## Justin V. Strauss

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Education				
Harvard University, Cambridge, MA PhD, Department of Earth and Planetary Sciences MA, Department of Earth and Planetary Sciences	May 2015 May 2014			
The Colorado College, Colorado Springs, CO BA, Department of Geology	Aug. 2006			
Teaching and Work Experience				
<b>Dartmouth College, Department of Earth Sciences, Hanover, NH</b> Assistant Professor	Jan. 2016–present			
<b>Stanford University, Department of Geological Sciences, Stanford, CA</b> <i>Agouron Institute Geobiology Postdoctoral Scholar</i>	July 2015 - Dec. 2015			
Harvard University, Department of Earth and Planetary Sciences, Cambridge, MA Teaching Fellow – Geobiology and the History of Life Teaching Fellow – Sedimentology and Stratigraphy Research Fellow Field Assistant – Dr. Francis Macdonald Field Assistant – Dr. Francis Macdonald	Spring 2013 Spring 2012 Mar. 2010 - Aug. 2010 July 2009 - Aug. 2009 May 2008			
<b>Princeton University, Department of Geosciences, Princeton, NJ</b> Lab Technician – Dr. Adam Maloof Field Assistant – Dr. Adam Maloof	Aug. 2007 - Dec. 2007 June 2007 - Aug. 2007			
<b>The Colorado College, Department of Geology, Colorado Springs, CO</b> <i>Paraprofessional</i>	Sept. 2006 - June 2007			
Honors and Awards				
<ul> <li>2018 National Geographic Explorer (May)</li> <li>2015 Agouron Institute Geobiology Postdoctoral Fellowship (May)</li> <li>2015 Geological Society of America Student Research Grant (April)</li> <li>2014 Geological Society of America Student Research Grant (April)</li> <li>2013 Star Family Prize for Excellence in Undergraduate Advising Nominee – Harvard Univ</li> <li>2013 Bok Center Distinction in Teaching Award – Harvard University (October)</li> <li>2012 Bok Center Distinction in Teaching Award – Harvard University (October)</li> <li>2012 GACMAC 2012 Jerome Remick III Poster Award (May)</li> <li>2012 National Science Foundation GRFP Honorable Mention (April)</li> <li>2010 National Science Foundation GRFP Honorable Mention (April)</li> <li>2010 William A. Fischer Special Becograption Constitutes (May)</li> </ul>	versity (May)			

2006 William A. Fischer Special Recognition Geosciences Award (May)

2005 Patricia J. Buster Scholarship for Undergraduate Research (May)

2004 Patricia J. Buster Scholarship for Undergraduate Research (May)

#### Publications

\*Dartmouth Graduate Student Author \*\*Dartmouth Undergraduate Student Author \*\*\*Joint 1st Author

#### Accepted/In press:

46. Ahm, A-S., Macdonald, F.A., Bjerrum, C.J., Hoffman, P.F., Bold, U., Rose, C.V., **Strauss, J.V**, and Higgins, J.A., *accepted*, An early diagenetic deglacial origin for basal Ediacaran "cap dolostones": *Earth and Planetary Science Letters*, v. xx, p. xxx.

45. Halverson, G.P., Maloof, A.C., **Strauss, J.V.**, and Kunzmann, M., *in press*, The Tonian–Cryogenian transition in northeastern Svalbard: Precambrian Research, v. xxx, p. xxx.

44. Johnson, B.G., **Strauss, J. V.**, Taylor, J. F., Ward, W. P., Colpron, M., McClelland, W. C., Toro, J., *in press*, Geochronology, paleontology, and geochemistry from the Whale Mountain allochthon of the northeastern Brooks Range, Alaska, *in* Piepjohn, K., **Strauss, J.V.**, Reinhardt, L. and McClelland, W.C., eds., Circum-Arctic Structural Events: Tectonic Evolution of the Arctic Margins and Trans-Arctic Links with Adjacent Orogens: *Geological Society of America Special Papers*, v. xxx., p. xxx.

43. Macdonald, F.A., Schmitz, M.D., **Strauss, J.V.**, Halverson, G.P., Gibson, T., Eyster, A., Cox, G., \*\*Mamrol, P., and Crowley, J., *in press*, The Cryogenian of Yukon: *Precambrian Research*, v. xxx, p. xxx.

42. \*\*\*Moynihan, D., \*\*\*Strauss, J.V., Padget, C.M., and Nelson, L.L., *accepted*, Upper part of the Windermere Supergroup in the Nadaleen River area, east-central Yukon: stratigraphy, regional correlations and implications for development of the western Laurentian margin: *Geological Society of America Bulletin*, v. xxx, p. xxx.

41. Trower, E.J., Cantine, M., Gomes, M., Grotzinger, H., Grotzinger, J.P., Knoll, A.H., Lamb, M.P., Lingappa, U., O'Reilly, S.S., Present, T.M., Stein, N., **Strauss, J.V.**, and Fischer, W.W., *accepted*, Active ooid growth driven by sediment transport in a high energy shoal, Little Ambergris Cay, Turks and Caicos, British Overseas Territories, *Journal of Sedimentary Research*, v. xxx, p. xxx.

40. Ward, W.P., **Strauss, J.V.**, Johnson, B.G., McClelland, W.C., Colpron, M., von Gosen, W., Piepjohn, K., Cobble, M., Crockford, P.W., and Landis, J., *accepted*, Age, geochemistry and significance of Devonian felsic magmatism in the North Slope subterrane, Yukon, *in* Piepjohn, K., **Strauss, J.V.**, Reinhardt, L. and McClelland, W.C., eds., Circum-Arctic Structural Events: Tectonic Evolution of the Arctic Margins and Trans-Arctic Links with Adjacent Orogens: *Geological Society of America Special Papers*, v. xxx., p. xxx.

