Pierre Haenecour

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EDUCATION

Washington University in St. Louis	Earth and Planetary Sciences	PhD (2016) & MS (2012)
Free University of Brussels	Geology & Geochemistry	BSc. (2008) & MS (2010)

EMPLOYMENT

Assistant Professor, Lunar and Planetary Laboratory, University of Arizona	Oct 2019-present
Visiting Professor, McDonnell Center for Space Sciences, Washington University in St. Louis	2021-present
Postdoctoral Research Associate, University of Arizona	2017-2019
Robert M. Walker Postdoctoral Fellow, Washington University in St. Louis	2016
Doctoral Student (PhD), Washington University in St. Louis	2011-2016

HONORS AND ACADEMIC AWARDS

Geochemical Journal 10-Year Most Cited Paper Award from the Geochemical Society of Japan for the paper, "*Presolar silicate grains: Abundances, isotopic and elemental compositions, and the effects of secondary processing*"	2026
Wiley Top Cited Article 2020-2021 Award for the paper: "*The Effects of Secondary Processing in the Unique Carbonaceous Chondrite Miller Range 07687*"	2022
Selected for the AAAS/Science Program for Excellence in Science	2017
Meteoritical Society Early Career Scientist Award	2017
The Brian Mason Award	2016
Dean's Recognition for Student Leadership at Washington University	2016
Dr. Diane DeMell Jacobsen Scholarship	2015
NASA Earth and Space Science Fellowship (NNX12AN77H)	2012-2016
NASA Cosmochemistry Travel Awards for the Annual MetSoc meetings	2012-2016
Seventh LPI Career Development Award	2014
Summer Research Fellowship from the McDonnell Center for the Space Sciences	2009

SERVICE/OUTREACH

Local/State Outreach/Service

Desert Museum Rocks and Stars Night (Tucson, AZ) - "*From the Dawn of the Solar System to the Origins of Life: A Journey to Asteroid Bennu*"	July 2025
Spacefest 2025 (Keynote)	July 2025
UA-MIT KSJ Astrobiology Workshop – Panel Discussion for journalists on the NASA OSIRIS-REx Mission	April 2025
Arizona Astrobiology Symposium - *"From Ancient Earth to Stardust: My Journey into Planetary Science and Astrobiology"*	March 2025
International Meteorite Collectors Association (IMCA) Annual Dinner (Tucson, AZ) – "*First Look at Bennu Samples Returned by the OSIRIS-REx Mission*"	Feb 2024
Mansfeld Middle Magnet School (Tucson, AZ) – "*OSIRIS-REX QuickLook: First Look at the samples from asteroid 101955 Bennu*"	Jan 2024
Gregory School (Tucson, AZ) – "*NASA OSIRIS-REx Mission: Journey to the Origins of our Solar System*"	Oct 2023
Mansfeld Middle Magnet School (Tucson, AZ) – "*The NASA OSIRIS-REx Mission*"	Sept 2023
Huachuca Astronomy Club – *"We Are Made of Star Stuff - Stardust in the Laboratory"*	Feb 2022
Vice Motherboard – *"How to Grab an Asteroid | The Space Show"*	Sept 2021
University of Arizona - The 16th Annual College of Science Lecture Series: *"Water: Beyond Earth"*	April 2021

National/International Outreach

Astronomy Days at the North Carolina Museum of Natural Sciences – "*NASA OSIRIS-Rx Missions: First Results from the Analysis of Bennu Samples"*	Jan 2024
Astronomy Days at the North Carolina Museum of Natural Sciences – *"Asteroid Forensics: Unravelling the Origins of our Solar System"*	Jan 2023
Astronomy Days at the North Carolina Museum of Natural Sciences – *"We Are Made of Star Stuff - Stardust in the Laboratory"*	Jan 2022
Vice Motherboard – *"How to Grab an Asteroid | The Space Show"*	Sept 2021
Astronomy Days at the North Carolina Museum of Natural Sciences – "*NASA OSIRIS-REx Mission: Insight into the Origin of Volatiles Through the Analysis of Samples from Asteroid 101955 Bennu"*	Jan 2021

Departmental/College/University Committee(s)

LPL Representative to the College of Science Dean's Faculty Council	2026 – 2027
Standing Member for the Oral Exam	2025 – 2026
Department Life Committee	2025 – 2026 (chair) 2019 – 2022

Member of the Scientific and technical oversight committee (STOC) for the Kuiper-Arizona Laboratory for Astromaterials Analysis facility + Microprobe Instrument Scientist – 2023 – Present + Tabletop SEM Instrument Scientist – 2022 – Present	2020 – Present
Diversity, Equity, Inclusion (DEI) Committee	2023 – 2025 (chair) 2022 – 2023
Member of the Graduate Admissions and Advising Committee (GAAC)	2024 – 2025
Standing member for the Written Comprehensive Exam	2023 - 2024
APR Self Study Committee	2022 – 2023
Colloquium Organizer	Fall 2022
Journal Club Organizer	2021 – 2022
Strategic Planning	2020 – 2021
Marketing & Branding	2019 – 2020

