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Education

Harvard University , Cambridge, MA	
PhD, Department of Earth and Planetary Sciences	May 2015
MA, Department of Earth and Planetary Sciences	May 2014
The Colorado College , Colorado Springs, CO	
BA, Department of Geology	Aug. 2006

Professional Experience

Dartmouth College, Department of Earth Sciences, Hanover, NH	
<i>Associate Professor</i>	July 2022–present
<i>Assistant Professor</i>	Jan. 2016–June 2022
Stanford University, Department of Geological Sciences, Stanford, CA	
<i>Agouon Institute Geobiology Postdoctoral Scholar</i>	July 2015 - Dec. 2015
Harvard University, Department of Earth and Planetary Sciences, Cambridge, MA	
<i>Doctoral Student</i>	Sep. 2010 - July 2015
The Colorado College, Department of Geology, Colorado Springs, CO	
<i>Paraprofessional</i>	Sept. 2006 - June 2007

Honors and Awards

2022	Karen Wetterhahn Memorial Award for Distinguished Creative or Scholarly Achievement – Dartmouth College
2022	C. Troy Shaver 1969 Fellowship Award – Dartmouth College
2021	Alfred P. Sloan Foundation Earth System Science Fellow
2018	National Geographic Explorer
2018	American Chemical Society Doctoral New Investigator Award
2015	Agouon Institute Geobiology Postdoctoral Fellowship
2015	Geological Society of America Graduate Student Research Grant
2014	Geological Society of America Graduate Student Research Grant
2013	Star Family Prize for Excellence in Undergraduate Advising Nominee – Harvard University
2013	Bok Center Distinction in Teaching Award – Harvard University
2012	GACMAC 2012 Jerome Remick III Poster Award
2012	National Science Foundation Graduate Research Fellowship Recipient
2006	William A. Fischer Special Recognition Geosciences Award – Colorado College
2005	Patricia J. Buster Scholarship for Undergraduate Research – Colorado College
2004	Patricia J. Buster Scholarship for Undergraduate Research – Colorado College

Journal Publications

*Dartmouth Graduate/Postdoc Author **Dartmouth Undergraduate Author ***Joint 1st Author

In Review/In Prep.:

Beranek, L.P., Pease, V., McClelland, W.C., and **Strauss, J.V.**, *in review*, Svartvaeg terrane: new evidence for a Silurian arc fragment in northern North America and its significance for early Paleozoic sinistral displacements along the Canadian Arctic transform system: *Geological Society of America Bulletin*, v. xxx, p. xxx–xxx.

Evans, S.D., Sperling, E.A., Lau, K.V., and **Strauss, J.V.**, *in review*, Discovery of White Sea assemblage fossils from Laurentia: *Science*, v. xx, p. xxx–xxx.

Farrell, U.C., Abshire, M.L., Samawi, R., Adeboye, O., Ahm, A.-S.C., Algeo, T.J., Anderson, R.P., Ansari, A.H., Bastos, L.P.H., Bauer, K.W., Beaty, B., Birdwell, J.E., Bowyer, F.T., Brocks, J.J., Brunoir, T.N., Canfield, D.E., Caxito, F.A., Chang, C., Cheng, M., Clemente, J.N.R., Cordie, D., Crockford, P.W., Cui, H., Dahl, T.W., de Paula, J.R., Dehler, C.M., Dewing, K., do Carmo, D.A., Dornbos, S., Drabon, N., Dumoulin, J.A., Ejeh, O.I., Ellefson, E., Elrick, M., Emmings, J.F., Eric, B.E., Fang, H., Fazio, G., Fernandes, H.A., French, K.L., Gaines, R.R., Gaschnig, R., Gibson, T.M., Gilleaudeau, G.J., Goldberg, K., Gong, Z., Hagen, A.P.I., Halverson, G.P., Henderson, M.A., Hippertt, J.P.T.M., Hodgskiss, M.S.W., Hoffman, P.F., Huang, E.C., Johnson, B.W., Kang, J., Keller, C.B., Kendall, B., Kimmig, J., Kimmig, S.R., Kipp, M.A., Knoll, A.H., Kreitsmann, T., Kulkarni, A.A., Kunert, A., Kunzmann, M., Lai, J., Lease, R.O., Li, C., Li, S., Lipp, A.G., Lu, X., Maloney, K.M., Mand, K., Millikin, A.E.G., Mills, N.T., Motomura, K., Mwinde, C., Nelson, L.L., Nieminski, N.M., O'Connell, B., Okubo, J., Olah, J., Olson, H.C., Ossa Ossa, F., Ostrander, C.M., Paiste, K., Partin, C.A., Pereira, E., Peters, S.E., Playter, T., Porter, S., Poulton, S.W., Pruss, S.B., Qiu, Z., Quinn, D.P., Richiano, S., Richoz, S., Rico, K.I., Ritzer, S.R., Roney, Z., Rooney, A.D., Rose, W.C., Rugen, E.J., Sahoo, S.K., Schoepfer, S.D., Sclafani, J.A., Sheldon, N.D., Shen, Y., Shields, G.A., Singh, P., Singh, A.K., Slotznick, S., Smith, E.F., Song, H., Spinks, S.C., Stockey, R.G., **Strauss, J.V.**, Stüeken, E.E., Tang, D., Tarhan, L.G., Thompson, M.O., Thomson, D., Tosca, N.J., Tostevin, R., Tu, C., Vizcaino, M.N., Wang, Y., Wang, C., Warren, L.V., Webb, L.C., Wilby, P., Woltz, C.R., Wood, R.A., Wu, Y., Yang, X., Yurchenko, I., Zhang, J., Whiteside, J.H., Gill, B.C., Mehra, A.K., Lau, K.V., Planavsky, N., Johnston, D.T., and Sperling, E.A., *in review*, The Sedimentary Geochemistry and Paleoenvironments Project Phase 2 Data Release: An open data resource for the study of Earth's environmental history: *Chemical Geology*, v. xx, p. xxx–xxx.

*Geier IV, G.R., Lockett, A.C., Sehra, S.A., McClelland, W.C., Connors, C.D., Johnson, B.J., Crowley, J.L., and **Strauss, J.V.**, *in prep.*, Devonian arc magmatism and sedimentation in the Ulungarat Basin of Arctic Alaska: *Geological Society of America Bulletin*, v. xxx, p. xxx–xxx.

*Mehra, A., *Busch, J.F., Leslie, S.A., Jin, J., Melchin, M.J., and **Strauss, J.V.**, *in prep.*, Three-dimensional reconstruction of a far-field Hirnantian carbonate lowstand: *Geology*, v. xx, p. xxx.

*Nordin, B.J., *Getraer, A., Peters, N., Morgan, A., Stroup, J.S., Brown, N.D., Fosdick, J.C., O'Sullivan, P.B., Kelly, M.A., Schaeffer, A.J., Marshall, J.A., **Strauss, J.V.**, and Palucis, M.C., *in prep.*, Postglacial erosion of a permafrost landscape across decadal to millennial timescales, Aklavik Range, Arctic Canada: *JGR Solid Earth*, v. xxx, p. xxx–xxx.

Pierce, J.S., Evans, D.A.D., Polomski, D., Youbi, N., Medany, A.M., Ounar, J., Oukhro, R., Boumedhi, M.A., **Strauss, J.V.**, Keller, C.B., Gartner, A., Ovtcharova, M., Wotzlaw, J.F., and Linnemann, U., *in review*, Magnetostratigraphic resolution of the late Ediacaran paleomagnetic enigma: *Science Advances*, v. xxx, p. xxx–xxx.

*Zhang, T., Keller, C.B., Creveling, J.R., *Harding, R., Nelson, L.L., Smith, E.F., and **Strauss, J.V.**, *in prep.*, Revisiting the terminal Proterozoic to early Paleozoic subsidence history of western Laurentia: *Geology*, v. xx, p. xxx–xxx.

Accepted/In Press:

*Faehnrich, K., McClelland, W.C., Webb, L., Rasbury, T., Colpron, M.C., and **Strauss, J.V.**, *accepted*, Cretaceous strike-slip motion along the Porcupine Fault System and potential links to the opening of the Canada Basin: *Canadian Journal of Earth Science*, v. xxx, p. xxx–xxx.

