

Rivella Laboratory Alumni

[Roberta Chessa, PhD](#)

Postdoctoral Fellow

Dr. Chessa started working in the lab in 2013 as a visiting graduate student from Italy and continued as a postdoctoral associate, focusing her attention on developing new approaches for the treatment of disorders associated with inflammation, abnormal erythropoiesis and altered iron metabolism. During her PhD work in Developmental and Pediatric Pharmacology Therapy in Cagliari, she held an internship in the Laboratory of Human Genetics, Department of Human and Clinical Genetics at Leiden University Medical Center where she focused on the molecular diagnostic of the Hemoglobin Subunit Beta and Duchenne muscular dystrophy genes using the bench-top DNA Ion Torrent Sequencing and the Next Generation Sequencing Platforms.

[Alisa Dong, PhD](#)

Life Science Specialist at L.E.K. Consulting

Dr. Dong joined the Rivella lab at Weill Cornell Medical College in 2012 for her PhD dissertation, which focused on gene therapy and splice switching treatments for thalassemia and sickle cell anemia. As a Life Science Specialist at L.E.K. Consulting, she conducts primary and secondary research on markets, competitors, and customers, applies technical and scientific expertise to client issues, performs rigorous analysis to pinpoint appropriate, practical recommendations for clients, and collaborates with team members to transform research and analysis into thoughtful insights that deliver maximum impact for clients.

[Valentina Ghiaccio, PhD](#)

Postdoctoral Fellow

During her degree work in Experimental and Applied Biology at the University of Cagliari, Dr. Ghiaccio spent a year at the Granada University, Spain, where she took active part in the project "Development of a Lentiviral Vector for Gene Therapy of Immunodeficiencies." As a Globus Fellow, she apprenticed in the Gene Therapy Laboratory of the Austral Hospital in Buenos Aires, Argentina, participating in the project "The Antitumor Effect of Combined Immunotherapy in Murine Colorectal Carcinoma." She completed her PhD in Molecular and Translational Medicine at the Cagliari University, pursuing the development of lentiviral-based globin vectors for the regulation of globin genes. In the Rivella Lab, Dr. Ghiaccio works on gene therapy of hemoglobinopathies, developing new strategies to use RNA interference in order to improve the therapeutic potential of lentiviral vectors expressing therapeutic globin chains.

[Ritama Gupta, PhD](#)

Postdoctoral Fellow

Dr. Gupta obtained her BS in Microbiology from St. Xavier's College, University of Calcutta in India. She completed her PhD in Immunology and Microbial pathogenesis at Weill Cornell Medical College of Cornell University under the mentorship of Dr. Rivella. In the Rivella lab, she investigated the role of IL6, hepcidin, and tumor necrosis factor-alpha in anemia of inflammation.

Callum Hamilton

Research Intern

Medical School at the Thomas Jefferson University

Cal Hamilton earned a BS in Natural Sciences from the University of Pittsburgh in 2017. His undergraduate research focused on the necessity of postoperative anticoagulation following surgical intervention for atrial fibrillation. He joined the Rivella lab's gene therapy team lead by Dr. Laura Breda, and assisted Dr. Amaliris Gonzalez in investigating novel techniques aimed at improving the sickle cell disease and beta-thalassemia phenotype, learning the fundamental mechanisms that govern differentiation in erythropoiesis.

Yasuhiro Ikawa, MD, PhD

Kanazawa University, Department of Pediatrics

Dr. Ikawa studied medicine and received his doctoral degree in pediatric hematology at Kanazawa University in Japan. He completed postdoctoral work at the National Institutes of Health and, after working in clinical fields in Japan for five years, he joined the Rivella lab in 2018 for additional postdoctoral work. Dr. Ikawa's work focuses on the safety of gene transfer into hematopoietic stem cells. He established an in vitro assay system of verifying the safety of viral vectors and has reported a novel crucial element for cell immortalization by using this system. The system plays a pivotal role for verifying the quality of viral vectors, which would be useful in clinical trials.

Ping La, PhD

Research Scientist

Dr. La received her PhD on Molecular Genetics from the Chinese Academy of Sciences and joined the Rivella lab in 2016. Her research focuses on iron metabolism and mitochondria biogenesis, especially in normal and abnormal erythropoiesis.