#### 2018:

39. Colpron, M., **Strauss, J.V.**, and McClelland, W.C., 2018 (*online*), Detrital zircon U-Pb geochronological and Hf isotopic constraints on the geological evolution of North Yukon, *in* Piepjohn, K., **Strauss, J.V.**, Reinhardt, L. and McClelland, W.C., eds., Circum-Arctic Structural Events: Tectonic Evolution of the Arctic Margins and Trans-Arctic Links with Adjacent Orogens: *Geological Society of America Special Papers*, v. xxx., p. xxx.

38. Fraser, T.A., Crawford, I., Gadd, M.G., Henderson, K., Layton-Matthews, D., Melchin, M., Peter, J.M., Sack, P.J., Sperling, E., and **Strauss, J.V.**, 2018, An overview of shale studies in Yukon during the 2017 field season, *in* MacFarlane, K.E., ed., Yukon Exploration and Geology 2017: Yukon Geological Survey, p. 37–45.

37. Nelson, L.L., **Strauss, J.V.**, Crockford, P.W., Cox, G.M., Johnson, B.G., Ward, W., Colpron, M., McClelland, W.C., and Macdonald, F.A., 2018 (*online*), Neodymium isotopic and geochemical constraints on the provenance of pre-Mississippian sedimentary rocks in the North Slope of Yukon and Alaska, *in* Piepjohn, K., **Strauss, J.V.**, Reinhardt, L. and McClelland, W.C., eds., Circum-Arctic Structural Events: Tectonic Evolution of the Arctic Margins and Trans-Arctic Links with Adjacent Orogens: *Geological Society of America Special Papers*, v. xxx., p. xxx. 36. **Strauss, J.V.**, Johnson, B.G., Colpron, M., Nelson, L.L., \*\*Perez, J., Benowitz, J.A., Ward, W., and McClelland, W.C., 2018 (*online*), Pre-Mississippian stratigraphy and provenance of the North Slope subterrane of Arctic Alaska II: Basinal rocks of the northeastern Brooks Range and their significance in circum-Arctic evolution, *in* Piepjohn, K., **Strauss, J.V.**, Reinhardt, L. and McClelland, W.C., eds., Circum-Arctic Structural Events: Tectonic Evolution of the Arctic Margins and Trans-Arctic Links with Adjacent Orogens: *Geological Society of America Special Papers*, v. xxx., p. xxx.

35. **Strauss, J.V.**, Macdonald, F.A., and McClelland, W.C., 2018 (*online*), Pre-Mississippian stratigraphy and provenance of the North Slope subterrane of Arctic Alaska I: Platformal rocks of the northeastern Brooks Range and their significance in circum-Arctic evolution, *in* Piepjohn, K., **Strauss, J.V.**, Reinhardt, L. and McClelland, W.C., eds., Circum-Arctic Structural Events: Tectonic Evolution of the Arctic Margins and Trans-Arctic Links with Adjacent Orogens: *Geological Society of America Special Papers*, v. xxx., p. xxx.

## 2017:

34. Cohen, P.A., Irvine, S., and **Strauss, J.V.**, 2017, Vase-shaped microfossils from the Callison Lake Formation of Yukon, Canada: Taxonomy, taphonomy, and stratigraphic paleobiology: *Palaeontology*, v. 60, no. 5, p. 1-19.

33. Cohen, P.A., **Strauss, J.V.**, Rooney, A.D., Sharma, M., and Tosca, N.J., 2017, Controlled hydroxyapatite biomineralization in an ~810 million-year-old unicellular eukaryote: *Science Advances*, v. 3, n. 6, p. 1-8.

32. Eyster, A.E., Fu, R.R., **Strauss, J.V.**, Weiss B.J., Roots, C.F., Halverson, G.P., Evans, D.A.D., and Macdonald, F.A., 2017, Paleomagnetic evidence for a 50 degree rotation of the Yukon block relative to Laurentia: Implications for a low-latitude Sturtian glaciation and the break-up of Rodinia: *Geological Society of America Bulletin*, v. 129, no. 1/2, p. 38–58.

31. Miller, A.J., **Strauss, J.V.**, Halverson, G.P., Macdonald, F.A., Johnston, D.T., and Sperling, E.A., 2017, Tracking the onset of Phanerozoic-style redox-sensitive trace metal enrichments: New data from basal Ediacaran post-glacial strata in NW Canada: *Chemical Geology*, v. 457, p. 24–37.

30. **Strauss, J.V.**, Hoiland, C.W., and Nelson, L.L., 2017, Field Report: Exploring the Doonerak fenster of the central Brooks Range, Alaska, USA: *Geoscience Frontiers*, v. 8, p. 915–918.

29. **Strauss, J.V.**, Hoiland, C.W., Ward, W., Johnson, B.G., Nelson, L., and McClelland, W.C., 2017, Orogen transplant: Taconic–Caledonian magmatism in the Brooks Range of Alaska: *Geological Society of America Bulletin*, v. 129, no. 5/6, p. 649–676.

#### 2016:

28. Cox, G.M., Halverson, G.P., Poirier, A., Le Heron, D., Stevenson, R., and **Strauss, J.V.**, 2016a, A model for Cryogenian iron formation: *Earth and Planetary Science Letters*, v. 433, p. 280–292.

27. Cox, G.M., Halverson, G.P., Stevenson, R.K., Vokaty, M., Poirier, A., Kunzmann, M., Li, Z.-X., Denyszyn, S.W., **Strauss, J.V.**, and Macdonald, F.A., 2016b, Continental flood basalt weathering as a trigger for Neoproterozoic Snowball Earth: *Earth and Planetary Science Letters*, v. 446, p. 89–99.

26. Johnson, B.G., **Strauss, J.V.**, Toro, J., Benowitz, J.A., and Ward, W.P., 2016, Detrital geochronology of pre-Mississippian strata in the northeastern Brooks Range, Alaska: Insights into the tectonic evolution of northern Laurentia: *Lithosphere*, v. 8, no. 6, p. 649–667.

25. Knoll, A.H., Bergmann, K.D., and **Strauss, J.V.**, 2016, Life: The First Two Billion Years: *Philosophical Transactions* of the Royal Society B, v. 371, p. 1-13.

