

# BARRY SMITH

## Curriculum Vitae • January 1, 2019

Born 4 June 1952 in Bury, England. US citizen

[h-index](#): 85

[citations](#): 30,015

[h-Index for Computer Science](#)

Erdős Number: [4](#)

### 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.

### 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, [National Center for Geographic Information and Analysis](#) (NCGIA), University at Buffalo
- 2000–          Julian Park Chair, [Department of Philosophy](#), University at Buffalo
- 2002–2006      Director, Institute for Formal Ontology and Medical Information Science ([IFOMIS](#)), Faculty of Medicine, University of Leipzig (2002-2004) and Saarland University, Saarbrücken (2004-2006)
- 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, [Department of Computer Science and Engineering](#), University at Buffalo
- 2013–          Affiliate Professor, [Department of Biomedical Informatics](#), University at Buffalo
- 2016–          Researcher, [Center for Multi-Source Information Fusion](#) (CMIF), University at Buffalo
- 2017–          Faculty Affiliate, [Sustainable Manufacturing and Advanced Robotic Technologies](#) (SMART) Community, University at Buffalo

### HONORS AND AWARDS (SINCE 2010)

- 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 ([FACMI](#))  
 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 Information Systems](#), Annecy, France  
 Aug 2016 [50 Most Influential Living Philosophers](#)  
 Jan 2017– [Member, Faculty of 1000](#)

## EXTERNAL GRANTS

Aug 1991 Research grant 11-37632.93 from the Swiss National Foundation for a project on the Philosophical Foundations of Artificial Intelligence  
 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  
 Mar 1998 National Science Foundation IGERT Program Grant [DGE-9870668](#). 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 [The Mystery of Capital and the Construction of Social Reality](#). Co-PI with David Mark and Isaac Ehrlich  
 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: [Forms of Life: Philosophical Dimensions of Contemporary Biomedical Research](#), PI  
 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  
 Sep 2005 European Union 6th Framework Programme for Research, Technological Development and Demonstration: [ACGT: Advancing Clinico-Genomic Trials on Cancer](#). PI for IFOMIS subcontract  
 Sep 2005 NIH Roadmap Grant U 54 HG004028: [National Center for Biomedical Ontology](#); 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: [Task Force for Ontology-Based IT Support for Large-Scale Field Studies in Psychiatry](#). 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 [International Conference on Biomedical Ontology \(ICBO\)](#). 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. PI of Buffalo subcontract

Aug 2010 NIH Roadmap Grant 2 U54 HG004028: [National Center for Biomedical Ontology](#). (\$17,400,000) PI of Buffalo sub-contract

May 2011 NIH / NHGRI R13HG006231-01 [International Conference on Biomedical Ontology \(ICBO\)](#), 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), [EPSOS: European Patients: Smart Open Services](#). Consultant

Jan 2013 NIH / NIAID HHS N272201200028 [Bioinformatics Integration Support Contract](#) (BISC), National Institute of Allergy and Infectious Diseases. PI of Buffalo Sub-Contract

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 [The Planteome Project: Common Reference Ontologies for Plant Science](#) (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

Jun 2017 NIH / NLM T5 [Biomedical Informatics and Data Science Research Training Programs](#). Mentor

Mar 2018 Naval Postgraduate School N00244-18-1-0003 Data Science Approaches to Automation of Analytic Work Flows. Co-PI

Aug 2018	Navy SYSCOMs and DoD Ontology (Planning Grant), Systems Engineering Research Center (SERC). 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

