



Information and Communication Technologies

EPIWORK

Developing the Framework for an Epidemic Forecast Infrastructure

<http://www.epiwork.eu>

Project no. 231807

D8.8 Dissemination, collaboration and exploitation report

Period covered: 3rd

Start date of project: February 1st, 2009

Due date of deliverable: Month 36th

Distribution: public

Date of preparation:

Duration:

Actual submission date: February
20th, 2012

Status: Finalized

Project Coordinator: Alessandro Vespignani

Project Coordinator Organization Name: ISI Foundation

Lead contractor for this deliverable: ISI Foundation

Work package participants

The following partners have taken active part in the work leading to the elaboration of this document, even if they might not have directly contributed writing parts of this document:

- ISI
- FGC-IGC
- TAU
- MPG
- AIBV
- SMI
- KULeuven
- CREATE-NET

Change log

Version	Date	Amended by	Changes
1	20/02/12		

Table of contents

1 Project communication tools	4
Project website	4
2 Publications, conferences and seminars.....	5
Publications	5
Scientific Events	10
International Conferences and seminars	10
3 Outreach to the public and popularization.....	16
Press releases, media coverage	16
Exhibitions, interactive and non-interactive media	19
4 Effort to engage with policymakers and government agencies.....	24
5 Coordination and integration with proactive FET initiatives and projects on science of complex systems for socially intelligent ICT.	25
6 IMS and Modeling Platform as exploitation and dissemination tools	26

1 Project communication tools

One of the main goal of WP8 is to make sure that the results achieved by the project are widely disseminated and can constitute the basis of other research across the scientific and engineering communities.

Project website

The *visual identity* of the project has been defined by the choice of the Epiwork logo and the project website layout. The project web site (constituting the **deliverable D8.2**) has been setup and it is continually updated. It gives an overview about the project and compiles press material and publications.

This website is located at

<http://www.epiwork.eu>

The web site is hosted by seeweb s.r.l. (<http://www.seeweb.it>).

This web site is promoted by links from the partners web sites as well as from the Cordis web site (see D8.2 for technical details).

During the first three years of the project, the website has been enriched by the enormous amount of heterogeneous material produced by all the Consortium partners.

Home: <http://www.epiwork.eu/> a very brief introduction to the project and a diagram highlighting the main components of the Epiwork project and their integration to reach the overall aim of the project. The home page is form of a blog, therefore, under the project introductions, it displays news and update about the project, the work packages and the partners.

Publications: <http://www.epiwork.eu/publications/> List of editorial material, scientific publications and international conferences and seminars by consortium members which are linked to Epiwork. The Editorial material section contains links to dissemination movies, dedicated features in international journals etc. The Dissemination section is dedicated to those tools developed in the scope of the project to reach the general public with scientific results and outcome from the project.

H1N1: <http://www.epiwork.eu/2009-h1n1-flu/> This page is dedicated to the progress made by the several teams during the H1N1 2009 pandemic.

Resources: <http://www.epiwork.eu/resources/> This page contains a subset of pages illustrating demos and prototypes developed in the scope of the different Work Packages:

WP2: Spatially structured models and human mobility

<http://www.epiwork.eu/resources/wp2-spatially-structured-models-and-human-mobility/>

WP3: Epidemic Marketplace

<http://www.epiwork.eu/resources/wp3-epiwork-epidemic-marketplace/>

WP4: Computational Modelling Platform

<http://www.epiwork.eu/resources/wp4-computational-modeling-platform/>

WP5: ICT monitoring and reporting systems

<http://www.epiwork.eu/resources/wp5-ict-monitoring-and-reporting-systems/>

WP6: Reporting systems comparative analysis and evaluation

<http://www.epiwork.eu/resources/wp6-reporting-systems-comparative-analysis-and-validation/>

Events: <http://www.epiwork.eu/events/> This page contains announcements about international events organized by the several partners participating to the Epiwork project.

2 Publications, conferences and seminars

The project puts great emphasis on publication in high impact scientific communication channels such as papers and major conferences. It also envisions communicating results at top international conferences. During the third year of life of the project the scientific outreach is simply stated by the sheer numbers of publications (53 papers in peer reviewed journals) and presentations at conferences (about 100 talks, lectures and seminars).

Publications

1. Coelho FC, Codeço CT, Gomes MGM (2011) A Bayesian framework for parameter estimation in dynamical models. *PLoS ONE* 6(5):e19616.
2. van Noort SP, Aguas R, Ballesteros S, Gomes MGM (2012) The role of weather on the relation between influenza and influenza-like illness. *J Theor Biol* 298C:131-137.
3. Aguas R, Ferreira MU, Gomes MGM (2012) Modeling the effects of relapse in the transmission dynamics of malaria parasites. *J Parasitol Res*:921715.
4. Gomes MGM, Águas R, Lopes JS, Nunes MC, Rebelo C, Rodrigues P, Struchiner CJ (2012) How host selection governs tuberculosis reinfection. *Proc R Soc Lond B*. (In press).
5. Givan O, Schwartz N, Cygelberg A, Stone L. Predicting epidemic thresholds on complex networks: Limitations of mean-field approaches. *J Theor Biol*. 2011 Nov 7;288:21-8.
6. Katriel G. The size of epidemics in populations with heterogeneous susceptibility. *J Math Biol*. 2011 Aug
7. Barnea O, Yaari R, Katriel G, Stone L. Modelling seasonal influenza in Israel. *Math Biosci Eng*. 2011 Apr;8(2):561-73.
8. Roll U, Yaari R, Katriel G, Barnea O, Stone L, Mendelson E, Mandelboim M, Huppert A. Onset of a pandemic: characterizing the initial phase of the swine flu (H1N1) epidemic in Israel. *BMC Infect Dis*. 2011 Apr 14;11:92.

9. Katriel G, Yaari R, Huppert A, Roll U, Stone L. Modelling the initial phase of an epidemic using incidence and infection network data: 2009 H1N1 pandemic in Israel as a case study. *J R Soc Interface*. 2011 Jun 6;8(59):856-67.
10. Katriel G Note on 'Age, influenza pandemics and disease dynamics' by Greer et al. (2010). *Epidemiol Infect*. 2011 Sep;139(9):1440-1;
11. Stone L., Hilker F., & Katriel H. SIR epidemic models Sourcebook in Theoretical Ecology, Alan Hastings and Louis Gross, Editors , University of California Press 2011.
12. Stone L. Waltz of the weevil. *Nature*. 2011 Feb 3;470(7332):47-9.
13. Eames KTD, Tilston NL, Brooks-Pollock E, Edmunds WJ Measured Dynamic Social Contact Patterns Explain the Spread of H1N1v Influenza *PLoS Comput Biol* 8(3): e1002425. doi:10.1371/journal.pcbi.1002425
14. Brooks-Pollock E, Tilston N, Edmunds WJ, Eames KT. Using an online survey of healthcare-seeking behaviour to estimate the magnitude and severity of the 2009 H1N1v influenza epidemic in England. *BMC Infect Dis*. 2011 Mar 16;11:68.
15. Eames KT, Brooks-Pollock E, Paolotti D, Perosa M, Gioannini C, Edmunds WJ. Rapid assessment of influenza vaccine effectiveness: analysis of an internet-based cohort. *Epidemiol Infect*. 2011 Sep 12:1-7. DOI: 10.1017/S0950268811001804
16. H. J. Herrmann, C. M. Schneider, A. A. Moreira, J. S. Andrade Jr, S. Havlin, Onion-like network topology enhances robustness against malicious attacks, *J. Stat. Mech*. 2011, 01027 (2011)
17. C. Lagorio, M. Dickison, F. Vazquez, L. A. Braunstein, P. A. Macri, M. V. Migueles, S. Havlin, H. E. Stanley, Quarantine-generated phase transition in epidemic spreading, *Phys. Rev. E* 83, 026102 (2011)
18. A. A. Moreira, J. S. Andrade Jr., S. Havlin, H. J. Herrmann, C. M. Schneider, Mitigation of malicious attacks on networks, *PNAS* 108, 3838 (2011)
19. Rybski D, Buldyrev SV ,Havlin S, Liljeros F, Makse HA, Communication activity in social networks: growth and correlations, *European Physical Journal B* 84, 147-159 (2011)

