# BARRY SMITH Curriculum Vitae • September 2, 2018

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.

**Abstract:** We propose a dichotomy between object-entities and meaning-entities. The former are entities such as molecules, cells, organisms, organizations, numbers, shapes, and so forth. The latter are entities such as concepts, propositions, and theories belonging to the realm of logic. Frege distinguished analogously between a 'realm of reference' and a 'realm of sense', which he presented in some passages as mutually exclusive. This however contradicts his assumption elsewhere that every entity is a referent (even Fregean senses can be referred to by means of suitably constructed expressions). We apply the meaning/object dichotomy to mathematical and fictional entities, and develop a view of mathematical and other abstract objects as the results of certain types of demarcation – as for example the North Sea is the result of demarcations built into naval charts. Such demarcations reflect demarcatory acts, which presuppose complex cognitive and social structures enabling the creation of maps, of theories (of mathematics, of natural science), and of novels.

h-index: 82 citations: 27,921

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
1996–	Research Scientist, <u>National Center for Geographic Information and Analysis</u> (NCGIA), University at Buffalo
2000-	Julian Park Chair, Department of Philosophy, University at Buffalo
2002–2004	Director, Institute for Formal Ontology and Medical Information Science (IFOMIS), Faculty of Medicine, University of Leipzig
2004-2006	Director, Institute for Formal Ontology and Medical Information Science (IFOMIS), Saarland University, Saarbrücken, Germany.
2004-	SUNY Distinguished Professor, University at Buffalo
2005-	Director, National Center for Ontological Research (NCOR), Buffalo, NY
2006-	Research Scientist, Center of Excellence in Bioinformatics and Life Sciences, 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

2016– Researcher, <u>Center for Multi-Source Information Fusion</u> (CMIF), University at Buffalo
2017– Faculty Affiliate, <u>Sustainable Manufacturing and Advanced Robotic Technologies</u>
(SMART) Community, University at Buffalo

# **HONORS AND AWARDS**

1970–1973	Open Exhibition and Open Scholarship (Jesus College, Oxford)
1983–1984	Two-Year Fellowship, Alexander von Humboldt Stiftung, Germany for research in the Universities of Louvain (Belgium), Erlangen (Germany) and Graz (Austria)
1989–1998	Honorary Fellow, University of Liverpool
1991	First Marvin Farber Lecturer, State University of New York at Buffalo
Nov 1994	Fifth Gustav Bergmann Lecturer, University of Iowa
Nov 1995	International Conference on Spatial Information Theory, Semmering, Austria. Award for Best Presentation
Feb 1997	UB Committee for the Promotion of Tolerance and Diversity, Certificate of Appreciation for Exemplary Teaching in American Pluralism
Oct 1997	Distinguished Visiting Scholar, James Madison University, Harrisonburg, Virginia
Mar 1999	Fellow of the American Philosophical Society
Nov 2001	Wolfgang Paul Award the Alexander von Humboldt Foundation
Oct 2002	SUNY Chancellor's Award for Excellence in Scholarship
May 2002	Stanisław Kamiński Memorial Lecture, Catholic University of Lublin, Poland
Jun 2005	Carl Linnaeus Lecturer, Mälardalen University, Sweden
Dec 2005-	Honorary Professor, Saarland University, Saarbrücken, Germany
Apr 2010	Paolo Bozzi Ontology Prize, University of Turin, Italy
May 2012–	Member, SUNY Distinguished Academy
Nov 2014-	Fellow, American College of Medical Informatics ( <u>FACMI</u> )
Apr 2016	Honorary Professor, International Center for Formal Ontology, Warsaw University of Technology
July 2016	Winner, IAOA Ontology Competition, 9th International Conference on Formal Ontology in
A 0040	Information Systems, Annecy, France
Aug 2016	50 Most Influential Living Philosophers
Jan 2017–	Member, Faculty of 1000

# **EXTERNAL GRANTS**

Jul 197		Research grant from the Deutscher Akademischer Austauschdienst, for work in the Bayerische Staatsbibliothek, Munich
Jul 198	80	Research grant from the British Academy, for research in Vienna, Graz and Budapest
Jul 198		Liberty Fund grant to organize Summer Schools on Austrian Economics for scholars from Eastern Europe, held in Graz (July 1980) and Vienna (July 1982)
Jul 198		Research grant from the Austrian Bundesministerium für Wissenschaft und Forschung, for research in the University of Graz
Aug 198		Research grant from the Austrian Bundesministerium für Wissenschaft und Forschung, for research in the Forschungsstelle und Dokumentationszentrum für Österreichische Philosophie, Graz
Sep 198	86	Travel grant from the British Council for research in Milan
Sep 198	88	Travel grant from the British Academy for attendance at an International Symposium on the

