Convention 2014. Gainesville FL.
- Moss, D.K. and **Ivany**, L.C. (2014) Environmental controls on extreme longevity in modern and fossil bivalves. North American Paleontological Convention 2014, Gainesville FL.
- Vanhove D., Ghosh P., Prasanna K., Bijl P. K., **Ivany** L. C., Speijer R. P. And Steurbaut E. (2013) Fish otoliths record high shelf temperatures at mid-latitudes during the early Eocene climatic optimum (EECO). *11th International Conference on Paleoceanography, Sitges, Spain, September 2013.* (P-075).
- Moss\*, D.K. and **Ivany**, L.C. (2013) The role of environment in the evolution of extreme longevity in bivalves. Geological Society of America Abstracts with Programs, Annual Meeting, V. 45.
- McGregor\*, D.A., **Ivany**, L.C., Dietl, G. (21013) Late Cretaceous latitudinal gradients in temperature and seasonality using the marine oyster *Exogyra cancellata*. Geological Society of America Abstracts with Programs, Annual Meeting, V. 45.
- Beard\*, J.A., Ivany, L.C., and Runnegar, B. (2013) Seasonality and latitudinal gradient in the early Permian from the  $\delta^{18}$ O record of fossil bivalves. Geological Society of America Abstracts with Programs, Annual Meeting, V. 45.
- Vanhove, D., Speijer, R.P., Steurbaut, E., **Ivany**, L.C. (2013) Paleotemperature and seasonality in the early Eocene Southern North Sea Basin inferred from fossil fish otoliths. Geological Society of America Abstracts with Programs, Annual Meeting, V. 45.
- **Ivany**, L.C. (2013) Growth, longevity, and macroevolution: It's about time. Invited Keynote Lecture, 3<sup>rd</sup> International Sclerochronology Conference, Caernarfon Wales.
- Vanhove D., Speijer R., Steurbaut E., **Ivany** L. (2013) Temperature and salinity variability on a shallow shelf: a multispecies case study of Ypresian fish otoliths from the southern North Sea Basin. 3<sup>rd</sup> International Sclerochronology Conference, Caernarfon Wales.
- Vanhove D., Bijl P., **Ivany** L., Speijer R., Steurbaut E., Ghosh P. (2013) Fish otoliths record hot shelf temperatures at mid-latitudes during the early Eocene climatic optimum (EECO) interval. 3<sup>rd</sup> International Sclerochronology Conference, Caernarfon Wales.
- Dunham, J.I., Visaggi, C.C., **Ivany**, L.C., and Kelley, P.H. (2013) Temporal and spatial analysis of naticid drilling predation on *Scapharca lesueuri* from the early Oligocene Byram Formation in Mississippi. Geological Society of America, Abstracts with Programs, Southeastern Section.

- Waite, R., Allmon, W.D., **Ivany**, L.C. (2012) The oxygen and carbon stable isotope record of modern turritelline gastropods: Implications for biology, sclerochronology and (paleo)environmental interpretations. Geological Society of America, Abstracts with Programs, Annual Meeting, V. 44.
- Douglas, P., **Ivany**, L.C., Beu, A., Hollis, C., Houben, A.J., Sluijs, A., and Affek, H. (2012, invited) A clumped isotopes perspective on sea surface temperatures in the Eocene southern high latitudes. Goldschmidt Conference, Montreal, 2012.
- Affek HP, Zaarur S, Kluge T, Dublyansky J, Spötl C, Douglas P, **Ivany** LC, Saenger C, Zhang YG (2012) Clumped isotopes role in a multi-proxy paleoclimate reconstruction. Goldschmidt Conference. Montreal, June 2012.
- Beard\*, J.A., Ivany, L.C., and Runnegar, B. (2012) Seasonal variation of carbon and oxygen isotopes from the Permian of southeastern Australia, as recorded by a circumpolar Gondwanan bivalve (*Eurydesma* Morris 1845). Geological Society of America, Abstracts with Programs, V. 44, no. 2, Northeastern Sectional Meeting.
