UNITWIN/UNESCO Chairs Programme
Progress report 2013-2017

«If this has not yet been done, please forward your progress report before
31 May 2016» to the Director, Division of Higher Education.

Period of activity: 2013-2016

Title: **UNESCO CHAIR TELEMEDICINE**

Report established by: **Prof.Dr.O.Ferrer-Roca,**
Function / Title: responsible UNESCO Chair Telemedicine 1999-2016
Full Professor in Pathology. Responsible of the Telemedicine Training at the University of La Laguna. Canary Islands. Spain

To be sent by electronic mail to: unitwin@unesco.org
Or to UNESCO, Division of Higher Education
7, place Fontenoy – 75352 Paris 07 SP
Fax: 33 1 45 68 56 26/27/28

Summary

I. Address

	Address of the Host Institution	Address of the Coordinator
Name	Prof. Dr. O. Ferrer-Roca	Prof. Dr. O. Ferrer-Roca
Function/Title	Chair of Pathology	Chair of Pathology
University/Institution	University of La Laguna	University of La Laguna
Faculty/Department/Centre	Faculty of Medicine	Faculty of Medicine
P.O.Box	La Cuesta	La Cuesta
Street	La Laguna	La Laguna
Postal Code	38071	38071
City	Santa Cruz de Tenerife	Santa Cruz de Tenerife
Province	Canary Islands	Canary Islands
Country	Spain	Spain
Phone	+34 922-319321	+34 922-319321
Fax	+34 922-641855	+34 922-641855
E-mail	catai@teide.net	catai@teide.net
Web Site	http://www.teide.net/catai	http://www.teide.net/catai

II. Available resources

1. Human resources

1. For the administration of the UNESCO Chair or Network
Partial time support Secretary
2. For the teaching/training/research activities
Please specify number of full professors, researchers, visiting professors, lecturers, others
Prof. Dr. O. Ferrer-Roca
Engineer, Fellowship Daniel González Mendez;
3. For the information and documentation activities:
Prof. Dr. O.Ferrer-Roca
4. For other activities: The international courses brought to teaching and training a total of 30 professors coming from European, African and Ibero-American countries (Greece, Germany, Spain, Uganda, Valencia, Argentina, UK).

2. Material resources

1. For the administrative work: Computers fax machines, xerocopy machines, printer, and storage systems.
2. For the teaching/training/research activities: Videoconference, workstations, ultrasounds, video-edition, projector, Book edition, CD-edition, Proceedings editions, e-learning, Digital Fingerprint control systems, Breeze server, iPhone medical applications.
3. For the information and documentation activities: Web site, Posters, brochures, Proceedings, Book editions, CD-edition
4. For other activities (Please specify): Videoconferencing, 3D-virtual reality, skylight distant control, iphone applications (blood pressure monitor, ECG, EEG), Galaxy camera over android OS, Cloud systems.

III. Activities

Please, provide information on items 1 to 7 for each activity, when available, and specify:
- *Target groups, in accordance with Annex 1*
- *Geographical coverage, in accordance with Annex 2*
- *Funding sources, in accordance with Annex 3.*

1. Education/Training/Research

1.1. Title and expected results for each course, workshop,…
See joined memorandum and programs of the Winter Courses of the CATAI (Annex 5-Form 3)

- Duration: 1weeks.
- Target groups: doctors, nurses, health-care providers, NGO´s

1.1.1. Partnership (please specify the name of the Institution, city, country): Universities Trier-DE, Postdamm-DE, Humboldt Univ. Berlin-DE, Makerere-Uganda, Simon Bolivar-Caracas-Venezuela, Athens Univ. of Economics and Business-GR, Istambul-Turkey, El Cairo- Egypt, EntreRios-Argentina, Barcelo Univ Buenos Aires, Argentina, Pontificia Universidade Catolica do Rio Grande do Sul (PUCRS) Porto Alegre-Brazil, Porto-Portugal, Univ Oslo, Oslo-Norway, Univ Munich-Munich-Germany, Universidad Politecnica Barcelona (UPB)- Spain. Hosp. Clinic Barcelona-Spain, Univ. Di Roma Sapienza-Italy, Univ Budapest-Hungary, Univ Udine, Italy. Univ. Cheikh Anta Diop, Dakar, Senegal, Univ d´Abomey Calavi (Cotonou), Rép. Du Benin y Univ Nacional de Guinea Ecuatorial (UNGE), Guinea Ecuatorial,University California (UCLA)-USA,Univ Valencia,(UV). U.Baleares (UB), Shahid Beheshti Medical University, Tehran, (Iran), U Caribe-Barranquilla, (Colombia), Vitanlink (France), L´Institute Mines Telecomm (France), Science Park (Bulgaria), Municipalities of Piamonte, Univ. Beijeen (China), Univ. Torino (Italy), Barcelona Supercomputer Centre (Spain), Univesity libre de Bruseles (Belgium), Kazakistan ( ), , .

- Geographical coverage partners & participant: Europe-Africa-South & North America.
- Funding sources: CATAI founding. Telefónica SL. CajaSiete SA.
- Outputs: Please specify number of doctoral students: 150-200 students per year. For the publications, complete form of Annex 4, and Annex 5 for the multimedia material.

2. Conferences/Congresses/Meetings

2.1. Title and expected results for each conference, meeting…:
They are always in Telemedicine. Expected increase of knowledge and training of how to handle medicine at distance for people and areas underserved or with health care constrains availability.

Dates and place: In 4-10th March 2013 the XXI CATAI Winter Course in System on Chip (SoC) devices in telemedicine from LABoC to high resolution images. January 2015. Humanization of Healthcare (H2O) and we attended the following congresses and meetings: In the 25th January 2013 the international meeting of the IWEE (Foro Internacional de e-Health in Emerging Economies)under Social Justice with the participation of the WHO, EC, WB, Red Cross, Doctors without frontiers. In the 22nd – 23th January 2014 Meeting of UNESCO Chairs on Higher Education,Teachers, and ICT in Education in the UNESCO Paris. In the 29th -30th May 2014 the international meeting of the IWEE (Foro Internacional de e-Health in Emerging Economies) under Social Justice with the participation of the WHO, EC, WB, Red Cross, Doctors without frontiers. 28September-2 August 2014 Meeting at the Politechnic University of Catalonia to continue with the Solo-medicine project. 13-15 August 2014 meeting with St.Lazare hospital director to introduce Humanization of Healthcare. In

the 17th-18th October 2014, Beijin-China in the International Conference on Identification, Information & Knowledge in the Internet of the things (IoT); In October 2014, meeting at the Institute Mine Telecomm for the elaboration of the Humanization of Healthcare.

- *P*artnership *(please specify: Name of the Institution, City, Country): see joined programs plus Mulago Hospital-Uganda; Roche Research Center, Univ Perm-Russia, Casablanca-Marrocco, Pontificia Universidade Catolica do Rio Grande do Sul (PUCRS) Porto-Alegre-Brazil. Technical University Munich (Germany). Israel Institute of Technology (Haifa-Israel), U Caribe-Barranquilla, (Colombia).*
- Participants *(number)*: *100 up to 1000 depending of the type of meeting*
- Geographical coverage for participants and partners: Europe, Africa, South-America, Asia & Australia.
- Funding sources: CATAI funding. Telefonica SL. CajaSiete.
- Outputs: Please complete Annex 1 for the publications and Annex 2 for the multimedia material.
- Master at distance on "**Health Legal Aspects**". With the topic of Telemedicine. University of Balear Islands. http://catai.net/blog/2012/07/master-de-derecho-sanitario/ . Editions 2013-14 and 2014-15.

3. Missions / Travels abroad

Destination: University La Laguna-UNESCO Chair Telemedicine.
From : Venezuela- UK- Argentina
Purpose: Students training in telemedicine
Duration: from 1 to 2 month
Funding source: University of La Laguna/CajaSiete/ Catai fundings/
Outputs: 1- Training of students to provide telemedicine in underserved areas.

4. Visiting professors / Fellowships

Number: (17)
Duration: 1-2 month
University of origin: *Potsdam-Germany (2), Clinical university of the Charité-Berlin (2), Univ Athens (3), Univ Munich- Germany (2), Univ Mainz, Germany (1) Univ Budapest, Hungria (2), U. Politecnica Barcelona (2).U.Valencia, Spain (1), U.California, USA (1),*

Funding sources: University of La Laguna, CATAI fundings, Telefonica SL, CajaSiete.

5. Information and documentation activities

5.1.   **CATAI 2013** "System on Chip (SoC) devices in telemedicine from LABoC to high resolution images" CATAI editions 2012 Tenerife. Canary Islands. Spain ISBN: 978-84-615-6080-6

5.2.   **CATAI 2009** "Superresolution and Optical Biopsy" Ed: Prof.Dr.O.Ferrer-Roca. CATAI Ed 2008. Tenerife. ISBN. 978-84-612-8620-1

5.3.   European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume V**. CATAI Editions 08. ISBN 978-84-612-8290-6

5.4.   European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume VI**. CATAI Editions 09. ISBN 978-84-613-7245-4.

5.5.   European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume VII**. CATAI Editions 10. ISBN 978-84-614-5996-4.

5.6.   European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume VIII**. CATAI Editions 11. ISBN 978-84-615-6144-5.

5.7.   European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume IX**. CATAI Editions 12. ISBN 978-84-615-6081-3

5.8. European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume X**. CATAI Editions 13. ISBN 978-84-616-2364-8

6. Others

6.1. Written agreements with Universities

6.1.1. Agreements with the University of Barcelona in order to provide distant teaching and projects related to the image query standardization

6.1.2. Agreements with the Pontificia Universidade Catolica do Rio Grande do Sul (PUCRS), Porto-Alegre, Brazil for training in telemedicine.

6.1.3. Agreements of the students interchange in the field of Telemedicine and for third cycle students with the Universities of Postdamm-DE (6 Students), Charite-Berlin-DE (6 Students) and Univ. Udine-IT (6-students) as Erasmus students, plus 1 or 2 professors from each University.

6.1.4. Agreements with the CLARA NETWORK (e-LAB) in the Univ Autonoma del Caribe-Barranquilla. Colombia. An on line laboratory network on medicine. 2011.

6.1.5. Agreements with the Shahid Beheshti Medical University, Tehran, Iran.2012

6.1.6. Agreement with the University of Tuckmenistan.2012

6.1.7. Agreements with the Siksha O Anusandhan University (India) 2013.

6.2. Training Books donations

6.2.1. Donations of the vol. V of the European Master of Telemedicine and Bioengineering applied to Telemedicine. to the Universities of Entre-Rios (5), Makerere (6), Caracas (5), Greece (5), Univ. Rio Grande do Sur.Brazil (6).

