

EFMI STC 2021 – Online
22nd – 24th November, 2021



EFMI STC 2021 – Online FINAL PROGRAM

Monday 22nd November

Opening Session - Keynote 8:45 – 9:45 CET

Chair: Carlos Luis Parra-Calderón (LOC STC 2021, Chair) (Institute of Biomedicine of Seville)

Opening of the Conference

Jaime Delgado (SPC STC 2021, Chair) (Universitat Politècnica de Catalunya)

Keynote speech: “FAIR: Past, Present, and Future”

Mark Wilkinson (UPM)

Session 1: Metadata 10:00 – 12:00 CET

Chair: Arriel Benis (Holon Institute of Technology)

“Automated Modeling of Clinical Narrative with High Definition Natural Language Processing using Solor and Analysis Normal Form”

Melissa Resnick, Frank LeHouillier, Steven Brown, Keith Campbell, Diane Montella, Peter Elkin

“Distribution-based Similarity Measures applied to Laboratory Results Matching”

Martin Courtois, Alexandre Filiot, Grégoire Ficheur

“A methodology for an auto-generated and auto-maintained HL7 FHIR OWL ontology for health data management”

Vassilis Kilintzis, Vasileios C. Alexandropoulos, Nikolaos Beredimas, Nicos Maglaveras

“Assessing Resolvability and Consistency in OBO Foundry Ontologies: Pilot Study”

Shuxin Zhang, Nirupama Benis, Ronald Cornet

“Intelligent Integrative Platform for Sharing Heterogeneous Stem Cell Research Data”

Kirill Borziak, Irena Parvanova, Joseph Finkelstein

“Standard for data sharing as a basis to fill in a tailored EHR for undiagnosed rare diseases”

Norbert Maggi, Ariam Boaglio, Carmelina Ruggiero, Roberto Fancellu, Francesco Cocchiara, Domenico Coviello, Deborah Capanna, Mauro Giacomini

“Semantics management for a regional health information system in Italy by CTS2 and FHIR”

Roberta Gazzarata, Norbert Maggi, Luca Douglas Magnoni, Maria Eugenia Monteverde, Carmelina Ruggiero, Mauro Giacomini

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Session 2: Methods 12:15 – 13:15 CET

Chair: Alicia Martínez-García (Institute of Biomedicine of Seville)

“FAIRification efforts of clinical researchers: the current state of affairs”

Martijn G. Kersloot, Philip van Damme, Ameen Abu-Hanna, Derk L. Arts, Ronald Cornet

“FAIR aspects of a Genomic Information Protection and Management System”

Jaime Delgado, Silvia Llorente

“Best research practice implementation: the experience of the N.N. Burdenko National Medical Research Center of Neurosurgery”

Gleb Danilov, Michael Shifrin, Yulia Strunina, Timur Ishankulov, Timur Zagidullin, Elizaveta Makashova, Igor Pronin, Nikolay Konovalov, Alexander Potapov

“Pilot study of an e-cohort to monitor adverse event for patient with hip prostheses from clinical data warehouse”

Thibault Dhalluin, Marie Ansoberlo, Philippe Rosset, Hervé Thomazeau, Marc Cuggia, Leslie Grammatico-Guillon

LUNCH Break 13:15 – 14:30 CET

EFMI Working Groups business meetings (action plan & Chair/Co-Chair elections):

THI (Translational Health Informatics) 13:15 – 14:15 CET

Join at: https://teams.microsoft.com/l/meetup-join/19%3ameeting_NGZmNDJlNjUtNDQxNS00NzdkLWI5NDYtZjY0MmVmYjA1NGQx%40thread.v2/0?context=%7b%22Tid%22%3a%226cd36f83-1a02-442d-972f-2670cb5e9b1a%22%2c%22Oid%22%3a%226d8240c2-805a-4d75-866f-fa222db25b47%22%7d

SSE (Security, Safety and Ethics) 14:15 – 15:15 CET

Join at: <https://meet.google.com/nks-wwim-qby>

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Session 3: Short papers 14:30 – 16:00 CET

