

BIOGRAPHICAL SKETCH			
NAME		POSITION TITLE	
Aldo Gangemi		Senior Researcher, ISTC-CNR	
Born in Rome, August 16, 1962			
INSTITUTION AND DEGREE			
	DEGREE	YEAR(s)	FIELD OF STUDY
University of Rome La Sapienza	M.S.	1989	Philosophy, Linguistics (M.S. in Philosophy, 110/110 cum laude)
Italian National Research Council	Academic grants	1990-1994	Medical Informatics Knowledge Engineering
ADDRESSES			
Place type	Physical place	Telephone	Email/Profile
Office	Via Nomentana 56, 00161, Roma, Italy	+390644161535	aldo.gangemi.cnr.it
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Web	http://www.istc.cnr.it/people/aldo-gangemi http://stlab.istc.cnr.it/Aldo_Gangemi	Skype: aldogangemi	FOAF: http://bit.ly/gwpQLu
		okkam: http://bit.ly/aldogangemiokkam	

A. Positions and Roles

Employment positions

1990-1994: Academic CNR grants (Borsa di Studio) at Institute for Biomedical Technology, Italian National Research Council.

Research on medical terminologies and knowledge organization systems. Conceptual modelling in the European Union GALEN Project. (Title II funded).

1995-2000: Junior researcher at Institute for Biomedical Technology, Italian National Research Council.

Research on knowledge representation in medicine, clinical guidelines, ontology engineering, conceptual modelling in Italian academic projects.

2001-: Senior researcher at Institute for Cognitive Sciences and Technology, Italian National Research Council.

Research on ontology engineering, semantic web, cognitive and formal semantics in European Union projects WonderWeb, OntoWeb, METOKIS (local coordinator), NeOn (local coordinator and workpackage leader), and European EUREKA project IKF. Coordinator for CNR commessa (programme) Semantic Intrawebs. Co-founder of the Laboratory for Applied Ontology, co-founder and scientific director of the Semantic Technology Lab.

2004-2006: Professor (“professore a contratto”) at Università per Stranieri di Perugia.
Teaching Knowledge Engineering courses at the faculty.

2011 (May 15 to June 15); 2012 (June 1 to June 30): Invited Professor at Paris 13 University.

Research at the LIPN department on hybridising knowledge engineering and natural language processing, in particular for the legal domain.

2001-: Consultant for:

- Italian Ministry of Research: project reviewer for ICT
- Italian Ministry of Industry: project reviewer for ICT
- Regione Toscana: project reviewer for ICT and Humanities
- European Union FP6/FP7: project reviewer for ICT
- Vrije Universiteit Brussels – Belgium: project reviewer for ICT
- von Humboldt prize – Germany: reviewer
- ELSAG: ontology design, ontology-driven applications in the banking and regulatory domains
- Accenture: semantic CRM applications, ontology design
- Selesta: semantic service-level agreement applications, ontology design
- WIND telecommunications: taxonomy refactoring, search optimization
- ITER: semantic workflows
- RAI: semantic advertising, semantic search
- United Nations FAO Agency: ontology design, revision, database reengineering, data linking in agriculture and fishery domains
- Italian Governmental Authority for Informatics in the Public Sector – CNIPA: coordinator of the working group on Semantic Inoperability for Italian Public Administration Services
- European Media Lab – Germany: ontology design, bioinformatics
- Boehringer Ingelheim – Germany: ontology design
- Reinvent technologies – Canada: ontology design, lexical ontologies, semantic advertising, search optimization
- Almaviva (company) – Italia: ontology design, linked data
- DigitPA (Italian agency for informatics in the PA) – Italia: ontology design, linked data

Roles

2008-: Head of the Semantic Technology Lab. Supervised researchers 2008-11: 13. Total STLab funds 2008-12: ≈1.5M€

2006-: Coordinator for the Research Programme (“commessa”) “Semantic Technologies” within the ICT Department of CNR

2004-: Reviewing service for the European Union (FP6 and FP7 projects), Italian Ministry of Research and Ministry of Industry (technology transfer and industrial projects from PNR – National Research Programmes–: PIA, FAR, FIT, PON), von Humboldt German Academic Prize, Free University of Brussels.

Reviewing of academic and industrial projects on semantic web, information system design, software engineering, etc.

1998-: Regular presence in the program, organization and scientific committees of relevant conferences, journals, workshops, organizations.

