CURRICULUM VITAE of Federico Pieruzzi, MD, PhD Date of birth: 08 DEC 1966 ADDRESS AND CONTACTS: Clinica Nefrologica, ASST-Monza Ospedale S Gerardo, via Pergolesi 33, 20900 Monza (MB), Italy Phone: +39039233-9385-2375 e-mail: federico.pieruzzi@unimib.it

EDUCATION AND POSTGRADUATE TRAINING

1984 Scientific graduation at St. Paul Academy and Summit School, St. Paul, Minnesota, USA. 1991 Degree in Medicine and Surgery with full marks with honors

1991 Professional Qualification (EEC).

1996 PhD degree in Cardiovascular Pathophysiology at the University of Milan

2000 Diploma of Specialization in Cardiology with full marks and honors at the University of Milan 2001 Achievement of the Certification of Competence in Cardiovascular Ultrasound issued by the Educational Council of the Italian Society of Cardiovascular Ultrasound (SIEC), with full marks. 2013 Diploma of Specialization in Nephrology, with full marks at the University of Parma 2018 National Scientific Qualification (ASN) Section II. Notice D.D. 1532/2016, Competition Sector 06 / D2 ENDOCRINOLOGY, NEPHROLOGY AND FOOD AND WELLNESS SCIENCES: valid from 09/21/2018 to 09/21/2024 (Article 16, paragraph 1, Law 240/10).

PROFESSIONAL CURRICULUM

1988 Internal student at the Center for Clinical Physiology and Hypertension and at the Institute of General Medical Clinic and Medical Therapy of the University of Milan

1994-95 research activities during the Doctorate in Cardiovascular Physiopathology of the University of Milan and also at the Hypertension-Endocrine Branch, National Heart, Lung, and Blood Institute, of the National Institutes of Health, in Bethesda, Maryland, USA

1995-96 Volunteer researcher at the Molecular Biology laboratory of the Centro Auxologico Italiano in Milan.

1996 Winner of the public competition for the annual research grant of the Ospedale Maggiore of Milan IRCCS

1996-97 Specialist at the School of Cardiology II of the State University of Milan

1997-98 Internal Physician at the Medicine II Echocardiography Laboratory of the Sacco Hospital in Milan

1999 Postgraduate in Cardiology at the Nephro-Cardiovascular Clinical Didactic Unit of the University of Milan-Bicocca, San Gerardo Hospital, Monza

2002 Assumption of fixed-term service in Category D, technical, technical-scientific and data processing area, at the Department of Clinical Medicine, Prevention and Health Biotechnology, of the University of Milan-Bicocca

2004 Employment of permanent service in Category D, technical, technical-scientific and data processing area, at the Department of Clinical Medicine, Prevention and Health Biotechnology, of the University of Milan-Bicocca.

2005 Appointment as University Researcher for the scientific-disciplinary sector MED / 09 -Internal Medicine - at the Faculty of Medicine and Surgery of the University of Milan-Bicocca. 2008 Appointment as Confirmed University Researcher

2009 Assumption of service as University Medical Director at the Nephrological Clinic of the San Gerardo Hospital of Monza. Clinical assignment at echocardiography clinic, arterial hypertension clinic and dialysis center. Participation in guard shifts of the Nephrology and Dialysis Unit.

2014 Department of Medicine and Surgery approval on the transition from the scientific disciplinary sector MED / 09, Internal Medicine, to the scientific disciplinary sector MED / 14, Nephrology.

2018 Temporary appointment as Head of the Nephrology Complex Structure - Nephrology Clinic, ASST-Monza, San Gerardo Hospital and Desio Hospital.

2021 Associate Professor of Nephrology, School of Medicine and Surgery, University of Milano - Bicocca, Italy

2021 Director, Nephrology and Dialysis Unit, San Gerardo Hospital, ASST-Monza, Monza, Italy

TEACHING ACTIVITY

-Lecturer at the Master in Electrophysiology Techniques and Cardiac Electrostimulation, Master in Cardiovascular Ultrasound Techniques and at the Postgraduate Course: "Diagnosis and treatment of acute and chronic heart failure"

-Member of the final examination commission of the PhD in Cardiovascular Physiopathology of the University of Milan.