*Chairs: Ronald Cornet (Amsterdam Public Health Research Institute),
Lăcrămioara Stoicu-Tivadar (Universitatea Politehnica Timisoara)*

DATA

“From EHR to EDC - The Experience at the Policlinico Hospital in Milan”

Sara Pizzimenti, Mauro Bucalo, Amedeo Guzzardella, Eleonora Ferretti, Angelo Caroli, Alberto Zanella, Giacomo Grasselli, Nicola Barbarini, Silvano Bosari

“Towards FAIR Patient Reported Outcome: Application of the Interoperability Principle for Mobile Pandemic Apps”

Michael Muzoora, Marco Schaarschmidt, Dagmar Krefting, Johannes Oehm, Sarah Riepenhausen, Sylvia Thun

“Development of a FHIR layer on top of the OMOP Common Data Model for the CAPABLE Project”

Matteo Gabetta, Anna Alloni, Francesca Polce, Giordano Lanzola, Enea Parimbelli, Nicola Barbarini

“Automatic data transfer from OMOP to REDCap: a semantically-enriched framework”

Emanuele Girani, Matteo Gabetta, Anna Alloni, Morena Stuppia, Lucia Sacchi, Nicola Barbarini

METADATA

“What Metadata? Defining Different Types of Digital Assets as Application Targets of Metadata in Clinical Research Informatics”

Matthias Löbe

EXPERIENCES

“Changes in Users Trends Before and During the COVID-19 Pandemic on WHO's Online Learning Platform”

Heini Utunen, Ngouille Ndiaye, Lama Mattar, Paula Christen, Oliver Stucke, Gaya Gamhewage

“Network Analysis of COVID-19 Vaccine Misinformation on Social Media”

Chad Melton, Olufunto Olusanya, Arash Shaban-Nejad

“An Online Information Tool for Diabetic Retinopathy”

George Agriodimos, Paris Gallos, Sotiris Tasoulis, Ioannis Anagnostopoulos

METHODS

“One Digital Health is FAIR”

Arriel Benis, oscar Tamburis

“Investigating the FAIR Equivalency In National Guidance in Health in Kenya”

Esther Inau, Reginald Nalugala, William Muhadi Nandwa, Fredrick Obwanda, Antony Wachira, Dagmar Waltemath, Antonio Cartaxo, Atinkut Zeleke

“Extraction of Temporal Structures for Clinical Events in Unlabeled Free-text Electronic Health Records in Russian”

Anastasia Funkner, Sergey Kovalchuk, Dmitrii Zhurman

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Workshops & Panels 1

Panel “A coordinated US-European FAIR data policy based on lessons learned during the covid19 pandemic” **16:15 – 17:45 CET**

Coordinator: Carlos Luis Parra-Calderón

End of Day 1

Tuesday 23rd November

Session 4: Artificial Intelligence 8:30 – 10:15 CET

Chair: Parisi Gallos (National and Kapodistrian University of Athens)

“A data-driven intervention framework for improving adherence to growth hormone therapy based on patient-generated data clustering analysis and traffic light alerting systems for clinical decision making”

Matheus Araujo, Paula van Dommelen, Jaideep Srivastava, Ekaterina Koledova

“Federated Mining of Interesting Association Rules over EHRs”

Carlos Molina, Belen Prados Suarez, Beatriz Martinez Sanchez

“Encoding Health Records into Pathway Representations for Deep Learning”

Marco Luca Sbodio, Natasha Mulligan, Stefanie Speichert, Vanessa Lopez, Joao H Bettencourt-Silva

“A Learning Framework for Medical Image-Based Intelligent Diagnosis from Imbalanced Datasets”

Tetiana Biloborodova, Inna Skarga-Bandurova, Mark Koverha, Illia Skarha-Bandurov, Yelyzaveta Yevsieieva

“Assessing Acceptance Level of a Hybrid Clinical Decision Support Systems”

Georgy Kopanitsa, Sergey Kovalchuk, Ilia Derevitskii

“Are Semantic Annotators Able to Extract Relevant Complexity-Related Concepts from Clinical Notes?”