Conference and journal scientific committee member: Semantic Web Journal, Applied Ontology Journal, KR (International Conference on Knowledge Representation), ISWC (International Semantic Web Conference), WWW (International World Wide Web

Conference), EKAW (European Knowledge Engineering Conference), ESWC (European Semantic Web Conference), FOIS (Formal Ontology and Information Systems), CIKM (Conference on Information and Knowledge Management). Vice-chair at ISWC2011.

1998-: Presence in the advisory board of international agencies.

W3C-SWBPD-OEP (W3C Working Group on Semantic Web Best Practices and Deployment), W3C-eGovIG (W3C Working Group on eGovernment), ECDC (Working Group on Knowledge Management of the European Council for Disease Control and Prevention), Semic-IDABC (EU Working Group on Semantic Interoperability), W3C Ontology-Lexica Community Group.

1998-: Conference organization: FOIS1998 (Formal Ontology and Information Systems, *organization chair*), LREC2006 (Linguistic Resources and Evaluation Conference, *program chair*), EKAW2008 (European Conference on Knowledge Engineering and Knowledge Management, *conference chair*), SWAP2008 (Semantic Web Applications and Perspectives, *conference chair*), ESWC2010 (Extended Semantic Web Conference, *tutorials chair*), ISWC2011 (International Semantic Web Conference, *vice-chair*).

2003-: Workshop organization: LegOnt2003 (*Third International Workshop on Legal Ontologies*, at International Conference on AI&Law, Edinburgh, 2003), OntoLex2004, *Second International Workshop on Ontologies and Lexica*, at LREC2004, Lisbon, 2004, WORM04 (*Second International Workshop on Regulatory Ontologies*, at ODBASE Conference, Cyprus, 2004), CORONT04 (*First International Workshop on Core Ontologies*, at EKAW2004, Northampton, 2004), WORM05 (*Third International Workshop on Regulatory Ontologies*, at ODBASE Conference, Cyprus, 2005), OPSW05 (*Ontology Engineering Patterns*, at ISWC2005, Galway, Ireland, 2005), EON06 (*Ontology Evaluation Workshop at WWW2006*, Edinburgh, 2006), OntoLex (*The ontology/lexicon interface workshop*, Busan, Corea, 2007), KRSSW2008 (*Workshop on Knowledge Reengineering on the Semantic Web at ESWC2008*, Tenerife, Spain, 2008), SPIM2010 (Semantic Personalized Information Management at LREC2010, Malta, 2010), SPIM2011 (Semantic Personalized Information Management at ISWC2011, Bonn, 2011).

2004-: Invited talks in academic contexts:

- *Some design patterns for domain ontology building and analysis*, Knowledge Media Institute, 2004
- *Context types in Formal Ontology*, Free University of Bruxelles, 2004
- *Ontologie fondazionali*, University of Rome I, DSI, 2004
- *Modelli di progettazione ontologica per la complessità. Il caso dei beni culturali*, Minerva Project, Rome, 2004
- *Legal ontologies*, Final Conference of CNRS Action Spécifique Ontologie du droit et langage juridique, Paris, 2004
- *Ontology-driven Law: What representations are feasible, what inferences can be drawn?*, Colloque de l'Action Spécifique Ontologie du droit et langage juridique, Paris, 2004
- *Formal ontological methods for sharing scientific and cultural information*, Final Mesmuses Project Workshop, Florence, 2004
- *Modelli di progettazione ontologica comunitaria: lessico e conoscenza implicita nella società della conoscenza*, University of Rome II, AI, 2005
- *What's in a term*, European Media Laboratory, Heidelberg, 2005
- *Fishery Ontology Service Project*, University of Bolzano, 2005
- *Knowledge Content Objects: a grounded ontology for content management over the semantic web*, OntoHumanities Workshop, Florence, 2005
- *Trattamento del linguaggio naturale e ingegneria ontologica*, AI*IA NLP Workshop, Perugia, 2005

