

## UNESCO CHAIR REPORT FORM



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TITLE OF THE CHAIR      *Training and empowering human resources for health development in resource-limited countries*

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HOST INSTITUTION      **University of Brescia, Italy**  
**Website:** <https://www.unibs.it/ricerca/unesco-chair-cattedra-unesco>

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DATE OF ESTABLISHMENT OF CHAIR      

- **Signature of the agreement is dated March 2014**
- **Renewed on July 11<sup>th</sup>, 2018 for the period 2018-2022**

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PERIOD OF ACTIVITY UNDER REPORT      **January – December 2019**

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REPORT ESTABLISHED BY      **Prof. Francesco CASTELLI – Chairholder**



Professor of Infectious Diseases and Deputy Rector,  
University of Brescia (Italy)

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## 1. EXECUTIVE SUMMARY

**Major outcomes, results and impact of the Chair, including on national policies, in relation to its objectives as stated in article 2 of the chair agreement (between the institution and UNESCO) (not exceeding 300 word)**

Chair's objectives (article 2 of the Chair agreement) are:

**A) To provide training on Global Health at the undergraduate and post graduate level to students, health professionals and representatives of NGO**

- I. Undergraduate training on global health for medical students and NGOs staff was implemented in 5 different modules in the period April-June 2019;
- II. The Graduate Course in Global Health has taken place at the University of Brescia from February to May, 2019).
- III. The Master in Tropical Medicine and Global Health, co-organized by the Universities of Florence and Brescia, has delivered 60 credits in the Academic Year 2018-19
- IV. Undergraduate medical students from the University of Brescia have spent 1 month in Kampala (Uganda) at Mulago Hospital, upon agreement with Makerere University

**B) To develop and expand collaborations in the field of global health with higher education Institutions from resource-limited countries**

- I. Collaborative actions in the field of global health have taken place with Kwame N'Krumah University of Science and Technology (KNUST, Kumasi, Ghana)

**C) To promote operational research on HIV/AIDS, tuberculosis and malaria in Europe and highly endemic countries**

The Chair has continued its research, with a specific focus on:

- I. Migration Medicine
- II. Health in developing countries
- III. Poverty-related diseases including TB, HIV/AIDS and malaria

**D) To foster networking, capacity development and sharing of knowledge and good practices**

- I. Promotion of the culture of Sustainability (SDGs – UN 2030 Agenda) by completing the cycle of specific workshops, open to academic staff, students and the general population. The Chair has also contributed to the creation of the University Documentation and Research Centre for the Implementation of the 2030 UN Agenda
- II. The Chair ha co-organized, together with *Medecins sans Frontiers* Italy and *Medicus Mund Italy*, the Conference “*Epidemie in regioni a clima tropicale. Strategie di*

*prevenzione, attuali orizzonti nell'ambito delle vaccinazioni e strategie di controllo dell'epidemia", Brescia, 7th March 2019, addressed to medical students*

- III. The Chairholder has presented in many national and international conferences on topics related to the Chair's mission

**E) To closely cooperate with UNESCO**

- I. Participation to the Interministerial Meeting on inclusion and mobility in higher education, held at UNESCO Headquarters, Paris 13th November 2019;
- II. Active participation at the meetings of the Italian UNESCO Chairs Group 1 (CONIUS: Cultural Identity, Immigration, Human rights and Health), including 11 UNESCO Chairs from different Italian Universities.
- III. The Chair has operated, together with other UNESCO Chairs to implement the project *"Education and social work in Tanzania and Cambodia"*, in collaboration with Ruaha University, Iringa, Tanzania and St Paul Institute, Takeo, Cambodia

## 2. ACTIVITIES

Overview of activities undertaken by the chair during the reporting period, by objective (see Executive Summary)

### A) TO PROVIDE TRAINING ON GLOBAL HEALTH AT THE UNDERGRADUATE AND POST GRADUATE LEVEL TO STUDENTS, HEALTH PROFESSIONALS AND REPRESENTATIVES OF NGO

<p><b>I) TRAINING (SHORT TERM) (ONGOING ACTIVITY)</b></p>	<p>According to the approved plan of operation, the UNESCO Chair has organized a 10-hour elective course on “<b>Tropical medicine and global health</b>”, addressed to undergraduate medical students and staff from the civil society (NGOs, etc.). The course took place in 5 distinct 2-hour lectures in the period April –June 2019. University credits (CFU: <i>crediti formativi universitari</i>) are offered to students attending 100% of the Course. The programme of the Course is attached (Annex 1). The Course is intended to be mandatory for students willing to participate in the <b>stage at Makerere University, Kampala</b> (Uganda, see below), that has an official agreement with University of Brescia to host 10-15 medical students/year willing to gain first-hand experience in the health systems in developing Countries</p> <p>In 2019, 26 students attended the elective Course.</p>
<p><b>II) EDUCATION (LEADING TO CERTIFICATE) (ONGOING ACTIVITY)</b></p>	<p>In 2019, the Chair has organized the XXIII edition of the <b>Graduate Course on Global Health</b>, coordinated by the Chairholder Prof. F. Castelli and by Prof. A. Matteelli. The Course is recognized as the <b>Core Course of the TropEd European Master in International Health</b> (<a href="http://www.troped.org">www.troped.org</a>). Many Professors from other Institutions belonging to the Tropd network and national and International Non-Governmental Organizations participated in the Course. A University certificate is issued at the end of the Course. The Program of the 2019 Course (February – May 2019) is attached (Annex 2).</p> <p>In 2019, 15 students (physicians, nurse, pharmacists) attended the Course and were awarded the final Certificate</p>

