

Fabio Rinaldi: Curriculum Vitae

January 2017

Employment History

- 2005-present** Institute of Computational Linguistics, University of Zurich, Switzerland, *senior researcher, lecturer, principal investigator* [permanent appointment]
2000-2005 Institute of Computational Linguistics, University of Zurich, Switzerland, *project manager, team leader*
1996-1999 UMIST (now part of the Univ. of Manchester), Manchester, UK, *research assistant*
1995 GMD/IPSI (now closed), Darmstadt, Germany, *guest researcher*
1993-1995 ITC/IRST (now FBK), Trento, Italy, *student assistant*

Other affiliations and temporary visits

- 2017-2019** Fondazione Bruno Kessler (FBK), Trento (IT), *group leader*
2016-2019 Swiss Institute of Bioinformatics (SIB), *group leader*
2015-2018 Center for Computational Genomics, National Autonomous University of Mexico (UNAM), *visiting professor* (NIH-funded collaboration)
2010-2011 Center for Computational Pharmacology, University of Colorado, Denver, 2 months
2009-2010 Institute of Computational Linguistics, University of Tokyo, Japan, *visiting researcher* (SNF¹ fellowship), 10 months
2009 National Center for Text Mining Technologies (NaCTeM), Manchester, 3 months

Research funding

- 2017-2020** *Automated detection of adverse drug events from older inpatients' electronic medical records using structured data mining and natural language processing.* Total funding: 610,043 CHF. Funding for my group: **110,000 CHF**.
- 2016-2018** *MelanoBase: large-scale text mining for database integration, with the use-case scenario of Melanoma.* Funding: **420,469 CHF** (SNF), entirely for my group.
- 2016-2018** *Text Mining for Competitive Intelligence.* PostDoc position entirely funded by Roche Pharmaceuticals. Additional funding for supervision: **30,000 CHF**.
- 2015-2017** *PsyMine: Text mining in support of psychiatric research: overcoming fragmented knowledge.* Collaboration the Institute of Epidemiology, UZH. Funding: 188,892 CHF (COGITO Foundation). Funding for my group: **115,092 CHF**.
- 2015-2018** *High-Throughput Literature Curation of Genetic Regulation in Bacterial Models* Funding Agency: NIGMS-NIH. Grant ID: GM110597. Funding: 1,6 M USD. PI: Dr. Julio Collado-Vides (CCG-UNAM, Mexico). My role is to provide text mining technologies for assisted curation.
- 2015** *Organization of a large scale evaluation of biomedical text mining software in the context of a shared task.* Funding (by PMI R&D): 120,000 CHF.
- 2014-2015** *Development and application of a text mining tool for the monitoring and early recognition of animal diseases.* Collaboration with the Veterinary Public Health Institute, University of Bern, funded by the Swiss Federal Veterinary Office. Total budget: 252,817 CHF. Funding for my group: 88,705 CHF.
- 2013-2014** *Detection of Protein Interactions in large-scale document collections,* project funded by

1 Swiss National Science Foundation

- Roche AG. Funding: 50,000 CHF.
- 2012-2013 *Answer retrieval for Requests for Proposals*, (with Professor Dr. Martin Volk), project funded by Finnova AG (70,000 CHF).
- 2010-2014 *Semi-Automated Semantic Enrichment of the Biomedical Literature* (SASEBio). Author of the project proposal and principal investigator. SNF Funding: 278,359 CHF. Additional funding (100,000 CHF) provided by Novartis Pharma AG.
- 2008-2009 *Detection of biological interactions from biomedical literature*. Author of the project proposal and project leader. SNF funding: 114,046 CHF, 18 months. Additional funding (70,000 CHF) and support provided by Novartis Pharma AG.
- 2003-2005 *Parmenides* (EU FP5 project). Joint author of the project proposal, together with a number of European partners, Zurich team leader. Total Project Budget: 3,251,490 Euro, 36 months. EU funding: 1,954,875 Euro. Funding of the Zurich group: 392,291 CHF.