- *Ontology Design Patterns for Semantic Web Content*, University of Bologna, Dipartimento di Informatica, 2005
- *Social and logical reification*, ICIB-CNR, Napoli, 2006
- *Identity of Resources and Entities*, Semantic Web Applications and Perspectives, Pisa, 2006
- *Ontology Design Patterns*, DynamOnt Project, Salzburg, 2006
- *Ontologie e portali semantici: il caso della IntraWeb CNR*, Workshop on Portale di Ateneo, University of Bologna, 2006
- *Ontology design as mediation: The case for terminological resources*, CNR-ITTIG, Florence, 2006
- *A Collaborative Semantic Web Layer to Enhance Legacy Systems*, CNIPA, Rome, 2007
- *Formalizzare i(l) Web: comunità di pensiero, invarianti semantiche e applicazioni*, Signum, Scuola Normale, Pisa, 2007
- *Plans and Norms as unification criteria for Social Collectives*, Dagstuhl Seminar on Norms and Multi-Agent Systems, 2007
- *Sweet models: a DOLCE history*, Workshop on Legal Ontology Building, Barcelona, 2007
- *Suq semantics*, Keynote Lecture at Terminology and Knowledge Engineering Conference, Copenhagen, 2008
- *The Computational Ontology Perspective*, Approaches to Legal Ontologies Seminar, European University Institute, Florence, 2008
- *Ontology and the lexicon: a roundtrip*, Keynote Lecture at Conference sur le Traitement Automatique du Langage Naturel, Paris, 2009
- *Semantic Web Ontologies: What worked, what didn't*, Dagstuhl Seminar on the Future of the Semantic Web, 2009
- *The STLab Research Programme*, STI2 workshop, Kalamaki, Crete, 2010
- *A Pattern Science for the Semantic Web*, Keynote Lecture at the Extended Semantic Web Conference, Hersonissos, Crete, 2010
- *Pattern-based Design of Medical Ontologies*, Paris 13 University, 2011
- *Combining Natural Processing and Semantic Web: some Applications, Migrating Alphabets*, CNR, Rome, 2011
- *A Pattern Science for the Semantic Web*, Workshop on La Strutturazione della Conoscenza nel Web, Università di Salerno, 2011
- *Tecnologie di Web Semantico per le Scienze Umane*, Conference Diritto romano e scienze antichistiche nell'era digitale, Firenze, 2011
- *Some Design Patterns for the Ontology-Lexicon Interface over the Web*, Invited talk at the Workshop on Ontologies and Lexical Semantics, Roma, 2011
- *Ontology Design: an Empirical Perspective*, 9th SSSW Semantic Web Summer School, Cercedilla, Spain, 2012

2004-: Invited talks in institutional and business contexts:

- *Ontology Design: A Primer*, Boehringer Ingelheim, 2007
- *CNR Semantic IntraWeb Project*, Agricultural Ontology Workshop, UN-FAO, 2007
- *Il progetto STLab: tecnologie semantiche per una rete di conoscenza fra cittadini, organizzazioni e imprese*, CONSIP, Rome, 2008
- *Ontology and the Lexicon: a Roundtrip*, SRI Menlo Park, US, 2009
- *Ontology Design*, Almaviva, Roma, 2011
- *Knowledge Patterns: Frame Representation across AI, Semantic Web, Linguistics, and Cognitive Science*, IBM Watson Research Center, 2011

2000-: Teaching:

- Tutorings at the Ninth European Summer School on Ontological Engineering and the Semantic Web (SSSW-2012), at Cercedilla, Spain (July, 2012).
- *Applicazioni Semantiche sugli Open Data*, Doctoral lecture at University of Bologna, Faculty of Law, Bologna, (March, 2012).
- Course on *Ontology Design* at the Third LEX International Summer School (LEX2011), at Ravenna, Italy (September, 2011).