Taylor, J.F., **Strauss, J.V.**, and Repetski, J.E., *in press*, Late Furongian arthropod and conodont faunas and a new basal Ibexian (uppermost Cambrian Sate 10) isotopic excursion in the Jones Ridge Limestone of Alaska, in Laurie, J., *ed.*, *Cambrian–Ordovician Studies VII: Australasian Palaeontological Memoirs*, v. xxx, p. xxx–xxx.

Vayda, P., Xiao, S., Keller, N., Hagen, A., **Strauss, J.V.**, Hagadorn, J., Lonsdale, M., Selly, T., and Schiffbauer, J., *accepted*, A cnidarian affinity for *Salterella* and *Volborthella* and implications for the evolution of shells: *Journal of Paleontology*, v. xx, p. xxx–xxx.

2025:

86. *Barnes, B.D., Jiang, C.Z., Methley, P., **Strauss, J.V.**, and Tosca, N.J., 2025, CaCO₃ precipitation kinetics and polymorphism in ferruginous seawater: *Earth and Planetary Science Letters*, v. 660, 119345. [10.1016/j.epsl.2025.119345](https://doi.org/10.1016/j.epsl.2025.119345)

85. *Biasi, J., and **Strauss, J.V.**, 2025, A review of paleomagnetic studies from northern Alaska and Yukon: *Canadian Journal of Earth Sciences*, v. 62, n. 4, p. 725–757. [10.1139/cjes-2024-0125](https://doi.org/10.1139/cjes-2024-0125)

84. Cobbett, R.N., Beranek, L.P., Colpron, M., Piercey, S., Crowley, J.L., **Strauss, J.V.**, and Taylor, J.F., 2025, Late Cambrian and Ordovician alkalic magmatism along the Dawson fault, Yukon: Evidence for multiple reactivations of a rift-transfer fault in the northern Canadian Cordillera: *Tectonics*, v. 44, e2024TC008645. [10.1029/2024TC008645](https://doi.org/10.1029/2024TC008645)

83. *Getraer, A., *Nordin, B.J., **Strauss, J.V.**, and Palucis, M.C., 2025, Postglacial canyon incision primes ice-cored hillslopes for permafrost thaw-slumping in the western Canadian Arctic: *Geology*, v. 53, p. 657–662. [10.1130/G53102.1](https://doi.org/10.1130/G53102.1)

82. Malik, M.H., Hussain, A., Koeshidayatullah, A., **Strauss, J.V.**, Herlambang, A., Bello, A.M., Al-Ramadan, K., 2025, Sedimentary architecture of an Ediacaran mixed carbonate-siliciclastic system, NW Saudi Arabia: Regionally extensive marine incursion or syntectonic fault-controlled basin?: *Precambrian Research*, v. 427, 107872. [10.1016/j.precamres.2025.107872](https://doi.org/10.1016/j.precamres.2025.107872)

81. Methley, P., Jiang, C.Z., **Strauss, J.V.**, and Tosca, N.J., 2025, Evaporation of Neoproterozoic seawater drives amorphous calcium-magnesium carbonate production: *Earth and Planetary Science Letters*, v. 669, 119594. [10.1016/j.epsl.2025.119594](https://doi.org/10.1016/j.epsl.2025.119594)

80. Millikin, A.E.G., *Gibson, T.M., **Strauss, J.V.**, Bergmann, K.D., Tosca, N.J., Anderson, R.P., Halverson, G.P., *Zhang, T., and Rooney, A.D., 2025, Geochemistry and mineralogy of Neoproterozoic strata in northeastern Svalbard: re-evaluating the prevalence of basalt weathering during the early Neoproterozoic: *Geological Society of America Bulletin*, v. xx, p. xxx–xxx. [10.1130/B38195.1](https://doi.org/10.1130/B38195.1)

79. Mughal, S., Millikin, A.E.G., *Zhang, T., *Gibson, T.M., Rooney, A.D., Tosca, N.J., Bergmann, K.D., **Strauss, J.V.**, and Anderson, R.P., 2025, The Svanbergfjellet Formation: eukaryotic life in a Tonian Sea: *Journal of the Geological Society of London – Lagerstätten Series*, v. 182. [10.1144/jgs2024-0](https://doi.org/10.1144/jgs2024-0)

78. Ostrander, C.M., Clemente, J.N.R., Stockey, R.G., **Strauss, J.V.**, Fraser, T., Nielsen, S.G., and Sperling, E.A., 2025, Dynamic deep marine oxygenation during the Early and Middle Paleozoic: *Science Advances*, v. 11, eadw5878. [10.1126/sciadv.adw5878](https://doi.org/10.1126/sciadv.adw5878)

2024:

77. Boag, T.H., *Busch, J.F., Gooley, J., **Strauss, J.V.**, and Sperling, E.A., 2024, Deep-water first occurrences of Ediacara biota prior to the Shuram carbon isotope excursion in the Wernecke Mountains, Yukon, Canada: *Geobiology*, v. 22, n. 3, p. 1–23. [10.1111/gbi.12597](https://doi.org/10.1111/gbi.12597)

76. Cantine, M., Orzechowski, E., Stein, N., Lincoln, T., Hibner, B., Present, T., Thorpe, M., **Strauss, J.V.**, Rumbelsperger, A.M.B., Knoll, A.H., Grotzinger, J., Gomes, M., and Trower, E., 2024, Rapid growth of a carbonate island over the last millennium: *Sedimentology*, v. 71, p. 2119–2143. [10.1111/sed.13202](https://doi.org/10.1111/sed.13202)

75. Koch, M.M., McClelland, W.C., Gilotti, J.A., Kosminska, K., **Strauss, J.V.**, *Faehnrich, K., Beranek, L.P., and Pease, V., 2024, Early Paleozoic accretion history of the Pearya terrane: new insights from igneous and detrital zircon signatures of the Kulutingwak complex, Ellesmere Island, Nunavut, Canada: *Geosphere*, v. 20 (3), p. 778–798. [10.1130/GES02723.1](https://doi.org/10.1130/GES02723.1)

74. Stockey, R.G., Cole, D.B., Farrell, U.C., Boag, T.H., Brocks, J.J., Canfield, D.E., Cheng, M., Crockford, P.W., Cui, H., Dahl, T.W., Del Mouro, L., Dewing, K., Dornbos, S.Q., Emmings, J.F., Gaines, R.R., Gibson, T.M., Gill, B.C., Gilleaudeau, G.J., Goldberg, K., Guilbaud, R., Halverson, G., Hammarlund, E.U., Hantsoo, K., Henderson, M.A., Hendersson, C.M., Hodgskiss, M.S.W., Jarrett, A.J.M., Johnston, D.T., Kabanov, P., Kimmig, J., Knoll, A.H., Kunzmann, M., LeRoy, M.A., Li, C., Loydell, D.K., Macdonald, F.A., Magnall, J.M., Mills, N.T., Och, L.M., O’Connell, B., Pages, A., Peters, S.E., Porter, S.M., Poulton, S.W., Ritzler, S.R., Rooney, A.D., Schoepfefer, S., Smith, E.F., **Strauss, J.V.**, Uhlein, G.J., White, T., Woltz, C.R., Yurchenko, I., Planavsky, N.J., and Sperling, E.A., 2024, Multiple sustained increases in atmospheric oxygen and marine productivity through the Neoproterozoic and Paleozoic eras: *Nature Geoscience*, v. 17, p. 667–674. [10.1038/s41561-024-01479-1](https://doi.org/10.1038/s41561-024-01479-1)

2023:

73. Bazarnik, J., Kósmínska, K., McClelland, W.C., **Strauss, J.V.**, Piepjohn, K., Elvevold, S., Zielinski, G., and Majka, J., 2023, Reinterpretation of a major terrane boundary in the northern Svalbard Caledonides based on metamorphic fingerprinting of rocks in northern Spitsbergen: *Canadian Journal of Earth Sciences*, v. 60, p. 1188–1205. [0.1139/cjes-2022-000](https://doi.org/10.1139/cjes-2022-000)

