

# Curriculum Vitae of Ronald Cornet

## Summary

### Bio

Ronald Cornet holds a position as associate professor, principal investigator and principal educator at the department of Medical Informatics in the Amsterdam Public Health research institute, Amsterdam UMC.

His research focuses on semantic interoperability, both from a technical perspective and from a users' point of view, including natural language processing. This research has resulted in over 70 journal publications and over 80 peer-reviewed conference proceedings. See the list of publications for a complete biography. Ronald has supervised 8 completed PhD-projects and currently supervises 8 PhD students.



Ronald is involved in health care information standardization, among others as member of the Dutch, European (CEN) and global (ISO) standardization committees on health informatics. He is also involved in SNOMED International, which is responsible for maintenance and further development of SNOMED CT. He chairs the IMIA working group on Language and Meaning in Biomedicine, and participates in various international projects: FAIR4Health, European Joint Programme Rare Diseases (EJP-RD), CAPABLE, and C4C.

Ronald holds a Basic Teaching Qualification and is involved in both organization of education and in teaching at the University of Amsterdam. This teaching involves information modeling, knowledge representation and semantic interoperability in health care. He has supervised research work of over 50 students (at BSc and MSc level). He is a four-time awardee of the best-teacher price in the Medical Informatics curriculum at the University of Amsterdam.

## Education and Work Experience

year	description
2021 -	Principal Educator at dept of Medical Informatics, Amsterdam Public Health Institute, Amsterdam UMC (Academic Medical Center) - University of Amsterdam
2020 -	Principal Investigator at dept of Medical Informatics, Amsterdam Public Health Institute, Amsterdam UMC (Academic Medical Center) - University of Amsterdam
2017 -	Associate Professor at dept of Medical Informatics, Amsterdam Public Health Institute, Amsterdam UMC (Academic Medical Center) - University of Amsterdam
1998 - 2017	Assistant Professor at dept of Medical Informatics, Amsterdam Public Health Institute, Amsterdam UMC (Academic Medical Center) - University of Amsterdam
2012 - 2017	Visiting associate professor (Gästlektor) at Medical Informatics research group, Department of Biomedical Engineering (Linköping University)
2007 - 2015	Consultant for the Dutch ICT institute in health care (Nictiz) on "preparing implementation of SNOMED CT in the Netherlands"
2000 - 2006	PhD student at dept of Medical Informatics, Academic Medical Center, Amsterdam Thesis "Methods for auditing medical terminological systems"
1996 - 1998	Software Engineer at dept of Medical Informatics, Academic Medical Center, Amsterdam
1992 - 1996	Scientific programmer at dept of Medical Informatics, Erasmus University Rotterdam
1986 - 1992	Applied Physics at Delft University Doctoral internship at dept of Experimental Echocardiography, Erasmus University Rotterdam Thesis "The ultrasonic, nonlinear behaviour of encapsulated gas-filled bubbles"
1980-1986	Secondary school ("Gymnasium β"): Christelijk College "Marnix van St. Aldegonde" Exams in Dutch, English, German, Latin, Mathematics, Physics, Chemistry, Biology
1974-1980	Primary school ("Basisschool"): Bos en Duinschool

## Personal

year	description
1968	Born in Haarlem
1996	Married

## Research

### Publications

year	description
1992 -	Ronald published over 100 publications. He edited proceedings of various conferences and a special issue of the Journal of Biomedical Informatics on Auditing of Terminologies. See Publications for the full list

