BARRY SMITH Curriculum Vitae • December 28, 2019

Born 4 June 1952 in Bury, England. US citizen

EDUCATION

Oxford University: Degree of BA in Mathematics and Philosophy (First Class Honours), 1973. Converted to MA (Oxon.), 1977.

University of Manchester: Ph.D. in Philosophy, 1976. Dissertation: *The Ontology of Reference. Studies in Logic and Phenomenology*, xvi + 477pp., a study of theories of meaning and reference in Frege and Husserl. Supervisor: Wolfe Mays.

h-index: 91 citations: 34,316

h-Index for Computer Science

Erdös Number: 4

ACADEMIC POSTS

1976–1979	Research Fellow, Department of Philosophy, University of Sheffield, England
1979–1989	University Lecture, Department of Philosophy, University of Manchester, England, with tenure as of 1982
1989–1994	Professor of Philosophy, International Academy for Philosophy, Liechtenstein
1994–2004	Professor of Philosophy and Member of the Center for Cognitive Science, University at Buffalo
2002–2006	Director, Institute for Formal Ontology and Medical Information Science (<u>IFOMIS</u>), Faculty of Medicine, University of Leipzig and Saarland University, Germany
2004–	SUNY Distinguished Professor, University at Buffalo
2005-	Director, National Center for Ontological Research (NCOR), Buffalo, NY
2008-	Affiliate Professor, Department of Neurology, University at Buffalo
2009–	Affiliate Professor, <u>Department of Computer Science and Engineering</u> , University at Buffalo
2013-	Affiliate Professor, Department of Biomedical Informatics, University at Buffalo

VISITING POSTS

1983-1984	Humboldt Fellow, Universities of Louvain (Belgium), Erlangen (Germany) and Graz (Austria)
1990	Distinguished Visiting Professor, University of California, Irvine (Winter Quarter)
1993	Visiting Researcher at the Istituto per Ricerche di Dinamica dei Sistemi e di Bioingegneria (LADSEB), Padua, Italy
1994	Humboldt Fellow, Universities of Hamburg and Konstanz, Germany
2000	Visiting Professor, University of Koblenz, Germany
2008	Visiting Professor, University of Texas Southwestern Medical Center, Dallas
2019–	Visiting Professor, University of Italian Switzerland, Lugano

HONORS AND AWARDS

1983–1984 Alexander von Humboldt Fellowship

1989–1998	Honorary Fellow, University of Liverpool
1999	Fellow of the American Philosophical Society
2001	Wolfgang Paul Award, Alexander von Humboldt Foundation
2002	SUNY Chancellor's Award for Excellence in Scholarship
Apr 2010	Paolo Bozzi Ontology Prize, University of Turin, Italy
Nov 2014-	Fellow, American College of Medical Informatics (<u>FACMI</u>)

EXTERNAL GRANTS (SELECTED)

Aug	1991	Research grant 11-37632.93 from the Swiss National Foundation for a project on the Philosophical Foundations of Artificial Intelligence	\$210,000
Aug	1992	Research grant P-08661-HIS from the Austrian Foundation for the Promotion of Scientific Research (FWF) for a project on Apriorism and the History of Austrian Philosophy	\$165,000
Mar	1998	National Science Foundation IGERT Program Grant <u>DGE-9870668</u> . Co-PI (with David Mark and others)	\$187,948
May	1999	National Science Foundation Research Grant BCS- 9975557: Geographic Categories: An Ontological Investigation. Co-PI (with David Mark)	\$99,845
Apr	2002	Wolfgang Paul Prize, Alexander von Humboldt Foundation. Pl	\$2,600,000
Aug	2003	European Union 6th Framework Programme for Research, Technological Development and Demonstration Grant NoE 507505: Network of Excellence in Semantic Data Mining and Medical Informatics. Pl of IFOMIS subcontract	\$600,000
Sep	2003	National Science Foundation IGERT Program Grant <u>DGE-0333417</u> . Co-PI	\$302,294
Apr	2004	Volkswagen Foundation: <u>Forms of Life: Philosophical Dimensions of Contemporary Biomedical Research</u> , PI	\$1,191,237
Sep	2005	European Union 6th Framework Programme for Research, Technological Development and Demonstration, RIDE – A Roadmap for Interoperability of eHealth Systems. PI of IFOMIS subcontract	\$195,421
Sep	2005	European Union 6th Framework Programme for Research, Technological Development and Demonstration: ACGT: Advancing Clinico-Genomic Trials on Cancer. PI for IFOMIS subcontract	\$182,636
Sep	2005	NIH Roadmap Grant U 54 HG004028: <u>National Center for</u> <u>Biomedical Ontology</u> ; PI of Buffalo subcontract	\$877,904
Mar	2007	NIH / NIGMS R01 GM080646-01: PRO: A Protein Ontology in Open Biomedical Ontologies. PI of Buffalo subcontract, 7.5%	\$1,568,033
Sep	2008	NIH / NIAID R01 AI 77706 Immune System Biological Networks: A Case Study in Improved Data Integration and Analysis. PI of Buffalo Sub-Contract	\$250,260
Nov	2008	UCore SLX Biometrics Ontology, U.S. Department Of Defense, November 2008 – October 2009. Pl	\$360,606

Aug	2010	NIH Roadmap Grant 2 U54 HG004028: <u>National Center</u> <u>for Biomedical Ontology</u> . (\$17,400,000) PI of Buffalo subcontract	\$1,036,404
Jul	2011	NIH / NIGMS R01 GM080646-06 PRO: A Protein Ontology in Open Biomedical Ontologies, National Institute for General Medical Sciences (4-year renewal). Co-PI	\$348,203
Jan	2013	NIH / NIAID HHS N272201200028 Bioinformatics Integration Support Contract (BISC), National Institute of Allergy and Infectious Diseases. PI of Buffalo Sub-Contact	\$690,483
Jul	2013	NIH / NIDCR 1 T32 DE023526-01 Advanced Training in Oral Biology, National Institute for Dental and Craniofacial Research. Mentor.	
July	2015	NIH/NIGMS R01GM080646-09 PRO: A Protein Ontology in Open Biomedical Ontologies. 4-year renewal. PI of Buffalo sub-contract.	\$377,528
Aug	2015	NIH / NCATS Buffalo Clinical and Translational Research Center (CTSA Award). Key personnel.	\$360,000
Jan	2017	DMDII 15-11 Coordinated Holistic Alignment of Manufacturing Processes. PI	\$1,255,260
Jun	2017	NIH / NLM T5 <u>Biomedical Informatics and Data Science</u> <u>Research Training Programs</u> . Mentor	
Sep	2018	Air Force Office of Scientific Research AFOSR- 0007011818 Event Characterization Fusing Hard and Soft Data via Semantic Models. Co-PI	\$661,447

STANDARDS DEVELOPMENT

Editor, International Standards Organization and International Electrotechnical Commission Joint Technical Committee 1, for ISO/IEC 21838-1 (Top-Level Ontologies) and ISO/IEC 21838-2 (Basic Formal Ontology)

ONLINE COURSES

An Introduction to Biomedical Ontology(2008)

An Introduction to Ontology: From Aristotle to the Universal Core (2009)

From Basic Formal Ontology to the Information Artifact Ontology (2009)

Basic Building Blocks for Biomedical Ontologies (2011)

Problems in Ontology (2012)

Ontology for Intelligence, Defense and Security (2012)

Semantics for Biodiversity (2013)

Analytic Metaphysics (Lecture Couse) (2016)

Building Ontologies: An Introduction for Engineers (2017)

Introduction to Basic Formal Ontology 2.0 (2017)

Ontology for Systems Engineering (2018)

Building Ontologies with Basic Formal Ontology (2018)

TEACHING (SINCE 2010)

University at Buffalo

Philosophical Aspects of Health and Disease, Fall Semester, 2010 (with Mathias Brochhausen)

CAS 101: Trends in Arts and Sciences (Philosophy), Fall Semester 2011

Four Seminars on Biomedical Informatics. <u>Core Curriculum in Clinical and Translational Research</u> Seminar Series (School of Medicine), Spring Semester 2012

Basic Formal Ontology 2.0 (tutorial), Summer Semester 2012

Protégé 2000 (tutorial), Summer Semester 2012 (with Ron Rudnicki)

Problems in Ontology (graduate seminar), Fall Semester 2012

Ontological Engineering (graduate seminar), Fall Semester 2013, Fall Semester 2014

Tutorial and Hackathon: Ontology and Imaging Informatics, Third Clinical and Translational Science Ontology Workshop, June 23-25, 2014

CE 630: Research Methods in Chemical and Biological Engineering (Research Ethics), Spring Semester 2015

CAS 101: Trends in Arts and Sciences (Philosophy), Fall Semester 2015

Analytic Metaphysics, Spring Semester 2016

Biomedical Ontology, Fall Semester 2016 (with Werner Ceusters)

Applied Ontology, Spring Semester 2017 (online course)

PHI 579 Social Norms and Informal Institutions, Spring Semester 2017 (guest lecture)

Advanced Biomedical Ontology, Fall Semester 2017 (with Werner Ceusters)

Clinical and Translational Science Institute (CTSI) Workforce Development Core, Fall Semester 2017 Ontology for Systems Engineering, UB Center for Multi-Source Information Fusion, January 26, 2018 (Slides)

Ontological Engineering, Spring Semester 2018 (online course)

Applied Ontology, Fall Semester 2018

Intelligence Analysis: A Philosophical Introduction, Fall Semester 2019

Clinical and Translational Science Institute (CTSI) Workforce Development Core, Fall 2019

Northwestern University, Chicago, IL

Tutorial on Ontology Development, Disease Ontology Workshop, Northwestern University, Chicago, January 16-17, 2010

European Bioinformatics Institute, Hinxton, Cambridge, UK

Ontologies for the Virtual Physiological Human (Tutorial, with Alan Ruttenberg), February 14, 2010 Introduction to Ontology Best Practices (Tutorial), Ontology Development and Engineering: Tutorial & Training Workshop (EMBL-EBI Industry Programme), October 11, 2010

US Army Net-Centric Data Strategy Center of Excellence, ANSER Center, Arlington, VA Universal Core Semantic Layer (Tutorial, with Lowell Vizenor), March 17, 2010

Pre-Conference of the 2nd Summer School in Affective Sciences (ISSAS 2010), University of Geneva, Switzerland

Groundrules for an Ontology of Emotion (Tutorial), August 22, 2010

Department of Human Genetics, Emory University, Atlanta GA

<u>Building Ontologies for Clinical and Translational Research</u>, June 29, 2011

Presentations on Youtube

Space and Naval Warfare (SPAWAR) Systems Command, Systems Center Atlantic, Charleston SC SPAWAR Semantic Boot Camp, September 21-23, 2011

US Army Intelligence and Information Warfare Directorate (I2WD). Washington DC Semantic Enhancement Training, January 12-13, 2012 Ontology for the Intelligence Community: Training and Coordination Event, April 19-20, 2012 Distributed Common Ground System Ontology Training Event, March 27, 2013

New York Botanical Garden, Bronx, NY Introduction to Bio-Ontologies, Tutorial, Feb 5, 2012

National Center for Biomedical Ontology, Baltimore, MD Introduction to Biomedical Ontology for Clinical and Translational Research Tutorial, April 24, 2012