<b>III) EDUCATION (LEADING TO CERTIFICATE) (ONGOING ACTIVITY)</b>	<p>The Chair also organizes, together with the Universities of Florence and Brescia, the <b>Italian Master in Tropical Medicine and Global Health</b>, that delivers 60 credit to graduated students willing to gain experience and skills to work in co-operation activities in developing Countries.</p> <p>In 2019, 6 students attended the Master</p>
<b>IV) STAGE OF STUDENTS IN DEVELOPING COUNTRIES (ONGOING ACTIVITY)</b>	<p>Upon agreement between the University of Brescia – UNESCO Chair and Makerere University, undergraduate medical students from the University of Brescia (4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> year) have spent 1 month in Kampala (Uganda) at Mulago Hospital to gain first-hand insight on the health systems in resource-limited countries</p> <p>In 2019, 18 medical students participated to the programme</p>

#### **B) TO DEVELOP AND EXPAND COLLABORATIONS IN THE FIELD OF GLOBAL HEALTH WITH HIGHER EDUCATION INSTITUTIONS FROM RESOURCE-LIMITED COUNTRIES**

<p>I. Collaboration with Kwame N’Krumah University of Science and Technology (KNUST, Kumasi, Ghana) and HopeXChange Medical Centre (HXMC)</p>	<p>On 26th October 2017 the University of Brescia (UniBS) and KNUST signed an MoU for developing and enhancing health research activities on Tropical Diseases, and more generally, on Medicine. The UNESCO Chair and the Department of Tropical and Infectious Diseases of the University of Brescia started operating in Kumasi since May 2016. In line with this initial MoU, all along 2018 and 2019, a research project about “Malaria and Gender” has been conducted by a UniBS PhD student</p> <p>The implementation of the study has been accompanied by multiple visit by the senior academic staff of UniBS – UNESCO Chair, who also has provided formal and informal trained activities to local staff and students. The study results have been already presented at the annual meeting of the Italian UNESCO Chairs (Quaresima V. et al. Is <i>Plasmodium falciparum</i> malaria incidence and severity in holo-endemic areas affected by gender? Good Health, Quality Education, Sustainable Communities, Human Rights, Florence University Press, 2019, pag. 57-68) and are now submitted to and international peer-reviewed Journal (Infectious Diseases of Poverty).</p>
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## C) TO PROMOTE OPERATIONAL RESEARCH ON HIV/AIDS, TUBERCULOSIS AND MALARIA IN EUROPE AND HIGHLY ENDEMIC COUNTRIES

I) RESEARCH	<p>The Brescia UNESCO Chair carries out research in the following fields:</p> <ul style="list-style-type: none"> <li>- Migration medicine</li> <li>- Poverty-related diseases including TB, malaria and HIV/AIDS</li> <li>- International health</li> <li>- Capacity building</li> </ul> <p>See below for the list of peer-reviewed papers published in 2019 by the Chairholder prof. Francesco Castelli and other staff of the Chair</p>
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C.1 Publications/Multimedia Materials			
(Major publications and teaching/learning materials)			
Please tick relevant fields of output and indicate volume of output		[TICK]	[No]
	BOOKS	<input type="checkbox"/>	
	BOOKS (EDITED)	<input type="checkbox"/>	
	BOOKS (CHAPTERS)	X	4
	MONOGRAPHS	<input type="checkbox"/>	
	RESEARCH REPORTS	<input type="checkbox"/>	
	JOURNAL ARTICLES (REFEREED)	X	19
	CONFERENCE PROCEEDINGS (INT.L)	X	4
	OCCASIONAL PAPERS	<input type="checkbox"/>	
	TEACHING/LEARNING MATERIAL	<input type="checkbox"/>	
	MULTIMEDIA MATERIALS (CD-ROM)	<input type="checkbox"/>	
	MULTIMEDIA MATERIALS (VIDEO)	<input type="checkbox"/>	
	MULTIMEDIA MATERIALS (OTHER)	<input type="checkbox"/>	

Give details of major publications and materials including full citations

I) THESES (2016)	TITLE	SUPERVISOR	STUDENT
	Trasmissione verticale dell'HIV in un paese ad alta endemia e risorse limitate: studio osservazionale retrospettivo su una popolazione rurale in Mozambico.	Prof. Castelli	Letizia Previtali
	Terapia eradicante dell'epatite C con i nuovi farmaci antivirali ad azione diretta (DAA): analisi costo-beneficio e impatto sul sistema sanitario regionale.	Prof. Castelli	Luca Molinero
	Epidemia di legionellosi dell'autunno 2018: studio epidemiologico dei pazienti valutati presso l'ASST Spedali Civili di Brescia	Prof. Castelli	Alessandro Peri
	Studio osservazionale dell'andamento dei markers infiammatori in pazienti HIV positivi dopo l'inizio della terapia antiretrovirale.	Prof. Quiros Roldan / Prof. Castelli	Bergognini Samuele
	Sospensione di Abacavir in pazienti con infezione da HIV per tossicità: relazione con HLA-B*57:01	Prof. Quiros Roldan / Prof. Castelli	Alessandro Marchi
	Polmonite da SARS-COV-2: caratteristiche clinico-strumentali e correlazione con gli indicatori di outcome in pazienti trattati con Tocilizumab	Prof. Castelli	Stefania Arsuffi
	<u>Thesis for specializing physicians (Infectious Diseases and Tropical Medicine/Public Health)</u>		
	TITLE	SUPERVISOR	PHYSICIAN IN TRAINING
	Epidemia di <i>Serratia marcescens</i> in TIN: quale il ruolo dell'infettivologo	Prof. Matteelli	Dott. Barbara Saccani
	Vademecum di terapia antibiotica: valutazione di appropriatezza sulla base degli isolamenti microbici dell'ASST Spedali Civili di Brescia nel periodo 2016-2019	Prof. Matteelli	Dott. Ester Pollastri
	Cascade of care of HIV	Prof. Matteelli	Dott. Paola Magro