	Philosophy of Science in Cerisy-la-Salle, France
Sep 1990	Travel grant from the Finnish Academy of Sciences for lecturing and research in Turku, Finland
Aug 1991	Research grant 11-37632.93 from the Swiss National Foundation for a project on the Philosophical Foundations of Artificial Intelligence
May 1991	Travel grant from the Swiss National Foundation for a Lecture Tour in Prague
Apr 1992	Grants from the Soros and Lynde and Harry Bradley Foundations for the First Monist Colloquium on the topic of Philosophy and Political Change in Eastern Europe
Aug 1992	Research grant from the Foundation Pax ex Innovatione for a project on the Ethical Consequences of Scientific and Technological Innovation
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
Oct 1992	Grant from the Lynde and Harry Bradley Foundation for the Second Monist Colloquium on the topic of European Philosophy and the American Academy, held at the Wingspread Conference Center of the Johnson Foundation (Racine, Wisconsin) in February 1993
Apr 1993	Travel grant from the Swiss National Foundation for a Lecture Tour in Budapest
Jun 1993	Grant from the Foundation Pro Helvetia for work on the Swiss philosopher Anton Marty
Aug 1993	Conference grant from the Peter Kaiser-Stiftung (Vaduz) for the organization of the <a href="16th">16th</a> <a href="16th">16th</a> <a href="16th">International Wittgenstein Conference</a> , Kirchberg am Wechsel, Austria on Philosophy and the Cognitive Sciences
Aug 1993	Research grant from the Foundation "Pax ex Innovatione" for a project on the Ethical Consequences of Scientific and Technological Innovation (Prolongation)
Feb 1994	Research grant from the Alexander von Humboldt Stiftung for a research visit to Hamburg, Germany
Aug 1994	Research grant from the Alexander von Humboldt Stiftung for a research visit to Konstanz, Germany
May 1995	International Research and Exchanges Board (IREX, Washington DC), travel grant for a lecture tour in Poland
Apr 1997	Grant from the John C. Brentano Foundation, for work on Brentano's philosophy of history
May 1997	Summer research grant from the National Center for Geographic Information and Analysis, NSF Project Varenius, Grant Number SBR 96-00465
May 1997	Pilot Project Grant from the National Center for Geographic Information and Analysis, NSF Project Varenius, Grant Number SBR 96-00465
Jul 1998	Summer research grant from the National Center for Geographic Information and Analysis, National Science Foundation Project Varenius, Grant Number SBR 96-00465
Mar 1998	National Science Foundation IGERT Program Grant <u>DGE-9870668</u> . Co-PI (with David Mark and others)
Mar 1999	Sabbatical Fellowship, American Philosophical Society
May 1999	National Science Foundation Research Grant BCS-9975557: Geographic Categories: An Ontological Investigation. Co-PI (with David Mark)
May 2000	German Academic Exchange Service (DAAD), Short-Term Research Grant
Apr 2002	Wolfgang Paul Prize, Alexander von Humboldt Foundation. PI
Mar 2003	National Science Foundation Award Number 0242145, to support the conference

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. PI of IFOMIS subcontract
Sep 2003	National Science Foundation IGERT Program Grant DGE-0333417. Co-PI
Apr 2004	Volkswagen Foundation: <u>Forms of Life: Philosophical Dimensions of Contemporary Biomedical Research</u> , PI
Sep 2005	European Union 6th Framework Programme for Research, Technological Development and Demonstration, <u>RIDE – A Roadmap for Interoperability of eHealth Systems</u> . PI of IFOMIS subcontract
Sep 2005	European Union 6th Framework Programme for Research, Technological Development and Demonstration: <u>ACGT: Advancing Clinico-Genomic Trials on Cancer</u> . PI for IFOMIS subcontract
Sep 2005	NIH Roadmap Grant U 54 HG004028: <u>National Center for Biomedical Ontology</u> ; PI of Buffalo subcontract
Mar 2007	NIH / NIGMS R01 GM080646-01: PRO: A Protein Ontology in Open Biomedical Ontologies. PI of Buffalo subcontract, 7.5%
Apr 2007	Burroughs Wellcome Fund 1007105: Workshop on Infectious Disease Ontology.Co- Director with Lindsay Powell, 50%
May 2007	National Institute of Standards and Technology: IPA for Fabian Neuhaus, May 2007 to April 2008
Aug 2007	NIH / NIAID / Lockheed CA-0774 Bioinformatics and Scientific IT Program (BSIP): Review of Ontology, Terminology and Vocabulary Resources in the Infectious Disease Domain. Co-PI with Lindsay Cowell, 50%
Aug 2007	Oishei Foundation: <u>Task Force for Ontology-Based IT Support for Large-Scale Field Studies in Psychiatry</u> . Co-PI
May 2008	National Institute of Standards and Technology: IAP for Fabian Neuhaus, May 2008- February 2009
Apr 2008	Burroughs Wellcome Fund: 2nd Workshop on Infectious Disease Ontology. PI
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
Nov 2008	UCore SLX Biometrics Ontology, U.S. Department Of Defense, November 2008 – October 2009. PI
Dec 2008	Command and Control (C2) Core Ontology, U.S. Department of Defense (PI), December 2008 – October, 2009. Key scientist
Feb 2009	NIH / NHGRI 1R13HG005049-01 <u>International Conference on Biomedical Ontology (ICBO)</u> . PI
Feb 2009	NSF Award 0822201 The Plant Ontology: Plant Genome Research Resource. Consultant
Jan 2010	ARGOS Transatlantic Observatory for Meeting Global Health Policy Challenges through ICT-Enabled Solutions, European Union Directorate General for External Relations, January 1-June 30, 2010. Pl of Buffalo subcontract
Aug 2010	NIH Roadmap Grant 2 U54 HG004028: <u>National Center for Biomedical Ontology</u> . (\$17,400,000) PI of Buffalo sub-contract
May 2011	NIH / NHGRI R13HG006231-01 <u>International Conference on Biomedical Ontology (ICBO)</u> , National Human Genome Research Institute. PI
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

Nov 2011	Gesellschaft für Telematikanwendung der Gesundheitskarte (Gematik), <u>EPSOS: European Patients: Smart Open Services</u> . Consultant
Jan 2013	NIH / NIAID HHS N272201200028 <u>Bioinformatics Integration Support Contract</u> (BISC), National Institute of Allergy and Infectious Diseases. PI of Buffalo Sub-Contact
Jul 2013	NIH / NIDCR 1 T32 DE023526-01 Advanced Training in Oral Biology, National Institute for Dental and Craniofacial Research. Mentor.
Dec 2014	NSF Award 1340112 <u>The Planteome Project: Common Reference Ontologies for Plant Science</u> (CROPS). Consultant
July 2015	NIH/NIGMS R01GM080646-09 PRO: A Protein Ontology in Open Biomedical Ontologies. 4-year renewal. PI of Buffalo sub-contract.
Aug 2015	NIH / NCATS Buffalo Clinical and Translational Research Center (CTSA Award). Key personnel.
Sep 2015	NIH 1U24CA199374-01 Pathology Image Informatics Platform for Visualization, Analysis and Management. Co-Investigator
Jan 2017	DMDII 15-11 Coordinated Holistic Alignment of Manufacturing Processes. PI
Mar 2017	NIH Office of Strategic Coordination U24DK112331 PAGES: Physical Activity Genomics, Epigenomics/Transcriptomics Site. Consultant
Jun 2017	NIH / NLM T5 Biomedical Informatics and Data Science Research Training Programs.  Mentor
Jan 2018	DMDII Wind Turbine Ontology Project.
Mar 2018	Naval Postgraduate School N00244-18-1-0003 Data Science Approaches to Automation of Analytic Work Flows. Co-PI
Sep 2018	Air Force Office of Scientific Research AFOSR- 0007011818 Event Characterization Fusing Hard and Soft Data via Semantic Models. Co-PI
Oct 2018	Intelligence Community Postdoctoral Research Fellowship Program: Referent Tracking for Intelligence Analysis. PI