- Course on *Ontology Design* at the Eighth European Summer School on Ontological Engineering and the Semantic Web (SSSW-2011), at Cercedilla, Spain (July, 2011).
- PhD Course on *Computational Ontologies* at the Computer Science Department of the University of Bologna (May, 2011).
- *Ontology Design*, Doctoral lecture at University of Bologna, Faculty of Law, Bologna, (March, 2011).
- PhD Course on *Computational Ontologies* at the Computer Science Department of the University of Bologna (February, 2010).
- Course on *Ontology Design* at the Second LEX International Summer School (LEX2010), at Ravenna, Italy (September, 2010).
- Course on *Ontology Design* at the First LEX International Summer School (LEX2009), at Fiesole, Italy (September, 2009).
- Course on *Ontology Design* at the Seventh European Summer School on Ontological Engineering and the Semantic Web (SSSW-2009), at Cercedilla, Spain (July, 2009).
- Course on *Ontology Design* at the University of Jönköping, Sweden, within the bilateral programme DEON between Jönköping University and CNR (November, 2009).
- PhD Course on *Computational Ontologies* at the Computer Science Department of the University of Bologna (October, 2009).
- Invited Tutorial on *Ontology Design* at the Seventh International Semantic Web Conference, Karlsruhe, Germany (October, 2008)
- PhD Course on *Computational Ontologies* at the Computer Science Department of the University of Bologna (September, 2008).
- Course on *Ontology Design* at the Sixth European Summer School on Ontological Engineering and the Semantic Web (SSSW-2008), at Cercedilla, Spain (July, 2008).
- Invited Tutorial on *Ontology Design* at the Sixth International Semantic Web Conference, Busan, Korea (November, 2007)
- PhD Course on *Ontology Design* for the PhD curriculum at the Computer Science Department of the University of Bologna (September, 2007).
- Course on *Ontology Design* at the Epoch Summer School, Procida, Italy, (2007).
- Course on *Ontology Design* at the Fifth European Summer School on Ontological Engineering and the Semantic Web (SSSW-2007), at Cercedilla, Spain (July, 2007).
- Tutorial on *Ontology Design Patterns* at the EKAW Conference, in collaboration with Guus Schreiber and Alan Rector (2006).
- Course on *Ontology Evaluation and Validation* at the Fourth European Summer School on Ontological Engineering and the Semantic Web (SSSW-2006), at Cercedilla, Spain (July, 2006).
- Course on *The emergent ontology: knowledge collectives and conceptual design patterns* at the Interdisciplinary College (IK2006), Günne, Germany (2006)
- Course on *Ontology Evaluation and Validation* at the Third European Summer School on Ontological Engineering and the Semantic Web (SSSW-2005), at Cercedilla, Spain (July, 2005).
- Course on *Ontologies: Theory, Methods and Tools* at the Second European Summer School on Ontological Engineering and the Semantic Web (SSSW-2004), at Cercedilla, Spain (July, 2004).
- Specialist course (supported by professorship) on *Knowledge Engineering* within the School of Strategic Design (Un. Diploma in Communication Studies) at the Università per Stranieri (University for Foreigners of Perugia), (2003-5)
- Course on *Semantic Web* at the ReasonPark Summer School (2003)
- Tutorial on *Formal Ontological Analysis and Conceptual Modelling* at the EKAW Conference, in collaboration with Nicola Guarino (2002).

B. Selected international, peer-reviewed publications (main conferences, books and journals only) – current h-index: 33 (Publish or Perish, January 2012)