Akram Redjda, Jacques Bouaud, Joseph Gligorov, Brigitte Seroussi

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Session 5: Experiences 10:30 – 12:15 CET

Chair: Mauro Giacomini (University of Genoa)

“Utilising the FOXS Stack for FAIR Architected Data Access”

John Meredith, Nik Whitehead, Michael Dacey

“Making EHRs Reusable: a Common Framework of Data Operations”

Miguel Pedrera Jiménez, Noelia García Barrio, Paula Rubio Mayo, Juan Luis Cruz Bermúdez, José Luis Bernal Sobrino, Pablo Serrano Balazote

“Challenges and Experiences extending the cBioPortal for Cancer Genomics to a Molecular Tumor Board Platform”

Niklas Reimer, Philipp Unberath, Hauke Busch, Melanie Börries, Patrick Metzger, Arsenij Ustjanzew, Christopher Renner, Hans-Ulrich Prokosch, Jan Christoph

“Deep Learning, a Not So Magical Problem Solver: a Case Study With Predicting the Complexity of Breast Cancer Cases”

My-Anh Le Thien, Akram Redjdal, Jacques Bouaud, Brigitte Seroussi

“Influence of Healthcare Organization Factors on Cardiovascular Diseases Mortality”

Georgy Kopanitsa, Oleg Metsker

“Chios Hospital Information System Assessment”

Konstantinos Karitis, Paris Gallos, Ioannis Triantafyllou, Vassilis Plagianakos

Session 6: Data 12:15 – 13:15 CET

Chair: Matthias Löbe (IMISE, Universität Leipzig)

“Transfer of clinical drug data to a research infrastructure on OMOP – A FAIR concept”

Ines Reinecke, Michele Zoch, Markus Wilhelm, Martin Sedlmayr, Franziska Bathelt

“Beyond the FAIRness of COVID-19 data: what about quality?”

Fabrizio Pecoraro, Daniela Luzi

“Fast Healthcare Interoperability Resources (FHIR) in a FAIR Metadata Registry for COVID-19 Research”

Sophie Anne Ines Klopfenstein, Carina Nina Vorisek, Aliaksandra Shutsko, Moritz Lehne, Julian Sass, Matthias Löbe, Carsten Oliver Schmidt, Sylvia Thun

“Improving the FAIRness of Health Studies in Germany: The German Central Health Study Hub COVID-19”

Johannes Darms, Jörg Henke, Xiaoming Hu, Martin Golebiewski, Carsten Oliver Schmidt, Juliane Fluck

Satellite Event

“Workshop on HosmartAI H2020 project – EFMI perspective and contribution” **13:15 – 14:30 CET**

Coordinator: Lăcrămioara Stoicu-Tivadar (EFMI Past President)

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LUNCH Break 13:15 – 14:30 CET

Workshops & Panels 2

Panel “Secondary use of health service information: implications for nursing” **14:30 – 16:00 CET**
Coordinator: Laura-Maria Peltonen

Panel “Public Health Response in Southern Europe: What should be the role of EFMI?”
14:30 – 16:00 CET
Coordinator: Ivana Ognjanovic

Workshops & Panels 3

Workshop “Metadata for machines (M4M): Metadata Templates to Support FAIR Principles for Observational Health Research” **16:15 – 17:45 CET**
Coordinator: Alicia Martínez-García

Closing Session - Keynote 18:00 – 19:00 CET

Chair: Jaime Delgado (SPC STC 2021, Chair) (Universitat Politècnica de Catalunya)

Keynote speech: “The long road to data sharing in biomedicine”
Alfonso Valencia (BSC)

Closing of the Conference
Catherine Chronaki (EFMI President)

End of Day 2

Wednesday 24th November

FAIR4Health project event (open to STC 2021 participants)

“Free online demonstration of the FAIR4Health solution” **14:30 - 17:15 CET**

Agenda: Introduction, FAIR4Health architecture, FAIRification workflow, Data Curation Tool, Data Privacy Tool, FAIR4Health portal, Other use cases & discussion

Note: If you would like to participate in this session, please fill, preferably by 19th November, this form:
<https://forms.gle/gTataAWpMB1FeA9s6>