

UNITWIN/UNESCO Chairs Programme Progress report 2011-2013

«If this has not yet been done, please forward your progress report before
31 May 2013» to the Director, Division of Higher Education.

Period of activity: 2011-2013

Title: UNESCO CHAIR TELEMEDICINE

Report established by: Prof.Dr.O.Ferrer-Roca,
Function / Title: responsible UNESCO Chair Telemedicine 1999-2013
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	3
II. Available resources	4
1. Human resources	4
2. Material resources	4
III. Activities	5
1. Education/Training/Research	5
1.1. Title and expected results for each course, workshop,	5
2. Conferences/Congresses/Meetings	5
2.1. Title and expected results for each conference, meeting. ... :	5
3. Missions / Travels abroad.....	6
4. Visiting professors / Fellowships	6
5. Information and documentation activities	6
6. Others	7
6.1. Written agreements with Universities.....	7
IV. Impact	9
1. Relation Article Citation in international collaborations.....	9
2. Geographic distribution of web visitors 1year:	9
3. Google Search: Telemedicina- UNESCO	10
1. UNESCO Chair in Telemedicine (467) UNESCO	10
2. UNESCO Chair in Telemedicine for multidisciplinary distance	10
3. UNESCO Chair in Telemedicine - Wikipedia, the free encyclopedia	10
4. UNESCO chair woman of Telemedicine	10
5. UNESCO Chair Telemedicine Digital Agenda for Europe	10
6. Unesco Telemedicine - España LinkedIn	10
7. UNESCO Chair for distance learning.....	10
8. Unesco Telemedicine Facebook.....	10
10. UNESCO Chair In Telemedicine quotes Quotations at Dictionary.com.....	10

11. <i>Telemedicine</i> Workshop 2011 - Speakers	10
12. Handbook of <i>Telemedicine</i> - Olga Ferrer-Roca - Google Books.....	11
13. Handbook of <i>Telemedicine</i> - Página iii - Resultado de la Búsqueda de libros de Google	11
List of <i>chairs</i> in natural sciences - <i>Unesco</i>	11
16. <i>Telemedicine</i> in Encyclopedia	11
17. Handbook of <i>Telemedicine</i> - O. Ferrer Roca - Google Libros.....	11
18. Endowed Professorships - Clinfowiki.....	11
20. <i>Telehealth</i> : High-impact Strategies - What You Need to Know	11
21. ICTs <i>UNESCO</i>	11
22. Pósters - Sociedad Española de Anatomía Patológica	11
V. Forthcoming activities.....	17
VI. Development prospects.....	18
Annex 1	19
Target groups.....	19
Annex 2	20
Geographical Coverage	20
Annex 3	21
Funding sources.....	21
Annex 4	22
Outputs-I.....	22
Form 1: Publications	22
1. Title of activity: STANDARDS IN TELEMEDICINE.	22
Annex 5	31
Outputs-II	31
Form 2: Multimedia material	31
Title of activity: TELEMEDICINE-CD	31
Title of activity: WEB OF THE TELEMEDICINE GROUP	36
Title of activity: DISTANT TEACHING	39
Title of activity: UNIVERSITY OF LA LAGUNA (ULL)	41
Title of activity: UNESCO	41
Form 3: Program of Courses	43
2011 - Title of activity: 4G Mobile Phones in TELEMEDICINE	43
2012 - Title of activity: HEALTH CLOUD, I-CLOUD & CROWDSOURCING in TELEMEDICINE:	44
2013 - Title of activity: SYSTEM ON CHIP (SoC) devices in Telemedicine. From Lab on Chip (LoC) to high resolution images.....	45

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 Nayra Gilmartín Rodríguez
Partial time support Secretary Rebeca Plasencia García
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; Jesús Montañez Díaz; Xiomara Santos Palacios.
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, Brazil, Spain, Uganda, Norway, Italy, Portugal, Venezuela, Argentina, Hungary, USA, 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: 1 weeks.
- 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, Istanbul-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).
- Geographical coverage for partners and participants: Europe-Africa-South & North America.
- Funding sources: CATAI founding. Telefónica SL.
- 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: III International symposium of biomedical informatics in EU HealthInfo & Biostec. Rome Italy 25-29th January 2011. VIII Reunión de Cooperación de Telemedicina com la Universidad Politécnica de Alcoy, Valencia, España 13-16 mayo 2011. la Reunión de Cooperación científica internacional en el campo de aplicaciones de análisis de imagen en Telemedicina y Telesalud, Munich, Alemania, 30 junio- 12 julio de 2011. MHealth Summit 2011, en Washington, D.C, US, 3 diciembre-12 diciembre de 2011; 28th March to 3th april 2011 XIX CATAI Winter Course 4G Mobile Phones in telemedicine; 12-18th March 2012, XX CATAI Winter Course Health Cloud, iCloud & Crowdsourcing in Telemedicine; & 4-10th March 2013 the XXI CATAI Winter Course in System on Chip (SoC) devices in telemedicine from LABoC to high resolution images

and we attended the following congresses:

In June, 2012 UPC meeting in order to deal with the CBIR project (Content based image retrieval) and 26th-29th August 14th International Congress of Hystochemistry and Cytochemistry in Kyoto, Japan; 21st to 24th October 2012 the 29th International Conference in Advancing Quality and Safety for al; Now and in the future, Geneva, Switzerland; 25th

January 2013; 19th November 2012, join meeting of the Telephonic chairs in Las Palmas of Talent & Innovation in a hiper-connected world, 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. .