	treatment and follow-up in a cohort of patients admitted in three different points of care in the province of Inhambane, Mozambique				
	Caratteristiche cliniche, viro-immunologiche e terapeutiche e fattori associati all'outcome clinico in giovani pazienti con trasmissione verticale dell'infezione da HIV	Prof. Matteelli	Dott. Anna Celotti		
	Progetto S.C.I.M.MI.A ( saper come impostare al meglio il miglior antimicrobico): implementazione e valutazione dell'impatto di un programma di antimicrobial stewardship agli Spedali Civili di Brescia (triennio 2016-2018)	Prof. Matteelli	Dott. Erika Chiari		
II) PUBLICATIONS (all the 2019 publications of the Brescia UNESCO Chairholder are listed in the box. Only international peer-reviewed publications are listed). UNESCO Chair affiliation is mentioned where appropriated.	<u>Books' chapters</u>				
	Authors	Chapter's Title	Pages	Book	Publisher
	Quaresima V, Agbenyega T, Osei-Kofi D, Oppong B, Enty E, <b>Castelli F.</b> (UNESCO affiliation)	Is <i>Plasmodium falciparum</i> malaria incidence and severity in holo-endemic areas affected by gender?	57-68	Good Health, Quality Education, Sustainable Communities, Human Rights. The scientific contribution of Italian UNESCO Chairs and partners to SDGs 2030	Florence University Press, 2019



	Marchese V, Capone S, El Hamad I, Tomasoni LR, Gulletta M, Caligaris S, <b>Castelli F</b> , Matteelli A (UNESCO affiliation)	Addressing tuberculosis in vulnerable populations in Europe: the E-Detect-TB project and its activities in Brescia	69-79	Good Health, Quality Education, Sustainable Communities, Human Rights. The scientific contribution of Italian UNESCO Chairs and partners to SDGs 2030	Florence University Press, 2019
	Gallizioli C, Tomasoni LR, Cerini C, Arieti F, da Nelola N, <b>Castelli F</b> . (UNESCO affiliation)	National Immunization programme in rural area of Mozambique; evaluation of immunization coverage rates in child population accessed to a health service	81-88	Good Health, Quality Education, Sustainable Communities, Human Rights. The scientific contribution of Italian UNESCO Chairs and partners to SDGs 2030	Florence University Press, 2019
	Comelli A, Tomasoni LR, Arieti F, Cerini C, Izzo I, da Gloria Julio andré A, Calia M, <b>Castelli F</b> . (UNESCO affiliation)	Retention in care of newly diagnosed HIV patients. Similarities and differences among Italian health system and mobile-TARV strategy in Morrumbene, Mozambique	89-98	Good Health, Quality Education, Sustainable Communities, Human Rights. The scientific contribution of Italian UNESCO Chairs and partners to SDGs 2030	Florence University Press, 2019

**Peer-reviewed journal articles by the Chairholder**

1. Tilli M., Gobbi F., Rinaldi F., Testa J., Caligaris S., Magro P., Buonfrate D., Degani M., Minervini A., Carini M., Tuccio A., Sforza S., Gulletta M., Castelli F., Agostini S., Richter J., Olliaro P., Bisoffi Z., Bartoloni A., Zammarchi L. **The diagnosis and treatment of urogenital schistosomiasis in Italy in a retrospective cohort of immigrants from South-Saharan Africa.** *Infection*, 2019 Jan 21. doi: 10.1007/s15010-019-01270-0. (UNESCO affiliation)
2. Greenaway C., **Castelli F. Embracing the challenges of migration medicine.** *J Travel Med.* 2019 Feb 1;26(2). pii: taz009. doi: 10.1093/jtm/taz009. (UNESCO affiliation)
3. Greenaway C., **Castelli F. Infectious diseases at different stages of migration: an expert review.** *J Travel Med.* 2019 Feb 1;26(2). pii: taz007. doi: 10.1093/jtm/taz007 (UNESCO affiliation)
4. Greenaway C., **Castelli F. Migration Medicine.** *Infect Dis Clin North Am.* 2019 Mar;33(1):265-287. doi: 10.1016/j.idc.2018.10.014. Review (UNESCO affiliation)
5. Gardini G., Comelli A, Gardini G., Pecorelli S., Parolini F., Tomasoni L., Pezzotta R., Fiorentini S., Caruso A., Alberti D., **Castelli F. Acute Epididymo-Orchitis due to Salmonella Typhi In a Young Man from Bangladesh.** *Infection.* 2019 Feb 15. doi: 10.1007/s15010-019-01280-y.
6. Armenia D., Di Carlo D., Cozzi Lepri A., Calcagno A., Borghi V., Gori C., Bertoli A., Gennari W., Bellagamba R., Castagna A., Latini A., Pinnetti C., Cicalini S., Castelli F., Di Giambenedetto S., Andreoni M., Di Perri G., Antinori A., Mussini C., Ceccherini-Silberstein F., D'Arminio Monforte A., Perno C.F., Santoro M.M. **Very high pre-therapy viremia is a predictor of virological rebound in HIV-1 infected patients starting a modern first-line cART.** *Antivir Ther.* 2019 Apr 12. doi: 10.3851/IMP3309.
7. Comelli A., Izzo I., Donato F., Celotti A., Focà E., Pezzoli C., Castelli F.,