20. Schneider CM, Mihaljev T, Havlin S, Herrmann HJ, Suppressing epidemics with a limited amount of immunization units, *Phys. Rev. E* 84, (2011)
21. Li W, Wang FZ, Havlin S, Stanley HE, Financial factor influence on scaling and memory of trading volume in stock market, *Phys. Rev. E* 84, (2011)
22. Huang XQ, Vodenska I, Wang FZ, Havlin S, Stanley HE, Identifying influential directors in the United States corporate governance network *Phys. Rev. E* 84, (2011)
23. Y. Hu, Y. Wang, D. Li, S. Havlin, Z. Di, Possible Origin of Efficient Navigation in Small-Worlds, *Phys. Rev. Lett.* 106, 108701 (2011)
24. D. Li, G. Li, K. Kosmidis, H.E. Stanley, A. Bunde, S. Havlin, Percolation of spatially constraints networks, *Europhys. Lett.* 93, 68004 (2011)
25. D. Li, K. Kosmidis, A. Bunde, S. Havlin, Dimension of spatially embedded networks, *Nature Physics* 7, 481-484 (2011)
26. J. Shao, S. V. Buldyrev, S. Havlin, H. E. Stanley, Cascade of failures in coupled network systems with multiple support-dependence relations, *Phys. Rev. E* 83, 036116 (2011)
27. A. Bashan, R. Parshani, S. Havlin, Percolation in networks composed of connectivity and dependency links, *Phys, Rev. E* 83, 051127 (2011)
28. Gao Jianxi, Buldyrev Sergey V., Stanley H. Eugene, Havlin S., Networks formed from interdependent networks, *Nature Physics* 8, 40-48 (2011)
29. A.Bashan and S.Havlin, The Combined Effect of Connectivity and Dependency Links on Percolation of Networks, *J Stat Phys* 145, (2011)
30. Hu Y. Q., Kshirim B., Cohen R., Havlin S., Percolation in interdependent and interconnected networks: Abrupt change from second- to first-order transitions, *Phys. Rev. E* 84, (2011)
31. C. Rozenblat, D. Ietri, C. Ducruet, S. Havlin, , R. Parshani, Inter-similarity between coupled networks *Europhys. Lett.* 92, 68002 (2011)

32. Merler S, Ajelli M, Pugliese A, Ferguson NM, 2011 Determinants of the Spatiotemporal Dynamics of the 2009 H1N1 Pandemic in Europe: Implications for Real-Time Modelling. *PLoS Comput Biol* 7(9): e1002205. 2011.
33. G. Guzzetta, M. Ajelli, Z. Yang, S. Merler, C. Furlanello, D. Kirschner. Modeling socio-demography to capture tuberculosis transmission dynamics in a low burden setting. *Journal of Theoretical Biology* 289: 197-205. 2011.
34. P. Poletti et al. The effect of risk perception on the 2009 H1N1 pandemic influenza dynamics. *PLoS ONE*, 6(2): e16460, 2011.
35. I. Carreras, A. Matic, P. Saar, V. Osmani, "Comm2Sense: Detecting Proximity Through Smartphones", in Proc. of perMoby – PERCOM Workshop 2012.
36. C Pesquita, F Couto, Where GO is going and what it means for ontology extension. Proceedings of ICBO 2011, International Conference on Biomedical Ontology, July 2011.
37. Bruno Tavares, Hugo Bastos, Daniel Faria, Joao D. Ferreira, Tiago Grego, Catia Pesquita, Francisco Couto, The Biomedical Ontology Applications (BOA) framework. Proceedings of ICBO 2011, International Conference on Biomedical Ontology, July 2011.
38. João D. Ferreira, Francisco Couto, Generic semantic relatedness measure for biomedical ontologies. Proceedings of ICBO 2011, International Conference on Biomedical Ontology, July 2011.
39. Francisco Couto, Mário J. Silva. Disjunctive Shared Information between Ontology Concepts: application to Gene Ontology. *Journal of Biomedical Semantics*. Vol 2(5). doi:10.1186/2041-1480-2-5.
40. J. Zamite, F. Silva, F. Couto, M. Silva, MED Collector: Multisource epidemic data collector. *Transactions on Large-scale Data-and Knowledge- centered Systems IV: Special Issue on Database Systems for Biomedical Applications* (6990), pp. 40-72. Springer-Verlag New York, Inc. ISBN 978-3-642-23739-3 (2011)
41. Aguiar, M., Ballesteros, S., Kooi, B. W., Stollenwerk, N. (2011). The role of seasonality and import in a minimalistic multi-strain dengue model capturing differences between primary and secondary infections: complex dynamics and its implications for data analysis. *Journal of Theoretical Biology*, 289, 181–196.

42. Stollenwerk, N., Aguiar, M., Ballesteros, S., Boto, J., Kooi, W. B., Mateus, L. (2012). Dynamic noise, chaos and parameter estimation in population biology, accepted for publication in Roy. Soc. Interface Focus.
43. Aguiar, M., Stollenwerk, N. and Kooi, W. B. (2012). Scaling of stochasticity in dengue hemorrhagic fever epidemics, accepted for publication in Math. Modelling Nat. Phenom. (MMNP)
44. Peyman Ghaffari, Vincent Jansen & Nico Stollenwerk (2011). Evolution towards critical fluctuations in a system of accidental pathogens, (Numerical Analysis and Applied Mathematics ICNAAM 2011 AIP Conf. Proc. 1389, 1224-1227 (2011); doi: 10.1063/1.3637837 Copyright 2011 American Institute of Physics 978-0-7354-0956-9/\$30.00)
45. Martins, J., Aguiar, M., Pinto, A., Stollenwerk, N. (2011). On the series expansion of the spatial SIS evolution operator. Journal of Difference Equations and Applications, 17, 1107–1118.
46. Aguiar, M., Stollenwerk, N. and Kooi, W. B. (2011). The stochastic multi-strain dengue model: analysis of the dynamics. AIP Conference Proceedings, 1389, 1224–1227
47. Aguiar, M., Ballesteros, S., Boto, J.P., Kooi, B.W., Mateus, L., Stollenwerk, N. (2011). Parameter estimation in epidemiology: from simple to complex dynamics. AIP Conference Proceedings, 1389, 1248–1251.
48. Gerrish, P., and Sniegowski, P. (2011). Adding Dynamical Sufficiency to Fishers Fundamental Theorem of Natural Selection. AIP Conference Proceedings, 1389, 1260–1262.
49. D Grady, R. Brune, C. Thiemann, F. Theis and D. Brockmann Modularity maximization and tree clustering: Novel ways to determine effective geographic borders in *Handbook of Optimization in Complex Networks*, Thai, My T., Pardalos, Panos M(eds.), Springer (2012).
50. V. Belik, T. Geisel and D. Brockmann Recurrent host mobility in spatial epidemics: beyond reaction-diffusion *European Physical Journal B*, 84, 579–587 (2011).
51. V. Belik, T. Geisel and D. Brockmann Natural human mobility patterns and spatial spread of infectious diseases *Phys. Rev. X* **1**, 011001 (2011).
52. G. O'Danleyman, J. J. Lee, H. Seebens, B. Blasius and D. Brockmann Complexity in human transportation networks: A comparative analysis of worldwide air transportation

and global cargo ship movements *European Physical Journal B*, **84**, 589–600 (2011) (2011).

