

EDUCATION

1996 Ph.D., Cornell University, Environmental Sciences and Nutrition, Ithaca, NY, USA.

1993 M.Sc., Cornell University, Environmental Sciences and Nutrition, Ithaca, NY, USA.

1987 D.V.M., Veterinary School of Zaragoza, Spain.

Specializations: Food Science & Technology, Agriculture, Nutrition, Economy.

Awards and nominations

2016 Nomination to participate at the High Level signature ceremony of the Paris Climate Treaty at the United Nations, NY.

2007 Contributor author of the 4th IPCC Assessment Report 2007 (IPPC was awarded with the Peace Nobel Prize shared with Al Gore in 2007).

1996 Fulbright Scholarship for Professional Development.

1991-1995 Fulbright Scholarship for MS and PhD Program at Cornell University.

PROFESSIONAL EXPERIENCE

2010-Present

UCLA Institute for Environment and Sustainability, Lecturer. (2015- Present). Academic Focus: Global Climate Change, Health, Food and Sustainability. Research focus: Co-benefits to the environment and health of climate change adaptation and mitigation strategies related to green urban development (active transport, urban gardens and markets) and sustainable food production and consumption and waste reduction. Methodologies used for policy analysis: Robust decision making under uncertainty, Health Impact Assessments and Multi-Criteria decision making.

Adjunct associated professor at the UCLA School of Public Health (2010-14), affiliated with the UCLA Center for Global and Immigrant Health. Supported the development of the Center Global Health Certificate. Academic focus: Climate Change and Food and Nutrition Policies: Global Perspectives. Other affiliations include Center for Public Health and Disasters, the Blum Center for Health and Poverty in Latin America, the Center for Women Studies.

9/06-Present

International Adviser on Climate Change, Health and Sustainability. Lead international large research programs for WHO, UNEP, FAO, UNDP, CBD, IFPRI, WB, WFP, EC, RAND, OXFAM etc. Lines of research include climate change adaptation and mitigation policies and climate-resilient sustainable development initiatives in the health, energy, agriculture and other sectors. Focus on the Americas, the Caribbean, Sub-Saharan Africa, East and Central Asia and Europe. Supported the establishment of a network of Universities focusing on climate change and health in Latin America and Spain. Provision of scientific evidence to support the policy work of the UN Framework Convention on Climate Change, the Sustainable Development Goals and the UN Environment Assembly. Moderator of the UN Standing Committee on Nutrition group on Climate Change and Chair of the International Union of Nutritional Sciences Task Force on Climate Change.

11/12- 12/13

Pan American Health Organization/WHO. Rio de Janeiro, Brazil. Responsible of program coordination, planning, implementing and evaluating technical cooperation and research activities related to food, health and agriculture in Latin America and the Caribbean (LAC). Advise to member states through provision of strategic thinking, planning and direction to position the promotion of public policies, legislation, regulations and research programs. Established inter-sectoral partnerships across sectors and institutions in support of the regional strategy. Mobilized political, technical and financial resources to support regional, national research programs and initiatives. Development jointly with the World Bank of an educational package to strengthen the capacity of Caribbean countries to address health and food safety in climate-related emergencies (available at the PAHO/WHO virtual Campus).

03/11-07/12

Center for Climate Change and Health, Institute for Public Health. Oakland, CA, Director & Principal Investigator. Responsibilities include setting the direction, overarching vision and strategy of the center as a leading global player bridging health, food security, gender and climate change agendas. Responsible for the center's programmatic, research, policy, advocacy initiatives around the UN Framework Convention for Climate Change (UNFCCC), the UN Conference on Sustainable Development Rio+20 and the 2030 development agenda. Currently associated as Principal Investigator.

7/01-7/06

WHO European Center for Environment and Health, WHO Regional Office for Europe, Rome. Scientist and Regional Adviser. Provision of support to governments of 52 countries on the development and implementation of their Food and Nutrition Policy and Action Plans and Environment and Health Plans. Establishment and coordination of two major international Research WHO Programmes for Surveillance of Foodborne Diseases and the Global Environmental Monitoring System for chemical contamination assessment. Contributed to key Ministerial Conferences on Environmental Health. Responsible for program and fund development, budget management, recruitment and supervision of staff. Establishment of Int'l partnerships and regional networks with WHO, FAO, OIE, IAEA, UNICEF, UNEP, EU, CDC, USAID and Universities .

11/99-7/01

Federal Institute for Risk Assessment - FAO/WHO Collaborating Centre for Research and Training on Food Hygiene and Zoonosis, Berlin, Germany. Scientist. WHO Surveillance Programme for Control of Foodborne Diseases and Intoxications in Europe. Promoted the establishment of a Surveillance network in 52 countries. Designed a major international database for surveillance and risk assessment. Development of strategies to support food microbiological risk assessment and harmonization of surveillance systems among WHO Regions. Publication of International Epidemiological Reports.

4/99-8/99

Food and Agriculture Organization (FAO), Food, Nutrition and Consumer Protection Service, Rome, Italy. Consultant. Technical assistance to projects related to Harmonization, Equivalence and Mutual Recognition of Food Control, Inspection and Certification Systems. Development of capacity building educational materials on food safety.

1/98-4/99

Ministry of Agriculture, Fisheries and Food, Madrid, Spain. Secretary of the European Committee for Standardization of horizontal methods of food analysis and determination methods of environmental contaminants and heavy metals in foods.

9/97-3/99

Confederación de Consumidores y Usuarios, Madrid, Spain. Coordinator of the Environmental Health and Food Department. Responsible for fund raising from the European Commission (EC). Representative of the Consumers Council at the Inter-ministerial Food Commission. Member of the WG for EU Common Agriculture Policy reform. Delegate of the Codex Committees on Nutrition and Foods for Special Dietary, on Food Labeling on Veterinary Drugs and on Pesticides Residues in Foods. European delegate for the Transatlantic Dialogue's WG on GMOs. Raised substantial long-term funding from the EC for projects that promoted collaboration of small farmers' and consumers' associations for education on environmental health and sustainability.

2/96-11/98

Environmental Defense Fund, NY/ Brussels. Intern/Consultant. Reviewed the EU, EPA/FDA regulations governing the use of chemicals in aquaculture and public health and environmental impacts. Evaluation of World Bank and federal proposals of aquaculture new project proposals. Supported major fund raising efforts from the Rockefeller Fund among others.