	<p>Quiros-Roldan E. <b>Disengagement and reengagement of HIV continuum of care in a single center cohort in northern Italy</b> <i>HIV Research &amp; Clinical Practice</i>, DOI: 10.1080/15284336.2019.1595887</p> <p>8. Buonfrate D, Salas-Coronas J, Muñoz J., Trevino Maruri B, Rodari P, Castelli F, Zammarchi L, Bianchi L, Gobbi F, Cabezas-Fernández T, Requena-Mendez A, Godbole G, Silva R, Romero M, Chiodini PL, Bisoffi Z. <b>Multiple-dose versus single-dose ivermectin for <i>Strongyloides stercoralis</i> infection (Strong Treat 1 to 4): a multicentre, open-label, phase 3, randomised controlled superiority trial.</b> <i>The Lancet Infectious Diseases</i>, Published: September 23, 2019 DOI: <a href="https://doi.org/10.1016/S1473-3099(19)30289-0">https://doi.org/10.1016/S1473-3099(19)30289-0</a></p> <p>9. G. Guerrini, F. Franzetti, R. Giacomelli, L. Meroni, A. Riva, C.A. Scirè, R. Scrivo, M. Tavio, A. Agostinone, P. Airò, F. Atzeni, F. Bartalesi, L. Bazzichi, O. Berardicurti, G. Cassola, A. Castagna, <b>F. Castelli</b>, A. Cattelan, G. Citriniti, F. Cristini, F. De Rosa, E. Fracassi, J. Galloway, G.M.C. La Paglia, M.C. Moioli, D. Ripamonti, A. Saracino, C. Tani, C. Tascini, T. Tieghi, M. Tinelli, A. Zabotti, P. Sarzi-Puttini, M. Galli. <b>Italian recommendations for influenza and pneumococcal vaccination in adult patients with autoimmune rheumatic diseases.</b> <i>Clin Exp Rheumatol</i>. 2019 Aug 27.</p> <p>10. Gardini G, Zanotti P, Pucci A, Tomasoni L, Caligaris S, Paro B, Gavazzi E, Albano D, Bonardelli S, Maroldi R, Giubbini R, <b>Castelli F. Non-typhoidal <i>Salmonella</i> aortitis.</b> <i>Infection</i>. 2019 Jul 18. doi: 10.1007/s15010-019-01344-</p> <p>11. Lapadula G, Bernasconi DP, Bai F, Focà E, Di Biagio A, Bonora S, <b>Castelli F</b>, Squillace N, Bandera A, Monforte AD, Migliorino GM, Gori A; SWEAR Study Group. <b>Switching from efavirenz to rilpivirine improves sleep quality and self-perceived cognition but has no impact on neurocognitive performances: Results from a randomized controlled trial.</b> <i>AIDS</i>. 2019 Sep 26. doi: 10.1097/QAD.0000000000002377.</p> <p>12. <b>Castelli F. Waiting for the malaria vaccine. The complex epidemiological transition towards malaria elimination.</b> <i>Clin Infect Dis</i>. 2019 Aug 27. pii: ciz847. doi: 10.1093/cid/ciz847. [Epub ahead of print] No abstract available</p>
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13. Heywood A., **Castelli F.**, Greenaway C. **Migration Health: highlights from the inaugural International Society of Travel Medicine (ISTM) International Conference on Migration Health.** *Curr Infect Dis Rep.* 2019 Nov 16;21(12):48. doi: 10.1007/s11908-019-0705-6.
14. Focà E., Magro P., Guaraldi G., Riva A., Cattelan A.M., De Socio G.V., Costa C., Piconi S., Celesia B.M., Nozza S., Orofino G., Castagna A., Di Perri G., **Castelli F.**, Calcagno A. GEPPPO (GEriatric Patients living with HIV/AIDS: a Prospective Multidimensional cOhort) Study Group. **Elderly HIV-positive women: a gender-based analysis from the Multicenter Italian “GEPPPO” Cohort.** *Plos One*, 2019 Oct 17;14(10):e0222225. doi: 10.1371/journal.pone.0222225. eCollection 2019. PMID: 31622347
15. Zanini B., Rodari P., Marullo M., **Castelli F.**, Castellano M., Quiros-Roldan E. **Dietary Intake in a Cohort of HIV Patients at the Time of Diagnosis: Comparison with a Matched Control Cohort and with Italian National Reference Values.** *EC Nutrition*, accepted for publication
16. Comelli A., Riccardi N., Canetti D., Spinicci M., Cenderello G., Magro P., Nicolini L.A., Marchese V., Zammarchi L., **Castelli F.**, Bartoloni A., Di Biagio A., Caligaris S., Gaiera G. **Delay in schistosomiasis diagnosis and treatment. A multicenter cohort study in Italy.** *J Travel Med.* 2019 Oct 16. pii: taz075. doi: 10.1093/jtm/taz075.
17. Paghera S, Quiros-Roldan E, Sottini A, Properzi M, **Castelli F.**, Imberti L. **Lymphocyte homeostasis is maintained in perinatally HIV-infected patients after three decades of life.** *Immun Ageing.* 2019 Oct 13;16:26. doi: 10.1186/s12979-019-0166-7. PMID:31636688
18. Zammarchi L., Gobbi F., Angheben A., Spinicci M., Buonfrate D., Calleri G., De Paola M., Bevilacqua N., Carrara S., Attard L., Vanino E., Gulletta M., Festa E., Iacovazzi T., Grimaldi A., Sepe A., Salomone Megna A., Gaiera G., Castagna A., Parodi P., Albonico M., Bisoffi Z., **Castelli F.**, Olliaro P., Bartoloni A. **Schistosomiasis, strongyloidiasis and Chagas disease: the leading imported Neglected Tropical Diseases in Italy.** *Journal of Travel Medicine*, taz100, <https://doi.org/10.1093/jtm/taz100>
19. Properzi M., Quiros E., **Castelli F.**, Chiesa A., Gregori N., Mentasti S., Focà E. **Low prevalence of symptomatic thyroid diseases and thyroid**

**cancers in HIV-infected patients.** Scientific Reports Nature, Sci Rep. 2019 Dec 19;9(1):19459. doi: 10.1038/s41598-019-56032-7

**Abstracts in Conference Proceedings (International only) by the Chairholder**

1. **Castelli F.**, Quaresima V. Migration health issues. 2nd South-East European Conference on Travel, Tropical, Migration and HV. Dubrovnik, 4-6 April 2019, pag. 18-19
2. Zuglian G., Mangioni D., Signorini L., Festa E., Ravizzola G., Stellini R., **Castelli F. Epidemiology of hospital-acquired candidaemia and azoles consumption over a five-year period in a university hospital in northern Italy**, 29th ECCMID, Amsterdam 13-16 April 2019, Abs. P2227
3. Zuglian G., Odolini S., Carriero C., Chirico C., Spinetti A., Zaltron S., Marchese V., Nasta P., **Castelli F. Outcomes of patients with HCV-associated cryoglobulinemia after IFN-free therapy: a monocenter retrospective study. Paper Poster AASLD, The Liver Meeting, Boston, 8-12 November 2019**
4. Comelli A., Tomasoni L., Fanetti A, Zanotti P, Magro P, Marchese V, Quaresima V, Odolini S, Gulletta M, Caligaris S, Matteelli A, **Castelli F. Imported P. falciparum malaria in children: characteristics of severe infections and factors that could help physicians in risk stratification.** European Conference of Clinical Microbiology and Infectious Diseases (ECCMID), Amsterdam 13-16 April 2019, Abs O0507