Other Committees (Internal)

Scientific and Technical Oversight Committee (STOC) for the Kuiper-Arizona Laboratory for Astromaterials Analysis (K-ALFAA)	2019 – Present
Hiring committee for a 'Focused Ion Beam' lab manager at LPL	2026
Candidate Selection for the AZ Space Rock Summer Camp	2025 & 2026
Hiring committee for a 'NanoSIMS' lab manager at LPL	2023
Hiring committee for a 'Focused Ion Beam' lab manager at LPL	2021

Service on UA student committees is covered in Dossier Section 6 – Teaching

Other Committees (External)

NSF Findable Accessible Interoperable Reusable Open Science (FAIROS) Open Sample Ecosystem Community Advisory Panel	2026
Guest Editor for a Special Issue in Geochimica et Cosmochimica Acta	2026
External reviewer for Swiss National Science Foundation proposals	2025
Co-Convener of Goldschmidt Conference Session on Asteroid Sample Return Missions	2025
Chair of the Travel Award Committee for the Meteoritical Society	2024
Member of the Joint Lunar Exploration Analysis Group (LEAG) and Extraterrestrial Materials Analysis Group (ExMAG) Action Team	2023 – 2025
Full voting member of the Extraterrestrial Materials Analysis Group (ExMAG) - formerly the Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM)	2021 – Present
Co-Chair of the Facilities & Informatics Subcommittee of ExMAG	2021 – Present
Organizer of the first Community Workshop on Data Management in the Era of Sample Return Missions	Nov 2021
Member of the Queers in Planetary Sciences (QUIPS) Group	2020 – Present

Special Issue organizer and guest editor for Meteoritics & Planetary Science	2020
Recurring Panelist & External Reviewer on multiple NASA ROSES Planetary Science Rolling Review Panels	2019 – Present
Recurrent Reviewer for Earth, planets and space, Meteoritics & Planetary Science, Geochemical Perspectives Letters, Geochimica et Cosmochimica Acta, Nature Astronomy, Nature Communications, The Astrophysical Journal, Science Advances, and Scientific Data	2019 – Present

MISSION INVOLVEMENT

Co-Investigator on the NASA NF5 mission concept CAESAR (Comet Astrobiology Exploration Sample Return) — 2023 – Present

Co-Investigator on the NASA's OSIRIS-REx mission — 2021 – Present

- Lead for the Sample Analysis Data Archiving Working Group (SADAWG)
- Member of the Sample Elements and Isotopes Analysis Working Group (SEIWG)
- Member of the Sample Organics Analysis Working Group (SOAWG)
- Member of the Mineralogy and Petrography Working Group (MAPWG)
- Member of the Quicklook 'Tiger' Team (2022-2023)
- Member of the Mission Sample Science Risk Board (2022-2023)
- Lead Special Study Sample Scientist for NASA Data Management Special Study (2021-2022)

PROFESSIONAL DEVELOPMENT

NASA Science Mission Directorate Media Training	2023
Safe Zone training	2020
National Center for Faculty Diversity and Development Faculty Success Program	2020

PUBLICATIONS/CREATIVE ACTIVITY

Chapters in scholarly books (peer-reviewed)

Haenecour, P. and Zega, T.J. (2025). Presolar silicates in the solar system. In: Presolar Grains in Extra-Terrestrial Materials, pp.303-353. https://doi.org/10.1016/B978-0-12-821830-3.00011-5

Refereed Journal Articles – in review/revision

Prince, B. S., Zega, T. J., Gainsforth, Z., Benner, M. C., Barnes, J. J., ***Haenecour, P.***, Wilbur, Z. E., Russell, S. S., McCoy, T. J., Connolly Jr., H. C., Lauretta, D. S. (2026). Nanometer-sized inclusions of an ammonia-rich, alkaline fluid from the parent body of asteroid Bennu. Science (resubmitted to post-revision).

Lauretta D. S., Connolly, Jr., H. C., Russell, S. R., McCoy, T. J., Alexander, Conel M. O'D., Amini, M., Barnes, J. J., Bennett, C. A., Brennecka, G. A., Corrigan, C. M., DellaGiustina D. N., Domanik K. J., Eckley S. A., Foustoukos, D. I., Franchi, I. A., Glavin, D. P., Gooding, T., Richard C. Greenwood, R. C., ***Haenecour, P.***, Hill, D. H., Jourdan, F., Kawasaki, N., Keller, L. P., Koefoed, P., Kontogiannis M. K., Libourel G., Malley, J. A., Nguyen, A. N., Polit, A. T., Reddy, S. M., Render, J., Rickard, W. D. A., Rose T. R., Ryan, A. J., Salge T., Saxey D. W., Shollenberger Q. R., Thomas-Keprta, K., Timms, N. E., Wang K., Wardell, R. L., Weis, D., Welten, K., Wilbur, Z. E., Wimpenny, J., Yurimoto, H., Zega T. J., Wolner C. W. V. (2026) Hummocky, Angular, and Mottled Stones from Asteroid (101955) Bennu: Records of Variable Fluid–Rock Interactions on an Asteroid Parent Body. *Meteoritics & Planetary Sciences*, in revisions (with minor revisions).