## **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, June 23-25, 2014

CE 630: Research Methods in Chemical & 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 (quest lecture)

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

Clinical and Translational Science Institute (CTSI) Workforce Development Core, Biomedical Informatics Workshop Series, Lectures on: How to write grants. How to get published. Data ethics and responsible data sharing. October 3 and October 15, 2017

Ontological Engineering, Spring Semester 2018 (online course)

Catholic University of Lublin

Applied Ontology: An Introduction, Block-Seminar, May 2018

Universität des Saarlandes

Die Grundkategorien der Ontologie (Blockveranstaltung), Summer Semester 2014

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

International Conference on Biomedical Ontology (ICBO)

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

Basic Formal Ontology 2.0, Tutorial, Medical University of Graz, Austria, July 25, 2012

OBO Foundry 101: 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 Slides

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 Immunology Ontology, Tutorial (with Lindsay Cowell), June 10-14, 2013. Video

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 <u>Towards Ontological Foundations for Web Science</u>, July 18-19, 2016

ASME 2017 International Design Engineering Technical Conferences (IDETC) and Computers & Information in Engineering Conference (CIE) (IDETC/CIE), Cleveland, OH

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

Systems Engineering Research Center (SERC), Washington, DC

Systems Engineering Ontology Bootcamp, (Slides), December 5, 2017

<u>University at Buffalo, Center for Multi-Source Information Fusion,</u> Ontology for Systems Engineering (Video), January 26, 2018

#### STUDIES OF MY WORK

#### **Festschrifts**

 Leo Zaibert (ed.), <u>The Theory and Practice of Ontology</u>, London and New York: Palgrave/MacMillan, December 2016

Including contributions by Jonathan P. Bona, Berit Brogaard, Roberto Casati, Werner Ceusters, Maurizio Ferraris, Ingvar Johansson, David Koepsell Kevin Mulligan, Alessandro Salice Peter Simons. Mariam Thalos. Achille Varzi

2. Gloria Zúñiga y Postigo and Gerald J. Erion (eds.), <u>Barry Smith an sich</u> (Cosmos + Taxis. Studies in Emergent Order and Organization, 4 (4), June 2017)

Including contributions by Wolfgang Grassl, Nicola Guarino, John T. Kearns, Rudolf Lüthe, Luc Schneider, Peter Simons, Jan Woleński, Wojciech Żełaniec

#### **Articles**

Denis Seron, "<u>Théorie relationnelle et théorie phénoménale de l'intentionnalité</u>" in S. Richard (ed.), *Analyse et ontologie: Le renouveau de la métaphysique dans la tradition analytique*, Paris, Vrin, 2010, 39-70

Gary H. Merrill, "Ontological realism: Methodology or misdirection?", <u>Applied Ontology</u>, vol. 5, no. 2, pp. 79-108, 2010

Gary H. Merrill, "Realism and Reference Ontologies: Considerations, Reflections, and Problems. - 2010 - *Applied Ontology* 5 (3-4):189-221.

Merrill, Gary H. "Ontology, Ontologies, and Science", *Topoi*, April 2011, Volume 30, Issue 1, pp 71–83 Warren Bizub and Julia Brandt, "<u>Transitioning to the Next Generation (Nextgen) Defense Training Environment (DTE)</u>" in S. Jain, R.R. Creasey, J. Himmelspach, K.P. White, and M. Fu (eds.), *Proceedings of the 2011 Winter Simulation Conference* 

Juan C. González, "Interactive Fiat Objects", Review of Philosophy and Psychology, June 2013, Volume 4, Issue 2, pp 205–217

Lars Vogt, Peter Grobe, Björn Quast, Thomas Bartolomaeus, "<u>Fiat or Bona Fide Boundary – A Matter of Granular Perspective</u>", *PLoS ONE* 7(12), 2012, e48603. doi:10.1371/journal.pone.0048603

Adrien Barton and Arnaud Rosier, "Ontologies appliquées biomédicales et ontologie philosophique: un développement complémentaire", Revue de la Société de Philosophie des Sciences, 3 (1), 2016, 1-8.

Rafe Champion, Karl Popper and Barry Smith on the Metaphysical Research Program of Austrian Realism and Carl

Menger's Economics, Critical Rationalism Blog, 2017

Marco Tedeschini, "<u>From Phenomenology to Formal Ontology: How Barry Smith and Kevin Mulligan Made Husserl's Descriptive Psychology into a Form of Realism</u>", *Archivio di filosofia*, 83 (3), 2015, 177-188.

Bittner, T. 2017. Fiat and De Facto Objects. The International Encyclopedia of Geography. 1-8.

Jeffrey A. Bell, "From Difference-Maker to Truthmaker (and Back)", chapter in J. A. Bell *et al*, (eds.), *Beyond the Analytic-Continental Divide*, London: Routledge, 2017, 129-150.

Bauwens Michaël, "Institutions as dispositions: Searle, Smith and the ontology of blind chess". Journal for the Theory of Social Behaviour, 6 February 2018.