## D) TO FOSTER NETWORKING, CAPACITY DEVELOPMENT AND SHARING OF KNOWLEDGE AND GOOD PRACTICES

<p><b>I) PROMOTING THE CULTURE OF SUSTAINABILITY</b></p>	<p>The Chair has promoted and organized an ambitious <b>cycle of lectures on Sustainable Development Goals</b>, held at the Teatro Grande of Brescia and targeted to the academic community as well as to the general population of the town, presenting each of the Sustainable Development Goals of the 2030 Agenda of the United Nations. Each lecture has been delivered by a recognized national/international expert and has been introduced by the chairholder prof. F. Castelli and by an academic staff from the university of Brescia (see Annex 3)</p> <p>After the first 13 events had been organized in 2017 and 2018, the workshops devoted to SDGs 14 to 17 have been carried out in 2019 according to the following schedule (<a href="https://www.unibs.it/seminars">seminars on sustainable development goals   portale di ateneo - unibs.it</a>)</p> <ul style="list-style-type: none"> <li>• <b><u>SDG n. 14 – Life below water</u> (10th january 2019)</b> <ul style="list-style-type: none"> <li>○ Honorary guest: prof. Nadia Pinardi (University of Bologna)</li> <li>○ Focal point for the university of Brescia: prof. Marco Pilotti</li> </ul> </li> <li>• <b><u>SDG n. 15 – Life on land</u> (21st january 2019)</b> <ul style="list-style-type: none"> <li>○ Honorary guest: dr. Carlo Rondinini, University of Rome “La Sapienza”</li> <li>○ Focal point for the University of Brescia: dr. Roberta Pedrazzani</li> </ul> </li> <li>• <b><u>SDG n. 16 – Peace, justice and strong institutions</u> (19th march 2019)</b> <ul style="list-style-type: none"> <li>○ Honorary guest: Moni Ovadia</li> <li>○ Focal point for the university of Brescia: prof. Antonello Calore.</li> </ul> </li> <li>• <b><u>SDG n. 17 – partnership for the goals</u> (22th may 2019)</b> <ul style="list-style-type: none"> <li>○ Honorary guest: dr. Luigi Ferrata, ASVIS - Italian alliance for sustainable development</li> <li>○ Stage performance: "La politique des restes" by Arthur Adamov</li> <li>○ Focal point for the university of Brescia: prof. Francesco</li> </ul> </li> </ul>
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	<p>Castelli, UNESCO Chairholder, Deputy-Rector / Director of CRA2030</p> <p>The calendar and the videos of all the events are available on the website of the University of Brescia and the UNESCO Chair of Brescia at the link: <a href="https://www.unibs.it/ateneo/vita-dell-ateneo/seminars-sustainable-development-goals">https://www.unibs.it/ateneo/vita-dell-ateneo/seminars-sustainable-development-goals</a></p> <p>The success of the cycle of workshops dedicated to the UN 2030 Agenda has lead the Chair and the University of Brescia to create the University Research and Documentation Centre for the UN 2030 Agenda (CRA2030: link <a href="HTTPS://WWW.UNIBS.IT/NODE/20707">HTTPS://WWW.UNIBS.IT/NODE/20707</a></p>			
<b>II) OTHER CONFERENCES/ORGANIZATIONAL ACTIVITIES UNDERTAKEN BY THE CHAIRHOLDER</b>	<p>The Chair ha co-organized, together with Medecins sans Frontiers (MSF) Italy and Medicus Mundi (MMI) Italy, the Conference <i>“Epidemie in regioni a clima tropicale. Strategie di prevenzione, attuali orizzonti nell'ambito delle vaccinazioni e strategie di controllo dell'epidemia”</i>, Brescia, 7th March 2019, addressed to medical students</p> <p>The Chair has co-organized the meeting <i>“Pre-Exposure Prophylaxis of HIV: pros and cons and lesson learned from the field, including STIs”</i>, with the participation of Prof. Jean-Michel Molina (Professor of Infectious Diseases at the University of Paris Diderot) that has taken place in Brescia on the 24<sup>th</sup> of October 2019 (Annex 4). The meeting has been addressed to the medical students of the School of Medicine of the University of Brescia</p>			
<b>III) A SELECTION OF CONFERENCE PRESENTATIONS BY THE CHAIRHOLDER AND OTHER COLLEAGUES</b>  (Note: only presentations relevant to the chair’s mission are reported)	<b>Lecturer</b>  Francesco CASTELLI	<b>Title (in the language the lecture has been delivered)</b>  <b>L’agenda 2030 dell’ONU per lo sviluppo dei popoli</b>	<b>Congress/conference</b>  Ripensare l’educazione (organized by the UNESCO Chair on Education for Human Development and Solidarity among Peoples, Università Cattolica del Sacro	<b>Venue, date</b>  Brescia, Italy 18/01/2019