- Partnership (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.
- Outputs: Please complete Annex 1 for the publications and Annex 2 for the multimedia material.
- Actually “**Telemedicine Master**” at distance, with the Universities of Makerere-Uganda, Beijing-China, New Delhi-India, Istambul-Turkey, El Cairo-Egypt, Queensland- Australia, Casablanca- Marrocco; Albenia, Tuckmekistan, Georgia.
- First stage of the Network Project of Virtual Laboratories and Teleoperated of Colombia from the e-LABColombia and the University Network of e-Health (RueS)
- 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/>

3. Missions / Travels abroad

Destination: University La Laguna-UNESCO Chair Telemedicine.
From : Entre Rios-Argentina, Makerere-Uganda and Caracas-Venezuela
Purpose: Students training in telemedicine
Duration: from 1 to 2 month
Funding source: University of La Laguna/Telefónica SL / Catai fundings/
Outputs: 1- Training of students to provide telemedicine in underserved areas.

4. Visiting professors / Fellowships

Number: (25)
Duration: 1-2 month
University of origin: *Potsdam-Germany (2), U.-Caracas-Venezuela (2), , Clinical university of the Charité-Berlin (2), U. Makerere - Uganda (1), , Univ Oslo, Olso, Norway (2), Univ Athens (3), Univ Munich- Germany (2), Univ Mainz, Germany (1) Univ Budapest, Hungria (2), U. Rio Grande do Sur-Brazil (1); U. Politecnica Barcelona (2).U.Madrid, Spain (2),U.Valencia, Spain (1), U.California, USA (2),*

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

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 2012** “Health, i-cloud and Crowdsourcing in Telemedicine” CATAI editions 2011 Tenerife. Canary Islands. Spain ISBN: 978-84-615-6145-2
- 5.3. **CATAI 2011** “I-Phone & 4G mobile phone in Telemedicine” Ed: Prof.Dr.O.Ferrer-Roca. CATAI Ed 2010. Tenerife. ISBN. 978-84-614-5897-1

- 5.4. **CATAI 2010** "IoT Internet of Things for Medical Devices. Health 2.0 to Health 3.0" Ed: Prof.Dr.O.Ferrer-Roca. CATAI Ed 2009. Tenerife. ISBN. 978-84-612-8620-1
- 5.5. **CATAI 2009** "Superresolution and Optical Biopsy" Ed: Prof.Dr.O.Ferrer-Roca. CATAI Ed 2008. Tenerife. ISBN. 978-84-612-8620-1
- 5.6. European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume V**. CATAI Editions 08. ISBN 978-84-612-8290-6
- 5.7. European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume VI**. CATAI Editions 09. ISBN 978-84-613-7245-4.
- 5.8. European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume VII**. CATAI Editions 10. ISBN 978-84-614-5996-4.
- 5.9. European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume VIII**. CATAI Editions 11. ISBN 978-84-615-6144-5.
- 5.10. European Master of Telemedicine and Bioengineering applied to Telemedicine, **Volume IX**. CATAI Editions 12. ISBN 978-84-615-6081-3

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 University of Cordoba (Spain) 2012
- 6.1.8. 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) .

6.3. International projects

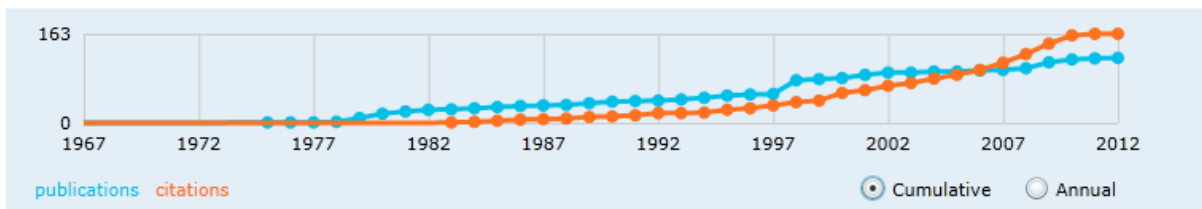
- 6.3.1. Joined projects of the Ministry of Foreign Affairs and International Cooperation with Venezuela. BOE nº6 1495-1592, 2009. AECI- A16183/08 - *Desarrollo Rural: Web Semántica para la Gestión planificación y coordinación descentralizada en Telemedicina*
- 6.3.2. Joined cooperative projects with the Ministry of Education and Research and de Ministry of Brazil in the Bazilian-Spanish interuniversity cooperation programm. PHB 2008-0021-TA. *Role of Superresolution in Telemedicine*
- 6.3.3. CAP2009-1ª call with the title: *Biopsia Óptica por Endoscopia Confocal. Técnica no invasiva para zonas rurales indígenas del Brasil.*
- 6.3.4. Concesión de Becas. Según el BOC Nro. 023 Jueves de 4 de Febrero de 2010 – 602. de África Noroccidental y Universidades de Canarias y el Gobierno Autónomo de Canarias. Université Cheikh Anta Diop de Dakar, País: Senegal, Université d'Abomey Calavi (Cotonou), País: Rép. Du Benin y Universidad Nacional de Guinea Ecuatorial (UNGE), País: Guinea Ecuatorial.
- 6.3.5. Proyectos de cooperación entre Universidad de La Laguna e Israel. 2012.
- 6.3.6. Red Clara.net (e-Labs) with the U. Caribe-Barranquilla de Colombia. 2012.
- 6.3.7. Tempus Project : 530574-TEMPUS-1-2012-1-ESTEMPUS-JPCR. *Advanced Curriculum development in Telemedicine for Turkmenistan (MEDET).*
- 6.3.8. Senior IPAD.net 2012. FP7-ICT-2013-10. Project ID SEP-210088840
- 6.3.9. eOn Project. eHealth Online. European Commission Research. ICT Policy Support Programme Competitiveness and Innovation Framework Programme. Project Type: CIP-ICT-PSP-TN(EC). Proposal number: 620984.