Genomic Standards Consortium, University of Kansas Biodiversity Institute, Lawrence, KS Semantics of Biodiversity Workshop and Tutorial, May 16 -18, 2012 Presentations on Youtube

International Conference on Biomedical Ontology (ICBO)

<u>How to Develop and Use OBO Foundry Ontologies</u>, Tutorial, Medical University of Graz, Austria July 21, 2012

<u>Basic Formal Ontology 2.0</u>, Tutorial, Medical University of Graz, Austria, July 25, 2012 <u>OBO Foundry 101</u>: Tutorial on Collaborative Ontology Development (with Melanie Courtot, Melissa Haendel, Chris Mungall, Bjoern Peters, Alan Ruttenberg, Carlo Torniai and Jie Zheng), Concordia University, Montreal, Canada, July 7, 2013

<u>Information Artifact Ontologies Workshop</u>, Rio de Janeiro, <u>Tutorial on the Information Artifact Ontology</u>, September 22, 2014

Tutorial: <u>Introduction to Basic Formal Ontology</u>, Lisbon, Portugal, July 28, 2015 Tutorial: The Ontology for Biomedical Investigations, Lisbon, Portugal, July 28, 2015

Tutorial: Open Biomedical Ontologies, Corvallis, OR, August 1, 2016

Tutorial: Building Ontologies with Basic Formal Ontology, Corvallis, OR, August 7, 2018 (Video)

BFO Tutorial (2019) (with Alan Ruttenberg), July 30, 2019 (Video)

European Conference on Computational Biology (ECCB), Basel, Switzerland

Applications of Bio-Ontologies in Large-Scale Data-Driven Science, Tutorial, September 9, 2012

Semantic Technology for Intelligence, Defense and Security (STIDS), George Mason University, Fairfax, VA

Ontology for Intelligence, Defense and Security, Tutorial, October 23, 2012

Information Ontologies for the Intelligence Community, Tutorial, November 12, 2013

Ontology of Military Planning and Operations Assessment, Tutorial, November 18, 2014

<u>Quantitative Systems Immunology Summer School,</u> Boston University, Boston, MA <u>Immunology Ontology</u>, Tutorial (with Lindsay Cowell), June 10-14, 2013. <u>Video</u>

Milan Polytechnic, Milan, Italy

Tutorial: An Introduction to Ontology for Mechanical Engineers, April 28-30, 2015

Air Force Research Laboratory, Rome, NY Ontology Bootcamp, July 7, 2015

Air Force Research Laboratory, Wright-Patterson Air Force Base, Dayton, OH Ontology Bootcamp, February 25-26, 2016

Aircraft Airworthiness & Sustainment (AA&S) Conference

Digital Thread Training: Ontology Bootcamp, Grapevine, TX, March 24, 2016

<u>Unlocking Digital Thread (DT) Data for More Effective and Economical Systems Health Monitoring,</u> Phoenix, AZ, May 21, 2017

<u>Web Science and Technology (WebST) 2016</u>, Bilbao, Spain Towards Ontological Foundations for Web Science, July 18-19, 2016 ASME 2017 International Design Engineering Technical Conferences (IDETC) and Computers & Information in Engineering Conference (CIE) (IDETC/CIE), Cleveland, OH

A Strategy for Promoting Data Interoperability Across the Enterprise. Introduction to BFO for Engineers, August 6, 2017

<u>Systems Engineering Research Center (SERC)</u>, Washington DC Systems Engineering Ontology Bootcamp, December 5, 2017, (Video)

University of Italian Switzerland (USI), Ticino, Switzerland Ontology and Artificial Intelligence, April 8-12, 2019

Propulsion Directorate, Tinker Air Force Base, Oklahoma City, OK Propulsion Ontology Tutorial, June 27, 2019

Joint Ontologies Workshop (JOWO), Graz, Austria
TLO: Top Level Ontologies (ISO/IEC 21838), September 24, 2019

POSTDOCTORAL RESEARCH SUPERVISED

Graham White, IAP Liechtenstein, Fonds Nationale (Bern, Switzerland), 1991-1994

Roberto Casati, IAP Liechtenstein, Fonds Nationale (Bern, Switzerland), 1991–1994

Wojciech Zelaniec, IAP Liechtenstein and SUNY Buffalo, Fonds zur Förderung der wissenschaftlichen Forschung (Vienna, Austria), 1992–1996

Dieter Münch, University of Manchester, Deutsche Forschungsgemeinschaft, 1986-1988

Artur Rojszczak, University at Buffalo, Foundation for Polish Science, 1998–1999

Guido Hülsmann, University at Buffalo, Alexander von Humboldt-Stiftung, 1998–1999

Berit Brogaard, University at Buffalo, College of Arts and Sciences, 1999–2000

Alan Clune, University at Buffalo, College of Arts and Sciences, 2001

Daniel von Wachter IFOMIS, Leipzig, 2002

Igor Papakin, IFOMIS Leipzig, 2002-2003

Martin Trautwein, IFOMIS Leipzig, 2002-2004

Thomas Bittner, IFOMIS, Leipzig/Saarbrücken, 2002-2005

Maureen Donnelly, IFOMIS, Leipzig/Saarbrücken, 2002-2005

Pierre Grenon, IFOMIS, Leipzig/Saarbrücken, 2002-2007

Luc Schneider, IFOMIS, Leipzig, 2003-2004

Anand Kumar, IFOMIS, Leipzig, 2003-2006

Fabian Neuhaus, IFOMIS Saarbrücken / University at Buffalo / National Center for Biomedical Ontology, 2004–2007

Dirk Marwede, IFOMIS, Leipzig/Saarbrücken, 2004-2006

Boris Hennig, IFOMIS, Leipzig/Saarbrücken, 2004-2006

Mathias Brochhausen, IFOMIS, Saarbrücken, 2005-2006, University at Buffalo, 2010-2011

Ludger Jansen, IFOMIS Saarbrücken, 2005-2006

Christian Cocos, IFOMIS Saarbrücken, 2006

Jose L. E. Mejino, Jr. University at Buffalo / National Center for Biomedical Ontology, 2006

Robert Arp, University at Buffalo / National Center for Biomedical Ontology, 2007-2009

Albert Goldfain, Immune System Biological Networks: A Case Study in Improved Data Integration and Analysis (NIH / NIAID), University at Buffalo, 2008-2010

Leonard Jacuzzo, University at Buffalo / National Center for Biomedical Ontology, 2009

Kerry Trentelman, University at Buffalo / National Center for Biomedical Ontology, 2009-2010

Gian Paolo Terravechia, University at Buffalo, 2009

Mauricio B. Almeida, University at Buffalo, 2010-2011

William H. Mandrick, University at Buffalo, 2011

Selja Seppälä, University at Buffalo, 2012–2016

Jose Parente de Oliveira, University at Buffalo, 2016

David Kasmier, University at Buffalo, 2018-2019

David Limbaugh, ICPostdoc, University at Buffalo, 2018-2020

PH.D. DISSERTATIONS DIRECTED

- 1. Catherine J. Pearce, <u>Phenomenology of Time and Space</u>, University of Manchester, October 1991. Current employment: Her Majesty's Treasury, UK.
- 2. James DuBois, Reinach's Theory of Judgment, International Academy of Philosophy, Liechtenstein, June 1992. Published as <u>Judgment and Sachverhalt</u>. <u>An Introduction to Adolf Reinach's Phenomenological Realism</u>, Dordrecht/Boston/London: Kluwer Academic Publishers, 1995. Current employment: Steven J. Bander Professor of Medical Ethics, Washington University, St. Louis.
- 3. Balász Mezei, <u>World and Life-World. Aspects of the Philosophy of Edmund Husserl</u>, International Academy of Philosophy, Liechtenstein, June 1992. Published as World and Life-World, Frankfurt: Peter Lang, 1995. Current employment: Department of Philosophy, Eötvös Loránd University, Budapest
- 4. Paul Chu, A Small Gray Book about the Present, International Academy of Philosophy, Liechtenstein, November 1992
- Agnieszka Lekka-Kowalik, The Concept of Rationality in Natural Science, International Academy of Philosophy, Liechtenstein, January 1993. Current employment: Director and Vice-Dean, John Paul II Institute, Catholic University of Lublin, Poland
- 6. Aage Holter, <u>The Horizon of Choice: A Contribution to the Austrian Theory of Economics</u>, International Academy of Philosophy, Liechtenstein, May 1993; Current Employment: Kreative Norge, Norway
- 7. Michael Gorman, Ontological Priority, University at Buffalo, August 1993. Current employment: Department of Philosophy Catholic University of America
- 8. David Koepsell, The Ontology of Cyberspace, University at Buffalo, February 1997 (published as The Ontology of Cyberspace: Law, Philosophy, and the Future of Intellectual Property, Chicago: Open Court, 2000). Director of Research and Strategic Initiatives, Comisión Nacional de Bioética, Mexico, D.F.
- 9. Daniel Barwick, On the Nature of Concepts: An Essay in Metaphysics, University at Buffalo, April 1997. Current employment: Department of Philosophy SUNY Alfred
- 10. Leo Zaibert, <u>Intentionality and Blame: A Study in the Foundations of Culpability</u> (member of Ph.D. Committee), University at Buffalo, June 1997. Current employment: Chair, Department of Philosophy, Union College, Schenectady
- 11. Berit Brogaard, <u>Temporal Mereology</u>, University at Buffalo, November 1999. Current employment: Department of Philosophy, University of Miami
- 12. Gerold Erion, <u>Common Sense: An Investigation in the Theory of Ontology, Epistemology, and Moral Philosophy</u>, University at Buffalo, November 1999. Current employment: Professor of Philosophy, Medaille College, Buffalo
- 13. Ivonne Palares, Foundations of the Theory of Categories, University at Buffalo, November 1999. Current employment: Department of Philosophy, Universidad Autónoma del Estado de Morelos, Mexico
- 14. Alan Clune, <u>Using the World to Understand the Mind: Evolutionary Foundations for Ecological Psychology</u>, University at Buffalo, April 2000. Current employment: Department of Philosophy, Sam Houston State University
- 15. Gloria Zuniga, <u>A General Theory of Value: Axiology in the Central European Philosophical Tradition</u>, University at Buffalo, April 2000. Department of Philosophy, Ashford University
- 16. Michael Happold, <u>Information, Computation, and the Nature of Cognition: A Critique of Computational Approaches to Understanding and Creating Minds</u>, August 2000. Current employment: Senior Robotics Research Scientist at Neya Systems, LLC in Pittsburgh, PA
- 17. David Garren, Whose Life Is It Anyway: The Case Against Paternalism, March 2002. Current employment: Associate Professor, US Naval Academy, Annapolis