53. AC Singer, V Colizza, H Schmitt, J Andrews, D Balcan, WE Huang, VDJ Keller, A Vespignani, RJ Williams, *Environmental Health Perspectives* 119, 1084 (2011)

Scientific Events

1. Second Workshop on “[Dynamical Systems Applied to Biology and Natural Sciences](#)”, 2-4 February 2011, Lisbon, organized by Nico Stollenwerk
2. Workshop DSABNS - Third Workshop Dynamical Systems Applied to Biology and Natural Sciences. Lisbon, Portugal, 8-10 February 2012.
3. Mini-Symposium ICNAAM - V Mini-symposium “Biomathematics” 19-25 September 2011.
4. Mini-Symposium ECMTB - Mini-Symposium “Modelling dengue fever epidemiology” June 28 - July 2.
5. Workshop DSABNS - Second Workshop Dynamical Systems Applied to Biology and Natural Sciences. Lisbon, Portugal 2-4 February 2011.

This year the project has finalized the organization of the mietermi workshop “**Facing the challenge of infectious diseases**” that took place in Courmayeur on 18-20 January 2012. This workshop consisted in a major event gathering most of the relevant stakeholders interested in the Epiwork project. The funding from Epiwork has been complemented with external sponsorship because of the size reached by the event that has gathered around 100 researchers, policy makers and institution representatives (including JRC, WHO, INSERM, ISS, HPA etc.). The workshop detailed presentation is reported in the specific deliverable D8.3.2.

International Conferences and seminars

FCG-IGC (WP1+WP5)

1. Measures of immunity across scales. Talk at symposium "Infection Dynamics: Bridging the Gap between Theory and Application", Utrecht Centre for Infection Dynamics, The Netherlands, March 2011.
2. Heterogeneity in host-microparasite systems. Talk at workshop "Phylodynamics", NESCent - National Evolutionary Synthesis Center, Durham, USA, May 2011.
3. Heterogeneity in antibody range and the antigenic drift of influenza A viruses. Talk at "VIII European Conference on Mathematical and Theoretical Biology", Krakow, Poland, June 2011.
4. Heterogeneity in antibody range and the antigenic drift of influenza viruses. Talk at workshop "From Chaos to Complexity", Mathematics Interdisciplinary Research, University of Warwick, UK, July 2011.

5. The role of weather on the relation between influenza and influenza-like illness. Talk at "Second Workshop "Facing the Challenge of Infectious Diseases: Integrating mathematical modeling, computational thinking and ICT applications". Pré-Saint-Didier, Aosta, Italy, January 2012.
6. Platform to support a cartoon scholar contest as well as the communication and dissemination of flu information among the youth (<http://bandadesenhada.gripenet.pt>).

TAU (WP1)

1. Banff conference: Modelling and analysis of options for controlling persistent infectious diseases (attendance and invited talk)
2. Invited talk at Princeton University (Bryan Grenfell's group). Nov. 2011
3. Collaboration with Sebastien Ballesteros and visit.
4. Invited speaker at EE2 conference Aosta, Italy. Poster.

BIU (WP1+WP2)

1. Robustness of Complex Networks: Nov. 14 - 16, 2010, Delft, Netherland, ``Chatastrophic Cascades of Failures of Interdependent Networks"
2. Workshop on "Applications of statistical physics to complex systems" : Jan 11-13, 2011, Budapest, Hungary , ``Robustness of Networks"
3. Horizons in Emergence & Scaling, March 19-20, 2011, Boston, USA, "Applications of statistical physics to complex systems"
4. APS March Meeting, Focus Session " The Dynamics of Co-evolving and Interdependent Networks": March 21-25, 2011, Dallas, Texas USA, ``Robustness of Interacting Networks""
5. European Geophysics Union Meeting: April 3-8, 2011, Vienna, AustriaTitle: ``The Emergence of El-Nino Basin as an Autonomous Component"
6. Complexity Workshop: May 11-12, 2011, Tel Aviv University, Israel, Title: ``Catastrophic Cascade of Failures in spatial interdependent networks""
7. International Conference on Econophysics: June 4-6, 2011, Shanghai, China Title: ``Theory of spreading in Network of Networks"
8. Statistical Mechanics Day IV: June 23, 2011, Weizmann Institute of Science, Israel Title: ``Percolation and Epidemics in Network of Networks"
9. Statistical Physics and Complex Networks: Nov. 15-17, 2011, Potsdam, Germany Title: ``Using Real World Data in Socio-economic modeling "

LSHTM (WP1 + WP5)

1. K Eames. "The mathematics of plagues"; Maths and science week, North London Collegiate School, Jan 2012 http://www.nlcs.org.uk/Latest_News/Dr-Ken-Eames.php
2. K Eames. "Measuring and modelling changing social contact networks"; European Conference on Mathematical and Theoretical Biology, Krakow June 2011
3. K Eames. "Caught in the SCaMPiE net"; Social Contacts and Mixing Patterns in Epidemiology workshop, LSHTM April 2011
4. K Eames. "Networks in epidemiology: human mixing patterns and models of infection" Seminar, Durham University March 2011
5. S Funk "Pitfalls in analysing biased data" at "Biases in reporting and detection of rare events.", Columbia University. Nov 17-18, 2011.

6. S Funk "Modelling the influence of human behaviour on the spread of infectious diseases" Contributed talk at European Conference of Mathematical and Theoretical Biology, Kraków. June 28 - Jul 2, 2011
7. J Edmunds, invited talk on the flusurvey at the HPA Annual Conference in September 2011
8. J Edmunds, invited talk on the use of models for public health decision-making at the Epidemics3 conference in Boston December 2012, in which he highlighted the importance of the use of community surveillance using the internet or other methods.
9. J Edmunds, invited talk on surveillance of influenza at the EE2 talk at Courmayeur in January 2012.