### Grants & Contracts

year	description
2018 - 2024	Third-party expert in IMI-funded "conect4children - COLlaborative Network for European Clinical Trials For Children"
2019 - 2023	Participant in Horizon2020-funded European Joint Programme Rare Diseases EJP-RD (H2020-SC1-2018-Single-Stage-RTD; # 825575)
2019 - 2023	Work Package leader in Horizon2020-funded project CAPABLE (SC1-DTH-01-2019; # 875052 - Cancer Patients' Better Life Experience)
2019 - 2022	Project leader on AMC-funded project "Easy and high-quality capture and use of diagnosis data"
2018 - 2021	Participant in Horizon2020-funded project FAIR4Health (SwafS-2018-1; # 824666 - Improving Health Research in EU through FAIR Data)
2019 - 2020	Project leader on APH-funded project "Requirements for an Interactive voice response system for provision of cancer information to patients and general public in Uganda"
2016 - 2016	Project expert for "Acceleration project for Intensive Care data capture" for The Netherlands Federation of University Medical Centres (NFU)
2015 - 2016	Participant in Horizon2020-funded project (PHC-34-2014) (# 643818) ASSESS-CT
2014 - 2015	Project leader and subject matter expert for development of education on "Facilitating clinical data capture at the point-of-care" for The Netherlands Federation of University Medical Centres (NFU)
2014 - 2015	Co-leader for the Health chapter of Amsterdam Data Science
2007 - 2015	Advisor to the SNOMED CT National Release Center for the Dutch ICT Institute in Health Care (Nictiz)
2010 - 2014	Co-leader for the project "Computing Healthcare Quality Indicators Automatically"
2007 - 2010	Workpackage leader in EU-funded NephroQUEST Initiative.
2009	Project leader on "Evaluation of SNOMED CT for the perioperative process" for the Dutch ICT Institute in Health Care (Nictiz)
2009	Consultant for Furore
2003	Co-leader in project "Introduction of a Clinical Terminology in The Netherlands" for the Dutch ICT Institute in Health Care (Nictiz)

## Externally funded PhD-students

year	description
2016 -	Hugo van Mens, funded by ChipSoft
2014 -	Gerard Burger, supported by Symbiant
2018 - 2022	Martijn Kersloot, funded by Castor
2016 - 2022	Johnblack Kabukye, funded by Bank of Africa
2010 - 2015	Tom Oluoch, funded by CDC-USA
2006 - 2011	Leila Ahmadian, funded by Iranian department of Ministry of health and medical education sciences

## PhD Thesis Supervision (promotor)

2022-04-22	Martijn Kersloot - FAIR Data in Medical Research - Incorporating the FAIR Principles in the Research Data Life Cycle
2022-03-17	Johnblack Kabukye - Digitalizing Oncology in Africa - A Design Science Research Approach

## PhD Thesis Supervision (co-promotor)

2019-06-27	Erik Joukes - Implementing structured data in Electronic Health Records
2015-05-12	Tom Oluoch - Electronic Medical Records and Clinical Decision Support Systems in HIV Care in Resource-limited Settings
2014-05-19	Kathrin Dentler - Computing Healthcare Quality Indicators Automatically - Secondary Use of Patient Data and Semantic Interoperability
2013-12-17	Dennis Lee Hon Kit - The Science and Practice of SNOMED CT Implementation
2011-01-26	Leila Ahmadian - Data Interchange Standards in Healthcare: Semantic Interoperability in Preoperative Assessment
2010-12-17	Ferishta Bakhshi-Raiez - Terminological Systems and Prognostic Models as Instruments for Quality Assessment in Intensive Care

## PhD Thesis Committees

2020-06-22	Sven van Laere (Vrije Universiteit Brussel) - An end-to-end flow analysis of the Belgian ePrescription
2019-01-08	Benedikt Becker (Erasmus University Rotterdam) - Vaccine Semantics. Automatic methods for recognizing, representing, and reasoning about vaccine-related information
2017-01-27	Annet Sollie (VU University Amsterdam) - Reuse and Sharing of Electronic Health Record Data - with a focus on Primary Care and Disease Coding
2015-07-28	María del Carmen Legaz García (University of Murcia) - Integración de Información Biomédica basada en Tecnologías Semánticas Avanzadas
2014-08-18	Ying Ou (University of Sydney) - Automatic Population of Structured Reports from Narrative Pathology Reports
2012-08	Pooyan Asgari (University of Sydney) - Intensive Care Real-Time Auditing Information System
2011-01-20	György Surján (University of Amsterdam) - Barriers and challenges of using medical coding systems
2010-09-10	Mikael Nyström (Linköping University) - Enrichment of Terminology Systems for Use and Reuse in Medical Information Systems (faculty opponent)
2008-09-05	Zharko Aleksovski (VU University Amsterdam) - Using background knowledge in ontology matching