DEVELOPMENT OF INTERNATIONAL ACADEMIC and TRAINING PROGRAMMES

Leader on-going	Development of Massive Open Online courses (MOOC) on One Health. Current initiatives include the development of a MOOC on "One Health" in collaboration with International organizations.
<i>PAHO/WHO Adviser 2013-14</i>	Development with the World Bank and WHO of e-learning materials for a comprehensive course to address health nutrition and food safety in emergencies in the Caribbean. Organized a virtual knowledge exchange series of webinars with the WB, WHO, FAO and regional workshops for validation of the learning materials. The final course is available at the PAHO/WHO virtual campus.
<i>Program Director 2011-13</i>	Leadership Program for climate change and health. Development of a leadership capacity building strategy and training program to address the challenges of climate change on health and nutrition at community, national and global levels.
Program manager 2001-2006 Coordinator 2000-2001	WHO Surveillance Programme for Control of Foodborne Diseases (52 countries). Development and coordination of large international research and capacity building program for the surveillance of food and waterborne diseases and outbreak investigation, in collaboration with the FAO/WHO Collaborating Center for Research and Training on Hygiene and Zoonosis, CDC, Institute Pasteur, European Commission etc.
Program manager 2001-2006	WHO Global Environment Monitoring System for chemicals in food/water and exposure assessment Programme in Europe (52 countries). Establishment and coordination of a global research and capacity building program on chemical food and water monitoring, laboratory methods and methods of chemical exposure assessment in collaboration with WHO/FAO Collaborating Centers.
Regional Adviser 2001-2006	Food and Nutrition Policy and Action Plans in Europe (52 countries). Establishment of an integrated institutional capacity building 5 year program for development and implementation of food and environmental health policies and actions plans in 52 European countries.
Regional Adviser 2001-2006	Sub-regional Project to strengthen Food and Nutrition Services in South Eastern Europe within the Stability Pact Initiative for Social Cohesion in the Balkans. Established and coordinated and institutional capacity building program on food and nutrition policies and legislation.
Programme manager 2001-2006	Multi-country Public Health Initiative for the Central Asian Republics Development of a Food Specialization and Professional Master on Food Safety at the Kazakhstan School of Public Health for the five Central Asian Republics. Modules developed include: Food Policy and Legislation, Surveillance, Laboratory work, Risk analysis and Risk communication. Int'l collaborators: WHO, FAO, UNICEF, CDC, USAID, EC, Universities etc.
Project Manager 2004-2005	Sub-regional Projects for Promotion of Food and Nutrition Education in Schools and in Healthy Markets in Central Asian Republics. Development and integration of food safety and nutrition educational materials as part of the Healthy Schools and Healthy Markets programs.
Regional Adviser 2002-2003	Risk Management of Genetically Modified Organisms in foods. Collaboration with the Joint Research Centre of the European Commission in the development and organization of training courses for detection of Genetically Modified Organisms in foods.

SELECTED PUBLICATIONS AND CONTRIBUTIONS

Tirado MC. 2017. Climate Change and Sustainable and Healthy Diets. United Nations Standing Committee on Nutrition, Rome (in press).

Niles, M.T., Ahuja, R., Esquivel, J., Mango, N., Duncan, M., Heller, M., and C. Tirado 2017. Climate change and food systems: assessing impacts and opportunities. Meridian Institute. <http://bit.ly/2oFucpe>.

Romanelli C. and MC. Tirado (2017) "Harvesting common ground: maximizing the co-benefits of agrobiodiversity and human health", Chapter 21 in Handbook of Agricultural Biodiversity, Hunter D, Guarino L, Spillane C and McKeown PC (Eds.) Routledge: Abingdon, United Kingdom. 696pp.

MC. Tirado. 2016. Addressing the challenges if Climate Change to Food Security, Safety and Nutrition" In "Global Climate Change and Human Health: From Science to Practice", Luber G. editors.

Tirado, M.C., Galicia, L., Husby, H., Lopez, J., Olamendi, S., Chaparro, and R. Grajeda. 2016. Policy mapping of the nutrition and sectoral policies to address malnutrition in Latin America. Revista Panamericana de Salud Publica. 2016;40(2):114–23.

Tirado, MC, Hunnes, D., Cohen, M., Lartey, A. Climate Change and Nutrition Security in Africa. 2014. Journal of Hunger and Environmental Nutrition. 10:22–46, 2015

Jacoby E., Tirado, MC., et al. 2014. An integrated overview of the public policies on family agriculture, food security, nutrition and public health in the Americas: getting closed the UN working agendas closer. PAHO/FAO/CEPAL.

Jacoby E, Tirado C, Diaz A, Pena M, Sanches A, Coloma M, et al. 2014. Family farming, food security and public health in the Americas. World Nutrition, 5, 6, 537-551

Tirado, M.C., Crahay, P., Mahy, L., Zanev, C., Neira, M., Msangi, S., D. Costa Cohitino and Mueller A. 2013. Climate Change and Nutrition: creating a climate for nutrition security. Food and Nutrition Bulletin, vol. 34, no. 4.

Herforth, A, Frongillo E., Sassi F, Mclean M., Arabi M., Tirado C., Remans R, Mantilla G, Thomson M, Prabhu Pingali, P., 2014. Toward an integrated approach to nutritional quality, environmental sustainability, and economic viability: research and measurement gaps. Annals of the NY Academy of Sciences. 1332:1-21.

Tirado, MC, 2012. "Gender-sensitive strategies to address the challenges of climate change on health and nutrition security". In UNDP "Securing the Future We Want: Gender equality, Economic Development and Environmental Sustainability" launched at the UNDP HL side event UN GA 2012. <http://www.undp.org/content/undp/en/home/librarypage/womens-empowerment/powerful-synergies.html>

Tirado et al 2012. Food and Nutrition Security, Health and Gender Equality Partnerships for climate-resilient sustainable development. Launched at the Partnerships Forum in Rio+20. <http://www.uncsd2012.org/rio20/index.php?page=view&type=1012&nr=2&menu=23>

Tirado MC. 2012. *RIO+20 conference implications for Agriculture and Health of "The Future We Want"*. Background paper of the 16th Ministerial Conference on Health, Agriculture and Environment (RIMS 16), Santiago, Chile. <http://ww2.panaftosa.org.br/rimsa16>

Schneider, M.C., Tirado M.C, Rereddy S., Dugas R., Borda M.I., Aldighieri S., Cosivi O. and E. Alvarez Peralta (2012). Natural disasters in the Americas and contributions of veterinarians of public health focus in communicable diseases.