- 18. David Kaspar, <u>Wise Action: A Dissertation on Prudence and Morality</u>, October 2002. Current employment: St John's University, Staten Island Campus
- 19. Eric Little, <u>Moderate Materialism: Toward a Unified Ontology of Consciousness</u>, October 2002. Current employment: VP Data Sciences, Osthus
- 20. Adrienne McEvoy, <u>The Role of Empathy in Pain Management Decisions</u>, University at Buffalo, August 2002. Current employment: Mansfield University of Pennsylvania, Mansfield, PA
- 21. William Mandrick, <u>The Ontology of War</u>, University at Buffalo, April 2003. Current employment: Colonel, US Army.
- 22. Youngjin Kiem, <u>Prolegomena to a New Theory of Intentionality</u>, University at Buffalo, September 2004. Current employment: Assistant Professor, Kyonggi University, Suwon, Korea
- 23. Lowell Vizenor, Corporate Being: A Study in Realist Ontology, University at Buffalo, February 2006 Current employment: Chief Technology Officer at Securboration, Washington, DC.
- 24. Douglas Mayhew, <u>An Ontology of Natural Cognition. The Substance and Structure of Everyday Thought,</u> University at Buffalo, May 2007 (deceased)
- 25. Pierre Grenon, On Relations, University of Geneva, October 2007 (co-supervisor: Kevin Mulligan). Current Employment: Centre for Health Informatics, University College, London
- 26. Luc Schneider, <u>Kinds of Instances: A Logical and Metaphysical Inquiry into the Ontological Square</u>, University of Geneva, October 2007 (co-supervisor, Kevin Mulligan). Current Employment: Digital Curator National Library of Luxemburg
- 27. Nikoloz Tsikolia, <u>Mechanisms of carcinogenesis: A consideration of causality in the development and pathology of the living organism based on realistic ontology</u>, University of Leipzig, November 2007 (cosupervisor). Current employment: Department of Anatomy and Embryology, University Medical Center, Göttingen, Germany
- 28. Mark Niswonger, <u>Life at Its Edges: A New Look at the Persistence Conditions for Organisms</u>, University at Buffalo, November 2010. Current employment: Brown Mackie College, Cincinnati
- 29. A. Patrice Seyed, <u>A Method for Evaluating and Standardizing Ontologies</u>, University at Buffalo, December 2011 (co-supervisor). Current employment: Biomedical Ontology Engineer at 3M Health Information Systems, Troy, NY
- 30. Frédéric Tremblay, Resemblance Realism: A Theory of Universals, University at Buffalo, May 2014. Current employment, Immanuel Kant Baltic Federal University, Kaliningrad, Senior Research Fellow
- 31. William Duncan, <u>The Ontology of Computational Artifacts</u>, University at Buffalo, June 2014. Current employment: Assistant Professor of Oncology, Roswell Park Cancer Institute
- 32. Peter Koch, <u>A Theory of Patient Welfare</u>, University at Buffalo, 2016. Current employment: Assistant Professor, Villanova University, Villanova, PA
- 33. J. Neil Otte, <u>Moral Psychology: An Ontological Approach</u>, University at Buffalo, 2019. Current employment: Senior Ontologist, Applied Physics Lab, Johns Hopkins University

PRESENTATIONS AT PROFESSIONAL MEETINGS AND SYMPOSIA (Since 2010)

- Jan 2010 Disease Ontology, Northwestern University, Chicago, January 16-17 ("The Ontology for General Medical Science")
- Feb 2010 Ontology Summit 2010, on-line panel session, February 11 ("A Template for Ontology Training Programs")

 OBO Foundry Workshop, European Bioinformatics Institute, Wellcome Trust Genome Campus,

Hinxton, February 15-16, 2010 ("The Disease Ontology", "Basic Formal Ontology Version 2.0")
Pistoia Alliance Conference, European Bioinformatics Institute, Wellcome Trust Genome Campus, Hinxton, Cambridge, February 17-18 ("OBO Foundry: Recent Developments")

- Mar 2010 ARGOS: Transatlantic Observatory for Meeting Global Health Policy Challenges through ICT-Enabled Solutions, Consortium Meeting, Barcelona, Spain, March 15 (with Werner Ceusters)

 Ontology Summit 2010, National Institute for Standards and Technology (NIST), Gaithersburg, MD, March 15-16 ("What are we doing right, and what are we doing wrong, in ontology education")
- Apr 2010 First Paolo Bozzi Ontology Lecture, University of Turin, April 15 ("Towards a Theory of Document Acts")

 Third Annual Protein Ontology Meeting, University of Delaware, April 26-28 ("The OBO Foundry

in 2010")

FOIS Workshop on Ontology Education, University of Toronto, May 11 ("Creating a Common May 2010 Body of Knowledge for the Discipline of Ontology") Formal Ontology in Information Systems (FOIS), University of Toronto, May 12-15 ("Evaluating Ontologies" (with Mathias Brochhausen), "Dispositions and the Infectious Disease Ontology", with Albert Goldfain and Lindsay Cowell) Open Toxicology (OpenTox) Consortium Virtual Meeting, May 13 ("Introduction to OBO Ontology Development") 2010 International Workshop on Bio-Ontologies, Institute for Formal Ontology and Medical Information Jun Science, Saarland University, Saarbrücken, Germany, June 28 ("Classification Then and Now") La métaphysique appliqué: Séminaire des Treilles, Fondations les Treilles, Tourtour, France, June 29-July 2 ("Applied Ontology" and "BFO and Disease") Conference on Collective Intentionality VII, August 23-26, Basel, Switzerland ("New Foundations 2010 Aug for Social Ontology" and "Is Money a 'Product of Massive Fantasy'?") Joint Forces Command Next Generation Training Environment, Norfolk, VA, September 1 Sep 2010 ("Coordination Management Process for Ontology-Based Information Integration") Infectious Disease Ontology Workshop, 13th World Congress on Medical and Health Informatics (Medinfo 2010), Cape Town, South Africa, September 11, 2010 ("IDO and the OBO Foundry"), 13th World Congress on Medical and Health Informatics (Medinfo 2010), Cape Town, South Africa, September 13, 2010 ("A Unified Framework for Biomedical Terminologies and Ontologies", with Werner Ceusters) Oct 2010 Joint Forces Command Live, Virtual, Constructive Architecture Framework (LVCAF), Virginia Modeling and Simulation Center (VMASC), Suffolk, VA, October 4 ("Ontology Development Best Practices") Plant Ontology Workshop, New York Botanical Gardens, Bronx, NY, November 5 ("BFO and the Nov 2010 Plant Ontology") Transatlantic Observatory for Meeting Global Health Policy Challenges through ICT-Enabled Solutions, Argos Consortium Conference, Washington DC, November 12 ("Semantic Interoperability: Reuse of EHR Data", with Werner Ceusters) Disease Ontology Workshop and Advisory Board Meeting, Institute for Genomic Sciences, Feb 2011 University of Maryland, February 8-9 ("OGMS' Spawn") Ontology and Analytical Metaphysics, Open Research Centre for Logic and Formal Ontology, Keio University, Tokyo, February 24-25 ("Materials Towards an Ontology of Pain", "The Ontology of Documents") Mar 2011 National Center for Biomedical Ontology Project Meeting, March 1-3 ("Dissemination and Ontology Best Practices") Advancing Oral Health Worldwide, International Association for Dental Research General Meeting, San Diego, March 16 ("Development of the Field of Biomedical Ontology" and "Saliva Ontology: A Unique Controlled Vocabulary for Salivary Research") 2011 Jubileumsseminar Anders Grimsmo, Department of Public Health and General Practice, Apr Norwegian University of Science and Technology, Trondheim, April 7 (Keynote speech, "Toward an Ontological Treatment of Disease and Diagnosis") EviCare Workshop on Ontology and the Representation of Clinical Guidelines, Department of Computer and Information Science, Norwegian University of Science and Technology, Trondheim, April 8 ("An Introduction to Biomedical Ontology") Workshop on Ontology Driven Implementation of Semantic Services for the Enterprise Environment (ODISSEE), sponsored by US Federal Government, Alion Science and Technology and the National Center for Ontological Research, Washington DC, April 12-13 ("Coordinated Development of Ontologies Across Diverse Communities of Interest") Ratio Conference on Metaphysics, Reading University, Reading, United Kingdom, May 7 May 2011 ("Classifying Diseases") ARGOS Transatlantic Observatory for Meeting Global Health Policy Challenges through ICT-Enabled Solutions, Budapest, Hungary, May 11 ("An Evolutionary Strategy for Incremental Realization of Genuine Semantic Interoperability in the EHR Domain") Jun 2011 Ontology-Based Research on Medicare/Medicaid Data, School of Pharmacy and

Pharmaceutical Sciences, University at Buffalo and Department of Pharmacological Sciences,

		Stony Brook University, June 15 ("Biomedical Ontology in Buffalo")
		How to Build Ontologies for Clinical and Translational Research, Department of Human
		Genetics, Emory University, June 29, 2011 ("Review of ONSTR: the Ontology for Newborn Screening Translational Research")
Jul	2011	International Conference on Biomedical Ontology (ICBO), Buffalo, NY, July 28-30, 2011 ("Panel:
ou.	2011	Collaborative Ontology Development: Why? and How?")
		Working with Multiple Biomedical Ontologies. Workshop organized in conjunction with the
		International Conference on Biomedical Ontology (ICBO), Buffalo, NY, July 26-27, 2011 ("Towards a Body Fluids Ontology: A Unified Application Ontology for Basic and Translational
		Science" and "Coordination of Multiple Biomedical Ontologies: Basic Methodological Principles")
Sep	2011	12th Genomic Standards Consortium Meeting (GSC 12), Max Planck Institute for Marine
		Microbiology, Bremen, September 28-29 ("The World Wide Web Consortium (W3C)", "An Introduction to Ontology as a Strategy for Data Integration", "The Structure of the Environment
		Ontology")
Nov	2011	Research Data: Management, Access and Control, University Libraries, University at Buffalo,
		November 14 ("Ontologies: What Librarians Need to Know") Visual Learning Lab (VLL), Budapest University of Technology, November 3 ("How Vision Works"
		(remote presentation))
		Semantic Technology for Intelligence, Defense and Security (STIDS 2011), George Mason
		University, Fairfax, VA, November 16-17 ("Integration of Intelligence Data through Semantic Enhancement" (with David Salmen); "Semantic Enhancement for Data Retrieval and Integration
		in the Cloud")
Jan	2012	What Are Artworks and How Do We Experience Them, Winter Symposium, Aarhus University, Denmark, January 26-28 ("The Emotion Ontology")
Feb	2012	Interdisciplinary Ontology Conference (InterOntology12), Keio University, Tokyo, February 23
		("On Classifying Material Entities in Basic Formal Ontology")
		Ontology for Big Systems, Ontology Summit 2012, on-line symposium, February 9 ("Big Data that would benefit from ontological technology")
Mar	2012	Financial Reference Data Management Conference (FIMA 2012), New York, March 21
		("Reference Data Integration: A Strategy for the Future")
		Gradualist Approaches to Health and Disease: Philosophical, Medical and Legal Perspectives, Humboldt University, Berlin, March 23-25 ("Disease, and Other Clinical Natural Kinds")
Apr	2012	UK Ontology Network. Connecting the UK Ontology Community, University of Manchester, April
Jun	2012	12 ("Looming Ontology Chaos") Conference on Immunology Ontologies and Their Applications in Processing Clinical Data,
Juli	2012	National Center for Biomedical Ontology, Buffalo, NY. June 11-13 ("Bio-Ontologies for
		Immunology Research: An Introduction")
Jul	2012	<u>Towards an Ontology of Mental Functioning, ICBO Workshop</u> , Medical University of Graz, Austria, July 22 ("Mental Functioning and the Ontology of Language")
		How to Deal with Sectarianism in Biomedical Ontologies, 3rd International Conference on
		Biomedical Ontology (ICBO), Medical University of Graz, Austria, July 23 ("What causes sectarianism in ontology development and how to alleviate it?")
Aug	2012	Basic Formal Ontology 2.0 Preliminary Development Workshop, Center of Excellence in
		Bioinformatics and Life Sciences, National Center for Ontological Research. August 18-19 ("Main Features of BFO 2.0")
Sep	2012	Genomic Standards Consortium 14th Annual Conference, Biocode Commons Hackathon,
		Oxford, September 18-20 ("Sample Ontology for Biodiversity Genomics", "Critical Review of EnvO 2.0")
Oct	2012	<u>Semantic Technology for Intelligence, Defense and Security</u> (STIDS), George Mason University, Fairfax, VA, October 23-25 ("Horizontal Integration of Warfighter Intelligence Data")
Nov	2012	<u>Austrian Thought at the Turn of the 20th Century</u> , University of Texas, Arlington, TX, November 1-3 ("Ontology and the Austrian Tradition")
Dec	2012	<u>Visual Learning: Communication - Cognition - Curriculum,</u> International Conference, Budapest
		University of Technology and Economics, December 7-8 ("Diagrams and Time" Slides)