## Program committees

year	description
2019	Semantic Web Applications and Tools for Healthcare and Life Sciences (SWAT4HCLS) - Scientific Program Committee <b>Chair</b>
2017	Informatics for Health - Scientific Program Committee <b>Chair</b>
2015	MIE: Medical Informatics Europe - Scientific Program Committee <b>Chair</b> for Proceedings (editor)
2012	ICBO: International Conference on Biomedical Ontologies - <b>Chair</b> of Scientific Program Committee
2011	MIE: Medical Informatics Europe
2009	11th International Protégé Conference - <b>Chair</b> of Organizing Committee
2008	KR-MED: Workshop on Knowledge Representation in Biomedicine - <b>Chair</b> of Scientific Program Committee
2004	KR-MED: Workshop on Knowledge Representation in Biomedicine - <b>Chair</b> of Organizing Committee

## Editorial board and Reviews (selection)

- See my Publons profile
- Series Editor for Studies in Health Technology and Informatics
- Editorial Board Member of International Journal of Medical Engineering and Informatics
- International Journal of Medical Informatics
- International Journal of Human-Computer Studies
- Journal of Universal Computer Science
- BioMed Central
- AMIA conference, Annual Symposium of the American Medical Informatics Association
- MedInfo, conference of the International Medical Informatics Association
- MIE, Medical Informatics Europe, conference of the European Federation of Medical Informatics
- PSB, Pacific Symposium on Biocomputing
- ECAI, European Conference on Artificial Intelligence

## Research Boards & Committees

year	description
2019 -	Chair of the Executive Board of GO-FAIR
2018 -	Steering committee member for Kidney Biopsy Codes project
2018 -	Member of the seed group for the Rare Disease GO FAIR Implementation Network
2012 - 2018	Steering committee member of the International Conference on Biomedical Ontology (ICBO)
2016 - 2017	Program council member for the Global Health program of the Amsterdam Public Health research institute
2013 - 2014	Advisory board member of FP7 SemanticHealthNet Project
2013 - 2014	Dutch Language Chair (associated member) in the Mantra project, supported by FP7 Programme on ICT (# 296410)

## Memberships

year	description
2020 -	President of the Dutch Society for Health Care Informatics (VMBI)
2015 -	Chair of IMIA working group "Language and Meaning in Biomedicine"
2015 -	Member of the International Health Terminology Standards Development Organisation (IHTSDO) Modeling Advisory Group
2008 -	Member of the Council of the European Federation for Medical Informatics (EFMI)
2007 -	Member of the AMC selection committee for the Amsterdam Merit Scholarships programme (AMS)
2007 -	Member of the Dutch Norm Committee 303006 "Informatievoorziening in de zorg"
2010 - 2015	Member of the International Health Terminology Standards Development Organisation (IHTSDO) Technical Committee
2009 - 2012	Member of the AMC committee on qualification in education
2008 - 2011	Chair of the International Health Terminology Standards Development Organisation (IHTSDO) Implementation Special Interest Group
2007 - 2010	Member of the International Health Terminology Standards Development Organisation (IHTSDO) Quality Assurance Committee
2003 - 2010	Co-chair of AMIA Working group on Knowledge Representation and Semantics
2007 - 2009	Member of the Netherlands' Society of Anesthesiologists (NVA) working group "Minimal Dataset pre-operative assessment". See also the (Dutch) article on this topic: <i>Eerste stap naar eenduidige informatie</i> .
2006 - 2009	Board member / vice-chairman of the Dutch Society for Health Care Informatics (VMBI)
2007 - 2008	Member of the Dutch HL7 technical committee "Health and Clinical"
2006 - 2007	Member of AMIA Education committee
2003 - 2004	Co-chair of AMIA Student Working Group