IV. Impact

1. In Uganda, their initiatives with the use of VHF in walky-talkies to support midwives, 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.

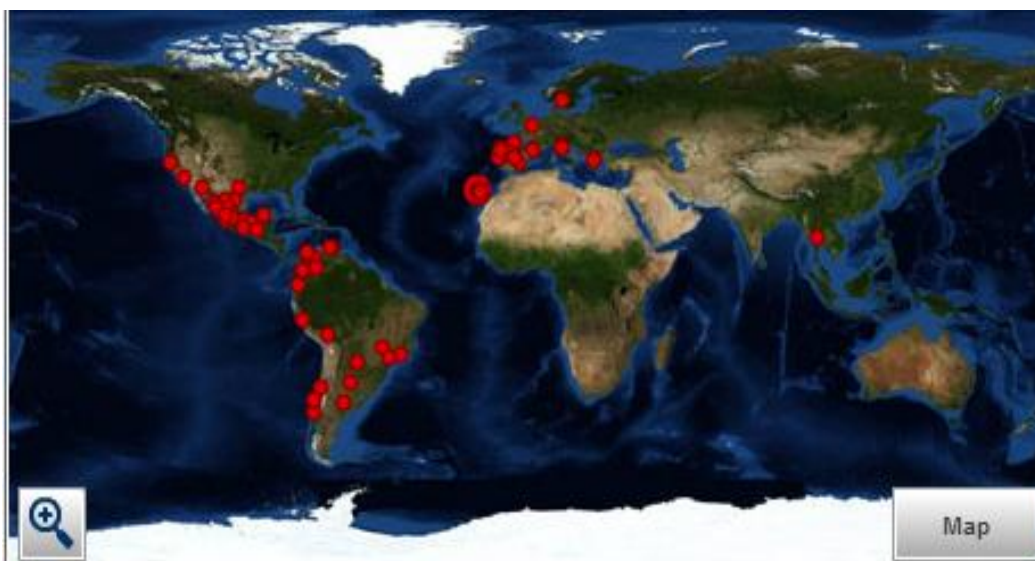
One of the main obstacles in the wide use of Telemedicine is the lack of specific training and qualifications in the health care environment (doctors, nurses, paramedics, managers, NGO's) as well as related areas from which they require support (computer science, telecommunications).

1. Relation Article Citation in international collaborations



<http://academic.research.microsoft.com/Author/53893146/o-ferrer-roca>

2. Geographic distribution of web visitors 1year:



3. 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 CATAL-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 evolutionary 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 acquire 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](http://www.seap.es/posters3;...En%20cach%C3%A9)

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 I **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](#)

www.teide.net/catai/xviii.../proceeding_index.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, ...

27. [UNESCO Chair in Telemedicine | 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 ...

28. [Endowed Professorships - Clinfowiki](#)

clinfowiki.org/wiki/.../Endowed_Professorships 7 Dec 2011 – **UNESCO Chair of Telemedicine** and Chair of **Telemedicine** of ...Dr.O.Ferrer-Roca [1], **Full** Professor of Pathology and President of the CATAI ... [PDF]

29. [Progress report 2009-2010 www.redkbs.com/...unesco/memoriaunesco09-1...](#)

Formato de archivo: PDF/Adobe Acrobat
Items 1 - 7 – Function / Title: responsible **UNESCO Chair Telemedicine** 1999-2010.**Full** Professor in Pathology. Responsible of the **Telemedicine** Training at the ...

30. [Unesco Chair In Telemedicine Videos - Mitra Videos :: Video ...](#)

videos.mitrasites.com/unesco-chair-in-telemedici... 20 elementos – List of videos about **unesco chair in telemedicine** collected ...

31. [UNESCO Chair for distance learning](#)

oeso.agenzia-pubblicita-italia.com/index.php? ...

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

32. [¿Es buena la facultad de medicina de la ULL? | Cut Fundings ...](#)

<https://unescotelemedicine.crowdmap.com/reports/view/54>

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

33. [Handbook of Telemedicine - Olga Ferrer-Roca - Google Libros](#)

books.google.es/.../Handbook_of_Telemedicine...

It is not a **full** treatise nor a complete recollection of all **telemedicine** applications or **telemedicine** basics. It was built ... **UNESCO Chair of Telemedicine**. President ...

34. [Spain \(467\) UNITWIN/UNESCO Chairs Programme Progress Report ...](#)
portal.unesco.org/.../en//.../pr_report_467.pdf

Formato de archivo: PDF/Adobe Acrobat

UNESCO Chair in Telemedicine ... of trained students **ULL** : 4; USA: 5. 4. ... The **UNESCO chair of Telemedicine** together with world associations such as the ITU ... [PDF]

35. [Spain/Espagne \(467\) UNITWIN/UNESCO Chairs Programme ...](#)
www.unesco.org/.../spain%20467_sv_en_07-09....

Formato de archivo: PDF/Adobe Acrobat

UNESCO Chair in Telemedicine ... Dr. O. Ferrer-Roca, UNESCO Chairholder,. University of La Producer and/or distributor: **ULL** (University La Laguna)... [PDF]

36. [HEALTHINF 2010](#)
upcommons.upc.edu/e.../HEALTHINF_2010.pd...