## SCIENTIFIC ADVISORY BOARDS

1983–2010	<a href="#">Meinong-Institut: Forschungsstelle und Dokumentationszentrum für Österreichische Philosophie</a>
2004–	Hegeler Institute, Board of Trustees
2004–10	Centre de Recherche en Philosophie Economique
2005–06	The MGED Network Functional Genomics Investigation Ontology (FuGO)
2006–2011	Gene Ontology Consortium (NIH/NHGRI)
2006–	Ontology for Biomedical Investigations (OBI)
2006–12	Philosophy Documentation Center
2006–08	Multiscale Systems Immunology for Adjuvant Development (NIH/NIAID)
2007–10	The Cleveland Clinic Semantic Database
2008–12	Disease Ontology (NIH/NHGRI)
2010–12	CardioVascular Research Grid Ontology Advisory Board (CVRG) (Johns Hopkins)
2010–12	Ontology for Clinical Research (OCRe) (University of California at San Francisco)
2010–	International Association for Ontology and its Applications (IAOA)
2011–13	NextGen (Next Generation Air Transportation System) Ontology Team, US Government Joint Planning and Development Office (JPDO)
2014–2015	Ontolog Foundation, Board of Trustees
2014–2015	<a href="#">Intelligence and Information Warfare Directorate</a> (I2WD) Ontologies Governance Board
2014–17	National Center for Geographic Information and Analysis ( <a href="#">NCGIA</a> ), Buffalo
2016–	The Autoimmune Registry
2016–	International Council for Formal Ontology ( <a href="#">ICFO</a> )
2017–	China Biomedical Ontology Consortium, National Scientific Data Sharing Platform for Population and Health

## ONTOLOGY CONSORTIA AND WORKING GROUPS

2006–	<a href="#">Open Biomedical Ontologies (OBO) Foundry</a> Coordinating Editorial Board
2007–	<a href="#">Protein Ontology (PRO)</a> Consortium (NIH/NIGMS)
2007–	<a href="#">Infectious Disease Ontology (IDO)</a> Consortium (NIH/NIAID)
2009–12	Major Histological Complex Ontology Working Group (NIH/NIAID)
2009	Task Force on Representation and Deployment of the Program on Ontologies of Neural Structures (PONS) of the International Neuroinformatics Coordinating Facility (INCF)
2010–12	eagle-I / VIVO Expertise Ontology Working Group
2012–13	CTSAconnect
2012–	<a href="#">Environment Ontology Core Team</a> (Genomic Standards Consortium)
2015–	United Nations Environment Programme (UNEP) <a href="#">Sustainable Development Goals Interface Ontology (SDGIO) Community of Practice</a>
2015–17	<a href="#">Pistoia Ontologies Mapping Project</a>
2016–	<a href="#">ISO/IEC JTC 1/SC 32/WG 2 – MetaData</a>

- 2016– Industry Ontology Foundry (IOF)
- 2017– Semantic Web Technologies for Systems Engineering (SWTSE) group
- 2017– Roswell Park Cancer Institute (RCPI) Cancer Ontology Working Group
- 2017– International Standards Organization ISO/IEC 21838-1 Top-Level Ontologies; ISO/IEC NP 21838-2
- 2017– Governance Board, Industry Ontologies Foundry (IOF), National Institute of Standards and Technology (NIST)
- 2018– Capabilities Ontology Working Group

## LEARNED JOURNALS AND SERIES

Editor of The Monist. An International Quarterly Journal of General Philosophical Inquiry ([1992–2016](#))

Associate Editor

*Applied Ontology* (2004–)

*BMC Bioinformatics* (2011–2015)

*Journal of Biomedical Semantics* (2009–)

## 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. [Core Curriculum in Clinical and Translational Research](#) 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 (guest 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)

*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  
[Building Ontologies for Clinical and Translational Research](#), 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)  
[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  
[Information Artifact Ontologies Workshop](#), Rio de Janeiro, [Tutorial on the Information Artifact Ontology](#), September 22, 2014  
Tutorial: [Introduction to Basic Formal Ontology](#), 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

[Quantitative Systems Immunology Summer School](#), 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  
[Unlocking Digital Thread \(DT\) Data for More Effective and Economical Systems Health Monitoring](#),  
Phoenix, AZ, May 21, 2017

[Web Science and Technology \(WebST\) 2016](#), 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

[Systems Engineering Research Center \(SERC\)](#), Washington, DC  
[Systems Engineering Ontology Bootcamp](#), ([Slides](#)), December 5, 2017

[University at Buffalo, Center for Multi-Source Information Fusion](#),  
[Ontology for Systems Engineering \(Video\)](#), January 26, 2018

## PH.D. DISSERTATIONS DIRECTED

1. Catherine J. Pearce, [Phenomenology of Time and Space](#), 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 [Judgment and Sachverhalt. An Introduction to Adolf Reinach's Phenomenological Realism](#), Dordrecht/Boston/London: Kluwer Academic Publishers, 1995. Current employment: Steven J. Bander Professor of Medical Ethics, Washington University, St. Louis.
3. Balász Mezei, [World and Life-World. Aspects of the Philosophy of Edmund Husserl](#), 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.