72. *Busch, J.F., Boag, T.H., Sperling, E.A., Rooney, A.D., Feng, X., Moynihan, D.P., and **Strauss, J.V.**, 2023, Integrated litho-, chemo-, and sequence stratigraphy of the Ediacaran Gametrail Formation across a shelf-slope transect in the Wernecke Mountains, Yukon, Canada: *American Journal of Science*, v. 323 (4), 74874. [10.2475/001c.74874](https://doi.org/10.2475/001c.74874)

71. Dumoulin, J.A., **Strauss, J.V.**, and Repetski, J.E., 2023, Ordovician Geology of Alaska, in Percival, I., Harper, D., Lefebvre, B., and Servais, T., eds., Global Synthesis of the Ordovician System II: *Geological Society of London Special Papers*, v. 533, p. 11–26. [10.1144/SP533-2022-39](https://doi.org/10.1144/SP533-2022-39)

70. *Faehnrich, K., McClelland, W.C., Webb, L., Kósmínska, K., and **Strauss, J.V.**, 2023, Late Ediacaran–early Cambrian rifting along the northern margin of Laurentia: Constraints from the Yelverton Formation of Ellesmere Island, Canada: *Canadian Journal of Earth Sciences*, v. 60, no.12, p. 1597–1626. [10.1139/cjes-2023-0020](https://doi.org/10.1139/cjes-2023-0020)

69. McClelland, W.C., **Strauss, J.V.**, Gilotti, J.A., and Colpron, M., 2023, Paleozoic evolution of the northern Laurentian margin: Evaluating links between the Caledonian, Ellesmerian, and Cordilleran orogens, in Whitmeyer, S.J., Williams, M.L., Kellett, D.A., and Tikoff, B., eds., Laurentia: Turning Points in the Evolution of a Continent: *Geological Society of America Memoir* 220, p. 605–633. [10.1130/2022.1220\(30\)](https://doi.org/10.1130/2022.1220(30))

68. Palucis, M.C., Morgan, A.M., **Strauss, J.V.**, Rivera-Hernandez, F., Marshall, J., Menio, E., and **Miller, R., 2023, Rates and processes controlling periglacial alluvial fan formation: Implications for Martian fans: *Geological Society of America Bulletin*, v. 135, no. 3/4, p. 937–954. [10.1130/B36459.1](https://doi.org/10.1130/B36459.1)

67. Roest-Ellis, S., Richardson, J.A., Phillips, B.L., *Mehra, A., Webb, S.M., Cohen, P.A., **Strauss, J.V.**, and Tosca, N.J., 2023, Tonian carbonates record phosphate-rich shallow seas: *Geochemistry, Geophysics, Geosystems*, v. 24 (5), e2023GC010974. [10.1029/2023GC010974](https://doi.org/10.1029/2023GC010974)

66. Stein, N.T., Grotzinger, J.P., Quinn, D.P., Lingappa, U.F., Present, T.M., Trower, E.J., Gomes, M.L., Orzechowski, E., Cantine, M., Metcalfe, K.S., Fischer, W.W., Ehlmann, B.L., **Strauss, J.V.**, and Knoll, A.H., 2023, Geomorphic and environmental controls on microbial mat fabrics on Little Ambergris Cay, Turks and Caicos Islands: *Sedimentology*, v. 70, p. 1915–1974. [10.1111/sed.13100](https://doi.org/10.1111/sed.13100)

65. **Strauss, J.V.**, *Faehnrich, K., McClelland, W.C., Koch, M.M., Crowley, J.L., Melchin, M.J., and Beranek, L.P., 2023, Reply to the Discussion by Hadlari on “Age and significance of the Fire Bay Formation: An Ordovician arc fragment within the Clements Markham belt, northwest Ellesmere Island”: *Canadian Journal of Earth Sciences*, v. 60, no. 12, p. 1705–1708. [10.1139/cjes-2023-0039](https://doi.org/10.1139/cjes-2023-0039)

64. *Zhang, T., Keller, C.B., Hoggard, M.J., Rooney, A.D., Halverson, G.P., Bergmann, K.D., Crowley, J.L., and **Strauss, J.V.**, 2023, A Bayesian framework for subsidence modeling in sedimentary basins: a case study of the Tonian Akademikerbreen Group of Svalbard, Norway: *Earth and Planetary Science Letters*, v. 620, 118317. [10.1016/j.epsl.2023.118317](https://doi.org/10.1016/j.epsl.2023.118317)

2022:

63. *Busch, J.F., Hodgin, E.B., Ahm, A.-S., Husson, J.M., Macdonald, F.A., Bergmann, K.D., Higgins, J.A., and **Strauss, J.V.**, 2022, Global and local drivers of the Ediacaran Shuram carbon isotope excursion: *Earth and Planetary Science Letters*, v. 579, p. 117368. [10.1016/j.epsl.2022.117368](https://doi.org/10.1016/j.epsl.2022.117368)

62. Kinney, S.T., MacLennan, S.A., Szymanowski, D., Keller, C.B., VanTongeren, J.A., Setera, J.B., Jaret, S.J., **Town, C.F., **Strauss, J.V.**, Bradley, D.C., Olsen, P.E., and Schoene, B., 2022., Onset of long-lived silicic and alkaline magmatism in eastern North America precedes CAMP emplacement: *Geology*, v. 50, p. 1301–1305. [10.1130/G50181.1](https://doi.org/10.1130/G50181.1)

61. Koch, M.M., *Faehnrich, K., McClelland, W.C., Crowley, J.L., Melchin, M.J., Beranek, L.P., and **Strauss, J.V.**, 2022, Age and significance of the Fire Bay Formation: An Ordovician arc fragment within the Clements Markham Belt, Northwest Ellesmere Island: *Canadian Journal of Earth Sciences*, v. 59, p. 639–659. [10.1139/cjes-2021-0129](https://doi.org/10.1139/cjes-2021-0129)

60. Millikin, A.E.G., **Strauss, J.V.**, Halverson, G.P., Bergmann, K.D., Tosca, N.J., and Rooney, A.D., 2022, Calibrating the Russoya excursion in Svalbard, Norway, and implications for Neoproterozoic chronology: *Geology*, v. 50, p. 506–510. [10.1130/G49593.1](https://doi.org/10.1130/G49593.1)

59. Richardson, J.A., Roest-Ellis, S., Phillips, B., **Strauss, J.V.**, Webb, S.M., and Tosca, N.J., 2022, Characterization and geological implications of Precambrian calcite-hosted phosphate: *Geophysical Research Letters*, v. 49, e2022GL100328. [10.1029/2022GL100328](https://doi.org/10.1029/2022GL100328)

2021:

58. Ahm, A.-S.C., Bjerrum, C.J., Hoffman, P.F., Macdonald, F.A., Maloof, A.C., Rose, C.V., **Strauss, J.V.**, and Higgins, J.A., 2021, The Ca and Mg isotope record of the Cryogenian Trezona carbon isotope excursion: *Earth and Planetary Science Letters*, v. 568, p. 117002. [10.1016/j.epsl.2021.117002](https://doi.org/10.1016/j.epsl.2021.117002)

57. *Busch, J.F., Rooney, A.D., Meyer, E.E., **Town, C., Moynihan, D., and **Strauss, J.V.**, 2021, Late Neoproterozoic–early Paleozoic basin evolution in the Coal Creek inlier of Yukon, Canada: Implications for the tectonic evolution of northwestern Laurentia: *Canadian Journal of Earth Sciences*, v. 58, p. 355–377. [10.1139/cjes-2020-013](https://doi.org/10.1139/cjes-2020-013)

56. *Faehnrich, K., McClelland, W.C., Colpron, M., **Nutt, C.L., **Miller, R.S., Trembath, M., and **Strauss, J.V.**, 2021, Pre-Mississippian stratigraphic architecture of the Porcupine Shear Zone, Yukon and Alaska, and significance in the evolution of northern Laurentia: *Lithosphere*, p. 7866155. [10.2113/2021/7866155](https://doi.org/10.2113/2021/7866155)