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 ... 2 Fellow 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. [\[teleestoscopio\] Diff of /paper/rtw-stethoscope.tex](#)

svn.ehas.org/viewvc.cgi/teleestoscopio/.../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 evolutionary 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 Kinesilología 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. XXI WINTER COURSE OF THE CATAI –March 2013 – Tenerife – Spain
2. STUDENTS EXCHANGE TO TENERIFE
3. STUDENTS TRAINING IN TENERIFE
4. UGANDA DOCTORS TRAINING IN EUROPE
5. SCHOLARSHIPS FOR IBEROAMERICAN BIOENGINEERS
6. EU to IBEROAMERICA INTERCHANGE FOR SUPPORT.
7. TELEMEDICINE MASTER FOR DEVELOPING COUNTRIES
8. MASTER OF TELEMEDICINE AT DISTANCE.
9. TRAINING IN TUCKMENISTAN
10. VIRTUAL LABS IN SUDAMERICA

VI. Development prospects

The activities of the Chair started on 1999 and have expanded during the period 2011-2013 to the following countries:

1. – Brazil and the Norwest Amazonia Area.
2. – Cabo Verde islands
3. – Israel
4. – Columbia- Barranquilla
5. – Senegal
6. -- Republic. Du Benin
7. -- Guinea Ecuatorial
8. Tuckmenistan

Annex 1

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 (<i>Please specify</i>)	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

Annex 3

Funding sources

Funding source	Type of Organization / Institution	Period	Amount US\$
UNESCO Contribution		2011/13	0
Other contributions: <i>Please specify, for each contribution:</i> <i>Institution, City, Country</i> ■	Host Institution	2011/13	1500
	Partner university/ institution	2011/13	3000
	Governmental body		
	Other public institution <i>Please specify</i>		
	UN Agencies		
	IGO's		
	NGO's: CATAI	2011/13	20000
	Industry		
	Other private sources <i>Telefónica SL -Spain</i>	2011/13	90000
TOTAL		2011/13	114500 €

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 superresolución, 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 gamificación 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. Healthcloud, icloud–Crowdsourcing in TELEMEDICINE

Publisher(s): CATAI editions 2011 Tenerife. Canary Islands. Spain ISBN: 978-84-615-6145-2

Year: 2012

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)

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 “ Crowdsourcing” 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.

El principal objetivo de la enseñanza de la Telemedicina es capacitar al estudiante en los aspectos de control de calidad de la medicina a distancia.

El resultado es conseguir médicos documentados en salud-electrónica (competencia general) y conocedores de las subespecialidades informáticas en medicina (competencia específica) -pato-informática, bioingeniería telemedicina, cirugía robótica, onco-grid, minería de datos.

Para ello los estudiantes han de formarse en los aspectos de interoperabilidad, estandarización, accesibilidad, conectividad y protección de datos en gestión de documentos, telemetría y servicios ofrecidos a distancia.

3. Title: **i-Phone & 4G mobile phone in Telemedicine.**

Publisher(s): CATAI 2010 Ed. Ferrer-Roca o. Ed.ISBN 978-84-614-5997-1 canary Islands

CATAI- Tenerife-Spain

Year: 2011

Number of pages: 54

Type of document/material:

- Book X
- Periodical
- Others (*specify, please*)

Teaching/learning material

Language(s): >Bilingual (English/Spanish)

Main keywords (4 or 5): 4G, Smart-GRID, aplicacionesH2H

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 Healthcare: 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 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 médico altamente cualificado. Un coste enorme se pierde en el sistema en la interface 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 y por eso 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.

4. Title: **i-Phone in Telemedicine. e-Health 4.0**

Publisher(s): CATAI 2010 Ed. Ferrer-Roca o. Ed.ISBN 978-84-614-5997-1 canary Islands
CATAI- Tenerife-Spain

Year: 2011

Number of pages: 22-30

Type of document/material:

- Book X
- Periodical
- Others (*specify, please*)

Teaching/learning material

Language(s): English

Main keywords (4 or 5): iPhone, iPad, iPod, Telemedicine, Vital signs, Image diagnosis, hand-held devices.

SHORT ABSTRACT

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

The quick introduction of iPhone, iPad, iPod products in medical delivery, together with the approval of several diagnostic-prognostic-distant care –management applications by the FDA, assure a non-stop deployment in modern medicine of mobile applications starting the i2i era. The present paper not only list approved application but already developed applications together with future deployments.

5. Title: Ultrasound in Telestroke- i-Phone services.

Publisher(s): CATAI 2010 Ed. Ferrer-Roca o. Ed.ISBN 978-84-614-5997-1 canary Islands
CATAI- Tenerife-Spain

Year: 2011

Number of pages: 17-21

Type of document/material:

- Book X
- Periodical
- Others (*specify, please*)

Teaching/learning material

Language(s): English

Main keywords (4 or 5 Teleictus, Ultrasound, iPhone, iMedicine, 3DUS, Telemedicine.

SHORT ABSTRACT

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

The project presented is dealing with the use of the ultrasonography in the field of neurology with portable solutions in two main applications: diagnosis of carotid artery stenosis and diagnosis and treatment of the ictus. The project aims to use the telemedicine and compares the results with the regular protocol at the hospital to see if the times and diagnosis can be reduced.

6. Title: Placental Virtual Biopsy

Publisher(s): CATAI 2010 Ed. Ferrer-Roca o. Ed.ISBN 978-84-614-5997-1 canary Islands
CATAI- Tenerife-Spain

Year: 2011

Number of pages: 31-37

Type of document/material:

- Book X
- Periodical
- Others (*specify, please*)

Teaching/learning material

Language(s): English

Main keywords (4 or 5) Virtual Biopsy, Placenta, 3D-US, Hand-held US.

SHORT ABSTRACT

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

The present study describes the technique of PVB (placental virtual biopsy) and its future improvements, establishing the requirements for reproducible measurements and considering their extension to iPhone or hand-held US devices. From the data collected FI (Flow Index) was related with foetal circulation, while VI (Vascularization Index) was supposed to be maternal-related. The 3D-US Power Doppler had been diagnostic to detect GD with an increase in FI>45 and number of vessels (>30%). Whether VI changes could predict FI or fetal changes is a matter of discussion...