Tirado, MC. 2011. Enhancing women leadership to address the challenges of climate change to nutrition security and health. Launched at the UN Framework Convention for Climate Change 17th Conference of the Parties
<http://www.climatehealthconnect.org/sites/climatehealthconnect.org/files/resources/Enhancing%20Women%27s%20Leadership.pdf>

Tirado, M.C., 2010. Cambio Climatico y Salud. Informe SESPAS. 2010. Gaceta Sanitaria. 24 (Suplemento 1):78–84.

Tirado M.C., Cohen M.J., Aberman N.L., Meerman, J. and B. Thompson. 2010. Addressing the Challenges of Climate Change and Biofuel Production on Food and Nutrition Security. *Journal of Food Research International* 43 (2010) 1729–1744.

Tirado, M.C., Clarke, R., Jaykus L.A., McQuatters-Gollop, A., and J. M. Frank. 2010 Climate Change and Food Safety: a review. *Food Research International* 43 (2010) 1745–1765.

Galal, O., Corroon, M. and MC Tirado 2010. Urban Environments and Human Health: Food Security in the Middle East. *Asia-Pacific Journal of Public Health Supplement to* 22(3) 254S –261S.

Harrison G.G., MC Tirado and O.Galal. 2010. Backsliding malnutrition. *Asia-Pacific Journal of Public Health. Supplement to* 22(3) 246S –253S.

Tirado M.C., Cohen M.J., Aberman N.L. and B. Thompson. 2009. The Impact of Climate Change on Nutrition. In “The Global Food Crisis: Governance Challenges and Opportunities”. J. Clapp and Cohen M., editors. Wilfred Laurier University Press, Canada.

Cohen, M, Tirado, MC, N. L. Aberman, B. Thompson. 2008. Impact of climate change and bioenergy on nutrition. *FAO High Level Conference on Food Security and the Challenges of Climate Change and Bioenergy*. http://www.fao.org/ag/agn/agns/files/HLC2_Food_Safety_Bioenergy_Climate_Change.pdf

Tirado, MC. 2008. Chapter on Climate Change and Chemicals in food and Chapter on Food Emergencies and Climate Change. In *Food Safety and Climate Change*. FAO, Rome.
http://www.fao.org/ag/agn/agns/files/HLC1_Climate_Change_and_Food_Safety.pdf

Tirado MC. 2007. Consumers and Health a new approach to public health, PAHO/WHO report.

Trübswasser, U., Branca, F. and C. Tirado. 2006. Comparative analysis of nutrition policies in the WHO European Region. Background document for the WHO Ministerial Conference on counteracting Obesity. WHO Regional Office for Europe.

Kovats, S. and C. Tirado. 2006. Climate, Whether and Enteric Diseases. In *Climate Change and Adaptation Strategies for Human Health*. Menne, Bettina; Ebi, Kristie L. (Eds.) 2006, XXV, 449 p.
http://www.euro.who.int/globalchange/Publications/20051202_3

Tirado, C. and K. Schmidt, 2004. Role of the WHO Surveillance Programme for Control of Foodborne infections and intoxications in Europe. *FAO/WHO second Global Forum for food safety regulators*. Conference room document 85. <http://www.fao.org/docrep/meeting/008/ae331e.htm>

Tirado, C., 2004. Food Strategies in Europe: Promoting a new approach to Food control in the Region. In *FAO/WHO second Global Forum for Food Safety Regulators*, Conference Room document No.84
<ftp://ftp.fao.org/docrep/fao/meeting/008/ae330e.pdf>

Tirado C., Wickramatillake, H., and A. Robertson. 2004. Environmental Risks and Health Effects: Food. In *Health and Environment in the European Region: Situation and Policy at the beginning of the 21st Century*. Ivanov, I et al. eds. WHO Regional Office for Europe.

Muntean N, Jermini M, Small I, Falzon D, Fürst P, Migliorati G, Scortichini G, Forti AF, Anklam E, von Holst C, Niyazmatov B, Bahkridinov S, Aertgeerts R, Bertollini R, Tirado C, Kolb A. 2003. Dietary Exposure Assessment to Some Persistent Organic Pollutants in the Republic of Karakalpakstan of

Uzbekistan. Environmental Health Perspectives 111: 1306-1311.
<http://www.ehponline.org/members/2003/5907/5907.pdf>

Tirado M.C. 2002. Statistical information on food-borne disease in Europe microbiological and chemical hazards. FAO/WHO Pan-European Conference on food safety and quality, PEC 01/04. rev.1
<ftp://ftp.fao.org/docrep/fao/meeting/004/x6865e.pdf>

Tirado, M.C. 2002. Chapter 11 Pesticides. In Monograph on Children Health and Environment: A review of evidence. European series WHO/European Environment Agency. Environmental issue report No. 29. pages 152-161 http://www.euro.who.int/childhealthenv/Monitoring/20020725_4

Tirado M.C. and K. Schmidt, 2001. WHO Surveillance Programme for Control of Foodborne Diseases: results and trends across Greater Europe. Journal of Infection, 43, 80–84.

BOOKS and Chapters

Robertson A., Tirado C. Lobstein, T., Jermini, M., Knai, C., Jensen, J., Ferro-Luzzi A and W.P.T. James. 2004. Food and health in Europe: a new basis for action. WHO Regional Publications, European Series, No.96.
http://www.euro.who.int/InformationSources/Publications/Catalogue/20040130_8

M Cohen, B. Thompson, C. Tirado, N-L. Aberman, J. Merman. 2012. Climate Change, Bioenergy and Nutrition. Springer.

Tirado M.C. Food Security, Food Safety and Nutrition. Chapter in "Global Climate Change and Human Health: From Science to Practice" edited by George Luber and Jay Lemery. 2015.
<http://www.wiley.com/WileyCDA/WileyTitle/productCd-1118505573.html>

Noora-Lisa Aberman and Cristina Tirado. Impacts of Climate Change on Food Utilization In Handbook of Global Environmental Change. Bill Freedman (ed.) DOI 10.1007/978-94-007-5784-4_124 Springer (2014).