Briefing to Chief of Naval Operations Strategic Studies Group (SSG), Naval War College, Newport, RI, December 18 ("Towards Joint Doctrine for Military Informatics")

Feb 2013 <u>Building Ontologies to Meet Evaluation Criteria</u>, Ontology Summit 2013, Session-04, February 7 ("Ontological Realism as a Strategy for Integrating Ontologies")

<u>Clinical and Translational Science Ontology Workshop</u>, Orlando, FL, February 11-12 ("<u>Limning</u> the CTSA Ontology Landscape")

<u>Phenotype Ontology Research Coordination Network Summit</u>, National Evolutionary Synthesis Center, Duke University, Durham, NC, February 24 ("On the Future of the Neuro Behavior Ontology and Its Relation to the Mental Functioning Ontology")

- Apr 2013 Ontologies for Information Integration, National Center for Ontological Research, Buffalo, NY, April 18 ("The Role of Ontology in the Era of Big (Military) Data")
- May 2013 <u>Basic Formal Ontology 2.0 Development Workshop</u>, National Center for Ontological Research, University at Buffalo, May 13 ("The BFO 2.0 Specification")

PRO-PO-GO: Challenges of Ontology Coordination Across Organisms, Plant Ontology Consortium, Protein Ontology Consortium and National Center for Biomedical Ontology, Buffalo, NY, May 15-16 ("Critique of the Phenotype Ontology and of the Trait Ontology" and "Species-Neutral vs. Multi-Species Ontology")

<u>Information Systems and the Four-Category Ontology</u>, University of Durham, May 21 ("<u>The Six Category Ontology</u>: <u>BFO and Its Applications</u>")

Talk About What You See: Objects, Colors, Sounds and Trajectories. Conference in Memory of Paolo Bozzi, University of Trento, Italy, May 30-31 ("Figure and Ground in Time", "Applications of Bozzi's Naïve Physics")

- Jun 2013 Bioinformatics and Computational Biology in the Era of Big Data, University at Buffalo, June 6 ("Biomedical Ontology in Buffalo")
- Jul 2013 <u>International Workshop on Definitions in Ontologies</u>, co-located with the International Conference on Biomedical Ontology (ICBO), Montreal, Canada, July 7 (Keynote lecture: "An Introduction to the Logic of Definitions")

International Conference on Biomedical Ontology (ICBO), Montreal, Canada, July 8-9 ("Ontological-Based Annotation of Contextualized Vital Signs" (with Albert Goldfain); "What Constitutes a Result in Ontology Research?" (Panel); "Representing Disease Courses: An Application of the Neurological Disease Ontology to Multiple Sclerosis Typology" (Poster presentation))

- Aug 2013 <u>Bioethics and the Philosophy of Medicine</u>, PANTC Conference, University at Buffalo, August 2-3 ("Diseases, Diagnoses, Signs and Symptoms")
- Sep 2013 ImmPort Site Visit, NIAID Bioinformatics Integration Support Contract (BISC), Stanford University, September 3 ("Immune-Related Ontologies")

<u>ImmPort Ontology Conference</u>, NIAID Bioinformatics Integration Support Contract (BISC), Stanford University, September 4-5 ("A Debate on Strategies for Use of Ontologies in ImmPort" (with Alan Ruttenberg))

ImmPort External Advisory Board Meeting, NIAID, Bethesda, MD, September 12 ("The Rho Strategy for Empirical Testing of Ontology Methods")

Rostock Symposium on <u>Systems Biology and Bioinformatics in Aging Research</u>, Institute for Biostatistics and Informatics in Medicine and Ageing Research, Rostock, Germany, September 20-21 (Keynote address: "<u>Ontology of Aging and Death</u>")

 ${\it CUBRC-CMIF-NCOR~Collaboration~Meeting,~CUBRC,~Buffalo,~23~September~("Ontology~Research~and~Opportunities")}$

Oct 2013 NCBO SAB Meeting, Stanford, CA, October 1-2 ("NCOR Dissemination")

<u>Training and Strategy for ImmPort Data Submitters</u>, Rho Federal Systems Division, Chapel Hill, NC, October 9-10 ("A Practical Introduction to ImmPort and to NIH Mandates for Data Sharing and Reuse", "Introduction to Allergy Ontology")

<u>Philosophy of Emerging Media</u>, College of Communication, Boston University, October 25-27 ("<u>Towards Emerging Media Science</u>" and "Media and Agency")

Nov 2013 Globalization and Documentality, Käte Hamburger Kolleg / Center for Advanced Study,

		Office sty of Bollin, November 15 (off-line presentation. Bootherts and Wassive Gooda Agency)
		8th International Conference on Semantic Technologies for Intelligence, Defense, and Security (STIDS 2013), George Mason University, Fairfax, VA, November 12-15 ("IAO-Intel: An Ontology of Information Artifacts in the Intelligence Domain")
Jan	2014	Big Data and Semantic Web Meet Applied Ontology, Ontology Summit 2014 Launch Event, January 14 ("Introduction on behalf of the National Center for Ontological Research"; on-line presentation)
Feb	2014	Humanomics Research Centre Opening Seminar, University of Copenhagen, February 7, ("The Philosophome: An Exercise in the Ontology of the Humanities")
Apr	2014	Ontologie und Zeit, Saarland University, Saarbrücken, Germany, April 26 ("Eine Korrespondenztheorie von Graphen")
		<u>Philosophy of Medicine Seminar Series</u> , King's College, London, April 29 ("The Ontology of Disease") <u>Video</u>
May	2014	Consequences of Realism, Rome, May 4-6 ("The Fifth Cycle of Philosophy")
		HIMA Imaging Science Workshop, Pathology Informatics 2014, Pittsburgh May 13 (" <u>A Guide to Ontology for the Pathologist of the Future</u> ")
Jun	2014	<u>The Ends of Life – Deepening Reflections on Bioethical Issues at the Beginning and End of Life,</u> Edmond J. Safra Center for Ethics, Tel Aviv University, Israel, June 8-10 (" <u>The Ontology of Aging and Death</u> ")
		<u>Protein Ontology Workshop</u> , Georgetown University, DC, June 19 (" <u>Introduction to the Relation Ontology</u> ")
		Ontology and Imaging Informatics, University at Buffalo, NY, June 23-25 ("Introduction to Ontology for Pathology Imaging")
Aug	2014	<u>Bioethics and the Philosophy of Medicine</u> , 2014 PANTC Conference, University at Buffalo, August 1-2 (" <u>Ontology of Aging</u> ")
		Clinical and Translational Science Ontology Group, August 12, Online Presentation on Imaging Ontologies
		American Society of Mechanical Engineers (ASME) International Design Engineering Technical Conference and Computers and Information in Engineering (IDETC/CIE), Buffalo, August 17-20 (Keynote Lecture, "Ontological Engineering")
Sep	2014	Inaugural Conference of the World Interdisciplinary Network for Institutional Research (WINIR), Old Royal Naval College, Greenwich, London, September 12 (Keynote address: "From Speech Acts to Document Acts: An Ontology of Institutions").
		Formal Ontology in Information Systems (FOIS), Rio de Janeiro, September 21-25 ("The Fifth Cycle of Philosophy: Eulogy for Nicola Guarino"; "Applying the Realism-Based Ontology-Versioning Method for Tracking Changes in the Basic Formal Ontology", with Selja Seppälä)
Oct	2014	International Conference on Biomedical Ontology (ICBO), Houston, TX, October 8-11 (MedDRA technical workshop and panel; "Creating a MedDRA ontology"; NASA Panel, "The Ontology for
		General Medical Science"; Presentation: " <u>Data Wrangling Clinical Research Datasets using Ontology and Referent Tracking</u> ", with Werner Ceusters; Lightning talk: " <u>Ontological Representation of CDC Active Bacterial Core Surveillance Case Reports</u> ")
		<u>Truth, Image, Normativity, University of Cagliari, Sardinia, October 21-26 ("The Division of Deontic Labor")</u>
Nov	2014	Semantic Technology for Intelligence, Defense and Security (STIDS 2014), George Mason University, Fairfax, VA, November 18-20 ("A Computational Framework for Living Plan Specification, Execution and Evaluation" (with Erik Thomsen); "An Ontological Approach to Territorial Disputes" (with Neil Otte and Brian Donohue); Panel: Semantics for Collaboration ("Collaboration Through Military Doctrine"))
		Leveraging Standards and Ontologies to Improve HIPC Data Submission and Analysis, National Institute of Allergy and Infectious Diseases (NIAID), Rockville, MD, November 19 (" <u>Leveraging Ontologies for Human Immunology Research</u> ")
Feb	2015	United Nations Environment Program, New York, Feb 27-Mar 1, Senior Expert Meeting on Ontology of Indicators for Sustainable Development ("Environment Ontology and Ecosystems: Basic Examples")

University of Bonn, November 19 (on-line presentation: <u>Documents and Massive Social Agency</u>)

