CURRICULUM VITAE

HAROLD C. CONNOLLY JR.

CONTACT INFORMATION

Department of Physical Sciences
Kingsborough Community College
City University of New York
2001 Oriental Drive
Brooklyn, NY 11235
Tel/Fax: 718-368-5776/ 718-368-4876
E-mail: hconnolly@kbcc.cuny.edu
Citizenship: U.S.A.

1365 Chetwynd Ave.
Plainfield, NJ 07060
Cell: 908-803-8075
E-mail: drhccjr@mac.com
Facebook: Harold C. Connolly Jr.

CHRONOLOGY OF EDUCATION

1996 Ph.D. in Geological Science, Rutgers University.
Petrology - Geochemistry - Meteoritics - Cosmochemistry
Thesis advisor: Prof. Roger H. Hewins

1991 M.S. in Geological Sciences, Rutgers University.
Thesis advisor: Prof. Roger H. Hewins

1988 B.A. in Geological Sciences, Rutgers University.
Honor thesis advisor (Chondrule formation): Prof. Roger H. Hewins
Independent Research advisor (Devonian invertebrates): Prof. G. McGhee

CHRONOLOGY OF PROFESSIONAL EXPERIENCE

CITY UNIVERSITY OF NEW YORK

2005 Awarded tenure at the City University of New York

2004- Associate Professor (promotion before tenure) - Earth and Planetary Sciences, Department of Physical Sciences, Kingsborough Community College of the City University of New York, Brooklyn, N.Y.

2003- Earth and Environmental Sciences Doctoral Faculty, City University of New York.

2001-2004 Assistant Professor - Earth and Planetary Sciences, Department of Physical Sciences, Kingsborough Community College of the City University of New York, Brooklyn, N.Y.

OTHER APPOINTMENTS AND POSITIONS

2006- Adjunct Associate Professor of Planetary Science, Lunar and Planetary Laboratory, University of Arizona.

2001- Research Associate, American Museum of Natural History, New York, N.Y.

2001- Graduate Faculty, Department of Geological Sciences, Rutgers University.

1998-2001 Research Scientist, Division of Geological and Planetary Sciences, California Institute of Technology.

1996-1998 Postdoctoral Scholar in Geochemistry, California Institute of Technology.

1993-1995 TEM analyst, EMSL Piscataway, N.J.

1989-1996 Graduate Research Assistant, Department of Geological Sciences, Rutgers University.

1988-1989 Field Engineer, Melick and Tully, Inc., Geotechnical Engineers, S. Brook, N.J.

CHRONOLOGY OF TEACHING EXPERIENCE

2009- Open Doors Learning Community, linking Introduction to Astronomy with first-semester English, the overall course entitled *Composing Astronomy*.

2008- Earth System Science I (EES 716), Graduate Center, CUNY

2002- Introduction to Astronomy (EPS 35; resurrected the course in Fall 2002 and designed a lab for this course that began in Fall, 2003).

2001- Introduction to Earth Science (EPS 38; completely revised the curriculum for the lecture and accompanying laboratory for the entire program).

CHRONOLOGY OF MENTORING

GRADUATE LEVEL

2007- Co-advisor for Devin Schrader, Ph.D. student at the Lunar and Planetary Laboratory.
2007- Committee member for Eve Berger, Ph.D. student at the Lunar and Planetary Laboratory.
2008- Committee member for Kathryn Gardner, Ph.D. student at the Lunar and Planetary Laboratory.
2008- Ph.D. qualification examiner for all candidates in Earth and Environmental Sciences, The Graduate Center of the City University of New York.

UNDERGRADUATE LEVEL

2006- REU advisor to Devin Schrader, American Museum of Natural History and the City University of New York (summer program).
2008- REU co-advisor to Jacqui Beard, American Museum of Natural History and the City University of New York (summer program).
2009- REU advisor to Stuart A. Sweeney Smith, American Museum of Natural History and the City University of New York (summer program).

CHRONOLOGY OF AWARDS AND FELLOWSHIPS

2007-2008 Fellowship (sabbatical) leave from CUNY.
2006 Asteroid **(6761) Haroldconnolly** renamed from Asteroid 1981 EV19
1999 Antarctic Service Medal, US Congress and Department of Navy.
1991-1994 Graduate Student Researchers Program-NASA.
1988 Honors in Geological Sciences.
1987 Helgi Johnson Award for excellent in field geology.

CHRONOLOGY OF GRANTS AWARDED

2009 **Co-I**: Research Experience for Undergraduates, the National Science Foundation, at the American Museum of Natural History in collaboration with the City University of New York. Mentor to Stuart A. Sweeney Smith, an undergraduate at the Carelton College, during the summer of 2009.
2008 **PI:** Evolution of primitive planetary materials in the protoplanetary disk. Awarded from the NASA Cosmochemistry program. Awarded **$50,000.00** for one year.
2008 **PI:** Constraining the timing of pre-accretion events in the protoplanetary disk. Awarded from the NASA Origins of Solar Systems program. Awarded **$156,000.00** over three years.
2007 **PI:** The complex nature of a CAI from Allende. Awarded from the PSC-CUNY Foundation. Awarded **$3990.00** for one year.
2006 **Co-I**: Acquisition of an electron microprobe for use at a regional facility at Rutgers University. Awarded from the NASA Cosmochemistry program. Awarded **$475,000**.
2006 **PI**: Constraints on Solar System origins from experimental and petrographic investigations of primitive planetary materials. Awarded from the NASA Cosmochemistry program. Awarded **$166,000** over three years.
2006 **Co-I**: Scanning electron microscope studies of solar system materials. Awarded from the NASA Cosmochemistry Program. Awarded **$214,000**.
2006 **Co-I**: Research Experience for Undergraduates, the National Science Foundation, at the American Museum of Natural History in collaboration with the City University of New York. Awarded from the National Science Foundation. Mentor to Devin Schrader, an undergraduate at the University of Arizona, during the summer of 2006; now my Ph.D. student at the University of Arizona.
2005 **Co-I**: Petrologic-geochemical studies of STARDUST commentary materials. Awarded from the NASA Cosmochemistry program. Awarded **$15,000** for one year.