6.2.2. Donations of the vol. VI of the European Master of Telemedicine and Bioengineering applied to Telemedicine. to the Universities of Entre-Rios (5), Makerere (6), Caracas (5), Greece (5), Univ. Rio Grande do Sur.Brazil (6), Senegal (3), Rép. Du Benin (6) y Guinea Ecuatorial (4).

6.2.3. Donations of the vol. VII of the European Master of Telemedicine and Bioengineering applied to Telemedicine. to the Universities of Entre-Rios (5), Makerere (6), Greece (5), Univ. Rio Grande do Sur.Brazil (6).

6.2.4. Donations of the vol. VIII of the European Master of Telemedicine and Bioengineering applied to Telemedicine. to the Greece (5), Univ. Rio Grande do Sur.Brazil (6), Univ Tuckmenistan (12), U.Caribe-Barranquilla (6) .

6.2.5. Donations of the vol. IX of the European Master of Telemedicine and Bioengineering applied to Telemedicine. to the Greece (5), Univ Tuckmenistan (12), U.Caribe-Barranquilla (6), Shahid Beheshti Medical University, Tehran, Iran (6) .

6.2.6. Donations of the vol. X of the European Master of Telemedicine and Bioengineering applied to Telemedicine. to the Greece (5), Univ Tuckmenistan (12), Shahid Beheshti Medical University, Tehran, Iran (6) .

6.3. International projects

6.3.1. Tempus Project : 530574-TEMPUS-1-2012-1-ESTEMPUS-JPCR. *Advanced Curriculum development in Telemedicine for Turkmenistan (MEDET).*

6.3.2. H2O- Humanization of Healthcare. In preparation.

6.3.3. Humanization of Healthcare-Trials in Piamonte & Servia. Interreg-Med 2015.

IV. Impact

1. In Uganda, their initiatives with the use of VHF in walky-talkies to support midwifes, has decreased the mortality of new-born babies by 30%. http://www.iicd.org/articles/iicdnews.2006-05-08.0697050392
2. With the Simon Bolivar University in Caracas Venezuela, we will bring the development of rural areas accessing distant diagnosis of vaginal cytology.
3. With Pontificia Universidade Catolica do Rio Grande do Sul (PUCRS) PortoAlegre in Brazil has been started obtaining founding for a join seminar of training and extending the telepathology to telepathology and teledermatology mission to the Amazon (City of Jiparana)and in Amazon area (Rondonia State).
4. With Entre-Rios cooperation have extended the telemedicine into the Peru selvage areas in the Napo river.
5. Scholarships of the GD of the relations with Africa from the Canarian Governement.

6. Cooperation with the Institute of Tropical diseases in providing DIY (Do it yourself) support for tropical disease diagnosis.

7.

One of the <mark>main obstacles</mark> in the wide use of Telemedicine is the lack of specific training and qualifications in the health care environment (doctors, nurses, paramedics, managers, NGO´s) as well as related areas from which they require support (computer science, telecommunications).

1. Relation Article Citation in international collaborations

http://academic.research.microsoft.com/Author/53893146/o-ferrer-roca
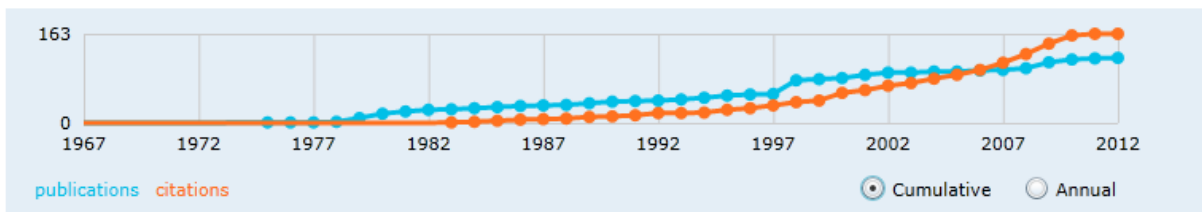
My Publications: Citation Metrics

This graph shows the number of times the articles on the publication list have been cited in each of the last 20 years.
Note: Only articles from Web of Science Core Collection with citation data are included in the calculations. More information about these data.

Total Articles in Publication List:	**176**
Articles With Citation Data:	**61**
Sum of the Times Cited:	**593**
Average Citations per Article:	**9.72**
h-index:	**12**
Last Updated:	**03/04/2016 06:54 GMT**
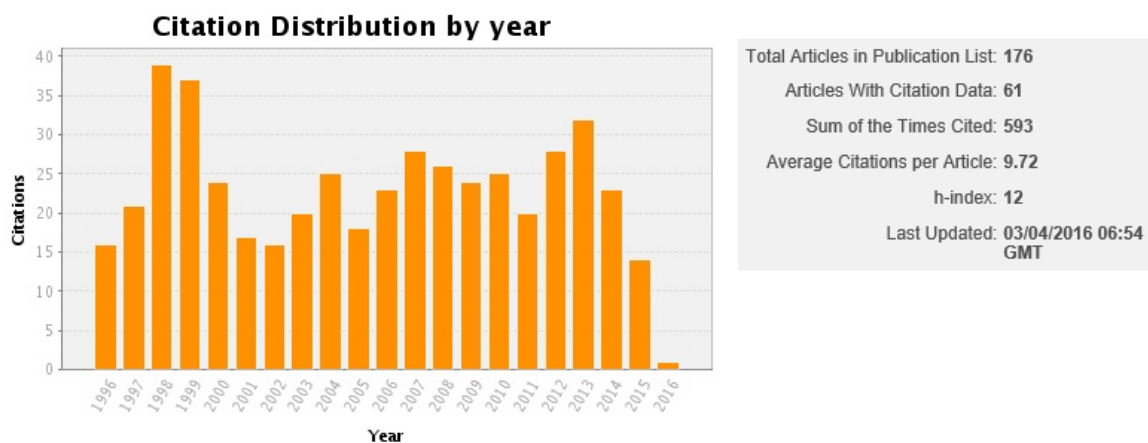
2. Geographic distribution of web visitors 1year:
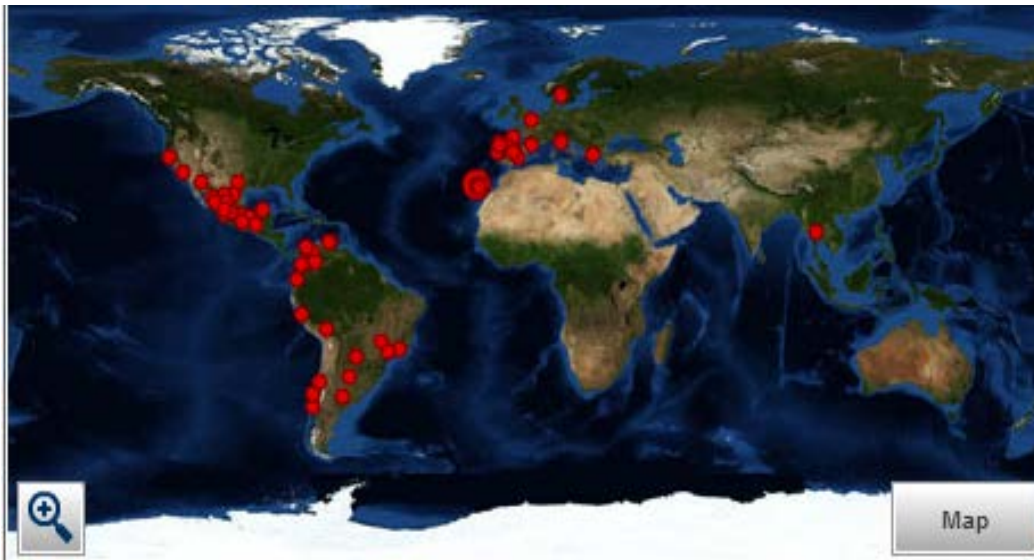
3. On Line social impact: The KLOUT: 56

56.39
Máximo en 90 días

48.20
Mínimo en 90 días

Contribución de red

Facebook	33%
Twitter	14%
LinkedIn	10%
Conectar Instagram	
Google	0%
Conectar Foursquare	
Youtube	42%
Klout	0%

One of the most influencers in eHealth
https://klout.com/#/UnescoTeleMed reaching the 56 influence score.
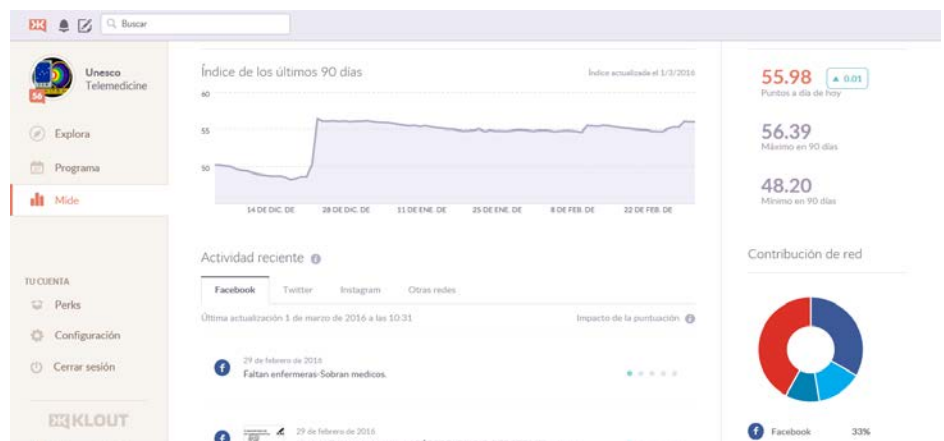
Particularly with their teaching videos in the YOUTUBE channel
https://www.youtube.com/channel/UCitOeEF7tWf4FQ2ZqMiK_hw
with 617 subscriptions
FACEBOOK https://www.facebook.com/unesco.telemedicine that
are followed by 761 but also in
SCOOPIT http://www.scoop.it/t/health-4-0 , with 3,4 K views

9

PINTEREST https://es.pinterest.com/cataitm/ with 561 followers
TWITTER https://twitter.com/UnescoTeleMed with 487 followers
And LINKEDIN https://www.linkedin.com/in/unesco-telemedicine-93baa243?trk=hp-identity-name
with 731 connections with the following readers demographics

Demographics of your readers ⓘ

Top industries	Top job titles	Top locations	Top traffic sources
31% Hospital & Health Care	33% Salesperson	28% Santa Cruz De Tenerife…	63% LinkedIn.com
21% Legal Services	19% Consultant	11% Geneva Area, Switzerland	21% LinkedIn Pulse
10% Information Technology a…	10% Research / Graduate Ass…	11% Barcelona Area, Spain	11% Facebook
7% Telecommunications	5% Construction Project Plan…	6% Mexico City Area, Mexico	5% Homepage
3% Management Consulting	5% CIO / CTO	6% Kassel Area, Germany	
3% Education Management	5% Manufacturing / Mechani…	6% Lisbon Area, Portugal	
3% Consumer Goods	5% Software Developer	6% Frankfurt Am Main Area,…	
3% Higher Education	5% Operations Management…	6% Rochester, United Kingdom	
3% Staffing and Recruiting	5% Project Manager	6% Phra Nakhon Si Ayutthay…	
3% Pharmaceuticals	5% Nurse	6% Sevilla Area, Spain	