24. Sperling, E.A., Carbone, C., **Strauss, J.V.**, Johnston, D.J., Narbonne, G.M., and Macdonald, F.A., 2016, Oxygen, facies, and secular controls on the appearance of Cryogenian and Ediacaran body and trace fossils in the Mackenzie Mountains of northwestern Canada: *Geological Society of America Bulletin*, v. 128, no. 3-4, p. 558–575.

#### 2015:

23. Cox, G.M., **Strauss, J.V.**, Halverson, G.P., McClelland, W.C., Schmitz, M., and Macdonald, F.A., 2015, Kikiktat Volcanics of Arctic Alaska: Melting of subcontinental lithospheric mantle associated with the Franklin Large Igneous Province: *Lithosphere*, v. 7, no. 3, p. 275–295.

22. Martindale, R.C., **Strauss, J.V.**, Sperling, E.A., Johnson, J.E., Van Kranendonk, M.J., Flannery, D., French, K., Lepot, K., Mazumder, R., Rice, M.S., Schrag, D.P., Summons, R., Walter, M., Abelson, J., and Knoll, A.H., 2015, Sedimentology, chemostratigraphy and stromatolites of lower Paleoproterozoic carbonates, Turee Creek Group, Western Australia: *Precambrian Research*, v. 266, p. 194–211.

21. McClelland, W.C., Colpron, M., Piepjohn, K., von Gosen, W., Ward, W., and **Strauss, J.V.**, 2015, Preliminary detrital zircon geochronology of the Neruokpuk Formation in the Barn Mountains, Yukon: *in* Yukon Exploration and Geology, K.E. MacFarlane, M.G. Nordling, and P.J. Sack (eds.), Yukon Geological Survey, p. 123–143.

20. Rooney, A.D., **Strauss, J.V.**, Brandon, A.D., and Macdonald, F.A., 2015, A Cryogenian chronology: Two long-lasting, synchronous Neoproterozoic Snowball Earth glaciations: *Geology*, v. 43, no. 5, p. 459–462.

19. **Strauss, J.V.**, Macdonald, F.A., Halverson, G.P., Tosca, N.J., Schrag, D.P., and Knoll, A.H., 2015, Stratigraphic evolution of the Neoproterozoic Callison Lake Formation: Linking the break-up of Rodinia to the Islay carbon isotope excursion: *American Journal of Science*, v. 315, p. 881–944.

18. Taylor, J.F., Allen, T.J., Repetski, J.E., **Strauss, J.V.**, and Irwin, S.J., 2015, Life on the edge in eastern Alaska: basal Ordovician (Tremadocian) platform-margin faunas of the Jones Ridge Limestone, *in* S.A. Leslie, D. Goldman, and R.C. Orndorff, eds., 12th International Symposium on the Ordovician System, Short Papers and Abstracts: *Stratigraphy*, v. 12, no. 2, p. 70-77.

#### 2014:

17. Macdonald, F.A., Pruss, S. B., and **Strauss, J.V.**, 2014, Trace fossils with spreite from the Late Ediacaran Nama Group, Namibia: Complex feeding patterns five million years before the Precambrian-Cambrian boundary: *Journal of Paleontology*, v. 88, no.2, p. 299-308.

16. Rooney, A.D., Macdonald, F.A., **Strauss, J.V.**, Dudàs, F.Ö., Hallman, C., and Selby, D., 2014, Re-Os geochronology and coupled Os-Sr isotope constraints on the Sturtian snowball Earth: *Proceedings of the National Academy of Sciences*, v. 111, no. 1, p. 51-56.

15. **Strauss, J.V.,** Rooney, A.D., Macdonald, F.A., Brandon, A.D., and Knoll, A.H., 2014, 740 Ma vase-shaped microfossils from Yukon, Canada: Implications for Neoproterozoic chronology and biostratigraphy: *Geology*, v. 42, no. 8, p. 659-662.

14. **Strauss, J.V.**, Roots, C.F., Macdonald, F.A., Halverson, G.P., Eyster, A., and Colpron, M., 2014, Geological map of the Coal Creek inlier, Ogilvie Mountains (NTS 116B/10-15 and 116C/9,16): Yukon Geological Survey, Open File Report 2014-15, 1:100,000 scale.

## 2013:

13. Cox, G.M., Halverson, G.P., Minarik, W.G., LeHeron, D.P., Macdonald, F.A., Bellefroid, E.J., and **Strauss, J.V.**, 2013, Neoproterozoic iron formation: An evaluation of its temporal, environmental, and tectonic significance: *Chemical Geology*, v. 362, p. 232-249.

12. Macdonald, F.A., **Strauss, J.V.**, Sperling, E.A., Halverson, G.P., Narbonne, G.H., Johnston, D.T., Kunzmann, M., Schrag, D.P., and Higgins, J.A., 2013, The stratigraphic relationship between the Shuram carbon isotope excursion, the oxygenation of Neoproterozoic oceans, and the first appearance of the Ediacara biota and bilaterian trace fossils in northwestern Canada: *Chemical Geology*, v. 362, p. 250-272.

11. Myrow, P.M., Hanson, A., Phelps, A.S., Creveling, J.R., **Strauss, J.V.**, Fike, D.A., and Ripperdan, R.L., 2013, Latest Devonian (Famennian) global events in western Laurentia: Variations in the carbon isotopic record linked to diagenetic

alteration below regionally extensive unconformities: *Palaeogeography, Palaeoclimatology, and Palaeoecology*, v.386, p. 194-209.

10. **Strauss, J.V.**, Macdonald, F.A., Taylor, J.F., Repetski, J.E., and McClelland, W.C., 2013, Laurentian origin for the North Slope of Alaska: Implications for the tectonic evolution of the Arctic: *Lithosphere*, v. 5, n. 5, p. 477-482.