## Invited presentations

year	description
2019	Keynote "Semantic interoperability in Healthcare", German Medical Informatics Conference
2019	Invited talk "From care data to FAIR data", Amsterdam Medical Data Science
2018	Invited talk "Use of routinely collected health data for computing outcomes", i~HD Workshop "Data Quality", Paris
2017	Invited talk "SNOMED CT in the Netherlands - Implementation and application of SNOMED CT", TMF Workshop "Semantic Interoperability", Berlin
2016	Keynote "Talen naar gestructureerde zorginformatie", TiNT-dag, Bilthoven
2016	Invited talk "Using AI in the clinic - a case study for the Netherlands", AI in health and life sciences, London, UK
2016	Invited talk "The Dutch approach towards Point-of-care data capture", Karolinska Institutet, Stockholm, Sweden
2014	Keynote "Impact of ontologies in healthcare and biomedical research", Infors@Iud, XVII Congreso Nacional de Informática de la Salud 2014, Madrid, Spain
2014	Invited talk "Collection and use of clinical and administrative data", Aalborg University, Denmark
2013	Invited talk "SNOMED CT Implementation - Implications & Barriers", Aalborg University, Denmark
2013	Invited talk "SNOMED - terug van (nooit) weggeweest", Pathologie 2.13, Utrecht
2012	Invited talk "SNOMED CT and the ICU - background and activities", University of Victoria, BC, Canada
2010	Invited plenary talk "Terminology Standards in the Netherlands", IHIC, Rio de Janeiro, Brazil
2009	Invited talk "Europe's next top model - Health 3.0", University of Utah, United States
2008	Invited plenary talk "Het EPD is een succes als je begrijpt wat ik bedoel", Nationaal EPD Congres, Bussum
2008	Invited plenary talk "SNOMED CT - 'De semantische standaard' van de toekomst?", NvMM congres, Arnhem
2008	Invited plenary talk at The First Iranian Conference Of Hospital Automation, Mashhad University of Medical Sciences, Iran
2006	Invited talk "Methods for Auditing and Applying Medical Terminological Systems", ErasmusMC, Rotterdam
2006	Invited plenary talk "Realizing a European research infrastructure in Nephrology with HL7 version 3", HL7 Jahrestagung, Gießen, Germany

## Research-related Awards

year	description
2015	Rolf Hansen award for best paper on EHR implementation at 26th Medical Informatics Europe conference (MIE2015): Joukes E, Cornet R, Abu-Hanna A, De Bruijne M, De Keizer NF. End-User Expectations During an Electronic Health Record Implementation: a Case Study in Two Academic Hospitals
2015	Joachim W. Dudeck award for best research paper at 15th International HL7 Interoperability Conference (IHIC 2015): Smits M, Kramer E, Harthoorn M, Cornet R. A comparison of two Detailed Clinical Model representations: FHIR and CDA
2014	Distinguished paper award at 8th International Conference On Formal Ontology in Information Systems (FOIS 2014): Schulz S, Martínez Costa C, Karlsson D, Cornet R, Brochhausen M, Rector A. An Ontological Analysis of Reference in Health Record Statements
2013	Mario Stefanelli award for best student paper at 14th Conference On Artificial Intelligence in Medicine (AIME 2013): Dentler K, Cornet R. Redundant Elements in SNOMED CT Concept Definitions
2009	Selected as Best Paper for IMIA Yearbook 2009: Cornet R, Abu-Hanna A. Auditing Description-Logic-based Medical Terminological Systems by Detecting Equivalent Concept Definitions
2005	Distinguished Paper Award, AMIA 2005: Cornet R, Abu-Hanna A. Two DL-based Methods for Auditing Medical Terminological Systems

## Education

### Qualification

2008	Basic qualification in education
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### Coordination of education

year	description
2014 -	Course "Eenmalige registratie, meervoudig gebruik", Master Health informatics
2011 - 2014	Course "Databases & Computer Networks", Bachelor Medical informatics
2001 - 2011	Course "Software Engineering Project", Bachelor Medical informatics
2006 - 2009	Course "Registratie & Classificatie", Bachelor Medical informatics
2004 - 2005	Medical Informatics Symposium, Bachelor Medical informatics

## Educational committees

year	description
2017 -	Committee on new curriculum for BSc Medical informatics (chair)
2007 -	AMC selection committee for the Amsterdam Merit Scholarships programme (AMS) (member)
2012 - 2017	Committee for Public Relations & Marketing of Bachelor & Master program (chair)
2009 - 2012	AMC committee on qualification in education (member)
2006 - 2007	Educational Committee of the American Medical Informatics Association (member)
2002 - 2003	Commissie 1-component in het kader van herziening MIK onderwijs (member)

## Teaching activities (selection)

Ronald has supervised research work of over 30 students (at BSc and MSc level).