2005 **PI**: Towards an Origin of Chondrules: Kinetics of Reactions. Awarded from the PSC-CUNY Foundation. Awarded **$3,840** for one year.

2004 **PI:** On the nature and origins of type II chondrules from CR chondrites. Awarded from the PSC-CUNY Foundation. Awarded **$5,640.00** for one year.

2003 **PI**: On the origins of Fe, Ni-metal in enstatite chondrites. Awarded from the PSC-CUNY Foundation. Awarded **$4,300.00** for one year.

2001 **Co-I:** X-ray radiographic and tomographic techniques for maximizing the information extracted from STARDUST and small particle data. Awarded from the NASA Cosmochemistry Program.

CHRONOLOGY OF PENDING GRANTS

2009 **Co-I:** OSIRIS Rex (Origins Spectral Interpretation Resource Identification Security Regolith Explorer to be submitted to NASA's New Frontiers Program by 31 July 2009.

2009 **PI:** Evolution of chondrule compositions from ordinary chondrites and the evolution of planetary materials in the protoplanetary disk. To be submitted to NASA's Cosmochemistry program as a 3-year award by 15 May 2009.

CHRONOLOGY OF PROFESSIONAL ACTIVITIES AND SERVICE

2009 Research Education for Undergraduates (NSF funded) advisor to Stuart A. Sweeney Smith.

2008- *OSIRIS Rex* Science Team (Origins Spectral Interpretation Resource Identification Security); sample return mission and characterization of an asteroid to be submitted to New Frontiers Program.

2009- Council member of the international Meteoritical Society (elected position).

2008 Research Education for Undergraduates (NSF funded) co-advisor to Jacqui Beard.

2007-2008 Awarded sabbatical leave, one year.

2007 Gold team review, *OSIRIS.*

2007 Chair of the Scientific Program Committee, 70th Annual Meteoritical Society Meeting, Tucson, AZ.

2006 Research Education for Undergraduates (NSF funded) advisor to Devin L. Schrader.

2006- Member of the Advisory Board, Southwest Meteorite Center.

2006 April 2006 Panel Member for ECO Festival 2006, Kingsborough Community College.

2006 Appointed to the review panel for President's Faculty Innovation Award, Kingsborough.

2006- Elected representative to the College Council, Kingsborough Community College.

2006- Appointed member of the Academic Integrity Committee, Kingsborough Community College.

2006- Appointed member of the Strategic Planning Committee, Kingsborough Community College.

2006- Appointed member of the General Education Committee, Kingsborough Community College.

2005-2006 Appointed Chair of the Pellas-Ryder Student Award Committee, a joint committee of the Planetary Science Divisions of the Geological Society of America and the Meteoritical Society.

2005-2008 Editor of the Meteoritical Bulletin (http://www.meteoriticalsociety.org).

2005-2006 Appointed member of the Meteoritical Society's Nomenclature Committee – Associate Editor for Oman.

2005-2007 Meteorite Working Group.

2005- Program committee for the Lunar and Planetary Science Conference.

2005- Elected to College Council, which is the governing body of Kingsborough Community College.

2004 Elected to the Faculty Search Committee for President of Kingsborough Community College.

2003-2006 Appointed member of the Pellas-Ryder Student Award Committee. The committee represents both the Meteoritical Society and the Geological Society of America.

2003-2006 Appointed member of the Publications Committee of the Meteoritical Society.

2003	Scientific organization committee for Chondrites and the Protoplanetary Disk.
2003-	Advisor GLABA/AQUA Club, Kingsborough Community College.
2002	Co-advisor GLABA Club, Kingsborough Community College.
2001	Advisory Committee for the new Hall of Meteorites, American Museum of Natural History.
2001-2002	Advisory Board - Women's Center, Kingsborough Community College.
2001	Editorial Board for *Meteorites and the Early Solar System II*.
2001	Panel member- NASA Cosmochemistry Review Panel (Proposal funding panel).
1999-2000	Program committee for the Lunar and Planetary Science Conference.
1998	Award committee, GSA Stephen E. Dwornik Student Award (LPSC).
1997-2001	Visitor, Center for Star Formation Studies, NASA-Ames.
1994-1995	Member of the Antarctic Search for Meteorites (ANSMET) expedition.
1991-1994	President of the Graduate Student Association of Rutgers University.

PROFESSIONAL SOCIETY MEMBERSHIPS

American Geophysical Union 1990-
American Astronomical Society and its Division of Planetary Sciences 2001-
Geochemical Society 2009-
Geological Society of America, its Planetary Sciences Division and Geosciences Education Division 2001-
Meteoritical Society 1989-
Membership to the International Astronomical Union, *pending*.

LANGUAGES

English – Fluent
French – Some fluency
Irish – Some fluency
Tibetan – Currently, learning spoken and written (both modern and classical)

CHRONOLOGY OF PUBLISHED BOOKS

(1) A Lab Manual for Introduction to Earth Science **Harold C. Connolly Jr.**, Cyrena A. Goodrich, and Michael K. Weisberg. (2005) Kendall/Hunt Publishing Company, Dubuque, Iowa.