## 2012:

9. Halverson, G.P., Macdonald, F.A., **Strauss, J.V.**, Smith, E.F., Cox, G.M., and Hubert-Théou, L., 2012, Updated definition and correlation of the lower Fifteenmile Group in the central and eastern Ogilvie Mountains: *in* Yukon Exploration and Geology 2011, K.E. MacFarlane and P.J. Sack (eds.), Yukon Geological Survey, p. 75-90.

8. Macdonald, F.A., Halverson, G.P., **Strauss, J.V.**, Smith, E.F., Cox, G.M., Sperling, E.A., Roots, C.F., and Schrag, D.P., 2012, Early Neoproterozic basin formation in Yukon, Canada: Implications for the make-up and break-up of Rodinia: *Geoscience Canada*, v. 39, p. 77-99.

## 2011:

7. Macdonald, F.A., Smith, E.F., **Strauss, J.V**., Cox, G.M, Halverson, G.P. and Roots, C.F., 2011, Neoproterozoic and early Paleozoic correlations in the western Ogilvie Mountains, Yukon: *in* Yukon Exploration and Geology 2010, K.E. MacFarlane, L.H. Weston and C. Relf (eds.), Yukon Geological Survey, p. 161-182.

6. Myrow, P.M., **Strauss, J.V.**, Creveling, J., Sicard, K., Ripperdan, R., Sandberg, C.A., and Hartenfels, S., 2011, A carbon isotopic and sedimentological record of the Latest Devonian (Famennian) from the western U.S. and Germany: *Palaeogeography, Palaeoclimatology, and Palaeoecology*, v. 306, p. 147-159.

5. Tosca, N.J., Macdonald, F.A., **Strauss, J.V.**, Johnston, D.A., and Knoll, A.H., 2011, Sedimentary talc in Neoproterozoic carbonate successions: *Earth and Planetary Science Letters*, v. 306, p. 11-22.

## 2010:

4. Macdonald, F.A., **Strauss, J.V.**, Rose, C.V., Dudas, F.O., and Schrag, D.P., 2010, Stratigraphy of the Port Nolloth Group of Namibia and South Africa and implications for the age of Neoproterozoic iron formations: *American Journal of Science*, v. 310, p. 862-888.

3. Macdonald, F.A., Schmitz, M.D., Crowley, J.C., Roots, C.F., Jones, D.S., Maloof, A.C., **Strauss, J.V.**, Cohen, P.A., Johnston, D.T., Schrag, D.P., 2010, Calibrating the Cryogenian: *Science*, v. 327, pp. 1241-1243.

## 2008:

2. Lamb, M.P., Myrow, P.M., Lukens, C., Houck, K., and **Strauss, J**., 2008, Deposits from wave-influenced turbidity currents: Pennsylvanian Minturn Formation, Colorado, USA: *Journal of Sedimentary Research*, 78 (7), pp. 480-498.

1. Myrow, P.M., Lukens, C., Lamb, M.P., Houck, K., and **Strauss, J**, 2008, Dynamics of a Transgressive Prodeltaic System: Implications for Geography and Climate within a Pennsylvanian Intracratonic Basin, Colorado, USA: *Journal of Sedimentary Research*, 78 (8), pp. 512-528.

## Recent Conference Abstracts (2015–2019)

\*Dartmouth Graduate Student Presenter \*\*Dartmouth Undergraduate Student Presenter

## 2019 (accepted for upcoming meetings):

\*Busch, J.F., **Strauss, J.V.**, and Saylor, M., 2019, Complete 3-D reconstruction of an early Paleozoic fore-reef succession in Yukon, Canada: American Association of Petroleum Geologists, Paper No. xxx.

## 2018:

Ahm, A-S., Macdonald, F., Hoffman, P., Bjerrum, C., Bold, U., Rose, C., **Strauss, J.V**, and Higgins, J., 2018, An early diagenetic deglacial origin for basal Ediacaran 'cap dolostones': American Geophysical Union, Washington DC, Paper No. xx.

Ahm, A-S., Maloof, A., Bjerrum, C., Bold, U., Hoffman, P., Macdonald, F., Rose, C., **Strauss, J.V**, and Higgins, J., 2018, An early diagenetic deglacial origin for basal Ediacaran 'cap dolostones': Goldschmidt Abstracts, Boston, MA, Paper No. 25.

\*Busch, J.F., and **Strauss, J.V.**, 2018, Characterization and provenance of the Neoproterozoic "upper" Group in the Coal Creek inlier, Ogilvie Mountains, Yukon: Cordilleran Tectonics Workshop, Whitehorse.

\*Faehnrich, K., **Strauss, J.V.**, McClelland, W.C., Colpron, M., and Israel, S., 2018, The Porcupine Shear Zone of northern Yukon and Alaska: Cordilleran Tectonics Workshop, Whitehorse.

Jackson, B., Sharma, M., Seo, J.-H., and **Strauss, J.V.**, 2018, Application of ICP-QQQ to isotope tracer studies: Goldschmidt Abstracts, Boston, MA, Paper No. 1142.

Kinney, S.T., Setera, J.B., Olsen, P.E., MacLennan, S.A., Van Tongeren, J.A., Schoene, B., Town, C.F., **Strauss, J.V.**, Hemming, S.R., and Bradley, D.C., 2018, Causal implications of new geochronological constraints on Mesozoic post-rift magmatism in New England: Goldschmidt Abstracts, Boston, MA, Paper No. 1294.

Loch, J.D., Taylor, J.F., Repetski, J.E., **Strauss, J.V.**, and Kamerer, W.T., 2018, Paleoenvironmental distribution of the late Cambrian (Furongian) agnostoid arthropod *Lotagnostus* in western Laurentia: Geological Society of America Annual Meeting, Indianapolis, IN, Paper No. xxx.

Neal, B., Reusch, D.N., **Strauss, J.V.**, Bradley, D., and Gibson, D., 2018, Hyper-cryptic thrust faults in the Rumford allochthon, Saddleback Wind, Carthage, Maine: Geological Society of America Northeastern Section Meeting, Burlington, Paper No. 56-5.