5. 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, [\*The Horizon of Choice: A Contribution to the Austrian Theory of Economics\*](#), 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, [\*Intentionality and Blame: A Study in the Foundations of Culpability\*](#) (member of Ph.D. Committee), University at Buffalo, June 1997. Current employment: Chair, Department of Philosophy, Union College, Schenectady.
11. Berit Brogaard, [\*Temporal Mereology\*](#), University at Buffalo, November 1999. Current employment: Department of Philosophy, University of Miami.
12. Gerold Erion, [\*Common Sense: An Investigation in the Theory of Ontology, Epistemology, and Moral Philosophy\*](#), 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, [\*Using the World to Understand the Mind: Evolutionary Foundations for Ecological Psychology\*](#), University at Buffalo, April 2000. Current employment: Department of Philosophy, Sam Houston State University.
15. Gloria Zuniga, [\*A General Theory of Value: Axiology in the Central European Philosophical Tradition\*](#), University at Buffalo, April 2000. Department of Philosophy, Ashford University.
16. Michael Happold, [\*Information, Computation, and the Nature of Cognition: A Critique of Computational Approaches to Understanding and Creating Minds\*](#), 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, [\*Wise Action: A Dissertation on Prudence and Morality\*](#), October 2002. Current employment: St John's University, Staten Island Campus.
19. Eric Little, [\*Moderate Materialism: Toward a Unified Ontology of Consciousness\*](#), October 2002. Current employment: VP Data Sciences, Osthus.
20. Adrienne McEvoy, [\*The Role of Empathy in Pain Management Decisions\*](#), University at Buffalo, August 2002. Current employment: Mansfield University of Pennsylvania, Mansfield, PA.
21. William Mandrick, [\*The Ontology of War\*](#), University at Buffalo, April 2003. Current employment: Colonel, US Army.
22. Youngjin Kiem, [\*Prolegomena to a New Theory of Intentionality\*](#), University at Buffalo, September 2004.
23. Lowell Vizenor, [\*Corporate Being: A Study in Realist Ontology\*](#), University at Buffalo, February 2006. Current employment: Chief Technology Officer at Securborator, Washington, DC.
24. Douglas Mayhew, [\*An Ontology of Natural Cognition. The Substance and Structure of Everyday Thought\*](#), 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, [\*Kinds of Instances: A Logical and Metaphysical Inquiry into the Ontological Square\*](#), University of Geneva, October 2007 (co-supervisor, Kevin Mulligan). Current Employment: Digital Curator National Library of Luxemburg.



27. Nikoloz Tsikolia, [\*Mechanisms of carcinogenesis: A consideration of causality in the development and pathology of the living organism based on realistic ontology\*](#), University of Leipzig, November 2007 (co-supervisor). Current employment: Department of Anatomy and Embryology, University Medical Center, Göttingen, Germany.
28. Mark Niswonger, [\*Life at Its Edges: A New Look at the Persistence Conditions for Organisms\*](#), University at Buffalo, November 2010. Current employment: Brown Mackie College, Cincinnati.
29. A. Patrice Seyed, [\*A Method for Evaluating and Standardizing Ontologies\*](#), 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, Post-Doc at Jean Nicod Institute, Paris.
31. William Duncan, [\*The Ontology of Computational Artifacts\*](#), University at Buffalo, June 2014. Current employment: Assistant Professor of Oncology, Roswell Park Cancer Institute
32. Peter Koch, *A Theory of Patient Welfare*, University at Buffalo, 2016. Current employment: Assistant Professor, Villanova University, Villanova, PA

## SOCIAL MEDIA

[HL7 Watch](#): HL7 (Health Level 7) is a collection of standards and proposals for healthcare-specific data exchange between computer applications. Considerable efforts are being invested by governments and industry to use HL7 as part of national health IT projects. Many claims are made on behalf of HL7 by its advocates. The goal of this blog is to investigate the merits of these claims, and to provide some needed independent perspective on the HL7 project.