Internet of Things: Toward Smart Networked Systems and Societies. Ontology Summit 2015. Mar 2015 Beyond Semantic Sensor Network Ontologies, March 5 ("Ontology of Sensors; Some Examples from Biology") American Philosophical Association, Pacific Division Meeting, Vancouver, BC, Canada, April 2 2015 Apr ("Towards an Ontology of Philosophy") Philosophy as Science: A Key Idea of the 19th Century, Utrecht, Netherlands, April 9 (Keynote address: "Metaphysics after Darwin") Advanced Defense Studies Institute, Italian Ministry of Defense, Rome, April 24 ("New Foundations for Military Ethics") HIMA Imaging Science Workshop, Pathology Informatics 2015, Pittsburgh, May 5 ("An May 2015 Introduction to Biomedical Ontology for Imaging Informatics") Briefing on "Ontology for Military Doctrine", Department of Defense Training and Doctrine Command (TRADOC), May 11, Pentagon, Washington, DC The Role of Ontology in Big Cancer Data, National Cancer Institute, Bethesda, MD, May 12-13 ("The Cancer Ontology Landscape") United Nations Environment Programme, New York, May 16-18, Senior Expert Meeting on Ontology of Indicators for Sustainable Development ("The SDG Ontology Framework") Medical Informatics Europe, Madrid, Spain, May 27-31 (Lecture: "Biomarkers in the Ontology for General Medical Science"; Panel: "Basic Formal Ontology Meets Critics") 2015 Joint CUBRC / Air Force Research Laboratory, Wright Patterson Air Force Base IT Summit, June Jun 25 ("BFO and the Joint Doctrine Formalization Initiative") Jul 2015 Workshop on the Ontology of Chemistry, Department of Chemistry, University of Southampton, United Kingdom, July 20 ("Introduction to BFO and OBI"; "Building a Chemical Image Ontology") Taking Pregnancy Seriously in Metaphysics: The Foetus and The Maternal Organism, University of Southampton, United Kingdom, July 21 ("Embryontology", Video) International Conference on Biomedical Ontology (ICBO), Lisbon, Portugal, July 27-31 ("Aboutness: Towards Foundations for the Information Artifact Ontology" with Werner Ceusters) Aug 2015 Bioethics and Philosophy of Medicine, 2015 PANTC Conference, July 30-August 1 ("The Emotion Ontology", "Video") INCITS/DM32.8 Meeting, August 24 ("On the Need for a Common Standard Upper Ontology") Air Force Research Lab – Navy Distributed Operations Summit, August 26 ("Joint Ontology") Federal Big Data Working Group (on-line presentation), August 31 ("Building Ontologies with Basic Formal Ontology") Sep 2015 Briefing to Joint Doctrine Staff, Pentagon, September 4 ("Joint Doctrine Ontology") Information Meeting on Joint Doctrine Ontology, Multi-Agency Collaborative Environment (MACE) Center, Herndon, VA, September 16-17 ("Addressing DoD information and coordination Ontology in Practice: Fourth Clinical and Translational Science Ontology Workshop, Charleston, SC, September 23-25 ("FHIR and Ontology") HelsIT: Health Information Technology, Trondheim, Norway, October 20 (Keynote lecture: "The Oct 2015 Glory and Misery of Electronic Health Records") Symposium on Military Codes of Ethics, University at Buffalo, November 2 ("Building an Ethical Nov 2015 Warfighter") Planteome Curation Workshop: Ontology Curation and Data Annotation, Oregon State University, Corvallis, November 9-10 ("What do plant scientists need ontologies for?" and "Trait Ontology: Introductory discussion") International Standards Organization (ISO) Committee on MetaData Standards, National Cancer Institute, Bethesda, MD, November 18 ("Common Ontology Standards") Semantic Technology for Intelligence, Defense and Security (STIDS 2015), George Mason University, Fairfax, VA, November 18-20 ("Joint Doctrine Ontology: A Benchmark for Military Information Systems Interoperability")

("Joint Doctrine Ontology: Interim Report")

56th Joint Doctrine Planning Conference, Joint Warfighting Center, Suffolk, VA, November 5

Digital Thread / Digital Twin Applications for Next Generation and Legacy Aerospace Systems Dec 2015 and Engines, Kick-Off Meeting, Wright Brothers Institute, Dayton, OH, December 4 ("Ontology Development for Air Force Logistics") Federal Big Data Working Group (on-line presentation), December 7 ("Joint Doctrine Ontology") 2016 KAUST Research Conference on Computational and Experimental Interfaces of Big Data and Jan Biotechnology, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia, Jan 25-27 ("The Glory and Misery of Electronic Health Records") Workshop on BFO and the Ontology of Deontic Entities, University of Florida School of Medicine, Feb 2016 Gainesville, FL, February 17-19 ("Developing a Framework of Ontologies for Social Entities") Completing the Model Based Development, Digital Manufacturing and Design Innovation Apr 2016 Institute (DMDII) Technical Interchange Meeting, National Institute of Standards and Technology (NIST), Gaithersburg, April 11 ("Coordinated Holistic Alignment of Manufacturing Processes (CHAMP)") 2016 Ontological Approaches to Sensor Data Analysis, National Center for Geographic Information May and Analysis, Buffalo, NY, May 19-20 ("The Ontology of Sensors: A Critical Overview") 57th Joint Doctrine Planning Conference, Joint Warfighting Center, Suffolk, VA, June 1-2 ("Joint Jun 2016 Doctrine Ontology: Progress Report") International Standards Organization (ISO/IEC JTC 1/SC 32/WG 2), Memphis, TN, June 14-15 ("Basic Formal Ontology: New Work Item Proposal") Perspectives on Deontology from Early Phenomenology and Contemporary Philosophy. 2016 Jul Workshop with Barry Smith, University of Geneva, July 6, 2016 ("Deontology Ontology: Towards an Ontology of Deontic Entities") Video 9th International Conference on Formal Ontology in Information Systems (FOIS 2016), Annecy, France, July 6-9 ("The Functions of Definitions in Ontologies", with Selja Seppälä and Alan Ruttenberg; "Permanent Generic Relatedness and Silent Change", with Niels Grewe and Ludger Jansen [winner of FOIS/IAOA Ontology Competition]) Bioethics and the Philosophy of Medicine, PANTC Conference, University at Buffalo, July 30 ("The Metaphysics of the Embryo") International Conference on Biological Ontology, Corvallis, OR, August 1-4 ("The Ontology of the Aug 2016 Organigram", "The United Nations Environment Program Sustainable Development Goals Ontology", Panel: The Future of Ontology) Addressing the Big Data Challenges of Pathology Imaging through Biomedical Ontology, National Cancer Institute, August 15 ("Ontology and Quantitative Histopathology", with Alan Ruttenberg) Sep 2016 Clinical Terminology Shock and Awe, University at Buffalo, September 7-8 ("Clinical Terminology: Shock and Awe") Turbine Engine Technology Symposium (TETS), Wright-Patterson AFB, Dayton, OH, September 12 ("Propulsion Digital Thread/Digital Twin Spiral 0.1: Use of Ontology in Digital Thread") Intelligence Support to Command and Control Working Group (ISC2WG), Pentagon (JS, J6 and Oct 2016 J2), October 12 ("Joint Doctrine Ontology") Top-Level Ontologies, UB Ontology Group, October 21 ("Proposed ISO Top Level Ontology Standard") Big Data – Herausforderung für Wissenschaft und Gesellschaft, ZiF Zentrum for interdisziplinäre Forschung, Universität Bielefeld, October 25 ("Die Datenwelt von Morgen") (Video) Normative Drawings and Deontic Artifacts, University of Cagliari, Sardinia, October 27-28, 2016 ("The Ontology of the Organigram") (Video) Nov 2016 International Standards Organization (ISO) Committee on Metadata Standards, Oxford, UK, November 10 ("Proposed Top Level Ontology Standard Parts 1 and 2") First Industrial Ontology Foundry Workshop, Systems Integration Division, National Institute of Dec 2016 Standards and Technology (NIST), Gaithersburg, MD, December 8 ("How to Build the Industry Ontology Foundry", "Draft of a Product Lifecycle Management Ontology" (with Dimitris Kiritsis) The Metaphysics of Quantities, Istituto di Studi Filosofici, Facoltà di Teologia di Lugano, February Feb 2017 2-3 ("Quantities as Fiat Universals") (Video)

		FOUST Workshop on Foundational Ontologies, Bolzano, February 27-28 ("Basic Formal Ontology: An Overview" Video)
Apr	2017	<u>Second Industry Ontology Foundry Workshop</u> , National Institute of Standards and Technology (NIST), Gaithersburg, MD, April 10-11 (Panel presentation: " <u>Comparing Upper Level Ontologies</u> ")
May	2017	Ontology Summit 2017 Symposium, National Institute for Standards and Technology (NIST), Gaithersburg, MD, May 15-16 (Keynote address: "The Industry Ontology Foundry")
Jun	2017	<u>Franz Brentano Centenary 1838–1917,</u> University of Vienna, June 1 (" <u>Four Phases of Philosophy and Its Present State</u> ")
		International Standards Organization (ISO) Committee (JTC1/SC32/WG2) on Metadata Standards, Okayama, Japan, June 20 ("Draft Top-Level Ontology Standard, Parts 1 and 2")
Jul	2017	Romanell Conference 2017: Personal Identity and Our Origins, University at Buffalo, July 28-29 ("Personae")
Aug	2017	A Strategy for Promoting Data Interoperability Across the Enterprise, workshop organized as part of the ASME 2017 International Design Engineering Technical Conferences (IDETC) and Computers & Information in Engineering Conference (CIE) (IDETC/CIE). Cleveland, OH, August 6 ("Introduction to BFO and the Industry Ontologies Foundry", Video)
Aug	2017	<u>IAOA Summer Institute on Upper Ontologies</u> , University of Toronto, August 8-11 (" <u>Why do we need upper-level ontologies?</u> ", " <u>Relationships between upper-level ontologies</u> ", <u>Slides</u>)
Sep	2017	Second Workshop on Representing Social and Legal Entities in the Biomedical Domain, International Conference on Biomedical Ontology (ICBO), Newcastle, UK, September 13 (Keynote lecture on "Functions, Dispositions and Capabilities", Video, online)
		Nankai University Workshop on the Philosophy of Economics and the Social Sciences, Tianjin, P.R. China, September 25-26 ("Goods vs. Services: An Ontological Exploration", Video)
		<u>Journées sur l'Interopérabilité des Applications d'entreprise</u> (JIAE), conference of the Virtual Interoperability Lab, September 28-29 (" <u>The Vision of the Industry Ontologies Foundry</u> ", online)
Oct	2017	3rd Big Data Interagency Working Group (BDIWG) Workshop on an Open Knowledge Networks: Enabling the Community to Build the Network, National Institutes of Health, Bethesda, MD, October 4-5 ("Manufacturing 1", "Manufacturing 2")
		ASM International, Materials Properties Database Committee, Pennsylvania, PA, October 8 ("Introduction to the Industry Ontologies Foundry", on-line presentation)
		<u>Protein Ontology Consortium Workshop 2017</u> , Bar Harbor, MN, October 11-12 ("How To Define 'Causally Upstream Of")
		<u>Microbiology for the CTSA: Ontological Approaches</u> : Sixth Clinical and Translational Science Ontology Workshop, University of Michigan, Ann Arbor, October 24-25 ("Building a Microbiome Ontology")
Nov	2017	European Materials Modelling Council (EMMC) Workshop on Interoperability in Materials Modelling, St John's Innovation Centre, Cambridge, UK, 7-8 November ("Introduction to the Industry Ontologies Foundry", online)
		International Standards Organization (ISO) Committee on MetaData Standards, University of Colorado, Anschütz, OR, November 28 ("ISO NWIP: Top-Level Ontologies")
Apr	2018	Boston Phenomenological Circle Symposium, Boston College and Boston University, April 13-14 ("The Ontology of Emotions", Video)
		<u>Capabilities: Human and Machine</u> , Workshop, University at Buffalo School of Engineering and Applied Sciences, April 20 (" <u>What are Capabilities?</u> ", <u>Video</u>)
		Medical Informatics Europe (MIE 2018), April 23-26 Gothenburg ("Bruxism", with Werner Ceusters)
		Metaphysics and Formal Ontology, Dynamis: Finnish Network of Metaphysics, Tampere, April 27 (Keynote Lecture, " <u>Driverless Philosophy</u> " <u>Video</u>)
May	2018	Ontology Summit 2018, NIST, Washington DC, May 1 ("The Great Debate: John Sowa vs. Barry Smith", Video of BS contribution, Audio of Entire Debate, Audio of closing exchanges)
Jun	2018	Society for Automotive Engineers Automated and Connected Vehicle Systems Testing Symposium, June 20–21, 2018 Hosted by Clemson University – International Center for