Wang, K., Lodders, K., Koefoed, P., Broussard, M., Wimpenny, J., Render, J., Shollenberger, Q. R., Kruijer, T. S., Brennecka, G. A., Amini, M., Lai, V., Weis, D., Welten, K. C., Nishiizumi, K., Glavin, D. P., Dworkin, J. P., Alexander, C. M. O'D., Barrat, J.-A., ***Haenecour, P.***, Barnes, J. J., Nguyen, A. N., Connolly, H. C. Jr., Lauretta, D. S. (2026). Best Bulk Bennu (B3): Elemental compositions of aggregate samples from asteroid Bennu. *Geochimica et Cosmochimica Acta*, in review.

Yoshimura, T., Takano, Y., Naraoka, H., Koga, T., Hirakawa, Y., Ogawa, N. O., Oba, Y., Schmitt-Kopplin, P., Ruchti, S., Liss, M., Araoka, D., Ohkouchi, N., McLain, H. L., Peretyazhko, T. S., Glavin, D. P., Dworkin, J. P., ***Haenecour, P.***, Connolly, Jr., H. C., Lauretta, D. S. (2026). Aqueous alteration and organosulfur evolution recorded in asteroid Bennu. *Nature Communications*, in review.

Liu, X., Lodders, K., Koefoed, P., Glavin, D. P., Dworkin, J. P., McLain, H. L., **Haenecour, P.**, Barnes, J. J., Nguyen, A. N., Russell, S. S., McCoy, T. J, Wang, K., Connolly, Jr., H. C., Lauretta, D. S. (2026). Soluble Elemental Inventories in Samples from Asteroid Bennu and CI Chondrites. *Meteoritics & Planetary Sciences*, in review.

Refereed Journal Articles

Haenecour, P., Barnes, J.J., Bloch, E., Smith, L.R., Hill, D., Glavin, D.P., Dworkin, J. P., Connolly, Jr., H. C, Lauretta, D. S. (2026). Gradual Destruction of Refractory Stardust Grains in Late-Stage Alkali Brines on Asteroid Bennu. *Nature Communications*, accepted.

Kawasaki, N., Matsumoto, T., Arakawa, S., Sakamoto, N., Bajo, K., Russell, S. S., Barnes, J. J., Nguyen, A. N., McCoy, T. J., ***Haenecour, P.***, Yurimoto, H., Connolly Jr., H. C., Lauretta, D. C. (2026). Refractory inclusions in Bennu samples are indicative of outer Solar System accretion. *Nature Communications*, in press.

Eckley, S. A., Lunning, N. G., O'Neal E. W., Plummer J., Funk R. C., Calva C., Connelly W. D., Ferdous J., Garcia G. C., Hernandez N., Lugo G., Martinez S., Montoya M., Rivera E. V., Rohmer D. J., McCubbin F. M., Davidson J., McCoy T. J., Russell S. S., ***Haenecour P.***, Dworkin J. P., Connolly Jr., H. C., and Lauretta D. S. (2026). Diverse Lithologies in Bennu Stones Revealed Using X-ray Computed Tomography Under Pristine Conditions, *Meteoritics & Planetary Sciences*, in press.

Hamilton, V. E., Cloutis, E. A., Milliken, R. E., ***Haenecour, P.***, Golish, D. R., Domanik, K. J., McCoy, T. J., Keller, L. P., Simon, A. A., Kaplan, H. H., Goodrich, C. A., Sandford, S. A., Applin, D., Hiroi, T., Hill, D. H., Lunning, N. G., McCubbin, F. M., Eckley, S. A., Snead, C.

J., Blumenfeld, E. H., Aebersold, J. E., Schultz, C., Bowles, N., Shirley, K. A., Russell, S. S., Barnes, J. J., Zega, T. J., DellaGiustina, D. N., Ryan, A. J., Glavin, D. P., Dworkin, J. P., Connolly, Jr. H. C., and Lauretta D. S. (2026). Visible, near-, and thermal infrared spectra of asteroid Bennu samples: Relationship to and implications for remote sensing of carbonaceous asteroids, *Meteoritics & Planetary Sciences*. https://doi.org/10.1111/maps.70176

Smith, L.R., ***Haenecour, P.***, Barnes, J.J., Domanik, K., Neuman, M., Wang, K., and Ogliore, R. Petrography, Bulk Chemical Composition, and Presolar Grain Abundances in the C3.00-ungrouped chondrite Chwichiya 002. *Meteoritics & Planetary Sciences*. https://doi.org/10.1111/maps.70166 (*journal cover for July/August 2026 issue*)

