# Jon M. Husson

Department of Geoscience
University of Wisconsin - Madison
1215 W. Dayton Street
Madison, WI 53706
husson@wisc.edu
www.jonhusson.com

$(Oct. \ 2014 \rightarrow)$	${\bf post\text{-}doctoral\ fellow\ at\ University\ of\ Wisconsin-Madison} \\ {\it advisor:\ Shanan\ Peters}$
(2009 - 2014)	graduate student at Princeton University (Princeton, NJ)
$(2009 - 2014) \ Sept. \ 2014$	Ph.D., Department of Geosciences
	Thesis: Constraining timing and origin of unusual carbon cycle
	dynamics in the terminal Proterozoic and middle Paleozoic
May 2011	M.A., Department of Geosciences
(2003 - 2008)	undergraduate at Harvard University (Cambridge, MA) B.A., Earth and Planetary Sciences, magna cum laude

## Honors/Awards

- Teaching Award (university-wide), Association of Princeton Graduate Alumni (2013)
- Outstanding Teaching Assistant Award, National Association of Geoscience Teachers (2013)
- Arnold Guyot Teaching Award, Princeton Department of Geosciences (2013)
- NSF Graduate Research Fellow (2010–2014)

#### RESEARCH METHODS/SKILLS

field: high-precision mapping (30-cm  $2\sigma$ ) with the Trimble differential GPS system (R8 GPS base station and GeoXH rover); 15 months field work in Namibia, Canadian Arctic, Tanzania, maritime Canada, central Australia, South Australia, The Bahamas, Cyprus, upstate New York

laboratory:  $\delta^{13}$ C and  $\delta^{18}$ O measurements on GasBench II–Thermo Delta Plus and GasBench II–Sercon 20–22 instruments; trace element abundances on a Thermo Element 2 ICP–MS;  $\delta^{44/40}$ Ca and  $\delta^{26}$ Mg measurements on a multi-collector Thermo Neptune Plus ICP–MS; U–Pb dating of single zircon grains on a PhoeniX62 TIMS instrument at low blank (Pb<sub>c</sub> <1 pg) levels

programming/computing: MATLAB; ArcGIS; QGIS; HTML; Adobe Illustrator; IATEX

Publications (italics denotes in-revision/in-press; # denotes student co-author)

- **Husson, J. M.**, Schoene, B., Bluher, S. E.<sup>#</sup>, and Maloof, A. C., in revision, Chemostratigraphic and U-Pb geochronologic constraints on carbon cycling across the Silurian-Devonian boundary: Earth and Planetary Science Letters.

- Keller, C. B., Schoene, B., Barboni, M., Samperton, K. M., and **Husson, J. M.**, 2015, Volcanic-plutonic parity and the differentiation of the continental crust: Nature, vol. 523, pp. 301–307.
- Husson, J. M., Higgins, J. A., Maloof, A. C., and Schoene, B., 2015, Ca and Mg isotope constraints on the origin of Earth's deepest  $\delta^{13}$ C excursion: Geochimica et Cosmochimica Acta, vol. 160, pp. 243–266.
- Husson, J. M., Maloof, A. C., Schoene, B., Chen, C. Y.<sup>#</sup>, and Higgins, J. A., 2015, Strati-graphic expression of Earth's deepest  $\delta^{13}$ C excursion in the Wonoka Formation of South Australia: American Journal of Science, vol. 315, pp. 1–45.
- **Husson, J. M.**, Maloof, A. C., and Schoene, B., 2012, A syn-depositional age for Earth's deepest  $\delta^{13}$ C excursion required by isotope conglomerate tests: Terra Nova, vol. 24, pp. 318–325.
- Rose, C. V., Swanson-Hysell, N. L., **Husson, J. M.**, Poppick, L. N., Cottle, J. M., Schoene, B., and Maloof, A. C., 2012, Constraints on the origin and relative timing of the Trezona  $\delta^{13}$ C anomaly below the end-Cryogenian glaciation: Earth and Planetary Science Letters, vol. 319, pp. 241–250.
- Higgins, M. B., Robinson, R. S., **Husson, J. M.**, Carter, S. J., and Pearson, A., 2012, Dominant eukaryotic export production during ocean anoxic events reflects the importance of recycled NH<sup>4+</sup>: Proceedings of the National Academy of Sciences, vol. 109, pp. 2269–2274.
- Johnston, D. T., Poulton, S. W., Dehler, C., Porter, S., **Husson, J.**, Canfield, D. E., and Knoll, A. H., 2010, An emerging picture of Neoproterozoic ocean chemistry: insights from the Chuar Group, Grand Canyon, USA: Earth and Planetary Science Letters, vol. 290, pp. 64–73.
- Hoffman, P., Halverson, G., Domack, E., **Husson, J.M.**, Higgins, J., and Schrag, D., 2007, Are basal Ediacaran (635 Ma) post-glacial "cap dolostones" diachronous?: Earth and Planetary Sciences Letters, vol. 258, pp. 114–131.