4. Google Search: Telemedicina- UNESCO

All the following links are related to the UNESCO Chair of the ULL either in Spanish or in English
(telemedicine-Unesco)

1.   *UNESCO Chair **in** Telemedicine* **(467) | | UNESCO**

*www.**unesco**.org/.../**unesco-chair**-in-**telemedicine**...*En caché - Traducir esta página
UNESCO Chair in *Telemedicine* (467), established in 1999 at the University of La Laguna
(Spain). Fields/Disciplines Health, ICTs. Objectives. To facilitate **...**

2.   *UNESCO Chair **in** Telemedicine* **for multidisciplinary distance ...**

*www.**unesco**.org/.../**unesco-chair**-in-**telemedicine**...*En caché - Traducir esta página
UNESCO Chair in *Telemedicine* for multidisciplinary distance learning and creation of
evaluation content (685), established in 2005 at the University of Geneva **...**

3.   *UNESCO Chair **in** Telemedicine* **- Wikipedia, the free encyclopedia**

*en.wikipedia.org/.../**UNESCO_Chair**_in_**Teleme**...*En caché - Similares - Traducir esta página
UNESCO Chair of Telemedicine (UNES_CT) is a portion of UNESCO that was founded in
1999. Undertakes international activities related to the promotion of **...**

4.   *UNESCO chair **woman of** Telemedicine*

*www.teide.net/catai/catedra_**unesco**/catedra_**unesco**_ing.htm*En caché

11/05/2007 – The University of La Laguna have since 16 of September of 1999 the first *UNESCO chair of Telemedicine*. The sign of the agreement took **...**

5. *UNESCO Chair Telemedicine* **| Digital Agenda for Europe**

*daa.ec.europa.eu/users/***unesco-chair**-*telemedicine*En caché - Traducir esta página
06/12/2012 – *UNESCO Chair Telemedicine's* picture. O Ferrer Roca. Based in La Laguna. Organization: *UNESCO Chair of Telemedicine* (Academic) **...**

6. *Unesco Telemedicine* **- España | LinkedIn**

*es.linkedin.com/pub/***unesco***-telemedicine/43/aa2/93b*En caché
Santa Cruz De Tenerife Area, Spain - Full Profesor of Pathology at University of La Laguna Chair en *UNESCO Chair of Telemedicine*; President en CATAI-Center Advanced Technology Image Analysis; Full Profesor of Pathology en University of La **...**

7. *UNESCO Chair* **for distance learning**

*www.oeso.org/.../indexf385.html?...id...*En caché - Traducir esta página
UNESCO Chair in *Telemedicine* for multi-disciplinary distance learning and creation of evolutional content in the framework of the UNITWIN networks (University **...**

8. *Unesco Telemedicine* **| Facebook**

*www.facebook.com/***unesco***.telemedicine*En caché - Traducir esta página
Unesco *Telemedicine* is on Facebook. Join Facebook to connect with Unesco *Telemedicine* and others you may know. **...** Like · *UNESCO Chair* in *Telemedicine* **...**

9. Teaching activities of the *UNESCO chair of Telemedicine* - Med-e-Tel [DOC]
*www.medetel.lu/.../teaching_activities_of_***unesc...** - Traducir esta página
Formato de archivo: Microsoft Word - Vista rápida
The *UNESCO chair of Telemedicine* began his activities on September '99 to adquire knowledge on the topics before any Telemedicine practices.

10. *UNESCO Chair* **In** *Telemedicine* **quotes | Quotations at Dictionary.com**

*quotes.dictionary.com/.../***UNESCO***+***Chair***+in+***Te**...*En caché - Traducir esta página
You sir, will bring down that renowned *chair* in which you sit into infamy if your seal is set to this instrument of perfidy; and t ... he name of this nation, hitherto the **...**

11. *Telemedicine* **Workshop 2011 - Speakers**

telemedicine.itg.be/***telemedicine***/.../Default.aspx?...*En caché - Traducir esta página
In 2005, his efforts in developing *telemedicine* and tele-education are recognized by the creation of the *UNESCO chair* for *telemedicine* and multidisciplinary **...**

12. **Handbook of** *Telemedicine* **- Olga Ferrer-Roca - Google Books**

*books.google.com/.../Handbook_of_***Telemedici**...* - Traducir esta página
Prof. Olga Ferrer-Roca MD, phd. *UNESCO Chair of Telemedicine*. President, CATAI Consortium. Full Professor of Pathology, Faculty of Medicine, .

13. **Handbook of** *Telemedicine* **- Página iii - Resultado de la Búsqueda de libros de Google**

books.google.es/books?isbn=9051994133 Olga Ferrer-Roca, Marcelo C. Sosa-Iudicissa - 1998
– Medical Handbook of Telemedicine Edited by Olga Ferrer-Roca President CATAI Consortium Responsible for the First *UNESCO Chair of Telemedicine* Full Professor of ...

14. PDF format | 3.37 MB [PDF]
www.cure4kids.org/.../view_part_pdf.php?... - Traducir esta página
Formato de archivo: PDF/Adobe Acrobat - Vista rápida
18/11/2010 – and Geneva University. ○ World Health Organization Collaborating Center for eHealth and *Telemedicine*. ○ *UNESCO chair* for *telemedicine* **...**

15. [PDF]
List of *chairs* **in natural sciences -** *Unesco*

www.unesco.org/.../partners_Chairs-List-March_... - [Traducir esta página](#)
30/03/2012 – *UNESCO Chair* in prospective and integrated coastal zone management **.....**
UNESCO Chair in *Telemedicine* (467) - University of La Laguna **...**

16. *Telemedicine* **in Encyclopedia**

www.tutorgigpedia.com/Telemedicine_es.html - [Traducir esta página](#)
UNESCO Chair in *Telemedicine* Society *Telemedicine* with which is collaborating closely and from which received part of the sponsorship ..., have established **...**

17. **Handbook of** *Telemedicine* **- O. Ferrer Roca - Google Libros**

books.google.es/.../Handbook_of_Telemedicine....[En caché](#) - [Traducir esta página](#)
Prof. Olga Ferrer-Roca MD, phd. *UNESCO Chair of Telemedicine.* President, CATAI Consortium. Full Professor of Pathology, Faculty of Medicine, .

18. **Endowed Professorships - Clinfowiki**

www.informatics-review.com/.../Endowed_Profe...[En caché](#) - [Traducir esta página](#)
03/07/2012 – McKesson Foundation Professor of Biomedical Informatics -- Vanderbilt University. *UNESCO Chair of Telemedicine* and Chair of Telemedicine **...**

19. [PDF] **Quality Control in** *Telemedicine* **- "CE" Label - InTech**
www.intechopen.com/download/pdf/14282 - [Traducir esta página](#)
Formato de archivo: PDF/Adobe Acrobat - [Vista rápida](#)
Quality Control in Telemedicine - "CE" Label. Prof. Dr. O. Ferrer-Roca MD. PhD. *UNESCO Chair of Telemedicine.* Faculty of Medicine. University of La Laguna.

20. *Telehealth***: High-impact Strategies - What You Need to Know ...**

www.docstoc.com/docs/137197805/[En caché](#) - [Traducir esta página](#)
01/12/2012 – *Telehealth* is an expansion of *telemedicine*, and unlike *telemedicine* (which **...**
The Continua Health Alliance, *UNESCO Chair* in *Telemedicine*, **...**

21. **ICTs | |** *UNESCO*

www.unesco.org › ... › [Access by Domain](#)[En caché](#) - [Traducir esta página](#)
List of *UNESCO Chairs* and UNITWIN Networks in the field of ICTs: Brazil **...** *UNESCO Chair* in *Telemedicine* (467)- University of La Laguna-established in 1999.

22. **Pósters - Sociedad Española de Anatomía Patológica**

www.seap.es/posters3;...[En caché](#)
Dr.O.Ferrer-Roca *UNESCO Chair of Telemedicine.* Chair of Pathology. Chair of Telemedicine. Telefonica SL. Faculty of Medicine. University of La Laguna.

23. **UNESCO chair** of **Telemedicine.**

www.teide.net/...**unesco**/catedra_**unesco**_ing.htm 11 May 2007 – Chair UNESCO of **Telemedicine ... ULL** Guide (pp 52-53) **...** have since 16 of September of 1999 the first **UNESCO chair** of **Telemedicine**.

24. **Chair UNESCO** of **Telemedicine** - Activities in Iberoamerica

www.teide.net/catai/catedra_**unesco**/activities_ib.htm **UNESCO Chair** meeting - Iberoamerica · MEDNET **... ULL** Chair in **Telemedicine** has been selected by AproTECH LatAm for projects in Colombia. **Telemedicine ... [PDF]**

25. Guía **ULL** (pp 52-53)

www.teide.net/catai/catedra_**unesco**/pag5253.pdf Formato de archivo: PDF/Adobe Acrobat
Research ▌**UNESCO Chair** 53. Cátedra UNESCO **...** La **ULL** cuenta además con un **...**a distance learning Master in **Telemedicine** and Bioengineering applied **... [PDF]**

26. HANDBOOK OF **TELEMEDICINE** FOR STUDENTS

Formato de archivo: PDF/Adobe Acrobat
de O Ferrer-Roca - 2011 - Citado por 1 - Artículos relacionados
1 University of La Laguna, **UNESCO Chair** of **Telemedicine**, **Full** Professor of Pathology. La Cuesta, La Laguna 38071, Canary Islands, Spain. {catai}@teide.net **...**

37.   [teleestetoscopio] Diff of /paper/rtw-stethoscope.tex

svn.ehas.org/viewvc.cgi/teleestetoscopio/.../rtw-stethoscope.tex?r1...

1 Jun 2011 – He collaborates with the **UNESCO Chair** in **Telemedicine**. He was a teach member of the European Master of **Telemedicine**, University of La **...**

38.   **UNESCO Chair** in **Telemedicine** - Wikipedia | Facebook

www.facebook.com/.../**UNESCO**-**Chair**...**Teleme**...

Description above from the Wikipedia article **UNESCO Chair** in **Telemedicine**, licensed under CC-BY-SA **full** list of contributors here. Community Pages are not **...**

39.   ¿Es buena la facultad de medicina de la **ULL**? | Cut Fundings **...**

https://**unescotelemedicine**.crowdmap.com/reports/view/54?l=ru.. .