year	description
2017 -	Topic "Reasoning with health data" in "Data-driven decision making and evaluation in medicine" (MSc MI)
2015 -	Topic "Standardized information models" in "Databases" (BSc Mi)
2014 -	Course "Eenmalige registratie, meervoudig gebruik", Master Health informatics
2007 -	Topic "Coding systems" in "Introduction to Medical Informatics" (BSc Mi)
2003 -	Topic "Structuring and Standardization of Health Records" in "Registratie en Classificatie" (BSc Mi)
2006 - 2016	Topic "Terminology systems" in "Medical Knowledge Representation and Reasoning" (MSc MI)
2011 - 2014	Topic "SQL, ER-modeling, RDM" in "Databases" (BSc Mi)
2001 - 2012	Supervision of 2 <sup>nd</sup> years' students in projects in "Software Engineering Project" (BSc Mi)
2001 - 2011	Topic "UML modelling" in "Software Engineering theory" (BSc Mi)
2005 - 2009	Lecture "Terminology systems" and working group "De principes van programmeren" in Amsterdam International Medical Summer School (AIMSS) - Health Informatics: the Role of Informatics In Health Care
2003 - 2005	Topic "terminology" in "Medical Information Technology" (MSc MI)
1999 - 2002	AMC In-house course "Bouwen van onderzoeksdata met behulp van SPSS Data Entry"
1994 - 1996	Practical "Huisartsinformatiesystemen" Erasmus Universiteit Rotterdam

## Invited lectures

year	description
2011	Guest lecture "Leren registreren omtrent sederen", UMC Utrecht
2005 - 2007	Guest lecture "Coding & Classification" in the Erasmus International Master Health Information Management, Rotterdam
2006	Guest lecture "Terminological Reasoning in Clinical Terminologies", Freiburg University, Germany
2005	Guest lecture "Registration of Patient Data - The role of Terminological Systems", Mashhad University, Iran
2003	Guest lecture "Medical Terminologies" - Information Sciences, UVA
2001	Presentation "Project-based education in Software Engineering" at UvA Education Day

## Tutorials

year	description
2009	"Terminological Systems - Understanding, Application and Maintenance". At MIE2009, Sarajevo. (R.Cornet, NF de Keizer)
2006	"Use and maintenance of Terminological Systems". At MIE2006, Maastricht. (R.Cornet, NF de Keizer)
2005	"Use and maintenance of Terminological Systems". At MIE2005, Geneva, Switzerland. (R.Cornet, NF de Keizer)
2003	"Understanding Terminological Systems". At MIE2003, Saint Malo, France. (NF de Keizer, R.Cornet, DGT Arts)

## Education-related Awards

year	description
2018	Best Teacher in the Master Program in Medical Informatics at the University of Amsterdam 2017/2018
2015	Nominated for Best Teacher in the Master Program in Medical Informatics at the University of Amsterdam 2014/2015
2014	Nominated for Best Medical Informatics Teacher in the Bachelor Program in Medical Informatics at the University of Amsterdam 2013/2014
2013	Nominated for Best Medical Informatics Teacher in the Bachelor Program in Medical Informatics at the University of Amsterdam 2012/2013
2012	Best Teacher in the Bachelor Program in Medical Informatics at the University of Amsterdam 2011/2012
2011	Best Teacher in the Bachelor Program in Medical Informatics at the University of Amsterdam 2010/2011
2009	Nominated for University of Amsterdam Teacher of the year
2009	Best Teacher in the Bachelor Program in Medical Informatics at the University of Amsterdam 2008/2009

## Courses and workshops taken

year	description
2021	Amsterdam UMC Training "Leading hybrid teams"
2019	AMC course "Leadership"
2018	AMC e-learning course "Leadership" (by Goodhabitz)
2017	AMC Symposium & Workshops "Blended learning"
2017	AMC Workshop "Making Rubrics"
2017	AMC Workshop "Multiple-choice test questions"
2015	Elevate Course "Teaching an Online Course"
2013	AMC Workshop "Educational objectives, Test blueprint, Test questions & Model answers"
2013	AMC Workshop "Intervision"
2011	AMC Workshop "Supervision of PhD students"
2011	AMC Workshop "Project management"
2007	AMC Workshop "Assignments as tests"
2007	AMC Course "Lecturing in English for a Diverse Student Population"
2004	UvA workshop "Assessment"
2003	AMC Workshop "Giving feedback on writing skills"
2003	AMC Workshop "Giving feedback on presentation skills"
2000	UvA Course "Didactics for assistant professors" by "Centrum voor Nascholing Amsterdam"