1. Rossi Mori A, Thornton AM, Gangemi A, An Entity-relationship Model for a European Machine-Dictionary of Medicine, in RA Miller (ed.): *Proceedings of Fourteenth Annual SCAMC (Symposium on Computer Applications in Medical Care) - Standards in Medical Informatics*, Washington, IEEE Computer Society Press, 1990.
2. Rossi Mori A., Galeazzi E., Gangemi A., Pisanelli D.M., Thornton A.M. The Transfer of Medical Concepts in a Multilingual Environment, in G Negrini, T Farnesi, D Benediktsson (eds.): *Proceedings of the Conference: Documentary Languages and Databases*, Roma, Indeks Verlag, pp. 201-212, 1991.
3. Rossi Mori A, Gangemi A, Pisanelli DM, Thornton AM, Semantic Standards for the Representation of Medical Records, *Medical Decision Making*, 11, 4, 1991.
4. Gangemi A, Galanti M, Galeazzi E, Rossi Mori A, Beyond UMLS: Compositional Semantics for Medical Records, in R Scherrer & S Mandil (eds.): *Proceedings of 7th World Congress on Medical Informatics (MedInfo)*, Genève, 1992.
5. Gangemi A., Galanti M., Galeazzi E., Rossi Mori A., Knowledge Acquisition from Coding Systems, in A Neelameghan (ed.): *Proceedings of 2nd Int. ISKO Conference Cognitive Paradigms in Knowledge Organization*, Madras, 1992.
6. Rossi Mori A., Gangemi A., The Coding Cage, in A Reichert (ed.): *Proc. of 11th Int. Congress of the European Federation for Medical Informatics*, Jerusalem, 1993.
7. Gangemi A., Rossi Mori A., Composizionalità e modelli nell'analisi del linguaggio medico, *Lexicon Philosophicum 7: Ricerca e terminologia tecnico-scientifica*, Firenze, Olschki, 1994.
8. Gangemi A., Strategie dell'informazione scientifica: problemi di divulgazione, comprensione e rappresentazione della conoscenza a partire dall'analisi di un corpus di testi di genetica, in T De Mauro (ed.): *Studi sul trattamento linguistico dell'informazione scientifica*, Roma, Bulzoni, 1994.
9. Rector AL, Gangemi A, Galeazzi E, Glowinski A, Rossi Mori A, The GALEN CORE Model Schemata for Anatomy: Towards a Re-usable Application-Independent Model of Medical Concepts, in M Veloso (ed.): *Proceedings of 12th International Congress of the European Federation for Medical Informatics (MIE94)*, Lisboa, 1994.
10. Gangemi A, Steve G, Cognitive Design for Sharing Medical Knowledge Models, in Kaihara (ed.): *Proceedings of 8th World Congress on Medical Informatics*, Vancouver, 1995.
11. Steve G, Gangemi A, Rossi Mori A, Modelling a Sharable Medical Concept System: Ontological Foundation in GALEN, in *Proceedings of the Conference of the European Society for Artificial Intelligence in Medicine (AIME)*, 1995.
12. Steve G., Gangemi A., Rossi Mori A., Integrating Medical Terminological Sources: An Ontological Framework, *Proceedings of the Conference FLAIRS-96, Track on Information Interchange*, S Ali ed., pp 117-133, 1996.
13. Steve G, Gangemi A, Ontological Commitment for Medical Ontologies Reuse in the ONIONS Methodology, *Proceedings of the KAW-96 Conference, Track on Sharable and Reusable Ontologies*, B Gaines & M Musen eds, Calgary, pp 412-433, 1996.
14. Steve G, Gangemi A, Pisanelli DM, Giacomelli F, Ontological Integration of Medical Terminologies with ONIONS, *Proceedings of the Conference EJCIMKB-97*, H Kangassalo ed., pp. 82-98, 1997.
15. Rossi Mori A, Gangemi A, Steve G, Consorti F, Galeazzi E, An Ontological Analysis of Surgical Deeds, *Proceedings of the Conference AIME-97*, E Keravnou ed., Berlin, Springer Verlag, pp. 361-372, 1997.
16. Pisanelli DM, Gangemi A, Steve G, WWW-available Conceptual Integration of Medical Terminologies: the Onions Experience, *Journal of American Medical Informatics Association*, vol. 4, 575-579, 1997.
17. Gangemi A., The Ontological Stance in Artificial Intelligence: A Cognitive Semantic Perspective, *Proceedings of the Conference ICLC-97*, Tuggy L. (ed.), Amsterdam, Frije Universiteit P., p. 135, 1997.
18. Steve G, Gangemi A, Pisanelli DM, Integrating Medical Terminologies with ONIONS Methodology, in P-J Charrel et al (eds.) *Information Modelling and Knowledge Bases IX*, Amsterdam, IOS-Press, pp. 1-18, 1998.
19. Gangemi A., Pisanelli D.M., Steve G., Some Requirements and Experiences in Engineering Terminological Ontologies over the WWW *Proceedings of KAW98 Conference*, Banff (Canada), Un. of Calgary Press, pp.137-148, 1998.
20. Gangemi A., Pisanelli D.M., Steve G., Ontology Integration: Experiences with Medical Terminologies, in: *Formal Ontology in Information System*, Guarino N ed., Amsterdam, IOS-Press, pp.163-178, 1998.
21. Pisanelli DM, Gangemi A, Steve G, An Ontological Analysis of the UMLS Metathesaurus, *J. of American Medical Informatics Association*, vol. 5, pp. 810-814, 1998.