CHRONOLOGY OF EDITORSHIP OF PROFESSIONAL PUBLICATIONS

(4) The Meteoritical Bulletin, No. 93. **Harold C. Connolly Jr.**, Jutta Zipfel, Luigi Folco, Caroline Smith, Gretchen K. Benedix, Kevin Righter, Akira Yamaguchi, and Hassnaa Chennaoui-Aoudjehane. (2008) *Meteorit. Planet. Sci.* **43**, 571-632.

(3) The Meteoritical Bulletin, No. 92. **Harold C. Connolly Jr.,** Jutta Zipfel, Luigi Folco, Caroline Smith, Gretchen K. Benedix, Kevin Righter, Akira Yamaguchi, and Hassnaa Chennaoui-Aoudjehane. (2007) *Meteorit. Planet. Sci.* **42**, 413-466.

(2) The Meteoritical Bulletin, No. 91. **Harold C. Connolly Jr.**, Jutta Zipfel, Luigi Folco, Caroline Smith, Rhian H. Jones, Gretchen K. Benedix, Kevin Righter, Akira Yamaguchi, Hassnaa Chennaoui-Aoudjehane and, Jeffery N. Grossman. (2007) *Meteorit. Planet. Sci.* **42**, 413-466.

(1) The Meteoritical Bulletin, No. 90. **Harold C. Connolly Jr.** (Editor), Jutta Zipfel, Jeffery N. Grossman, Luigi Folco, Caroline Smith, Rhian H. Jones, Kevin Righter, Michael Zolensky, Sara S, Russell, Gretchen K. Benedix, Akira Yamaguchi, and Barbara A. Cohen. (2006) *Meteorit. Planet. Sci.* **41**, 1383-1418.

CHRONOLOGY OF INVITED PUBLICATIONS

(17) Thermal processing in protoplanetary nebulae. Daniel Api, Dante S. Lauretta, and **Harold C. Connolly Jr.** (2009) In *Protoplanetary Dust*, Cambridge University Press; In press (**Refereed).**

(16) On the nature, origins and significance of chondrules. **Harold C. Connolly Jr.** and Dante S. Lauretta. (2008) In *Terrestrial Planets: Evolution Through Time*. Physical Research Laboratory, Ahmedabad, India.

(15) A review of *The history of meteoritics and key meteorite collections: Fireballs, falls and finds.* **Harold C. Connolly Jr.** (2007) *Meteoritic. Planet. Sci.* **42**.

(14) Transient heating in the protoplantery disk, **Harold C. Connolly Jr.**, Steve J. Desch, Rhian H, Jones, and Richard D. Ash. (2006) In *Meteorites and the Early Solar System II,* University of Arizona Press (**Refereed).**
(13) Chemical Processes in CAIs: A mostly CMAS view of melting and crystallization John R. Beckett, **Harold C. Connolly Jr.** and Denton S. Ebel. (2006) In *Meterorites and the Early Solar System II,* University of Arizona Press (**Refereed**).
(12) Refractory inclusions and chondrules: Insights into a protoplanetary disk and planet formation. (2005) **Harold C. Connolly Jr.** In *Proceeding of Chondrites and the Protoplanetary Disk*, Astronomical Society of the Pacific, pp. 215-223 (**Refereed**).
(11) Experimental constraints on chondrule formation. Roger H. Hewins, **Harold C. Connolly Jr.**, Gary E. Lofgren, and Guy Libourel. (2005) In *Proceeding of Chondrites and the Protoplanetary Disk*, Astronomical Society of the Pacific, pp. 286-313 (**Refereed**).
(10) A review of *A Color Atlas of Meteorites in Thin Section* **Harold C. Connolly Jr.** (2005) *Meteorit. Planet. Sci.* **40**, 939-940.
(9) The Meteoritical Bulletin, No. 89. S. S. Russell, M. Zolensky, K. Righter, L. Foloco, R. H. Jones, **Harold C. Connolly Jr.**, M. M. Grady, and J. N. Grossman. (2005) *Meteorit. Planet. Sci.* **40**, A201-263.
(8) From stars to dust: Looking into a circumstellar disk through chondritic meteorites. **Harold C. Connolly** Jr. (2005) *Science* **307,** 75-76.
(7) On the origin of the "kleine Kügelchen" called chondrules. **Harold C. Connolly Jr.** and S. J. Desch (2004) *Chemie der Erde* **64**, 95-184 **(Refereed).**
(6) Nier Prize Citation for Steven J. Desch. **Harold C. Connolly Jr.** (2003) *Meteorit. Planet. Sci.* **38**, *Supple*. A7.
(5) A review of *Brother Astronomer: The Adventures of a Vatican Scientist* **Harold C. Connolly Jr.** (2000) *Meteorit. Planet. Sci.* **35**, 884.
(4) A review of *Planetary Materials*, Reviews in Mineralogy Volume 36. **Harold C. Connolly Jr.** (1999). *EOS* **80**, 222.
(3) The Paul Pellas Symposium. **Harold C. Connolly Jr.** (1998) *Meteorit. Planetat. Sci.* **33**, 956-957.
(2) Formation of chondrules and CAIs: Theory versus observations. Rhian J. Jones, Typhoon Lee, **Harold C. Connolly Jr.**, Stanley G. Love, and Hsien Shang. (1999) In *Protostars and Planets IV*, 2001 (**Refereed**).
(1) The formation of chondrules: Petrologic tests of the shock wave model. **Harold C. Connolly Jr.** and Stanley G. Love (1998) *Science* **280,** 62-67 **(Refereed)**.