SELECTED CONTRIBUTIONS

Contributor author of the health chapter of the 4th Assessment report of the Intergovernmental Panel on Climate Change (IPCC) 2007. *The IPCC was recipient of the Nobel Peace price in 2007 co-shared with Al Gore.* <http://www.ipcc.ch/>

Connecting Global Priorities: Biodiversity and Human Health A State of Knowledge Review. 2015. Chapter3: Climate change, biodiversity and human health. <https://www.cbd.int/health/SOK-biodiversity-en.pdf>

Roots for the Future: the Landscape and Way Forward on Gender and Climate Change. 2015. Chapter 3: Promoting resilience, rights and resources: Gender-responsive adaptation across sectors <https://portals.iucn.org/library/sites/library/files/documents/2015-039.pdf>

Food and Nutrition Security, in Climate Change: An Encyclopedia of Science and History. 2013
<http://ebooks.abc-clio.com>

Climate Change and Food and Nutrition Security. UN Standing Committee of Nutrition Message to the UNFCCC negotiators. Presented at the 16th United Nations Conference of the Parties (COP16) 2010.
www.unscn.org

Climate Change and Health. Policy options for climate change and health. Report on a joint WHO-PBL technical meeting. Bonn, Germany, 11-12 January, 2010.
http://www.pbl.nl/sites/default/files/cms/publicaties/pbl2010-who-pbl-technical-meeting-climate-change-and-health_0.pdf

WHO/Europe and the European Commission Climate, Environment and Health Action Plan Information System (CEHAPIS) project. Food policy section.
http://ec.europa.eu/health/indicators/other_indicators/environment/index_en.htm

Health and climate change: the now and how. A policy action guide (2005). WHO Europe.
<http://www.euro.who.int/document/E87872.pdf>

EU Technical Working Group on integrated Monitoring. 2004. Final Report on Actions and Recommendations for "Integrated Monitoring of dioxins & PCBs in the Baltic Region" in the framework of the European Environment and Health Strategy (COM(2003)338 final)
<http://europa.eu.int/comm/environment/health/pdf/com2004416.pdf>

Terrorist threats to food: guidance for establishing and strengthening prevention and response systems, World Health Organization. Dept. of Food Safety, Zoonoses and Foodborne Diseases, Geneva, 2003.

EU Technical Working Group on integrated Monitoring. 2003. Baseline Report on "Integrated Monitoring of dioxins & PCBs in the Baltic Region" in the framework of the European Environment and Health Strategy (COM(2003)338 final). <http://www.environmentandhealth.org/>

FAO/WHO/EU Position paper (prepared by Tirado MC), 2004. Compatibility of data reporting formats used by FAO/WHO international Risk assessment bodies, European institutions such as the European Commission and scientific bodies such as the European Food Safety Authority. CX/EURO 04/3-Add.1. FAO/WHO Codex Regional Coordinating Committee for Europe.
<ftp://ftp.fao.org/codex/cceuro24/eu0403ae.pdf>

Resolution EUR/RC52/R3 of the fifty-second of the WHO Regional Committee for Europe, 2002. (prepared by Tirado MC) Recommendations of the FAO/WHO Pan-European Conference on Food Safety and Quality http://www.euro.who.int/Governance/resolutions/2002/20021231_10

Robertson A. and C. Tirado 2002. Food and health in Europe: a new basis for action. Summary for Policy Makers. WHO Europe Regional Publications. <http://www.euro.who.int/document/e78578.pdf>

Report of the FAO/WHO Pan-European Conference on Food Safety and Quality, February, 2002.
http://www.foodsafetyforum.org/paneuropean/summary_en.htm

The analysis of food samples for the presence of genetically modified organisms. 2002. Quercy et. al. ed. EU JRC/WHO Europe. <http://gmotraining.jrc.it/docs/Manual%20EN%202006/Foreword.pdf>

Naylor, R.L., Goldberg R. et al., 2000. Effect of aquaculture on world fish supplies, a review. Nature. Vol. 405: 1017-1040.

SELECTED INTERNATIONAL CONFERENCES/EVENTS ORGANIZED

Co-organization with the University of California, IUNS, the European Commission, Italy and the UK of an event on Climate Change and adaptation to health in cities at the WHO Ministerial Conference on Environment and Health in Ostrava, 2017.

Co-organized with the University of California, Secretariat of the Convention of Biological Biodiversity (CBD), UNEP, FAO, and International Union of Nutritional Sciences (IUNS) a symposium on Agro-biodiversity and Health at the CBD COP13, Cancun December 2016.

Organized with the University of California, IFOAM and the delegation of Madagascar an event on "Sustainable Food Systems, Biodiversity and Health" at the UNFCCC COP22, Marrakesh, 2016.

Organized with the University of California, IUCN, CBD Secretariat, WHO and the delegation of Uganda an event on "Sustainable Food Systems, Health and Biodiversity in Africa" at the African Pavilion UNFCCC COP22, Marrakesh 2016.

Organized with WHO, UNEP, CBD and the International Union of Nutritional Sciences (IUNS) a symposium on Sustainable Food Systems, Biodiversity and Health around the WHO Global Ministerial Conference on Health and Climate in Paris, July 2016.

Co-organized with the Convention of Biological Diversity (CBD) Secretariat and the IUNS an event on "Mainstreaming biodiversity in Agriculture for Nutrition and Health" at the 20th meeting of the CBD Subsidiary Body on Scientific, Technical and Technological Advice, Montreal, Canada, 2016.

Collaboration with OHCHR in the organization of a panel discussion on Climate Change and the Right to Health at the 31st Human Rights Council Session, Geneva, 2016.

Organized with UNSCN/IUNS/FAO/WHO/UNEP an event on "Sustainable Food Systems and Health" COP21, Paris, 2015. Launched a paper on "Sustainable Food Systems and Health: a convenient truth for health and the planet" at COP21, Paris, 2015.

Co-organized with ICRAF, IUNS and IFOAM an event on Agro-ecology: climate resilience, food and nutrition security, and Sustainable Development Goals at the COP21, Paris.