[Youtube](#)

[Philosophical Installations](#)

[Publons](#)

## 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 (" <a href="#">Environments</a> ")

		<a href="#">Inside and Outside the Organism</a> ")
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 (" <a href="#">How to Do Things with Diagrams</a> ")
Oct	2012	Buffalo PANTC Colloquium, October 16 ("Discussion of 16 Days")
Nov	2012	UB Clinical/Research Ethics Seminar. Buffalo General Medical Center, November 20 (" <a href="#">Ethics, Informatics and Obamacare</a> ")
Jan	2013	National Center for Biomedical Ontology (NCBO) Webinar, January 16 (" <a href="#">HL7: An Ontologist's Guide</a> ") Institut für Geoinformatik, University of Münster, Germany, January 30 (" <a href="#">Massively Shared Social Agency</a> ")
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 (" <a href="#">How to make ImmPort data fit for secondary use</a> ") 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, (" <a href="#">How to Enhance the Utility of Data in ImmPort</a> ")
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 (" <a href="#">Clinical Trial Data Wants to Be Free: Lessons from the ImmPort Immunology Data and Analysis Portal</a> ")
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 (" <a href="#">Speech Acts, Economic Acts, and Poker</a> ")

May 2014 Department of Philosophy, University of Rijeka, Croatia, May 7 ("[Document Acts and the Ontology of Social Reality](#)") ([Video](#))  
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 ("[An Ontology Ecosystem Approach to Electronic Health Record Interoperability](#)", 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 ("[The Future of the History of Philosophy](#)") ([Video](#))  
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 ("[The Engineering Ontology Landscape](#)", online presentation) ([Video](#))  
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 (" <a href="#">The Evolving Ontology Landscape</a> ")
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	<a href="#">Sustainable Manufacturing and Advanced Robotic Technologies</a> (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 (" <a href="#">Molecules, Cells, Diseases, Networks</a> ")
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 (" <a href="#">How BFO Deals with Data from Multiple Contexts</a> ", <a href="#">Video</a> ) INCOSE Finger Lakes Chapter, February 15 (" <a href="#">Ontology for Systems Engineers</a> " <a href="#">Video</a> ) Department of Philosophy, University at Buffalo, February 16 (" <a href="#">Is Terrorism a Crime</a> " <a href="#">Video</a> )
Mar	2018	<a href="#">Romanell Philosophy of Medicine and Bioethics Workshop</a> , University at Buffalo, March 10, 2018 (" <a href="#">What do IQ tests measure?</a> " <a href="#">Video</a> ) Department of Philosophy, University of Maryland, College Park, MD, March 28 (" <a href="#">The Ontology of Terrorism</a> ") 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 (" <a href="#">Introduction to Basic Formal Ontology</a> ")
Sep	2018	Romanell Center for Philosophy of Medicine and Bioethics, September 14 ("Disability: A Realist Approach") Grand Rounds, Department of Biomedical Informatics, University at Buffalo, September 25 (" <a href="#">Defining Disability</a> ") Department of Pharmaceutical Sciences, University at Buffalo, September 27 (" <a href="#">The Replication Crisis in Pharmaceutical Science</a> " <a href="#">Video</a> )

## 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	<a href="#">Ontology Summit 2010</a> , 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	<a href="#">ARGOS</a> : Transatlantic Observatory for Meeting Global Health Policy Challenges through ICT-Enabled Solutions, Consortium Meeting, Barcelona, Spain, March 15 (with Werner Ceusters) <a href="#">Ontology Summit 2010</a> , 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”)

May 2010 FOIS Workshop on Ontology Education, University of Toronto, May 11 (“Creating a Common 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”)

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”)

[La métaphysique appliqué: 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)

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”)

Nov 2010 [Plant Ontology Workshop](#), New York Botanical Gardens, Bronx, NY, November 5 (“BFO and the 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)