CHRONOLOGY OF INVITED TALKS

(19) On the nature, origins and significance of chondrules. Terrestrial Planets: Evolution through time. Physics Research Laboratory, Navrangpura, Ahmedabad, India. January 2008.
(18) On understanding the formation of chondrules and CAIs, Gordon Research Conference, Origin of Solar Systems, July 2007.
(17) On understanding the formation of chondrules and CAIs, University of Toronto, November 2006.
(16) On understanding the formation of chondrules and CAIs, Natural History Museum, June 2006.
(15) On understanding the formation of chondrules and CAIs, University of Maryland April 2006.
(14) On John Wood and the importance of chondrites in recording solar system formation, Harvard University May 2005.
(13) Refractory inclusions and chondrules: Insights into a protoplanetary disk and planet formation. Kaua'i, Hawai'i, November 2005.
(12) On chondritic meteorite components: Chondrules and CAIs. Department of Geological Sciences, Arizona State University, February 2004.
(11) On chondritic meteorite components: Chondrules and CAIs. The Lunar and Planetary Laboratory at the University of Arizona, February 2004.
(10) Citation for Dr. Steve J. Desch, winner of the 2003 Meteoritical Society Nier Prize. Citation presented at the 66th annual meeting of the Meteoritical Society in Munster, Germany.
(9) On the formation of chondrules, Lawrence Livermore National Laboratory February 2003.
(8) On the formation of meteoritic chondrules and CAIs, UC Berkeley, joint Astronomy and EPS seminar, February 2003.
(7) On the origins of planetary materials: Fe-Ni metal Georgia State, February 2002.

(6) On a recipe for making chondrules, California Institute of Technology, March 2001.
(5) What are Chondrules/CAIs and Why Should Astrophysicists Care? Institute for Advanced Studies, May 2001.
(4) Distinguish lecturer for the Cultural and Life Program, Furman University, South Carolina. Talk entitled: From Antarctica to the formation of our solar system: Meteorites, February 2000.
(3) On the formation of type B CAI from minor element concentrations in spinels. UCLA, December 1999.
(2) On the formation of chondrules and type B CAI. Center for Star Formation Studies, NASA-Ames, April 1998.
(1) On the thermal histories of chondrules. NASA-Ames, November 1996.

CHRONOLOGY OF REFEREED AND UNSOLICITED PUBLICATIONS IN PREPARATION OR REVISION

(5) Sulfide-rich metallic impact melts from the H-chondrite parent body. Devin L. Schrader, Dante S. Lauretta, Harold C. Connolly Jr., Yulia Goreva, Dolores Hill, Eve Berger, and Ken Domanik. (2009) In preparation for *Meteorit. Planet. Sci.*
(4) Inti didn't form in the X-wind (and neither did most CAIs and chondrules) M.A. Morris, S. J. Desch, and H. C. Connolly Jr. (2009) In preparation for *Meteorit. Planet. Sci.*
(3) The petrography and geochemistry of an Allende type B CAI: An issue of remelting? **Harold C. Connolly Jr.**, Anat Shahar, Edward D. Young, Denton S. Ebel, Michael K. Weisberg, John R. Beckett, and Julie M. Paque. (2009) In preparation for *Meteoritic Planet. Sci.*
(2) On the nature and origins of type-II chondrules in CR2 chondrites. **Harold C. Connolly Jr.**, Gary. R. Huss, Michael K. Weisberg, K. Nagashima, Richard D. Ash, Denton S. Ebel, Devin L. Schrader, and Dante S. Lauretta. (2009) In preparation for *Geochim. Cosmochim. Acta*.
(1) On understanding the cooling rates of type-II chondrules: Myths verses Data. **Harold C. Connolly Jr.**, Rhian H. Jones, and Gary E. Lofgren. (2009) In preparation for *Meteoritic. Planet. Sci.*

CHRONOLOGY OF REFEREED AND UNSOLICITED PUBLICATIONS SUBMITTED

(1) Compositional evolution of the proplanetary disk: Oxygen isotopes of CR2 chondrite chondrules. **Harold C. Connolly Jr.** and Gary R. Huss. (2009) Submitted to *Meteorit. Planet. Sci.*

CHRONOLOGY OF REFEREED AND UNSOLICITED PUBLICATIONS

(17) Characterization of opaque phases in type-II chondrules from CR2 chondrites: Evidence for low and high temperature history. Devin L. Schrader, **Harold C. Connolly Jr.**, and Dante S. Lauretta (2008) *Geochim. Cosmochim. Acta.* **72,** 6124-6140.
(15) Ancient asteroids enriched in refractory materials. J.M. Sunshine, **H.C. Connolly Jr.,** T. J. McCoy, S. J. Bus, and L. LaCroix. (2008) *Science* **320**, 514-517.
(14) Petrology and origin of amoeboid olivine aggregates in CR chondrites. Michael K. Weisberg, **Harold C. Connolly Jr.**, and Denton S. Ebel. (2004) *Meteorit. Planet. Sci.* **39.**
(13) An interstellar origin for the Beryllium 10 in CAIs. S. J. Desch, **Harold C. Connolly Jr.**, and G. Srinivasan. (2004) *Ap. J.* **602** 528-542**.**
(12) On Type B CAI Formation: Experimental Constraints on fO_2 Variations in Spinel Minor Element Partitioning and Re-equilibration Effects. **Harold. C. Connolly Jr.** and D. S. Burnett. (2003) *Geochim. Cosmochim. Acta*, **67**, 4429-4434.
(11) The petrogenesis of type B Ca, Al-rich inclusions: The spinal perspective. **Harold C. Connolly Jr.**, D. S. Burnett, and Kevin D. McKeegan (2003) *Meteorit. Planet. Sci.* **38**, 197-224.
(10) A model for the thermal processing of particles in solar nebula shocks: Application to cooling rates of chondrules. S. J. Desch and **Harold C. Connolly Jr.** (2002). *Meteorit. Planet. Sci.* **37**, 183-207.
(9) On the formation of Fe-Ni metal in CR2 meteorites. **Harold C. Connolly Jr.**, Gary R. Huss, and G. J. Wasserburg. (2001) *Geochim. Cosmochim. Acta,* **65**, 4567-4588.
(8) Comment on "On the lower limit of chondrule cooling rates: The significance of iron loss in dynamic crystallization experiments" by S. Weinbruch, et al. Juile M. Paque, **Harold C. Connolly Jr.** and Gary E. Lofgren (1999) *Meteorit. Planet. Sci.* **34**, 671-675.
(7) A study of the minor element concentrations in spinels from type B CAIs: An investigation into potential formation conditions of CAIs. **Harold C. Connolly Jr.** and D. S. Burnett (1999) *Meteorit. Planet. Sci.* **34**, 829-848.