¿Es buena la facultad de medicina de la **ULL**? 01:25 Mar 13 2012 Facultad de medicina,**... Unesco chair telemedicine**, Tfe, Canary islands. España, 0 Kms **...**

[PDF]

40.   The Anatomy of an Optical Biopsy Semantic Retrieval System

www.redkbs.com/catai/rtous.pdf

Formato de archivo: PDF/Adobe Acrobat Mainz, Mainz, Germany. Olga Ferrer-Roca is with Faculty of Medicine. University of La Laguna. **UNESCO Chair** of **Telemedicine**. **Full** Professor of Pathology.

[PDF]

41.   p-Health

www.teide.net/Catai/xiv...eng/00-TOC-XIVWINTER_1-3_.pdf

Formato de archivo: PDF/Adobe Acrobat Edited by. Prof. Olga Ferrer-Roca MD, PhD. **UNESCO Chair** of **Telemedicine**. President, CATAI Consortium. **Full** Professor of Pathology, Faculty of Medicine, **...**

42.   Spain - **UNESCO**

portal.**unesco**.org/education/en//files/.../467.rtf

Formato de archivo: Rich Text Format - Versión en HTML
UNITWIN/**UNESCO Chairs** Programme **... UNESCO CHAIR** in **TELEMEDICINE ....** The**full** version of the report provides information on another 9 scientific **...**

43.   Virtual Sonography Through the Internet: Volume Compression Issues

www.ncbi.nlm.nih.gov/pmc/.../PMC1761897/

de O Ferrer-Roca - 2001 - Citado por 11 - Artículos relacionados
22 Jun 2001 – Abstract; |; **Full** Text; |; Printer Friendly **...** 2Fellow at the **UNESCO Chair**of **Telemedicine**, Spain **...** Ultrasonography has always been envisaged as one of the easiest **telemedicine** applications due to the small size of images **...**

[PDF]

44.   9TH EUROPEAN CONGRESS ON TELEPATHOLOGY AND 3RD **...**

www.satec.es/.../9ECT_final_programme.pdf

Formato de archivo: PDF/Adobe Acrobat
1 Eng. Fellow of the **UNESCO Chair** in **Telemedicine**, University of La Laguna. 2 MD. PhD. **Full** Professor of Pathology. **UNESCO Chair** in **Telemedicine**.

45. **Telemedicine** - Wikipedia, the free encyclopedia

en.wikipedia.org/wiki/**Telemedicine**

Telemedicine is the use of telecommunication and information technologies in order**.....** of **telehealth** to provide audiological services and may include the **full** scope of **...**Telemental Health · Telephone triage · **UNESCO Chair** in **Telemedicine ...**

46. Hospital Doctor Negrín abre una planta cerrada por colapso **...**

https://**unescotelemedicine**.crowdmap.com/reports/view/37?l=ru...

3 Mar 2012 – **Unesco chair telemedicine**, Tfe, Canary islands. España, 73.91 Kms. ¿Es buena la facultad de medicina de la **ULL**? 01:25 Mar 13, 2012 **...**

47. BLOG - SkyLight

www.skylightscope.com/blog/

27 Mar 2012 – **...** SkyLight) in order to give everyone the **full** technological experience.**...** in the hands of the **UNESCO Chair** of **Telemedicine** at the University **... [PDF]**

48. FOR TRUSTWORTHY ONLINE MEDICAL INFORMATION: A STUDY **...**

www.healthonnet.org/.../RUIG_Report_final_en....

Formato de archivo: PDF/Adobe Acrobat
2 Oct 2008 – **...** of research for the **UNESCO Chair** of **telemedicine** at the University of**....** access to such information like OpenAccess (free access to **full** peer **...**

49. BIOMEDICAL RESEARCH FOUNDATION

www.bioacademy.gr/.../investigators_details_ne...

She received the **full** MRC scholarship to carry out her DPhil, which she was **...** quality and reliability assurance (in press) **UNESCO Chair** of **Telemedicine**, **...**

50. [teleestetoscopio] Diff of /paper/rtw-stethoscope.tex

svn.ehas.org/viewvc.cgi/teleestetoscopio/.../rtw-stethoscope.tex?...

1 Jun 2011 – 245, Fisioterapia en la carrera de Kinesilogía en la Universidad Adventista del, permanent collaborator **UNESCO Chair** in **Telemedicine**.

51. **Telehealth**: High-impact Strategies - What You Need to Know **...**

www.scribd.com › Business/Law › Technology

An Important Message for ANYONE who wants to learn about **Telehealth** Quickly and**...** The Continua Health Alliance **UNESCO Chair** in **Telemedicine** Virtual patient Virtual**....** Marlene M.S. ca/ cgi/ content/ **full**/ 161/ 9/ 1137) Canadian Medical **...**

52. BIOMEDICAL RESEARCH FOUNDATION

www.bioacademy.gr/.../investigators_details_ne...

She received the **full** MRC scholarship to carry out her DPhil, which she was **...** quality and reliability assurance (in press) **UNESCO Chair** of **Telemedicine**, **... [PDF]**

53. **Telemedicine** - Wikipedia, the free encyclopedia

www.medicare-asia.com/.../**Telemedicine**... - Malasia

Formato de archivo: PDF/Adobe Acrobat
16 Jul 2011 – **Telemedicine** is a rapidly developing application of clinical **.....** Restrictive licensure

laws in the United States require a practitioner to obtain a **full** license to deliver**telemedicine** care **... UNESCO Chair** in **Telemedicine**. Women **...**

54.   [Page sans titre](#)

www.oeso.org/body/**unesco**-e.html

UNESCO Chair in **Telemedicine** for multi-disciplinary distance learning and creation of evolutional content in the **... Full** contact address / telephone / fax: **... [PDF]**

55.   [Small Size Virtual Slides in Pathology](#)

www.teide.net/catai/TelepathSymp.pdf

Formato de archivo: PDF/Adobe Acrobat
de O Ferrer-Roca - Citado por 3 - Artículos relacionados
UNESCO Chair of **Telemedicine**, **Full** Professor of Pathology, University of La Laguna, Faculty of Medicine, 38071,. Tenerife, Canary Islands, Spain. Phone: **...**

56.   [IWEEE: octubre 2009](#)

blog.iweee.org/2009_10_01_archive.html

30 Oct 2009 – Got the **UNESCO Chair** of **Telemedicine** in 1999 for the University of La Laguna. Since 1996 train on **Telemedicine** the students of medicine **... [PDF]**

57.   [Telepathology in Optical biopsy](#)

mts.hindawi.com/.../getacceptedmsfile.aspx?...

Formato de archivo: PDF/Adobe Acrobat
UNESCO Chair of **Telemedicine**. **.....** The macroscopic OCT is the FFOCT or **full**-field optical coherence tomography that uses simple halogen lamps and CCD **...**

58.   **[UNESCO Chair** in **Telemedicine** - Wikipedia, the free encyclopedia](#)

en.wikipedia.org/.../**UNESCO_Chair**_in_**Teleme**...

UNESCO Chair of **Telemedicine** (UNES_CT) was founded in 1999. Undertakes international activities related to the promotion of the information society and **...**

59.   [Hospital Doctor Negrín abre una planta cerrada por colapso **...**](#)

https://**unescotelemedicine**.crowdmap.com/reports/view/37?l=ru...

3 Mar 2012 – **Unesco chair telemedicine**, Tfe, Canary islands. España, 73.91 Kms. ¿Es buena la facultad de medicina de la **ULL**? 01:25 Mar 13, 2012 **...**

60.   [[teleestetoscopio] Diff of /paper/rtw-stethoscope.tex](#)

svn.ehas.org/viewvc.cgi/.../paper/rtw-stethoscope.tex?r1...

1 Jun 2011 – 245, Fisioterapia en la carrera de Kinesilogía en la Universidad Adventista del, permanent collaborator **UNESCO Chair** in **Telemedicine**.

61.   [African nations call for ICTs to tackle disease - SciDev.Net](#)

www.scidev.net › Home › News

3 May 2011 – But Tim Unwin, **UNESCO chair** in ICT for Development (ICT4D), was cautious on **telemedicine**. "It is intuitively very appealing, but it is striking **...**

62.   [http://www.digitalavmagazine.com/2012/10/15/una-catedratica-de-la-universidad-de-la-laguna-utiliza-realidad-aumentada-para-impartir-anatomia-patologica/](#) Information on the use of virtual reality to train medical students.

63.   http://www.elblogoferoz.com/2012/10/07/clases-de-anatomia-patologica-en-la-ull-con-un-sistema-innovador-de-docencia/ Virtual reality to train medical students and students in Telemedicine

64.   http://lavozdetenerife.com/not/23181/_una_catedratica_de_la_ull_utiliza_tecn Virtual reality to train medical students and students in Telemedicine

V. Forthcoming activities

1. HUMANIZATION OF HEALTHCARE. January 2015 – Tenerife – Spain
2. STUDENTS EXCHANGE TO TENERIFE
3. STUDENTS TRAINING IN TENERIFE
4. SCHOLARSHIPS FOR IBEROAMERICAN BIOENGENEERS
5. EU to IBEROAMERICA INTERCHANGE FOR SUPPORT.
6. MASTER OF HEALTHCARE LAWS 2014-2015.
7. TRAINING IN TUCKMENISTAN
8. VIRTUAL LABS IN SUDAMERICA
9. SMALL DATA IN THE FOG FOR HEALTH 4.0 in BEIJING (China). October 2014
10. H2O TECHNOLOGIC DEVELOPMENT-INSTITUTE MINES TELECOMM (Paris) October 2014.
11. SUPERCOMPUTER ACTIVITY IN SOLO MEDICINE-UPB (Barcelona)

VI. Development prospects

The activities of the Chair started on 1999 and have expanded during the period 2013-2015 to the following countries:

1. – Israel
2. – Beijing- China
3. – Portugal
4. --Tuckmenistan

Target groups

Undergraduate students	YES
Graduate students	YES
Postgraduate students	YES
Academics	YES
Public administrators	YES
Employees from industry, or other private organizations	YES: NGO's
Teachers from primary education	NO
Teachers from secondary education	NO
Teachers from technical and vocational education	YES
Teachers from adult education	YES
Others groups *(Please specify)*	YES: VOLUNTIERS

Geographical Coverage

- National

  - **Spain**: Canary Islands (7 Islands)

    Cataluña

    Madrid

    Valencia

    Balear Islands

    Cordoba

    Extremadura

- Regional

  - **África**: Nairobi-Kenya, Makere-Uganda, Marrocco, Argelia; Cabo Verde, Senegal, Republic. Du Benin, Guinea Ecuatorial.

  - **Arab States**: Israel, Turkey-Istambul, Iran

  - **Asia/ Pacific**: Tuckmenistan, Kazakhstan, Israel-Tel Aviv, New Delhi-India, China-Beijing

  - **Eastern and Central Europe**: Sofia-Bulgaria, Rumania, Russia-Perm & Moscow- Albania – Lithuania Budapest. Hungary.

  - **Australia**: Queensland University.