			Cuore	
	Francesco CASTELLI	<b>Infezione da HIV e trasfusione. Nuovi scenari</b>	Workshop of the Italian Society of Transfusion Medicine	Neaples, Italy 05/02/2019
	Francesco CASTELLI	<b>Assicurare la salute e il benessere per tutti e per tutte le età</b>	La sostenibilità per una crescita responsabile Presentazione Rapporto Lombardia 2018	Milan, Italy 06/02/2109
	Francesco CASTELLI, Virginia QUARESIMA	<b>Presentation of the UNESCO Chair “Training and empowering human resources for health development in resource-limited countries”, University of Brescia</b>	Meeting of the Italian UNESCO Chairs, organized by the Venice UNESCO Bureau	Venice, UNESCO Bureau 14/02/2019
	Francesco CASTELLI	<b>I vaccini, una grande conquista della umanità. Tra efficacia, leggi, contestazioni ed... il baobab</b>	Univax Day, organized by the Italian Society of Clinical Immunology and Allergology	Brescia, Italy 16/02/2019
	Francesco CASTELLI	<b>Migration health issues.</b>	2nd South-East European conference on travel, tropical, migration medicine & HIV	Dubrovnik, Croatia 06/05/2019
	Francesco CASTELLI	<b>Terapia e approvvigionament o dei farmaci</b>	Conference World Malaria Day, organized by the University of Pisa	Pisa, Italy 07/05/2019
	Francesco CASTELLI	<b>Cooperazione internazionale: miti e limiti</b>	Per un’uguaglianza nei diritti senza frontiere	Brescia, Italy 16/05/2019



	Francesco CASTELLI	<b>Le pandemie virali all'interfaccia uomo animale (influenza aviaria, SARS, etc.)</b>	Malattie Infettive Trasmissibili tra Animale e uomo (Fondazione Iniziative Zooprofilattiche)	Brescia, Italy 27/05/2019
	Francesco CASTELLI	<b>Il punto sulla epidemia di Legionellosi nel bresciano nell'estate 2018</b>	Giornate Infettivologiche dell'Ospedale Sacco	Milan, Italy 29/05/2019
	Francesco CASTELLI	<b>Overview of migration patterns and their health issues</b>	CISTM-16 Migrant Pre-Conference Introduction to Migration Health: Knowledge for Travel Medicine Providers	Washington USA 05/06/2019
	Francesco CASTELLI	<b>Sustainable Development Goals and university education</b>	2019 EUA-CDE ANNUAL MEETING	Brescia, Italy 13/06/2019
	Francesco CASTELLI	<b>Aggiornamento sulla gestione clinica e terapeutica della malaria grave in paese non endemici</b>	Interim Meeting of the International Study on the treatment of severe malaria	Rome, Italy 10/06/2019
	Francesco CASTELLI	<b>Le sfide della salute nell'epoca della globalizzazione</b>	Salute in Comune	Brescia, Italy 13/06/2019
	Francesco CASTELLI	<b>I nuovi flussi migratori ed il rischio infettivo</b>	XXII Corso avanzato. Patogenesi, diagnosi e terapia della infezione da HBV, HCV, HIV	Pavia, Italy 25/06/2019
	Virginia QUARESIMA	<b>Is <i>Plasmodium falciparum</i> malaria affected by gender?</b>	IX International Summer School , University of Brescia	Brescia, Italy 28/06/2019

	Francesco CASTELLI	<b>Migration Medicine</b>	<b>Workshop “Dialogue Days 2019 - Global Health Challenges: What’s Next?” University of Zurich (Switzerland)</b>	Zurich, Switzerland 09/09/2019
	Francesco CASTELLI	<b>Opening Lecture - Cambiamenti climatici e infezioni Impatto sul fragile equilibrio tra microrganismi, ambiente, vettori ed uomo</b>	Yearly Assembly of the College of Physicians of Pavia	Pavia, Italy 16/09/2019
	Francesco CASTELLI	<b><i>Dalla eradicazione della poliomielite alle malattie infettive già conosciute ed emergenti</i></b>	World Polio Day	Bagnolo Mella (Brescia) 24/10/2019
	Francesco CASTELLI	<b>Il Progetto StAR (Students at Risk)</b>	UNCHR project presentation “Università inclusiva”	Roma, Italy 30/10/2019
	Francesco CASTELLI	<b>The UN Sustainable Development agenda and Universities</b>	ASEA Network Annual Meeting	Brescia, Italy 11/11/2019
	Francesco CASTELLI	<b>La fragilità e la vulnerabilità in sanità</b>	Prendersi cura Della fragilità in Malattie infettive: <i>SSR a confronto</i>	Milan, Italy 15/11/2019
	Francesco CASTELLI	<b>Le nuove sfide in Pronto Soccorso: Le nuove (o vecchie) infezioni</b>	Congresso Nazionale AcEMC	Brescia, Italy 21/11/2019
	Francesco CASTELLI, Virginia	<b>Are malaria risk factors based on gender? A mixed-</b>	XVIII National Conference of the Italian Society of	Palermo, Italy 25/11/2019

	QUARESIMA	<b>methods survey in a malaria holo-endemic country in Western Africa</b>	Infectious and Tropical Diseases	
	Francesco CASTELLI	<b>Migrazioni, viaggi internazionali e nuovi scenari geopolitici ed ambientali</b>	Conference of the Italian Society of Tropical Medicine and Global Health (SIMET)	Florence, 28/11/2019
	Francesco CASTELLI	<b>Malattie da vettori: quali prospettive di immunizzazione?</b>	National Course on vaccinology, University of Ferrara	Ferrara, Italy 13/12/2019
	Francesco CASTELLI	<b>Ambiente, clima e malattie infettive</b>	XVI Convegno CETAMB "Sostenibilità dei progetti ambientali di cooperazione allo sviluppo"	Brescia, Italy 18/12/2019
	Francesco CASTELLI	<b>Il diritto alla salute dei minori</b>	Giornata Mondiale Diritti dei Bambini	Brescia, Italy 23/11/2019

#### E) TO CLOSELY COOPERATE WITH UNESCO

(Principals exchanges/partnerships between the chair and other institutions, including UNESCO chairs/UNITWIN networks)