(6) The flash melting of chondrules: An experimental investigation into the melting history and physical nature of chondrule precursors. **Harold C. Connolly Jr.**, Brian D. Jones, and Roger H. Hewins. (1998) *Geochim. Cosmochim. Acta* **62**, 2725-2735.
(5) Peak temperatures of flash-melted chondrules. Roger H. Hewins and **Harold C. Connolly Jr.** (1996) **Chondrules and the Protoplanetary Disk**, Cambridge University Press, pp.197-204.
(4) Constraints placed on the nature of chondrule precursors: A review of experimental evidence. **Harold C. Connolly Jr.** and Roger H. Hewins. (1996) **Chondrules and the Protoplanetary Disk**, Cambridge University Press, pp. 129-136.
(3) Chondrules as products of dust collisions with totally molten droplets within a dust-rich nebular environment: An experimental investigation. **Harold C. Connolly Jr.** and Roger H. Hewins. (1995) *Geochim. Cosmochim. Acta* **59**, 3231-3246.
(2) Carbon and the formation of reduced chondrules: an experimental investigation. **Harold C. Connolly Jr.**, Roger H. Hewins, Richard D. Ash, Brigitte Zanda, and Michele Bourot-Denise. (1994) *Nature* **371**, 136-139.
(1) The influence of bulk composition and dynamic melting conditions of olivine chondrule textures. **Harold C. Connolly Jr.** and Roger H. Hewins. (1990) *Geochim. Cosmochim. Acta* **55**, 2943-2950.

CHRONOLOGY OF PUBLISHED ABSTRACTS

(74) Petrologic – geochemical study of chondrules in enstatite chondrites. M. K. Weisberg, D. S. Ebel, **H. C. Connolly Jr.**, N. T. Kita, T. Ushikubo, J. W. Valley. (2009) Submitted to the 40th Lunar and Planet. Sci. Conf. #1886.
(73) In situ discovery of a cluster of refractory grains in an Allende ferromagnesian chondrule. C. Ma, J.R. Beckett, G.R. Rossman, **H.C. Connolly, Jr.**, Y. Guan, J.M. Eiler, and A.E. Hofmann. (2009) Submitted to the 40th Lunar and Planet. Sci. Conf.
(72) NWA 4477: A unique impact melt breccia. D. L. Schrader, D. S. Lauretta, **H. C. Connolly Jr.,** T. J. McCoy, R. C. Greenwood, and I. A. Franchi. (2009) Submitted to the 40th Lunar and Planet. Sci. Conf., #1854.
(71) Microstructure of a sulfide-assemblage in a Renazzo type-II chondrule as revealed by transmission electron microscopy. (2009) D. L. Schrader, T. J. Zega, D. S. Lauretta, and **H. C. Connolly Jr.** Submitted to the 40th Lunar and Planet. Sci. Conf., #218.
(70) Supra-canonical ^{26}Al detected by in situ LA-MC-ICPMS and SIMS techniques: But what does it mean? (2009) **H. C. Connolly, Jr.**, E. D. Young, G. R. Huss, K. Nagashima, W. F. McDonough, R. D. Ash, J. R. Beckett, E. Tonui, and T. J. McCoy. Submitted to the 40th Lunar and Planet. Sci. Conf., *#1675*.
(69) On the relationship between chondrites, comets and asteroids, a petrologic perspective. M.K. Weisberg and **H.C. Connolly Jr.** (2008) *39th Lunar and Planet. Sci. Conf.* #1981.
(68) Sacramento Wash 005 and MET 00428: Impact generated sulfide-rich Fe, Ni melts from the H-chondrite parent body. D.L. Schrader, **H.C.Connolly Jr.** and D.S. Lauretta. (2008) *39th Lunar and Planet. Sci. Conf.* #1185.
(67) Mg isotope study of CAI's by UV laser ablation and solution MC-ICPMS: Implications for canonical and supra-canonical evolution. E.K.Tonui, **H.C.Connolly Jr.,** T. J. McCoy, and E.D. Young. (2008) *39th Lunar and Planet. Sci. Conf.* #1380.
(66) Origin of Na-, Al-, Glass-rich chondrules in H, L and LL chondrites. C. E. Nehru, M.K.Weisberg, D. S. Ebel, J.S.Boesenberg and **H. C. Connolly Jr.** (2008) *39th Lunar and Planet. Sci. Conf.*# 1697.
(65) Aluminous spinels in ferromagnesian chondrules from Allende. C. Ma, J. R. Beckett, **H.C. Connolly Jr.** and G. R. Rossman. (2008) *39th Lunar and Planet. Sci. Conf.* #2030.
(64) Oxygen isotopes and the nature and origins of type-II chondrules in CR2 chondrites. **Harold C. Connolly Jr.**, G. R. Huss, K. Nagashima, M. K. Weisberg, R. D. Ash, D. S. Ebel, D. L. Schrader and D. S. Lauretta. (2008) *39th Lunar and Planet. Sci. Conf.* #1675.
(63) Refractory-rich asteroids: Concentrations of the most ancient materials in the solar system. Jessica Sunshine, **Harold C. Connolly Jr.**, Timothy J. McCoy, and S. J. Bus. (2007) *American Astronomical Society, DPS* meeting #39, #33.01.
(62) Petrology of matrix in the Semarkona ordinary chondrites. Michael K. Weisberg, Denton S. Ebel and **Harold C.Connolly Jr.** (2007) *Meteorit. Planet. Sci.* 42, *Supple*, p. 528.
(61) Sulfide-rich assemblages in CR type-II chondrules formed by high-temperature gas-solid reactions. D. L. Schrader, D. S. Lauretta and **H. C. Connolly Jr.** in *Meteorit. Planet. Sci.* 42, *Supple.* p. 524.