Co-organized with ACF, UNSCN, FAO, DGDEVCO – EuropeAid an event on Climate and Nutrition: A double win for Sustainable Development. COP21, Paris. 2015.

Organization with IUNS, WFP, Sackler Institute for Nutrition/NYAS and the German Government the event on Sustainability, Health and Nutrition in Face of Climate Change around the UNGA in NY 2015.

Organization with FAO, UNDP/GEF-SGP and with support of IFAD of an international workshop on nutrition indicators at the Conference on Community Based Adaptation, Nairobi, Kenya, 2015.

Collaboration in the stakeholders meetings on climate change and food security and climate change and health at the UNESCO Conference Our common future under climate change. Paris, 2015.

Organization on behalf of the IUNS task force on climate and nutrition, the Swiss Federal Office for the Environment, WHO and FAO a round table on Climate, Nutrition, Health and Gender at the WHO Ministerial Conference on Climate Change in Geneva 2014.

Invited by the UN Secretary General to participate at the UN Climate Summit NY, 2014. Presented the key messages from the round table at the WHO Ministerial Conference in Geneva.

Organization with IUNS, UCLA, ACF, CARE, International Office for Migration and Veterinaires and Agronomes Sans Frontiers of an event on Climate justice and Human Rights with focus on food security nutrition, health and gender at the UNFCCC COP20 in Lima, 2014.

Co-organization with ACF, CARE France International Office for Migration, and UN University an event on Climate justice and human rights with focus on migration and food and nutrition security, gender at the EU Pavilion at the COP20 in Lima, 2014.

Co-organization of a HL event on Climate change adaptation, resilience and human mobility: voices from the climate frontlines" Co-organized with UNHCR, UN-WOMEN, UNU-EHS, IOM, COP20 Lima 2014.

Contribution to address the right to food and climate change at the Human Rights meeting organized by the Mary Robinson Foundation at the COP20 in Lima, 2014.

Contributed to the organization of a learning event of IFOAM/Biovision on food security at the Global Landscapes Forum at the COP19 and to a seminar on Nutrition sensitive climate adaptation and mitigation at the II Health Summit at the UNFCCC COP19, Poland, 2013.

Contributed to the organization UNSCN, FAO, WHO, Biodiversity International seminar on Nutrition and Sustainability at the ICN2 technical preparatory meeting, FAO, Rome 2013.

High Level event at Rio+20 Partnerships Forum on *partnerships for climate-resilient sustainable development, food security and nutrition, health and gender* organized by PHI with WFP, FAO, WHO, IFAD, UNDP, Oxfam the Mary Robinson Foundation for Climate Justice¹
<http://www.uncsd2012.org/rio20/index.php?page=view&type=1012&nr=2&menu=23>

Learning event at the Rio+20 Agriculture and Rural Development Day organized in collaboration WFP/IFOAM/FAO to address recommendation 5 of the CGIAR/Climate Change, Agriculture and Food Security (CCAFS) Summary for policy makers from the Commission on Sustainable Agriculture and Climate Change.

Event on Confronting Climate Change and Extreme Weather: A Public Health Perspective. April, 12th 2012. Complementary event to the California Governor's Conference on Climate Change and Extreme Weather in California. <http://gov.ca.gov/ecrcf.php> co-organized by PHI, UCLA Center for Public Health and Disasters and the California Department of Public Health, Los Angeles, CA, USA.

Stakeholders meeting for the "*Climate Action and Advocacy: Strategies and Tools for Influencing Public Policy on Health and Climate Change in California*", California Endowment, Oakland, CA, November 14th, 2012.

High Level event on "leadership for women to address the challenges of climate change on nutrition and health" organized by PHI with WFP, UNSCN, FAO, WHO and WB December 4th 2011, UNFCCC COP17 Durban.

Side event on Climate Change and Non Communicable Diseases (NCDs): co-benefits to climate and health of adaptation and mitigation UN Conference on NCDs, UN General Assembly, NY, NY September, 2011.

Coordinator of the learning circle on *climate change adaptation, food, nutrition and health* organized by the Climate Change Gender Alliance at the Committee on the Status of Women, NY 2012.

Symposium on *Climate Change, Health and Gender*. International Conference on Environmental Health. University of Guadalajara, Mexico, 1-4, October 2010.

Symposium on *Risk Benefit Assessment of food production and food consumption on human health and on the environment*. Conference of the International Association for Food Protection. Anaheim, CA, 2010.

Symposium on *Global Climate Change, Food security and Ethics*. Conference of the International Society of Environmental Epidemiology. Dublin, Ireland, August 2009.

Symposium on *Risk Benefit Analysis of food production and consumption on health and the environment*. Conference of the International Society of Environmental Epidemiology. Dublin, 2009.

Symposium on *Global Food Safety and Environmental Health*. Conference of the International Society of Environmental Epidemiology. Pasadena, USA, October 2008.

Highlighted Symposium on *Infectious Diseases in a Global Environment*. Conference of the International Society of Environmental Epidemiology. Pasadena, USA, October 2008.

Series of FAO workshops to strengthen biosecurity in Nepal. Co-organized with FAO and the National Agriculture Research Center. Institutional and Legislative Framework and Capacity Building Assessment. Katmandu, Nepal, 21- 31st January, 2008.

Workshop on the establishment of a New Programme on Consumers and Health at PAHO. Organized by the Department of Sustainable Development and Environmental Health PAHO/WHO. *Framework for the establishment of a new Programme on Consumers and Health*. Washington, DC, USA, 20th July 2007.

¹ Event co-moderated with David Nabarro. Speakers: Ertharin Cousin, executive director of the WFP, Ann Tutwiler, assistant director FAO, Barbara Stocking, Director Oxfam GB, Mary Robinson, Olav Kjørven, Director of UNDP's Bureau for Development, Director of WHO SDE, Chief Development Strategist IFAD, and Dutch Minister for European Affairs.

FAO/WHO Europe/ICD, Awareness course on risk assessment, Ljubiana, Slovenia, 27-29 September 2005. Co-organized by FAO, the Industry Council of Development and WHO Europe.

FAO/WHO Regional training on Codex Alimentarius. Vilnius, Lithuania, 25-27 October 2005, Co-organized by Switzerland FAO and WHO Europe.