Ryan, A.J., Ballouz, R.L., Macke, R.J., Ishizaki, T., Alasli, A., Biele, J., Eckley, S.A., Hoover, C.G., Jardine, K., King, A.J., Opeil, C.P., Pajola, M., Tusberti, F., Barnes, J.J., Bates, H.C., Berger, E.L., Bierhaus, E.B., Calva, C., Cambioni, S., Cheng, F., Delbo, M., DellaGiustina, D.N., Dworkin, J.P., Elder, C.M., Emery, J.P., Freemantle, J., Fujita, R., Glavin, D.P., Gonzalez, C., ***Haenecour, P.***, Hamilton, V.E., Hanna, R.D., Hanton, L.T.J., Harrington, R., Hildebrand, A.R., Hill, D.H., Ishimaru, K., Jawin, E.R., Kontogiannis, M.K., Lunning, N.G., McCoy, T.J., Molaro, J.L., Montoya, M., Nagano, H., O'Neal, E.W., Plummer, J., Righter, K., Sakatani, N., Sánchez, P., Schofield, P.F., Siegler, M.A., Tanaka, S., Zega, T.J., Wolner, C.W.V., Connolly, H.C., Lauretta, D.S. (2026). Low thermal inertia of carbonaceous asteroid Bennu driven by cracks observed in returned samples. Nature Communications 17(1), 2443. https://doi.org/10.1038/s41467-026-68505-1

Smith L.R., ***Haenecour P.***, Barnes J.J., Domanik K, Chang Y.-J., Hill D. (2025). Rare Phosphides and Nitrides in Igneous Clasts within Aqueously Altered Chondrites. The Planetary Science Journal, 6 122. https://doi.org/10.3847/PSJ/adce00

Huseby, L., Moran, S.E., Pearson, N., Kataria, T., He, C., Pesciotta, C., Hörst, S.M., ***Haenecour, P.***, Barman, T., Reddy, V., and Lewis, N.K. (2025). Effects of Ultraviolet Radiation on Sub-Neptune Exoplanet Hazes Through Laboratory Experiments. The Planetary Science Journal, 6(6), p.145. https://doi.org/10.3847/PSJ/adda4a

Connolly Jr, H.C., Lauretta, D.S., McCoy, T.J., Russell, S.S., ***Haenecour, P.***, Polit, A., Barnes, J.J., Zega, T.J., Yurimoto, H., Kawasaki, N., and Righter, K. (2025). An overview of the petrography and petrology of particles from an aggregate sample from asteroid Bennu. Meteoritics & Planetary Science. https://doi.org/10.1111/maps.14335

Barnes, J.J., Nguyen, A.N., Abernethy, F.A.J., Bajo, K., Bekaert, D.V., Bloch, E., Brennecka, G.A., Busemann, H., Cowpe, J.S., Crowther, S.A., Ek, M., Fawcett, L.J., Fehr, M.A., Franchi, I.A., Füri, E., Gilmour, J.D., Grady, M.M., Greenwood, R.C., ***Haenecour, P.***, Kawasaki, N., Koefoed, P., Krietsch, D., Le, L., Liszewska, K.M., Maden, C., Malley, J., Marrocchi, Y., Marty, B., Meyer, L.A.E., Peretyazhko, T.S., Piani, L., Render, J., Russell, S.S., Rüfenacht, M., Sakamoto, N., Schönbächler, M., Shollenberger, Q.R., Smith, L., Thomas-Keprta, K., Verchovsky, A.B., Villeneuve, J., Wang, K., Welten, K.C., Wimpenny, J., Worsham, E.A., Yurimoto, H., Zimmermann, L., Zhao, X., Alexander, C.M.O.D., Amini, M., Baczynski, A., Bland, P., Borg, L.E., Burgess, R., Caffee, M.W., Chaves, L.C., Clay, P.L., Dworkin, J.P., Foustoukos, D.I., Glavin, D.P., Hamilton, V.E., Hill, D., House, C.H., Huss, G.R., Ireland, T., Jilly, C.E., Jourdan, F., Keller, L.P., Kruijer, T.S., Lai, V., McCoy, T.J., Nagashima, K., Nishiizumi, K., Ogliore, R., Ong, I.J., Reddy, S.M., Rickard, W.D.A., Sandford, S., Saxey, D.W., Timms, N., Weis, D., Wilbur, Z.E., Zega, T.J., DellaGiustina, D.N., Wolner, C.W.V., Connolly, H.C., Lauretta, D.S. (2025). The variety and origin of materials accreted by Bennu's

parent asteroid. Nature Astronomy 9(12), 1785–1802. https://doi.org/10.1038/s41550-025-02631-6