- Douglas, P., **Ivany**, L.C., Pagani, M., Beu, A., Hollis, C., Affek, H. (2011) Eocene southern high latitude sea surface temperatures: New constraints from clumped isotope paleothermometry. EOS Transactions, American Geophysical Union Fall Meeting Suppl.
- Petrizzo D.A.S., Runnegar, B., **Ivany**, L.C., Young, E.D. (2011) Directly measured clumped isotope temperatures from known and proposed Paleozoic glacial intervals suggest that oceans were depleted in <sup>18</sup>O. American Geophysical Union Fall Meeting.
- Beard\*, J.A., **Ivany**, L.C., and Runnegar, B. (2011) Seasonal variations of carbon and oxygen isotope ratios in shells of the circumpolar Gondwanan bivalve *Eurydesma*, and their impact on interpretations of early Permian climates. Geological Society of America, Abstracts with Programs, Annual Meeting, V. 43, no.5.
- **Ivany**, L.C. and Sessa<sup>†</sup>, J.A. (2011) An isotope-based paleotemperature record for the Paleogene subtropics derived from shelf macrofauna, US Gulf Coastal Plain. Geological Society of America, Abstracts with Programs, Annual Meeting, V. 43, no. 5.
- Douglas, P., **Ivany**, L.C., Pagani, M., Affek, H. (2011) An Eocene sea surface temperature record for the Antarctic Peninsula derived from bivalve clumped isotope measurements. 11th International Symposium on Antarctic Earth Sciences, Edinburgh. PS 22.5., p. 269. (presented by Ivany)
- Sessa<sup>†</sup>, J. A., **Ivany**, L. C., Handley, J. C., Lockwood, R., Allmon, W. D. 2011. Climatic controls on Late Cretaceous through Paleogene ecosystems. Climate and Biota of the Early Paleogene, Conference Program and Abstracts, 5 8 June 2011, Salzburg, Austria; p. 147.
- Douglas, P., **Ivany**, L.C., Keating-Bitonti, C., Pagani, M., Affek, H. (2011) Eocene sea surface temperature reconstructions from bivalve clumped isotope measurements. Climate and Biota of the Early Paleogene, Conference Program and Abstracts, 5 8 June 2011, Salzburg, Austria; p. 66.
- Gilbert\*, K.N., **Ivany, L.C.,** and Uhen, M. (2010) Killer sperm whales: exploring the life history and ecology of Neogene physeterids from the Atlantic Coastal Plain. Geological Society of America, Abstracts with Programs, v. 42, no. 5, Annual Meeting.
- Sessa<sup>†</sup>, J.S., **Ivany, L.C.**, Handley, J.C., Allmon, W.D., and Lockwood, R. (2010) Lack of major faunal and environmental change in shallow marine assemblages across the Paleocene-Eocene boundary in the U.S. Gulf Coastal Plain. Geological Society of America, Abstracts with Programs, v. 42, no. 5, Annual Meeting.
- Gillikin, D.P., Versteegh, E., Poulain, C., Haveles\*, A., Lorrain, A., Ivany, L.C., and Dehairs, F. (2010)
  Barium in mollusk shells a dual proxy of environmental conditions. Geological Society of America, Abstracts with Programs, v. 42, no. 5, Annual Meeting.
- **Ivany, L.C.** (2010) The Eocene climate record of Seymour Island and its relevance to the Drake Passage gateway. "Austral Portals: Plate Tectonics, Paleobiogeography and Paleogeography" NSF-sponsored workshop. Invited.
- **Ivany, Linda C.** and Sessa, Jocelyn A. (2010) Effects of ocean warming and acidification during the Paleocene-Eocene Thermal Maximum on deep and shallow marine communities. Invited talk for session at Ecological Society of America meeting in August 2010 "Ecological Responses to Abrupt Climate Changes: Looking Back to See Ahead". Invited.

- Douglas, Peter, Affek, Hagit, and **Ivany, Linda** (2010) Eocene clumped isotope temperature estimates from Seymour Island, Antarctica. Goldschmidt Conference, Geochimica et Cosmochimica Acta, v. 74, p. A245.