WHO Sub-regional training course: Global Salmonella Surveillance: St. Petersburg, Russian Federation, 13- 19 June 2005. Organized by the Global Salmonella Surveillance network in collaboration with the Institute Pasteur and WHO Europe.

Sub-regional workshop for the development of national food safety strategies in South Eastern Europe. Organized by WHO Europe with the collaboration of FAO. Brijuni, Croatia, 5-7 July 2004.

WHO International workshop on total diet studies, Paris, France, 17-21 May 2004. Organized by WHO HQ and WHO Europe in collaboration with the Institut National de la Recherche Agronomique – INRA.

5th World Congress on foodborne infections and intoxications Berlin, Germany, 7-11 June 2004
Organized by the Federal Institute for Risk Assessment (BfR), FAO/WHO Collaborating Centre for Training and Research in Food Hygiene and Zoonoses with the contribution of WHO Europe. Member of Scientific Advisory Board.

WHO International Training Course: "Surveillance and Epidemiology of Salmonella and other Foodborne Diseases" April 26-30, 2004, Warsaw, Poland. Organized by the Global Salmonella Surveillance network in collaboration with WHO Europe.

European seminar on Codex Alimentarius Bratislava, Slovak Republic, 19 September 2004, Organized by the Dutch Ministry of Agriculture, Nature and Food Quality in partnership with the Food Research Institute of the Slovak Republic and WHO Europe.

WHO Sub-regional training course: Global Salmonella Surveillance Level October 2004, Saint Petersburg, Russian Federation. Organized by the Global Surveillance network in collaboration with the Institute Pasteur and WHO Europe.

Panel of the Food Safety Project for South Eastern Europe. 11th March 2004, Dublin, Ireland. Organized by WHO Europe in collaboration with the Safety Authority of Ireland within the Food Safety Conference: new Agenda for Official Food Controls.

Foodborne Disease Epidemiology Training: Surveillance and Response for Central Asian Republics. Organized by WHO Europe in collaboration with CDC Atlanta, CDC Central Asia, and the Kazakhstan School of Public Health. Almaty, Kazakhstan, 14-18 July 2003.

WHO Training Course: Surveillance of Foodborne Diseases and Antimicrobial Resistance in Foodborne Pathogens for Russian speaking countries. Moscow, Russia, 3-8 March 2003. Organized by the Global Salmonella Surveillance network in collaboration with WHO Europe.

Workshop on food policy and legislation for South Eastern Europe, Belgrade, Serbia and Montenegro, 12-16 May, 2003. Organized by WHO Europe with contribution of FAO.

Sub-regional seminar for development of Food Policies and Legislation for Central Asian Republics. Organized by WHO Europe in collaboration with FAO and the Kazakhstan School of Public Health. Almaty, Kazakhstan, 14-18th October 2002.

Workshop on Foodborne disease and Climate Change. Rome, Italy, Italy, Rome, 27 - 28 February 2003. European Commission project on Climate Change and Adaptation Strategies for Human Health (cCASHh). Organized by WHO Europe.

Training in chemical food contamination monitoring and laboratory methods: pesticides and environmental contaminants of importance in Central Asian Republics - theoretical and analytical aspects. Organized by

WHO Europe in collaboration with the Kazakhstan School of Public Health and City of Almaty Sanitary and Epidemiological Station, Almaty, 4-8 August 2003.

Training for Sanitarian and Veterinarian Inspectors in Central Asian Republics. Organized by WHO Europe in collaboration with the Kazakhstan School of Public Health. Almaty, Kazakhstan, 25-30 October 2003.

Advisory Committee Meeting of the WHO Surveillance Programme for Control of Foodborne Infections and Intoxications in Europe, Berlin, Germany, December 10-11, 2002. Organized by the BgVV-FAO/WHO Collaborating Center for Training and Research in Food Hygiene and Zoonoses in collaboration with WHO Europe.

WHO Sub-regional workshop on total diet studies for EU accession countries. Brno and Prague, Czech Republic, 25-30 November 2002. Organized by WHO/Europe and the National Institute of Public Health of the Czech Republic.

Multi-country Public Health Initiative for Central Asian Republics Launch Seminar. Almaty, Kazakhstan, 26-28, March 2002. Organized by WHO Europe in collaboration with the Kazakhstan School of Public Health.

Meeting of National Contacts of the WHO Surveillance Programme for Control of Foodborne Infections and Intoxications in Europe, Berlin, Germany, 23-24 April, 2002. Organized by the BgVV -FAO/WHO Collaborating Center for Training and Research in Food Hygiene and Zoonoses in collaboration with WHO Europe.

First Technical Workshop of the Nutrition and Food Safety Project for South Eastern Europe, within the framework of the Stability Pact Initiative for Social Cohesion, Belgrade, Serbia and Montenegro, 12-13 November 2002.

Workshop on Intersectoral Development of National Food and Nutrition Action Plans in Southern Europe, Rome, Italy, 20-23 March 2002. Organized by WHO Europe with the contribution of FAO.

First Steering Committee Meeting of the Global Environmental Monitoring System for Food Programme in Europe Rome, Italy, 26 October 2001. Organized by WHO Europe.

Workshop on Intersectoral Development of Food and Nutrition Action Plans in South East Europe Sofia, Bulgaria, 8-11 October 2001. Organized by WHO Europe with contribution of FAO and UNICEF.

WHO/FAO/ILSI. Sub-Regional Food Safety Seminar for Central Asian Republics, Tashkent, Uzbekistan 24-26, September, 2001. Organized by WHO Europe in collaboration with FAO and ILSI.

NATIONAL WORKSHOPS/TRAININGS ON ENVIRONMENT & HEALTH

National workshops, seminars and trainings on environmental health and food policy and action plans organized and facilitated in more than 100 different countries in Asia, Africa, Europe, Balkan Region, New Independent States, Central Asia, Middle East and South America and the Caribbean.

MEMBERSHIPS IN COMMITTEES

- UN Standing Committee on Nutrition WG on Climate Change (2010- present)
- Chair of the Climate and Nutrition Task Force of the International Union of Nutritional Sciences (2014-present).
- Global Gender Climate Change Alliance (2011-Present).
- WG for the US National Strategy for Health Security RAND WG on emerging environmental risks (2010).
- World Bank Development Market Place Assessor on Climate Adaptation (2009-2010).
- WHO WG on the impacts of POPs and dioxins on children (2007-2010).
- WHO Task Force on Response to the threat from deliberate use of biological agents, chemicals and nuclear technology as weapons in Europe (2001-2006).