7. Title: Optical biopsy data base content retrieval with a smartphone

Publisher(s): CATAI 2010 Ed. Ferrer-Roca o. Ed.ISBN 978-84-614-5997-1 canary Islands

CATAI- Tenerife-Spain

Year: 2011

Number of pages: 44-48

Type of document/material:

- Book X
- Periodical
- Others (*specify, please*)

Teaching/learning material

Language(s): English

Main keywords (4 or 5) Medical image search, CBIR, multimedia, images, metadata, search and retrieval, standard, MPEG, JPEG, MPQF, JPSearch, query format.

SHORT ABSTRACT

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

An optical biopsy (OB) is an optic diagnostic method capable to analyze the tissue in surface and in deepness without the need to extract it from the body. When it is obtained through confocal laser endomicroscopy (OB-CLE), the optical biopsies are taken by endoscopists, not trained in microscopic morphology which is the domain of the surgical pathology. In order to gain diagnostic confidence, the endoscopists could consult the images to a pathologist or could query an OB database. This paper presents a case-based computer-aided diagnosis system that assists medical personnel in the interpretation of OB-CLE images. The system design enables operation from a smartphone. Users are able to retrieve information about precedent diagnostics by providing an example OB image for content based image retrieval (CBIR), by using keywords, or by filtering different fields for structured retrieval. To effectively ensure interoperability with potential third-party applications the system provides a standard interface based on ISO/IEC 15938-12:2008 (MPEG Query Format) and ISO/IEC 24800 (JPEGSearch)...

8. Title: Quality Control in Telemedicine - "CE" Label.

Book edited by: Georgi Grasczew, ISBN: 978-953-307-159-6, Publisher: InTech, Publishing date: March 2011

<http://www.intechopen.com/articles/show/title/quality-control-in-telemedicine-ce-label>

Year: 2011

Number of pages: 9 (pp. 261 – 270)

Type of document/material:

- Book X
- Periodical
- Others (*specify, please*)

Teaching/learning material X

Language(s): English

Main keywords (4 or 5):

SHORT ABSTRACT

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

As I explained previously [1], the European Directive for Medical Devices (MDs) and equipment, the DIR 2007/47/EC [2], aims to achieve the goal of quality of medical delivery at a distance, providing comparable demands in telemedicine or distance support as in face-to-face healthcare.

The transposition into Spanish law of the EU directive was the Royal Decree RD-1591/2009, dated 16 October 2009 [3], which regulates the use of medical devices called “PRODUCTOS SANITARIOS (PS)” (= health-care products) in Spanish, which came into force on the 21st of March 2010. As from that date, the CE-Label is always required in all “MDDS or Medical Device Data Systems” according to the FDA.

In this article, we will explain the philosophy behind the EU-Directive and the Spanish RD with respect to quality in medical assistance. We will also try to demonstrate that the same norms apply to Telemedicine, and finally we will underline the importance of training medical and health-care workers in those aspects linked to the Body of Knowledge of Telemedicine as well as in the essential safety aspects linked to medical assistance. These professionals may indeed be guilty of infringing the law and liable if the law is not applied. As it is well known, ignorance of the law is not an excuse. This has indirect consequences on the training and licensing of health-workers.

9. Title: Grid Technology in Telepatology and Personalised Treatment.

Publisher(s): Applications for Telemedicine Services & Delivery Editor: Dr. Ekaterina Kldiashvili. Georgian Telemedicine Union, Georgia IGI Global Publ. Philadelphia. USA.

[Grid Technologies for eHealth: Applications for Telemedicine Services & Delivery](#)

Year: 2011

Number of pages: 10 (pp. 117 – 128)

Type of document/material:

- Book X
- Periodical
- Others (*specify, please*)

Teaching/learning material X

Language(s): English

Main keywords (4 or 5): Patho-informatics, solo-pathology, quality control, automatic pathology, LBD techniques, MPEG, JPEG, ISO standards, GRID, PIMS

SHORT ABSTRACT

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

Histopathology requires automation, quality control and global collaborative tools. Usually, the PIMS (Pathology information management system) automates samples, images and reports and progressively incorporates the PI (Pathology informatics), the D-PATH (digital pathology), e-PATH (electronic pathology), the PPH (Patho-pharmacology), virtual autopsy (VA) and all type of translational researches in the PMIS (pathology management information system).

Not being subject to a specific standard, quality control follows ISO-13485:2003 on services and medical devices, ISO 17025:2005 on technical aspects; and ISO-15198:2003 for automate and quantifiable procedures that being medical software is affected by the new European Directive on medical devices. For non-standardized procedures, consumers' requirements for tests and calibrations are essential.

The paper analyses the non-standardized procedures: VS (Virtual Slides), GRID networking and Literature Based Discovery as tools for knowledge discovery of relevant relationships on image-diagnosis and personalized treatments. Standardized procedures available for search and annotation are the ISO/IEC 11179 Information Technology Metadata Registries specification, the ISO/IEC 13250:2003 for topics maps or MPEG-7 & 21 for images and the ISO/IEC 24800-3 for JPEG query search.

The forthcoming innovations are prepared to quality certify the so called “solo-pathology” robotic labs, supported by telepathology to reduce diagnostic errors and carrying out a relevant task on personalized treatment through GRID technology. In this environment the JPEG query searches to play a relevant role on images which metadata can be annotated on natural language.

10. Title: E-Health Systems Quality and Reliability: Models and Standards.

Publisher(s): <http://www.igi-global.com/requests/details.asp?ID=579>.