Rodewald, B.M., Vogel, J., Stockey, R., Fraser, T., **Strauss, J.V.**, Melchin, M., and Sperling, E.A., 2018, The black shale record of the Ordovician radiation: new insights into redox change from the Road River Group of Yukon, Canada: Geological Society of America Annual Meeting, Indianapolis, IN, Paper-No. xxx.

Sperling, E.A., **Strauss, J.V.**, Fraser, T.A., Miller, A., Farrell, U.C., Tecklenburg, S., Malinowski, J., Torres Plaza, S., Bhajan, L., Stockey, R.G., Cole, D.B., Planavsky, N.J., Loydell, D.K., Lenz, A., and Melchin, M.J., 2018, An exceptional record of early- to mid-Paleozoic redox change from the Road River Group, Yukon, Canada: Goldschmidt Abstracts, Paper No. 2400.

**Strauss, J.V.**, and Tosca, N.J., 2018, Chemical sedimentation in the Callison Lake Formation, Yukon, Canada: A window into Tonian seawater carbonate chemistry: American Geophysical Union, Paper No., xxx.

Thompson, P.J., and **Strauss, J.V.**, 2018, Reevaluation after 50 years of nappes in western New Hampshire: Are the Skitchewaug and Cornish nappes one and the same?: Geological Society of America Northeastern Section Meeting, Burlington, Paper No. 29-2.

\*Wala, V.T., **Strauss, J.V.**, Majka, J., Ziemniak, G., Faehnrich, K., Meyer, E.E., Czerny, J., Bellefroid, E.J., Feng, X., and McClelland, W.C., 2018, Neoproterozoic stratigraphy of the Southwestern Basement Province, Svalbard: Constraints on the Proterozoic–Paleozoic evolution of the North Atlantic-Arctic Caledonides: American Geophysical Union, Paper No., xxx.

## 2017:

Allen, T.J., \*\*Cornish Morales, I.M., Wallace, V.C., Piepjohn, K., Bergmann, K., Halverson, G.H., Tosca, N.J., McClelland, W.C., and **Strauss, J.V.**, 2017, Detrital zircon geochronology and provenance of the Hecla Hoek Succession of northeastern Svalbard, Norway: Geological Society of America Annual Meeting, Seattle, Paper No. 90-1.

Colpron, M., McClelland, W.C., and **Strauss, J.V.**, 2017, Detrital zircon U-Pb geochronology and Hf isotopic constraints on the geological evolution of North Yukon: Geological Society of America Annual Meeting, Seattle, Paper No. 28-9.

### Justin V. Strauss, Page 7

\*Faehnrich, K., Majka, J., Schneider, D., **Strauss, J.V.**, Ziemniak, G., Manecki, M., Wala, V.T., and Czerny, J., 2017, Late Caledonian shearing in SW Spitsbergen – new age constraints from "Ar/"Ar muscovite geochronology: Geological Society of America Annual Meeting, Seattle, Paper No. 90-4.

Johnson, B., **Strauss, J.V.**, Taylor, J.F., Ward, W.P., Colpron, M., McClelland, W.C., and Toro, J., 2017, The Whale Mountain allochthon of the northeastern Brooks Range, Alaska: An Arctic vestige of the Iapetus Ocean: Geological Society of America Annual Meeting, Seattle, Paper No. 28-8.

McClelland, W.C., **Strauss, J.V.**, Colpron, M., and Faehnrich, K., 2017, The Porcupine Shear Zone: A fundamental link between the Arctic and Cordilleran margins of Laurentia: Geological Society of America Annual Meeting, Seattle, Paper No. 28-10.

Repetski, J.E., Taylor, J.F., Kulenguski, J.T., and **Strauss, J.V.**, 2017, New conodont and trilobite occurrences from the Cambrian of eastern Alaska: Geological Society of America Annual Northeastern Section Meeting, Pittsburgh, Paper No. 4–1.

Rooney, A.D., **Strauss, J.V.**, Cohen, P., Condon, D., and Schmitz, M.D., 2017, New Re-Os and U-Pb age constraints for the biological innovations and geochemical and climatic perturbations of the Neoproterozoic: Geological Society of America Annual Meeting, Seattle, Paper No. 346-1.

Sperling, E.A., **Strauss, J.V.**, Fraser, T.A., Miller, A., Farrell, U.C., Planavsky, N.J., Cole, D.B., Bhajan, L., Torres Plaza, S., Malinowski, J., Loydell, D.K., and Lenz, A., 2017, An exceptional record of early- to mid-Paleozoic redox change from the Road River Group, Yukon, Canada: Geological Society of America Annual Meeting, Seattle, Paper No. 11-3.

**Strauss, J.V.**, 2017, Ordovician–Silurian arc magmatism recorded in the Apoon assemblage of the Doonerak fenster, central Brooks Range, Alaska: Implications for circum-Arctic terrane linkages and paleogeography: Circum-Arctic Structural Events Workshop, Hannover, Germany.

Taylor, J.F., **Strauss, J.V.**, and Repetski, J.E., 2017, A new trilobite fauna and associated carbon isotopic excursion at the top of the Ptychaspid biomere in eastern Alaska: Whittling down a gap in the late Cambrian time scale: Geological Society of America Annual Meeting, Seattle, Paper No. 41-2.

\*Wala, V.T., Ceaser, I.M., Ziemniak, G., Faehnrich, K., Meyer, E.E., Czerny, J., Majka, J., McClelland, W.C., and **Strauss, J.V.**, 2017, Neoproterozoic stratigraphy and provenance of Wedel Jarlsberg Land, Svalbard: New insights into the origin and transport history of the Southwestern Province: Geological Society of America Annual Meeting, Seattle, Paper No. 90-2.

#### 2016:

Boag, T.H., Sperling, E.A., **Strauss, J.V.**, and Moynihan, D., 2016, Deep-water first occurrences of Ediacara-type fossils along a shelf-to-slope transect in the Wernecke Mountains, Yukon, Canada: Geological Society of America Annual Meeting, Denver, Paper No. 184-5.