- WHO Task Force for Preparedness for Avian Influenza in Europe (2002-2007).
- European Food Safety Authority Task Force on Zoonosis (2002-2007).
- Member of the EU Technical Working Group on integrated Monitoring, in the framework of the development of the European Environment and Health Strategy 2004-2010 (2003-2004)
- Member of the WHO European Task Force on Obesity (2004-2005)
- WHO/FAO Secretariat of Codex Alimentarius Coordinating Committee Europe (2001-2006).
- EU Expert Evaluator of the SME research proposals, 5th Framework Programme (Environment and Health panel) 1999-2000.
- Secretary of the European group for standardization of methods of food analysis (1998-99)
- Representative of the Consumers' Council at the Inter-ministerial Commission for Food, Spanish Ministry of Health and Consumers Protection (1997-99).
- Delegate of Consumers International at Codex Committee on Veterinary residues Foods (1997-1999).
- Delegate of the EU/USA Transatlantic Dialogue -Biotechnology WG (1998-99).

Professional Affiliations:

- Institute of Environment and Sustainability, UCLA.
- UCLA Center for Women Studies.
- Blum Center for Poverty and Health in Latin America.
- University of San Francisco Center for Women's Health and Empowerment.
- International Society of Environmental Epidemiologists ISEE (2007-present). Member of the Ethics Committee.
- American Association for the Advancement of Science. (2005-present)

INTERNATIONAL PROGRAM AND FUND DEVELOPMENT

Date:	Name and description of project
2017-Present	WHO/European Commission project on climate change adaptation and health. Evaluation of the implementation of the EU Climate Change adaptation strategy in 28 countries in Europe. Lead scientist: M.C.Tirado. Funding: WHO and European Commission.
2017-Present	UNEP Economics of Ecosystems and Biodiversity (TEEB) Agri-Food study. Coordinator lead author of the Equitable Food Systems chapter and lead author of the Health Chapter. Funding: Global Alliance for the Future of Food.
2016-Present	Sustainable Food Systems, Nutrition, Health and Climate Change. This study focuses on sustainable food production and consumption as adaptation to and mitigation of climate change. Funding: UN Standing Committee on Nutrition. Lead Scientist: Dr. M.C. Tirado.
2014-2016	Policy mapping and analysis: nutrition and sectoral policies that affect malnutrition. Mapping of sectoral policies that affect nutrition in Central America and LAC. Funding: Micronutrients Initiative/ PAHO/WHO. Lead Scientist: Dr. M.C. Tirado.
2012-2013	Strengthening policies and surveillance systems for climate sensitive food-, water and vector-borne diseases in Brazil. Funding: PAHO/WHO Cooperation Agreement with Ministry of Health, Brazil (\$US 3.5 Million). Technical Coordinator: Dr. M.C. Tirado. Administrative coordinator PAHO/WHO Panatosa Center.
2012-2013	Technical Cooperation agreement on food safety and risk assessment with ANVISA Health Surveillance Agency Brazil. Funding: ANVISA (\$US 1.5 Million). Technical coordinator: Dr. MC Tirado. Administrative coordinator PAHO, Panatosa Center.
2011- 2012	EU Research project on Climate Change and Nutrition Research needs in Africa with focus on Sub-Saharan countries. Funding EU AFRI 2010 SUNRAY project. Overall Coordinator: Tropical Institute; Research working packages: Intermon/OXFAM. Climate Change expert: Dr. M.C. Tirado
2011-2012	Development of a California Public Policy Action Plan for Climate Change and Health. Funding: Hewlett Foundation. Principal Investigator: Dr. M.C. Tirado
2010- 2011	Increasing the capacity of ACF and nutrition stakeholders capacity and impact in preventing nutritional and humanitarian crisis in areas affected by cyclical natural hazards and climate change. Funding: Action Against Hunger. Coordinator: Philippe Crahay. climate change expert: Dr. M.C. Tirado.