55. Farrell, U.C., Samawi, R., Anjanappa, S., Klykov, R., Adeboye, O., Agic, H., Ahm, A.-S.C., Boag, T.H., Bowyer, F.T., Brocks, J.J., Brunoir, T.N., Canfield, D.E., Chen, X., Cheng, M., Clarkson, M.O., Cordie, D., Crockford, P.W., Cui, H., Dahl, T.W., Mouro, L., Dewing, K., Dornbos, S., Drabon, N., Dumoulin, J.A., Emmings, J.F., Endriga, C., Fraser, T., Gaines, R.R., Gaschnig, R., Gibson, T., Gilleaudeau, G.J., Goldberg, K., Guilbaud, R., Halverson, G.P., Hammarlund, E.U., Hantsoo, K.G., Henderson, M., Hodgskiss, M.S.W., Horner, T.J., Husson, J., Johnson, B.W., Kabanov, P., Keller, C.B., Kimmig, J., Kipp, M.A., Knoll, A.H., Kreitsmann, T., Kunzmann, M., Kurzweil, F., LeRoy, M.A., Li, C., Lipp, A.G., Loydell, D.K., Lu, X., Macdonald, F.A., Magnall, J.M., Mänd, K., Mehra, A., Melchin, M.J., Miller, A.J., Mills, N.T., Mwinde, C., O'Connell, B., Och, L.M., Ossa Ossa, F., Pagès, A., Paiste, K., Partin, C.A., Peters, S.E., Playter, T., Plaza-Torres, S., Porter, S., Poulton, S.W., Pruss, S.B., Richoz, S., Ritzer, S.R., Rooney, A.D., Sahoo, S., Schoepfer, S.D., Sclafani, J.A., Shen, Y., Shorttle, O., Slotznick, S., Smith, E., Spinks, S.C., Stockey, R.G., **Strauss, J.V.**, Stüeken, E.E., Tecklenburg, S., Thomson, D., Tosca, N.J., Uhlein, G.J., Vizcaíno, M.N., Wang, H., White, T., Wilby, P., Woltz, C., Wood, R.A., Yurchenko, I., Zhang, T., Planavsky, N.J., Lau, K.V., Johnston, D.T., and Sperling, E.A., 2021, The Sedimentary Geochemistry and Paleoenvironments Project: *Geobiology*, v. 19, p. 545–556. [10.1111/gbi.12462](https://doi.org/10.1111/gbi.12462)

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10. *Geier IV, G.R., Lockett, A., Connors, C.D., McClelland, W.C., and **Strauss, J.V.**, 2023, Geologic map of the Table Mountain D-5 NW 7.5' quadrangle, Brooks Range, Alaska: USGS EDMAP, Open-File Map, 1:24,000 scale.

9. *Geier IV, G.R., Lockett, A., Kroeger, E.D.L., *Fame, M.L., Connors, C.D., McClelland, W.C., and **Strauss, J.V.**, 2023, Geologic map of the Arctic D-1 NE 7.5' quadrangle, Brooks Range, Alaska: USGS EDMAP, Open-File Map, 1:24,000 scale.

8. Lockett, A., *Geier IV, G., *Fame, M.L., Kroeger, E.D.L., Nelson, L.L., Roberts, H., Freeman, D., MacKenzie, C., Connors, C.D., **Strauss, J.V.**, and McClelland, W.C., 2022, Geologic map of the Arctic D-1 SW Quadrangle and part of the D-1 NW quadrangle, Brooks Range, Alaska: USGS EDMAP, Open-File Map, 1:24,000 scale.

7. *Busch, J.F., **Strauss, J.V.**, **Saylor, M.H., Allen, T.J., *Faehnrich, K., and Taylor, J.F., 2019, Preliminary observations of the Bouvette Formation at Nadaleen Mountain, Yukon (NTS 106C/2,3): *in* MacFarlane, K.E., ed., *Yukon Exploration and Geology 2018*: Yukon Geological Survey, p. 19-42. <https://data.geology.gov.yk.ca>
6. 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. <https://data.geology.gov.yk.ca>
5. **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. [10.1016/j.gsf.2017.02.004](https://doi.org/10.1016/j.gsf.2017.02.004)
4. 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. <https://data.geology.gov.yk.ca>
3. **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. <https://data.geology.gov.yk.ca>
2. 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. <https://data.geology.gov.yk.ca>
1. 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. <https://data.geology.gov.yk.ca>

Code/Software Publications

*Dartmouth Graduate/Postdoc Author

1. *Zhang, T., Keller, C.B., and **Strauss, J.V.**, 2023, SubsidenceChron.jl. [10.17605/OSF.IO/ZW5GA](https://doi.org/10.17605/OSF.IO/ZW5GA)

Recent Conference Abstracts (2021–2024)

*Dartmouth Graduate Presenter **Dartmouth Undergraduate Presenter ***Dartmouth Postdoc Presenter

2025:

Beranek, L.P., Pease, V., McClelland, W.C., and **Strauss, J.V.**, 2025, Silurian arc volcanism in northern Axel Heiberg Island, Nunavut, Arctic Canada: International Conference on Arctic Margins, Bremen, Germany.

Connors, C., Lease, R., Dumoulin, J., McClelland, W.C., **Strauss, J.V.**, Craddock, W., and Houseknecht, D., 2025, Subsurface constraints on Paleozoic deformation in Arctic Alaska and the adjacent offshore region: International Conference on Arctic Margins, Bremen, Germany.

Evans, S., Sperling, E.A., Lau, K., and **Strauss, J.V.**, 2025, New Ediacaran fossils of the White Sea assemblage from the Blueflower Formation, Mackenzie Mountains, Northwest Canada: Geological Society of America Annual Meeting, San Antonio, TX.

Evans, S., Sperling, E.A., Lau, K., and **Strauss, J.V.**, 2025, New Ediacaran fossils of the White Sea assemblage from the Blueflower Formation, Mackenzie Mountains, Northwest Canada: American Geophysical Union Annual Meeting, New Orleans, LA.

*Faehnrich, K., *Geier, G., Majka, J., Schiffer, C., and **Strauss, J.V.**, 2025, Proterozoic–Paleozoic histories of North Greenland: An update of recent research activities: International Conference on Arctic Margins, Bremen, Germany.

*Geier, G., Lockett, A., Sehra, S., Kroeger, E., McClelland, W.C., Connors, C., Crowley, J.L., and **Strauss, J.V.**, 2025, Evidence for Middle–Late Devonian assembly of the Arctic Alaska terrane, northeastern Brooks Range, Alaska: International Conference on Arctic Margins, Bremen, Germany.

*Getraer, A., *Nordin, B., Penprase, S., Strauss, J.V., and Palucis, M.C., 2025, Ongoing landscape response to continental-wide drainage reorganization in the ice-sheet marginal western Canadian Arctic: American Geophysical Union Annual Meeting, New Orleans, LA.

Harding, R., Keller, C.B., Zhang, T., and **Strauss, J.V.**, 2025, Integrating tectonic subsidence and age-depth modeling to constrain Neoproterozoic–Devonian basin evolution in the central Mackenzie Mountains, NW Canada: Geological Society of America Annual Meeting, San Antonio, TX.

Kim, A., Odlum, M.L., **Strauss, J.V.**, Donaghy, E.E., Rasbury, E.T., McClelland, W.C., and Faehnrich, K., 2025, Evidence for Cenozoic deformation in the Porcupine Fault System, Alaska, from fault rock hematite (U-Th)/He thermochronology and microstructural analysis: Geological Society of America Annual Meeting, San Antonio, TX.

Meyer, F., Chappaz, A., Gregory, D., Carrothers, E., Sperling, E.A., **Strauss, J.V.**, Yobo, L.N., and Lau, K., 2025, Does the uranium speciation in sedimentary shales reflect depositional redox conditions?: American Geophysical Union Annual Meeting, New Orleans, LA.

McClelland, W.C., Koch, M.M., *Faehnrich, K., Kosminska, K., Gilotti, J.A., **Strauss, J.V.**, Beranek, L.P., and Colpron, M.C., 2025, Field relations and displacement of the Pearya terrane, Ellesmere Island, and its role in the tectonic evolution of the Arctic margin of North America: International Conference on Arctic Margins, Bremen, Germany.