Cohen, P.A., **Strauss, J.V.,** Rooney, A.D., Sharma, M., Tosca, N.J., 2016, The first appearance of controlled eukaryotic biomineralization in the Neoproterozoic fossil record: Geological Society of America Annual Meeting, Denver, Paper No. 191-8.

Cohen, P.A., Tosca, N.J., **Strauss, J.V.**, and Rooney, A.D., 2016, Dating the first appearance of controlled eukaryotic biomineralization: Northeast Geobiology Symposium, Harvard University.

Colpron, M., Nelson, J., McClelland, W.C., and **Strauss, J.V.**, 2016, The beginning of the story – Early to mid-Paleozoic translation of terranes from the Arctic realm into eastern Panthalassa: Geological Society of America Annual Meeting, Denver, Paper No. 274-1.

Frier, W.P., Johnson, B., Toro, J., Hammond, G., and **Strauss J.V.**, 2016, Geological evidence from the Doonerak fenster and the Endicott Mountains allochthon of the central Brooks Range, Alaska: Insights into the assembly of the Arctic Alaska terrane: Geological Society of America Annual Meeting, Denver, Paper No. 164-9.

Gomes, M.L., Lingappa, U., Metcalfe, K., O'Reilly, S.S., Riedman, L.A., Cantine, M., Ireland, B., Phillips, R., Stein, N., Orzechowski, E.A., **Strauss, J.V.**, Grotzinger, H.M., Quinn, D.P., Trower, L., Fischer, W.W., Grotzinger, J.P., Knoll, A.H., and Fike, D.A., 2016, Linking the modern to the ancient with a comprehensive geobiological understanding of biosignature preservation in microbial mats: American Geophysical Union Annual Meeting, Paper No. B21E-0467.

Grotzinger, J.P., Knoll, A.H., Fischer, W.W., Cantine, M., Gomes, M.L., Grotzinger, H.M., Lingappa, U., Metcalfe, K., O'Reilly, S.S., Orzechowski, E.A., Quinn, D.P., Riedman, L.A., Stein, N., **Strauss, J.V.**, and Trower, L., 2016, Context, Biogeochemistry, and Morphology of Diverse and Spatially Extensive Microbial Mats, Little Ambergris Cay, Turks and Caicos Islands, B.W.I.: American Geophysical Union Annual Meeting, Paper No. B24B-07.

\*\*Mamrol, P.M., Crowley, J.L., Colpron, M., Taylor, J.F., King, J.D., and **Strauss, J.V.**, 2016, New age constraints on volcanic rocks from the Ogilvie Mountains, west-central Yukon: Geological Association of Canada and Mineralogical Association of Canada Annual Meeting, Whitehorse, v. 39.

Miller, A.J., **Strauss, J.V.**, Halverson, G.P., Macdonald, F.A., Johnston, D.J., and Sperling, E.A., 2016, Tracking the onset of Phanerozoic-style redox-sensitive trace metal enrichments: New data from Neoproterozoic post-glacial strata in NW Canada: Geological Society of America Annual Meeting, Denver, Paper No. xx.

Orzechowski, E.A., **Strauss, J.V.**, Knoll, A.H., Fischer, W.W., Cantine, M., Metcalfe, K., Quinn, D.P., Stein, N., Gomes, M.L., Grotzinger, H.M., Lingappa, U., O'Reilly, S.S., Riedman, L.A., Trower, L., and Grotzinger, J.P., 2016, Age and Construction of Little Ambergris Cay Bedrock Rim, Southeastern Caicos Platform, British West Indies: American Geophysical Union Annual Meeting, Paper No. EP11A-0990.

Stein, N., Quinn, D.P., Grotzinger, J.P., Fischer, W.W., Knoll, A.H., Cantine, M., Metcalfe, K., Gomes, M.L., Grotzinger, H.M., Lingappa, U., O'Reilly, S.S., Orzechowski, E.A., Riedman, L.A., **Strauss, J.V.**, and Trower, L., 2016, UAV, DGPS, and Laser Transit Mapping of Microbial Mat Ecosystems on Little Ambergris Cay, B.W.I.: American Geophysical Union Annual Meeting, Paper No. EP21D-0921.

**Strauss, J.V.**, Hoiland C.W., Ward, W., Johnson, B.G., and McClelland W.C., 2016, Ordovician–Silurian arc magmatism recorded in the Apoon assemblage of the Doonerak fenster, central Brooks Range, Alaska: Implications for circum-Arctic terrane linkages and paleogeography: Geological Association of Canada and Mineralogical Association of Canada Annual Meeting, Whitehorse, v. 39.

**Strauss, J.V.**, Johnson, B.G., Ward, W., and McClelland W.C., 2016, Pre-Mississippian stratigraphy and provenance of the North Slope of Arctic Alaska: A record of Iapetus closure and strike-slip deformation along the northern margin of Laurentia: Geological Society of America Annual Meeting, Denver, Paper No. 274-9.

Trower, L., Cantine, M., O'Reilly, S.S., **Strauss, J.V.**, Gomes, M.L., Grotzinger, H.M., Grotzinger, J.P., Knoll, A.H., Lamb, M.P., Lingappa, U., Metcalfe, K., Orzechowski, E.A., Quinn, D.P., Riedman, L.A., Stein, L., and Fischer, W.W., 2016, Evidence of Active Ooid Growth from Little Ambergris Cay, Turks and Caicos Islands, B.W.I.: American Geophysical Union Annual Meeting, Paper No. B24B-04.

#### 2015:

Irvine, S., **Strauss, J.V.**, and Cohen, P., 2015, Abundance and morphological variation of vase-shaped microfossils from the late Tonian Callison Lake Formation, Yukon: Geological Society of America Annual Meeting, Baltimore, Paper No. 123-2.

Johnson, B., **Strauss, J.V.**, Toro, J., and Benowitz, J., 2015, Early Paleozoic assembly of the North Slope subterrane: Evidence from an accretionary complex exposed in the northeastern Brooks Range, Alaska: Geological Society of America Cordilleran Section Meeting, Anchorage, Paper No. 1-7.