<b>I) PARTICIPATION AT UNESCO HEADQUARTES EVENTS</b>	The Chair has participated at the Interministerial meeting on inclusion and mobility in higher education, held at UNESCO Headquarters during UNESCO General Assembly, Paris 13th november 2019
<b>II) PARTICIPATION AT ITALIAN UNESCO CHAIRS NETWORK MEETINGS</b>	During 2019, the exchanges between the Chair and the other Italian UNESCO Chairs listed below and belonging to the Italian Group 1 UNESCO Chairs (CONIUS: <i>Cultural identity, migration, human rights and health</i> ) have continued under the

	<p>coordination of Prof. Paolo Orefice from the UNESCO Chair in Florence</p> <ul style="list-style-type: none"> <li>- <i>Sviluppo Umano e Cultura di Pace</i> (Florence, Prof. P. Orefice)</li> <li>- <i>Sovranità e cooperazione</i> (Bergamo, Prof. S. Gandolfi)</li> <li>- <i>Training and empowering human resources for health development in resource-limited countries</i> (Brescia, Prof. F. Castelli)</li> <li>- <i>Bioetica e Diritti Umani</i> (Ateneo Pontificio Regina Apostolorum, Prof. A. G. Garcia)</li> <li>- <i>Antropologia della Salute-Biosfera e Sistemi di Cura</i> (Genoa, Prof. A. Guerci)</li> <li>- <i>Popolazione, Migrazioni e Sviluppo</i> (Rome La Sapienza, Prof. R. Cagiano de Azevedo)</li> <li>- <i>Social and Spatial Integration of International Migrants: urban policies and practices</i> (IUAV, Venice)</li> <li>- <i>Cultural and Comparative Studies on Imaginary</i> (IULM Milan, Prof. P. Proietti)</li> <li>- <i>Pace, Sviluppo Culturale e Politiche Culturali</i> (Int.I Institute Jacques Maritain, Rome)</li> <li>- <i>Diritti umani democrazia e pace</i> (Padua, Prof. M. Mascia)</li> <li>- <i>Pluralismo religioso e la pace</i> (Bologna, Prof. A. Melloni)</li> </ul> <p>The CONIUS Group has met several times in 2019:</p> <ul style="list-style-type: none"> <li>- 14th February 2019 at a joint meeting at the UNESCO UNESCO Regional Bureau for Science and Culture in Europe (<a href="#">Venice</a>)</li> <li>- 15th April 2019 (Brescia)</li> <li>- 27th November 2019 (Rome)</li> </ul> <p>The notes of those meetings are attached as Annexes 5</p>
<p><b>III) COLLABORATION WITH OTHER UNESCO CHAIRS ON SPECIFIC PROJECTS</b></p>	<p>The Chair has actively interacted with the UNESCO Chair “<i>Human Rights and Ethics of International Cooperation</i>”, University of Bergamo. In particular, the Chairs have signed an agreement to implement the three-year project “<i>Education and Social Work in Tanzania and Cambodia</i>” in partnership with the Ruaha Catholic University of Iringa (Tanzania), the S. Paul institute of Takeo (Cambodia) and the Royal University of Phnom Penh (Cambodia). The project has</p>

	<p>come to an end in March-April 2019 with the final visit of teachers and students from Iringa and Takeo to Bergamo and Brescia. A number of activities have been organized by the UNESCO Chairs of Brescia and Bergamo (see Annex 6) including discussion on the results of the projects and future plans for collaboration</p>
<b>COOPERATION WITH UNESCO HEADQUARTERS, FIELD OFFICES</b>	
<ol style="list-style-type: none"> <li>1) The Chair has participate at the UNESCO Chairs networking event, held at the Regional Bureau for Science and Culture in Europe, Venice, 14th February 2019 (Annex 7)</li> <li>2) The Chair has participated at the Inter-ministerial meeting on inclusion and mobility in higher education, held at UNESCO headquarters during UNESCO General Assembly, Paris 13th November 2019</li> </ol>	

<b>F) OTHER ACTIVITIES OF THE CHAIR</b>
<ul style="list-style-type: none"> <li>• The Brescia UNESCO Chair actively interacted with the WHO Collaborating Centre (WHO-CC) on “TB/HIV joint activities and TB elimination strategy” (headed by Prof. Alberto Matteelli) which is hosted by the same Department at the University of Brescia.</li> <li>• In 2018, the UNESCO Chair <i>Education for human development and solidarity among peoples</i> has also been established at the Catholic University of the Sacred Heart (Brescia, Chairholder Prof. Domenico Simeone). Many interactions have taken place between our two Chairs. The most relevant are: <ul style="list-style-type: none"> <li>- participation of the Chairholder Prof. F. Castelli to the Scientific Committee of the UNESCO Chair <i>Education for human development and solidarity among peoples</i>.</li> <li>- participation of the Chairholder Prof. F. Castelli to the launching event of the UNESCO Chair <i>Education for human development and solidarity among peoples</i>, that took place in Brescia on January 18<sup>th</sup>, 2019</li> </ul> </li> <li>• The Chair is collaborating with the Italian NGO Medicus Mundi Italy in the following projects in</li> </ul>

### Mozambique

- *Care Evolution* - General Objective: To improve health conditions in the population of the Province of Inhambane (Mozambique). Specific Objective: To improve health coverage in the Districts of Morrumbene and Homoine (Province of Inhambane, Mozambique) through innovative practices, scientifically validated, with particular regard to HIV infection and children malnutrition.
- *Till the end* - To improve access to detection and treatment of tuberculosis in the Province of Inhambane, Mozambique; To evaluate the effectiveness of using mobile Genexpert to detect active tuberculosis in a rural setting (Districts of Massinga, Funhalouro, Homoine e Morrumbene); To evaluate the prevalence of rifampicine resistance in a rural setting of the Province of Inhambane, Mozambique.
- The Chairholder Prof. Francesco Castelli has been appointed Co-Chair (together with Prof. Christina Greenaway from Montreal) of the ISTM (International Society of Travel Medicine) Task Force for Migration Health
- The Chair has participated with its patronage to the Workshop “*Dialogue Days 2019 - Global Health Challenges: What’s Next?*” University of Zurich (Switzerland)

## G) FUTURE PLANS AND DEVELOPMENT PROSPECTS

Outline of action plan for the next biennium and short/medium and long-term development prospects. Please, do not hesitate to refer to difficulties that the Chair has experienced (not exceeding 300 word)

The present 2019 Report has been delayed by the Covid-19 Pandemic. It is to be remembered that the Chairholder Prof. Francesco CASTELLI is Professor of Infectious Diseases and Head of the Division of Infectious and Tropical Diseases of the Spedali Civili Hospital, affiliated with the University of Brescia. Prof. F. Castelli has acted as the Coordinator of the Covid response at the hospital level. The Province of Brescia has been among the first Italian Provinces hit by the pandemic in Europe, and without doubts among the most hitten by the fury of the epidemic with many thousands of affected people and deaths.