Methley, P., Jiang, C.Z., **Strauss, J.V.**, and Tosca, N.J., 2025, Why does aqueous phosphate inhibit aragonite nucleation?: Goldschmidt Annual Conference, Vienna, Austria.

Michalski, K., Bal, S., Manby, G., Nejbert, K., Domanska–Siuda, J., Majka, J., **Strauss, J.V.**, and Holda-Michalska, A., 2025, Project NEOMAGRATE – Toward quantification of NE Svalbard’s paleogeographic position in the Neoproterozoic: International Conference on Arctic Margins, Bremen, Germany.

Millikin, A.E.G., *Gibson, T.M., **Strauss, J.V.**, Bergmann, K.D., Tosca, N.J., Anderson, R.P., Halverson, G.P., *Zhang, T., and Rooney, A.D., 2025, Geochemistry and mineralogy of Neoproterozoic strata in northeastern Svalbard: re-evaluating the prevalence of basalt weathering during the early Neoproterozoic: American Geophysical Union Annual Meeting, New Orleans, LA.

Odlum, M.L., **Strauss, J.V.**, Faehnrich, K., McClelland, W.C., Donaghy, E.E., Rasbury, E.T., and Colpron, M., 2025, Regional and fault rock geo- and thermochronological evidence for polyphase deformation along the Porcupine fault system of Yukon and Alaska: International Conference on Arctic Margins, Bremen, Germany.

Odlum, M.L., **Strauss, J.V.**, Faehnrich, K., McClelland, W.C., Donaghy, E.E., Rasbury, E.T., and Colpron, M., 2025, Regional and fault rock geo- and thermochronological evidence for polyphase deformation along the Porcupine fault system of Yukon and Alaska: Thermochronology Annual Conference, xxx, xxx.

Odlum, M.L., **Strauss, J.V.**, Donaghy, E.E., Rasbury, E.T., McClelland, W.C., and Faehnrich, K., 2025, Polyphase Cretaceous and Cenozoic deformation along the Porcupine fault system of Yukon and Alaska: Geological Society of America Annual Meeting, San Antonio, TX.

Rusty, M., Bey, S., Cohen, P.A., Mehra, A., and **Strauss, J.V.**, 2025, Reef of Doubt: Filamentous structures in the early Neoproterozoic Little Dal: Geological Society of America Annual Meeting, San Antonio, TX.

Strauss, J.V., Faehnrich, K., McClelland, W.C., Odlum, M.L., Donaghy, E.E., Rasbury, E.T., and Colpron, M., 2025, The Porcupine fault system of Yukon and Alaska: An underappreciated piece of the Arctic Puzzle: International Conference on Arctic Margins, Bremen, Germany.

Wedlake, G.O., Cohen, P.A., Nadalin, C.C., Mehra, A.K., **Strauss, J.V.**, and Anderson, R.P., 2025, New microfossil eukaryotes from the Tonian Little Dal Group, northwestern Canada: Banff Geobiology Conference, Banff, Canada.

2024:

***Barnes, B.D., Jiang, C.Z., Methley, P., Tosca, N.J., and **Strauss, J.V.**, 2024, CaCO₃ precipitation in ancient ferruginous oceans: Northeastern Geobiology Meeting, New Haven, CT.

***Barnes, B.D., Methley, P., Jones, P., Mehra, A., King, M., Tevis, A.A.L., Jiang, C.Z., Tosca, N.J., and **Strauss, J.V.**, 2024, Geochemical controls on abiotic carbonate sedimentation in the Paleoproterozoic Pethei Group, Northwest Territories, Canada: American Geophysical Union Annual Meeting, Washington DC.

Bradley, D., Hillenbrand, I., and **Strauss, J.V.**, 2024, The missing, near-missing, and cryptic upper crust of the Acadian Altiplano: Geological Society of America, Northeastern Section Meeting: Manchester, NH.

*Harding, R., Zhang, T., Keller, C.B., and Strauss, J.V., 2024, An updated subsidence-based age model for Ediacaran–Devonian strata in NW Canada: Northeastern Geobiology Meeting, New Haven, CT.

Kroeger, E., McClelland, W.C., Crowley, J.L., **Strauss, J.V.**, Connors, C.D., Piercey, S.J., and Colpron, M., 2024, New CA-TIMS ages for felsic volcanic rocks of the Ambler District, south-central Brooks Range: Implications for regional correlations and subduction initiation in the Cordillera: Geological Society of America Annual Meeting, Anaheim, CA, Paper No. 57-14.

McClelland, W.C., **Strauss, J.V.**, Crowley, J.L., Colpron, M., and Connors, C.D., 2024, Evaluating the age of the Old Crow plutonic suite, Yukon and northeastern Alaska, with SIMS, LA-ICPMS, ID-TIMS, and CA-TIMS analysis: Geological Society of America Annual Meeting, Paper 57-13.

Methley, P., Jiang, C.Z., **Strauss, J.V.**, and Tosca, N.J., 2024, Evaporation of seawater produces amorphous calcium-magnesium carbonate when aragonite is inhibited: European Geophysical Union Annual Meeting, Paper No. 17981.

Methley, P., Jiang, C.Z., **Strauss, J.V.**, and Tosca, N.J., 2024, Non-classical carbonate crystallization in the Tonian Draken Formation: Goldschmidt Annual Meeting, Paper No. xxx.

*Nordin, B., Getraer, A., Marshall, J., Peters, N., Schaeffer, A.J., Fosdick, J., Brown, N.D., Kelly, M., **Strauss, J.V.**, and Palucis, M., 2024, Post-glacial erosional response of a permafrost landscape across decadal to millennial timescales, Aklavik Range, Arctic Canada: Geological Society of America Annual Meeting, Anaheim, CA, Paper No. 104-2.

Strauss, J.V., Bradley, D.C., Thompson, P.J., Eusden, J.D., Meyer, E.E., Reusch, D.N., Town, C.F., McClelland, W.C., and Crowley, J.L., 2024, Detrital zircon U-Pb geochronology of the greater Central Maine Basin, New Hampshire and Southwestern Maine: Geological Society of America, Northeastern Section Meeting: Manchester, NH.

Stukel, C., and **Strauss, J.V., 2024, A record of Late Devonian (Frasnian-Famennian) reef drowning in Arctic Alaska: Northeastern Geobiology Meeting, New Haven, CT.

Thompson, P.J., **Strauss, J.V.**, and Crowley, J.L., 2024, Bedrock geologic map of the Mount Moosilauke, 7.5' Quadrangle, New Hampshire: Geological Society of America, Northeastern Section Meeting: Manchester, NH.

*Torres, L., Reusch, D.N., Smith, T., Guevara, V., Slack, J.F., Jones, P., Warburton, L., and **Strauss, J.V.**, 2024, Preliminary geologic map of the Islesboro 7.5' quadrangle with implications for the evolution of the Islesboro block, coastal Maine: Geological Society of America, Northeastern Section Meeting: Manchester, NH.

Vayda, P., Xiao, S., Crook, N., Evans, S., **Strauss, J.V.**, Smith, E., Lonsdale, M., Baillie, I., Chanchai, W., Rose, C., 2024, The first disaster taxa: vendotaenids and the Ediacaran extinction: Geological Society of America Annual Meeting, Anaheim, CA, Paper No. 103-3.

Wong, M., Rasbury, T., Kirk, J., Hatton, K., Faehnrich, K., McClelland, W.C., **Strauss, J.V.**, Odlum, M., and Donaghy, E., 2024, Understanding the Porcupine Fault System through U-Pb dating and thin-section analysis of calcite veins: American Geophysical Union Annual Meeting, Washington DC.

*Zhang, T., Harding, R., Keller, C.B., and **Strauss, J.V.**, 2024, Subsidence age-depth modeling: implications for calibrating Proterozoic–Phanerozoic paleontological and geochemical records: Northeastern Geobiology Meeting, New Haven, CT.

*Zhang, T., Keller, C.B., Harding, R., Smith, E.F., Nelson, L.L., Creveling, J.R., and **Strauss, J.V.**, 2024, Neoproterozoic to early Paleozoic sedimentation history of the southern Great Basin: Geological Society of America Annual Meeting, Anaheim, CA, Paper No. 277-4.