(60) Olivine and the onset of thermal metamorphism in EH3 chondrites. C. Bendersky, M. K. Weisberg, **H. C. Connolly Jr.** and D. S. Ebel. (2007) *38th Lunar Planet. Sci. Conf.*, # 1613.

(59) Identification of refractory-rich asteroids: Evidence for the earliest accreted bodies in the Solar System. Jess M. Sunshine, **Harold C. Connolly Jr.**, Timothy J. McCoy, S. J. Bus, and L. La Croix. (2007) *38th Lunar Planet. Sci. Conf.*, # 1613.

(58) Petrologic-isotopic study of amoeboid olivine aggregates in CR chondrites. Michael K. Weisberg, Norkio T. Kita, Takayuki Ushikubo, **Harold C. Connolly Jr.**, Denton S. Ebel, M. J. Spicuzza, and John W. Valley. (2007) *38th Lunar Planet. Sci. Conf.*, #1588.

(57) Characterization of opaque phases in type II chondrules from CR2 chondrites. Devin L. Schrader, **Harold C. Connolly Jr.**, Dante S. Lauretta, Michael K. Wesiberg and Denton S. Ebel. (2007) *38th Lunar Planet. Sci. Conf.*, #1368.

(56) On the nature and origins of type II chondrules in CR2 chondrites. **Harold C. Connolly Jr.**, Michael K. Weisberg, Gary R. Huss, Kazu Nagashima, Denton S. Ebel, Devin L. Schrader, and Dante S. Lauretta. (2007) *38th Lunar Planet. Sci. Conf.* ,#1571.

(55) Stardust (comet) samples and the meteorite record. M. K. Weisberg, **Connolly H. C. Jr.**, Zolensky M., P. Bland, Bradley J., Brearley A., Bridges J., Brownlee D., Butterworth A., Dai Z., Ebel D., Genge M., Gounelle M., Graham G., Grossman J., Grossman L., Harvey R., Ishii H., Kearsley A., Keller L., Krot A., Langenhorst F., Lanzirotti A., Leroux H., Matrajt G., Messenger K., Mikouchi T., Nakamura T., Ohsumi K., Okudaira K., Perronnet M., Simon S., Stephan T., Stroud R., Taheri M., Tomeoka K., Toppani A., Tsou P., Tsuchiyama A., Velbel M., Weber I., Westphal A., Yano H., and Zega T. (2006) American Geophysical Union Fall Meeting.

(54) Sulfide-metal nodules in unequilibrated enstatite (EH3) chondrites. Weisberg M. K., **Connolly H. C.**, Ebel D. S. and M. Kimura. (2006) 69th Annual Meeting of the Meteoritical Society.

(53) Petrologic and trace element study of seven type A inclusions from Lance (CO3). Nehru C. E., Ebel D. S., Friedrich J. M., Weisberg M. K. and **Connolly H. C. Jr.** (added after submission of abstract) (2006) 27th Lunar Planet. Sci. Conf. #2044.

(52) The petrography and geochemistry of an Allende type B CAI: V depletion, relict regions and remelting. **Harold C. Connolly Jr.**, Denton S. Ebel, Michael K. Weisberg, Julie. Paque, and John R. Beckett. (2006) *37th Lunar Planet. Sci. Conf.* #1521 (oral presentation).

(51) Understanding the cooling rates experienced by type II porphyritic chondrules. **Harold C. Connolly Jr.** and Rhian H. Jones. (2005) *36th Lunar.Planet. Sci. Conf.* (oral presentation).

(50) Petrology and origin of amoeboid olivine aggregates in CR chondrites. Michael K. Weisberg, **Harold C. Connolly Jr.**, and Denton S. Ebel. (2004). 35th *Lunar. Planet. Sci. Conf.*

(49) A cosmic-ray origin for CAI Beryllium 10. Steven J. Desch and **Harold C. Connolly Jr. (2003)** ***Meteorit. Planet. Sci.*** 38**,** ***Supple.***

(48) Locating stardust particles in aerogel using X-ray techniques. A. J. G. Jurewicz, S. M. Jones, A. Tsapin, D. T. Mih, and **H. C. Connolly Jr.** (2003) *34th Lunar Planet. Sci. Conf.*, #1228.

(47) An interstellar origin for Beryllium 10 in CAIs. Steven J. Desch, G. Srinivasan and **Harold C. Connolly Jr.** (2003) *34th Lunar Planet. Sci. Conf.,* #1394.