  - **Western Europe and North America**: Germany-Regensburg/Postdamm/Berlin, Italy-Udine/Milan/Rome, Greece-Athens and Aegean islands, Austria-Tyrol, France-Strasbourg/Paris, Lachen-Switzerland, Oxford-UK, Cyprus, .

  - **Ibero-America**: Argentina-Entre-Ríos, Venezuela-Maracaibo, Venezuela-Caracas, Brazil- Rio Grande do Sur + Norwest Amazonia. Colombia-Barranquilla.

  - **USA**: Massachusets, California

- Interregional

Funding sources

Funding source	Type of Organization / Institution	Period	Amount US$
UNESCO Contribution		2013/15	0
Other contributions: *Please specify, for each contribution:* *Institution, City, Country* ▪	Host Institution	2013/15	0
	Partner universities/ institution	2013/15	9000
	Governmental body		
	Other public institution *Please specify*		
	UN Agencies		
	IGO´s		
	NGO´s: CATAI	2013/15	20000
	Industry		
	Other private sources *Telefónica SL –Spain*	2013/14	35000
	CajaSiete- Canary I.-Spain	2014/15	25000
TOTAL		2013/15	89500 €

Outputs-I

Form 1: Publications

1. **Title of activity: STANDARDS IN TELEMEDICINE.**

1. **Title. System on Chip (SoC) devices in Telemedicine from Lab on Chip (LoC) to high resolution images.**

   Publisher(s): CATAI editions 2012 Tenerife. Canary Islands. Spain ISBN: 978-84-615-6080-6
   Year: 2013
   Number of pages: 78

   Type of document/material:
   - Book   X
   - Periodical
   - Others *(specify, please)*
   Teaching/learning material
   Language(s): >Bilingual (English/Spanish)
   Main keywords (4 or 5):

   SHORT ABSTRACT
   (Brief description of the content in English, French or Spanish)
   La capacidad de miniaturización en micro o nano MEMs permite en la actualidad una gran calidad de imagen y procesado en aparatos portables, particularmente en teléfonos móviles inteligentes que mantienen el procesado local o en la nube. Igualmente el procesado de las imágenes digitales permiten en la actualidad técnicas de superresolucion, enfoque en todos los planos e identificación holográfica que aseguran capacidades diagnósticas y de detección nunca antes imaginadas.
   A eso se une la exigencia del WEF (world económica fórum) sobre la sanidad a la que le demandan 3 actualizaciones esenciales su inmersión total digital, su innovación en la provision de servicio y la prevención creando ciudades sanas. En cualquiera de ellas se requerirá un entorno BYOD (bring your own device) y la utilización de las modernas técnicas de gamificacion para mantener la productividad y la motivación de los trabajadores sanitarios.
   Las ventajas y los inconvenientes que todas ellas aportan a la sanidad serán analizadas con la presentica de los expertos mundiales de las materias. Son retos que en muchos casos requieren renovación o innovación inversa pero con las técnicas de QoS (Quality of Service) que demandan nuestros países tanto en USA como en la UE.

2. **Title: The Anatomy of an Optical Biopsy Semantic Retrieval System.**

   Publisher(s): Revista IEEE Multimedia.
   Producer and/or distributor *(with address)*: vol 19 (n2)
   Year: 2012
   Number of pages: 12 (pp.16-27)
   Type of document/material:
   - Book
   - Periodical
   - Others *(specify, please)*
   Teaching/learning material
   Language(s): English.
   Main keywords (4 or 5): Multimedia, metadata, multimedia databases, standards, image retrieval, video retrieval, feature measurement, healthcare

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
This paper addresses the question of how to build a case-based computer-aided diagnosis system that assists physicians and other medical personnel in the inter-pretation of optical biopsies obtained through confocal laser endomicroscopy (CLE). An optical biopsy is an optic diagnostic method capable to analyze the tissue in surface and in deepness without the need to extract it from the body. The system allows users to navigate and search over an image database containing optical biopsies of the human colon recorded with CLE. Users are able to retrieve information about precedent diagnostics by providing an example CLE image for content based image retrieval (CBIR), by using keywords for structured retrieval. The system's CBIR approaches a novel algorithm for automatic feature extraction in CLE images, showing results on inferring semantic metadata from low-level features. In order to ensure the interoperability with potential third-party applications, the system provides an interface compliant with the recent standards ISO/IEC 15938-12:2008 (MPEG Query Format) and ISO/IEC 24800 (JPEG Search).

3. Title: Health 4.0 in the i2i era

Publisher(s): International Journal of Reliable and Quality E-Healthcare (2011)
Producer and/or distributor (with address):
Year: 2012
Number of pages: 15 (pp. 43 - 57)

Type of document/material:
- Book   X
- Periodical
- Others (specify, please)

Teaching/learning material
Language(s): English & Spanish.
Main keywords (4 or 5): iPhone, mHealth, Medical device, standards, quality

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
The acceptance of iPhones, iPads, and iPods in medical environments, as well as the FDA approval of several diagnostic-prognostic-distant care-management applications, demonstrates the modern medicine trend to introduce mobile applications initiating the i2i era. Furthermore, Cloud and Internet applications ranging from non-quality control up to intelligent-quality-control data base management anytime, anywhere, are the basis of what is called Health 4.0. The present editorial listed approved FDA applications and future deployments, including three personal projects in iHealth: blood-pressure monitoring, iAnapath and the i-EEG control in child Attention Deficit Disorder.

4. Title: Health care management innovation in the net. Cloud- SoC- LaboC and high resolution image techniques change the way to practice medicine.

Publisher(s): CATAI Editions 2012.
Producer and/or distributor (with address):
Year: 2012
Number of pages: 15-17, 64-69 (9 pages)

Type of document/material:
- Book   X
- Periodical
- Others (specify, please)

Teaching/learning material
Language(s): English & Spanish.
Main keywords (4 or 5):
Multimedia, metadata, multimedia databases, standards, image retrieval, video retrieval, feature measurement, healthcare

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
We cover every year the innovations in Telemedicine. This year are focused on management, specifically on BYOD or bring your own device and on gamification. From the technical point of view, TM devices expect dramatic innovation with the SoC (system on chip) and the new HD image techniques. TM devices are now miniaturized and capable to be included in smart phones.

5. **Title: Big Data versus Small Data.**

Publisher(s):IEEE.
Producer and/or distributor (with address):
Year: 2014
Number of pages: (2 pages)

Type of document/material:
- Book
- Periodical   X
- Others (specify, please)

Teaching/learning material
Language(s):   English.
Main keywords (4 or 5):
Cloud, Fog, Bigdata, Smalldata, Health 4.0, mHealth, Intelliagents, agents, PHA, Personal health assistants.

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
Facing user experience in Health care data coming from Health 4.0 in the IoE (internet of everything) two serious distinctions appear. Not all data processed in "The Cloud" is Big Data, on the contrary there is a relevant proportion of Small Data that should be processed in "The Fog".
In this statement there are several new references that should be understood.To whom it belongs, what to do with it and how to do it are the main differences.
Characteristics

	BIG DATA	**SMALL DATA**
Belongs to	*Governement/State*	*Individuals/Patient*
Anonimized	*YES*	*NO*
Encripted	*NO*	*YES*
Processed in	*The Cloud*	*The Fog*
Response	*Months / Years*	*Minutes / On time*
Obtained from	*Institutions/EHRs*	*Sensors / At home / PHR*
Proceced by	*Data Base tools*	*e-Agents*
Stored	*By Govern/Distributed*	*By Individuals/ Personal Assistants*
Useful	*for Decision makers*	*for Individuals*

It is clear therefore that in the cloud or in the fog both type of data cannot be mixed or processed together.

Outputs-II

Form 2:   Multimedia material

Title of activity: TELEMEDICINE-CD

1. **Title: CATAI Telemedicine-CD. ISBN 84-923357-2-6**
    Producer and/or distributor *(with address)*: CATAI
    Year: 1999-2011
    Teaching/learning material   X
    Type of material:
    *   Video
    *   CD ROM   X with videos
    *   Videoconference:
    *   Other type of material
    Duration: 643 MB
    Format: Word, Html, */ppt, /mpeg*
    Language(s): English- Italian-Spanish
    Main keywords (4 or 5): Telemedicine

    SHORT ABSTRACT
    According to one of the numerous definitions of Telemedicine "providing medicine at a distance", any doctor being trained in the use of some telematic devices could effort what he practice. The reality is far from this because to assure a safe practice, people have to learn and bear a minimum understanding of a wide range of topics: from economics to telecommunications and from medicine to legal aspects. Technology learning is not limited to technology itself but linked to its social practical consequences in all their aspects. To guarantee that none of the aspects related with Telemedicine are missed, this minimum knowledge has to be fixed, organized and in some way standardized. The main purpose of this book is to structure the basic knowledge linked to teaching to provide or to practice telemedicine, as well as an overview of the technology developments linked to this new discipline. As expressed in the title (Handbook of Telemedicine), the book is precisely structured as a "handbook" whose main value is the joint opinion of all the participating authors of what are the learning requirements for anyone that would like to practice Telemedicine. It is neither a full treatise nor a complete collection of all telemedicine applications or telemedicine basics. It was built with the aim of creating awareness to the academic aspects (technology development, telecommunications approach, law and regulations, medical practice) as well as to the minimum knowledge requirements to guarantee safe and appropriate medical practice. Nowadays this fact is enhanced by the evidence that welfare expenses cannot be endlessly increased, whilst an efficient health provision system in the context of the information society, will mark a new trend to configure health care practice in the next century. If training and teaching schemes are to cope with the demands of society it seems obvious that those careers and professions should consider structured and sufficient training in Telemedicine.

2. **Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine**
    Producer and/or distributor *(with address)*: CATAI Ed. ISBN 84-609-2162-X
    Year: 2004-15
    Teaching/learning material   X
    Type of material:
    *   Video   DVD with text & multimedia   X
    *   CD ROM
    *   Videoconference:

- Other type of material

Duration: 2 GB
Format: RM (real media)
Language(s): English-Spanish
Main keywords (4 or 5): Telemedicine

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
Generic name of the list of DVDs with multimedia material produced to train at distance on Telemedicine and Bioingeneering applied to telemedicine any people who are interested. No requirements needed, except a DVD reader in the computer.

3. Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine. Volume I.

Producer and/or distributor *(with address)*: CATAI Ed. ISBN 84-609-2163-8
Year: 2004-15
Teaching/learning material   X
Type of material:
- Video   DVD with text & multimedia   X
- CD ROM
- Videoconference:
- Other type of material   Other multimedia material

Duration: 2 GB
Format: RM (real media); PDF; HTML
Language(s): English-Spanish
Main keywords (4 or 5): Telemedicine

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
Volume I of the multimedia material trains the people in Quality control and security in e-health. It includes text, presentations and videos given by the more representative professionals in the world in the topics of Minima requirements, Technical knowledge, Teleworking and teleteaching, Principal technical innovations, Telemetry, Nanotechnology, Quality control and assessment, Legal requirements, Security, Internet, Standards, Electronic Health Record.

4. Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine. Volume II.

Producer and/or distributor *(with address)*: CATAI Ed. ISBN 84-609-6488-4.
Year: 2005-15
Teaching/learning material   X
Type of material:
- Video   DVD with text & multimedia   X
- CD ROM
- Videoconference:
- Other type of material

Duration: 2 GB
Format: RM (real media); PDF; HTML
Language(s): English-Spanish
Main keywords (4 or 5): Telemedicine
SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
Volume 2 of the multimedia material produced for distant training containing texts, presentation and videos. Topics covered in these editions include Telemedicine applications, Minimal technical knowledge, Nanotechnology and new materials, Mobile and electronic learning, Digital signature, Security for health-care, Legal and liability issues, Artificial intelligent in the control of diseases, robotic surgery, ambience intelligence and virtual environment for disease control and treatment, telepresence.

5. **Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine. Volume III.**
   Producer and/or distributor *(with address)*: CATAI Ed. ISBN: 84-611-3589-X.
   Year: 2006-15
   Teaching/learning material   X
   Type of material:
   - Video   DVD with text & multimedia   X
   - CD ROM
   - Videoconference:
   - Other type of material
   Duration: 2 GB
   Format: RM (real media); PDF; HTML
   Language(s): English-Spanish
   Main keywords (4 or 5): Telemedicine

   SHORT ABSTRACT
   (Brief description of the content in English, French or Spanish)
   Volume 3 of the multimedia material produced for distant training containing text, presentation and videos. Topics covered in these editions include mainly standards and technology linked to personalized medicine or *p*-Medicine, Non-invasive sensors, Security for health-care, Legal and liability issues, Artificial intelligent in the control of diseases, robotic surgery, ambience intelligence and virtual environment for disease control and treatment, telepresence.

6. **Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine. Volume IV.**
   Producer and/or distributor *(with address)*: CATAI Ed. ISBN: 978-84-612-1102-9.
   Year: 2007-15
   Teaching/learning material   X
   Type of material:
   - Video   DVD with text & multimedia   X
   - CD ROM
   - Videoconference:
   - Other type of material
   Duration: 2 GB
   Format: RM (real media); PDF; HTML
   Language(s): English-Spanish
   Main keywords (4 or 5): Telemedicine

   SHORT ABSTRACT
   (Brief description of the content in English, French or Spanish)
   Volume 4 of the multimedia material produced for distant training containing text, presentation and videos. Topics covered in these editions include Global vision of standard in Telemedicine. Quality control in Teleophthalmology and OCT. Telemedicine cost in Primary Attention. New aspects in the DICOM standard. Wavelet compression on medical imaging. Image quality assessment. Identity management Quality of services in 4G networks. Telecardiology quality and reliability assurance frameworks. IHE in Spain. Data Protection Laws. Advances in Sanitary Regulation. OneQL: Efficiently Querying the Health Domain in the Semantic Web. Telemetry. Calibration of monitors in Radiology. Wide Spain. Standards of virtual reality. Environmental intelligence in telemedicine. Decision support system and robotics. Stitching & transmission in JPEG2000. Telemedicine in the Sea. Teleophtalmology in the HUC. Distance learining in surgery. Quality control and quality assessment medical device standards. Medical image modalities. Cardiac frequency and detection of cardiac events. Image stictchin in medicine. Telepsychyatry efficacy. Hand-held computer in medicine. Spanish law and Telemedicine. Ethics in Telemedicine.

7. **Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine. Volume V.**
   Producer and/or distributor *(with address)*: CATAI Ed. ISBN: 978-84-612-8290-6.
   Year: 2008-15
   Teaching/learning material   X

Type of material:
- Video   DVD with text & multimedia   X
- CD ROM
- Videoconference:
- Other type of material

Duration: 2 GB
Format: RM (real media); PDF; HTML
Language(s): English-Spanish
Main keywords (4 or 5): Telemedicine

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
Volume 5 of the multimedia material produced for distant training containing text, presentation and videos. Topics covered in these editions include Global vision of Quality control in Telemedicine. Biobanking.

8. **Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine. Volume VI.**
   Producer and/or distributor *(with address)*: CATAI Ed. ISBN: 978-84-613-7245-4.
   Year: 2008-15
   Teaching/learning material   X
   Type of material:
   - Video   DVD with text & multimedia   X
   - CD ROM
   - Videoconference:
   - Other type of material

   Duration: 2 GB
   Format: RM (real media); PDF; HTML
   Language(s): English-Spanish
   Main keywords (4 or 5): Telemedicine

   SHORT ABSTRACT
   (Brief description of the content in English, French or Spanish)
   Los avances tecnológicos en el campo de la visión microscópica de las imágenes o la capacidad diagnóstica de una gran variedad de técnicas ópticas, obligan a analizar y reubicar el papel del Anatomopatólogo en la medicina. Ni los microscopios, ni la tinción, ni el procesado de tejidos son hoy en día imprescindibles para diagnosticar una lesión. Se hace necesario contar con publicaciones morfológicas que determinan el estándar de acuerdo con la técnica empleada de estas biopsias in vivo o biopsias ópticas no disruptivas.

9. **Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine. Volume VII.**
   Producer and/or distributor *(with address)*: CATAI Ed. ISBN: 978-84-614-5996-4.
   Year: 2009-15
   Teaching/learning material   X
   Type of material:
   - Video   DVD with text & multimedia   X
   - CD ROM
   - Videoconference:
   - Other type of material

   Duration: 2 GB
   Format: RM (real media); PDF; HTML
   Language(s): English-Spanish
   Main keywords (4 or 5): Telemedicine

   SHORT ABSTRACT
   (Brief description of the content in English, French or Spanish)

IoT. El Internet de los Dispositivos médicos. Salud 2.0 a Salud 3.0, trata de los aspectos tecnológicamente mas avanzados sobre la gestión de los dispositivos a distancia a través de Intra o Internet, con identificación univocas y altas en la red, que permiten la ubicación, gestión y modificación a distancia de los dispositivos médicos o mecánicos asociados (ejem: camillas…) de forma que se facilite no solo un MRP (management resource planning) sino una telemetría en condiciones de permitir la monitorización de los pacientes. En el segundo apartado nos movemos desde la Salud electrónica 2.0 a través de Internet en la que la calidad y control es limitado a la Salud 3.0 en la que se priman los criterios de control de calidad en todos los ámbitos de automatización y robotización.

Para ello contamos con expertos internacionales, especialmente seleccionados por sus aspectos innovadores en su clínica diaria o en sus investigaciones y por su apuesta por la estandarización y calidad de la asistencia.

10. **Title: Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine. Volume VIII.**

Producer and/or distributor *(with address)*: CATAI Ed. ISBN: 978-84-615-6144-5
Year: 2011-2015
Teaching/learning material   X
Type of material:
- Video   DVD with text & multimedia   X
- CD ROM
- Videoconference:
- Other type of material

Duration: 2 GB
Format: RM (real media); PDF; HTML
Language(s): English-Spanish
Main keywords (4 or 5): Telemedicine

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
Móviles 4G en Telemedicina, trata de los aspectos tecnológicamente más avanzados sobre la gestión de los dispositivos a distancia a través de Telefonía móvil. Particularmente:

1.- El uso de los móviles de última generación para la medicina y las aplicacionesH2H (health2health) y las Smart-GRID o el acceso universal en la Nube, además de los aspectos técnicos del Packet Backhaul Technology, o las estrategias packet-core.

2.- El control de calidad de las aplicaciones de Telemedicina

3.-El informe:"Telecommunications, IT and Heathcare: Wireless Networks, Digital Healthcare and the Transformation of US Healthcare, 2006-2011″ en el que se especifica que en USA la industria de TIC relacionadas con la salud se incrementara en un 8.4% en 5 años cubriendo desde $7.5 billones en 2008 a $11.3 billones en 2013. El gasto sanitario pasara de ser un 6% del PIB a un 16% a un 18%. La industria sanitaria se ve forzada a operar de forma más eficiente, y un elemento central será la creación de redes eficientes capaces de compartir no solo datos sino imágenes de calidad para el diagnóstico remoto que se llevara a cabo con personal

Medico altamente cualificado. Un coste enorme se pierde en el sistema en la interfaz médico-paciente – tiempo de desplazamientos, buscar plazas a los enfermos, buscar la atención que requieren, administrar la atención etc… - Por ello el control remoto es algo esencial.

Para ello contamos con expertos internacionales, especialmente seleccionados por sus aspectos innovadores en su clínica diaria o en sus investigaciones y por su apuesta por
la estandarización y calidad de la asistencia.

11. **Title: Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine. Volume IX.**

Producer and/or distributor *(with address)*: CATAI Ed. ISBN: 978-84-615-6081-3
Year: 2012-2015
Teaching/learning material   X
Type of material:
- Video   DVD with text & multimedia   X

- CD ROM
- Videoconference:
- Other type of material

*(Please specify):*_____

Duration: 2 GB

Format: RM (real media); PDF; HTML

Language(s): English-Spanish

Main keywords (4 or 5): Telemedicine

SHORT ABSTRACT

(Brief description of the content in English, French or Spanish)

Sanidad en la nube, i-Cloud y Consulta masiva trata los aspectos relacionados con " la nube sanitaria", el papel que la telefonía móvil desempeña en este tipo de actividades, así como la repercusión que tiene el denominado " Crowsourcing" en el contexto sanitario que permite a los médicos consultar con los mayores expertos en las distintas áreas sanitarias.

La tecnología debe asegurar un sistema de provisión de servicios en sanidad, viable económicamente, descentralizado y ubicuo todo ello a bajo coste por ello los teléfonos inteligentes y los servicios en la Nube van a ser determinantes en esta evolución. El almacenamiento masivo de datos y su accesibilidad y control remoto con virtualización disminuirán costes y personal. se tratan en el presente libro, que se basara principalmente en cómo pueden los profesionales médicos valerse de las nuevas tecnologías y la comunicación (TICS), para hacer más eficiente las asistencia a distancia.

Para ello contamos con expertos internacionales, especialmente seleccionados por sus aspectos innovadores en su clínica diaria o en sus investigaciones y por su apuesta por la estandarización y calidad de la asistencia.

12. **Title: Title: EU-Master of Telemedicine and Bioengineering applied to Telemedicine. Volume X.**

Producer and/or distributor *(with address)*: CATAI Ed. ISBN: 978-84-615-6081-3

Year: 2013-2015

Teaching/learning material   X

Type of material:

- Video   DVD with text & multimedia   X
- CD ROM
- Videoconference:
- Other type of material

*(Please specify):*_____

Duration: 2 GB

Format: RM (real media); PDF; HTML

Language(s): English-Spanish

Main keywords (4 or 5): Telemedicine

SHORT ABSTRACT

(Brief description of the content in English, French or Spanish)

System on Chip (SoC) devices in Telemedicine from Lab on chip (LoC) to high resolution images, summarized the most advanced, miniaturized, reverse innovation Solution for better Access to Healthcare. Mostly of them based in smartphones, some of the innovations are based on the DIY or do it yourself phylosophy.