Year: 2011

Number of pages: 23 (pp.220 – 243)

Type of document/material:

- Book X
- Periodical
- Others (*specify, please*)

Teaching/learning material X

Language(s): English

Main keywords (4 or 5):

SHORT ABSTRACT

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

A systematic gathering of glimpses related to future healthcare reveal at least two trends which might be interpreted as proposals of what the future of healthcare might look like. One trend embodies increased uses of nanotechnology, individualised drugs, cell-based computing and microchip-enhanced brains. The other one relates to emerging e-health care provision services, like telemedicine and e-health. Notwithstanding the previously mentioned prospects, both healthcare professionals and patients remain increasingly dissatisfied as a result of nebulous expectations and fundamentally different views with respect to the content of quality in healthcare as related to the reliability of systems and services.

Quality and reliability are thought to be measurable at least in specific domains. Thus, our knowledge on the subject could be compared with a fleeting glance. New ways of thinking should evolve based on what we actually know and that which we do not understand. The safest way to achieve this is to juxtapose the criticism with the existing body of knowledge. Unilateral approaches, for instance those dealing only with continuous quality improvement or reliability assurance, do not work. Instead, a broad view of all ideas and tools used should be applied.

All the aspects for e-health systems design are discussed in this book to formulate epistemic criteria for evaluation purposes. The purpose of the book is to provide a comprehensive coverage of the ideas of quality assurance and continuous quality improvement in e-health. With respect to quality assurance, the objective will be achieved by including a review of the methods used for quality assurance, including both advantages and disadvantages. As far as continuous quality improvement is concerned, a critical presentation of great thinkers' ideas will be included. Finally, new topics like quality education in healthcare and patient safety will be explored. Furthermore, an overview of reliability modelling in e-health networks will be provided which includes various reliability evaluation aspects, such as network, system, software and diagnosis.

11. Title: Three-Dimensional Ultrasound in the Study of Chromosomopathy Markers.

Publisher(s): World Global Congress. Barcelona

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

Year: 2011

Number of pages: 2

Type of document/material:

- Book
- Periodical
- Others (*specify, please*)

Teaching/learning material X

Language(s): English.

Main keywords (4 or 5):

SHORT ABSTRACT

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

Classically, first and second term ultrasound markers were based on multiple anthropometric data, both morphological and functional, but the most significant can be summarized as follows:

NUCHAL TRANSLUCENCY THICKNESS

HYPOPLASIA-AGENESIS OF THE NASAL BONE

The applications of three dimensional (3D) ultrasound in pregnancy, especially at an early stage, can be summarized as:

Detection of chromosomopathy between weeks 10th and 14th of pregnancy.

Analysis of possibilities to identify and validate markers of chromosomopathy

Detection of embrionic / fetal abnormalities

Detection of adnexal abnormalities

Investigation on new markers (currently under investigation and at the validation stage).

Now, we have grounds to state that 3D ultrasound has clinical utility, established by consensus in the field of obstetrics.

Current expert opinion is that 3D ultrasound has certain advantages over two-dimensional ultrasound, because:

It establishes diagnoses and classification of anomalies

It constitutes a tool to explain the significance of an anomaly

It provides objective information on the malformation under study.

Comparatively, diagnostic sensitivity before 23 weeks of gestation is 85% for 3D ultrasound versus 30% for two-dimensional ultrasound.

12. 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).

13. Title: Solo-Medicine in Optical Biopsies

Publisher(s): Proceeding HEALTHINF 2011 Edited by: V Traver, A Fred, J Filipe, H

Gamboa. ISTICC isbn: 978-989-8425-34-8

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

Year: 2010

Number of pages: 5 (pp. 441-445)

Type of document/material:

- Book X
- Periodical

- Others (*specify, please*)

Teaching/learning material

Language(s): English & Spanish.

Main keywords (4 or 5): Solo-medicine, Optical biopsy, Confocal laser endomicroscopy, CLE, CBIR, Medical image retrieval, Query by image, ISO-15938-12, MPEG query format, MPQF, ISO 24800-3, JPSearch, JPEG query format, JPQF, Artificial intelligence, Multimedia standard.

SHORT ABSTRACT

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

A way to practice Telemedicine is to access a data-base capable to assist you in medical procedures (diagnosis, treatment and prognosis), similarly to consult a book or to ask a college. In many countries the lack of specialists and training capabilities demand to practice solo-medicine, that in the case of surgery require robots capable to induce anesthesia or help in vision or handling instruments. A relevant case is the diagnostic self-training requirements for optical biopsies (OBs) obtained with confocal laser endomicroscopy (CLE) or the assistance in the diagnosis of pathology slides. In both cases it is required a training set of digital images against which to compare the question case by means of image-queryformat. The present paper present a content-based image retrieval system (CBIR) based on the MPEG Query Format Standard in order to provide a set of similar pictures and the corresponding diagnosis to help on diagnosis or just to train the doctor. The paper defined the Image Solo-Medicine Paradigm (ISMP) architecture merging medical image standards and MPEG and JPEG standards. It tested the solution with normal, and benign colon OBs with 90% congruency. The ISMP is of particular interest viewed the proliferation of iPhone medical applications aiming to train doctors and support medical decisions.

14. 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.

15. Title: Grid Technologies for E-Health: Applications for Telemedicine Services and Delivery

Publisher(s): IGIC GLOBAL (2011)

Producer and/or distributor (with address):

Year: 2011

Number of pages: 117-128 (12 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)

The book will provide an overview of information and communication technologies that might affect patient safety in healthcare. The proposed book intends to provide a compendium of terms, definitions and explanations of concepts, processes and acronyms. Additionally, it will present chapters (each chapter consisting of 7,000-10,000 words) authored by leading experts offering an in-depth description of key terms and concepts related to different areas, issues and trends in patient safety in e-health.