FFCUL-LASIGE (WP3 + WP4 + WP5)

1. F. Couto, Exploring the semantics of biomedical ontologies, in External Seminar at European Bioinformatics Institute, Hinxton, UK, April 2011.
2. Mário J. Silva. Privacy and Crowdsensing: Can't we just be friends? FuturICT's Ethics Meeting, Zurich, June 2011.
3. Catia Pesquita, Francisco Couto, Where GO is going and what it means for ontology extension. Proceedings of ICBO 2011, International Conference on Biomedical Ontology, July 2011.
4. Bruno Tavares, Hugo Bastos, Daniel Faria, Joao D. Ferreira, Tiago Grego, Catia Pesquita, Francisco Couto, The Biomedical Ontology Applications (BOA) framework. Proceedings of ICBO 2011, International Conference on Biomedical Ontology, July 2011.
5. João D. Ferreira, Francisco Couto, Generic semantic relatedness measure for biomedical ontologies. Proceedings of ICBO 2011, International Conference on Biomedical Ontology, July 2011.
6. Presentation of EPIWORK to students of the Master/PhD in Epidemiology at the Faculty of Medicine of the University of Lisbon, in an invited 3 hours seminar in July 2011, by Mário J. Silva.
7. Mário J. Silva. Challenges in Societal Data Management. Keynote presentation at IDEAS'11: 15th International Database Engineering & Applications Symposium. Lisbon, September, 2011.
8. Juliana Duque, Mediação Dados-Informação: Design de Informação para a Epidemic Marketplace Master Thesis, University of Lisbon, School of Fine Arts, November 2011 (in Portuguese).
9. Carla Patrícia Freitas Sousa, Epidemic Marketplace: Repositório e Web Services, Master Thesis, University of Lisbon, Faculty of Sciences, January 2012.
10. Zamite, J., Silva, F., Couto, F., Silva, M. 2011: MEDCollector: Multisource epidemic data collector. Transactions on Large-scale Data-and Knowledge- centered Systems IV: Special Issue on Database Systems for Biomedical Applications (6990), pp. 40-72. Springer-Verlag New York, Inc. ISBN 978-3-642-23739-3
11. Corrado Gioannini, João Zamite, Integrating the Gleamviz Simulator Tool with the Epidemic Marketplace Platform. Poster presented at EE2, Epiwork/Epifor 2nd International Workshop: Facing the Challenge of Infectious Diseases. 2012.
12. João Zamite, Dulce Domingos, Mário J. Silva, Owner-Centred Group- Based Access Control for Epidemic Resources. Poster presented at EE2, Epiwork/Epifor 2nd International Workshop: Facing the Challenge of Infectious Diseases. 2012.
[http://xldb.di.fc.ul.pt/xldb/publications/Zamite.etal:EpidemicGroupBasedAccessControl:](http://xldb.di.fc.ul.pt/xldb/publications/Zamite.etal:EpidemicGroupBasedAccessControl)

2012_poster.pdf

13. João D. Ferreira, Francisco M. Couto, Mário J. Silva, Ontologies in the Epidemiological Domain. Poster presented at EE2, Epiwork/Epifor 2nd International Workshop: Facing the Challenge of Infectious Diseases. 2012.
http://xldb.di.fc.ul.pt/xldb/publications/Ferreira.et.al:OntologiesInThe:2012_poster.pdf
14. F. Couto, Untangling Biomedical Ontologies, Practical workshop: Bioinformatics and Systems Modelling, Faculty of Sciences, University of Lisbon, 2011

FFCUL-CMAF

1. M. Aguiar, Talk “Modelling dengue fever epidemiology: complex dynamics and its implication for data analysis”, at 9th International Conference of Numerical Analysis and Applied Mathematics (ICNAAM), Halkidiki, Greece, September 2011.
2. M. Aguiar, Talk “Modelling dengue fever epidemiology: complex dynamics and its implication for data analysis”, at 8th European Conference on Mathematical and Theoretical Biology (ECMTB), Krakow, Poland, July 2011.
3. M. Aguiar, talk “The role of seasonality and import rate in the two strain dengue model: complex dynamics and its implications for data analysis”, at Second Workshop Dynamical Systems Applied to Biology and Natural Sciences (DSABNS), Centro de Matemática e Aplicações Fundamentais (CMAF), Lisbon University, Portugal, February 2011
4. Bob W. Kooi, plenary talk “Complex dynamics and its regulation in a predator-prey model with predator suffering from an infectious disease”, at Second Workshop Dynamical Systems Applied to Biology and Natural Sciences (DSABNS), Centro de Matemática e Aplicações Fundamentais (CMAF), Lisbon University, Portugal February 2011.
5. Sebastien Ballesteros, talk “On the predictability of dengue epidemics: a sequential Monte Carlo approach”, at Second Workshop Dynamical Systems Applied to Biology and Natural Sciences (DSABNS), Centro de Matemática e Aplicações Fundamentais(CMAF), Lisbon University, Portugal February 2011.
6. Jose Martins, talk “Creation and annihilation operators in the spatial SIS model.”, at Second Workshop Dynamical Systems Applied to Biology and Natural Sciences (DSABNS), Centro de Matemática e Aplicações Fundamentais(CMAF), Lisbon University, Portugal February 2011..
7. Nico Stollenwerk, plenary Talk “The interplay between nonlinearity and noise in epidemiological systems”, at Second Workshop Dynamical Systems Applied to Biology and Natural Sciences (DSABNS), Centro de Matemática e Aplicações Fundamentais(CMAF), Lisbon University, Portugal February 2011.
8. Nico Stollenwerk, talk “On the origin of the irregularity of DHF epidemics”, at the ECMTB 2011, Krakow, Poland, July 2011.
9. Nico Stollenwerk, talk “Chaos and noise in population biology” , 2nd talk at the ECMTB 2011, Krakow, Poland, July 2011.
10. Philip Gerrish, talk “Genomic mutation rates that cause extinction: general evolutionary predictions” , 2nd talk at the ECMTB 2011, Krakow, Poland July 2011.
11. Nico Stollenwerk, talk “Parameter estimation in epidemiology: from simple to complex dynamics”, at the IC-NAAM 2011, Chalkidiki, Greece, July 2011.
12. Philip Gerrish, talk “Adding Dynamical Sufficiency to Fishers Fundamental Theorem of Natural Selection”, at the ICNAAM 2011, Chalkidiki, Greece, September 2011.
13. Nico Stollenwerk, invited plenary talk “Chaos and noise in population biology” with emphasis on parameter estimation in epidemiological models, at MATE 2011,