Zega, T.J., McCoy, T.J., Russell, S.S., Keller, L.P., Gainsforth, Z., Singerling, S.A., Manga, V.R., Harrison, C., Libourel, G., Prince, B.S., Thomas-Keprta, K., King, A., Portail, M., Guigoz, V., Tu, V., Le, L., Thompson, M., Benner, M.C., Kerrison, N.A., Barnes, J.J., Ong, I., Haenecour, P., Chaves, L., Smith, L., Kontogiannis, M., Vega Santiago, N., Hill, D., Zeszut, Z., Domanik, K., Chang, Y.J., Corrigan, C.M., Ray, S., Wardell, L.R., Gooding, T., Rose, T.R., Bates, H.C., Schofield, P.F., Almeida, N.V., Salge, T., Najorka, J., Seifert, L.B., Lunning, N., Righter, K., Nguyen, A.N., Brenker, F.E., Eckley, S.A., Dworkin, J.P., Jones, R.H., Sandford, S.A., Marcus, M.A., Bechtel, H.A., Dominguez, G., Yurimoto, H., Kawasaki, N., Bajo, K., Sakamoto, N., Zanetta, P.M., Tachibana, S., Busemann, H., Hamilton, V.E., Franchi, I.A., Grady, M., Greenwood, R.C., Tait, K., Timms, N., Bland, P., Jourdan, F., Reddy, S.M., Rickard, W., Saxey, D., Vincze, L., Connolly, H.C., Lauretta, D.S. (2025). Mineralogical evidence for hydrothermal alteration of Bennu samples. Nature Geoscience 18(9), 832–839. https://doi.org/10.1038/s41561-025-01741-0

McCoy, T.J., Russell, S.S., Zega, T.J., Thomas-Keprta, K.L., Singerling, S.A., Brenker, F.E., Timms, N.E., Rickard, W.D.A., Barnes, J.J., Libourel, G., Ray, S., Corrigan, C.M., ***Haenecour, P.***, Gainsforth, Z., Dominguez, G., King, A.J., Keller, L.P., Thompson, M.S., Sandford, S.A., Jones, R.H., Yurimoto, H., Righter, K., Eckley, S.A., Bland, P.A., Marcus, M.A., DellaGiustina, D.N., Ireland, T.R., Almeida, N.V., Harrison, C.S., Bates, H.C., Schofield, P.F., Seifert, L.B., Sakamoto, N., Kawasaki, N., Jourdan, F., Reddy, S.M., Saxey, D.W., Ong, I.J., Prince, B.S., Ishimaru, K., Smith, L.R., Benner, M.C., Kerrison, N.A., Portail, M., Guigoz, V., Zanetta, P.M., Wardell, L.R., Gooding, T., Rose, T.R., Salge, T., Le, L., Tu, V.M., Zeszut, Z., Mayers, C., Sun, X., Hill, D.H., Lunning, N.G., Hamilton, V.E., Glavin, D.P., Dworkin, J.P., Kaplan, H.H., Franchi, I.A., Tait, K.T., Tachibana, S., Connolly, H.C., Lauretta, D.S., 2025. An evaporite sequence from ancient brine recorded in Bennu samples. Nature 637(8048), 1072-1077. https://doi.org/10.1038/s41586-024-08495-6

Glavin, D.P., Dworkin, J.P., Alexander, C.M.O.D., Aponte, J.C., Baczynski, A.A., Barnes, J.J., Bechtel, H.A., Berger, E.L., Burton, A.S., Caselli, P., Chung, A.H., Clemett, S.J., Cody, G.D., Dominguez, G., Elsila, J.E., Farnsworth, K.K., Foustoukos, D.I., Freeman, K.H., Furukawa, Y., Gainsforth, Z., Graham, H.V., Grassi, T., Giuliano, B.M., Hamilton, V.E., ***Haenecour, P.***, Heck, P.R., Hofmann, A.E., House, C.H., Huang, Y., Kaplan, H.H., Keller, L.P., Kim, B., Koga, T., Liss, M., McLain, H.L., Marcus, M.A., Matney, M., McCoy, T.J., McIntosh, O.M., Mojarro, A., Naraoka, H., Nguyen, A.N., Nuevo, M., Nuth, J.A., Oba, Y., Parker, E.T., Peretyazhko, T.S., Sandford, S.A., Santos, E., Schmitt-Kopplin, P., Seguin, F., Simkus, D.N., Shahid, A., Takano, Y., Thomas-Keprta, K.L., Tripathi, H., Weiss, G., Zheng, Y., Lunning, N.G., Righter, K., Connolly, H.C., Lauretta, D.S. (2025). Abundant ammonia and nitrogen-rich soluble organic matter in samples from asteroid (101955) Bennu. Nature Astronomy 9(2), 199–210. https://doi.org/10.1038/s41550-024-02472-9.