- De Man, Ellen, **Ivany, Linda C.,** Van Simaeys, Stefaan, Steurbaut, Etienne, and Vandenberghe, Noël (2010) Stable isotopes from benthic foraminifera and fish otoliths as proxies for orbital climate forcing and seasonality changes during the middle Eocene to late Oligocene in the shallow marine North Sea Basin. Geophysical Research Abstracts, European Geophysical Union 2010 meeting.
- Gilbert\*, Kwasi N., **Ivany, Linda C**., Teece, Mark A., and Uhen, Mark D. (2010) Neogene sperm whales on the Atlantic Coastal Plain: Constraining life history and ecology from teeth. Geological Society of America, Abstracts with Programs, v. 42, no. 1, Combined NE-SE Sectional Meeting.
- Schlossnagle\*, Trevor H.; Sessa<sup>†</sup>, Jocelyn A., **Ivany, Linda C.**, and Samson, Scott D. (2010) Strontium isotope ratios from the early Eocene Gulf Coast Influence of salinity and potential for age control. Geological Society of America, Abstracts with Programs, v. 42, no. 1, Combined NE-SE Sectional Meeting.
- Keating-Bitonti\*, Caitlin, **Ivany, Linda C.**, Samson, Scott D., and Affek, Hagit P. (2009) Resolving low-latitude EECO paleotemperatures in a marine-shelf setting using stable, strontium, and clumped isotope techniques. Eos Trans. American Geophysical Union, 90(52), Fall Meet. Suppl., PP43B-1579.
- **Ivany, Linda C.**, Brey, Thomas, Huber, Matthew, Buick\*, Devin P., Lomovasky, Betina, Schöne, Bernd (2009) ENSO-scale variability in the Eocene greenhouse recorded by fossil bivalves and wood from Antarctica. Eos Trans. American Geophysical Union, 90(52), *F*all Meet. Suppl., PP44A-06
- Sessa<sup>†</sup>, Jocelyn A., **Ivany, Linda C**., Schlossnagle\*, Trevor H. (2009) Investigating seasonal isotopic variability along an early Eocene shallow shelf. Eos Trans. American Geophysical Union, 90(52), Fall Meet. Suppl., PP42A-05.
- **Ivany, Linda C.**, Runnegar, Bruce N., Keating-Bitonti\*, Caitlin (2009) High-latitude annual temperature cycles from bivalve calcite and the isotopic composition of Early Permian seawater. Geological Society of America, Abstracts with Programs, Annual Meeting.
- **Ivany, Linda C.,** Brett, Carlton E., Wall\*, Heather L.B., Wall\*, Patrick D., Handley, John C. (2009) Relative taxonomic and ecologic stability in Devonian marine faunas of New York State: A test of coordinated stasis. North American Paleontological Convention, Cincinnati OH.
- Handley, J.C., **Ivany, L.C.**, Brett, C.E., Wall\*, H.L.B., Wall\*, P.D. (2009) Assessing coordinated stasis with information theoretic model ranking: An illustration from the Middle Devonian Hamilton Group of New York. North American Paleontological Convention, Cincinnati OH.
- Sessa, J.A., Bralower, T., Patzkowsky, M., **Ivany, L.C.**, (2009) The long-term ecological evolution of shallow marine assemblages in the early Paleogene of the Gulf Coastal Plain, USA. North American Paleontological Convention, Cincinnati OH.
- Gillikin, D.P., Haveles\*, A., Lorrain, A., **Ivany, L.C.**, Dehairs, F. (in press) Barium in mollusk shells a dual proxy of environmental conditions. European Geosciences Union Annual Meeting 2009.
- Keating-Bitonti\*, C.R. and **Ivany, L.C.** (2009) How warm was the early Eocene? Paleotemperature reconstructions from the US Gulf Coast. Geological Society of America, Abstracts with Programs, NE Regional Meeting, v. 41, no. 3.