2023:

Anderson, R.P., Wedlake, G.O., Parry, L.A., Gibson, T.M., Millikin, A.E.G., Piepjohn, K., Tosca, N.J., Rooney, A.D., and **Strauss, J.V.**, 2023, Multicellular microfossils from the ca. 930–820-million-year-old Veteranen Group of Svalbard: Palaeontological Society Annual Meeting, Paper No. xxx.

***Barnes, B.D., Jiang, C.Z., Methley, P., **Strauss, J.V.**, and Tosca, N.J., 2023, CaCO₃ nucleation dynamics in the presence of dissolved iron: American Geophysical Union Annual Meeting, Paper No. xxx.

Bergmann, K., Gomez-Perez, I., Anderson, N.T., Cantine, M., Wilcots, J., Jost, A.B., Meyer, F., Mackey, T., Goldberg, S., Millikin, A.E.G., **Strauss, J.V.**, Rooney, A.D., and Gerdes, A., 2023, Unraveling geochemical complexity in Neoproterozoic sedimentary successions: A comparative study of Svalbard and Oman: American Geophysical Union Annual Meeting, Paper No. xxx.

***Biasi, J., and **Strauss, J.V.**, 2023, The paleogeography of northern Alaska: knowns and unknowns: Geological Society of America, Cordilleran Section, Paper No. xxx.

Bruxvoort, S.E., Rayburn, S.E., Murillo, M.A., **Stukel, C.S., McClelland, W.C., and **Strauss, J.V.**, 2023, New geologic mapping of the Phillip Smith Mountains A-1 NW 7.5' quadrangle, Central Brooks Range, Alaska: Geological Society of America Annual Meeting, Paper No. 109-5.

Connors, C., Craddock, W., Houseknecht, D., Dumoulin, J., Lease, R., McClelland, W.C., and **Strauss, J.V.**, 2023, Paleozoic fold-and-thrust belts in Arctic Alaska and the adjacent offshore region: American Association of Petroleum Geologists International Conference and Exhibition, Paper No. xxx.

*Geier IV, G.R., Lockett, A.C., Kroeger, E.D.L., ***Fame, M.L., McClelland, W.C., Connors, C.D., and **Strauss, J.V.**, 2023, New geologic mapping of the Arctic D-1 NE and Table Mountain D-5 NW 7.5' quadrangles, northeastern Brooks Range, Alaska: Geological Society of America Annual Meeting, Paper No. 109-1.

*Getraer, A., Nordin, B.J., **Strauss, J.V.**, Palucis, M.C., 2023, Permafrost landsliding reflects ongoing response to deglacial base level fall in the Aklavik Range, NWT, Canada: American Geophysical Union Annual Meeting, Paper No. xxx.

Malik, M.H., Koeshidayatullah, A., **Strauss, J.V.**, Herlambang, A., Bello, A.M., Amao, A., and Al-Ramadan, K., 2023, Sedimentary style and related facies architecture in fault-associated mixed clastic-carbonate systems of isolated basins: An example from the Ediacaran Dhaiqa Basin in Saudi Arabia: Geological Society of America Annual Meeting, Paper No. xxx.

McClelland, W.C., Connors, C.D., **Strauss, J.V.**, Lease, R.O., Craddock, W.H., Houseknecht, D.W., Gooley, J.A., and Crowley, J.L., 2023, Linking MDA estimates, pluton emplacement and deformation in the North Slope subsurface, Alaska, with CA-TIMS: Implications for Devonian orogenesis in the Brooks Range: Geological Society of America Annual Meeting, Pittsburgh, PA, Paper No. xxx.

Methley, P., Jiang, C.Z., **Strauss, J.V.**, and Tosca, N.J., 2023, Investigating the “Dolomystery”: A multifaceted study of Precambrian primary dolomite: Goldschmidt Meeting, Vienna, Austria, Paper No. xxx.

Methley, P., Jiang, C.Z., **Strauss, J.V.**, and Tosca, N.J., 2023, Evaporation of late Proterozoic seawater drives amorphous calcium magnesium carbonate production: American Geophysical Union Annual Meeting, Paper No. xxx.

*Nordin, B.J., Getraer, A., Marshall, J.A., **Strauss, J.V.**, and Palucis, M.C., 2023, A multi-chronometer approach to constrain alluvial fan formation in the Northwest Territories, Canada: American Geophysical Union Annual Meeting, Paper No. xxx.

Peters, N., Marshall, J.A., Palucis, M.P., **Strauss, J.V.**, and Meredith, P.G., Peering into the frost cracking window – physical experiments at 68N, Aklavik Range, Canada: American Geophysical Union Annual Meeting, Paper No. xxx.

Sehra, S., Geier IV, G., Lockett, A., Galloway, P., McClelland, W.C., Connors, C., and **Strauss, J.V., 2023, Stratigraphy and provenance of the Keikiktuk Conglomerate and Associated Lower Carboniferous Units in the Northeastern Brooks Range of Alaska: Geological Society of America Cordilleran Section, Paper No. xxx.

Strauss, J.V., 2023, On the origins and travels of Arctic Alaska: Cordilleran Tectonics Workshop, Whitehorse, Yukon.

Trower, E., Mizrahi, N., Yager, J., Corsetti, F., Fischer, W., Karim, T., Shapiro, R., Simpson, C., Sperling, E.A., **Strauss, J.V.**, Tang, Q., West, J., Xiao, S., and Zawaski, M., 2023, Examining the Phanerozoic record of seawater dissolved silica concentrations via Si isotopes of sponge spicules: American Geophysical Union Ocean Sciences Meeting, Paper No. xxx.

Vayda, P., Xiao, S., Keller, N., Lonsdale, M., **Strauss, J.V.**, and Hagen, A., 2023, Was Earth’s oldest mineral collector a Cnidarian? Morphological, mineralogical, and microstructural analysis of *Salterella*: Geological Society of America Annual Meeting, Paper No. xxx

2022:

Anderson, R.P., Wedlake, G.O., Gibson, T., Millikin, A., Piepjohn, K., Tosca, N.J., Rooney, A.D., and **Strauss, J.V.**, 2022, New multicellular microfossil eukaryotes from the ca. 950–820 Ma Veteranen Group of Svalbard: Geological Society of America Annual Meeting, Paper No. 381462.

Clemente, J., Ostrander, C., Nielsen, S.G., Stockey, R.G., **Strauss, J.V.**, and Sperling, E.A., 2022, Timing Phanerozoic deep ocean oxygenation using thallium isotopes: American Geophysical Union Annual Meeting, Paper No. xx.

Counts, J., Griffis, N., Maloof, A.C., Capion, A., Dumoulin, J., Gooley, J., Connors, C., and **Strauss, J.V.**, 2022, A new $\delta^{13}\text{C}_{\text{carb}}$ and $\delta^{18}\text{O}_{\text{carb}}$ record from the Carboniferous of Alaska: Geological Society of America Annual Meeting, Paper No. 378699.

*Faehnrich, K., McClelland, W.C., Webb, L.E., Rasbury, E.T., Colpron, M., and **Strauss, J.V.**, 2022, Displacement history along the Porcupine Shear Zone and its role in the opening of the Canada Basin: International Conference on Arctic Margins: Ottawa, Canada.

*Geier IV, G.R., Lockett, A., McClelland, W.C., Connors, C., ***Fame, M., and **Strauss, J.V.**, 2022, New insights into Devonian–Carboniferous geological relationships in the northeastern Brooks Range of Alaska: Geological Society of America Annual Meeting, Paper No. 377521.

Hernandez, M., Cohen, P., *Busch, J.F., and **Strauss, J.V.**, 2022, Enigmatic phosphatic tubular fossils from the early-middle Paleozoic Bouvette Formation, Yukon Territory, Canada: Geological Society of America Annual Meeting, Paper No. 381749.