McClelland, W.C., **Strauss, J.V.**, Ward, W., Malone, S.J., Colpron, M., Piepjohn, K., von Gosen, W., Macdonald, F.A., Gehrels, G., and Gilotti, J.A., 2015, Evidence for a Paleozoic strike-slip orogen on the North American Arctic margin: Geological Society of America Annual Meeting, Baltimore, Paper No. 173-8.

Miller, A.J., **Strauss, J.V.**, Myrow, P.M., Johnston, D.J., and Sperling, E.A., 2015, A geochemical investigation of oxygenation in the early Ediacaran oceans at the type section of the Sheepbed Formation, Mackenzie Mountains, Northwest Territories, Canada: Geological Society of America Annual Meeting, Baltimore, Paper No. 225-9.

Moynihan, D.P., **Strauss, J.V.**, Colpron, M., Israel, S.A., Abbott, G., 2015, Stratigraphic ties between the Windermere Supergroup and Hyland Group in the Rackla Belt of east-central Yukon: Implications for the age of the Selwyn Basin: Geological Society of America Cordilleran Section Meeting, Anchorage, Paper No. 10-10.

Sperling, E.A., Carbone, C., **Strauss, J.V.**, Johnston, D.T., Narbonne, G.M., and Macdonald, F.A., 2015, Oxygen, facies, and secular controls on the appearance of Cryogenian and Ediacaran body and trace fossils in the Mackenzie Mountains, northwestern Canada: Geological Association of Canada and Mineralogical Association of Canada-American Geophysical Union Join Meeting, Montreal, Paper No. SG41A-03.

**Strauss, J.V.**, Macdonald, F.A., Cox, G.M., Schmitz, M.E., and McClelland, W.C., 2015, Geochronological, geochemical, and sedimentological constraints on the Neoproterozoic and early Paleozoic evolution of the North Slope of Arctic Alaska: American Association of Petroleum Geologists Arctic 3P Meeting, Stavanger, Norway.

**Strauss, J.V.**, Hoiland, C.W., Ward, W., and McClelland, W.C., 2015, "Taconic" arc magmatism in the central Brooks Range, Alaska: New U-Pb zircon geochronology and Hf isotopic data from the lower Paleozoic Apoon assemblage of the Doonerak fenster: American Geophysical Union, Annual Meeting.

Taylor, J.F., Irwin, S.J., Repetski, J.E., and **Strauss, J.V.**, 2015, Biostratigraphic refinements in the Lower Ordovician of eastern Alaska: Emerging evidence of an eastern subprovince of the Laurentian Faunal Province?: Geological Society of America Annual Meeting, Baltimore, Paper No. 221-9.

Tosca, N.J., Pruss, S.B., and **Strauss, J.V.**, 2015, A sedimentary fingerprint of oscillating redox through the Cambrian Period: Geological Society of America Annual Meeting, Baltimore, Paper No. 94-14.

## **Awarded Research Grants**

- 2018 NASA Solar Systems Workings Program, *How much water does it take to build a fan under a "cold and icy" Mars climate scenario?*. M. Palucis (Lead PI, Dartmouth) and **J.V. Strauss** (Co-I, Dartmouth), \$343,160 total.
- 2018 National Geographic Society, *The Neoproterozoic of Svalbard: Critical archives for ancient seawater chemistry and animal evolution*. **J.V. Strauss** (PI, Dartmouth), \$30,000
- 2018 American Chemical Society–Petroleum Research Fund–Doctoral New Investigator, *Neoproterozoic Analogs for Mg-silicate-bearing Petroleum Basins*. J.V. Strauss (PI, Dartmouth), \$110,000.
- 2017 NSF Tectonics, EAR-1650152. Collaborative Research: Displacement history of the Pearya terrane evaluating a strike-slip origin for the Canadian Arctic margin. J.A. Gilottti (Lead PI, University of Iowa), W.C. McClelland (Co-PI, University of Iowa), J.V. Strauss (Co-PI, Dartmouth), \$141,662 Dartmouth, \$415,040 total.
- 2017 Research Council of Norway Arctic Field Grant, *Neoproterozoic stratigraphy and provenance of Wedel Jarlsberg Land, Southwest terrane, Spitsbergen.* V. Wala (Graduate Student, Dartmouth), **J.V. Strauss** (Dartmouth), \$9,100.
- 2016 NSF Tectonics, EAR-1624131. Collaborative Research: The Kaltag-Porcupine fault system of northern Yukon: Evaluating large-scale terrane displacement in the Arctic and beyond. J.V. Strauss (Lead PI, Dartmouth), W.C. McClelland (Co-PI, University of Iowa), \$241,522 Dartmouth, \$414,709 total.

- 2016 G. Norman Albree Trust Fund, 2016 Albree Trust Grant Proposal: Earth Science Micro- and Macrophotography. J.V. Strauss (Lead PI, Dartmouth), \$10,000.
- 2015 The Agouron Institute, *The Cambrian Radiation in Northwest Canada*. J.V. Strauss (Postdoctoral Scholar, Stanford University), \$32,000.
- 2015 GSA Graduate Student Research Grant, J.V. Strauss (Graduate Student, Harvard), \$1,900.
- 2014 GSA Graduate Student Research Grant, J.V. Strauss (Graduate Student, Harvard), \$900.
- 2012 NSF Graduate Research Fellowship, *An integrated study of Cambrian stratigraphy in Arctic Alaska and Canada*. J.V. Strauss (Graduate Student, Harvard), \$96,000.
- 2011 NSF Tectonics, EAR-1049463; EAR-1049368. *Collaborative Research: Comparative Studies of Circum-Arctic Neoproterozoic-Paleozoic terranes*. W.C. McClelland (Lead PI, University of Iowa), F.A. Macdonald (Co-PI, Harvard), **J.V. Strauss** (Graduate Student, Harvard), \$469,141.

#### **Recent Invited Department Lectures**

Strauss, J.V., 2018, An Alaskan perspective on the evolution of the Arctic: Presented to the Department of Geosciences at Williams College.