#### PRESENTATIONS AT DEPARTMENTAL COLLOQUIA (Since 2010)

Feb 2010 Buffalo IGERT Colloquium, February 12 ("How to Build an Environment Ontology")

Lecture to BCH 502: Genome Annotation – Halfon Honors Seminar, February 23 ("An

		Introduction to the Gene Ontology")
Mar	2010	Instituto de Seguridad Social del Estado de México y Municipios (ISSEMyM), Toluco, Mexico, March 23 ("Referent Tracking and the Electronic Health Record")
Apr	2010	Department of Philosophy and Swiss National Research Competence Center for Affective Sciences, University of Geneva, April 21 ("The Ontology of Collateralized Debt Obligations and the Metaphysics of the Current Economic Crisis")
May	2010	National Center for Biomedical Ontology, Stanford University, Stanford, CA, May 5 ("What developers need to know about ontologies")
Jun	2010	Intelligence and Information Warfare Directorate, Communications-Electronics Research, Development and Engineering Center (CERDEC), Fort Monmouth, NJ, June 3 ("Strategies for Developing Consistent Community of Interest Supported Data Extensions")
Jul	2010	CUBRC, Buffalo, July 14 ("Ontology in Buffalo: July 2010")
Sep	2010	South African Council of Scientific and Industrial Research (CSIR), Pretoria, September 15 ("Ontology: the why and how explained")
		Department of Computer Science and Engineering, University at Buffalo, September 30 ("Ontological Engineering")
Oct	2010	Department of Philosophy, Union College, Schenectady, NY, October 21 ("Towards an Ontology of Documents")
Jan	2011	Applied Ontology Group, University at Buffalo, January 17 ("Basic Formal Ontology (BFO) 2.0")
Mar	2011	Department of Philosophy, University at Buffalo, March 11 ("How to Publish a Philosophy Paper")
Aug	2011	University of California at Merced, Cognitive and Information Science, August 28 ("Environments Inside and Outside the Organism")
Sep	2011	Department of Philosophy, University at Buffalo, September 2 ("Defining Emotions")
•		Space and Naval Warfare (SPAWAR) Systems Command, Systems Center Atlantic, Technical Brief, September 23 ("Semantic Technology and Its Practical Implications")
Mar	2012	Department of Orthopedics and Sports Medicine, University at Buffalo, March 6 ("Concussion ontology")
Sep	2012	University at Buffalo Philosophy Department Lunchtime Talks, September 14 ("Truthmakers for Time Series Graphs")
		Department of Computer Science, Brunel University, London, England, September 20 ("BFO and Disease")
		Buffalo Logic Colloquium, University at Buffalo, September 27 (" <u>How to Do Things with Diagrams</u> ")
Oct	2012	Buffalo PANTC Colloquium, October 16 ("Discussion of 16 Days")
Nov	2012	UB Clinical/Research Ethics Seminar. Buffalo General Medical Center, November 20 ("Ethics, Informatics and Obamacare")
Jan	2013	National Center for Biomedical Ontology (NCBO) Webinar, January 16 (" <u>HL7: An Ontologist's Guide</u> ")
		Institut für Geoinformatik, University of Münster, Germany, January 30 (" <u>Massively Shared Social Agency</u> ")
Feb	2013	Intelligence and Information Warfare Directorate (I <sup>2</sup> WD), US Army Communications- Electronics Research, Development and Engineering Center (CERDEC), Aberdeen Proving Ground, MD, February 5 ("Distributed Common Ground System-Army Cloud Ontology")
Mar	2013	Cognitive Science Colloquium, University at Buffalo, March 20 ("On the Ontology of Massively Planned Social Actions")
May	2013	Air Force Research Laboratory (AFRL) Information Directorate, Rome, NY, May 8

		("Ontology and Information Integration")
Jun	2013	Center for Multisource Information Fusion, University at Buffalo, June 7 ("A Survey of Military Ontologies")
Jul	2013	Buffalo Ontology Group, July 23 ("How to Advance Reusability of Immunology Data")
Aug	2013	Immport Science Group, August 1, Stanford University (" <u>How to make ImmPort data fit for secondary use</u> ")
		Center for Multisource Information Fusion, University at Buffalo and Pacific Northwest National Labs, August 28 ("The National Center for Ontological Research")
		Department of Philosophy, University at Buffalo, August 30 ("The Ontology of Aging and Death")
Sep	2013	Institut für Philosophie, University of Rostock, Germany, September 19 ("e-Human Beings: The Contribution of Internet Ranking Systems to the Development of Human Capital")
Oct	2013	Immport Science Group, Stanford University October 17, (" <u>How to Enhance the Utility of Data in ImmPort"</u> )
Nov	2013	Clinical and Translational Science Ontology Affinity Group, November 12 ("Precoordination of Clinical Trial Data in the ImmPort Project")
Jan	2014	UB Clinical and Research Ethics Seminar, Clinical and Translational Science Center, Buffalo, January 21 ("Clinical Trial Data Wants to Be Free: Lessons from the ImmPort Immunology Data and Analysis Portal")
Feb	2014	Immport Science Group, Stanford University, February 27 ("Enhancing the Quality of ImmPort Data")
Mar	2014	Department of Computer Science and Engineering, University at Buffao, March 6 ("Ontology of Graphs")
		Department of Philosophy, University at Buffalo, March 14 ("Speech Acts, Economic Acts, and Poker")
May	2014	Department of Philosophy, University of Rijeka, Croatia, May 7 (" <u>Document Acts and the Ontology of Social Reality</u> ") ( <u>Video</u> )
		School of Advanced Studies, University of Rijeka, Croatia, May 8 ("Mind, Language and Emotions: From Austrian Philosophy to Contemporary Realist Ontology") (Video)
Jun	2014	Immport Science Group, Stanford University, June 27 ("The OBO Foundry Approach to Ontologies and Standards with Special Reference to Cytokines")
Oct	2014	Department of Mechanical and Aerospace Engineering, Syracuse University, October 3 ("An Introduction to Ontology for Engineers")
Dec	2014	Artificial Intelligence (AI) Center at SRI International, Menlo Park, CA, December 2 ("Towards an Ontology of Military Plans and Planning")
Mar	2015	UB Clinical and Research Ethics Seminar, University at Buffalo, School of Medicine and Biomedical Sciences, March 17 ("The Ontology of Aging")
Jun	2015	Leuven Social Ontology Reading Group, June 17 ("Commanding and Other Speech Acts" Slides)
Oct	2015	Buffalo Ontology Group, October 12 ("Towards an Ontology of Deontic Entities")
Nov	2015	Symposium on Military Codes of Ethics, University at Buffalo, November 2 ("Building an Ethical Warfighter")
		Department of Biomedical Informatics Grand Rounds, University at Buffalo, November 25 ("Aboutness: Towards Foundations for the Information Artifact Ontology")
Dec	2015	Department of Computer Science and Engineering, University at Buffalo, Dec 3 ("Ontology in Buffalo: An Overview")
Mar	2016	Penn Bioinformatics Forum, University of Pennsylvania, March 23 ("The Glory and Misery