Feb 2011 Disease Ontology Workshop and Advisory Board Meeting, Institute for Genomic Sciences, 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”)

Apr 2011 [Jubileumsseminar Anders Grimsmo](#), Department of Public Health and General Practice, 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")

May 2011 [Ratio Conference on Metaphysics](#), Reading University, Reading, United Kingdom, May 7 ("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: 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 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 [Towards an Ontology of Mental Functioning, ICBO Workshop](#), 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 [Semantic Technology for Intelligence, Defense and Security](#) (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 [Visual Learning: Communication – Cognition – Curriculum](#), 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 [Building Ontologies to Meet Evaluation Criteria](#), Ontology Summit 2013, Session-04, February 7 ("Ontological Realism as a Strategy for Integrating Ontologies")

[Clinical and Translational Science Ontology Workshop](#), Orlando, FL, February 11-12 ("[Limning the CTSA Ontology Landscape](#)")

[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 [Basic Formal Ontology 2.0 Development Workshop](#), 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](#)")

[Information Systems and the Four-Category Ontology](#), University of Durham, May 21 ("[The Six Category Ontology: 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 [International Workshop on Definitions in Ontologies](#), 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 [Bioethics and the Philosophy of Medicine](#), 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")

[ImmPort Ontology Conference](#), 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 [Systems Biology and Bioinformatics in Aging Research](#), 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")
- [Training and Strategy for ImmPort Data Submitters](#), 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")
- [Philosophy of Emerging Media](#), 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 [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")
- [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 ("[A Guide to Ontology for the Pathologist of the Future](#)")
- 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 ("[The Ontology of Aging and Death](#)")
- [Protein Ontology Workshop](#), Georgetown University, DC, June 19 ("[Introduction to the Relation Ontology](#)")
- [Ontology and Imaging Informatics](#), University at Buffalo, NY, June 23-25 ("Introduction to Ontology for Pathology Imaging")
- Aug 2014 [Bioethics and the Philosophy of Medicine](#), 2014 PANTC Conference, University at Buffalo, August 1-2 ("[Ontology of Aging](#)")
- 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](#)")  
[Truth, Image, Normativity](#), University of Cagliari, Sardinia, October 21-26 ("[The Division of Deontic Labor](#)")

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 ("[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. [Beyond Semantic Sensor Network Ontologies](#), March 5 ("[Ontology of Sensors: Some Examples from Biology](#)")

Apr 2015 American Philosophical Association, Pacific Division Meeting, Vancouver, BC, Canada, April 2 ("[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")

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")  
[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 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”)  
[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”)  
 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])  
[Bioethics and the Philosophy of Medicine](#), PANTC Conference, University at Buffalo, July 30

- ([“The Metaphysics of the Embryo”](#))
- Aug 2016 [International Conference on Biological Ontology](#), Corvallis, OR, August 1-4 ([“The Ontology of the 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”](#))
- 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”](#))  
[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”](#))
- Dec 2016 [First Industrial Ontology Foundry Workshop](#), Systems Integration Division, National Institute of 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)
- Feb 2017 [The Metaphysics of Quantities](#), 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 [Franz Brentano Centenary 1838–1917](#), University of Vienna, June 1 ([“Four Phases of Philosophy and Its Present State”](#))  
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 [IAOA Summer Institute on Upper Ontologies](#), University of Toronto, August 8-11 ([“Why do we need upper-level ontologies?”](#), [“Relationships between upper-level ontologies”](#), [Slides](#))
- 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](#))