Education

- 2008 PhD in Computational Linguistics (University of Zurich, Switzerland)
- 1995 BSc+MSc (“Laurea”) in Computer Science (University of Udine, Italy)

Awards, personal grants

- 2010 ARE-BM “*Advanced Relation Extraction in Biomedicine*” (Marie-Curie advanced fellowship). Main author of the proposal, with Dr. Dietrich Rebholz-Schuhmann (EBI, UK) and Prof. Larry Hunter (University of Colorado at Denver). Total funding: 335,453 EUR, 36 months. DECLINED, due to incompatibility with my position as leader of the SASEBio project, and risk of not being able to apply for Swiss citizenship.
- 2009 *A Comparative Study of Syntactic Parsers and their Applications in Biomedical Text Mining* (SNF Fellowship). Author of the project proposal. SNF funding: 70,000 CHF

Teaching

I teach two full courses per year since 2005, involving at least 12 lectures of 90 minutes each. All courses are held in English.

- PCL3: Database fundamentals and Web Interfaces (2016, 2017)
- Information Extraction and Text Mining (2012, 2013, 2014, 2016, 2017)
- XML and Semantic Web (2012, 2013, 2014, 2016, 2017)
- Logic Programming for Knowledge Representation (2015)
- XML: Fundamentals and Applications (2005, 2006, 2007, 2008, 2010, 2011)
- Corpus Linguistics (2007, 2008, 2009, 2011)
- Text Mining (2006, 2007, 2008)
- Question Answering Research Seminar (2005)

Invited presentations (since 2012)

- Dec 1, 2016. Zürich meeting of the Swiss Institute of Bioinformatics
- May 18, 2016. Text Mining Services, Novartis
- May 12, 2016. Epidemiology, Biostatistics and Prevention Institute of the Univ. of Zürich
- Sep 17, 2015. HTW Chur, Schweizerische Institut für Informationswissenschaft (SII)
- Sep 4, 2015. Insight research center, Galway, Ireland.
- Jun 17, 2015. sbvIMPROVER, Barcelona, Spain.
- Jan 20, 2015. CNIO (Spanish National Cancer Research Center), Madrid, Spain.

- Feb 18, 2014. Instituto Politecnico Nacional (Polytechnic University), Mexico City.
- Feb 14, 2014. Information Sciences Institute, Marina del Rey, California, US.
- Feb 11, 2014. Centro de Ciencias Genómicas (Genomic Sciences Center), UNAM, Mexico.
- Dec 16, 2013. KAIST, Daejeon, South Korea.
- Nov 7, 2013. EnterpriseSearch, Roche Pharmaceuticals
- Feb 13, 2013. Instituto de Ingeniería, UNAM, Mexico (DF).
- Jan 24, 2013. Centro de Ciencias Genómicas (group Collado-Vides), Cuernavaca, Mexico
- Jul 17, 2012. NIBR-IT, Novartis Pharma AG, Basel, Switzerland
- Jun 12, 2012. SwissProt/NextProt, Geneva, Switzerland.
- Apr 6, 2012. National Library of Medicine (group Wilbur), Bethesda, MD, USA.
- Jan 17, 2012. National Institute of Informatics, Tokyo, Japan

For a complete list see: <http://www.fabiorinaldi.org/cv/invited-presentations>

Professional Services

I have been a reviewer for several conferences, workshops and journals since 2003. In this list I provide only events since 2008. A list of older events is available upon request.

Evaluation of project proposals: Swiss National Science Foundation. Research Foundation Flanders (Belgium). German Federal Ministry of Education and Research.

Member of PhD Dissertation Committee: Qi Wei, National Institute of Informatics, Tokyo, Japan, December 2011 (supervisor: Prof. Nigel Collier). Fah Sarafranz, University of Manchester, UK, February 2012 (supervisor: Dr. Goran Nenadic). Jari Björne, University of Turku, Finland, June 2014 (supervisors: Dr. Filip Ginter, Prof. Tapio Salakoski).

Journal editorial committee: Journal of Biomedical Semantics (**associate editor**)

Journal reviewer: ACM Computing Surveys, Artificial Intelligence in Medicine, Briefings in Bioinformatics, BMC Bioinformatics, Computational Linguistics, Expert Systems, Language Resources and Evaluation, Natural Language Engineering, Journal of Biomedical Informatics (Elsevier), Computational Intelligence, IEEE/ACM Transactions on Computational Biology and Bioinformatics, ACM Transactions on Management Information Systems, The Journal of Databases and Curation, Computer Speech and Language, Journal of Biomedical Semantics, Journal of Cheminformatics, Science of Computer Programming.

