

CURRICULUM VITAE



PERSONAL INFORMATION

NAME: Chiara | SURNAME: Piantoni

ADDRESS: Via Gazzi di Sopra, 6 Chiari (BS), 25032, Italy

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SEX: Female | DATE OF BIRTH: 08/07/1987 | NATIONALITY: Italian

CURRENT POSITION

Post-doc position at Laboratory of Molecular Physiology and Neurobiology, Department of Biosciences, University of Milan

WORK EXPERIENCE

Dec 2017 to date:

POST-DOC

Laboratory of Molecular Physiology and Neurobiology,
Department of Biosciences, University of Milan.

Nov 2014 to Oct 2017:

PH.D. STUDENT

Laboratory of Molecular Physiology and Neurobiology,
Department of Biosciences, University of Milan.

Thesis title "Electrophysiological characterization of the cardiac pacemaker activity during aging and in the presence of the Traditional Chinese Medicine drug TMYX"

Mar 2013 to Jul 2014:

TRAINEE

Laboratory of Molecular Physiology and Neurobiology,
Department of Biosciences, University of Milan.

Thesis title "Identification of HCN channels mRNA in blood tissue"

QUALIFICATION AWARDED

- Feb 2018: PH.D. DEGREE
Ph.D. in “Integrated Biomedical Research”, University of Milan
- Dec 2014: STATE EXAM BIOLOGIST
University of Milan
- Jul 2014: MASTER DEGREE
Biology applied to biomedical research, University of Milan
- Oct 2011: BACHELOR DEGREE
Biology, University of Milan
- July 2006: SCIENTIFIC HIGH SCHOOL DIPLOMA
Liceo Scientifico Lorenzo Gigli, Rovato (BS) Italy

LABORATORY SKILLS

- Isolation of the sinoatrial node from mouse and rabbit heart;
- Single-cell patch-clamp electrophysiology on cardiac cells, neurons and HEK/CHO cells
 - *In-vitro* and *in-vivo* electrophysiological characterization of the pharmacological effects of HCN channel blockers in freely-moving mice and in SAN cells isolated from rabbit heart;
 - *In-vitro* electrophysiological characterization of HCN and Na⁺ channel mutations in HEK/CHO cells;
 - Analysis of action potential;
- Molecular biology techniques and analysis
 - DNA, RNA, protein extraction;
 - PCR/real time PCR;
 - Immunofluorescence;
 - Western Blot
- Proteomic analysis of young and old mice SAN tissue;
- Processing of blood
 - isolation of leukocytes;
 - Identification and functional study of HCN channels mRNA and proteins in human total

leukocytes and sub-populations;

- FACS analysis;
- Cell culture and transfection;
- In-vivo experimental skills
 - Laboratory animal manipulation (i.e., intraperitoneal and subcutaneous injections);
 - Surgery for the implantation of telemeters in mice for the recording of ECG signals;
 - Recording and analysis of ECGs in freely-moving mice;
 - Analysis of Heart Rate Variability;
- Tutoring activity for Master and Ph.D. students.

PERSONAL SKILLS

Mother tongue: Italian

Other languages: English

- Good knowledge of written and spoken language

Team attitude: Excellent ability to work in team

Software ability: Power Point, Excel, Word, Origin, pClamp

PUBLICATIONS

Chapters in Book:

- “HCN channels and cardiac pacemaking”, Chapter in the book “Channelopathies in Heart Disease”, Edited by Carol Ann Remm and Dierk Thomas, 2018.

Translational Activity:

- Italian translation of 2 Chapters of the book Widmaier-Vander’s Human Physiology 14ed, 2018.

Abstracts at congresses:

- Molecular aspects of Ivabradine binding to hHCN4 and hHCN1 channel pores, 66th Società Italiana di Fisiologia, Genova, 2014, Baruscotti M, Bucchi A, Cossu F, Paina M, Milanese R, Piantoni C, Bazzini C, Gualdoni A, Barbuti A, Nardini M, DiFrancesco D.
- Identification of the mechanism of action of the cardiac regulator Tong Mai Yang Xin: comparison between in-vitro and in-vivo experiments, Tian Jin, 2016, Bucchi A, Paina M, Piantoni C, Carnevali L, Frosio A, Manniello M, Giordano T, Gao XM, Wang Y, Wang YY,