22. Pisanelli D.M., Gangemi A., Steve G., A Medical Ontology Library that Integrates the UMLS Metathesaurus, in: W Horn et al. (eds.), *Artificial Intelligence in Medicine*, Lecture Notes in Artificial Intelligence 1620, Berlin, Springer Verlag, pp. 239-248, 1999.
23. Pisanelli DM, Gangemi A, Steve G, Towards a Standard for Guideline Representation: an Ontological Approach, *Journal of American Medical Informatics Association*, vol. S4, pp. 906-910, 1999.
24. Gangemi A, Pisanelli DM, Steve G, An Overview of the ONIONS Project: Applying Ontologies to the Integration of Medical Terminologies, in *Data and Knowledge Engineering*, 1999, vol.31, pp. 183-220, 1999.
25. Gangemi A., Categorizzazioni. Un'indagine tra semiotica, ontologia e informatica, in G. Negrini (ed): *Categorie e modelli di conoscenza*, Milano, Franco Angeli, 2000.
26. Steve G., Gangemi A., Pisanelli D.M., Ontological Analysis and Integration of Terminologies: Towards An Environmental Reference Ontology Library, Invited Talk to the *Open Forum on Metadata Registries*, Santa Fe (USA), published on the Web (http://www.sdct.itl.nist.gov/~ftp/l8/sc32wg2/2000/events/openforum/presentations/5_1_Steve.ppt), 2000.
27. Pisanelli DM, Gangemi A, Steve G, The Role of Ontologies for an Effective and Unambiguous Dissemination of Clinical Guidelines, in R Dieng, O Corby (eds.), *Knowledge Engineering and Knowledge Management. Methods, Models, and Tools*, Berlin, Springer-Verlag, pp. 129-139, 2000.
28. Gangemi A, Pisanelli DM, Steve G, Understanding Systematic Conceptual Structures in Polysemous Medical Terms, in: J Marc Overhage (ed.), *Converging Information, Technology, and Health Care*, *Proceedings of the 2000 AMIA Annual Symposium*.
29. Gangemi A, Guarino N, Oltramari A, Conceptual Analysis of Lexical Taxonomies: The Case of WordNet Top-Level, in: C Welty, B Smith (eds.), *Proceedings of the 2001 Conference on Formal Ontology and Information Systems*, Amsterdam, IOS Press, 2001.
30. Gangemi A, Guarino N, Oltramari A Borgo S, Cleaning-up WordNet's Top-Level, in *Proceedings of the 1st International WordNet Conference*, 2002.
31. Gangemi A, Guarino N, Masolo C, Oltramari A, Schneider L, Sweetening Ontologies with DOLCE, in Benjamins et al. (eds.), *Proceedings of the 13th European Conference on Knowledge Engineering and Knowledge Management (EKAW2002)*, Sigüenza, Spain, 2002.
32. Pisanelli DM, Gangemi A, Steve G, Battaglia M, Ontological Analysis for the Unification of Biology, *Proceedings of the 2002 AMIA Fall Symposium*, 2002.
33. Navigli R, Velardi P, Gangemi A, Ontology Learning and its Application to Automated Terminology Translation, *IEEE Intelligent Systems*, vol. 18, n.1, pp. 22-31, January 2003.
34. Gangemi A, Some Tools and Methodologies for Domain Ontology Building, *Journal of Functional Genomics*, II, 2003.
35. Masolo C., Gangemi A., Guarino N., Oltramari A., and Vieu L. La Prospettiva dell'Ontologia Applicata, *Rivista di Estetica*, 2003.
36. Oltramari A., Borgo S., Catenacci C., Ferrario R., Gangemi A., Guarino N., Masolo C. Negoziati di Significato, *Sistemi Intelligenti*, 2003.
37. Gangemi A, Mika P, Understanding the Semantic Web through Descriptions and Situations, Meersman R, et al. (eds.), *Proceedings of ODBASE03 Conference*, Springer, 2003.
38. Gangemi A, Guarino N, Masolo C, Oltramari A, Sweetening WordNet with DOLCE, *AI Magazine*, Fall 2003.
39. Gangemi A., Navigli R, Velardi P, The OntoWordNet Project: extension and axiomatization of conceptual relations in WordNet, Meersman R, et al. (eds.), *Proceedings of ODBASE03 Conference*, Springer, 2003.
40. Simonov M, Gangemi A, Soroldoni M. Ontology-driven, Natural Language Access to Legacy and Web Services in the Insurance Domain, in Wecel K (ed.), *Proceedings of the 7th International Conference on Business Information Systems (BIS)*, 2004.
41. Gangemi A, Catenacci C, Battaglia M. The *Inflammation* Ontology Design Pattern: an Exercise in Building a Core Biomedical Ontology with Descriptions and Situations, in Pisanelli D (ed.), *Ontologies in Medicine*, IOS Press, Amsterdam, 2004.
42. Pisanelli D.M., Gangemi A. If ontology is the solution, what is the problem?, in Pisanelli DM (ed.) *Ontologies in Medicine*, Amsterdam, IOS Press, 2004, pp.1-19.
43. Kumar A, Smith B, Pisanelli DM, Gangemi A, Stefanelli M, An Ontological Framework for the Implementation of Clinical Guidelines in Health Care Organizations, in Pisanelli DM (ed.) *Ontologies in Medicine*, Amsterdam, IOS Press, 2004, pp.95-107.
44. Oberle D, Mika P, Gangemi A, Sabou M. (2004). Foundations for service ontologies: Aligning OWL-S to DOLCE, in Staab S and Patel-Schneider P (eds.), *Proceedings of the World Wide Web Conference (WWW2004)*, Semantic Web Track, 2004.