Scientific committee member (conferences and workshops): CICLING (2006 – 2016), NoDaLiDa 2015, ECCB 2008, Bioinformatics 2010, WIMS 2011, BioNLP (2011-2016), LBM (2011-2013), PSB (2012-2013), AAAI 2012 Fall Symposium on IR and Knowledge Discovery in Biomedical Text, NLDB (2008-2012), KDIR 2014, LREC (2004 – 2016), EMNLP (2015,2016).

Conference organization: SMBM 2010 (organizing co-chair), SMBM 2012 (chair of local organization committee), LBM 2013 (**scientific co-chair**). SMBM 2014 and 2016 (**scientific co-chair**).

Languages

Full professional proficiency: Italian, English, German, Spanish. **Basic/Interm.:** French, Japanese.

Membership

Association for Computational Linguistics (ACL), Association for the Advancement of Artificial Intelligence (AAAI), Association for Computing Machinery (ACM), International Society for Biocuration (ISB).

Supervised students (recent)

PostDoc: Gerold Schneider (2009-2013), Simon Clematide (2009-2014), Gintarė Grigonytė (2012); **PhD:** Tilia Ellendorff (2012-2016), Lenz Furrer (2015-2018); **Master:** Michal Koltonik (2014), Parijat Ghoshal (2016); **Other:** Nico Colic (2015-2016), Hernani Marques Madeira (2013-2014), Adrian van der Lek (2015-2016), Zhu Yi (2014), Simon Hafner (2012), Kaarel Kaljurand (2005-2009).

Selected Publications

I have published more than **100 peer-reviewed papers**, including more than **20 journal papers**. My publications have more than **2000 citations** with an **h-index of 24²**. Below a selection of my most representative journal publications.

- Fabio Rinaldi, Simon Clematide, Simon Hafner, Gerold Schneider, Gintare Grigonyte, Martin Romacker, Therese Vachon. Using the OntoGene pipeline for the triage task of BioCreative 2012, The Journal of Biological Databases and Curation, Database 2013: bas053, Oxford Journals. [doi:10.1093/database/bas053](https://doi.org/10.1093/database/bas053)
- Fabio Rinaldi, Simon Clematide, Gerold Schneider. Fabio Rinaldi, Gerold Schneider, Simon Clematide. Relation Mining Experiments in the Pharmacogenomics Domain. Journal of Biomedical Informatics, 2012. [doi:10.1016/j.jbi.2012.04.014](https://doi.org/10.1016/j.jbi.2012.04.014)
- Fabio Rinaldi, Simon Clematide, Yael Garten, Michelle Whirl-Carrillo, Li Gong, Joan M. Hebert, Katrin Sangkuhl, Caroline F. Thorn, Teri E. Klein, Russ B. Altman. Using ODIN for a PharmGKB re-validation experiment. The Journal of Biological Databases and Curation , Oxford Journals, 2012, bas021; [doi:10.1093/database/bas021](https://doi.org/10.1093/database/bas021)
- Fabio Rinaldi, Kaarel Kaljurand, Rune Saetre. Terminological resources for Text Mining over Biomedical Scientific Literature. Journal of Artificial Intelligence in Medicine. Volume 52, Issue 2, June 2011, Pages 107-114. [doi:10.1016/j.artmed.2011.04.011](https://doi.org/10.1016/j.artmed.2011.04.011)
- Fabio Rinaldi, Gerold Schneider, Kaarel Kaljurand, Simon Clematide, Therese Vachon, Martin Romacker. OntoGene in BioCreative II.5. IEEE/ACM Transactions on Computational Biology and Bioinformatics, vol. 99, no. 1, 2010. [doi:10.1109/TCBB.2010.50](https://doi.org/10.1109/TCBB.2010.50)
- Fabio Rinaldi, Thomas Kappeler, Kaarel Kaljurand, Gerold Schneider, Manfred Klenner, Simon Clematide, Michael Hess, Jean-Marc Allmen, Pierre Parisot, Martin Romacker, Therese Vachon. OntoGene in BioCreative II. Genome Biology, 2008, 9:S13. [doi:10.1186/gb-2008-9-s2-s13](https://doi.org/10.1186/gb-2008-9-s2-s13)
- Fabio Rinaldi, Gerold Schneider, Kaarel Kaljurand, Michael Hess, Martin Romacker. An environment for relation mining over richly annotated corpora: the case of GENIA. BMC Bioinformatics 2006, 7(Suppl 3):S3. [doi:10.1186/1471-2105-7-S3-S3](https://doi.org/10.1186/1471-2105-7-S3-S3)