Koch, M.M., McClelland, W.C., Gilotti, J.A., Kosminska, K., *Faehnrich, K., and **Strauss, J.V.**, 2022, A Paleozoic accretion history: Igneous and detrital zircon signatures of the Kulutingwak and Danish River formations in the Yelverton Inlet-Phillips Inlet region, Ellesmere Island, Nunavut, Canada: European Geophysical Union, Paper No. 285.

Lockett, A., *Geier IV, G.R., ***Fame, M., Kroeger, E., Nelson, L.N., Connors, C., **Strauss, J.V.**, and McClelland, W.C., 2022, New geologic mapping in the Arctic D-1 SW and NW 7.5' quadrangles, northeastern Brooks Range, Alaska: Geological Society of America Annual Meeting, Paper No. 378097.

Malik, M.H., Koeshidayatullah, A., Herlambang, A., **Strauss, J.V.**, and Al-Ramadan, K., 2022, Ediacaran of Saudi Arabia: Myth, Facts, and Potential: AAPG Middle East Oil, Gas and Geosciences Show, Abstract No. 2023-A-620-AAPG.

***Mehra, A., *Busch, J.F., *Faehnrich, K., Jin, J., Leslie, S.A., Melchin, M., and **Strauss, J.V.**, 2022, A change in sedimentation patterns in a Paleozoic reef revealed via three-dimensional reconstruction: Geological Society of America Annual Meeting, Paper No. 382158.

McClelland, W.C., Kosminska, K., Gilotti, J.A., *Faehnrich, K., **Strauss, J.V.**, Colpron, M., 2022, The role of transcurrent structures in the Paleozoic evolution of the northern Laurentian margin: Geological Society of America Annual Meeting, Paper No. 377537.

Palucis, M.C., Marshall, J.A., and **Strauss, J.V.**, 2022, Sediment production and transport processes in an Arctic watershed undergoing climate change: European Geophysical Union, Paper No. 10812.

Palucis, M.C., Marshall, J.A., and **Strauss, J.V.**, 2022, Sediment production and transport processes in an Arctic watershed undergoing climate change: Geological Society of America Penrose Conference.

Pierce, J.S., Evans, D.A., Youbi, N., **Strauss, J.V.**, and Keller, C.B., 2022, Significant Ediacaran paleolatitude changes of West African Craton revealed by magnetostratigraphy of the Ouarzazate Group, Bou Azzer inlier, Morocco: American Geophysical Union Annual Meeting, Paper No. xxx.

Reusch, D., and **Strauss J.V.**, 2022, Update on detrital zircon U/Pb geochronology from Proterozoic and early Paleozoic rocks of the Penobscot Bay inlier, Maine: Geological Society of America Northeastern Meeting, Paper No. xx.

Vayda, P., Xiao, S., Keller, N., Evans, S.D., **Strauss, J.V.**, and Smith, E.F., 2022, Measuring Up: How does the early Cambrian small shelly fossil *Salterella* fit in phylogenetic space?: Geological Society of America Annual Meeting, Paper No. 378480.

*Zhang, T., Smith, E.F., Eyster, A., **Strauss, J.V.**, Mixed carbonate-clastic sedimentation in the late Ediacaran Reed Dolomite: Geological Society of America Annual Meeting, Paper No. 376812.

Pending Research Grants

2025 NSF Structure and Physics of the Solid Earth. *Collaborative Research: Latest Cretaceous–Paleogene Tintina Fault System: Links between the northern Cordillera and circum-Arctic*. Erin Donaghy (Lead PI, University of Nevada Las Vegas), Margaret Odlum (Co-PI, University of California San Diego), and **J.V. Strauss** (Co-PI, Dartmouth), \$147,324 Dartmouth, \$814,618 total.

Awarded Research Grants

2025 NASA Exobiology. *Investigating spatial and temporal variability of Earth's oldest animal communities within the Canadian Cordillera*. S. Evans (PI, Florida State University) and **J.V. Strauss** (Co-I, Dartmouth Subcontract), \$372,843 Dartmouth, \$727,578 total.

2023 NSF Tectonics, EAR-2314532. *Collaborative Research: The role of the Porcupine fault system in the Mesozoic opening of the Arctic Ocean*. **J.V. Strauss** (Lead PI, Dartmouth), W.C. McClelland (Co-PI, University of Iowa), Margaret Odlum (Co-PI, University of Nevada Las Vegas), and Troy Rasbury (Co-PI, Stony Brook University), \$247,428 Dartmouth, \$875,198 total.

- 2023 NSF Sedimentary Geology and Paleobiology, EAR-2233726. *Collaborative Research: RUI: Exploring early metazoan reef evolution through a multi-scale approach*. A. Mehra and **J.V. Strauss** (Co-PI, Dartmouth) and P. Cohen (Co-PI, Williams College), \$390,778 Dartmouth, \$496,523 total. Re-budgeted to accommodate PI Mehra's transfer to University of Washington.
- 2022 USGS EDMAP Program. *Bedrock geological mapping of the northern Table Mountain D-5 quadrangle, Brooks Range, Alaska*. **J.V. Strauss** (PI, Dartmouth), \$35,000.
- 2021 NSF Polar Programs, EAR-2116471. *Collaborative Research: Watershed-scale geomorphic response to climate change in the Aklavik Range, NWT (Canada)*. M. Palucis and **J.V. Strauss** (PI and Co-PI, Dartmouth) and J. Marshall (Co-PI, University of Arkansas), \$520,231 Dartmouth, \$776,798 total.
- 2021 Alfred P. Sloan Foundation Fellowship. *Exploring archives of non-skeletal carbonate sedimentation*. **J.V. Strauss** (PI, Dartmouth), \$75,000.
- 2021 USGS EDMAP Program. *Bedrock geological mapping of the northeastern Arctic D-1 quadrangle, Brooks Range, Alaska, with implications for the amalgamation of Arctic Alaska*. **J.V. Strauss** (PI, Dartmouth), \$25,000.
- 2020 NSF Frontiers in Earth Sciences, EAR-2021176. *Collaborative Research: Co-evolution of Earth and life across the Proterozoic–Phanerozoic transition: Integrated perspectives from outcrop and drill core*. E.F. Smith (Lead PI, Johns Hopkins University), **J.V. Strauss** and C.B. Keller (PI and Co-PI, Dartmouth), K. Lau (PI, University of Wyoming), A.D. Rooney and D.A. Evans (PI and Co-PI, Yale University), and S. Xiao (PI, Virginia Tech), \$739,430 Dartmouth, \$3,000,000 total.
- 2020 NSF Tectonics, EAR-1929593. *Collaborative Research: An Alaskan perspective on middle Paleozoic terrane translation, contraction, and subduction initiation in northwestern Laurentia*. **J.V. Strauss** (Lead PI, Dartmouth), W.C. McClelland (Co-PI, University of Iowa), and C. Connors (Co-PI, Washington and Lee University), \$249,582 Dartmouth, \$613,948 total.
- 2020 Dartmouth College Neukom CompX. *Acquisition of unmanned aerial vehicles for training the next generation of field scientists*. A. Mehra and **J.V. Strauss** (Dartmouth), \$39,998.
- 2019 NSF Low-Temperature Geochemistry and Geobiology, EAR-1929593. *Collaborative Research: Developing a multi-proxy approach for reconstructing deep-time silicate weathering*. A.D. Rooney (Lead PI, Yale University) and **J.V. Strauss** (Co-PI, Dartmouth), \$246,900 Dartmouth, \$525,040 total.
- 2018 NSF MRI, EAR-1828099. *MRI: Acquisition of an Isotope Ratio Mass Spectrometer (IRMS) to enable interdisciplinary research at Dartmouth and beyond*. C. Hicks Pries (Lead PI, Dartmouth), W. Leavitt (Co-PI, Dartmouth), and **J.V. Strauss** (Co-PI, Dartmouth), \$483,128 total.
- 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 total.
- 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. Gilotti (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 Macro-photography*. **J.V. Strauss** (Lead PI, Dartmouth), \$10,000.
- 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.