Vania Lo Presti

Visiting Undergraduate Student

Vania Lo Presti is a Medical Biotechnology student from the Università Vita-Salute San Raffaele, Milan. She joined the Rivella lab in October 2015 for her thesis internship with a project focused on understanding the role of tumor necrosis factor-alpha during anemia of inflammation, the second most common cause of anemia. Her goal is to obtain a new insight to better understand diseases such as inflammatory bowel diseases and rheumatoid arthritis.

Tashina Mack

Research Technician I

Tashina Mack earned her BS in Biochemistry from Temple University in 2017 and has experience as a registered nurse in the operating room providing palliative care to patients of all ages. Her current interest is in translational research as a method of delivering care to patients. Mack joined the Rivella Lab in 2018 to work with the Gene Therapy group under Dr. Laura Breda.

[Sílvia Pires Lourenço](#)

PhD Student

Sílvia Pires Lourenço received her BS in Molecular Cell Biology from Faculty of Science and Technology and master's degree in Molecular Biology and Genetics at the New University of Lisbon in Portugal. She joined the Rivella lab in 2014 while pursuing a PhD in Basic and Applied Biology at University of Porto. Her projects focused on developing two-pronged approaches using lentiviral vector for the cure of beta-globinopathies.

[Kevin Munoz](#)

Research Technician

Kevin Munoz earned his BS in Behavioral Neuroscience from Rider University in 2017 and is currently working on his master's degree at the University of Pennsylvania. His undergraduate research focused on circadian rhythms, studying the underlying effects of photoperiod manipulation of the day/night cycles to determine a potential link to diet and metabolism disruption of circadian processes. He developed a study to examine a back and forth shiftwork model in mice to study the adverse health effects of jet-lagged mice due to circadian rhythm imbalance and conjunction to metabolism, obesity, and diabetes. Munoz was involved with iron metabolism-related projects in the Rivella lab.

[Emir O'Hara, BA](#)

Research Technician

Emir O'Hara completed her BA at the College of Wooster in Wooster, OH where she was first exposed to research studying the developing stress response of young bluebird chicks. She worked in various neuroscience-related settings before joining the Rivella lab in 2014, working as a research technician in the Gene Therapy group under Dr. Breda and with Dr. Casu, where she helped develop a protocol for in-utero gene therapy for mouse models of sickle cell disease and beta-thalassemia.

[Hanyia N. Zaidi](#)

Research Assistant

Hanyia Zaidi completed her bachelor's degree at the University of Connecticut and Master's from the Southern CT State University. She worked in a Reproductive Sciences lab at Yale where her research focused on endometriosis and the role of stem cells in endometriosis. In the Rivella lab, Zaidi worked with the Gene Therapy group under Dr. Breda.

[Alexandra Zezulín](#)

MD-PhD Student

Alexandra Zezulín is an MD-PhD student at the University of Pennsylvania. She received her bachelor's degree in Biology from Haverford College in 2017. Her undergraduate research focused on inherited forms of retinal degeneration and how they can be treated via gene therapy. She completed her first PhD rotation in the Rivella lab.

Oleh Akchurin, MD

Assistant Professor, Weill Cornell Medical College

Dr. Akchurin joined the Rivella lab at Weill Cornell in 2014 with an interest in establishing a model of chronic kidney disease (CKD) that could be used in developing mice to study impact of CKD on their growth. After joining the lab, I also became interested in the role of iron metabolism in CKD, and how it may interact with growth regulation in uremia. Dr. Akchurin chose an approach based on the dietary supplementation of mice with adenine, which is a known nephrotoxin in high concentration. After establishing the model, the team induced CKD in hepcidin knock-out mice for the first time. This led to an improvement of anemia and growth in uremic mice. Dr. Akchurin's current research is related to clarifying the mechanisms of observed changes, their additional implications, and validation in humans.