-2008-2020 Professor of the Nephrology module of the integrated course of Semeiotics and Systematics 3, Master's Degree in Medicine and Surgery.

-Professor in charge of several elective courses of the Master Degree in Medicine and Surgery: "BASIC ECHOCARDIOGRAPHY"; "ULTRASONOGRAPHIC DIAGNOSTICS IN THE UREMIC PATIENT (HEART, KIDNEY AND VESSELS)", "DIALYSIS", "CLINICAL-THERAPEUTIC MANAGEMENT OF ACUTE RENAL DAMAGE IN CRITICAL PATIENT".

-Member of the Board of the School of Specialization in Nephrology of the University of Milan Bicocca

-Member of the commission for the final exams, thesis advisor and co-supervisor or the Specialization Diploma in Nephrology and Master Degree in Medicine.

-Since 2013 member of the Board of Professors of the Doctorate in PUBLIC HEALTH -University of Milan Bicocca.

-Lecturer and member of the coordination committee of the II level University Master's in NEPHROPATHOLOGY at the University of Milan Bicocca.

LANGUAGE SKILLS

Excellent knowledge of English and French spoken and written:

GCP training: 7 module completion certificate updated to July 2021

EXPERIMENTAL RESEARCH INTERESTS from 1991 to 2003

Nervous and humoral control of blood pressure and cardiocirculatory homeostasis. Nervous and humoral control mechanisms of the excretion of water and sodium. Gene expression of the tissue renin-angiotensin system. Gene expression of nitric oxide synthetases in the kidney. Role of the renal nerves in the progression of renal organ damage.

CLINICAL RESEARCH INTERESTS from 1998 to 2012

-Study of cardiac troponin T levels in hemodialysis patients and relationship between troponin levels in dialysate and cardiovascular morbidity and mortality

-Study of the autonomic cardiological profile and its progression in a population of patients with end-stage renal failure

-Participates in the Blood Pressure/Child Monza (PAB) Project, studying the prevalence of essential hypertension in children, the analysis of organ damage of hypertensive disease in pediatric age and associated factors.

-Study of cardiac electrophysiological and hemodynamic alterations in subjects with liver cirrhosis. -Study of early disautonomic changes in patients with mild to moderate chronic renal insufficiency and insulin resistance.

-Study of acute and long-term changes in intra-atrial conduction induced by hemodialysis. -Study of the effects of trans-catheter renal denervation in the treatment of resistant arterial hypertension, participating in the Italian Registry on renal denervation

-Study of cardiac geometries in hemodialysis patients

CLINICAL RESEARCH INTERESTS from 2012

Continuous collaboration begins with the Pathological Anatomy the Proteomics and Clinical Metabolomics laboratory of the Department of Health Sciences, University of Milano-Bicocca on the research project: Clinical and system – omics for the identification of the MOlecular DEterminants of established Chronic Kidney Disease (iMODE-CKD). The purpose of the study is to improve the analysis of the histological sample for the diagnosis of glomerulonephritis by adding the proteomic expression data, aimed at identifying possible new diagnostic markers to be used routinely in the future management of patients with glomerulonephritis.

PRINCIPAL INVESTIGATOR in national and international for-profit and non-profit studies

- Prospective observational study of patients with Fabry disease: Fabry Disease Registry

- A multicenter, double-blind, randomized, placebo-controlled, parallel-group study to determine the efficacy and safety of lucerastat oral monotherapy in adult subjects with Fabry disease

- A Phase 3, Open-label Study to Evaluate the Efficacy and Safety of ${\sf REPLAGAL}^{\circledast}$ in Treatment-naïve Subjects with Fabry Disease

- Calcimimetics Adherence and Preference Study in the Management of Secondary Hyperparathyroidism in Europe