- Sessa, J.A., **Ivany, L.C.**, Patzkowsky, M., Sluijs, A., van Roj, L., Bralower, T., 2009. Climate of the Late Paleocene and early Eocene in the Gulf Coastal Plain, USA. Climatic and Biotic Events of the Paleogene; Wellington, New Zealand, p. 75.
- Allmon, W.D. and **Ivany, L.C.** (2008) Testing for causal relationships between environmental and evolutionary change in the marine Paleogene of the US Gulf Coastal Plain: The nature of the problem. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 40, no. 6, p. 574.
- Wall\*, H.L.B. and **Ivany, L.C.** (2008) Ecospace utilization in high-diversity shallow shelf marine communities of the U.S. Gulf Coastal Plain. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 40, no. 6, p. 574.

- Wall\*, P.D., **Ivany, L.C.**, and Brett, C.E. (2008) Turnover is the Devonian foreland basin of New York: how geographic coverage our understanding of origination and extinction. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 40, no. 6, p. 403.
- Haveles\*, A. and Ivany, **L.C.** (2008) Rapid growth of mollusks in the Eocene Gosport Sand, US Gulf Coast. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 40, no. 6, p. 575.
- Keating-Bitonti\*, C. and **Ivany, L.C.** (2008) Early Eocene low-latitude stable isotope data from US Gulf Coast bivalves: paleotemperature or paleosalinity? Geological Society of America, Abstracts with Programs, Annual Meeting, vol. 40, no. 6, p. 258.
- Wall\*, P.D., Brett, C.E. and **Ivany, L.C.** (2008) The effect of variable geographic coverage on estimations of origination and extinction: A case study on the Devonian of New York. Geological Society of America, Abstracts with Programs, Northeast Meeting, v. 40, no. 2, p. 2.
- Buick\*, D.P. and **Ivany, L.C.** (2007) Becoming younger while getting colder: Exploring the evolutionary role of heterochrony in long-lived bivalves from the Eocene of Seymour Island, Antarctica. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 39, no. 6, p. 22.
- Wall\*, P.D., **Ivany, L.C.**, and Wilkinson, B.H. (2007) Revisiting Raup: Exploring the influence of outcrop area on diversity in light of modern sampling techniques. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 39, no. 6, p. 564.
- Baugh\*, H.L., Sessa, J.A., and **Ivany, L.C.** (2007) Thirty million years and thirty million shells: Paleogene diversity dynamics of the U.S. Gulf Coastal Plain marine shelf communities. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 39, no. 6, p. 589.
- Sessa, J.A., Baugh\*, H.L., **Ivany, L.C.** Patzkowsky, M., and Bralower, T. (2007) The ecological dynamics of the first thirty million years of the Cenozoic in the Gulf Coastal Plain. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 39, no. 6, p. 589.
- Haveles\*, A. and **Ivany. L.C.** (2007) Why are the mollusks from the Eocene Gosport Sand so big? Geological Society of America, Abstracts with Programs, Annual Meeting, v. 39, no. 6, p. 398.
- Handley, J.C. and **Ivany, L.C.** (2007) Two-way clustering of taxon abundance data: searching for environmental affinities using latent semantic analysis. Geological Society of America, Abstracts with Programs, Annual Meeting, v. 39, no. 6, p.398.
- Ivany, L.C. 2007. Contributions to the Eocene climate record of the Antarctic Peninsula. in Antarctica: A Keystone in a Changing World Online Proceedings of the 10th International Symposium on Antarctic Earth Sciences X, edited by A. K. Cooper and C. R. Raymond et al., USGS Open-File Report 2007-1047, Extended Abstract 068, 4 p.
- Buick\*, D.P. and **Ivany**, **L.C.** (2007) Looking younger while getting 'colder': exploring the role of heterochrony in the evolution of long-lived bivalves from the Eocene of Seymour Island, Antarctica. 1st International Sclerochronology Conference, St. Petersburg FL.
- **Ivany, L.C.** and Runnegar, B. (2007) Primary isotope ratios preserved in a Late Permian bivalve allow for life history and paleoenvironmental reconstructions. 1<sup>st</sup> International Sclerochronology Conference, St. Petersburg FL.