(46) Amoeboid olivine aggregates in CR chondrites. Michael K. Weisberg, **Harold C. Connolly Jr.** and Denton S. Ebel. (2003) *34th Lunar Planet. Sci. Conf.,* #1513.

(45) On the nature and origins of FeO-rich chondrules in CR2 chondrites: A preliminary report. **Harold C. Connolly Jr.,** Michael K. Weisberg, and Gary R. Huss. (2003) *34th Lunar Planet. Sci. Conf.*1770 (oral presentation).

(44) Constraining the environment in which chondrules were melted by nebula shocks. S. J. Desch, **Harold C. Connolly Jr.,** and Danielle E. Moser. (2002) *33th Lunar Planet. Sci. Conf.*

(43) On the use of phase and bulk compositions in classifying chondrules from semarkona (LL3.0) and other ordinary chondrites. John R. Beckett and **Harold C. Connolly Jr.** (2002) *33th Lunar Planet. Sci. Conf.*

(42) Reduction, metal loss, mixing: The origins of Fe-Mg chondrule compositions. **Harold C. Connolly Jr.,** Gary G. Huss, and Jeremy S. Delaney. (2001) *Meteorit. Planet. Sci.* **36**, *Supple* 44C (oral presentation).

(41) Experimental constraints on type B CAI formation: (1) fO_2 variations in spinel minor element partitioning. (2) sub-solidus re-equilibration effects. **Harold C. Connolly Jr.** and D. S. Burnett. (2001) *32th Lunar Planet. Sci. Conf.* (oral presentation).

(40) The formation of igneous CAIs and chondrules by impacts? **Harold C. Connolly Jr.** and Stanley G. Love. (2001) *32th Lunar Planet. Sci. Conf.* (poster presentation).

(39) On the remelting of type B calcium-aluminum-rich inclusions. **Harold C. Connolly Jr.** and D. S. Burnett. (2000) *Meteorit. Planet. Sci.* **35** (*Supple*), A44-45 (oral presentation).

(38) X-ray imaging applied to problems in planetary materials. A. J. G. Jurewicz, D. T. Mih, S. M. Jones, and **H. C. Connolly Jr.** (2000) *31th Lunar Planet. Sci. Conf.* (poster presentation).

(37) On the formation of metal in CR2 chondrites: In situ determination of PGE distributions and bulk chondrule compositions. **Harold C. Connolly Jr.**, Gary R. Huss, and G. J. Wasserburg. (2000) *31th Lunar Planet. Sci. Conf.* (oral presentation).

(36) The remelting of type B CAIs: relationships between the minor element concentrations in spinels to their host silicates. **Harold C. Connolly Jr.** and D. S. Burnett. (2000) *31th Lunar Planet. Sci. Conf.*

(35) Minor element distributions in spinels from type B, CAIs: An experimental study. **Harold C. Connolly Jr.** and D. S. Burnett. (1999) *30th Lunar Planet. Sci. Conf.* (oral presentation).

(34) Oxygen isotope ratios of natural and synthetic chondrules: Evidence for in situ reduction by carbon. R. D. Ash, **H. C. Connolly Jr.**, C. M. O'D. Alexander, G. J. MacPherson, and D. Rumble III. (1998) 61st Annual Meteoritical Society Meeting.

(33) Recycling (?); relict spinels (?) in type B, CAIs. **Harold C. Connolly Jr.** and D. S. Burnett. (1998) 61st Annual Meteoritical Society Meeting (oral presentation).

(32) Formation of chondrules and matrix metal within CR2 meteorites as constrainted from their PGE abundances. **Harold C. Connolly Jr.**, Gary R. Huss, W. Hsu, and G. J. Wasserburg. (1998) *29th Lunar Planet. Sci. Conf.* (poster presentation).

(31) Minor element distribution in and among spinels from Type B, CAIs. **Harold C. Connolly Jr.** and D. S. Burnett. (1998) *29th Lunar Planet. Sci. Conf.* (oral presentation).

(30) Revisiting nebular shocks as a chondrule formation mechanism. **Harold C. Connolly Jr.** and Stanley G. Love. (1997) *Meteorit. Planet. Sci.*, **32**, A31 (oral presentation).

(29) Europium valence state distributions in equilibrated ordinary chondrites. **Harold C. Connolly Jr.**, Mark T. Peters, Gary R. Huss, D. S. Burnett and G. J. Wasserburg. (1997) *Meteorit. Planet. Sci.,* **32**, A30-31 (oral presentation).

(28) Lithophile trace elment distributions in individual phases from equilibrated ordinary chondrites. **Harold C. Connolly Jr.**, Mark T. Peters, Gary R. Huss, D. S. Burnett and G. J. Wasserburg. (1997) *28th Lunar Planet. Sci. Conf.* (oral presentation).

(27) Carbon, nebular gas, and reduced chondrule formation: Experimental investigation. **Harold C. Connolly Jr.** (1996) *Meteoritics and Planetary Science* , **31**, A30-A31 (oral presentation).

(26) Compound chondrules and ingeous rims: Multiple heating of chondrules. **Harold C. Connolly Jr.** and Roger H. Hewins. (1996) *27th Lunar Planet. Sci. Conf.*, 247-248 (oral presentation).

(25) Etude du souffre dans les chondrites et de son comportement lors de la formation des chondres. Brigitte Zanda, Yang Yu, Michele Bourot-Denise, Roger H. Hewins and **Harold C. Connolly Jr.** (1994). *Journees de Planetologie du PNP/INSU.*

(24) Chondrule precursors and cooling paths: The sulfur evidence. Brigitte Zanda, Yang Yu, Michele Bourot-Denise, Roger H. Hewins and **Harold C. Connolly Jr.** (1994). *Conference on Chondrules and the Protoplanetary Disk.*

(23) Experimental constraints on models for origins of chondrules: Peak temperatures. Roger H. Hewins and **Harold C. Connolly Jr.** (1994). *Conference on Chondrules and the Protoplanetary Disk*.