Laura Bystrom, PhD

Chief Scientific Officer, Pharmacognosy startup Science Writer, American Botanical Council

Bart Crielaard, MD, PhD

Assistant Professor, University of Groningen

Dr. Crielaard joined the Rivella lab a postdoctoral associate from 2012 and 2014 to work on the role of macrophages in erythropoiesis and iron metabolism. With a scientific background in targeted drug delivery, he was interested in identifying molecular leads that play an essential role in the interaction between macrophage and erythroid cells, allowing for the development of novel therapies for red blood cell disorders. In his current role as assistant professor at the University of Groningen, The Netherlands, Dr. Crielaard heads his own research group focused on the development of bio- and nanomaterials for clinical applications. Part of his research involves designing new therapies that exploit iron metabolism for various diseases such as cancer.

Sara Gardenghi, PhD

Medical Writer

Sara Gardenghi was part of the Rivella Lab at Weill Cornell Medical College, New York, from 2011-2015. With an interest in translational research with bench-to-bedside potential, her postdoctoral training focused on investigating the mechanisms of abnormal iron absorption in beta-thalassemia and the development of corrective strategies targeting the iron regulatory hormone hepcidin in mouse models. As an instructor and assistant research professor, she investigated anemia of inflammation, first characterizing the independent role of hepcidin and interleukin-6 in the onset of the condition, and then aiming to identify additional inflammatory cytokines and mechanisms associated with the hepcidin/interleukin-6 pathway. Dr. Gardenghi currently works as an independent medical writer in medical communication and continuing education, combining data analysis, graphic skills, and creativity, and contributing to different therapeutic areas.

Noa Greenberg-Kushnir, MD

Resident, Sheba Tel HaShomer Hospital

Dr. Greenberg-Kushnir was a research fellow in the Rivella lab between 2012 and 2013. Her project was part of the lab's effort to assess the anti-malignant influence of the cranberry extract and focused on evaluating the A-proanthocyanidins cytotoxic effect on breast cancer cells. She then moved to Dr. Wiest's lab in the Fox Chase Cancer Center, Philadelphia, to study the clinical significance of the ribosomal protein L22 in pediatric acute lymphoblastic leukemia and assess relevant therapeutic interventions. Dr. Greenberg-Kushnir currently is a resident in pediatric medicine at the Sheba Tel HaShomer Hospital.

Ella Guy, NP

MSci, Board Certified Nurse Practitioner, United Health Group-Optum Health

After spending more than four years working with Dr. Rivella as a research technician, Ella Guy pursued a career in nursing, and worked as an RN for New York Presbyterian Hospital Weill Cornell in medical-surgical nursing for more than nine years. She earned a Master's degree as an advanced practice nurse specializing in adult-gerontology, and works for United Health Group-Optum Health as a board certified nurse practitioner providing primary care for adult gerontology patients, as well as serving as a per-diem primary care nurse practitioner for Fordham University.

Ahmed Hassib, MD

The Johns Hopkins Bloomberg School of Public Health

Dr. Hassib joined the Rivella lab in 2014 as a research assistant to Dr. Laura Breda and worked on genetic therapies aimed at curing sickle cell disease and β -Thalassemia as well as comparing them with current treatment regimens. He received his medical degree from Weill Cornell Medicine in 2016, and is currently attending The Johns Hopkins Bloomberg School of Public Health as an MPH candidate, after which he planned pursue a residency in pediatrics and work to improve access to medical care in resource-scarce communities.

Ilaria Vittoria Libani, PhD

Patent Specialist, Università degli Studi di Milano

Dr. Libani worked in the Rivella lab at Weill Cornell Medical College, New York, between 2006 and 2007, contributing to the study of ineffective erythropoiesis in beta-thalassemia. She returned to Italy and worked in the field of in vivo imaging for four years, then majored in patent and intellectual property. She currently holds a role in the research division of an academic institution.

Irene Mancini, PhD

Research Scientist, Amarna Therapeutics B.V.

Dr. Mancini's research focuses on the development of new therapeutics using a simian polyomavirus 40-derived gene delivery platform for the treatment of different human diseases such as multiple sclerosis, hemophilia, and age-related macular degeneration.

Maria Franca Marongiu, PhD

***Researcher, Institute of Genetics and Biomedical Research,
National Research Council of Cagliari***

Dr. Marongiu worked at the Rivella Lab at Weill Cornell Medical College, New York, from 2006 to 2007, studying gene regulation in mouse models in order to understand the abnormal iron metabolism in beta-thalassemia. She returned to Italy and the National Research Council Institute for Genetic and Biomedical Research of Cagliari, where she still works in the field of genetic research conducting experiments on appropriate animal models for performing functional studies on specific genetic variants involved in the development of autoimmune diseases.