Lauretta, D.S., Connolly, H.C. Jr., Aebersold, J., Alexander, C.M.O'D., Ballaouz, R.-L., Barnes, J.J., Bates, H.C., Bennett, C.A., Blumenfeld, E.H., Clemett, S.J., Cody, G.D., DellaGuistina, D.N., Dworkin, J.P., Eckley. S.A., Foustoukos, D.I., Franchi, I.A., Glavin, D.P., Greenwood, R.C., ***Haenecour, P.***, Hamilton, V.E., Hill, D.H., Hiroi, T., Ishimaru, K., Jourdan, F., Kaplan, H.H., Keller, L.P., King, A.J., Koefoed, P., Kontogiannis, M.K., Le. L., Macke, R.J., McCoy, T.J., Milliken, R.E., Najorka, J., Nguyen, A.N., Pajola, M., Polit, A.T., Russell, S.S., Ryan, A.J.,

Sandford, S.A., Schofield, P.F., Schultz, C.D., Tachibana, S., Thomas-Keprta, K.L., Thompson, M.S., Tu, V., Tusberti, F., Wang, K., Wolner, C.W.V., Zega, T.J., and the OSIRIS-Rex Sample Analysis Team (2024). Asteroid (101955) Bennu in the Laboratory: Properties of the Sample Collected by OSIRIS-REx, Meteoritics & Planetary Science 59, no. 9: 2453-2486. https://doi.org/10.1111/maps.14227

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Seifert L. B., ***Haenecour P.***, Ramprasad T., Brearley A. J. & Zega T. J. (2023). An in-situ study of presolar grains and the fine-grained matrices of the Meteorite Hills 00526 and Queen Alexandra Range 97008 unequilibrated ordinary chondrites. *Meteoritics & Planetary Science 58: 8, 1079-1098*. https://doi.org/10.1111/maps.14040

Seifert L. B., ***Haenecour P.***, Ramprasad T., Brearley A. J. & Zega T. J. (2023). An In Situ Investigation of the Preservation and Alteration of Presolar Silicates in the Miller Range 07687 Chondrite. *Meteoritics & Planetary Science* 58: 360-382. https://doi.org/10.1111/maps.13958

Ramprasad T., Haenecour P., Domanik K., and Zega T.J. (2022) A coordinated analysis of a compact type-A calcium-aluminum-rich inclusion from the Northwest Africa 5028 chondrite: Implications for nebular and parent-body processes. Meteoritics & Planetary Science, 57, Issue 10, pp. 1936-1956. https://doi.org/10.1111/maps.13910.

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Ogliore R., Nagashima K., Huss G. and ***Haenecour P.*** (2021). A Reassessment of the Quasi-Simultaneous Arrival Effect in Secondary Ion Mass Spectrometry. *Nuclear Instruments and Methods in Physics Research*, 491, pp. 17-28. https://doi.org/10.1016/j.nimb.2021.01.007

Haenecour P. & Bose M. (2020). Understanding our Solar System History through in-situ Nanoscale Analysis of Extraterrestrial Materials: A Special Issue for Dr. Christine Floss. Meteoritics & Planetary Sciences, 55, 6, 1153-1159. https://doi.org/10.1111/maps.13489

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Chaves, L.C., ***Haenecour, P.***, Barnes, J.J., Benner, M.C., Bloch, E, Domanik, K., Hill, D., Zega, T.J., Russell, S.S., McCoy, T. J., Nguyen, A.N., Connolly Jr., H. C., and Lauretta, D. S. Geochemical and Isotopic Compositions of Bennu Pyrrhotites. In preparation to be submitted to *Meteoritics and Planetary Science* by August 2026.

Haenecour, P., Howe, J. Y., Zega, T. J., Ogliore, R., Barnes, J.J., and Yada, T. Coordinated Analyses of Presolar Grains and Organic Matter in Fine-grained Antarctic Micrometeorite. In preparation to be submitted to *Meteoritics and Planetary Science* by August 2026.

Haenecour, P., Smith, L. R., and Ogliore, R. Abundance of Presolar Silicates in Unequilibrated Ordinary Chondrites. In preparation to be submitted to *Geochemical Perspectives Letters* by August 2026.

Smith, L.R., ***Haenecour, P.***, and Zega, T.J. Preparation of large electron-transparent sections of Astromaterials using C- and Cu-nanowires. In preparation to be submitted to *Microscopy & Microanalysis* by August 2026.

Aguilar, K. P., ***Haenecour, P.***, Palka, M., Hill, D., Domanik, K., Zeszut, Z., Chen, Y.-J., Santiago, N. V., Kontogiannis, M., and Lauretta, D. S. (2026). Where Does the P Go? Investigating Phosphorus Precipitation in Last Chance Lake. In preparation to be submitted to *Earth and Space Science* by August 2026.

Haenecour, P., Defouilloy, C., Takano, Y., and Barnes, J. J. (2026). Cryogenic NanoSIMS Isotopic Characterization of Fluids Trapped Inside Carbon Nanoglobules. In preparation to be submitted to *Geochemical Perspective Letters* by October 2026.