		Automotive Research (CU-ICAR) Carroll A. Campbell Jr. Graduate Engineering Center, 5 Research Dr, Greenville, SC 29607 (Keynote Lecture: "Ontology: Tool for Broad Spectrum Knowledge Integration" Video)
Jul	2018	Industrial Ontologies Foundry Workshop, Buffalo, July 18-19 ("The Industrial Ontologies Foundry: Introduction", "Diversity of ontologies inside and outside the IOF")
		Navy Model-Based Systems Engineering Transformation Technical Interchange Meeting, San Diego, July 25-26 ("Ontology for Systems Engineering")
		Romanell Philosophy of Medicine and Bioethics Conference 2018, University at Buffalo, July 28-29 ("Capabilities")
Aug	2018	256th, American Chemical Society National Meeting (Invited lecture: "Big Chemistry Data")
Sep	2018	Navy SYSCOM and DoD Ontology Workshop, Engility, Washington DC, September 18-19 ("Ontology and the Navy SYSCOMs Systems Engineering Transformation Process")
Oct	2018	DOCAM Conference: Annual Meeting of the Document Academy, Turin, October 4-6 (Keynote Lecture: "Documentome")
Nov	2018	The Philosophy of Achille Varzi on the Occasion of His Un-Birthday, November 5, Department of Philosophy, University of Milan ('Some Neglected Parts", online)
		International Standards Organization (ISO) Committee (JTC1/SC32/WG2) on Metadata Standards, Sendai, Japan, November 9 ("ISO/IEC 21838")
Feb	2019	<u>International Industrial Ontologies</u> , Det Norske Veritas, Oslo, Norway, February 4-7, 2019 (" <u>Industrial Ontologies Foundry: An open, shared reference ontology framework</u> " <u>Video</u>)
		Ontology for Precision Medicine: From Genomes to Public Health, Orlando, FL February 20-21 ("The Mental Functioning Ontology")
May	2019	<u>The Ontology of Economics: Capital, Exchanges and Preferences,</u> Institute of Philosophy, University of Neuchâtel. May 8 (" <u>The Ontology of Human Capital</u> ")
Jul	2019	Romanell Summer Conference on Death, Disease, and Identity, University at Buffalo, NY July 25-27 ("Minds made of Software vs. Minds made of Flesh")
		International Conference on Biomedical Ontology (ICBO), University at Buffalo, Buffalo NY, July 30 ("Foundations for a Realist Ontology of Cognitive Processes", with D. Kasmier and D.Limbaugh; "Warranted Diagnosis", with D. Limbaugh and W. Ceusters; "Mental Capabilities", with E. Merrell, D. Limbaugh and A. Anderson)
		International Conference on Biomedical Ontology (ICBO), University at Buffalo, Buffalo NY, August 1 (Keynote: "Identity and Immortality" (Video); "Ontology as Product-Service System: A Study of GO, BFO and DOLCE" (Video); Panel on Opportunities for collaboration between the OBO Foundry community and SNOMED)
Aug	2019	<u>25th International Conference on Production Research — Manufacturing Innovation: Cyber Physical Manufacturing</u> , Chicago, August 13 (Keynote: " <u>What is a Cyber-Physical System?</u> ")
Sep	2019	Joint Ontologies Workshop (JOWO) 2019, Graz, Austria, September 23-25 ("A First-Order Logic Formalization of the Industrial Ontology Foundry Signature Using Basic Formal Ontology", "Toward an Ontology of Commercial Exchange")
Oct	2019	Protein Ontology Consortium Workshop, Georgetown University Medical Center, October 23-24 ("Basic Formal Ontology and Ontology for General Medical Science")
Nov	2019	Rudolf Haller und die Österreichische Philosophie, University of Graz, 8-9 November ("Wittgenstein und der Turing Test", Video)
		Ontology Technical Exchange, Johns Hopkins University Applied Physics Lab, November 14, 2019 ("How to Build an IC / DoD Foundry")
Dec	2019	<u>Industrial Ontologies Foundry Meeting</u> , National Institute for Standards and Technology (NIST), December 4-5 ("Ontology Workflow Management")

WORKSHOPS AND CONFERENCES ORGANIZED

Mar	1977	Senses, Propositions, and States of Affairs, Department of Philosophy, University of Sheffield,
		March 4-5

Jun 1977 <u>Hegel and Husserl Workshop</u>, Department of Philosophy, University of Warwick, June 2-3

Dec	1977	Ontology and the Philosophy of Number, Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, December 2-3
Jan	1978	Wittgenstein and the Background of Austro-German Philosophy, Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, January 21-22
Feb	1978	Colloquium, Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, February 10-12
Mar	1978	The Philosophy, Literature and Arts of Austria-Hungary, Seminar for Austro-German Philosophy in Conjunction with the Institute of Contemporary Arts, London, March 11
Apr	1978	<u>Diverse Approaches to the Theory of Language, Seminar for Austro-German Philosophy and Department of Philosophy</u> , University of Sheffield, England, April 7-8
May	1978	Whole-Part Theory and the History of Logic, Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, May 12-13
Jul	1978	Kant and Husserl: Varieties of Idealism, Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, July 1-2
Sep	1978	<u>Psychology, Logic and Ontology</u> , Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, September 29-30
Nov	1978	<u>Phenomenology and Value Theory</u> , Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, November 24-25
Jan	1979	Origins of the Twentieth Century, Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, January 27-28
May	1979	<u>Phenomenology and Social Rules</u> , Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, May 4-5
Jun	1979	On Austrian Methodology, Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, June 1-2
Jul	1979	Men Without Qualities: Philosophy and Literature in Austria and Germany, Seminar for Austro-German Philosophy and the Institute of Contemporary Arts, London, July 7-8
Nov	1979	<u>Human Action and the Social Sciences</u> , Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, November 10-11
Dec	1979	<u>Grammar and the Begriffsschrift: A Centenary Celebration,</u> Seminar for Austro-German Philosophy, Bedford College, London, December 15-16
Feb	1980	Formal Logic and Formal Ontology in Husserl's Logical Investigations, Seminar for Austro-German Philosophy and the Higher Institute of Philosophy, University of Louvain, Belgium, February 2-3 (Peter Simons and Barry Smith, "Synthetic A Priori Structures")
Apr	1980	<u>Austrian Philosophy and Austrian Politics</u> , Seminar for Austro-German Philosophy, the Carl Menger Society, and the Institute of Contemporary Arts, London, April 26-27
May	1980	Meaning and Structure, Seminar for Austro-German Philosophy and Department of Philosophy, University of Manchester, May 17-18
Nov	1980	A Seminar on the History of Logic, Seminar for Austro-German Philosophy and Department of Philosophy, University of Manchester, November 22-23
Jan	1981	A Symposium to Mark the Centenary of the First Edition of Kant's <i>Critique of Pure Reason</i> , Seminar for Austro-German Philosophy and the Northern Association for Philosophy, Manchester, January 31.
Mar	1981	<u>Phenomenology and its Applications</u> , Seminar for Austro-German Philosophy, University of Edinburgh, March 6-7
May	1981	Objects of Thoughts, Seminar for Austro-German Philosophy, Queen's College, London, 23-24 May
Jun	1981	<u>Leibniz, Bolzano und die neue Ontologie</u> , Seminar for Austro-German Philosophy and Institut für Philosophie, University of Salzburg, June 6-7
Feb	1982	<u>Formal Ontologies</u> , Seminar for Austro-German Philosophy and Department of Philosophy, University of Manchester, February 5-6
Mar	1982	<u>The Austro-German/Scottish Axis</u> , Seminar for Austro-German Philosophy and Department of Philosophy, University of Edinburgh, March 18-20 ("Relations of Ideas and A Priori Structures: Material Ontology from Hume to Husserl")
Jun	1982	Intentionalität als objektiver Bezug: Die Philosophie von Roderick M. Chisholm, Seminar for Austro-German Philosophy and Institut für Philosophie, University of Salzburg, June 10-11

		("Intentionality, and Related Matters")
Aug	1982	<u>Ehrenfels-Konferenz</u> , Seminar for Austro-German Philosophy, sponsored by the Niederösterreichische Landesregierung, Schloss Lichtenau, Lower Austria, August 31-September 3
Jan	1983	Acts, Actions and Accidents, Seminar for Austro-German Philosophy and Bochum Cognitive Science Group, University of Bochum, January 7-8 ("Intentionality and the Theory of Relations")
Feb	1983	Realism and the Philosophy of Science, Seminar for Austro-German Philosophy and Northern Association for Philosophy, Manchester Polytechnic, February 25-26 (Jeremy Shearmur and Barry Smith, "Dialogues Concerning Naturalistic Realism")
Dec	1983	<u>Symposium Adolf Reinach</u> , Seminar for Austro-German Philosophy and Centrale Interfaculteit, University of Utrecht, December 9
Jun	1984	<u>Foundations of Cognitive Psychology: The Work of Köhler, Selz and Lewin,</u> Symposium of the Werner Reimers-Stiftung and the Seminar for Austro-German Philosophy, Bad Homburg, Germany, June 18-20
Dec	1984	Zur Philosophie und Sprachtheorie Anton Martys, Seminar for Austro-German Philosophy and University of Fribourg, Switzerland, December 7-9
May	1985	<u>Phenomenology and Gestalt Theory. The History and Contemporary Relevance of Formal Ontology,</u> Seminar for Austro-German Philosophy and Ecole des Hautes Etudes en Sciences Sociales, Paris, May 2-6
		<u>Symposium: Aspects of Continuity</u> , Seminar for Austro-German Philosophy, University of Manchester, May 10-11 ("What is a Boundary?")
Aug	1985	<u>Kunstgefühl, Sprachgefühl, Rechtsgefühl: Zum Problem des praktischen Wissens,</u> Seminar for Austro-German Philosophy and Forschungsstelle für Österreichische Philosophie, Schloss Lichtenau, Lower Austria, August 26-27
Dec	1985	<u>Symposium Alexander Pfänder</u> , Seminar for Austro-German Philosophy and Centrale Interfaculteit, University of Utrecht, December 13
Nov	1986	<u>100 Years of Polish Philosophy: An International Conference,</u> Seminar for Austro-German Philosophy, University of Manchester, November 14-15
Mar	1989	Computer und Bildung. Praktische und theoretische Aspekte, International Academy for Philosophie, Schaan, Liechtenstein, March 31, 1989
Mar	1992	Philosophy and Political Change in Eastern Europe, Monist Colloquium sponsored by the Bradley and Soros Foundations in the Hungarian Academy of Sciences, Budapest
Feb	1993	<u>European Philosophy and the American Academy</u> , The Second Monist Colloquium, held at Wingspread, Wisconsin, February 12-14. 1993
Aug	1993	<u>Philosophy and the Cognitive Sciences</u> , <u>16th International Wittgenstein Conference</u> , Kirchberg am Wechsel, Austria.
Jul	1994	<u>First International Summer Institute in Cognitive Science (FISI-CS)</u> , University at Buffalo, July 5-30 (Co-Director, with Robert Van Valin).
Apr	1997	<u>Topological Foundations of Cognitive Science</u> , Workshop organized as part of <u>FISI-CS</u> , Buffalo <u>History of the Concepts of Space</u> , Workshop sponsored by the Department of Philosophy, the Center for Cognitive Science, and the National Center for Geographic Information and Analysis of the University at Buffalo
Oct	1997	Academic Freedom in Perspective. A Conference at Canisius College, Buffalo, NY, April 25-26 The Origins of Property, Conference organized in the Department of Philosophy, University at
		Buffalo
Apr	1998	Applied Ontology. An International Conference on Law and Institutions in Society (Marvin Farber Conference), University at Buffalo, April 24-25
Jun	1998	Ontology of Fields. Research Meeting of the NSF Varenius Initiative, Bar Harbor, Maine
Aug	1998	Panel on the Philosophy of John Searle, World Congress of Philosophy, Boston
Nov.	1998	Symposium on: The Ontology of Integrated Products – The Microsoft/Netscape Browser Wars, Department of Philosophy. University at Buffalo (with David Koepsell)
Oct	1999	The Last Days of the Human Race: Karl Kraus Symposium, University at Buffalo
Aug	2000	Rationality and Irrationality. <u>23rd International Wittgenstein Symposium</u> , Kirchberg, Austria, August 13-19