The activities that were planned at the end of the year 2019 are listed below with the final aim to fulfil the commitments taken under Article 2 of the Agreement with UNESCO:

- To continue the undergraduate training in Tropical Medicine and Global Health;
- To continue the post-graduate training in Tropical Medicine and Global Health, also providing scholarships for young physicians from resource-poor countries
- To continue the fellowship program for Medical students at Makerere University, Kampala, Uganda
- To organize the biannual Course on International Cooperation, together with other UNESCO Chairs in Brescia and Bergamo
- To finalize the training program on (i) migration, (ii) sustainable development goals and (iii) education to the benefit of the teachers of the UNESCO Schools of the Provinces of Brescia, Bergamo, Mantova and Cremona, together with other UNESCO Chairs in Bergamo and Brescia
- To finalize the agreements with the newly created University in Xai Xai (Mozambique) to provide support to the Nursing School
- To effectively start collaborative activities with the Catholic University in Addis Ababa (Ethiopia)
- To strengthen collaborations with the UNESCO chairs in Ljubljana (Slovenia) and Thessaloniki (Greece) with the final aim to organize a summer school on “water related disasters”

**THESE ACTIVITIES COULD BE ONLY PARTIALLY IMPLEMENTED DUE TO THE COVID-19 PANDEMIC AND WILL BE THE SUBJECT OF THE 2020 REPORT THAT WILL FOLLOW BRIEFLY**

## Appendix:

1) Human resources
<p>The following staff of the University of Brescia have contributed to the UNESCO Chair achievements:</p> <p>1) at the School of Medicine</p> <ul style="list-style-type: none"> <li>- prof. Francesco Castelli, professor of infectious diseases, Chairholder, University of Brescia</li> <li>- prof. Alberto Matteelli, associate professor of infectious diseases and director, WHO collaborating Centre on “TB/HIV joint activities and TB elimination strategies”, University of Brescia</li> <li>- dr Silvio Caligaris, head, unit for tropical diseases, Spedali Civili general hospital, Brescia</li> <li>- dr Lina R. Tomasoni, unit for tropical diseases, Spedali Civili general hospital, Brescia</li> <li>- dr Virginia Quaresima, PhD doctorate students in methodologies and appropriate techniques for international cooperation for development</li> <li>- dr Agnese Comelli, resident in Infectious and Tropical Diseases, University of Brescia</li> <li>- dr Beatrice Formenti, scholar at the Chair</li> </ul> <p>2) at the School of Engineering</p> <ul style="list-style-type: none"> <li>- prof. Sabrina Sorlini, associate professor of health engineering, university of Brescia</li> <li>- Prof. Roberto Ranzi, professor of hydraulics and Rector’s Delegate for International Affairs</li> </ul>



2) Financial resources			
Please tick sources of financial contribution and specify the amount in US dollars  NOTE: pertinent to 2019 only	[AMOUNT (\$)]	[TICK]	
	HOST INSTITUTION	<input type="checkbox"/>	in kind
	PARTNER INSTITUTION	<input type="checkbox"/>	
	GOVERNMENT BODY	<input type="checkbox"/>	
	OTHER PUBLIC INSTITUTION/BODY (including research councils)	<input type="checkbox"/>	
	UNESCO	<input type="checkbox"/>	
	OTHER UN AGENCIES	<input type="checkbox"/>	
	IGO	<input type="checkbox"/>	
	NGO	<input type="checkbox"/>	
	INDUSTRY	<input type="checkbox"/>	
OTHER PRIVATE	X	5.400 €	
At the end of the year 2018, the Brescia UNESCO Chairs' fund was <b>55.640,86 euros</b>  During the year 2019, the no donations received was:  During the year 2019, the following expenses were done: <ul style="list-style-type: none"> <li>• <b>Mission to Venice (Prof. F. Castelli): 95,00 euros</b></li> <li>• <b>Mission to Ghana (Prof. F. Castelli): 1.188,99 euros</b></li> <li>• <b>Mission to Ghana (Dr V. Quaresima): 404,11 euros</b></li> </ul> <p style="text-align: right;">Totaling: <b>1.688,10 euros</b></p> At the end of 2019, the balance is then <b>53.952,76 euros</b>			

## Annexes

Annex 1. Program of the undergraduate Course on Tropical Medicine and Global Health (Edition 2019)

Annex 2. Program of the Graduate Course in Global Health (Edition 2019)

Annex 3. Workshops on Sustainable Development Goals, Teatro Grande

Annex 4 – Announcement of the meeting *Pre-Exposure Prophylaxis of HIV: pros and cons and lesson learned from the field, including STIs* with Prof. Jean-Michel Molina (Professor of Infectious Diseases at the University of Paris Diderot)

Annex 5. Minutes of the Italian UNESCO Chairs meetings 15<sup>th</sup> April 2019 (Brescia) and 27<sup>th</sup> November 2019 (Rome)

Annex 6. Report of the project “Education and Social Work in Tanzania and Cambodia” carried out by the UNESCO Chairs in Brescia and Bergamo

Annex 7. Minutes of the UNESCO Chairs networking event, 12 February 2019, Venice UNESCO Bureau