2009-2010	WHO/EC Climate, environment and health action plans and information systems (27 EU countries). Analysis of food policy options to adapt to climate change. Funding EC and WHO Europe. Coordinator: Dr. Menne. Climate and Food Policy expert: Dr. M.C. Tirado.
2009-ongoing	Adapting Humanitarian Response to cope with Climate Change. OXFAM America and CNA. Policy analysis on the changing roles of humanitarian Assistance organization in view of climate change. Project funded by the Rockefeller Fund. Adaptation expert: M.C. Tirado
2008-ongoing	FAO Conference on World Food Security: The Challenge of Climate Change and Bioenergy. Preparation of policy documents, including food emergencies, chemical contamination, food security, health and nutrition and follow up publications (two peer review articles, a chapter and an on-going book). Funding: FAO/IFPRI. Climate expert: Dr. MC. Tirado. http://www.fao.org/ag/agn/agns/files/HLC1_Climate_Change_and_Food_Safety.pdf
2006-2007	WHO Sustainable Development and Environmental Health Department. Development of a framework for the establishment of a new Programme on Consumers and Health. Health Impact Assessment of agriculture and food trade policies. Funding: PAHO. Lead expert: M.C. Tirado
1999-2006	WHO Surveillance Programme for Control of Foodborne Diseases (52 countries). Capacity building on surveillance of foodborne diseases and outbreak investigation, in collaboration with WHO Collaborating Center for Research and Training on Hygiene and Zoonosis and the WHO Global Salmonella Surveillance. Funding: Federal Institute for Risk Assessment-WHO Collaborating Center and WHO Europe. Programme Manager: M.C. Tirado 2001-06 / Program Coordinator 1999-2001.
2003-2005	Climate Change and Adaptation Strategies for Human Health (23 countries). EU Research Project. Funding EU. Project Coordinator: B. Menne. Climate and Food Safety Regional Regional Adviser: M.C. Tirado.
2001-2006	WHO Global Environment Monitoring System for chemicals in food/water and exposure assessment Programme in Europe (52 countries). Establishment of a Regional network of WHO Collaborating Centers and Participating Research Institutions. Capacity building on Total Diet Studies. Funding: WHO Europe. Program manager: M.C. Tirado
2001-2006	Food and Nutrition Policy and Action Plans in Europe (52 countries). Institutional capacity building and training for development and implementation of food policies and strategies. Funding: WHO Europe. Regional Adviser and Program manager: M.C. Tirado
2004-2005	Sub-regional Project for Promotion of Hygiene Education in Schools in Central Asian Republics (5 countries). Capacity building on of the use of the manual of "Five Keys for Safe Food". Collaboration with UNICEF and Health Promoting Schools. Funding: DFID.
2004-2005	Biannual Cooperation Agreement between Ministry of Health of Georgia and WHO Europe. Institutional capacity building for national authorities on the development of Intersectoral Food and Nutrition Strategies. Funding: WHO. Project Manager: M.C. Tirado
2004-2005	Biannual Cooperation Agreement between Ministry of Health of Russian Federation and WHO Europe. Training national authorities and institutions on the development of Intersectoral Food Strategies. Funding: WHO Europe. Manager: M.C. Tirado
2004-2005	Biannual Cooperation Agreement between Ministry of Health of Uzbekistan and WHO Europe. Capacity building for national authorities and institutions on the development of Intersectoral Food and Nutrition Strategies. Funding: WHO Euro. Manager: M.C. Tirado
2005	Biannual Cooperation Agreement between Ministry of Health of Turkmenistan and WHO Europe. Capacity building for national authorities and institutions on the development of national Food and Nutrition Strategies. Funding: WHO Europe/DFID. Manager: M.C. Tirado
2005	Biannual Cooperation Agreement between Ministry of Health of Tajikistan and WHO Europe. Capacity building for national authorities and institutions on the development of a national Food and Nutrition Strategies. Funding: WHO Europe. Project Manager: M.C. Tirado.
2005	Biannual Cooperation Agreement between Ministry of Health of Kyrgyzstan and WHO Europe. Capacity building for national authorities and institutions on the development of a national Food and Nutrition Strategies. Funding: WHO. Project Manager: M.C. Tirado.
2002-2005	Sub-regional Project to strengthen Food and Nutrition Services in South Eastern Europe - Stability Pact Initiative for Social Cohesion in the Balkans. (8 countries). Institutional capacity building on food policies and legislation. Collaborators: European Council, FAO, Greece, Belgium, Ireland, Slovenia and other WHO Europe Member States. Funding: WHO Europe and Member State donors. Food Regional Adviser: M.C. Tirado.
2004-2005	Biannual Cooperation Agreement between MoH of Albania and WHO Europe. Institutional capacity building on Hazard Analyses and Critical Control Points (HACCP) for Public Health Officials. Funding: WHO Europe. Manager: M.C. Tirado.
2004-2005	Biannual Cooperation Agreement between MoH of Croatia and WHO Europe. Institutional Capacity Building for the establishment of a Food Safety Agency. Manager: M.C. Tirado

- 2004-2005 **Biannual Cooperation Agreement between MoH of Bosnia and Herzegovina and WHO Europe.** Institutional capacity building for national authorities and institutions on the development of a national food and nutrition strategies. Manager: M.C. Tirado.
- 2004-2005 **Biannual Cooperation Agreement between MoH of Serbia and Montenegro and WHO Europe.** Capacity building of national authorities and institutions on the development of national food and nutrition strategies. Development of a Food Law and secondary food Legislation. Program Manager: M.C. Tirado.
- 2004-2005 **Biannual Cooperation Agreement between MoH of Former Yugoslavian Republic of Macedonia and WHO Europe.** Capacity building for national authorities and institutions on the development of Food and Nutrition Strategies and development of a Food Law and secondary Legislation. Program Manager: M.C. Tirado
- 2002 – 2003 **Multi-country Public Health Initiative for the Central Asian Republics (5 countries).** Development of a Food Initiative for Central Asia. Institutional Capacity building on: Policy, Legislation, Surveillance, monitoring and risk assessment. Int'l collaborators: WHO, FAO, CDC, USAID, European Universities. Funding: WHO Europe. Project Manager : M.C. Tirado.
- 2002 -2003 **Biannual Cooperation Agreement between MoH of Tajikistan and WHO Europe.** Capacity building on Risk communication. Funding: WHO Europe. Project Manager: M.C. Tirado.
- 2002-2003 **Biannual Cooperation Agreement between MoH of Russian Federation and WHO Europe.** Capacity Building on Food Safety and Nutrition. Project Manager: M.C. Tirado
- 2002 -2003 **Biannual Cooperation Agreement between MoH of Albania and WHO Europe.** Capacity Building on Food Safety and Nutrition. Project Manager: M.C. Tirado
- 2002 -2003 **Biannual Cooperation Agreement between MoH of Bosnia and Herzegovina and WHO Europe.** Capacity Building on Food Policies and Legislation. Project Manager M.C. Tirado
- 2002 -2003 **Biannual Cooperation Agreement between MoH of Serbia and Montenegro and WHO Europe.** Capacity Building on Food Policies and Legislation. Project Manager: M.C. Tirado
- 2002-2003 **Biannual Cooperation Agreement between Ministry of Health of FYRM and WHO Europe.** Institutional Capacity Building for the development of Food and Nutrition Strategies, Food Law and secondary food Legislation. Project Manager: M.C. Tirado
- 2002 -2003 **Biannual Cooperation Agreement between Ministries of Health of Bulgaria and WHO Europe.** Capacity Building for implementation of Food and Nutrition Action Plans. Funding: WHO Europe. Regional Adviser: M.C. Tirado
- 2002 -2003 **Biannual Cooperation Agreement between MoH of Latvia and WHO Europe.** Capacity Building for implementation of Food and Nutrition Action Plans. Manager: M.C. Tirado
- 2002 -2003 **Detection techniques of Genetically Modified Organisms in foods.** Collaboration with the Joint Research Centre of the European Commission in the development of training course for risk management of Genetically Modified Organisms in foods. Funding: EC-JRC Ispra. Project Manager: G. van den Eede. WHO Food Safety Regional Adviser: M.C. Tirado.

LANGUAGES

Spanish (mother tongue). English and French (working level), Italian (spoken/read), Portuguese and German (Read), Russian (notions).