- Colchester, UK, September 2011.
14. Frank Hilker, talk “Evaluating the effectiveness of controlling pest species with combined strategies” with emphasis on parameter estimation in epidemiological models, at MATE 2011, Colchester, UK, September 2011.
 15. M Aguiar, talk “Modelling dengue fever epidemiology: complex dynamics and its implication for data analysis.”, at Centro de Matemática e Aplicações Fundamentais, Faculty of Sciences, Lisbon University, Portugal, September 2011.
 16. M Aguiar, talk “Modelling dengue fever epidemiology: complex dynamics and its implication for data analysis.”, at Department of Theoretical Biology, Faculty of Earth and Life Sciences, Vrije Universiteit Amsterdam, The Netherlands, August 2011.
 17. M Aguiar, talk “Modelling dengue fever epidemiology: complex dynamics and its implication for data analysis.”, at Central Veterinary Institute of Wageningen, Lelystad, The Netherlands, August 2011.
 18. M Aguiar, talk “Modelling dengue fever epidemiology: complex dynamics and its implication for data analysis.”, Seminario Doutoral II at Faculty of Sciences, Lisbon University, Portugal, June 2011.
 19. M Aguiar, talk “Modelling dengue fever epidemiology: complex dynamics and its implication for data analysis.”, at Universidade Fundacao Ezequiel Dias, Brazil, April 2011.
 20. M Aguiar, talk “Modelling dengue fever epidemiology: complex dynamics and its implication for data analysis.”, at Universidade Federal de Minas Gerais, ICEX/ICB, Brazil, April 2011.
 21. M Aguiar, Sebastien Ballesteros, Bob W. Kooi and Nico Stollenwerk. (2011). “The role of seasonality and import in a minimalistic multi-strain dengue model capturing differences between primary and secondary infections”. (poster presented at at at 9th International Conference of Numerical Analysis and Applied Mathematics (ICNAAM), Halkidiki, Greece.).
 22. M Aguiar, S Ballesteros, J Boto, B Kooi, L Mateus and N Stollenwerk. (2011). “Parameter estimation in epidemiology: from simple to complex dynamics”. (poster presented at at at 9th International Conference of Numerical Analysis and Applied Mathematics (ICNAAM), Halkidiki, Greece.).
 23. M Aguiar, S Ballesteros, B Kooi and N Stollenwerk. (2011). “The role of seasonality and import in a minimalistic multi-strain dengue model capturing differences between primary and secondary infections”. (poster presented at Summer School Dynamical Models in Life Sciences, Évora, Portugal).
 24. M Aguiar, S Ballesteros, J Boto, B Kooi, L Mateus and N Stollenwerk. (2011). “Parameter estimation in epidemiology: from simple to complex dynamics”. (poster presented at Summer School Dynamical Models in Life Sciences, Évora, Portugal).
 25. Ghaffari, P., Jansen, V., & Stollenwerk, N. (2011). “Evolution towards critical fluctuations in a system of accidental pathogens”. (poster presented at ESMTB-EMS summer school, Evora, July 2011).
 26. Stollenwerk, N., & Boto, J.P. (2011). “Super-diffusion in epidemiology”. (poster presented at ESMTB-EMS summer school, Evora, July 2011).

CREATE-NET

27. D. Paolotti, I. Carreras, C. Gioannini, P. Saar, D. Miorandi, V. Colizza and A. Vespignani, "Influweb: an internet-based and mobile platform for influenza surveillance", in Demo Session - eHealth 2011 [demo]
28. P. Saar, A. Matic, I. Carreras, V. Osmani, "Comm2Sense: inferring social interactions via smartphones", in Demo Session - eHealth 2011. [demo]
29. P. Saar, A. Matic, I. Carreras, V. Osmani, "Comm2Sense: inferring social interactions via smartphones", in Proc. of Demo Session - eHealth 2011. [demo]

ISI

30. M Tizzoni, Poster. Title: Human mobility networks, travel restrictions, and the global spread of 2009 H1N1 pandemic. Venue: Epidemics3, Boston, MA, USA.
31. M Tizzoni, Talk. Title: GLEaM, a global stochastic simulation model for influenza epidemics: its application to the 2009 H1N1 pandemic. Venue: Workshop "Why should one trust your model?", SIMUL 2011, Barcelona, Spain.
32. M Tizzoni Talk. Title: GLEaM, a global stochastic simulation model for influenza epidemics: its application to the 2009 H1N1 pandemic. Venue: ECCS'11, Wien, Austria.
33. M Tizzoni Poster. Title: GLEaM, a global stochastic simulation model for influenza epidemics: its application to the 2009 A/H1N1 pandemic. Venue: NetSci2011, Budapest, Hungary.
34. D Balcan, Talk, Role of large scale computational models in forecasting spreading patterns of emerging infectious diseases: Experiences from the 2009 H1N1 influenza pandemic, Mathematics in Emerging Infectious Disease Management, Centro Internacional de Ciencias, Cuernavaca, Mexico – January 2011
35. C. Poletto, SIAM Conference on Application of Dynamics Systems, Snowbird, Utah, USA, May 22-26, 2011. Title: Multiscale Networks and the Spatial Spread of Infectious Diseases
36. C. Poletto, NetSci2011, Budapest, Hungary, June 6-10, 2011. Title: Human travel and time spent at destination: impact on the epidemic invasion dynamics
37. C. Poletto, Dagstuhl Seminar "Data Mining, Networks and Dynamics", Dagstuhl School, Germany, November 6 – 11, 2011. Title: Multiscale Networks and the Spatial Spread of Infectious Diseases
38. A. Vespignani, EE² - EPIWORK/EPIFOR 2nd International workshop "Facing the challenge of infectious diseases, Courmayeur, Italy, January 18 - 20, 2012.
39. A. Vespignani, Topix Conference, Turin, Italy December 6, 2011. "Frontiers in multiscale computational modeling for zoonotic epidemics", Kansas City, October 10-12, 2011.
40. A. Vespignani, Workshop "Data Science and Epidemiology", Center for Infectious Disease Dynamics (CIDD) at Penn State University, October 6 and 7, 2011.
41. A. Vespignani, ECCS 11, European Conference on Complex Systems 2011 Vienna, September 12-16, 2011.
42. A. Vespignani, The 2011 Summer Institute in Statistics and Modeling in Infectious Diseases (SISMID) , June 13-29, 2011, University of Washington in Seattle, Washington.
43. V. Colizza ECDC Infectious Disease Modeling Meeting, ECDC, Stockholm, Sweden, November 14-15, 2011
44. V. Colizza, Workshop 'The role of modeling in influenza pandemic planning and response: lessons from 2009' Venice, Italy, May 26-27, 2011.
45. V. Colizza, International Conference on Innovation and Information Technologies, Abu Dhabi, UAE, April 25-27, 2011. [keynote]

46. V. Colizza, SAMSI Workshop ‘Dynamics on networks’, RTI, NC, USA, March 21-23, 2011.
47. V. Colizza, Journee de l’Ecole Doctorale Pierre Louis de Sante Publique, Saint Malo October 19-21, 2011.

FBK

1. A. Pugliese, S. Merler, M. Ajelli, N.M. Ferguson. *Modelling the European spread of H1N1 epidemic in 2009*. UCID Symposium Infection Dynamics, Utrecht, The Netherlands, March 9-11, 2011. [Oral presentation]
2. A. Pugliese, S. Merler, M. Ajelli, N.M. Ferguson. *The role of epidemic modelling, focussing on 2009 pandemic influenza*. Annual meeting of the European Influenza Surveillance Network, Lublijana, Slovenia, June 7-9, 2011. [Oral presentation]
3. M. Ajelli, S. Merler. *Investigating the spatiotemporal dynamics of pandemic influenza in Europe*. SIAM Conference on Applications of Dynamical Systems, Snowbird, Utah, USA, May 22-26, 2011. [Oral presentation]
4. . Poletti, M. Ajelli, S. Merler. *Risk perception and 2009 H1N1 pandemic influenza spread in Italy*. 8th European Conference on Mathematical and Theoretical Biology, Krakow, Poland, June 28 - July 2, 2011. [Oral presentation]
5. S. Merler, M. Ajelli. *Simulation models for public health preparedness*. Cloud Computing per la Sanità Digitale, Castelfranco Veneto, Italy, Oct 18, 2011 [Oral presentation]
6. S. Merler, M. Ajelli, A. Pugliese, N.M. Ferguson, *Factors determining the dynamics of the 2009 H1N1 pandemic in Europe*, Epidemics3, Boston, MA, USA, Nov 19 - Dec. 2, 2011 [Poster]
7. P. Poletti, M. Ajelli, S. Merler, *The influence of uncoordinated human response on the spread of the 2009 pandemic influenza in Italy*. Epidemics3, Boston, MA, USA, Nov 19 - Dec. 2, 2011 [Poster]
8. S. Merler, M. Ajelli, A. Pugliese, N.M. Ferguson. *Investigating the spread of the 2009 H1N1 influenza pandemic in Europe*. Mathematical Innovative Methods and Models of BIOsciences. Trento, Italy, December 19-21, 2011. [Oral presentation]
9. L. Fumanelli, M. Ajelli, P. Manfredi, A. Vespignani, S. Merler. *Synthetic mixing patterns and infectious disease epidemiology*. Mathematical Innovative Methods and Models of BIOsciences. Trento, Italy, December 19-21, 2011. [Oral presentation]
10. L. Fumanelli, M. Ajelli, P. Manfredi, A. Vespignani, S. Merler, *Computing Synthetic contact matrices through modeling of social mixing patterns relevant to infectious disease transmission*. ESCAIDE, Stockholm, Sweden, Nov 6-8, 2011 [Oral presentation]
11. E. Dal Fava, L. Fumanelli, S. Merler, L. Marangi, M. Ajelli, A. Melegaro, Z. Shkedy, G. Scalia Tomba, C. Rizzo, P. Manfredi. *Contact patterns and transmission of varicella in Europe*. ESCAIDE, Stockholm, Sweden, Nov 6-8, 2011 [Oral presentation]