Oct	2001	<u>Formal Ontology in Information Systems</u> (FOIS 2001): Second International Conference, Ogunquit, Maine (with Chris Welty), October 17-19.
Apr	2002	Ontological Spring, Introductory Workshop in Ontology, Naumburg, Germany, April 17-20, 2002
Sep	2002	Academic Freedom and Intellectual Pluralism: US and Canadian Perspectives, Medaille College, Buffalo, September 20–21
Nov	2002	Ontology and WordNet, University of Leipzig, Germany, November 27
Mar	2003	After Modernism and Postmodernism: New Directions in the Arts, Hegeler Institute, La Salle, Illinois (with David R. Steele), March 28-30
Apr	2003	The Mystery of Capital and the Construction of Social Reality. A multi-disciplinary workshop with Hernando De Soto and John Searle, held in the University at Buffalo, sponsored by the National Science Foundation (with David Mark and Isaac Ehrlich), April 12-15
Sep	2003	Reference Ontology and Application Ontology, Workship at KI 2003: Annual Conference of the German Artificial Intelligence Society, Hamburg, Germany
May	2004	The Formal Architecture of the Gene Ontology, sponsored by the EU FP6 Network in Medical
		Informatics Semantic Datamining and the Max Planck Institute for Evolutionary Anthropology,
11	2004	Leipzig, May 28–29.
Jul	2004	Ontology Workshop, Summer School of the European Union Network of Excellence in Medical Informatics and Semantic Datamining, Balatonfüred, Hungary, 4–6 July 2004.
Nov	2004	Medicine and Metaphysics, University at Buffalo, Buffalo, NY, November 13-14
		Description Logics and Reasoning about Patient Data, Saarland University, Saarbrücken,
		Germany, November 22-23 Ontology: Interoperability of Patient Records and Biomedical Informatics, November 25,
		Brussels, Belgian Ministry of Health and European Commission (organized in conjunction with
		EUROREC 2004)
Jan	2005	<u>The Theory of European Unification</u> , Europa Institute, University of Saarbrücken, Germany, January 18
Apr	2005	Mapping the Human Body, National Center for Ontological Research, Buffalo April 16-17
		Ontologies and Biomedical Informatics, International Medical Informatics Association Working Group 6, Rome, April 29–May 2 (with Jim Cimino)
Jul	2005	Workshop on Health Messaging Standards, Summer School of the European Union Network of Excellence in Medical Informatics and Semantic Datamining, Tihany, Hungary, 3 July 2005.
Oct	2005	Ontology and Cancer Bioinformatics: Joint Columbia-Buffalo Workshop, Hauptmann-Woodward Institute, Buffalo, October 14, 2005 ("The National Cancer Institute Thesaurus")
		National Center for Ontological Research Inaugural Event, University at Buffalo, October 27, 2005 (Video)
		Workshop on Bio-Ontologies, University at Buffalo and National Center for Ontology Research, October 28, 2005 ("Symposium on the Gene Ontology", with David Hill)
Mar	2006	<u>Image Ontology Workshop</u> , National Center for Biomedical Ontology, Stanford University, March 23-24, 2006
Apr	2006	<u>The Metaphysics of E. J. Lowe</u> , National Center for Ontological Research, University at Buffalo, April 8-9, 2006 (jointly with R. Dipert and D. Hershenov)
Sep	2006	Workshop on Model Organism Anatomy Ontology, Seattle, September 8-9, 2006.
Nov	2006	Workshop on Disease Ontology, Baltimore, November 6-7, 2006
		<u>Biomedical Ontology in Action</u> (KR-MED 2006), November 8, 2006, Baltimore, MD (with Olivier Bodenreider and Fabian Neuhaus)
		Genomics Knowledge Representation for Clinical Trials, Workshop, AMIA Annual Symposium, Washington, November 12, 2006
		Panel on the Future of HL7, AMIA Annual Symposium, Washington DC, November 14, 2006
		Ontology for the Intelligence Community (NCOR) Columbia, MD, November 30-December 1, 2006
Mar	2007	Towards Interoperability of Biomedical Ontologies, <u>Dagstuhl Seminar</u> , March 25-29, 2007
May	2007	Ontology of Clinical Trials. Workshop of the National Center for Biomedical Ontology, NIH Campus, Bethesda, MD, May 16-17, 2007

Jun	2007	Reasoning with Biomedical Information: Training Course in Logic for Biomedical Research, Schloss Dagstuhl, 20-23 June 2007
Aug	2007	The EnvO Workshop: Developing an Ontology for Describing the Environments of Organisms and Biological Samples, UK National Environment Research Council, OERC: Oxford e-Research Centre, UK, August 29-31 (with Michael Ashburner, et al.)
Sep	2007	<u>Infectious Disease Ontology</u> , Cold Spring Harbor Laboratory, Long Island, NY, 19-21 September 2007, sponsored by the Burroughs Wellcome Fund (with Lindsay Cowell)
Nov	2007	EnvO Workshop II, Cold Spring Harbor Laboratories, November 15-16 (with Michael Ashburner, et al.)
		Ontology for the Intelligence Community 2007, Columbia, MD and Mitre Corporation, November 28-30.
Dec	2007	Protein Ontology Kick-Off Meeting, Georgetown University, Washington DC, December 2-4 (with Darren Natale).
Feb	2008	<u>Inaugural Conference of the Japanese Center for Ontological Research,</u> February 26-27 (with Mitsu Okada).
Mar	2008	<u>EnvO Workshop III</u> , University of Manchester, UK, March 13-16, sponsored by the Genome Standards Consortium (with Michael Ashburner, <i>et al.</i>).
		Ontology of Cellular Networks, Newark, NJ, March 26-27 (with Yves Lussier and Alan Ruttenberg)
Jun	2008	<u>Evolutionary Biology and Ontologies Workshop</u> . Organized as part of the Evolution 2008 Conference in the University of Minneapolis, MN on June 20 (with Paula Mabee, Todd Vision, Monte Westerfield)
Jul	2008	<u>First OBO Foundry Summit Meeting</u> , European Bioinformatics Institute, Hinxton, Cambridge, UK, July 7-8 (with Susanna Assunta-Sansone and the OBO Foundry Coordinating Editorial Board)
Sep	2008	Signs, Symptoms and Findings: First Steps Toward an Ontology of Clinical Phenotypes, University of Texas Southwestern Medical Center, Dallas, Texas, on September 3-4, (with Richard Scheuermann)
		Second Information Artifact Ontology Workshop, University at Buffalo, September 15.
		<u>Second Infectious Disease Ontology Workshop</u> , sponsored by the Burroughs Wellcome Fund, University at Buffalo, September 16-17 (with Lindsay Cowell)
Nov	2008	Second Annual Protein Ontology Meeting, Georgetown University, Washington DC, November 18-19
		10-19
Jan	2009	Second Evolutionary Biology and Ontologies Workshop. Organized as part of the Annual Meeting of the Society for Integrative and Comparative Biology (SICB) in Boston, MA on January 5 with Paula Mabee, Todd Vision, Monte Westerfield)
Jan Feb	2009	<u>Second Evolutionary Biology and Ontologies Workshop</u> . Organized as part of the Annual Meeting of the Society for Integrative and Comparative Biology (SICB) in Boston, MA on January
		Second Evolutionary Biology and Ontologies Workshop. Organized as part of the Annual Meeting of the Society for Integrative and Comparative Biology (SICB) in Boston, MA on January 5 with Paula Mabee, Todd Vision, Monte Westerfield) 2nd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 27-March 1 (with Mitsu Okada) Ontology-Driven Semantic Interoperability in eHealth, European Commission Directorate General Information Society and Media, Brussels, June 22-23 (with Ilias lakovidis and Erwin
Feb	2009	Second Evolutionary Biology and Ontologies Workshop. Organized as part of the Annual Meeting of the Society for Integrative and Comparative Biology (SICB) in Boston, MA on January 5 with Paula Mabee, Todd Vision, Monte Westerfield) 2nd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 27-March 1 (with Mitsu Okada) Ontology-Driven Semantic Interoperability in eHealth, European Commission Directorate
Feb Jun	2009 2009	Second Evolutionary Biology and Ontologies Workshop. Organized as part of the Annual Meeting of the Society for Integrative and Comparative Biology (SICB) in Boston, MA on January 5 with Paula Mabee, Todd Vision, Monte Westerfield) 2nd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 27-March 1 (with Mitsu Okada) Ontology-Driven Semantic Interoperability in eHealth, European Commission Directorate General Information Society and Media, Brussels, June 22-23 (with Ilias lakovidis and Erwin Bartels)
Feb Jun Jul	2009 2009 2009	Second Evolutionary Biology and Ontologies Workshop. Organized as part of the Annual Meeting of the Society for Integrative and Comparative Biology (SICB) in Boston, MA on January 5 with Paula Mabee, Todd Vision, Monte Westerfield) 2nd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 27-March 1 (with Mitsu Okada) Ontology-Driven Semantic Interoperability in eHealth, European Commission Directorate General Information Society and Media, Brussels, June 22-23 (with Ilias lakovidis and Erwin Bartels) International Conference on Biomedical Ontology (ICBO), University at Buffalo, July 20-26 Signs, Symptoms and Findings: Towards an Ontology for Clinical Phenotypes, Italian National Research Council Institute for Biomedical Technologies and University of Milan, September 4-5 (with Richard Scheuermann) Ontologies for the Virtual Physiological Human, February 14, European Bioinformatics Institute, Cambridge (with Bernard de Bono and Alan Ruttenberg)
Feb Jun Jul Sep	2009 2009 2009 2009	Second Evolutionary Biology and Ontologies Workshop. Organized as part of the Annual Meeting of the Society for Integrative and Comparative Biology (SICB) in Boston, MA on January 5 with Paula Mabee, Todd Vision, Monte Westerfield) 2nd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 27-March 1 (with Mitsu Okada) Ontology-Driven Semantic Interoperability in eHealth, European Commission Directorate General Information Society and Media, Brussels, June 22-23 (with Ilias lakovidis and Erwin Bartels) International Conference on Biomedical Ontology (ICBO), University at Buffalo, July 20-26 Signs, Symptoms and Findings: Towards an Ontology for Clinical Phenotypes, Italian National Research Council Institute for Biomedical Technologies and University of Milan, September 4-5 (with Richard Scheuermann) Ontologies for the Virtual Physiological Human, February 14, European Bioinformatics Institute,
Feb Jun Jul Sep	2009 2009 2009 2009	Second Evolutionary Biology and Ontologies Workshop. Organized as part of the Annual Meeting of the Society for Integrative and Comparative Biology (SICB) in Boston, MA on January 5 with Paula Mabee, Todd Vision, Monte Westerfield) 2nd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 27-March 1 (with Mitsu Okada) Ontology-Driven Semantic Interoperability in eHealth, European Commission Directorate General Information Society and Media, Brussels, June 22-23 (with Ilias lakovidis and Erwin Bartels) International Conference on Biomedical Ontology (ICBO), University at Buffalo, July 20-26 Signs, Symptoms and Findings: Towards an Ontology for Clinical Phenotypes, Italian National Research Council Institute for Biomedical Technologies and University of Milan, September 4-5 (with Richard Scheuermann) Ontologies for the Virtual Physiological Human, February 14, European Bioinformatics Institute, Cambridge (with Bernard de Bono and Alan Ruttenberg) 3rd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 26-28 (with
Feb Jun Jul Sep Feb	2009 2009 2009 2009 2010	Second Evolutionary Biology and Ontologies Workshop. Organized as part of the Annual Meeting of the Society for Integrative and Comparative Biology (SICB) in Boston, MA on January 5 with Paula Mabee, Todd Vision, Monte Westerfield) 2nd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 27-March 1 (with Mitsu Okada) Ontology-Driven Semantic Interoperability in eHealth, European Commission Directorate General Information Society and Media, Brussels, June 22-23 (with Ilias lakovidis and Erwin Bartels) International Conference on Biomedical Ontology (ICBO), University at Buffalo, July 20-26 Signs, Symptoms and Findings: Towards an Ontology for Clinical Phenotypes, Italian National Research Council Institute for Biomedical Technologies and University of Milan, September 4-5 (with Richard Scheuermann) Ontologies for the Virtual Physiological Human, February 14, European Bioinformatics Institute, Cambridge (with Bernard de Bono and Alan Ruttenberg) 3rd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 26-28 (with Riichiro Mizoguchi) Ontology Summit 2010, National Institute for Standards and Technology (NIST), Gaithersburg,
Feb Jun Jul Sep Feb	2009 2009 2009 2009 2010	Second Evolutionary Biology and Ontologies Workshop. Organized as part of the Annual Meeting of the Society for Integrative and Comparative Biology (SICB) in Boston, MA on January 5 with Paula Mabee, Todd Vision, Monte Westerfield) 2nd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 27-March 1 (with Mitsu Okada) Ontology-Driven Semantic Interoperability in eHealth, European Commission Directorate General Information Society and Media, Brussels, June 22-23 (with Ilias lakovidis and Erwin Bartels) International Conference on Biomedical Ontology (ICBO), University at Buffalo, July 20-26 Signs, Symptoms and Findings: Towards an Ontology for Clinical Phenotypes, Italian National Research Council Institute for Biomedical Technologies and University of Milan, September 4-5 (with Richard Scheuermann) Ontologies for the Virtual Physiological Human, February 14, European Bioinformatics Institute, Cambridge (with Bernard de Bono and Alan Ruttenberg) 3rd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 26-28 (with Riichiro Mizoguchi) Ontology Summit 2010, National Institute for Standards and Technology (NIST), Gaithersburg, MD, March 15-16 (Co-Chair, with Steve Ray) Infectious Disease Ontology Collaborators Meeting, Duke University, Durham NC, April 6-9 (with