- Brey, T., **Ivany, L.C.**, Schöne, B., Buick\*, D.P., and Schue\*, J., (2007) Do fossil bivalve shells from Seymour Island (Antarctic Peninsula) provide evidence for Eocene El Niño? 1<sup>st</sup> International Sclerochronology Conference, St. Petersburg FL.
- Fenlon, Erin E., Lockwood, Rowan, **Ivany, Linda C.**, and Sessa, Jocelyn A., (2007) Quantifying the morphology and reconstructing the phylogeny of venericard bivalves along the Gulf Coastal Plain during the Paleogene. Geological Society of America, Abstracts with Programs, Southeastern Section, v. 39, no. 2, p. 30.
- Sessa, Jocelyn A., Bralower, Timothy J., **Ivany, Linda C.,** and Patzkowsky, Mark E. (2006)
  Environmental and ecological controls on faunal dynamics in the Paleogene Gulf Coastal Plain.
  Geological Society of America Abstracts with Programs, Annual Meeting, V. 38, no. 7, p. 87.
- Sessa, Jocelyn A., Bralower, Timothy J., **Ivany, Linda C.,** and Patzkowsky, Mark E. (2006) Molluscan assemblage and isotopic changes across the Paleocene-Eocene boundary in the Gulf Coastal Plain, USA. Climate and Biota of the Early Paleogene, Bilbao, Spain, Abstracts volume p. 117.
- Sessa, Jocelyn A., Bralower, Timothy J., **Ivany, Linda C.,** and Patzkowsky, Mark E. (2006) Faunal assemblage and isotopic changes across the Paleocene-Eocene boundary in the Gulf Coastal

- Plain, USA. The Second International Paleontological Congress Programme, Beijing, China, p. 26
- Baugh\*, Heather L., and **Ivany, Linda C.** (2006) The Paleoecology of turnover: preliminary results from the middle-late Eocene, US Gulf Coast. Climate and Biota of the Early Paleogene, Bilbao, Spain.
- De Man\*, Ellen, Van Simaeys, Stefaan, **Ivany, Linda C.,** and Vandenberghe, Noël (2006) Oligocene sequence stratigraphy of the southern North Sea Basin: On the recognition of climate-driven unconformities. SealAix 2006, Aix-en-Provence, France.
- **Ivany, Linda C.,** Lohmann, Kyger C, Hasiuk, Franciszek (2005) Middle Eocene Warming on Seymour Island, Antarctica: Continental Shelf Paleotemperatures Recorded in Molluscan Carbonates. Geological Society of America *Abstracts with Programs*, Annual Meeting, V. 37, p. 414.
- Wall\*, Patrick, **Ivany**, **Linda C.**, Wilkinson, Bruce H., and Peters, Shanan (2005) The effect of sedimentary rock outcrop area on estimates of marine Phanerozoic diversity. Geological Society of America *Abstracts with Programs*, Annual Meeting, V. 37, p. 160.
- Baugh\*, Heather L., Brett, Carleton, and **Ivany, Linda C**. (2005) Can we see the forest for the trees? Faunal stability and spatio-temporal scale in the Devonian Hamilton Group, New York State. Geological Society of America Abstracts with Programs, Annual Meeting, V. 37, p. 460.
- De Man\*, Ellen, Ivany, Linda C., Van Simaeys, Stefaan, Steurbaut, Etienne, Nolf, Dirk, and Vandenberghe, Noël (2005) Middle Eocene to Late Oligocene glacio-eustatic driven unconformities from the southern North Sea Basin: applied climatostratigraphy in understanding the historical unit-stratotypes. *Geological Society of America Abstracts with Programs, Annual Meeting*, V. 37, p. 458.
- **Ivany, Linda C.**, Aronson, Richard B., Blake, Daniel B., Lohmann, Kyger C, and Werner, John (2005) Faunal change correlates with climate change in the Eocene of Seymour Island. North American Paleontological Convention, PaleoBios V. 25, No. 2 supplement, pp. 63-64.