Oct	2017	<a href="#">Journées sur l'Interopérabilité des Applications d'entreprise</a> (JIAE), conference of the Virtual Interoperability Lab, September 28-29 ("The Vision of the Industry Ontologies Foundry")
		<a href="#">3rd Workshop on an Open Knowledge Network: Enabling the Community to Build the Network</a> , National Institutes of Health, Bethesda, MD, October 4-5 (" <a href="#">Manufacturing 1</a> ", " <a href="#">Manufacturing 2</a> ")
		ASM International, Materials Properties Database Committee, Pennsylvania, PA, October 8 (" <a href="#">Introduction to the Industry Ontologies Foundry</a> ", on-line presentation)
		<a href="#">Protein Ontology Consortium Workshop 2017</a> , Bar Harbor, MN, October 11-12 ("How To Define 'Causally Upstream Of'")
Nov	2017	<a href="#">Microbiology for the CTSA: Ontological Approaches</a> : Sixth Clinical and Translational Science Ontology Workshop, University of Michigan, Ann Arbor, October 24-25 ("Building a Microbiome Ontology")
		<a href="#">European Materials Modelling Council (EMMC) Workshop on Interoperability in Materials Modelling</a> , St John's Innovation Centre, Cambridge, UK, 7-8 November (" <a href="#">Introduction to the Industry Ontologies Foundry</a> ")
		International Standards Organization (ISO) Committee on MetaData Standards, University of Colorado, Anschutz, OR, November 28 ("ISO NWIP: Top-Level Ontologies")
Apr	2018	Boston Phenomenological Circle Symposium, Boston College and Boston University, April 13-14 (" <a href="#">The Ontology of Emotions</a> ", <a href="#">Video</a> )
		<a href="#">Capabilities: Human and Machine</a> , Workshop, University at Buffalo School of Engineering and Applied Sciences, April 20 (" <a href="#">What are Capabilities?</a> ", <a href="#">Video</a> )
		Medical Informatics Europe (MIE 2018), April 23-26 Gothenburg ("Bruxism", with Werner Ceusters)
		<a href="#">Metaphysics and Formal Ontology</a> , Dynamis: Finnish Network of Metaphysics, Tampere, April 27 (Keynote Lecture, " <a href="#">Driverless Philosophy</a> " <a href="#">Video</a> )
May	2018	Ontology Summit 2018, NIST, Washington DC, May 1 ("The Great Debate: John Sowa vs. Barry Smith", <a href="#">Video of BS contribution</a> , <a href="#">Audio of Entire Debate</a> , <a href="#">Audio of closing exchanges</a> )
Jun	2018	<a href="#">Society for Automotive Engineers Automated and Connected Vehicle Systems Testing Symposium</a> , 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: " <a href="#">Ontology: Tool for Broad Spectrum Knowledge Integration</a> ")
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")
		<a href="#">Romanell Philosophy of Medicine and Bioethics Conference 2018</a> , University at Buffalo, July 28-29 ("Capabilities")
Aug	2018	256th, <a href="#">American Chemical Society National Meeting</a> (Invited lecture: "Big Chemistry Data")
Sep	2018	<a href="#">Navy SYSCOM and DoD Ontology Workshop</a> , Engility, Washington DC, September 18-19 (" <a href="#">Ontology and the Navy SYSCOMs Systems Engineering Transformation Process</a> ")
Oct	2018	DOCAM Conference: Annual Meeting of the Document Academy, Turin, October 4-6 (Keynote Lecture: " <a href="#">Documentome</a> ")
Nov	2018	The Philosophy of Achille Varzi on the Occasion of His Un-Birthday, Department of Philosophy, University of Milan ("Some Neglected Parts")

## WORKSHOPS AND CONFERENCES ORGANIZED (SINCE 2010)

Feb	2010	<a href="#">Ontologies for the Virtual Physiological Human</a> , February 14, European Bioinformatics Institute, Cambridge (with Bernard de Bono and Alan Ruttenberg)
		<a href="#">3rd Interdisciplinary Ontology Conference</a> , 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)

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 [Kick-Off Meeting](#), Alzheimer's Research Forum and Protein Ontology, Buffalo, NY, October 4-5, 2011 (with Alan Ruttenberg and Cathy Wu)

Nov 2011 [Basic Formal Ontology 2.0](#), 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 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 [Towards an Ontology of Mental Functioning](#), 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 [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 [Basic Formal Ontology 2.0 Development Workshop](#), 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 [Training and Strategy for ImmPort Data Submitters](#), 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 [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, [International Conference on Biomedical Ontologies](#), 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 [IAOA Summer Institute on Upper Ontologies](#), 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 [Capabilities: Human and Machine](#), Workshop, University at Buffalo School of Engineering and Applied Sciences, April 20. [Video](#)

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)