		of Electronic Health Records")
Apr	2016	Ontology Summit 2016: Semantic Integration – Health Sciences, April 7 (" <u>An Ontology Ecosystem Approach to Electronic Health Record Interoperability</u> ", online presentation)
		Department of Philosophy, University at Buffalo, April 14 ("Jobs for Philosophers")
Sep	2016	Department of Mechanical and Aerospace Engineering, University at Buffalo, September 6 ("Ontology for Product Lifecycle Management")
		Air Force Research Lab (AFRL), Wright-Patterson AFB, Dayton, OH, September 12 ("AFRL Ontology")
Oct	2016	Capen Lecture, Department of Philosophy, University at Buffalo, October 4 (" <u>The Future of the History of Philosophy</u> ") ( <u>Video</u> )
		Brown Box Lecture, Department of Philosophy, October 7 ("The Ontology of the Organigram")
		Paderborn University, Germany, Lecture in the series "Economy/Technology/Gender", October 24 ("Digitale Umwelten")
Nov	2016	School of Oriental and African Studies, University of London, UK, November 9 ("The Ontology of Terrorism") (Video)
Dec	2016	Romanell Clinical and Research Ethics Lecture, School of Medicine, University at Buffalo, December 20 ("How the NIH Plans to Solve the Replication Crisis") (Video)
Jan	2017	School of Engineering, Swiss Federal Institute of Technology, Lausanne, January 31 ("Building Ontologies", Video: Part 1, Part 2)
Feb	2017	National Institute of Standards and Technology (NIST) Industry Ontology Foundry Working Group, February 17 ("BFO: An Overview", online presentation)
Mar	2017	ImmPort Science Group, University of California at San Francisco, March 9 ("The Replication Crisis – and How ImmPort Could Help")
		National Institute of Standards and Technology (NIST) Industry Ontology Foundry Working Group, March 17 ('Building Ontologies with BFO', online presentation)
		Jet Propulsion Laboratory, March 22 (" <u>The Engineering Ontology Landscape</u> ", online presentation) ( <u>Video</u> )
		Enterprise Data Modeling and Data Service Capability Coordination Working Group, Mitre Corporation, Maclean, VA, March 29, 2017
May	2017	Los Alamos National Laboratory, Los Alamos, NM, May 23 (" <u>The Evolving Ontology Landscape</u> ")
Jun	2017	Japan Advanced Institute for Science and Technology, Kanazawa, Japan, June 16 ("What is the Difference between Goods and Services?")
		Keio University, Tokyo, Japan, June 21 ("Applied Ontology: A New Philosophical Discipline" and "Foundations of the Ontology of Law")
Sep	2017	<u>Sustainable Manufacturing and Advanced Robotic Technologies</u> (SMART) Conference, University at Buffalo. University at Buffalo, September 14 ('CHAMP: Coordinated Holistic Alignment of Manufacturing Processes")
		Department of Philosophy, Nankai University, Tianjin, China, September 25 ("What is a capability?")
		Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences, Beijing, China, September 23 ("Molecules, Cells, Diseases, Networks")
Nov	2017	Ontology Group Meeting, University at Buffalo, November 20, 2017 ("Granularity and Capabilities from a BFO Perspective")
Feb	2018	Ontology Summit 2018 – Upper Ontologies for Specifying Context, February 7 (" <u>How BFO Deals with Data from Multiple Contexts</u> ", <u>Video</u> )

INCOSE Finger Lakes Chapter, February 15 ("Ontology for Systems Engineers" Video)

Department of Philosophy, University at Buffalo, February 16 ("Is Terrorism a Crime" Video)

Mar 2018 Romanell Philosophy of Medicine and Bioethics Workshop, University at Buffalo, March 10, 2018 ("What do IQ tests measure?" Video)

Department of Philosophy, University of Maryland, College Park, MD, March 28 ("The Ontology of Terrorism")

DC-Maryland History and Philosophy of Biology Discussion Group, Washington, DC, March 29 ("Functions in Basic Formal Ontology")

Apr 2018 Kickoff Meeting for Naval Postgraduate School Research: Data Science Approaches to Analytic Workflows, Center for Multi-Source Information Fusion, Buffalo, April 11 ("Ontology Strategy")

Department of Philosophy, University of Tampere, April 26 ("Introduction to Basic Formal Ontology")

### PRESENTATIONS AT PROFESSIONAL MEETINGS AND SYMPOSIA (Since 2010)

- Jan 2010 Disease Ontology, Northwestern University, Chicago, January 16-17 ("The Ontology for General Medical Science")
- Programs")

  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")

  Pistoja, Alliance, Conference, European, Bioinformatics, Institute, Wellcome, Trust, Genome

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 <u>First Paolo Bozzi Ontology Lecture, University of Turin, April 15 ("Towards a Theory of Document Acts")</u>

Third Annual Protein Ontology Meeting, University of Delaware, April 26-28 ("The OBO Foundry in 2010")

May 2010 FOIS Workshop on Ontology Education, University of Toronto, May 11 ("Creating a Common Body of Knowledge for the Discipline of Ontology")

<u>Formal Ontology in Information Systems (FOIS)</u>, 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")

- Jun 2010 International Workshop on Bio-Ontologies, Institute for Formal Ontology and Medical Information Science, Saarland University, Saarbrücken, Germany, June 28 ("Classification Then and Now")