- Visaggi\*, Christy C. and **Ivany, Linda C.** (2005) How meaningful are by-taxon abundance data for evaluating faunal composition through time? North American Paleontological Convention, PaleoBios V. 25, No. 2 supplement, pp. 117-118.
- Underwood\*, Ethan M., **Ivany, Linda C.**, Wilkinson, Bruce H. (2005) No change in the rate of shell precipitation with age in the Atlantic surf clam, *Spisula solidissima*: abandoning the one-dimensional interpretation of growth. Geological Society of America *Abstracts with Programs*, Northeast sectional meeting, V. 37, p. (in press)
- Ivany, Linda C., Lohmann, Kyger C, Blake, Daniel B., Aronson, Richard B. (2004) δ¹8O values of Eocene bivalves reveal high-latitude shelf cooling, Seymour Island, Antarctic Peninsula.
   Geological Society of America Abstracts with Programs, Annual Meeting, Vol. 36, No. 5, p. 303
- J. Alroy, M. Aberhan, D. Bottjer, M. Foote, F. Fursich, L. Ivany, W. Kiessling, C. Marshall, A. Miller, and M. Patzkowsky (2004) Improved estimates of Phanerozoic marine diversity. Geological Society of America Abstracts with Programs, Annual Meeting, Vol. 36, No. 5, p. 456.
- Visaggi\*, Christy C., and **Ivany, Linda C.** (2004) The influence of presence-absence vs. relative abundance data on interpretations of faunal stability. Geological Society of America *Abstracts with Programs*, Annual Meeting, Vol. 36, No. 5, p. 527.
- **Ivany, Linda C.** and Van Simaeys, Stefaan (2003) Diamict of probable glacial origin at the Eocene-Oligocene boundary on Seymour Island, Antarctic Peninsula. Geological Society of America *Abstracts with Programs*, Vol. 35, No. 6, September 2003, p. 585.
- Buick\*, Devin P. and **Ivany, Linda C.** (2003) The role of light limitation in the ontogeny of extremely long-lived, temperate-water bivalves from the Eocene of Antarctica. Geological Society of America *Abstracts with Programs*, Vol. 35, No. 6, September 2003, p. 318.
- De Man\*, Ellen M., **Ivany, Linda C.,** Vandenberghe, Noël (2003) Stable oxygen isotope record of the Eocene-Oligocene transition in NE-Belgium. International Subcommission on Paleogene Stratigraphy Symposium on the Paleogene, Leuven Belgium, p. 15.
- Stafford\*, Laura, and **Ivany**, **Linda C.** (2003) Population Dynamics of *Venericardia hatcheplata*, Geological Society of America Abstracts with Programs, NE Section Meeting, 2003.
- Buick\*, Devin, and **Ivany**, **Linda C.** (2003) Morphology and life history of Eocene *Cucullaea* bivalves from Antarctica. Geological Society of America Abstracts with Programs, NE Section Meeting, 2003.

- **Ivany, Linda C.,** Peters, Stephen C., Wilkinson, Bruce H., Lohmann, Kyger C, Reimer\*, Beth A. (2002) Paleogene seawater chemistry inferred from coral stable isotopic and elemental chemistry. Abstracts with Programs, GSA Annual Meeting 2002.
- **Ivany, Linda C.**, Johnson, Emily, Cohen\*, Greg, Wilkinson, Bruce H. (2001) Isotopic records from *Venericardia* bivalves: implications for early Eocene climate. Abstracts with Programs, GSA Annual Meeting 2001.
- **Ivany, Linda C.**, Jones, Douglas S., and Wilkinson, Bruce H. (2001) Using stable isotopic data to resolve variation in rate and duration of seasonal growth throughout ontogeny. North American Paleontological Convention 2001, *Paleobios* 21(2) p. A72.
- **Ivany, Linda C.** and Wilkinson, Bruce H. (2000) Paleoclimatic inference from stable isotopic compositions of accretionary biogenic hardparts a quantitative approach to the evaluation of incomplete data. Abstracts with Programs, GSA Annual Meeting, p. A298.