### Professional Talks (\* denotes invited talk; # denotes student co-author)

- **Husson**, **J.M.** and Peters, S.E., 2015, Modes of continental sediment storage and the history of atmospheric oxygen: American Geophysical Union Fall Meeting, PP31E-05. (upcoming)
- **Husson, J.M.** and Peters, S.E., 2015, Macrostratigraphic constraints on the global carbon cycle: Geological Society of America Abstracts with Programs, Vol. 47, No. 7. (upcoming)
- Husson, J.M.\*, University of Wisconsion Madison, Weeks Lecture, September 2015
- **Husson, J.M.**, Peters, S.E. and Czaplewski, J., 2015, Macrostratigraphic constraints on the global carbon cycle: North-Central Geological Society of America Meeting, Vol. 47, No. 5, p. 61.
- Husson, J.M.\*, Washington University, Department Colloquium, April 2015
- Husson, J.M.\*, Johns Hopkins University, Bromery Lecture, January 2015
- **Husson, J.M.**, Higgins, J.A., Maloof, A.C., and Schoene, B., 2014, Ca isotope constraints on the origin of Earth's deepest  $\delta^{13}$ C excursion: Geological Society of America Abstracts with Programs, Vol. 46, No. 6, p. 401.

- Husson, J.M.\*, Massachusetts Institute of Technology, Geology, Geochemistry and Geobiology seminar, April 2014
- Husson, J.M., Maloof, A.C., Schoene, B., Chen, C.Y.\*\*, and Higgins, J.A., 2014, Strati-graphic expression of Earth's deepest  $\delta^{13}$ C excursion in the Wonoka Formation of South Australia: Northeastern Geobiology Symposium at Yale University.
- Husson, J.M.\*, Schoene, B., Bluher, S.E.#, and Maloof, A.C., 2013, Absolute time constraints on the Silurian-Devonian boundary  $\delta^{13}$ C excursion: William Smith Meeting of the Geological Society of London.
- **Husson, J.M.**, Maloof, A.C., and Schoene, B., 2010, Stratigraphic tests for the origin of the deepest carbon-isotope anomaly in Earth history the Wonoka Formation of South Australia: Geological Society of America Abstracts with Programs, Vol. 42, No. 5, p. 397.

## PROFESSIONAL POSTERS (# denotes student co-author)

- Wilcots, J.#, **Husson, J.M.**, and Peters, S.E., 2015, Stromatolite distribution in space and time: a machine-reading assisted quantitative analysis: Geological Society of America Abstracts with Programs, , Vol. 47, No. 7. (upcoming)
- **Husson, J.M.**, Maloof, A.C., Schoene, B., and Higgins, J.A., 2013, Does the Shuram  $\delta^{13}$ C excursion record Ediacaran oxygenation?: American Geophysical Union Fall Meeting, PP51B-1948.
- **Husson, J.M.**, Schoene, B., Bluher, S.E.<sup>#</sup>, and Maloof, A.C., 2013, Absolute time constraints on the Silurian-Devonian boundary  $\delta^{13}$ C excursion: American Association of Petroleum Geologists Annual Convention and Exhibition, Pittsburgh, PA.
- **Husson, J.M.**, Maloof, A.C., and Schoene, B., 2012, A syn-depositional age for Earth's deepest  $\delta^{13}$ C excursion required by isotope conglomerate tests: Fermor Meeting of the Geological Society of London.

## TEACHING/ADVISING EXPERIENCE

- Princeton University Teaching Assistant:
  - S2013: Structural Geology with Prof. B. Schoene
  - F2012: Fundamentals of Solid Earth Science with Profs. J. Tromp and J. Higgins
  - F2011: Earth's Environment and Ancient Civilizations with Profs. A. Maloof and F. Simons
- High school guest teacher in Earth history (2–3x per year; 2009–2014)
- Trained 21 undergraduates to work in geochemistry laboratories and 3 undergraduates as field assistants (2009 2013)
- Supervised two independent undergraduate research projects (1 month of field work, 6 months of independent lab work) by Christine Y. Chen ('13) and Sarah E. Bluher ('14). These projects grew into papers co-authored with both undergraduate students (see above).