Supervised and Co-Supervised Undergraduate Theses

Dartmouth College, Department of Earth Sciences, Hanover, NH

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| Caitlin Stukel – <i>Stratigraphy and provenance of the Beaucloup Formation in the Brooks Range, Alaska</i> | grad. June 2024 |
| Parker Jones – <i>The geologic history of the Seven Hundred Acre Island Formation in Penobscot Bay, ME</i> | grad. June 2024 |
| Shaalín Sehra – <i>Stratigraphy and provenance of Carboniferous strata in the northeastern Brooks Range of Alaska</i> | grad. June 2023 |
| Peter Kannam – <i>Early Paleozoic deep-marine mercury (Hg) deposition</i> | grad. June 2022 |
| Rebecca Miller – <i>Compilation bedrock geology along the Alaska–Yukon border from the Arctic Ocean to the Yukon River</i> | grad. June 2020 |
| Christian Trejo – <i>Age and significance of early Paleozoic unnamed chert units in the Zavkhan Terrane of Mongolia</i> | grad. June 2020 |
| Charlotte Nutt – <i>Middle to late Paleozoic stratigraphy and provenance of the Porcupine terrane: Implications for the tectonic history of western North America</i> | grad. June 2019 |
| Maxwell Saylor – <i>A sedimentological and paleontological study of the Cambrian–Devonian Bouvette Formation at Nadaleen Mountain, Yukon, Canada</i> | grad. June 2019 |
| Caleb “Forrest” Town – <i>U-Pb geochronology of the Moat Volcanics, White Mountains, New Hampshire</i> | grad. June 2018 |
| Joe Malinowski – <i>The basal Road River Group of Yukon, Canada: New insights into the Cambrian–Ordovician carbon cycle</i> | grad. June 2018 |
| Jack Taylor – <i>Sedimentological and chemostratigraphic analysis of Ediacaran carbonate platforms in the Canadian Cordillera</i> | grad. June 2018 |
| Joshua Perez – <i>Age, Geochemistry, and Significance of Middle Paleozoic Volcanics in the Brooks Range</i> | grad. June 2017 |
| Peter Mamrol – <i>Age and Significance of the Cambrian–Ordovician Dempster Volcanics, Yukon, Canada</i> | grad. June 2016 |

Harvard University, Department of Earth and Planetary Sciences, Cambridge, MA

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| Lyle Nelson – <i>Provenance of Ediacaran–Cambrian strata of the North Slope of Alaska</i> | grad. May 2015 |
| Esther Kennedy – <i>The sedimentology and chemostratigraphy of the Jones Ridge Limestone, AK</i> | grad. May 2013 |

Supervised and Co-Supervised Graduate Theses

(*indicates main supervisor)

Dartmouth College, Department of Earth Sciences, Hanover, NH

*George Geier – PhD supervisor

in progress

*Alexander Getraer – PhD supervisor (co-advised with Marisa Palucis)	in progress
*Reina Harding – PhD supervisor (co-advised with Brenhin Keller)	in progress
Olivia Moehl – MSc committee member	in progress
*Bailey Nordin – PhD supervisor (co-advised with Marisa Palucis)	in progress
Emma Rodgers – PhD committee member	in progress
*Tianran Zhang – PhD supervisor	in progress
*London Warburton – PhD supervisor	in progress
Laurie Zielinski – PhD committee member	in progress

*Luis Torres – MSc supervisor	grad. Oct. 2024
Matthew Maclay – MSc committee member	grad. Sept. 2023
*Karol Faehnrich – PhD supervisor	grad. June 2023
*James Busch – PhD supervisor	grad. June 2022
Gailin Pease – MSc committee member	grad. Dec 2021
Danielle Niu – PhD committee member	grad. Dec 2021
Alice Zhou – MSc committee member	grad. May 2019
*Virginia Wala – MSc supervisor	grad. May 2019
Mackenzie Marti – MSc committee member	grad. Jan 2018
Helen Doyle – MSc committee member	grad. July 2016

King Fahd University of Petroleum and Minerals, Dhahran, Kingdom of Saudi Arabia

Muhammad Hammad Malik – PhD external examiner	grad. Aug. 2024
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Purdue University, Purdue, IN

Brandon Matthew Keough – PhD external examiner	in progress
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University of Iowa, Department of Earth and Environment, Iowa City, IA

Samson Bruxvoort – MSc external examiner	grad. July 2024
Alec Lockett – MSc external examiner	grad. July 2023
Matthew Trembath – MSc external examiner	grad. July 2020

Yale University, Department of Earth and Planetary Sciences, New Haven, CT

Alexie Millikin – PhD external examiner	grad. Dec. 2024
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Université Pierre et Marie Curie, Institut des Sciences de la Terre, Paris, France

Nicolas Lemonnier – PhD external examiner	grad. Dec. 2015
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Supervised and Co-Supervised Postdoctoral Scholars

Dartmouth College, Department of Earth Sciences, Hanover, NH

Ben Davis Barnes	lecturer at Dartmouth College
Erin Donaghy	now at University of Nevada at Las Vegas
Joseph Biasi	now at University of Wyoming
Akshay Mehra	now at University of Washington
Timothy Gibson	now at Yale University

Courses Taught

Dartmouth College, Department of Earth Sciences, Hanover, NH

Earth Sciences 2: *Evolution of Earth and Life*
 Earth Sciences 38: *Sedimentary Systems*
 Earth Sciences 58/158: *Sedimentary Petrology and Stratigraphy*
 Earth Sciences 45/46/47: *The Stretch*
 Earth Sciences 201: *Fundamentals and Pedagogy in Earth Sciences*
 Earth Sciences 272: *Topics in Historical Geobiology*

Professional Service

Editorial Review Board

Geology (2021-in progress)

Journal Reviewer

Chemical Geology

Geology

Geosphere

Geological Society of America Bulletin

Journal of the Geological Society of London

Lithosphere

Nature

Nature Geoscience

Norwegian Journal of Geology

Palaeogeography, Palaeoclimatology, and Paleoecology

Precambrian Research

Science

Science Advances

Sedimentology

Sedimentary Geology

Ad hoc Panel Reviewer and Panelist

NASA Exobiology

NSF Structure and Physics of the Solid Earth

NSF Low-Temperature Geochemistry and Geobiology

NSF Tectonics

NSF Sedimentary Geology and Paleobiology

ACS Petroleum Research Fund

Conference Session Convener

2023 GSA NE Meeting: *Appalachian vestiges: Geology of the rocks in the Northern Appalachians that are almost gone*

2022 GSA Annual Meeting: *The geological evolution of northern Alaska: A session in honor of Charles “Gil” Mull*

2022 GSA Annual Meeting: *Cambrian–Ordovician Faunas and Events: A session in honor of John F. Taylor and John E. Repetski*

2022 GSA Annual Meeting Pardee Symposium: *The Proterozoic–Phanerozoic Transition: Laying the Foundation for the Modern Earth System*

2020 GSA Annual Meeting: *Precambrian Basin Analysis*

2019 AGU Annual Meeting: *The North Atlantic Realm from Neoproterozoic to Cenozoic: Orogens Old and New*

2019 AGU Chapman Meeting: *Subduction-related Magmatism in the Arctic*

2019 GSA NE Meeting: *Detrital mineral constraints on Appalachian tectonics*

2017 GSA Annual Meeting: *New perspectives on Cordilleran tectonics, paleogeography, and metallogeny*

2017 GSA Annual Meeting: *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: *Proterozoic Basins of Northern Laurentia*

2015 GACMAC-AGU Joint Session: *The Neoproterozoic-Paleozoic Earth system: records from an Earth in transition*

2015 GSA Annual Meeting: *Precambrian Geology of the North American Cordillera: An Exploration of New Developments in Laurentia’s Ancient History*

Professional Societies

Alaska Geological Society

International Association of Sedimentologists

American Geophysical Union

Geological and Mineralogical Association of Canada
American Association of Petroleum Geologists
Society for Sedimentary Geology (SEPM)
Geological Society of America
American Alpine Club

College/Departmental Committee Work

Departmental Geophysics Search Committee, Chair	2024-2025
Departmental Curriculum Committee, Member	2023-present
Departmental Prerequisite Committee, Member	2022-present
Departmental Website Committee, Chair	2020-present
Departmental Seminar Organizer	2019-2020
Departmental Inclusion, Diversity, and Equity Committee	2019-2020