3 Outreach to the public and popularization

The project has been very active in organizing outreach activities targeting the large public and aimed at popularizing the project and its results to the non-experts.

Press releases, media coverage

FCG-IGC (WP1+WP5)

- Sent press releases at the end of flu season 2010/2011 and the beginning of flu season 2011/2012. 25 newsletters were produced. Example news motivated by press release:

<http://www.gulbenkian.pt/index.php?article=3436&langId=1&format=404>

- Program broadcast on Portuguese national Radio, for the community of Portuguese language countries (Brazil, Angola, Mozambique, Cape Verde, Sao Tome, Timor) on the system Influenzanet applied to the monitoring of dengue fever in the Brazilian state of Bahia:

<http://www.rtp.pt/icmblogs/rtp/cientificamente/?k=Dengue-na-WEB.rtp&post=36828>

- Social networks: we maintain two Facebook pages - one to send invitations to specific 'friends' (approx. 350 people) and other institutional/ 'like' page (approx. 650 people). We run a Twitter page (250 Followers). We developed a rough guide to social networks, tailored to the specific needs of science communication and public health.

Facebook Page:

<http://www.facebook.com/pages/Gripenet/104348942939351>

Facebook Profile:

<http://www.facebook.com/profile.php?id=100000961861450>

Twitter page:

https://twitter.com/Gripenet_pt

LSHTM (WP1 + WP5)

- Birmingham Science Museum, Meet the Scientist (October 27th 2011). We staged a 1-day event in the museum during the busiest week of the year (October half term), on influenza, and how it is spreads. We also used this as a vehicle for recruiting individuals to the survey.

- Dr S Funk and Dr K Eames interviewed on BBC Radio 4 *Today Programme* (main radio News programme in the UK), about transmission of influenza across Europe and importance of Influenzanet (October 2011)

- Prof John Edmunds co-hosted and was panel-member of “*Contagion*” pre-launch screening (October 2011)

- Dr Ken Eames was interviewed on *Health Check*, BBC World Service (Nov 2011)

- Prof John Edmunds was interviewed on BBC Radio show *Naked Scientists* on spread of influenza (Nov 2011)

- Articles in the *Sun*, *Huffington Post*, and *Economist* on Influenzanet / flusurvey and importance of surveillance (October / November 2011)

AIBV

Grote Griepmeting: Press coverage in the Belgian and Dutch press: see <https://www.degrotegriepmeting.nl/nl/artikelen/de-grote-griepmeting-de-media-2011-2012/>.

In comparison with other seasons, the attention in this 9th season has been limited so far, due to a moderate flu season (February 2012). On 10 March 2011, the national Dutch school television broadcasted an item on flu and vaccination the Grote Griepmeting (GGM). The programme was seen by 100.000s of school students in the Netherlands:

<http://player.omroep.nl/?afIID=12334582>. The TV programme included flashes to our own

You Tube films, developed with Epiwork funding:

http://www.youtube.com/watch?v=vvR4kOgqtAE&feature=player_embedded.

SMI

Influensakoll: more than 40 articles and informational blurbs in on-line local media around Sweden have featured Influensakoll so far this season. We are unable to track print-only media, so we think this likely is an underestimate. In addition, we had four interviews on the radio, one of which on P1, the main news radio station. Influensakoll was also featured in an informational spot on Stockholm local TV, although we did not participate actively.

INSERM (subcontractor)

The subcontractor team at INSERM was very successful in deploying the IMS in France at the end of December 2011. In a few weeks, they were able to enroll thousands of participants who enabled the platform to collect a huge amount of data in no time.

Grippenet received a huge exposure including two television items on French TV: [Magazine de la Santé](#) on France 5 (26 Jan. 2012) and [LCI santé](#) (27, 28 and 29 January 2012). Particular at the launch in January, a lot of attention was realised in many, many health care magazines, local newspapers and two national ones, *Le Figaro* and *France Soir*. The communication campaign was very successful and the data collected on a weekly basis are included in the weekly bulleting released by the Réseau Sentinelles (French GPs surveillance).

LSHTM

Flusurvey: has been featured in The Sun (print edition), the Economist (<http://www.economist.com/node/21538656>) and the Huffington Post (http://www.huffingtonpost.co.uk/janis-curry/how-to-detect-a-flu-epide_b_1098320.html), the Naked Scientist podcast, <http://www.thenakedscientists.com/HTML/podcasts/show/2011.11.13/>), Today programme (BBC Radio 4), (http://news.bbc.co.uk/today/hi/today/newsid_9625000/9625165.stm), Health Check (BBC World Service) (<http://www.bbc.co.uk/programmes/p00ldzpv>). Our data are included in the weekly influenza report of the Health Protection Agency (http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1287147913271), and we've been at Thinktank Birmingham science museum for a day.

ISI

Influweb: at the beginning of the season, the Inluweb press office has released a communication informing the general public about the new platform and the activation of the platform in several new countries. The press release received not too much attention because of the late arrival of Influenza, due to the mild weather even though some articles came out about this: <http://influweb.it/news/2011/11/24/gravitazero/>, <http://influweb.it/news/2011/11/28/galileo/>, <http://influweb.it/news/2011/12/11/torinoscienza/>. In November 2011, a demo about the platform has been presented at the conference <http://electronic-health.org>. In January 2012, Inluweb has started a partnership with a portal, called pazienti.it, dedicated to disseminating healthcare and medicine information among the general population. The partnership received a huge attention from the media (the summary of the articles are here: http://influweb.it/news/2012/02/22/press_pazienti/) and is still getting a lot of attention especially on Social Network media such as Twitter and Facebook.

FGC-IGC

Gripenet: we sent press releases at the end of flu season 2010/2011 and the beginning of flu season 2011/2012 and we produced 25 newsletters. Example: <http://www.gulbenkian.pt/index.php?article=3436&langId=1&format=404>. We exploit two Facebook pages: one for inviting 'friends' (approx. 350 people) and another institutional/ 'like' page (approx. 650 people). We also run a Twitter page (250 Followers). We developed a rough guide to social networks, tailored to the specific needs of science communication and public health.