Dworkin, J.P., Sandford, S.A., Lunning, N.G., Righter, K., Lorentson, C.C., Glavin, D.P., Thomas-Keprta, K.L., Le, L., Corrigan, C., McCoy, T.J., Bierhaus, E.B., Aponte, J.C., Perry, R.L., Mojarro, A., McLain, H.L., Parker, E.T., Buckner, D.K., ***Haenecour, P.***, *et al.* (2026).

OSIRIS-REx Returned a Pristine Sample of Asteroid Bennu. In preparation for Space Science Reviews.

Haenecour, P., Bennett, C.A., Johnson, T.L., Crombie, M.K., Hammond, D., Lehnert, K.A., Fitzgibbon, M., Westermann, M.M., Kantarges, J., Hill, C., Barnes, J.J., Mays, J., Figueroa, J.D., Profeta, L., Ji, P., Celnick, M.E., Smith, L.R., Danninger, G., Stern, D., Richard, S., Connolly, H.C., Jr., and Lauretta, D.S. The OSIRIS-REx Sample Analysis Micro-Information System (SAMIS): Design, Implementation, Data Product Standards, and Lessons Learned from a Sample-Return Mission. In preparation for *Scientific Data*.

Haenecour, P., Barnes, J.J., Bloch, E., Smith, L. R., Ishimaru, K., and Hollings, C. (2026). Effect of Aqueous Alteration on Stardust Grains and Organics in the CI Chondrites Ivuna and Oued Chebeika 002. In preparation for *Meteoritics and Planetary Science*.

CREATIVE ACTIVITIES AND MEDIA

Vice Motherboard – *"How to Grab an Asteroid | The Space Show"* Sept 2021

Selected Press Articles:

- Space.com - Asteroid Bennu contains stardust that's older than the solar system
- Al Jazeera – "The Take: OSIRIS-REx – the space mission to find the origins of life"
- Al Jazeera – "NASA's OSIRIS-REx has delivered an asteroid sample on Earth. What next?"
- Wired.com – "How NASA Is Protecting Its Precious Asteroid Bennu Sample"
- AZ Daily Star – "Two U of A researchers will get first crack at asteroid samples"
- Forbes - *'Tiny Speck Of Actual Stardust' Found In Antarctic Meteorite*
- The New York Post - *'Alien' grain of dust from ancient star found in Antarctica*
- The New Yorker - *'An Exploding Star, a Grain of Sand, and an Origin Story'*
- Scientific American - *'A Star's Last Breath'* (video from Scientific American Space Lab Countdown)
- The Huffington Post - *'Meteorites, Supernova Linked After Rare Silica Grains Identified In Antarctic Space Rocks'*

CONFERENCES/SCHOLARLY PRESENTATIONS

Invited Colloquia and Seminars

Penn State University Astrobiology Hour – "OSIRIS-REx and the Origin of Life" Dec 2025

Arizona Astrobiology Symposium - *"From Ancient Earth to Stardust: My Journey into Planetary Science and Astrobiology"* March 2025

University of California, Los Angeles (UCLA) – "*Stardust in Samples from Asteroid (101955) Bennu*" Jan 2025

Cameca Seminar on the new UA NanoSIMS-HR at the Goldschmidt Conference Aug 2024

University of California, Santa Cruz - Institute of Geophysics and Planetary Physics (IGPP) Seminar series – *"Simulations of Dust Thermal Processing in Space inside of an Electron Microscope"* Jan 2022

Physical Research Laboratory (Ahmedabad, India) – *"Constraining thermal processing of dust grains in space and on the surface of airless bodies through in-situ laboratory experiments"*	Nov 2021
University of Arizona – Geosciences Colloquium – "Simulations of Thermal Processing of Volatile-rich Materials on the Surface of Asteroids"	Oct 2021
McDonnell Distinguished Panel Discussion (St. Louis) – *From Starlight to Stardust: Perspectives on the Formation of Planetary Systems*	Feb 2021
Jet Propulsion Laboratory (JPL) – "*Thermal Processing of Dust Grains on Airless Bodies: Insight from In-situ Heating inside a Transmission Electron Microscope"*	Dec 2020
University of Arizona - LPLC – *"Thermal Processing of Fine-grained Materials in Carbonaceous Asteroids"*	Aug 2020
NASA SOFIA Science Center – "*A Needle in a Haystack - Searching for Stardust inside the Solar System"*	May 2020

Invited Conference Presentations

Haenecour, P., Barnes, J. J., Smith, L. R., Hill, D., Bloch, E. M., Zega, T. J., et al. (2025). Stardust and Organics in Asteroid (101955) Bennu. Bulletin of the American Astronomical Society, 57(4). https://doi.org/10.3847/25c2cfeb.db75f3fa (*Invited Speaker*)

Haenecour, P. (2025). UA-MIT KSJ Astrobiology Workshop – Panel Discussion for journalists on the NASA OSIRIS-REx Mission. (*Keynote Panel Speaker*)