Luca Melchiori, PhD

Group Leader, Adaptimmune

Dr. Melchiori joined the Rivella lab in 2007 to carry on his PhD program and his interest has always been in hematology and development of the hematopoietic system. During that time, he had opportunity to investigate the mechanisms of abnormal erythropoiesis in beta-thalassemia, enjoying a very vibrant environment and cutting edge facilities. Dr. Melchiori moved to University of Oxford to focus on mechanisms of lineage commitment of hematopoietic stem cells, especially commitment toward the T cell lineage. He joined a biotech called Adaptimmune in 2012, which is focused of developing specific peptide-enhanced affinity receptors (SPEAR® T-cells) for adoptive cell therapy in cancer. He is currently a group leader of the T Cell Correlates Group in the Translational Sciences division, with the goal of finding signatures of response and side effects in SPEAR-T cell product together with better understand the mechanisms of action of the T cell during tumor eradication.

Alessandra Meloni, PhD

Life Technologies

Dr. Meloni was part of the Rivella lab in 2010, at Cornell University in New York, doing postdoctoral research focused in the characterization of iron metabolism and anemia of inflammation observed in chronic inflammatory states, with a particular attention on the distinct roles of hepcidin and interleukin-6 in the onset of anemia. She returned to Italy and works for Life Technologies, a biotech company and leader in the field of life sciences.

Irene Motta, MD

Attending Physician, Congenital Anemias Center

Dr. Motta was a visiting researcher in the Rivella lab between 2013 and 2014 during her residency in internal medicine at University of Milan. She has since been working in the hemoglobinopathies field in Italy, mainly on the clinical side. She was fascinated by gene therapy and in the Rivella lab, had the opportunity to work on a project of gene therapy that aimed to reactivate fetal hemoglobin. This experience had a great impact on her understanding of thalassemia and sickle cell anemia. Dr. Motta is currently an attending physician in the Congenital Anemias Center in Milan and still cooperate with Dr. Rivella's team on gene editing projects in order to improve patients care with a bench-to-bedside approach.

Paraskevi Rea Oikonomidou, MD

Pediatric Resident, Penteli General Hospital for Children

While working as a research fellow in Dr. Vogiatzi's lab in Weill Cornell Medical College, New York, in 2012, Dr. Oikonomidou collaborated with the Rivella lab. She was interested in identifying the chronic effect of polycythemia on bone metabolism and officially joined the lab in 2014 as a research fellow and continued as a visiting scientist at Children's Hospital of Philadelphia from 2015 to 2016. Her work focused on characterizing the progressive hematopoietic phenotype of a mouse model of myelodysplastic syndrome (MDS) and on better understanding newly characterized pathways that improve erythropoiesis in disorders associated with anemia, such as β -thalassemia and MDS. Dr. Oikonomidou is now in a pediatric residency training program at Penteli General Hospital for Children in Greece.

Pedro Ramos, PhD

Precision Medicine Director Associate, Novartis-Oncology Precision Medicine

Dr. Ramos worked in the Rivella lab from 2005 to 2011 at Weill Cornell Medical College, New York. Part of the work focused on understanding the role of iron overload and Hfe in stress erythropoiesis. He was also involved in the study of the erythroid niche in disease conditions like beta-thalassemia and polycythemia vera in which the team described that macrophages within the erythroid niche contribute for ineffective erythropoiesis and splenomegaly by supporting the expansion of erythroid progenitors and impairing their differentiation.

He then moved to Basel, Switzerland, to join the Novartis presidential postdoc program in Oncology in the lab of Mohamed Bentires-Alj at the Friedrich Miescher Institute for Biomedical Research. My work focused on the use of genetic screening tools, specifically Piggybac transposon mutagenesis, to identify genes involved in metastatic progression of breast cancer and mechanisms of resistance to targeted therapies. Dr. Ramos took the role of Precision Medicine Director Associate in the Novartis Oncology Precision Medicine group in 2016, focusing on late stage clinical development, including design and implementation of the biomarker discovery program.

Adrian Sanchez

Visiting Scholar

Jacqueline Guimarães, PhD

PhD