1) Personal Information
Name: Lia Crotti, MD, PhD
Place and Date of Birth: Crema (Italy), 2/10/1973
Gender: Female
E-Mail: lia.crotti@unimib.it
Children: 2

2) Academic Education
1999: Medical Degree in Medicine and Surgery (summa cum laude), Faculty of Medicine and Surgery, University of Pavia, Italy.

3) Advanced Professional Degrees
2003: Board Certification in Cardiology (summa cum laude); Faculty of Medicine and Surgery, School of Specialization in Cardiology, University of Pavia, Italy.
2007: PhD in Genetics and Molecular Biology; Faculty of Medicine, University of Stellenbosh, Cape Town, South Africa.

4) Current Positions
- October 2017: Associate Professor of Cardiology of the Department of Medicine and Surgery, University of Milano-Bicocca, Milan, Italy - November 2013-present: Cardiologist at the IRCCS Istituto Auxologico Italiano, Milan, Italy, with a specific expertise in molecular cardiology. She performs her clinical and basic research activities under the direction of Prof. G. Parati in the Department of Cardiology of San Luca Hospital. In addition she supervises the diagnostic and research activities of the Laboratory of Cardiovascular Genetics, Center for Cardiac Arrhythmias of Genetic Origin (Director: Prof. P.J. Schwartz).
- December 2005- September 2017 - "Ricercatore" of the Department of Molecular Medicine, University of Pavia, Italy.

5) Honors
- Abilitazione scientifica nazionale a professore di seconda fascia per il settore concorsuale 06/D1- Malattie dell'apparato cardiovascolare e malattie dell'apparato respiratorio (Bando 2013, DD n161/2013) - Rome, 11/12/ 2010 Società Italiana di Cardiologia: "Scholar in cardiologia" - Cardiac Electrophysiology Society 13/11/2010 – Winner of the competition in "Clinical Science" for the work entitled "KCNH2-K897T polymorphism increases the risk of life- threatening arrhythmias following acute myocardial infarction." - Cardiac Electrophysiology Society 14/11/2009 – Winner of the competition in "Clinical Science" for the work entitled "NOS1AP is a genetic modifier of congenital Long QT Syndrome" - Roma, 12.12.2004 Società Italiana di Cardiologia- "Premio per la Ricerca Scientifica Cardiovascolare"

6) Invited Lectures
She was invited to give lectures in 33 international meetings and 10 national meetings (these numbers are not including abstract presentations).

7) Summary and Collaborations
During the last year of her Medical School Dr. Crotti worked in the molecular cardiology laboratories at the Fondazione Maugeri in Pavia (Group Leader: Dr. Silvia Priori) where she acquired good knowledge of molecular biology techniques. After completing her graduation in 1999, Dr. Crotti moved to the USA and she worked with Dr. Charles Antzelevitch at the Masonic Medical Research Laboratories (Utica, NY) for three months where she acquired basic knowledge in cellular electrophysiology. Subsequently, she started her clinical training in Cardiology, and

during those years she worked on the realization of the Molecular Cardiology Laboratory of the Policlinico San Matteo of Pavia, where she was the group leader under the direction of Prof. Peter J. Schwartz until November 2013. After completing her clinical training in Cardiology in 2003, Dr. Crotti moved to the USA and worked in Dr. Alfred George's laboratories at Vanderbilt University for three months. From 2002 she was involved as a research investigator in the NIH grant "Genetic Modifiers of congenital long QT Syndrome" and therefore she spent 2-3 months/year at the University of Stellenbosch, South Africa, where in 2007 she completed a PhD program. In 2005 she became Assistant Professor of Cardiology and therefore she is regularly involved in giving lectures at medical students and at fellows in cardiology, making exams and performing tutorial activities. In Munich she serves as a mentor of 2 PhD students of the Medical Life Science and Technology program of the TUM Medical Faculty. She has also been involved in PhD dissertations of students from the Stellenbosh University (Cape Town, South Africa), the AMC University of Amsterdam and the University of Oslo. From January 2011 till July 2015 she worked as a visiting professor and group leader of the Cardiovascular Area in the Department of Human Genetics at the Helmholtz Zentrum in Munich (Germany), where she worked with next-generation sequencing techniques. In 2013 she started working in the IRCCS Istituto Auxologico Italiano, initially as supervisor of the Center for Cardiac Arrhythmias of Genetic Origin and Laboratory of Cardiovascular Genetics (Director: Prof. Peter J. Schwartz) and from July 2015 she is working in the San Luca Hospital under the direction of Prof. Parati. She is an internationally renowned expert in channelopathies and her research interests are mainly focused on the genetic basis of sudden cardiac death, in genetically transmitted arrhythmogenic diseases, in the Sudden Infant Death Syndrome (SIDS), stillbirths and in more common diseases, such as myocardial infarction. She regularly reviews manuscripts for all leading journals in cardiology and she has been and/or is an investigator of National, European and in NIH-funded research grants. The research activity of Dr. Crotti is testified by several publications in leading scientific journals (e.g. NEJM, Nature Genetics, JAMA, JCI, Circulation, JACC, Hearth Rhythm).

8) Publications

She is author or co-author of 109 peer reviewed papers, 14 book chapters and more than 100 abstracts. Her total Impact factor is 840 with a total H-index of 36 (scopus).

9) Grants as PI

- Grant Giovani ricercatori del Ministero della Salute GR-2009-1472102 (2014-2017) – **219,938€**

Sudden cardiac death during myocardial ischemia: unmasking genetic factors contributing to ventricular fibrillation

- Grant Giovani ricercatori del Ministero della Salute GR-2010-2305717 (2012-2016) – **366,100€**

Perinatal life-threatening arrhythmias and sudden infant death

- Grant Telethon GGP09247 (2009-2013) – **383,700€**

From mouse to man, using physiology to develop a gene-specific management of lethal LQT3 variant of Long QT Syndrome

10) Grants as Unit-coordinator:

- Grant FIRB "Futuro in ricerca" del MIUR (2013-2017) – 647,850€

Genetic, cellular, and molecular mechanisms of cardiac development and pathophysiology for targeted cardiovascular therapies.

PI: Daniele Torella

- Grant Malattie Rare, Ministero della Salute (2010-2012) – **230,769.23€**

Gene-specific management of lethal LQT3 variant of Long QT Syndrome: from mouse to man.

PI: Peter J. Schwartz

11) Grants as Co-investigator:

- Grant Horizon 2020 (2016- 2020) – 705,000€

ESCAPE-NET European Sudden Cardiac Arrest network: towards Prevention, Education and NEw Treatment

PI: Hanno Tan

- Grant PRIN from Italian Ministry of Education, University and Research (2013-2016) – 905,278€

Functional genomics, iPS cells, exome sequencing: strategy for the individualized management of arrhythmogenic genetic diseases.

PI: Peter J. Schwartz

- Grant NIH HL083374 (2008-2016) – **2,949,750$**

Neonatal long-QT syndrome and sudden infant death

PI: Alfred L. George Jr.

- Grant NIH HL68880 (2002-2013) – 4,768,783$

Genetic Modifiers of Congenital Long QT Syndrome

PI: Alfred L. George Jr.