  <u>La métaphysique appliqué</u>: Séminaire des Treilles, Fondations les Treilles, Tourtour, France, June 29-July 2 ("Applied Ontology" and "BFO and Disease")
- Aug 2010 Conference on Collective Intentionality VII, August 23-26, Basel, Switzerland ("New Foundations for Social Ontology" and "Is Money a 'Product of Massive Fantasy'?")
- Sep 2010 Joint Forces Command Next Generation Training Environment, Norfolk, VA, September 1 ("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) 2010 Joint Forces Command Live, Virtual, Constructive Architecture Framework (LVCAF), Virginia Oct 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") Jubileumsseminar Anders Grimsmo, Department of Public Health and General Practice, 2011 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") International Conference on Biomedical Ontology (ICBO), Buffalo, NY, July 28-30, 2011 ("Panel: Jul 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") 12th Genomic Standards Consortium Meeting (GSC 12), Max Planck Institute for Marine Sep 2011 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 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
Jan	2012	in the Cloud") 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	<u>Financial Reference Data Management Conference (FIMA 2012)</u> , New York, March 21 (" <u>Reference Data Integration: A Strategy for the Future</u> ")
		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	<u>UK Ontology Network. Connecting the UK Ontology Community</u> , University of Manchester, April 12 ("Looming Ontology Chaos")
Jun	2012	Conference on Immunology Ontologies and Their Applications in Processing Clinical Data, 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	<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 ("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	Austrian Thought at the Turn of the 20th Century, 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 (" <u>Diagrams and Time</u> " <u>Slides</u> )
		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 the CTSA Ontology Landscape</u> ")
		Phenotype Ontology Research Coordination Network Summit, 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>: BFO and Its Applications")

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: "Ontology of Aging and Death")

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 ("Towards Emerging Media Science" and "Media and Agency")

- Nov 2013 Globalization and Documentality, Käte Hamburger Kolleg / Center for Advanced Study, University of Bonn, November 19 (on-line presentation: Documents and Massive Social 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 <u>Big Data and Semantic Web Meet Applied Ontology, Ontology Summit 2014 Launch Event,</u>
  January 14 ("Introduction on behalf of the National Center for Ontological Research"; on-line presentation)
- Feb 2014 <u>Humanomics Research Centre Opening Seminar, University of Copenhagen, February 7, ("The Philosophome: An Exercise in the Ontology of the Humanities")</u>
- Apr 2014 Ontologie und Zeit, Saarland University, Saarbrücken, Germany, April 26 ("Eine Korrespondenztheorie von Graphen")

		Philosophy of Medicine Seminar Series, King's College, London, April 29 ("The Ontology of Disease") Video
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	The Ends of Life – Deepening Reflections on Bioethical Issues at the Beginning and End of Life, 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").
		BISC Site Visit / External Advisory Board Meeting, Rockville, MD, September 18 ("The Role of Ontology in the ImmPort Project", on-line presentation)
		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: "Data Wrangling Clinical Research Datasets using Ontology and Referent Tracking", with Werner Ceusters; Lightning talk: "Ontological Representation of CDC Active Bacterial Core Surveillance Case Reports")
		<u>Truth, Image, Normativity</u> , University of Cagliari, Sardinia, October 21-26 (" <u>The Division of Deontic Labor</u> ")
Nov	2014	<u>Semantic Technology for Intelligence, Defense and Security</u> (STIDS 2014), George Mason University, Fairfax, VA, November 18-20 ("A Computational Framework for Living Plan Specification, Execution and Evaluation" (with Erik Thomsen); " <u>An Ontological Approach to Territorial Disputes</u> " (with Neil Otte and Brian Donohue); Panel: Semantics for Collaboration (" <u>Collaboration Through Military Doctrine</u> "))
		Leveraging Standards and Ontologies to Improve HIPC Data Submission and Analysis, National Institute of Allergy and Infectious Diseases (NIAID), Rockville, MD, November 19 ("Leveraging Ontologies for Human Immunology Research")
Dec	2014	NCBO SAB Meeting, Stanford, CA, December 3 ("NCOR Dissemination"; Panel: "Lessons from the Past 10 Years")
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")
Mar	2015	Internet of Things: Toward Smart Networked Systems and Societies. Ontology Summit 2015. <u>Beyond Semantic Sensor Network Ontologies</u> , March 5 (" <u>Ontology of Sensors: Some Examples from Biology</u> ")
Apr	2015	American Philosophical Association, Pacific Division Meeting, Vancouver, BC, Canada, April 2

		<u>Philosophy as Science: A Key Idea of the 19th Century</u> , Utrecht, Netherlands, April 9 (Keynote address: " <u>Metaphysics after Darwin</u> ")
		Advanced Defense Studies Institute, Italian Ministry of Defense, Rome, April 24 ("New Foundations for Military Ethics")
May	2015	HIMA Imaging Science Workshop, Pathology Informatics 2015, Pittsburgh, May 5 ("An 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")
Jun	2015	Joint CUBRC / Air Force Research Laboratory, Wright Patterson Air Force Base IT Summit, June 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")
		<u>Taking Pregnancy Seriously in Metaphysics: The Foetus and The Maternal Organism</u> , University of Southampton, United Kingdom, July 21 (" <u>Embryontology</u> ", <u>Video</u> )
		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 needs")
		BISC Site Visit / External Advisory Board Meeting, University of California at San Francisco, CA, September 18 ("ImmPort Ontology Update")
		Ontology in Practice: Fourth Clinical and Translational Science Ontology Workshop, Charleston, SC, September 23-25 ("FHIR and Ontology")
Oct	2015	HelsIT: Health Information Technology, Trondheim, Norway, October 20 (Keynote lecture: "The Glory and Misery of Electronic Health Records")
Nov	2015	Symposium on Military Codes of Ethics, University at Buffalo, November 2 ("Building an Ethical Warfighter")
		<u>Planteome Curation Workshop: Ontology Curation and Data Annotation,</u> 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")

("Towards an Ontology of Philosophy")

Information Systems Interoperability")

<u>Semantic Technology for Intelligence, Defense and Security</u> (STIDS 2015), George Mason University, Fairfax, VA, November 18-20 ("Joint Doctrine Ontology: A Benchmark for Military