Haenecour, P. (2024). Laboratory Astronomy with the new NanoSIMS-HR at the University of Arizona. Cameca NanoSIMS-HR event at the Goldschmidt Conference (*Keynote Speaker*)

Haenecour, P. (2024). OSIRIS-REx QuickLook and Organic Sample Analysis Plan. Astrobiology Science Conference (AbSciCon) 2024. (*Keynote Plenary Speaker*)

Haenecour, P., Connolly, H., and Lauretta, D.S. (2024). Initial Results from the Laboratory Analysis of Samples Returned from Asteroid (101955) Bennu. AGU Fall Meeting 2024. (*Invited Speaker*)

Haenecour, P. (2020). From Stars to the Solar System: Analysis of Stardust Grains in the Laboratory. 236th Meeting of the American Astronomical Society. (*Invited Speaker*)

Invited Guest Lectures

Weber University – "NASA OSIRIS-REx – Sample Return Mission to Asteroid Bennu" (Course: '*Systems Engineering Graduate - Requirements Engineering*'; Instructor: N. Battaglia)	March 2026
University of Arizona – "Micrometeorites & Interplanetary Dust Particles" (Course: PTYS 520 '*Meteorites*'; Instructor: J. Barnes)	Oct 2025
Washington University – "Presolar Grains" (Course: '*Planetary Materials'*; Instructors: Brad Jolliff & Kun Wang)	April 2025
Purdue University – "NanoSIMS (Nanoscale Secondary Ion Mass Spectrometry)" (EAPS 591 '*Laboratory Analysis of Earth and Planetary Materials*'; Instructor: M. Thompson)	April 2025

University of Arizona – "Classification of Meteorites" (PTYS 407 '*Chemistry of the Solar System*'; Instructor: D. Lauretta)	Jan 2023
University of Arizona – "Life Cycle of Stars and Presolar Grains" (PTYS 170A1 '*Alien Earths*'; Instructor: J. Barnes)	Sept 2022
University of Arizona – "Organics and the Origin of Life" (PTYS 510A '*Cosmochemistry*'; Instructor: J. Barnes)	March 2022
University of Arizona – "Presolar Grains" (PTYS 510A '*Cosmochemistry*'; Instructor: J. Barnes)	Feb 2022
University of Arizona – "Micrometeorites" (PTYS 520 '*Meteorites'*; Instructor: J. Barnes)	March 2021
University of Arizona – "Micrometeorites & Interplanetary Dust Particles" (PTYS 407 '*Chemistry of the Solar System*'; Instructor: T. Zega)	Nov 2021

COMMUNITY PRESENTATIONS RELATED TO YOUR RESEARCH OR TEACHING

Desert Museum Rocks and Stars Night (Tucson, AZ) - "*From the Dawn of the Solar System to the Origins of Life: A Journey to Asteroid Bennu*"	July 2025
Spacefest Reunion (Tucson, AZ) - "*From the Dawn of the Solar System to the Origins of Life: A Journey to Asteroid Bennu*"	June 2025
UA-MIT KSJ Astrobiology Workshop – Panel Discussion for journalists on the NASA OSIRIS-REx Mission	April 2025
Arizona Astrobiology Symposium - *"From Ancient Earth to Stardust: My Journey into Planetary Science and Astrobiology"*	March 2025
International Meteorite Collectors Association (IMCA) Annual Dinner (Tucson, AZ) – "*First Look at Bennu Samples Returned by the OSIRIS-REx Mission*"	Feb 2024
Astronomy Days at the North Carolina Museum of Natural Sciences – NASA *OSIRIS-REX Mission: First Look at the samples from asteroid 101955 Bennu*"	Jan 2024
Mansfeld Middle Magnet School (Tucson, AZ) – "*OSIRIS-REX QuickLook: First Look at the samples from asteroid 101955 Bennu*"	Jan 2024
Gregory School (Tucson, AZ) – "*NASA OSIRIS-REx Mission: Journey to the Origins of our Solar System*"	Oct 2023
Mansfeld Middle Magnet School (Tucson, AZ) – "*NASA OSIRIS-REx Mission*"	Sept 2023
Astronomy Days at the North Carolina Museum of Natural Sciences – *"Asteroid Forensics: Unravelling the Origins of our Solar System"*	Jan 2023
Huachuca Astronomy Club – *"We Are Made of Star Stuff - Stardust in the Laboratory"*	Feb 2022
Astronomy Days at the North Carolina Museum of Natural Sciences – *"We Are Made of Star Stuff - Stardust in the Laboratory"*	Jan 2022

University of Arizona - The 16th Annual College of Science Lecture Series: *"Water: Beyond Earth"* April 2021

Astronomy Days at the North Carolina Museum of Natural Sciences "*Examining Stardust: Origins of Carbon in the Solar System*" Jan 2020