EURO-TELEPATH
“Telepathology Network in Europe”

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Pathology Department
Hospital General de Ciudad Real
Servicio de Salud de Castilla-La Mancha(SESCAM)
Spain

COST Action IC0604

SPAIN COST DAY
MADRID, November 27, 2009
Scope

- Adequate technological framework for the management of multimedia electronic healthcare records
- Informatics applied to Anatomic Pathology
- Research on standards to represent, interpret, browse, retrieve digital medical images
- World wide search engine of microscopic images
- Collaborate with Standardisation bodies with previous research conclusions
Information Systems in a regional Health Service
Emerging digital pathology

- Gross study (Intraoperative study)
  - Digital photography
  - Digital video

- Microscopy: Slides
  - Digital photography
  - Virtual microscopy: whole slide imaging

- Molecular Pathology
  - Digital photography
Euro-Telepath scientific program

1. Automation procedures in Pathology. Best technology available and under research.
2. Scanning solutions for Pathology microscopic slides.
3. Technological solutions for compression and storage problems with large image files.
4. Virtual slide standard viewer specifications which allow efficient reviewing of pathology images.

5. International standards (DICOM, HL7, SNOMED, CEN) and IHE initiative.
6. Model for pathology and other hospital information systems
7. An European-scope telepathology network
8. Collection of interesting and typical samples, and clinico-pathological sessions
Grant Holder:
Fundación para la Investigación Sanitaria en Castilla-La Mancha, FISCAM.
GH Representative: Marcial García Rojo
Spain
<table>
<thead>
<tr>
<th>4 Working Groups</th>
<th>Coordinators</th>
</tr>
</thead>
<tbody>
<tr>
<td>WG1. Pathology Business Modelling e.g. Consensus study of existing workflows in pathology departments</td>
<td>Thomas Schrader (Germany) and Luis Gonçalves (Portugal)</td>
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<tr>
<td>WG2 – Informatics Standards in Pathology e.g. Participation in covered standards bodies and initiatives.</td>
<td>Christel Le Bozec (France) and Bernd Blobel (Germany)</td>
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<tr>
<td>WG3 – Images: Analysis, Processing, Retrieval and Management e.g. study on the image analysis models (methods, systems, tools, fields of pathology).</td>
<td>Janina Slodkowska (Poland) and EPFL (Switzerland)</td>
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<tr>
<td>WG4 – Technology and Automation in Pathology e.g. analysis of microscope brands.</td>
<td>Marcial García Rojo (Spain) and Bernd Blobel (Germany)</td>
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</table>
Current research groups

Policy: A group of researchers (balance of female & young experts aged less than 35), shall be duly appointed to encourage and coordinate the network’s efforts.

Action SIGNATURES

1. Finland: Tampere University & University of Helsinki
2. France: INSERM & Tribvn
3. Germany: University of Regensburg & Charité Universitätsmedizin Berlin
4. Italy: University of Udine
5. Lithuania: National Centre of Pathology & Kaunas University of Technology
6. Poland: Institute of Tuberculosis and Lung Diseases, Warsaw
7. Portugal: Hospital Espírito Santo
8. Serbia: University of Belgrade
9. Spain: University of Castilla-La Mancha, Hospital General de Ciudad Real & SESCAM
10. Switzerland: EPF Lausanne
11. United Kingdom: University of Nottingham

- Croatia. University of Zagreb Faculty of Electrical Engineering and Computing,
- Cyprus. Computer Science University of Nicosia
- Greece, Norway, Holland,…
# Partners’ background

**Action kick-off**

| 1. Finland: Tampere University & University of Helsinki |
| 2. France: INSERM & Tribvn |
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| 10. Switzerland: EPF Lausanne |
| 11. United Kingdom: University of Nottingham |

<table>
<thead>
<tr>
<th>Clinical</th>
<th>Pathology</th>
<th>ICT</th>
<th>Industry</th>
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<tbody>
<tr>
<td><img src="image1.png" alt="Clinical" /></td>
<td><img src="image2.png" alt="Pathology" /></td>
<td><img src="image3.png" alt="ICT" /></td>
<td><img src="image4.png" alt="Industry" /></td>
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IHE. Integrating Healthcare Enterprise
MC and WG meeting in Evora
DICOM WG26 meeting with US DICOM representatives
## Use of COST instruments