- Phase 3, randomized, open-label, active-controlled, parallel-group, multicenter, event-based study in dialysis patients with anemia associated with chronic kidney disease to evaluate safety and efficacy of Daprodustat versus recombinant human erythropoietin following switch from erythropoietin stimulating agents

-Survey from data obtained from telemetry control of devices implanted in dialysis patients: CIDDY study (Cardiac Implanted electrical Devices and Dialysis)

-Epidemiological and clinical features of dialysis and kidney transplant patients with COVID-19 infection retrospective-prospective multicenter cohort study

-Safety and efficacy of left atrial auricle occlusion for the prevention of thrombo-embolic events in the hemodialysis patient: observational study

MULTIDISCIPLINARY UNIT OF FABRY'S DISEASE IN THE ADULT PATIENT

Since 2004 investigated Anderson Fabry disease, at the Nephrology Unit of the ASST-MONZA San Gerardo Hospital, setting up a multidisciplinary management unit with specific clinical-diagnostic paths for the diagnosis, clinical management and follow-up of patients with Fabry's disease. It ranks as the first reference center in Lombardy, and among the main national centers.

-Since 2019, Head of the AIAF ONLUS Scientific Committee (Italian Association of Anderson-Fabry Patients)

-Chaired the National Scientific Board on Fabry's Disease which led to the drafting of the National Cardiological guidelines 2015

-Author and promoter of a National Scientific Board on Fabry Disease which developed a new disease stabilization indicator (FASTEX) and created a specific WebApp, Medical device nr. 1554512

ONGOING COLLABORATIVE STUDIES ON FABRY'S DISEASE

Collaborations:

- Involvement of the respiratory system in Fabry's disease (UNIMIB Monza)

- Study of urinary sediment in Fabry's disease using phase contrast microscopy + polarized light and transmission electron microscopy (Policlinico di Milano)

- Study of cardiac MRI with T1 mapping in patients with Fabry disease (IRCCS San Donato, Milan) - Application of the MALDI-imaging technique on renal biopsies of patients with Fabry disease (UNIMIB Monza)

- National multicenter study on the Fabry Stabilization Index (FASTEX) (Rimini Hospital)

- National multicenter study on the determination of LysoGB3 on plasma and DBS samples from patients with Fabry disease (University of Florence)

- MAIORA study: effect of Migalastat on cardiac involvement in Fabry's disease, Monocentric Prospective Observational on Drug (IRCCS San Donato, Milan)

- Research of new biomarkers in Fabry nephropathy with proteomic approach applied to renal tissue (MALDI-MS imaging on renal biopsy) in collaboration with University of Bergen (Norway).

SPECIFIC CLINICAL AREAS OF COMPETENCE:

Nephrology - Renal Replacement Treatment, Uremic Patient Management, Rare Diseases Center of reference for: vasculitis, Systemic Lupus Erythematosus, primary glomerulopathies; home hemodialysis with telemedicine assistance; AKI from myeloma, rhabdomyolysis; Anderson-Fabry disease.

Internal Medicine - Adult and pediatric arterial hypertension Cardiology - Echocardiography, cardiorenal syndrome

EDITORIAL ACTIVITY (reviewer)

-Journal of Nephrology

-Journal of Hypertension

-Molecular Genetics and Metabolism

-Nephrology Dialysis and Transplantation

Member of the Editorial Board of the Journal of Onco-Nephrology since 2017

Member of the Italian Society of Arterial Hypertension (SIIA) since 1995

Member of the Italian Society of Nephrology (SIN) since 2011

Member of the Italian Society of Nephro-Cardiology (SINCAR) since 2011

Member of the European Renal Association - European Dialysis and Transplant Association (ERA-EDTA) since 2019

PUBBLICATION PARAMETERS (Google Scholar 02/09/20): Citations 2067 Index H 24 (last 5 years 20) i10-index 42 Number of Pubblications: 71 http://www.ncbi.nlm.nih.gov/pubmed/?term=Pieruzzi+F