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

		("Joint Doctrine Ontology: Interim Report")
Dec	2015	Digital Thread / Digital Twin Applications for Next Generation and Legacy Aerospace Systems 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")
Jan	2016	KAUST Research Conference on Computational and Experimental Interfaces of Big Data and Biotechnology, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia, Jan 25-27 ("The Glory and Misery of Electronic Health Records")
Feb	2016	Workshop on BFO and the Ontology of Deontic Entities, University of Florida School of Medicine, Gainesville, FL, February 17-19 ("Developing a Framework of Ontologies for Social Entities")
Apr	2016	Completing the Model Based Development, Digital Manufacturing and Design Innovation Institute (DMDII) Technical Interchange Meeting, National Institute of Standards and Technology (NIST), Gaithersburg, April 11 ("Coordinated Holistic Alignment of Manufacturing Processes (CHAMP)")
May	2016	Ontological Approaches to Sensor Data Analysis, National Center for Geographic Information and Analysis, Buffalo, NY, May 19-20 ("The Ontology of Sensors: A Critical Overview")
Jun	2016	57th Joint Doctrine Planning Conference, Joint Warfighting Center, Suffolk, VA, June 1-2 ("Joint 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")
Jul	2016	Perspectives on Deontology from Early Phenomenology and Contemporary Philosophy. 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])
		<u>Bioethics and the Philosophy of Medicine</u> , PANTC Conference, University at Buffalo, July 30 (" <u>The Metaphysics of the Embryo</u> ")
Aug	2016	International Conference on Biological Ontology, Corvallis, OR, August 1-4 (" <u>The Ontology of the Organigram</u> ", " <u>The United Nations Environment Program Sustainable Development Goals Ontology</u> ", 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	<u>Clinical Terminology Shock and Awe</u> , University at Buffalo, September 7-8 ("Clinical Terminology: Shock and Awe")
		<u>Turbine Engine Technology Symposium</u> (TETS), Wright-Patterson AFB, Dayton, OH, September 12 ("Propulsion Digital Thread/Digital Twin Spiral 0.1: Use of Ontology in Digital Thread")
Oct	2016	Intelligence Support to Command and Control Working Group (ISC2WG), Pentagon (JS, J6 and J2), October 12 ("Joint Doctrine Ontology")
		Top-Level Ontologies, UB Ontology Group, October 21 ("Proposed ISO Top Level Ontology Standard")
		<u>Big Data – Herausforderung für Wissenschaft und Gesellschaft,</u> ZiF Zentrum for interdisziplinäre Forschung, Universität Bielefeld, October 25 (" <u>Die Datenwelt von Morgen</u> ") ( <u>Video</u> )
		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")
Dec	2016	<u>First Industrial Ontology Foundry Workshop</u> , Systems Integration Division, National Institute of Standards and Technology (NIST), Gaithersburg, MD, December 8 (" <u>How to Build the Industry</u>

		Ontology Foundry", "Draft of a Product Lifecycle Management Ontology" (with Dimitris Kiritsis)
Feb	2017	<u>The Metaphysics of Quantities</u> , Istituto di Studi Filosofici, Facoltà di Teologia di Lugano, February 2-3 ("Quantities as Fiat Universals") (Video)
		FOUST Workshop on Foundational Ontologies, Bolzano, February 27-28 ("Basic Formal Ontology: An Overview" Video)
Apr	2017	Second Industry Ontology Foundry Workshop, National Institute of Standards and Technology (NIST), Gaithersburg, MD, April 10-11 (Panel presentation: "Comparing Upper Level Ontologies")
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)
		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 ("The Vision of the Industry Ontologies Foundry")
Oct	2017	<u>3rd Workshop on an Open Knowledge Network: Enabling the Community to Build the Network,</u> National Institutes of Health, Bethesda, MD, October 4-5 (" <u>Manufacturing 1</u> ", " <u>Manufacturing 2</u> ")
		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	<u>European Materials Modelling Council (EMMC) Workshop on Interoperability in Materials Modelling</u> , St John's Innovation Centre, Cambridge, UK, 7-8 November (" <u>Introduction to the Industry Ontologies Foundry</u> ")
		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", <u>Video of BS contribution</u> , <u>Audio of Entire Debate</u> , <u>Audio of closing exchanges</u> )
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")
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 ("Capacities")
Aug	2018	256th, American Chemical Society National Meeting (Invited lecture: "Big Chemistry Data")
Oct	2018	DOCAM Conference: Annual Meeting of the Document Academy, Turin, 4-6 October, 2018, (Keynote Lecture: "Documentome")