- Marshall, Charles R. and the NCEAS Phanerozoic Diversity Working Group (2000) Towards a sample standardized Phanerozoic Diversity Curve: comparing the Sepkoski and NCEAS databases. Abstracts with Programs, GSA Annual Meeting.
- **Ivany, Linda C.** and Patterson, William P. (1999) Paleogene temperature records inferred from microsampling and isotopic analysis of Gulf Coastal Plain fish otoliths. Abstracts with Programs **31**, GSA Annual Meeting, A-311.
- Marshall, Charles R. and the NCEAS Phanerozoic Diversity Working Group (1999) Towards a sample standardized Phanerozoic Diversity Curve. Abstracts with Programs **31**, GSA Annual Meeting.
- **Ivany, Linda C.** (1999) Testing for coordinated stasis in the middle Eocene Gulf Coastal Plain. Symposium on Cenozoic Paleobiology. p. 8.
- **Ivany, Linda C.** and Baumiller, Tomasz K. (1998) A new method for testing faunal similarity using real and simulated data. Abstracts with Programs **30**, GSA Annual Meeting, p. A328.
- **Ivany, Linda C.** (1997) Testing for coordinated stasis in the Eocene Gulf Coastal Plain. Abstracts with Programs **29**(6), GSA Annual Meeting, pp. 404-405.
- **Ivany, Linda C.** (1996) Coordinated faunal stasis: a new twist on the biological record of environmental change. AGU Fall Meeting, *EOS* Volume 77, no. 44, p. 403.
- **Ivany, Linda C.** (1996) Ichnofossil distribution in sequence stratigraphic units of the Eocene Claiborne Group, U.S. Gulf Coastal Plain. Sixth North American Paleontological Convention Abstracts, p. 189. (not presented due to illness)
- **Ivany, Linda C.** (1995) A multidisciplinary stratigraphic study of the Middle Eocene Lisbon Formation in Alabama and Mississippi. Abstracts with Programs **27**, GSA Annual Meeting, p. A177.
- **Ivany, L.C.** & Salawitch , R.J. (1995) Ancient wildfires: biomass burning at the Cretaceous-Tertiary boundary. AGU Chapman Conference Biomass Burning and Global Change, p. 52.
- **Ivany, Linda C.**, Schopf, Kenneth M., & Brett, Carlton E. (1994) Biofacies and coordinated stasis. Abstracts with Programs **26**, GSA Annual Meeting, p. A453.
- Morris, Paul J. & Ivany, Linda C. (1994) Biotic response to environmental change in light of ecological locking. AGU Fall Meeting, EOS Volume 75, no. 44, p. 80.
- **Ivany, Linda C.**, Newton, Cathryn R., & Mullins, Henry T. (1992) Benthic invertebrate biofacies of a modern carbonate ramp and implications for the fossil record. Abstracts with Programs **24**, GSA Annual Meeting, p. A313.
- Morris, Paul J., Ivany, Linda C., & Schopf, Kenneth M. (1992) Paleoecological stasis in evolutionary theory. Abstracts with Programs 24, GSA Annual Meeting, p. A313.
- Schopf, Kenneth M., Ivany, Linda C., & Morris, Paul J. (1992) Onshore-offshore trends in light of ecological locking. Abstracts with Programs 24, GSA Annual Meeting, p. A313.
- **Ivany, Linda C.** (1991) Carbon isotope records across the K/T boundary: implications for biomass burning. Abstracts with Programs **23**, GSA Annual Meeting, p. A420.
- **Ivany, Linda C.**, Portell, Roger W., & Jones, Douglas S. (1990) Animal-plant interactions in a fossil seagrass community from the Eocene of Florida. Abstracts with Programs **22**, GSA Southeastern Sectional Meeting, p. A19.
- **Ivany, Linda C.**, Portell, Roger W., & Jones, Douglas S. (1989) Biogeographic, paleoecologic, and evolutionary significance of an Eocene seagrass community: Avon Park Formation, Peninsular Florida. Abstracts with Programs **21**, GSA Annual Meeting, p. A112.