16. 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.

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 TelemedicineProducer and/or distributor (*with address*): CATAI Ed. ISBN 84-609-2162-X

Year: 2004-11

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 Bioengineering 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: 2004-11

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, Electronical 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: 2005-11

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: 2006-11

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: 2007-11

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. Teleophthalmology in the HUC. Distance learning in surgery. Quality control and quality assessment medical device standards. Medical image modalities. Cardiac frequency and detection of cardiac events. Image stictchin in medicine. Telepsychyaty 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: 2008-11

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: 2008-11

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: 2009-11

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

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 aplicaciones H2H (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 Healthcare: 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

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 “ Crowdsourcing” 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.

Title of activity: WEB OF THE TELEMEDICINE GROUP

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

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

Year: 1997-2012

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: 2008-2013

Teaching/learning material

Information material X

Type of material:

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

Duration: Always updated. 722 posts (156 posts in 2012)

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: 2010-2013

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 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: 2011-2013

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 subscribers.

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: 2011-2013

Teaching/learning material

Information material X

Type of material:

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

Duration: Always updated. 140 Posts.

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

Duration: Everyday participations.

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: 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.

9. 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: 2000-2011

Teaching/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.uil.es/>

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

Year: 2006-2011

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 http://www.ull.es/viewullnew/institucional/prensa/Noticias_ULL/es/2078715

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)

- La cátedra de Anatomía Patológica de la Universidad de La Laguna, ostentada por la doctora Olga Ferrer-Roca, ha organizado el XXIV Curso de Análisis de Imagen del CATAI (Curso Avanzado Tecnológico de Análisis de la Imagen), una iniciativa muy consolidada que pretende exponer a alumnos y profesionales del sector los últimos avances en telemedicina, motivo por el cual, además, este centro académico es acreedor de una cátedra UNESCO en la misma materia. El curso de este año comenzará el próximo lunes, 28 de marzo en la Facultad de Medicina, donde se impartirá hasta el 3 de abril, y estará dedicado a aplicaciones médicas para iPhone y móviles 4G.

3. Title **El XXV curso de Telemedicina de la ULL analiza las mejoras tecnológicas en la asistencia sanitaria a distancia**

http://www.ull.es/viewullnew/institucional/prensa/Noticias_ULL/es/2251327

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)

El XXV Curso Avanzado Tecnológico de Análisis de la Imagen de la Universidad de La Laguna, fue inaugurado ayer, lunes 12 de marzo, en la Facultad de Medicina. Durante este encuentro se expondrán las novedades en el sector de la telemedicina y se analizará cómo pueden valerse los profesionales médicos de las nuevas tecnologías de la información y la comunicación (TICS), para hacer más eficiente la asistencia a distancia

4. 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

2011 - Title of activity: **4G Mobile Phones in TELEMEDICINE**

XIX Winter Course of CATAI

XXIV Image Analysis Course of the ULL

28th March-3th April 2011

4G Mobile Phones in TELEMEDICINE

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/cm/pat/isdqp/>;

Course recognized by EFMI (European Federation of Medical Informatics)

<http://www.efmi.org/>; <http://www.gsf.de/imei/efmi/>

80 Teaching hours

Monday 28th March, 2011

16-20h. *Welcome to the Course.* **M. Mar Julios**, Chancellor of Industrial Development and Technological Innovation. **Prof. Dr. E. Domenech** Head of the University of La Laguna (ULL), Tenerife. **Prof. Dr. L. Moreno Ruiz**. Research Vice-Chancellor, Univ. of La Laguna, Tenerife. *Service Oriented architecture-*

SOA for National Cancer Center Registry, **Prof. Dr. Ch. Meinel**, Hasso-Plattner Institute, Potsdam University, Germany, <http://www.hpi.uni-potsdam.de/>

Tuesday 29th March, 2011

16-20h. *iPhone system integration in home-care*. **Prof. Dr. J. Roca**. ICT. Hospital Clínic Barcelona. <http://www.idibaps.upb.edu/cat/home.php>. *Interpath a pathology application with iPhone*. **Prof. H. Danielsen**. Director Inst. Medical Informatics. Radiumhospitalet. Oslo University Hospital. <http://www.room4.eu/interpath.htm>

Wednesday 30th March, 2011

16-20h • *Telestroke services* **Prof. Dr. JV Sanchez Andres**- Prof. Physiology. ULL. *Ultrasounds in the Telestroke- iPhone services*. **Dr. J. Carneado Ruiz & JA Rojo Aladro**. Neurology section. Infanta Elena Hospital in Madrid & Clinic Hospital of Tenerife.

Thursday 31th March, 2011

16-20h • *Telemedicine with mobile phones*, **Prof. Dr. O. Ferrer Roca**, UNESCO Chair of Telemedicine. ULL. <http://www.teide.net/catai>. *Virtual sonography to detect and follow up risk pregnancies*. **Prof. Dr. JM Troyano Luque**. Prof. Gynecology, Sono-department University Hospital. Tenerife. Canary Islands.

Friday 1st April, 2011

16-20h •; *Diagnostic DICOM images in 4G mobile phones*. **Prof. Dr. A. Horsch**. Technical Univ. Munich. Germany. <http://www.efmi-wg-mip.net/>. *Certified MMS in healthcare*. **Dr. S. Sapena Soler**. Lleida. <http://www.lleida.net> ; <http://www.doctormms.com/>

Saturday 2nd April, 2011

16-20h. *CBIR – Optical biopsy data base content retrieval in 4G mobile phones*. **Prof. Dr. R. Tous**. Univ. Politec. Catalunya UPC, Computer architecture depart. <http://people.ac.upc.edu/rtous/docencia.html>. *Quality control in the medical applications for 4G mobile phones*. **Prof. Dr. A. Kastania**, Found Biomedical Res. Academy of Athens. <http://www.bioacademy.gr/EN.htm>.