## **WORKSHOPS AND CONFERENCES ORGANIZED**

Mar	1977	<u>Senses, Propositions, and States of Affairs,</u> Department of Philosophy, University of Sheffield, March 4-5
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	<u>Wittgenstein and the Background of Austro-German Philosophy</u> , Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, January 21-22
Feb	1978	<u>Colloquium</u> , Seminar for Austro-German Philosophy and Department of Philosophy, University of Sheffield, England, February 10-12
Mar	1978	<u>The Philosophy, Literature and Arts of Austria-Hungary</u> , 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	<u>Kant and Husserl: Varieties of Idealism</u> , 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	Grammar and the Begriffsschrift: A Centenary Celebration, 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	Austrian Philosophy and Austrian Politics, 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	Phenomenology and its Applications, 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	Symposium Adolf Reinach, 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, Bad Homburg, Germany, June 18-20
Dec	1984	<u>Zur Philosophie und Sprachtheorie Anton Martys</u> , Seminar for Austro-German Philosophy and University of Fribourg, Switzerland, December 7-9
May	1985	Phenomenology and Gestalt Theory. The History and Contemporary Relevance of Formal Ontology, Seminar for Austro-German Philosophy and Ecole des Hautes Etudes en Sciences Sociales, Paris, 2-6 May  Symposium: Aspects of Continuity, 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	100 Years of Polish Philosophy: An International Conference, 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	Philosophy and the Cognitive Sciences, <u>16th International Wittgenstein Conference</u> , Kirchberg am Wechsel, Austria.
Jul	1994	<u>Topological Foundations of Cognitive Science</u> , Workshop organized as part of the First International Summer Institute in Cognitive Science, Buffalo
Apr	1997	<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
		Academic Freedom in Perspective, A Conference at Canisius College, Buffalo, NY, April 25-26.
Oct	1997	The Origins of Property, Conference organized in the Department of Philosophy, University at Buffalo
Apr	1998	Marvin Farber Conference on Applied Ontology, 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, 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
		<u>Description Logics and Reasoning about Patient Data,</u> 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	The Theory of European Unification, 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 ("Introduction to NCOR") <u>Workshop on Bio-Ontologies</u> , 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
		<u>and Biological Samples</u> , UK National Environment Research Council, OERC: Oxford e-Research Centre, UK, August 29-31 (with Michael Ashburner, <i>et al.</i> )
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	Inaugural Conference of the Japanese Center for Ontological Research, February 26-27 (with Mitsu Okada).
Mar	2008	EnvO Workshop III, 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
Jun	2008	Ruttenberg) <u>Evolutionary Biology and Ontologies Workshop</u> . Organized as part of the Evolution 2008
Juii	2000	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	<u>Second Annual Protein Ontology Meeting</u> , Georgetown University, Washington DC, November 18-19
Jan	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 5 with Paula Mabee, Todd Vision, Monte Westerfield)
Feb	2009	2nd Interdisciplinary Ontology Conference, Keio University, Tokyo, Japan, February 27-March 1 (with Mitsu Okada)
Jun	2009	Ontology-Driven Semantic Interoperability in eHealth, European Commission Directorate General Information Society and Media, Brussels, June 22-23 (with Ilias lakovidis and Erwin Bartels)
Jul	2009	International Conference on Biomedical Ontology (ICBO), University at Buffalo, July 20-26
Sep	2009	<u>Signs, Symptoms and Findings: Towards an Ontology for Clinical Phenotypes</u> , Italian National Research Council Institute for Biomedical Technologies and University of Milan, September 4-5 (with Richard Scheuermann)
Feb	2010	Ontologies for the Virtual Physiological Human, February 14, European Bioinformatics Institute, Cambridge (with Bernard de Bono and Alan Ruttenberg)
		<u>3rd Interdisciplinary Ontology Conference</u> , Keio University, Tokyo, Japan, February 26-28 (with Riichiro Mizoguchi)
Mar	2010	Ontology Summit 2010, National Institute for Standards and Technology (NIST), Gaithersburg, MD, March 15-16 (Co-Chair, with Steve Ray)
Apr	2010	Infectious Disease Ontology Collaborators Meeting, Duke University, Durham NC, April 6-9 (with Lindsay Cowell)
		3rd Annual Protein Ontology Meeting, April 26-28, Newark, USA.
Sep	2010	Infectious Disease Ontology Workshop, 13th World Congress on Medical and Health Informatics (Medinfo 2010) in Cape Town, South Africa on September 11, 2010 (with Albert Goldfain and Lindsay Cowell)
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		(Medinfo 2010) in Cape Town, South Africa on September 11, 2010 (with Albert Goldfain and Lindsay Cowell)
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Oct Dec	2010 2010	(Medinfo 2010) in Cape Town, South Africa on September 11, 2010 (with Albert Goldfain and Lindsay Cowell)  An Introduction to Ontology Building, Buffalo, October 23  Workshop on Infectious Disease Ontology, Baltimore, MD, December 8-9 (with Lindsay Cowell)  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
Oct Dec Apr	2010 2010 2011	(Medinfo 2010) in Cape Town, South Africa on September 11, 2010 (with Albert Goldfain and Lindsay Cowell)  An Introduction to Ontology Building, Buffalo, October 23  Workshop on Infectious Disease Ontology, Baltimore, MD, December 8-9 (with Lindsay Cowell)  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)  Ontology-Based Research on Medicare/Medicaid Data, School of Pharmacy and Pharmaceutical Sciences, University at Buffalo and Department of Pharmacological Sciences,
Oct Dec Apr	2010 2010 2011 2011	(Medinfo 2010) in Cape Town, South Africa on September 11, 2010 (with Albert Goldfain and Lindsay Cowell)  An Introduction to Ontology Building, Buffalo, October 23  Workshop on Infectious Disease Ontology, Baltimore, MD, December 8-9 (with Lindsay Cowell)  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)  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.  International Conference on Biomedical Ontology (ICBO), Buffalo, NY, July 26-30, 2011
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Oct Dec Apr Jun Jul Sep Oct Nov	2010 2010 2011 2011 2011 2011 2011 2011	(Medinfo 2010) in Cape Town, South Africa on September 11, 2010 (with Albert Goldfain and Lindsay Cowell)  An Introduction to Ontology Building, Buffalo, October 23  Workshop on Infectious Disease Ontology, Baltimore, MD, December 8-9 (with Lindsay Cowell)  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)  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.  International Conference on Biomedical Ontology (ICBO), Buffalo, NY, July 26-30, 2011 (Conference Chair)  Alzheimer's Research in the University at Buffalo, Buffalo, NY, September 2, 2011.  Kick-Off Meeting, Alzheimer's Research Forum and Protein Ontology, Buffalo, NY, October 4-5, 2011(with Alan Ruttenberg and Cathy Wu)  Basic Formal Ontology 2.0, Center of Excellence in Bioinformatics and Life Sciences, University at Buffalo, NY, November 10-11, 2011  Ontology for the Intelligence Community, Training and Coordination Event for the US Army DSC

		Ontology, Baltimore, MD, April 25-26, 2012
May	2012	Basic Formal Ontology and the Signature Discovery Ontology, UB Ontology Research Group
Jun	2012	and the Pacific Northwest National Laboratory, CUBRC, Buffalo, NY, May 1-2, 2012  Immunology Ontologies and Their Applications in Processing Clinical Data, Workshop
Juli	2012	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 h (ICBO), Medical University of Graz, Austria, July 22, 2012
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
Feb	2013	<u>Second Clinical and Translational Science Ontology Workshop</u> , 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, University at Buffalo, NY, June 23-25
Sep	2014	<u>Information Artifact Ontologies Workshop</u> , co-located with <u>Formal Ontology in Information Systems 2014</u> , 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

Microbiology for the CTSA: Ontological Approaches: Sixth Clinical and Translational Science Ontology Workshop, University of Michigan, Ann Arbor, October 24-25 (with Yongqun He, Amanda Hicks and William Hogan)

Apr 2018

<u>Capabilities: Human and Machine</u>, Workshop, University at Buffalo School of Engineering and Applied Sciences, April 20. <u>Video</u>