Strauss, J.V., 2018, An Alaskan perspective on the evolution of the Arctic: Presented to the Department of Geology at University of Vermont.

Strauss, J.V., 2017, An Alaskan perspective on the evolution of the Arctic: Presented to the Department of Geology and Geophysics at Yale University.

Strauss, J.V., 2017, Geobiological constraints on the tectonic evolution of western North America: Presented to the Departments of Geology and Biology at the University of Maine at Farmington.

Strauss, J.V., 2016, New insights into the Neoproterozoic tectonic and environmental evolution of northwest Laurentia: Presented to the Department of Geological and Environmental Sciences at the University of Iowa.

Strauss, J.V., 2015, Tales from the Yukon: New insights into Neoproterozoic tectonics, sedimentation, and biostratigraphy: Presented to the SPODDS Group, Department of Geological Sciences at Stanford University.

Strauss, J.V., 2014, A Cordilleran record of Neoproterozoic biostratigraphy and Arctic tectonics: Presented to the Yukon Geological Survey.

Strauss, J.V., 2014, A Cordilleran record of Neoproterozoic biostratigraphy and Arctic tectonics: Presented to the Department of Earth and Planetary Sciences at Massachusetts Institute of Technology.

Strauss, J.V., 2014, Geo-vignettes from Arctic Alaska and the Yukon: Presented to the Department of Earth Sciences at Dartmouth College.

#### Supervised and Co-Supervised Undergraduate Theses

#### Dartmouth College, Department of Earth Sciences, Hanover, NH

Charlotte Nutt – TBDin progressMaxwell Saylor – TBDin progressCaleb "Forrest" Town – U-Pb geochronology of the Moat Volcanics, White Mountains, New Hampshiregrad. June 2018Joe Malinowski – The basal Road River Group of Yukon, Canada: New insights into the Cambrian–grad. June 2018Ordovician carbon cyclegrad. June 2018

## Justin V. Strauss, Page 11

grad. June 2018 ge grad. June 2017 da grad. June 2016
grad. May 2015 grad. May 2013
in progress in progress in progress grad. Jan 2018 grad. July 2016
grad. Dec. 2015
2009–2018 2015–2018 2010–2017 2013 2012 2012 2010 2009 2008 2007 2006, 2016 2002–2006
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# Short Courses and Field Trips (\*Leader or Co-Leader)

NEIGC, Annual Meeting (Lake George, NY)	Oct. 2018
Dartmouth College, Basal Cambrian of Death Valley	May 2018
*Dartmouth College, Sedimentary Systems (Spain)	Mar. 2018
GSA, U-Pb Geochronology, O and Hf Isotopes, and Trace Element Geochemistry (Seattle, WA)	Oct. 2017
NEIGC, Annual Meeting (Bethel, ME)	Sept. 2017
Agouron Institute, Advanced Geobiology Field Course (Turks and Caicos)	July 2016
Acadia University, Bermuda Carbonate System (Bermuda)	Apr. 2016
*Dartmouth College, Apennine Transect (Italy)	Mar. 2016
Stanford SPODDS Annual Meeting (Death Valley, CA)	Oct. 2015
GSA, Using Google Earth to Teach Geoscience (Vancouver, QC)	Oct. 2014
GSA, Digital Mapping for the Geosciences (Vancouver, QC)	Oct. 2014

## Justin V. Strauss, Page 12

Harvard University, Newfoundland Transect (Gander, Newfoundland)	Sept. 2014
Harvard University, ArcGIS Short Course (Cambridge, MA)	Jan. 2014
GSA, Detrital Zircon Geochronology and Hf Isotopes (Denver, CO)	Oct. 2013
*Harvard University, Graduate Student Field Trip (Pyrenees)	Aug. 2013
GSA, Sequence Stratigraphy for Graduate Students (Charlotte, NC)	Oct. 2012
GSA, X-Ray Diffraction for Graduate Students (Charlotte, NC)	Oct. 2012
Agouron Institute, Advanced Geobiology Field Course (Western Australia)	June 2012
GACMAC, Mistaken Point Ediacaran Biota (St. Johns, Newfoundland)	May 2012
*Harvard University, Umbria-Marche Basin (Italy)	Mar. 2012
Harvard University, Taconic Orogen (Albany, NY)	Sept. 2011
USGS, Brooks Range Transect (Coldfoot, AK)	June 2010

#### **Professional Service**

#### **Journal Reviewer**

Geology Geological Society of America Bulletin Chemical Geology Sedimentology Sedimentary Geology Precambrian Research Journal of the Geological Society of London

#### Ad hoc Panel Reviewer and Panelist

NSF Tectonics NSF Sedimentary Geology and Paleobiology

#### **Conference Session Convener**

- 2017 GSA Annual Meeting, Seattle: New perspectives on Cordilleran tectonics, paleogeography, and metallogeny
- 2017 GSA Annual Meeting, Seattle: Circum-Arctic structural events: tectonic evolution of the Arctic margins and trans-Arctic links with adjacent orogens
- 2016 AGU Annual Meeting: Interpretations of stable carbon isotope records in sedimentary systems
- 2016 GACMAC Annual Meeting, Whitehorse: Proterozoic Basins of Northern Laurentia
- 2015 GACMAC-AGU Joint Session, Montreal: The Neoproterozoic-Paleozoic Earth system: records from an Earth in transition
- 2015 GSA Annual Meeting, Vancouver: Precambrian Geology of the North American Cordillera: An Exploration of New Developments in Laurentia's Ancient History

#### **Professional Societies**

Geological Society of America	2004–2018
American Geophysical Union	2010-2018
Geological and Mineralogical Association of Canada	2010-2018
American Association of Petroleum Geologists	2010-2018
Society for Sedimentary Geology (SEPM)	2010-2018
American Alpine Club	2004–2018

#### **Additional Skills**

Wilderness First Responder and CPR certified Glacier Travel and Crevasse Rescue certified Rock Self Rescue certified Avalanche Level I and II certified