Title of activity: WEB OF THE TELEMEDICINE GROUP

1. **Title: CATAI WEBPAGE www.teide.net/catai**

Producer and/or distributor *(with address)*: CATAI

Year: 1997-2015

Teaching/learning material   X

Type of material:

- Video
- CD ROM
- Videoconference:
- Other type of material   X
- *(Please specify):* Web page; Videostreaming training

Duration:
Format: Html; RM (real media)
Language(s): English- Spanish
Main keywords (4 or 5): Telemedicine

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
The CATAI web has as a main objective the spread of the Telemedicine in Spain and in developing countries. The non-for profit association for the CATAI (Center of Advanced Technology in Image Analysis) supports Telemedicine activities and studies in the field of:
Image Analysis at distance
Data transmission
Videoconsultation and videoconferences
On Line training
Distant telequantitation.
The Winter Courses of the CATAI can also be followed on line in a video streaming during its production by means of the Helix Videoserver providing Real Media output that contains the Power Point presentation together with the video image of the speaker.

2. **Title: Telemedicine BLOG http://www.catai.net/blog**
   Producer and/or distributor *(with address)*: ULL
   Year: 2008-2015
   Teaching/learning material
   Information material   X
   Type of material:
   - Video
   - CD ROM
   - Videoconference:
   - Other type of material   X
   - *(Please specify):* News

   Duration: Always updated. 960 posts (72 posts in 2014 August)
   Language(s): English- Spanish

   SHORT ABSTRACT
   (Brief description of the content in English, French or Spanish)
   The blog of the TELEMEDICINE chair displays all outstanding information regarding the chair itself, the cooperation activity and the UNESCO activity related with the chair of telemedicine, as well as the mission carried out in rural and depressed areas.

3. **Title: Facebook Unesco Telemedicine Profile**
   https://www.facebook.com/unesco.telemedicine
   Producer and/or distributor *(with address)*: CATAI
   Year: 2010-2015
   Teaching/learning material
   Information material   X
   Type of material:
   - Video
   - CD ROM
   - Videoconference:

- Other type of material   X
- *(Please specify):* News

Duration: Always updated. Everyday posts.

Language(s): English- Spanish

SHORT ABSTRACT

(Brief description of the content in English, French or Spanish)

The Unesco Telemedicine Facebook profile displays all outstanding information regarding the telemedicine, highlighting news that involve innovation, new standards, regional problems, etc, with everyday posts.

4. **Title: Youtube Channel** **http://www.youtube.com/user/cataiyt**

Producer and/or distributor *(with address)*: CATAI

Year: 2011-2015

Teaching/learning material

Information material   X

Type of material:

- Video   X
- CD ROM
- Videoconference:
- Other type of material

Duration: 54 uploaded videos, 13.037 video plays, 64.113 estimates play minutes around the world (mainly focus in Spain and Mexico), 91 subscriptors.

Language(s): English- Spanish

SHORT ABSTRACT

(Brief description of the content in English, French or Spanish)

The Youtube Channel displays teaching material in medicine and telemedicine technologies and innovations. There is a wide offer of educational material, about the top issues relating telemedicine innovation, such as BYOD, mobile health applications, health cloud, etc.

5. **Title: Twitter Unesco Telemedicine Profile** **https://twitter.com/UnescoTeleMed**

Producer and/or distributor *(with address)*: CATAI

Year: 2011-2013

Teaching/learning material

Information material   X

Type of material:

- Video
- CD ROM
- Videoconference:
- Other type of material   X
- *(Please specify):* News

Duration: Always updated. Everyday posts.

Language(s): English- Spanish

SHORT ABSTRACT

(Brief description of the content in English, French or Spanish)

The Unesco Telemedicine Twitter profile displays all outstanding short information regarding the telemedicine, highlighting news that involve innovation, new standards, regional problems, etc, with everyday posts.

6. **Title: Health Crisis Map** **https://unescotelemedicine.crowdmap.com/**

Producer and/or distributor *(with address)*: CATAI

Year: 2011-2015

Teaching/learning material

Information material   X

Type of material:

- Video
- CD ROM
- Videoconference:
- Other type of material   X
- *(Please specify):* News

<mark>Duration: Always updated. 140 Posts.</mark>

Language(s): English- Spanish

SHORT ABSTRACT

(Brief description of the content in English, French or Spanish)

The Health Crisis Map geographically displays news about the problems generated by the economic crisis, making focus in the Spanish Health System and the lack of resources.

7. **Title: Linkedin Unesco Telemedicine Profile** **http://es.linkedin.com/pub/unesco-telemedicine/43/aa2/93b**

Producer and/or distributor *(with address)*: CATAI

Year: 2011-2013

Teaching/learning material

Information material   X

Type of material:

- Video
- CD ROM
- Videoconference:
- Other type of material   X
- *(Please specify):* Discussion Groups

<mark>Duration: Everyday participations.</mark>

Language(s): English- Spanish

SHORT ABSTRACT

(Brief description of the content in English, French or Spanish)

The Unesco Telemedicine Linkedin profile works as a nexus with other people and organizations. Participations in discussion groups as "Horizont 2020 Framework".

8. **Title: Slideshare profile:** **http://www.slideshare.net/OFRoca/edit_my_uploads?page=1**

Producer and/or distributor *(with address)*: CATAI

Year: 2013-2015

Teaching/learning material

Information material   X

Type of material:

- Video
- CD ROM
- Videoconference:
- Other type of material   X
- *(Please specify):* Discussion Groups

Duration: 13 uploads. 180 followers .

Language(s): English- Spanish

SHORT ABSTRACT

(Brief description of the content in English, French or Spanish)

The Unesco Telemedicine slide-share profile is very much appreciated since it post outstanding material related with innovation and humanistic prospective of the Healthcare.

9. **Title: Scoop-it profile: http://www.scoop.it/u/unesco-telemedicine/curated-scoops**

      Producer and/or distributor *(with address)*: CATAI

      Year: 2014-2015

      Teaching/learning material

      Information material   X

      Type of material:

- Video
- CD ROM
- Videoconference:
- Other type of material   X
- *(Please specify):* Discussion Groups

      Duration: 1100 views- 60 uploads. 29 followers .

      Language(s): English- Spanish

      SHORT ABSTRACT

      (Brief description of the content in English, French or Spanish)

      The Unesco Telemedicine Health 4.0 scoop-it section of curated information regarding Health 4.0 is a classical one since it updated all information regarding Humanization of Healthcare, DIY, mHealth, Equity in Healthcare.

10. **Title: Diabetes control http://193.145.112.231/CHS/**

      Producer and/or distributor *(with address)*: CATAI

      Year: 2002-2011

      Teaching/learning material

      Type of material:

- Video
- CD ROM
- Videoconference:
- Other type of material   X
- *(Please specify):* Support of diabetic people at distance

      Duration:

      Format: Html;

      Language(s): English- Spanish

      Main keywords (4 or 5): Telemedicine, Diabetes, SMS

      SHORT ABSTRACT

      (Brief description of the content in English, French or Spanish)

      Web Server is available for medical people groups in English and in Spanish that is able to test Diabetes control at distance. It is accessible by the Internet and also using mobile phone SMS.

11. **Title: Anticoagulant treatment control at distance http://193.145.112.231/INR/**

      Producer and/or distributor *(with address)*: CATAI

      Year: 2002-2011

      Teaching/learning material

      Type of material:

- Video
- CD ROM
- Videoconference:
- Other type of material   X
- *(Please specify):* Support of people treated with an anticoagulant treatment.

Duration:
Format: Html;
Language(s): English- Spanish
Main keywords (4 or 5): Telemedicine, INR, telemetry, anticoagulation, SMS

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
This web site is available for any patient or doctor who either can be controlled at distance or want to control the patient at distance. It includes a Decision Support System (DSS) to advise the user on the type of treatment that should be implemented plus the capability of give messages from the doctor to the patients and vice versa.

Title of activity: DISTANT TEACHING

1. **Title: http://alexandros.ccslab.aueb.gr/~ctc**
   Producer and/or distributor *(with address)*: CATAI
   Year: 2000-2015
   Teach*i*ng/learning material   X
   Type of material:
   - Video
   - CD ROM
   - Videoconference:
   - Other type of material   X
   - *(Please specify):* Web page
   Duration:
   Format: Html
   Language(s): English-Spanish
   Main keywords (4 or 5): Telemedicine distance training

   SHORT ABSTRACT
   (Brief description of the content in English, French or Spanish)
   The present activity carries out the diffusion of the structured training skills in the field of TELEMEDICINE. It introduces an innovative professional training by assuming new Information Society skills not only in the Health Care provision but also in the teaching methodology. The co-operation inside of the present CTC consortium will provide and update the contents of those rapidly moving technologies, and will bring innovative approaches in the teaching done at distance with experience of the ODL of APOLLO project as well as the experience on surgical virtual reality simulators provided by the new partners. The training is directed towards trainers to update their knowledge and skills; therefore, it means health care professionals (including directors and responsible people) in the European Union. This requires the updating of the Information Society training applied to health care.
   This activity is linked with the initiative of the UNESCO Chair of Telemedicine to apply the consortium experience towards the urgent demand of Telemedicine in developing countries to improve their limited health care system efficiency and accessibility. The International teaching activities are arranged in intensive winter and Summer Courses particularly to update trainer knowledge and teaching material. This activity also takes into consideration the fact that a complete training is not possible in each individual country due to the irregular Health Care technology developments throughout the European Union

2. **Title: Distant coaching and training(BREEZE) http://www.cataibreeze.ull.es/**
   Producer and/or distributor *(with address)*: CATAI
   Year: 2006-2015
   Teaching/learning material   X
   Type of material:
   - Video   X
   - CD ROM

- Videoconference: X
- Other type of material   X
- *(Please specify):* Multimedia material and on-line session to train at distance in Telemedicine, including the official master students.

Duration: Always updated. Up to now 3 months material
Format: Macromedia Breeze (server-presenter); Macromedia Flash
Language(s): English- Spanish
Main keywords (4 or 5): Telemedicine training

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
Web Server available for training and coaching students on line and at distance in the Telemedicine topic as well as Bioengineering applied to telemedicine. Top multimedia material and test as well as on line conferences are included for study a review of the students. On line questionnaires will be available in the future.