EXPLOSYS (subcontractor)

Aktiv gegen Grippe: at 2 March, an article on AgG in print and online appears in *Deutsches Ärzteblatt* (<http://www.aerzteblatt.de/>) which is the Medical Doctor magazine in Germany, being distributed among all MDs in a circulation of 405.000. In general, PR activities in Germany, Austria and Switzerland had limited results due to a late start and the absence of flu in the news in the three countries.

Unanticipated finding, opportunity etc

LSHTM

Dr Sebastian Funk has also been collaborating with researchers at Royal Holloway, University of London, on a project to use online social network data (Twitter) to build a picture of the structure of real society. The manuscript (Brydon J, Funk S, Jansen VAA. Word usage mirrors community structure in an online social network. *PNAS* (in review)) is being reviewed at Proceedings of the National Academy of Science in the US at time of writing. Although this paper does not have any direct epidemiological impact, it is envisaged that the techniques can be used to uncover community structure and relate this to infectious disease spread and attitudes towards control (e.g. vaccines and antivirals). Work on this aspect is scheduled to start during this year. This work has been partly funded by EPIWORK.

The team at LSHTM have also been active in aiding the Health Protection Agency in their efforts to survey influenza in the community. Apart from the weekly incidence data that we provide to them (see above), we have also been aiding them in a project to use telephone-based surveys. Prof Edmunds is on the steering group of this project. We made our questionnaire available to them, and their survey is therefore heavily based on ours. This should therefore offer an opportunity to validate our method of data collection against other ways of performing community surveillance (the subject of WP6).

Exhibitions, interactive and non-interactive media

The project has been very active in organizing outreach activities targeting the large public and aimed at popularizing the project and its results to the non-experts. Among the major successes in this area we list:

- **a visualization application dedicated to the dissemination to a non academic audience of the WP4 research activity.**

The application, which is called *The Epidemic Planet*, displays the evolution of the 2009 H1N1 influenza pandemic and enables its users to interactively compare and learn about the effect of various intervention scenarios.



The Epidemic Planet setup consists of two screens:

- i) a touch screen used to choose the starting conditions, and
- ii) a visualization screen used to display the output of computer simulations performed using the GLEaM model.

Two different simulations are shown simultaneously.



For each simulation users can select the following options:

- the geographic origin for the disease, between La Gloria, Mexico, where the pandemic actually originated, and a major European city like Barcelona, Spain;

- the contagiousness of the disease, mild or severe (which corresponds to different values of the reproductive number);
- whether to apply travel restrictions or not, reducing the global airline transportation by a 75% factor;
- whether to suppose a worldwide vaccination campaign or not and, if yes, whether to start it in August or in November.

The dynamical maps show the time evolution of the epidemic for the selected scenarios allowing the users to qualitatively compare them. Visualization maps are provided both for the whole planet and for each continent.



The Epidemic Planet application has been shown in various events:

The Epidemic Planet application has been shown in various events in the past years. During the third period it has been shown at the **FET Flagship Pilots Midterm**

Conference held in Warsaw on November 25th 2011: <http://www.futurict.eu/event/fet-flagships-pilots-midterm-conference>

<http://www.futurict.eu/sites/default/files/docs/newsletters/FuturICT%20Warsaw%2025%20Nov%202011%20%28Opening%20Presentation%20%29.pdf>



The Epidemic Planet was also on show from October 2010, throughout 2011 in 28 locations in Spain with the exhibition ExpoCaixa Tecnorevolución (<http://www.arteenlared.com/archivo/2010/expocaixa-tecnorevolucion-una-exposicion-para-descubrir-los-avances-en-tecnologias-convergentes.html>) and Cosmocaixa ¡Epidemia! (<http://www.abc.es/agencias/noticia.asp?noticia=944430>).

Here are some more links from media reporting about the event:

<http://www.youtube.com/watch?v=ONe6zovtR6g&feature=relmfu>

<http://www.youtube.com/watch?v=uq7FJbqnps0&feature=related>

http://www.youtube.com/watch?v=_Wf8cJHydys

http://obrasocial.lacaixa.es/ambitos/exposiciones/tecnorevolucion4_es.html

The itinerant event was mainly focusing around an interactive exhibition that would invite visitors to discover some technology advances and how they affected the everyday life. In the first part of the exhibition, four different areas were covered: nanotechnology, biotechnology, information technology and communication and cognitive science.

In the second part, the most interactive one, visitors could experience first hand these technologies. The Epidemic Planet was included in this section and was meant to show to the

public the propagation of a virus on a global scale and how travels and human mobility in general can affect it.

- **production of instructive video clips that convey ideas, methods and results targeted by the project to the general public (WP4 research activity):**

Clip: [Introductory Video on SPATO software](#)

This clips is also available on the Epiwork website, together with clips from the previous years: <http://www.epiwork.eu/publications>

- **organization together with the ASSYST Consortium of a joint Workshop on “Visualization in Complex Environments”.**

The Workshop was held in Turin, on November 17-28 2011. This meeting was an opportunity to get insights into the possibilities offered by visualization and into the benefits likely to be accrued to the various societal organizations as they use these new tools: <http://areeweb.polito.it/ricerca/noiselab/FuturICT/Scope.html>

- **the WP3 team has publicly released the Epidemic Marketplace (see Deliverable 3.3).**

The portal can be found at the address: <http://www.epimarketplace.net/>.

At the end of Month 20th, The Epidemic Marketplace has been released to the scientific community at large. At the end of the third year of the project, the portal has new features: new user interface and component integration based on the Drupal Content-Management System, improved access control management, redesigned web- services. The system has been integrated with the WP4 Epidemic Modeling Platform. We jointly developed an interface that will enable the Modeling Platform to upload simulation results as datasets to the Epidemic Marketplace platform to be shared by the community. By means of features on the home page of the portal, users have access to:

- registration: visitors to the website are provided a description of the EM and can request an account;
- upon registration, users have access to the main components of the EM, namely: Data Sets (connects to the Repository), Forum, Web Services (Mediator services) and Data Collection (MedCollector);
- announcements, information on how to contact the EM developers and about the EM describing its main functions and goals.

EM Epidemic Marketplace ... a platform for integrating and sharing epidemiological data.

Search for Search

// Contact // Learn More

[Browse](#) [Upload](#) [Request](#)

Latest Announcement
searchSair webservice changed [See More](#)

Not Registered Yet? Register now!