		(Medinfo 2010) in Cape Town, South Africa on September 11, 2010 (with Albert Goldfain and Lindsay Cowell)
Oct	2010	An Introduction to Ontology Building, Buffalo, October 23
Dec	2010	Workshop on Infectious Disease Ontology, Baltimore, MD, December 8-9 (with Lindsay Cowell)
Apr	2011	Workshop on Ontology Driven Implementation of Semantic Services for the Enterprise
		Environment (ODISSEE), sponsored by US Federal Government, Alion Science and
		Technology, and the National Center for Ontological Research, Washington DC, April 12-13 (with Lowell Vizenor)
Jun	2011	Ontology-Based Research on Medicare/Medicaid Data, School of Pharmacy and
		Pharmaceutical Sciences, University at Buffalo and Department of Pharmacological Sciences, Stony Brook University, Buffalo, NY, June 15.
Jul	2011	International Conference on Biomedical Ontology (ICBO), Buffalo, NY, July 26-30, 2011
		(Conference Chair)
Sep	2011	Alzheimer's Research in the University at Buffalo, Buffalo, NY, September 2, 2011.
Oct	2011	<u>Kick-Off Meeting</u> , Alzheimer's Research Forum and Protein Ontology, Buffalo, NY, October 4-5, 2011(with Alan Ruttenberg and Cathy Wu)
Nov	2011	<u>Basic Formal Ontology 2.0</u> , Center of Excellence in Bioinformatics and Life Sciences, University at Buffalo, NY, November 10-11, 2011
Apr	2012	Ontology for the Intelligence Community, Training and Coordination Event for the US Army DSC Cloud, Aberdeen Proving Grounds, Aberdeen, MD, April 19-20, 2012
		First Clinical and Translational Science Ontology Workshop, National Center for Biomedical
		Ontology, Baltimore, MD, April 25-26, 2012
May	2012	Basic Formal Ontology and the Signature Discovery Ontology, UB Ontology Research Group
l	2042	and the Pacific Northwest National Laboratory, CUBRC, Buffalo, NY, May 1-2, 2012
Jun	2012	Immunology Ontologies and Their Applications in Processing Clinical Data, Workshop sponsored by the National Center for Biomedical Ontology, and by the Protein Ontology and
		Infectious Disease Ontology Consortia, Buffalo, NY, June 11-13, 2012.
Jul	2012	<u>Towards an Ontology of Mental Functioning</u> , Workshop organized in conjunction with the Third International Conference on Biomedical Ontology (ICBO), Medical University of Graz, Austria,
		July 22, 2012
Aug	2012	<u>Basic Formal Ontology 2.0 Preliminary Development Workshop</u> , Center of Excellence in Bioinformatics and Life Sciences, National Center for Ontological Research. August 18-19
Feb	2013	Second Clinical and Translational Science Ontology Workshop, Orlando, FL, February 11-12,
		sponsored by the Translational Network of the University of Arkansas for Medical Sciences (with William Hogan and Melissa Haendel)
Apr	2013	Ontology for Information Integration: The Challenges of Big Data in Military, Security, and
		Intelligence Domains, NCOR Workshop, Buffalo, NY, April 18 (with Ron Rudnicki)
May	2013	<u>Basic Formal Ontology 2.0 Development Workshop</u> , National Center for Ontological Research, University at Buffalo, May 13-14
		PRO-PO-GO: Challenges of Ontology Coordination Across Organisms, Plant Ontology
		Consortium, Protein Ontology Consortium and National Center for Biomedical Ontology, May 15-16
Sep	2013	ImmPort Ontology Conference, NIAID Bioinformatics Integration Support Contract (BISC), Stanford University, September 4-5
Oct.	2013	<u>Training and Strategy for ImmPort Data Submitters</u> , Rho Federal Systems Division, Chapel Hill, NC, October 9-10
June	2014	Protein Ontology Workshop, Georgetown University, DC, June 18-19
		Ontology and Imaging Informatics; Third Clinical and Translational Science Ontology Workshop,
•	0044	University at Buffalo, NY, June 23-25
Sep	2014	Information Artifact Ontologies Workshop, co-located with Formal Ontology in Information Systems 2014, Rio de Janeiro, September 22
Oct	2014	MedDRA and Ontology, Technical Workshop, <u>International Conference on Biomedical Ontologies</u> , Houston, October 7
May	2015	The Role of Ontology in Big Cancer Data, National Cancer Institute, Bethesda, MD, May 12-13

Sep	2015	Information Meeting on Joint Doctrine Ontology, Multi-Agency Collaborative Environment (MACE) Fusion Center, Herndon, VA, September 16-17
		Ontology in Practice: Fourth Clinical and Translational Science Ontology Workshop, Charleston, SC, September 23-25 (with Jahid Obeid and William Hogan)
Nov	2015	Symposium on Military Codes of Ethics, University at Buffalo, November 2.
Feb	2016	Workshop on BFO and the Ontology of Deontic Entities, University of Florida School of Medicine, Gainesville, FL, February 17-19 (with William Hogan)
May	2016	Ontological Approaches to Sensor Data Analysis, National Center for Geographic Information and Analysis, Buffalo, NY, May 19-20 (with Ling Bian and Werner Kuhn)
Sep	2016	Clinical Terminology Shock and Awe, University at Buffalo, September 7-8 (with William Hogan)
Apr	2017	MatOnto Ontology Meetings, University at Buffalo, April 3-5.
Aug	2017	<u>IAOA Summer Institute on Upper Ontologies</u> , University of Toronto, August 8-11 (with Michael Grüninger, Stefano Borgo and Nicola Guarino)
Aug	2017	A Strategy for Promoting Data Interoperability Across the Enterprise. Workshop, organized as part of the ASME 2017 International Design Engineering Technical Conferences (IDETC) and Computers & Information in Engineering Conference (CIE) (IDETC/CIE). Cleveland, OH, August 6
Oct	2017	Protein Ontology Consortium Workshop 2017, Bar Harbor, MN, October 11-12
		<u>Microbiology for the CTSA: Ontological Approaches</u> : Sixth Clinical and Translational Science Ontology Workshop, University of Michigan, Ann Arbor, October 24-25 (with Yongqun He, Amanda Hicks and William Hogan)
Jul	2018	The Industrial Ontologies Foundry (IOF) Workshop, Buffalo, NY, July 18-19
Apr	2018	<u>Capabilities: Human and Machine</u> , Workshop, University at Buffalo School of Engineering and Applied Sciences, April 20. <u>Video</u>
Sep	2018	Navy SYSCOM and DoD Ontology Workshop, Engility, Washington DC, September 18-19
Oct	2018	Relation Ontology 2018, University of Colorado, Denver, October 24-25 (with Larry Hunter and Chris Mungall)
Feb	2019	Ontology for Precision Medicine: From Genomes to Public Health, Orlando, FL February 20-21 (with William Hogan)
Oct	2019	Protein Ontology Consortium Workshop, Georgetown University Medical Center, October 23-24 (with Darren Natale)