<table>
<thead>
<tr>
<th>No. of MC / WG meetings</th>
<th>YR 1</th>
<th>YR 2</th>
<th>YR 3</th>
<th>YR 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of STSMs</td>
<td>1</td>
<td>6</td>
<td></td>
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<tr>
<td>No. of workshops / conferences</td>
<td>3</td>
<td>4</td>
<td></td>
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<tr>
<td>No. of joint publications</td>
<td>5</td>
<td>15</td>
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<tr>
<td>No. of training schools</td>
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<td>1</td>
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<tr>
<td>GASTG (activities)</td>
<td>Posters, website</td>
<td>Posters, website</td>
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Short Term Scientific Mission (STSM)

- **Italy.** University of Udine → SESCAM, Toledo (ES) France (François Baclesse Cancer Center, Caen) → Utrecht (NL)
- **Spain.** Hospital Vall d’Hebron → Univ. Charite, Berlin (DE)
- **Germany.** Univ. Charite, Berlin → UCLM, Ciudad Real (ES) X2
- **Poland.** Institute of Biocybernetics and Biomedical Engineering, Warsaw → Hospital Virgen de la Cinta de Tortosa (ES) x 2
- **Spain.** Hospital Tortosa → Institute of Biocybernetics and Biomedical Engineering, Warsaw (PL) x 3
Digital Pathology in Europe: Coordinating Patient Care and Research Efforts

Marcial GARCIA ROJO\textsuperscript{a,1}, Vytenis PUNYS\textsuperscript{b}, Janina SLODKOWSKA\textsuperscript{c}, Thomas SCHRADE\textsuperscript{d}, Christel DANIEL\textsuperscript{e}, Bernd BLOBEL\textsuperscript{f}

\textsuperscript{a}Hospital General de Ciudad Real, Spain
\textsuperscript{b}Kaunas University of Technology, Lithuania
\textsuperscript{c}Military Institute of the Health Services, Warsaw, Poland
\textsuperscript{d}University of Applied Sciences, Brandenburg, Germany
\textsuperscript{e}INSERM, Université René Descartes, Paris, France
\textsuperscript{f}eHealth Competence Center, University Hospital Regensburg, Germany

Abstract. The COST Action IC0604 “Telepathology Network in Europe” (EURO-TELEPATH) is an initiative of the COST (European Cooperation in the field of Scientific and Technical Research) framework, supported by the Seventh Framework Programme for research and technological development (FP7), of the European Union will be running from 2007 to 2011 and is aimed to coordinate research efforts to develop the most adequate technological framework for the management of multimedia electronic healthcare records (data and images) applied
MC and WG meetings. 2009

- MC and WG meeting. 12-13 March 2009, Paris
- WG1 meeting (Business modelling in Pathology), 7-9 May 2009, Berlin
- Workshop: WG3 and WG4. 1 Sep 2009, Sarajevo. During the 22nd International Congress of the European Federation for Medical Informatics.
- WG1 and WG2 meeting 4-9 Sep 2009. Florence. In conjunction with 22nd European Congress of Pathology

Next: MC and WG meeting 3-4 Dec, Lausanne, Switzerland
The Congress is organized by the National Centre of Pathology, the International Academy of Telepathology, and the EU COST Action IC0604 “European Telepathology Network“
http://www.conganat.org/eurotelepath/

**Action IC0604 website**

Next Friday, **Nov 27 2009**, Spain will be organizing a COST INFO Day, an Informative Meeting on COST activities and COST Actions. This meeting is organized by the European Projects Office of the Ministry of Science and Innovation in Spain.

COST Action IC0604 “Euro-Telepath” will be participating in this meeting. The meeting venue will be:
Centro de Investigaciones Biológicas / Biological Research Center
Ramiro de Maeztu 9, 28040 Madrid
Spain

Registration is free and you only need to send an e-mail message confirming attendance to: Infoday_COST@micinn.es

More information and registration info is available at Ministerio de Ciencia e Innovación web page:
http://web.micinn.es/contenido.asp?dir=05_investigacion/032CoopIntern/00-0/Europea/001ReCoCE/07-Eventos

Complementary information:
- Meeting agenda
- COST Annual_Report_2008
- About_COST_2009
- COST General_flyer_Aug09

December 3-4. Lausanne, Switzerland. 5th COST Action IC0604 MC and 6/7th WGs meeting.
Ecole Polytechnique Federale de Lausanne.