45. Masolo C, Vieu L, Bottazzi E, Catenacci C, Ferrario R, Gangemi A, Guarino N, Social Roles and their Descriptions, in Welty C and Dubois D (eds.), *Proceedings of the Ninth International Conference on the Principles of Knowledge Representation and Reasoning (KR2004)*, 2004 (*Nominated among the 5 best papers*).
46. Lehmann J, Masolo C, Gangemi A, Borgo S, Causality and Causation in DOLCE, in A Varzi, L Vieu (eds.), *3rd International Conference on Formal Ontology and Information Systems*, Torino 2004.
47. Gangemi A., Bottazzi E, Catenacci C., Lehmann J. Collective Intentionality: An Ontological Perspective, C. Castelfranchi (ed.), *International Conference on Collective Intentionality*, 2004.
48. Gangemi A, Sagri MT, Tiscornia, D, A Constructive Framework for Legal Ontologies, in R Benjamins, J Breuker, P Casanovas, A Gangemi (eds.): *Legal Ontologies and the Semantic Web*, Springer, 2005.
49. Ciaramita M, Gangemi A, Ratsch E, Rojas I, Saric J. Unsupervised Learning of Semantic Relations between Concepts of a Molecular Biology Ontology, in *Proceedings of International Joint Conference on Artificial Intelligence (IJCAI2005)*, 2005.
50. Behrendt W, Gangemi A, Maass W, Westenthaler R. Towards an Ontology-based Distributed Architecture for Paid Content, in A Gomez-Perez, J Euzenat (eds.): *Proceedings of the Second European Semantic Web Conference*, Springer, 2005.
51. Gangemi A. Ontology Design Patterns for Semantic Web Content. Musen et al. (eds.): *Proceedings of the Fourth International Semantic Web Conference*, Springer, 2005.
52. Kumar A., Smith B., Pisanelli M., Gangemi A., Stefanelli M. Clinical Guidelines as Plans: An Ontological Theory. *Methods of Information in Medicine*, 2, 2006.
53. Gangemi A., Bottazzi E., Catenacci C., Lehmann J. From Collective Intentionality to Intentional Collectives, *Cognitive Systems Research*, vol.7, 2-3, 2006.
54. Gangemi A., Catenacci C., Ciaramita M., Lehmann J. Modelling Ontology Evaluation, Y. Sure (ed.), *Proceedings of the Third European Semantic Web Conference*, Springer, 2006.
55. Oberle D., Lamparter S., Grimm S., Vrandečić D., Staab S., Gangemi A., Towards Ontologies for Formalizing Modularization and Communication in Large Software Systems, *Journal of Applied Ontology*, 2, 163-202, 2006.
56. van Assem M., Gangemi A., Schreiber G., Conversion of WordNet to a standard RDF/OWL representation, in *Proceedings of LREC2006*, Genova, 2006.
57. Vanessa Micelli, Robert Porzel, and Aldo Gangemi (2006) ECToloG: Construction Grammar Meets the Semantic Web. In *Proceedings of the Fourth International Conference on Construction Grammar (ICCG4)*, September 1-3, 2006. Tokyo, Japan.
58. Gangemi A., Presutti V. Ontology Design for Interaction in a Reasonable Enterprise, P.Rittgen (ed.): *Handbook of Ontologies for Business Interaction*, IGI, 2007.
59. Gliozzo A., Gangemi A., et al. A semantic web layer to enhance legacy systems, Abecker et al. (eds.): *Proceedings of ISWC2007*, Springer, 2007.
60. Maass W., Behrendt W., Gangemi A., Trading digital information goods based on semantic technologies, *Journal of Theoretical and Applied Electronic Commerce Research*, 2007.
61. Lehmann A. Gangemi, A.: An ontology of physical causation as a basis for assessing causation in fact and attributing legal responsibility. *Artificial Intelligence and Law*, 15(3): 301-321 (2007)
62. A. Gangemi. Design Patterns for Legal Ontology Construction. In P. Casanovas, P. Noriega, D. Bourcier, F. Galindo (eds.): *Trends in Legal Knowledge: The Semantic Web and the Regulation of Electronic Social Systems*, European Press Academic Publ. 2007.
63. Ciaramita M., Gangemi A., Ratsch E., Šaric J. and Rojas I. Unsupervised Learning of Semantic Relations for Molecular Biology Ontologies. In: *Ontology Learning and Population: Bridging the Gap between Text and Knowledge*. Volume 167 *Frontiers in Artificial Intelligence and Applications* Edited by: P. Buitelaar and P. Cimiano January 2008, 292 pp., hardcover ISBN: 978-1-58603-818-2
64. Gangemi, A. (2008). Norms and plans as unification criteria for social collectives. *Journal of Autonomous Agents and Multi-Agent Systems*, 16(3), 2008.
65. Presutti V., Gangemi A. Identity of Resources and Entities on the Web. *International Journal on Semantic Web and Information Systems*, 4(2), 2008.
66. Presutti V., Gangemi A. Content Ontology Design Patterns as practical building blocks for web ontologies. In Spaccapietra S. et al. (eds.): *Proceedings of ER2008*, Barcelona, Spain, 2008
67. Gangemi A., Euzenat J. (eds.) *Knowledge Engineering: Practice and Patterns*, Springer, 2008.
68. Gangemi A., Presutti V. Ontology Design Patterns, in Staab S. et al. (eds.): *Handbook of Ontologies (2nd edition)*, Springer, 2009.
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C. Research Support

1994-: Coordination of research activities (from 2008 as STLab coordinator).