3. **Title: European master Telemedicine**
   http://www.teide.net/catai/inscripcion/MASTERESP.htm
   http://www.bioingenieria.edu.ar/extension/secretaria/novedades/boletines/Boletin%20Institucional_76.htm

   Year: 2007-2011
   Teaching/learning material   X
   Information material
   Type of material:
   - Video
   - CD ROM
   - Videoconference:
   - Other type of material   X
   - (Please specify): PDF.

   Duration: 2007-2009
   Format: PDF
   Language(s): English- Spanish

   SHORT ABSTRACT
   (Brief description of the content in English, French or Spanish)
   El objetivo del Master Europeo de Telemedicina y Bioingeniería aplicada a la Telemedicina es impartir una enseñanza de calidad en Telemedicina y Salud electrónica orientada a posgraduados en Medicina, Informática, Ingenieros, Economistas e incluso Abogados, habilitando a estos profesionales para desarrollar e implementar soluciones sobre atención médica a distancia en cada uno de sus entornos.

   Title of activity: UNIVERSITY OF LA LAGUNA (ULL)

1. **Title: Guide of the ULL http://www.teide.net/catai/catedra_unesco/pag5253.pdf**
   Producer and/or distributor (with address): ULL (University La Laguna)g
   Year: 2007-2008
   Teaching/learning material
   Information material   X
   Type of material:
   - Video
   - CD ROM
   - Videoconference:
   - Other type of material   X
   - (Please specify): PDF. (Pages 52-53)

   Duration: Always updated.

Format: PDF
Language(s): English- Spanish
Main keywords (4 or 5): UNESCO Chair information in the guide of the ULL

SHORT ABSTRACT
(Brief description of the content in English, French or Spanish)
It refers to the presence and the activity of the UNESCO Chair of the University of La Laguna in the general guide of the University in a prominent place.

Title of activity: UNESCO

1. Title **http://www.unesco.org/en/unitwin/access-by-region/europe-and-north-america/spain/unesco-chair-in-telemedicine-467/**
   Year: 2011
   Teaching/learning material   X
   Information material
   Type of material:
   - Video
   - CD ROM
   - Videoconference:
   - Other type of material   X
   - (Please specify): htm
   Format:
   Language(s): Spanish

   SHORT ABSTRACT
   (Brief description of the content in English, French or Spanish)
   • Para facilitar la capacitación y la adquisición de habilidades en la Telemedicina, dirigidos a las áreas geográficas y la aplicación médica que muestran las necesidades reales de apoyo a la telemedicina.
   • Actuar como órgano intermediario o dar apoyo directo de telemedicina adaptado a las necesidades e infraestructura de los países que reciben apoyo.
   • Para promover la telemedicina misión de la unidad central (MTCU) que proporciona: apoyo médico a través del teléfono, centros de coordinación (RCC) y centros de telemedicina de apoyo

2. Title El XXV curso de Telemedicina de la ULL expone los avances en nuevas tecnologías para el Servicio sanitario
   http://www.ull.es/viewullnew/institucional/prensa/Noticias_ULL/es/2250830
   Year: 2012
   Teaching/learning material
   Information material
   Type of material:
   - Video
   - CD ROM
   - Videoconference:
   - Other type of material   X
   - (Please specify): htm
   Format:
   Language(s): Spanish

   SHORT ABSTRACT
   (Brief description of the content in English, French or Spanish)
   La cátedra de Anatomía Patológica de la Universidad de La Laguna, ostentada por la doctora Olga Ferrer-Roca, ha organizado el XXV Curso de Análisis de Imagen del CATAI (Curso Avanzado Tecnológico de Análisis de la Imagen). Con este programa se pretende acercar a alumnos y profesionales del sector los avances en telemedicina, es decir, la prestación de servicios médicos a

distancia utilizando las nuevas tecnologías. El curso se impartirá entre el lunes 12 y el domingo 18 de marzo y tiene una duración de 80 horas.

Form 3: Program of Courses

2013 - Title of activity: SYSTEM ON CHIP (SoC) devices in Telemedicine. From Lab on Chip (LoC) to high resolution images
XXI WINTER COURSE OF CATAI

XXVI IMAGE ANALYSIS COURSE OF THE ULL
04th March-10th March 2013
SYSTEM ON CHIP (SOC) DEVICES IN TELEMEDICINE FROM LABOC TO HIGH RESOLUTION IMAGES
La Laguna. Tenerife. Canary Islands. Spain.
Course recognized by: ESCAP (European Society of Analytical Cellular Pathology),
ISDQP (International Society of Diagnostic Quantitative Pathology) and ISCO
(International Society of Cellular Oncology). http://www.qub.ac.uk/isco/iscoweb/;
by EFMI (European Federation of Medical Informatics) http://www.efmi.org/
80 Teaching hours

MONDAY 4TH MARCH, 2013
16-20h • *Welcome to the Course.* **F. Luengo Orol**, Chancellor of Industrial Development and Technological Innovation. **Prof. Dr. E. Domenech,** Head of the University of La Laguna (ULL), Tenerife. **Prof. Dr. C. Ruiz-Pérez,** Research Vice-Chancellor, Univ. of La Laguna, Tenerife. *NIR-tomography & fMRI applied to Neurology* **Prof. Dr**. **JL Gonzalez Mora**, Physiology. ULL. http://www.nirx.net/breast-imaging.

TUESDAY 5TH MARCH, 2013
16-20h • *Photonics based Telemedicine Technologies* **Prof. Dr. A.Ozcan**, Univ.California UCLA. Innovation through photonics. http://www.innovate.ee.ucla.edu/ ;http://biogames.ee.ucla.edu/; http://www.ee.ucla.edu/faculty-ozcan.htm; *BYOD (Bring Your Own Device), gamification and high resolution in Telemedicine*, **Prof. Dr. O. Ferrer-Roca**, UNESCO Chair of Telemedicine, Univ. La Laguna ULL. http://www.teide.net/catai. *Superresolution in digital holographic microscopy by synthetic aperture*. **Prof. Dr. V. Micó**. Physics Faculty. U.Valencia. http://www.uv.es/gpoei/eng/directorio.html

WEDNESDAY 6TH MARCH, 2013
16-20h • *Vidyo, High definition videoconference without MCU.* **Frank Ruge** VP Vertical Market EMEA, Vidyo. http://www.vidyo.com. *In-Memory Technology – An Enabler for Personalized Medicine,* **Prof. Dr. Ch. Meinel,** Hasso-Plattner Institute, Potsdam University, Germany, http://www.hpi.uni-potsdam.de/

THURSDAY 7TH MARCH, 2013
16-20h • *Project 2020.Future Medical Office.* **Prof. Dr. G. Graschew and V. Guerkan,** Clinical University of the Charité, Berlín, http://www.rrk-berlin.de/op2000. ESA- European Space Agency, ESTEC-European Space Research and Technology Centre, Noordwijk, Holanda, http://www.esa.int/. *Open source EHR and image processing*. **Ing. L. Falcon.** http://health.gnu.org/

FRIDAY 8TH MARCH, 2013
16-20h • *New type of images in medicine.* **Prof. Dr. A. Horsch**, Technical Univ. Munich. Germany. http://www.efmi-wg-mip.net/. *Lab on chip analysis systems for viruses* **Ing. Dr. Reiner Gotzens**. MicroTEC. Germany. http://www.microtec-d.com/html/d_company/e_fuehrung.html

SATURDAY 9TH MARCH, 2013
16-20h • *Assistant living with images.* **Ing. D. Gonzalez**, Unesco Telemedicine, Canary Islands. http://catai.net/blog/acerca-de-este-blog/. *Images role in e-health.* **Prof. Dr. A. Kastania,** Athens University of Economics and Business, Greece. http://www.aueb.gr/users/kastania/researchank.html.

SUNDAY 10TH MARCH, 2013
16-20h • *Students presentation of the IT works.* Coordinator: **Prof**. **Dr. O. Ferrer-Roca**, *Telemetry*, **Mr. J. L. López,** COMITAS Communications. http://www.comitas.es. *Wheels for iPad to build a COW (computer on wheels)*, Double-robotics, http://www.doublerobotics.com/#.

WORKSHOPS: Everyday from 8 to 16 h.
Near Infrared images (NIR) and fMRI-functional MRI *(Prof. Dr. J. L. Gonzalez-Mora, F. Rodríguez Hernández, Dr. G. Navarrete García, C. Modroño Pascual); 2.* Robotic surgery and intelligent operating room *(Prof. Dr. A. Alarcó & Dr. A. Bravo); 3.* Double Robotics COW with iPad; 4. Full HD telemedicine with Vidyo (*Ing. J.Gonzalez); 5.* BYOD & Galaxy camera. *6.* iPhone telepathology with SkyLight. *7.* Dropbox cloud.

PRESS RELEASE
http://www.cunoticias.com/noticiasde/curso-avanzado-tecnologico-de-analisis.php
http://www.comminit.com/en/node/121255/38
http://www.iweee.org/2010/speakers.html
http://instapedia.com/m/Telemedicine
http://en.wikipedia.org/wiki/index.html?curid=774446
http://en.wikipedia.org/wiki/UNESCO_Chair_in_Telemedicine
http://raisingchooks.typepad.com/raising_chooks/2010/06/a-little-about-the-history-of-telemedicine.html ç
http://www.yatedo.com/s/companyname%3A%28%28unesco%29+OR+%28telemedicine%29%29+AND+%28jobtitle%3A%28%28chair%29%29+OR+profession%3A%28%28chair%29%29%29/all
http://jsahealthmd.com/tag/telemedicine/
http://www.mmdnewswire.com/virtual-microscopy-application-ipad-34658.html
http://www.europa-eu-un.org/articles/en/article_8653_en.htm
http://www.reference.com/browse/telemedical
http://www.springerlink.com/content/687pt00001m33564/
http://www.springerlink.com/content/687pt00001m33564/fulltext.pdf **Translational Oncology**
http://eldigitaldecanarias.net/enviar46763.php
http://iphone-pc.net/tag/freetoplay
http://www.iweee.org/2010/speakers.html.
http://www.eldigitaldecanarias.net/noticia46763.php
http://www.juventudcanaria.com/es/noticias/index.php?id=10111
http://www.gobiernodecanarias.org/noticias/index.jsp?module=1&page=nota.htm&id=124173
http://www.cenetec.salud.gob.mx/descargas/comite_e-Salud/FOROjunio08.pdf
http://www.infoamerica.org/primera/guia_catedras.pdf
 http://www.cunoticias.com/noticiasde/facultad-de-medicina.php
http://www.ull.es/viewullnew/institucional/prensa/Noticias_ULL/es/335810
http://www.tribunadecanarias.es/index.php?name=News&file=article&sid=18918&theme=Printer
http://www.ull.es/modules/ullnew/view.aspx?id=257097
http://lavozdetenerife.com/not/23181/_una_catedratica_de_la_ull_utiliza_tecnologia_de_realidad_aumentada_para_impartir_anatomia_patologica/
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