(22) Constraints placed on the nature of chondrule precursors. **Harold C. Connolly Jr.** and Roger H. Hewins. (1994) *Conference on Chondrules and the Protoplanetary Disk* (oral presentation).

(21) Dust and processes in the protoplanetary disk as recorded in chondrules. Brigitte Zanda, Michele Bourot-Denise, **Harold C. Connolly Jr.**, Roger H. Hewins, S. Moustefaoui, Claude Perron and Yang Yu. (1994) Circumstellar Dust and Planet Formation. 10th IAP Meeting, Paris, France.

(20) Compound chondrules: An experimental investigation. **Harold C. Connolly Jr.**, Roger H. Hewins, Nisha Atra and Gary E. Lofgren. (1994). *Meteoritics*, **29** 458 (oral presentation).

(19) Can sulfide minerals survive the chondrule-forming transient heating event? Yang Yu, Roger H. Hewins, Brigitte Zanda and **Harold C. Connolly Jr.** (1994). *25th Lunar Planet. Sci. Conf.*, 1537-1538.

(18) Rounding of chondrules by abrasion: A cautionary note regarding textural evidence. William R. Skinner and **Harold C. Connolly Jr.** (1994). *25th Lunar Planet. Sci. Conf.*, 1285-1286 (poster presentation).

(17) Possible origin of Si-bearing metal in chondrites. Roger H. Hewins, Brigitte Zanda, **Harold C. Connolly Jr.** and Michele Bourot-Denise. (1994). *25th Lunar Planet. Sci. Conf.*, 543-544.

(16) On the possible role of elemental carbon in the formation of reduced chondrules. **Harold C. Connolly Jr.**, Roger H. Hewins, Richard D. Ash, Gary E. Lofgren and Brigitte Zanda. (1994). *25th Lunar Planet. Sci. Conf.*, 279-280 (oral presentation).

(15) Possible clues to the physical nature of chondrule precursors: An experimental study using flash melting conditions. **Harold C. Connolly Jr.**, Roger H. Hewins and Gary E. Lofgren. (1993) *Meteoritics*, **28** 338 (oral presentation).

(14) The experimental production of matrix lumps within chondrules: Evidence of post-formational processes. **Harold C. Connolly Jr.** and Roger H. Hewins. (1993) *24th Lunar Planet. Sci. Conf.*, 327-328.

(13) Flash melting of chondrule precursors in excess of 1600C. Series I: Type II(B1) chondrule composition experiments. **Harold C. Connolly Jr.**, Roger H. Hewins, and Gary E. Lofgren. (1993). *24th Lunar Planet. Sci. Conf.*, 329-330 (oral presentation).

(12) The experimental production of accretionary rims around isolated olivine grains. **Harold C. Connolly Jr.** and Roger H. Hewins. (1992) *24th Lunar Planet. Sci. Conf.*, 241-242.

(11) The production of accretionary rims around chondrules by drop quenching into dust: A test for parent body origin. **Harold C. Connolly Jr.** and Roger H. Hewins. (1992). *24th Lunar Planet. Sci. Conf.*, 243-244.

(10) Chondrule modification as a possible indicator of rim-forming mechanisms. **Harold C. Connolly Jr.** and Roger H. Hewins. (1992). *LPSC* **XXIII**, 239-230 (oral presentation).

(9) The effect of precursor grain size on chondrule textures. **Harold C. Connolly Jr.**, Brian D. Jones and Roger H. Hewins. (1991) *Meteoritics* **26**, 329 (oral presentation).

(8) Calcium in forsteritic olivines in type IA chondrules: An experimental study. **Harold C. Connolly Jr.** and Roger H. Hewins. (1991). *22th Lunar Planet. Sci. Conf.*, 222-223.

(7) The experimental production of chondrule rims: Constraints on chondrule rim origins. **Harold C. Connolly Jr.** and Roger H. Hewins. (1991) *22th Lunar Planet. Sci. Conf.*, 224-225 (oral presentation).

(6) The production of chondrule textures by introduction of refractory dust to superheated melts. **Harold C. Connolly Jr.** and Roger H. Hewins. (1990) *Meteoritics* **25**, 354-355 (oral presentation).

(5) Calcium in forsteritic olivines in Type IA chondrules: An experimental study. **Harold C. Connolly Jr.** and Roger H. Hewins. (1990) *21th Lunar Planet. Sci. Conf.*, 224-225.

(4) The production of chondrule rims: A preliminary report. **Harold C. Connolly Jr.**, Roger H. Hewins and Jeremy S. Delaney. (1990) *21th Lunar Planet. Sci. Conf.*, 222-223 (oral presentation).

(3) Influence of bulk composition on olivine chondrule textures. **Harold C. Connolly Jr.** and Roger H. Hewins. (1989) *Meteoritics* **24**, 260 (oral presentation).

(2) Influence of melting kinetics on the formation of barred olivine chondrules. Roger H. Hewins, Patrick M. Radomsky and **Harold C. Connolly Jr.** (1989) *20th Lunar Planet. Sci. Conf.*, 412-413.

(1) Chondrule Texture: The influence of bulk composition and heating time for uniform thermal conditions. **Harold C. Connolly Jr.**, Patrick M. Radomsky and Roger H. Hewins. (1988) *19th Lunar Planet. Sci. Conf.*, 205-206 (oral presentation).