Sunday 3rd April, 2011

16-20h. *Students presentation of the IT works*. Coordinator: **Dr. O. Ferrer-Roca**. *Telemetry*, **Mr. J. L. López**. COMITAS Communications. <http://www.comitas.es>. *Telesurgery*. **Prof. Dr. G. Graschew and V. Guerkan**, Clinical university of the Charité, Berlin, <http://www.rnk-berlin.de/op2000>. ESA- European Space Agency, ESTEC- European Space Research and Technology Centre, Noordwijk, Holland, <http://www.esa.int/>

Workshops: Everyday from 8 to 15 h.

Neuroimaging (Prof. Dr. JL Gonzalez-Mora, Antonio, Lic. F. Rodríguez Hernández; Medicine, Dr. G. Navarrete García. Psychologies, Lic. C. Modroño Pascual, Mathematics y Psychologies); 2. Robotic surgery and intelligent operating room (Prof. Dr. A. Alarcó & Dr. A. Bravo). 3. Digital signature in 4G mobile phones; 4. Portable ultrasonography; 5. Web control of diabetes; 6. Wearable computers; 7. Stroke image control with 4G mobile phones.

2012 - Title of activity: HEALTH CLOUD, I-CLOUD & CROWDSOURCING in TELEMEDICINE:

XX WINTER COURSE OF CATAI

XXV IMAGE ANALYSIS COURSE OF THE ULL

12th March-18th March 2012

HEALTH CLOUD, ICLOUD & CROWDSOURCING IN TELEMEDICINE

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/cm/pat/isdqp/>;

Course recognized by EFMI (European Federation of Medical Informatics)

<http://www.gsf.de/imei/efmi/>

80 Teaching hours

MONDAY 12TH MARCH, 2012

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. *Healthcloud security and*

acceptance, **Prof. Dr. Ch. Meinel**, Hasso-Plattner Institute, Potsdam University, Germany, <http://www.hpi.uni-potsdam.de/>

TUESDAY 13TH MARCH, 2012

16-20h • *Healthcloud in Home-care*. **Prof. Dr. J. Roca**, ICT. Clinic Hospital Barcelona. <http://www.idibaps.ub.edu/cat/home.php>. *Crowdsourcing businesses*. **M. Hudecek**, Maintop Businesses, Czeck Republic. <http://www.maintop.biz/> ; <http://www.ideaswatch.com/>

WEDNESDAY 14TH MARCH, 2012

16-20h • *Healthcare in the Cloud*. **J. Gonzalez-Tarrio**, Brocade S. Jose. California. USA. <http://www.brocade.com/index.page>. *What is Healthcloud?* **J. Bru-Sanchis**, Local ministry of Health. Valencia Community. <http://www.telvent.com/es/>

THURSDAY 15TH MARCH, 2012

16-20h • *Healthcloud and crowdsourcing in Medicine*, **Prof. Dr. O. Ferrer-Roca**, UNESCO Chair of Telemedicine, ULL. <http://www.teide.net/catai>. *Healthcloud in gynecology*. **Prof. Dr. J.M. Troyano**, Prof. Gynecology, US-department University Hospital, Tenerife, Canary Islands. *Cloud teleconsulting*. **Ing. D. Gonzalez**, Unesco Telemedicine, Canary Islands. <http://catai.net/blog/acerca-de-este-blog/>

FRIDAY 16TH MARCH, 2012

16-20h • *Healthcloud and cloud sourcing in radiology*. **Prof. Dr. A. Horsch**, Technical Univ. Munich. Germany. <http://www.efmi-wg-mip.net/>. *Security in the Healthcloud* **D. E. Aced**, Data Protection Agency, Madrid. <https://www.madrid.org/apdcm>

SATURDAY 17TH MARCH, 2012

16-20h • *CBIR – Optical biopsy data base content retrieval on the cloud*. **Prof. Dr. R. Tous**, Univ. Politec. Catalunya UPC, Computer architecture department. <http://people.ac.upc.edu/rtous/docencia.html>. *Outsourcing in healthcare*. **Prof. Dr. A. Kastania**, Athens University of Economics and Business, Greece. <http://www.aueb.gr/users/kastania/researchank.html>. *Code of ethics in healthcloud*. **Prof. Dr. A. Moutzoglou**, MA PhD Chairman of the Hellenic Society for Quality & Safety in HealthCare (HSQSH), <http://www.bioacademy.gr/>

SUNDAY 18TH MARCH, 2012

16-20h • *Students presentation of the IT works*. Coordinator: **Dr. O. Ferrer-Roca**, *Telemetry*, **Mr. J. L. López**, COMITAS Communications. <http://www.comitas.es>. *Telesurgery*. **Prof. Dr. G. Grasczew** and **V. Guerkan**, Clinical University of the Charité, Berlin, <http://www.rk-berlin.de/op2000>. ESA- European Space Agency, ESTEC- European Space Research and Technology Centre, Noordwijk, Holland, <http://www.esa.int/>

WORKSHOPS: Everyday from 8 to 15 h.

Neuroimaging (*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. COWs-computer on wheels (*Mr. Bob Pyke, Ohio, USA*) 4. Portable ultrasonography; 5. VNC (Virtual network computing). 6. iPhone telepathology with SkyLight. 7. Dropbox cloud.

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.rk-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/primeraguia_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/
http://www.ull.es/viewullnew/institucional/prensa/Noticias_ULL/es/2337324