- Liu S, Barbuti A, Baruscotti M, DiFrancesco D.
- Unravelling the mechanisms of action of the Traditional Chinese Medicine drug Tong Mai Yan Xin (TMYX) on heart rate control, 67th SIF Congress, Catania, 2016, M. Paina, C. Piantoni, L. Carnevali, A. Frosio, R. Milanese, C. Bazzini, A. Bucchi, A. Barbuti, D. DiFrancesco, M. Baruscotti.
- HCN channels in human leukocytes, 67th SIF Congress, Catania, 2016, C. Piantoni, M. Adelfio, R. Milanese, C. Bazzini, A. Gualdoni, M. Pecchiari, A. Bucchi, A. Barbuti, D. DiFrancesco, M. Baruscotti.
- HCN3 channel expression in human leukocytes, 61st Annual Meeting Biophysical Society, New Orleans, 2017, C. Piantoni, A. Gualdoni, C. Bazzini, R. Milanese, M. Adelfio, A. Bucchi, A. Barbuti, M. Pecchiari, M. Baruscotti, D. DiFrancesco.
- Age-dependent changes in autonomic control of sinoatrial activity in mice, 68th SIF Congress, Pavia, 2017, C. Piantoni, L. Carnevali, A. Bucchi, A. J. Atkinson, M. Baruscotti, A. Frosio, M. Paina, A. Gualdoni, A. Barbuti, H. Dobrzynski, M. R. Boyett, D. DiFrancesco.
- Molecular mechanism of action of the bradycardic agent Tongmai Yangxin (TMYX), 68th SIF Congress, Pavia, 2017, Paina M, Piantoni C, Frosio A, Barbuti A, Frana E, Liu S, Wang YY, Wang Y, Baruscotti M, DiFrancesco D, and Bucchi A.
- Unraveling the relation between the rate- and use-dependence of ivabradine action in SAN cells, 68th SIF Congress, Pavia, 2017, A Bucchi, M. Paina, C. Piantoni, A. Frosio, M., barbuti A, Baruscotti, D. DiFrancesco.
- Molecular basis of cardiac pacemaker aging in mice”, EHRA Europace – Cardiostim, Vienna, 2017, A J. Atkinson , A. Bucchi , C. Piantoni , D. DiFrancesco , M. Baruscotti , M R. Boyett , H. Dobrzynski.
- Electrophysiological characterization of a novel SCN5A mutation associated with Brugada Syndrome, 68th SIF Congress, Pavia, 2017, Frosio A, Marchese P, Paina M, Piantoni C, Bertoli G, Milanese R, Bazzini C, Barbuti A, Bucchi A, DiFrancesco D, Baruscotti M.

PAPERS IN PREPARATION

- “Electrophysiological characterization of the cardiac pacemaker activity in the presence of the Traditional Chinese Medicine drug TMYX”.
- “Age-dependent changes in murine cardiac pacemaker activity”.

CONGRESSES PARTICIPATION

Oral presentations:

- Effects of the Traditional Chinese Medicine drug TMYX on pacemaker activity in freely-moving mice and in isolated SAN cells, 2015, Young SIF (Società Italiana di Fisiologia) meeting Firenze, Italy.
- HCN channels in human leukocytes, 2016, 67th SIF meeting, Catania, Italy.
- Age-dependent changes in autonomic control of sinoatrial activity in mice, 2017, 68th SIF meeting, Pavia, Italy.

Poster presentations:

- Mode of action of TMYX on the pacemaker activity of freely moving mice, 2015, 39th European Working Group of Cardiac Cellular Electrophysiology, Milano, Italy.
- HCN3 channel expression in human leukocytes, 2017, 61st Annual Meeting Biophysical Society, New Orleans, Louisiana.
- Age-dependent changes in murine cardiac pacemaker activity, 2017, 41st, European

Working Group of Cardiac Cellular Electrophysiology, Vienna, Austria.

COURSES ATTENDED

- Image J Course, November 2014, Department of Biosciences, University of Milan, Italy.
- Training for implants of ECG recording telemetry in mice, April 2015, University of Milan, Italy.
- Introductory Course to Animal Testing, June 2015, Mario Negri Institute, Milan, Italy.
- Participation in training for implants of telemetry sensors in mouse, June 2015, Aptuit center, Verona, Italy.
- Workshop on Western Blot: Chemidoc, September 2015, Department of Biosciences, University of Milan, Italy.
- Workshop Citofluorimetry, September 2015, Department of Biosciences, University of Milan, Italy.
- Training course of “Use in Safety Cryogenic and Compressed Gas”, October 2015, SIAD, Milan, Italy.
- “Correlative and super-resolution microscopy” course, February 2016, Dept. of Biology and Biotechnology, University of Pavia, Italy.
- Course on Digital PCR, April 2016, Department of Biosciences, University of Milan, Italy.

TEACHING ACTIVITY

- 2 seminars on Nervous System for the students of Biological Sciences, April 2015, University of Milan, Italy.
- 2 seminars on “General Features of the Autonomic Nervous System” in the course of General and Animal Physiology for the students of Biological Sciences, May 2017, University of Milan, Italy.