[Become a Curator](#)
A curator is a user that has some administrative permissions over the Epidemic Marketplace website. [See more](#)

[Developers Corner](#)
You can access to our Web Services, Tools, Manuals and Significance. [See more](#)

Website Tour

Most visited documents of the week

Epi Info
Luis Filipe Lopes
2010-09-17
Subject: Epidemiology
Type: Software
[See more](#)

cumEi Salvador
Daniela Paolotti
2010-06-10
Subject: Epidemiology
Type: Dataset
[See more](#)

Recent Requests
Popular Requests
Recent Uploads

554 Visitors
125
100
75
50
25
0
Jan Feb Jul Aug Sep Oct Nov Dec
[See More](#)

03:07 **vimeo**

[Epidemic Marketplace Demo from Zamite on Vimeo.](#)

4 Effort to engage with policymakers and government agencies

All teams of the consortium have been actively involved in the data gathering, computational analysis and monitoring in close contact with national and International agencies. The project has developed collaborations and interactions with the ECDC, The JRC and the WHO and other international agencies concerning the modeling and computational activities. We are also partnering with the JOINT RESEARCH CENTER (JRC) of the European Commission at Ispra, Italy. The Joint Research Centre is a research based policy support organization and an integral part of the European Commission. The mission of the JRC is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies. As a service of the European Commission, the JRC functions as a reference centre of science and technology for the Union. The objective of the collaboration is to share tools, including the GLEaM platform to improve models for crisis management and decision making of emerging public health threats. We are proud to announce that the first version of the GLEaMviz Simulator has been released to JRC where usability tests have been started. The project is part of the ECDC discussion group on the formation of a modeling

coordinated group and Epiwork has been among the presented project at ECDC Infectious Disease Modeling Meeting, ECDC, Stockholm, Sweden, November 14-15, 2011. During the next WP5 meeting that will be held in Stockholm in May 2012, the WP5 Consortium plans to start a further collaboration with the ECDC to design the future life of the InfluenzaNet platform and the relationship of the WP5 Consortium with the ECDC. We are in contact with representative from the WHO for the development of a collaboration within their activities concerning pandemic and highly pathogenic diseases. Epiwork in Europe has also direct contacts through teams leaders with several National Health Institutes:

- Belgian Pandemic crisis team, Belgium
- Health Protection Agency, UK (The Flusurvey data are available to the Health Protection Agency, the national body responsible for infectious disease surveillance, and they produce a weekly summary of the Flusurvey findings for their weekly influenza report.
- National Institute of health, Italy
- INSERM, France, now a subcontractor of WP5 (The Grippenet.fr data are available to the Reseau Sentinelles, the national body responsible for infectious disease surveillance, and they produce a weekly summary of the Grippenet.fr findings for their weekly influenza report)
- RIVM, the Netherlands

It is worth remarking that HPA and INSERM are directly involved in the dissemination of data from the respective national IMS platform and Italy is working on a similar plan for the next year.

5 Coordination and integration with proactive FET initiatives and projects on science of complex systems for socially intelligent ICT.

The consortium actively participated to the life of the ASSYST coordination action that ended in January 2012 and it has been present at the major initiatives in Complexity such as the ECCS11. The coordination action ASSYST was funded from the FET Proactive initiative Science of Complex Systems for Socially Intelligent ICT (COSI-ICT) and had several goals: promote CS & COSI-ICT research, organize many scientific meetings in Europe, in the new member states, in the candidate states, with the USA and South America, with Japan, China and India, and with Africa, make better connections between complex systems scientists and potential business users of complex systems, support the European Conference on Complex Systems. The Coordination Action ended in January 2012.

Epiwork coordinating team has jointly organized the Workshop “Visualitazion in Complex Environments” held in Turin, in November 17-18 2011.

This [Workshop](#) covered the following subjects: Visualization and Decision Making in Spatial Environments, Visualization and Scientific Data Exploration and Visualization and Communication. Epiwork coordinating team has also been present at the ECCS2011 [satellite meeting](#) “Complexity-NET and COSI-ICT session” organized by [ASSYST](#).

6 IMS and Modeling Platform as exploitation and dissemination tools

The project WP5 is taking particular care in exploiting the potentiality of the IMS recruiting to use the web tool as a podium for advertisement and dissemination of the project results. At the same time the web tool is being exploited to amplify the public perception on the issue of communicable diseases and as a new media for information and risk awareness campaign.

The success of WP5 campaign to collect epidemic data on flu and cold by means of the Internet monitoring platforms is based on the participation of as many volunteers as possible, in order to collect reliable data with high accuracy both in time and in space. To rely on public participation and convince volunteers to contribute with their time and data to the project, the Internet Monitoring platform teams are responsible for communicating the importance of the population contribution to the influenza surveillance. The web tool is being exploited to amplify the public perception on the issue of communicable diseases and as a new media for information and risk awareness campaign. The IMS teams in the several countries have envisioned strategies and campaign to “advertise” the local platform with the national public (see the detailed press releases above). In each of the “old” countries, i.e. The Netherlands, Belgium, Portugal, Italy and UK, all the national media have been exploited to make raise the population awareness of the existence of the project. In the new countries, such as France and Sweden, each platform has devised its own campaign to bootstrap the platform and start attracting participants (see media and press releases sections).

The Portuguese team from FGC-has also developed an interactive application for children (ages 6 to 12 years), with data collection (data base in back) [called ‘Gripenet Kids’]. It will be online by the end of February 2012. Participation required endorsement by the parents, who are also invited to participate in the general monitoring system in order to serve as a control group to calibrate the data collected. This application will be adapted by other Influenzanet partners. Beta version in: <http://takethewind.dyndns-work.com/Gripenet/> (Warning: this is a temporary url that will later migrate to <http://kids.gripenet.pt>).

The WP5 Consortium also carries out dissemination among health care professionals, researchers, policy makers and everybody else, interested in epidemiology, flu surveillance and modeling by means of the Influenzanet corporate website for. Influenzanet.eu presents the project and its results in a reader-friendly way, in order to promote the concept of Internet-based Monitoring Systems in other countries, to expand scientific cooperation with colleagues all over the world and, last but not least, to show interested visitors what flu, vaccination and epidemiology is. It contains an analysis of the collected Influenzanet data so far is presented, with as main and public elements:

- Graphs and data on flu and cold from all current (10) Influenzanet partners;
- the Netherlands, Belgium, Portugal, Italy and the UK;
- Daily updates from all graphs and data;
- ILI curves, as compared to Google Flu, EISN, Temperature (also interactive);
- Curves of other syndromes and ILI curves within various subgroups;

- Participation data: participants, completed surveys, histograms;
- Week and incidence data, also as CSV files;
- All published articles on IMS and Influenzernet to date;
- A weekly update of modeling and flu surveillance news.

Influenza

[Home](#) | [Results](#) | [Data](#) | [Questionnaires](#) | [Analyses](#)

Options

Country >
All

Season >
2011/2012

Type >
Sources

Sources >
Influenza

ILI definition >
ILI^{fever}

Help

ILI case definitions

Activity calculation

Active participants

Plots

2011/2012 (All countries) - Influenza

Download > Compare >

The Netherlands
ILI^{fever} Activity

□ 2010 - 2011 ■ 2011 - 2012

http://www.influenza.eu 09 Mar 2012

Download > Compare >

Belgium
ILI^{fever} Activity

□ 2010 - 2011 ■ 2011 - 2012

http://www.influenza.eu 09 Mar 2012

Download > Compare >

Portugal
ILI^{fever} Activity

□ 2010 - 2011 ■ 2011 - 2012

http://www.influenza.eu 09 Mar 2012

Download > Compare >

Italy
ILI^{fever} Activity

□ 2010 - 2011 ■ 2011 - 2012

http://www.influenza.eu 09 Mar 2012

Download > Compare >

United Kingdom
ILI^{fever} Activity

□ 2010 - 2011 ■ 2011 - 2012

http://www.influenza.eu 09 Mar 2012

Download > Compare >

Sweden
ILI^{fever} Activity

■ 2011 - 2012

http://www.influenza.eu 09 Mar 2012

Download > Compare >

France
ILI^{fever} Activity

■ 2011 - 2012

http://www.influenza.eu 09 Mar 2012

Sources: Influenza, Google Flu Trends, EISN, NOAA.

© 2012 Influenza | Contact