- SocNet (2010-), US National Science Foundation funded project on discovering social networks in historical series and facts.
- NeOn (2006-10), EU FP6 Integrating Project (IP), scientific coordinator for ISTC-CNR. Aim: collaborative, networked ontology lifecycle management.
- Historical Knowledge Representation (2007-9), CNR project, coordinator. Aim: Representation and reasoning with historical models over spatio-temporal situations.
- Semantic Intrawebs (2006-10), CNR programme for the reengineering, integration, and porting to the semantic web of legacy administrative research databases.
- Bony (2008-9), EU Leonardo project for creating semantic, multi-lingual e-Learning units.
- METOKIS (2004-5), EU FP6 STReP project, scientific coordinator for my Lab. Aim: a platform for the management of knowledge work and the representation of workflows. Task of the LOA: ontology of plans and tasks.
- Task force on Porting WordNet to the Semantic Web within the W3C Semantic Web Best Practices and Deployment working group.
- Fishery Ontology Service (2002-4), institutional project, scientific coordinator. Joint project with UN-FAO. Aim: developing a modular ontology library for fishery (starting from existing thesauri), and deploying it for database and portal integration. Task of my Lab: scientific architecture, methodology, supervision and consultancy.
- OntoWordNet (2001-), academic research programme, scientific coordinator. In conjunction with the University of Rome La Sapienza and the University of Princeton. Aim: deriving a full-fledged formal ontology from the WordNet lexical database. Both formal ontology and machine learning techniques are used. In collaboration with Alessandro Oltramari.
- IF-LEX: Banking regulation dynamics and anti-money laundering ontology (2000-2003), industrial project, scientific coordinator for my Lab. Automatic warning system for bank transactions over legacy databases, driven by an ontology of anti-money laundering guidelines derived from legal regulations from the Bank of Italy.
- ISK: Ontology-driven quality assessment in service-level agreements (2002-2003), industrial project, scientific coordinator for my Lab. Automatic evaluation of the economic impact of service-level agreements and their deployment in the domain of information services, based on a modular ontology of service contracts and information services.
- IES: Ontology-driven Customer Relationship Management in the insurance domain (2003), industrial project, scientific coordinator for my Lab.
- LegOntoWeb (2002-2004), working group sponsored by EU FP5 OntoWeb project, coordinator.
- ONIONS (1994-1999), academic research programme, scientific coordinator. Aim: developing a methodology for terminology reengineering, ontology construction and modularization. Mainly applied to biomedicine.

1992-: Participation in research activities (besides those coordinated).

- IKS (2009-12), EU FP7 Integrating Project (IP). Aim: semantic components for content management systems and technology transfer to SMEs.
- WonderWeb (2002-2004), EU FP5 FET, coordinated by the University of Manchester. Aim: excellence infrastructure for the Semantic Web. Task of my Lab: foundational ontology library, ontology building methodology, ontology of Web Services.
- OntoWeb (2002-2004), EU FP5 Thematic Network, coordinated by the University of Innsbruck (initially by the University of Amsterdam). Aim: Semantic Web research coordination. Task of my Lab: content standards, ontologies.
- TICCA (2002-2004), Italian project, coordinated by IRST, Trento. Aim: designing a conceptual architecture of agent-based systems. Task of my Lab: ontology of social interaction and organizations.
- IKF (2000-2003), EUREKA project, coordinated by NOMOS Sistema, Milan. Aim: industrial platform for knowledge fusion. Task of my Lab: foundational ontologies, methodologies, scientific supervision on domain ontology development. Three sub-projects:
- SOLMC (linguistic and ontological tools for conceptual modelling), and ONTOINT (ontological tools and methods for analysis, integration, and representation of heterogeneous knowledge) (1995-1998), Italian coordinated projects funded by the Italian Ministry of Research.
- GALEN (1992-1994), EU AIM project, coordinated by the University of Manchester. Aim: medical knowledge representation and terminology management. Task of ITBM: core models for biomedicine.