

The Luxembourg Hypertension Initiative: Advancing Clinical Research in Arterial Hypertension

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Cardiovascular disease (CVD) is a leading cause of death and disability worldwide, and in 2024, CVD accounted for 23% of all deaths in Luxembourg, making it the second leading cause of death after cancer (1). Despite a marked decrease in CVD mortality, a significant residual risk persists. This has been tackled by the national translational research program (Plan National Maladies Cardio Neuro Vasculaires 2023-2027), a research action focusing on issues like cardiac arrest or the identification of predictive biomarkers. Among various triggers, arterial hypertension contributes to a lack of further decrease of CVD mortality (2). The authors will describe their experience of clinical research in the field of hypertension and present the Luxembourg Hypertension Initiative, aiming to address this issue by: i) the establishment of a national cohort of hypertensive patients supported by national CROs and ESH excellence centers in the country; ii) collaborating nationally and internationally with other excellence centers to develop clinical trials evaluating drugs and devices (3,4,5); and iii) supporting the creation of a scientific society and promoting patient and physician education (6).

References

- 1) <https://santesecu.public.lu/en/espace-citoyen/departement-sante/maladies/cardio-neuro-vasculaires.html>
- 2) Mancia et al. J Hypertens. 2023 Dec 1;41(12):1874-2071.
- 3) Pathak et al. Arch Cardiovasc Dis. 2024 Oct;117(10):601-611.
- 4) Lobo et al. Eur Heart J. 2017 Apr 14;38(15):1101-1111.
- 5) Braun et al. Kidney Int. 2002 Jun;61(6):2149-56.
- 6) Kandzari et al. Circ Cardiovasc Qual Outcomes. 2023 Jan;16(1):e008997.

Biosketch – Atul Pathak

Atul PATHAK, Prof, MD, PhD

CEO, CMO and General Director, National Institute of Cardiology, Cardiac Surgery and Interventional Cardiology (INCCI), Luxembourg; Professor of Medicine (Cardiology and Clinical Pharmacology)

CURRENT AND PAST POSITIONS

CEO, CMO and General Director, National Institute of Cardiology, Cardiac Surgery and Interventional Cardiology (INCCI), Luxembourg.

Cardiologist, Department of Cardiology, Centre Hospitalier de Luxembourg (CHL).

Director, ESH (European Society of Hypertension) Hypertension Excellence Center, Princess Grace Hospital, Monaco; Professor of Medicine and Head, Department of Cardiovascular Medicine, Princess Grace Hospital, Monaco.

Full tenure Professor of Medicine (Cardiology and Clinical Pharmacology), University Hospital and Faculty of Medicine, Toulouse, France (since 2009); Head, Clinical Unit of Cardiovascular Pharmacology, Toulouse University Hospital. Associate/Assistant Professor at the same institution, 2002-2009.

Visiting Professor, Baker Heart Institute, Melbourne, Australia (2010).

Postdoctoral research fellow, Department of Cardiology, Hôpital Erasme, Université Libre de Bruxelles (2004-2005).

Resident in Cardiology (1996-2001), trained in Toulouse (France), Aachen (Germany) and the Cleveland Clinic (USA).

EDUCATION

MD (highest distinction), Faculty of Medicine, Toulouse, France.

European PhD (highest distinction) in Clinical and Experimental Pharmacology, 2005.

AWARDS AND HONORS

European Society of Cardiology (ESC) Young Investigator Award.

Awards from the British Pharmacological Society and the French Society of Cardiology.

OTHER RELEVANT PROFESSIONAL ACTIVITIES AND ACCOMPLISHMENTS

President, European Society for Patient Care (SETE - Société d'Éducation Thérapeutique Européenne); President-elect, French Society for Hypertension (SFHTA); social media ambassador, Hypertension Working Group, European Society of Cardiology (ESC).

Elected President, Cardiovascular Pharmacology Working Group, French Society of Cardiology. Member of the French Association of Pharmacologists, the French Society of Hypertension and Cardiology, and the American Society for Heart Failure.

Founding editor of the international journal Psychology & Health; serves on numerous editorial boards.

Advisory board member for the French National Agency for the Safety of Medicines and Health Products (ANSM) and the French National Authority for Health (HAS), reviewing clinical trial protocols and the benefit/risk assessment of drugs and devices.

Author or co-author of more than 250 peer-reviewed publications. Research interests: hypertension, cardiometabolic diseases and heart failure, with a focus on devices and innovative pharmacological approaches, the human sympathetic nervous system, and autonomic regulation of cardiovascular function.

Biosketch – Claude Braun

Claude BRAUN, Prof, MD, PhD

Medical Director, Hôpitaux Robert Schuman (HRS); Specialist in Internal Medicine and Nephrology

CURRENT AND PAST POSITIONS

Medical Director, Hôpitaux Robert Schuman (HRS), Luxembourg (since 2010).

Nephrologist, Internal Medicine-Nephrology-Dialysis department, Hôpital Kirchberg (Hôpitaux Robert Schuman) (since 2005).

Director, Clinical Research Unit (Cellule de Recherche Clinique), Hôpitaux Robert Schuman.

Chair, Luxembourg-Transplant (since 2014); member, Eurotransplant Kidney Advisory Committee (since 2022).

Associate Professor of Internal Medicine, University of Heidelberg (since 2008).

Senior Physician, 5th Medical Clinic (Nephrology, Endocrinology and Rheumatology), University Medical Center Mannheim (1998-2005).

Coordinator, "Kidneys and Urinary Tract" module, Bachelor of Medicine, University of Luxembourg; lecturer in Internal Medicine, Medical Faculty Mannheim and Medical University of Innsbruck.

EDUCATION

Studied human medicine, University of Heidelberg; licensed 1991.

Doctorate (Dr. med.), University of Heidelberg, 1992.

Habilitation in Internal Medicine, University Medical Center Mannheim.

Recognized European Hypertension Specialist, European Society of Hypertension, 2002.

OTHER RELEVANT PROFESSIONAL ACTIVITIES AND ACCOMPLISHMENTS

Areas of focus: clinical nephrology (acute and chronic kidney failure); hemodialysis and peritoneal dialysis; arterial hypertension, particularly treatment-resistant hypertension; impact of nutrition on cardiovascular disease; kidney transplantation.