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Prof Fallo was a Research Associate in Pediatric Endocrinology, The New York-Hospital, Cornell Medical Center, New York (USA) from 1981-1982. In 1988-1989 he was Research Fellow in the Paracrine Biology Lab at the Endocrinology-Hypertension Division, Brigham and Women's Hospital, Harvard Medical School, Boston, USA. He is European Hypertension Specialist and official Member of Società Italiana di Endocrinologia, Società Italiana dell'Ipertensione Arteriosa, The Royal Society for Endocrinology (UK), Endocrine Society (USA), European Society of Hypertension, American Society of Hypertension.

Main scientific interests: Endocrine Hypertension, Pituitary and Adrenal Diseases, Endocrine Tumor with more than 250 publications as full papers.

Research Team members

Dr. Catia Pilon, PhD
Dr. Riccardo Urbanet, PhD
Dr. Andrea Rebellato, MD, Doctorate Student

Research Focus

The Adrenal Pathophysiology Lab is part of the Clinica Medica (3) Unit at the Department of Medicine of University Hospital of Padova, which is one of the largest Hospitals in Italy serving within the network of the Public Health Service. The mission of Clinica Medica Unit is to provide cutting edge research, from bench to bedside, for the treatment and prevention of various medical diseases. Clinical research is ongoing in the cardiovascular aspects of endocrine and metabolic disorders, obesity and endocrine tumors. An Ambulatory Clinical Center, provided with a staffed personnel designed to organize, store and analyze clinical data, is devoted to studies performed in an outpatient setting. An extensive teaching program, as part of the University of Padova-Medical School duties, comprises activities in bedside clinical skill, critical reasoning and quality improvement methods.

The Adrenal Pathophysiology Lab, staffed by a team of experienced biologists, biotechnologists and post-doc students has developed national and international links with other Research Labs having adrenal disorders as scientific interest. Major research focus is on pathophysiological and molecular mechanisms regulating adrenal steroids production, aldosterone effect and MR activation in adipose tissue, and their clinical consequences in primary aldosteronism, metabolic syndrome and cardiovascular diseases and the role of vitamin D in adrenal growth and function.

Facilities

Cell culture and animal facilities, FAC-Sort cytofluorimeter, Real-time PCR, fluorescent and optical microscopes, luminometer, spectrophotometer, microplate reader, ultracentrifuge, Sequenom, electronic cell counter, beta-counter and radioisotope laboratory. Techniques used include: classical biochemistry, radioimmunoassays, cell culture, inbreeding animals for experimental studies, molecular biology techniques.

Publications

Fallo F., Sonino N., Armanini D., Luzzi T., Pedini F., Pasini C., Mantero F.. A new family with dexamethasone-suppressible hyperaldosteronism: aldosterone unresponsiveness to angiotensin II. *Clinical Endocrinology*, 22:777-785, 1985

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Lifton R.P., Dluhy R.G., Powers M., Rich G.M., Gutkin M., Fallo F., Gill J.R. Jr., Feld L., Ganguly A., Laidlaw J.C., Murnagham D.J., Kaufman C., Ulick S., Lalouel J.M. Hereditary hypertension caused by chimaeric gene duplications and ectopic expression of aldosterone synthase. *Nature genetics*, 2:66-74, 1992

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Pilon C., Mulatero P., Barzon L., Veglio F., Garrone C., Boscaro M., Sonino N., Fallo F. Mutations in CYP11B1 gene converting 11 β -hydroxylase into an aldosterone-producing enzyme are not present in aldosterone-producing adenomas. *Journal of Clinical Endocrinology and Metabolism*, 84: 4228-4231, 1999

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Fallo F., Della Mea P., Sonino N., Bertello C., Ermani M., Vettor R., Veglio F., Mulatero P. Adiponectin and insulin sensitivity in primary aldosteronism. *American Journal of Hypertension*, 20:855-861, 2007

Fallo F., Dalla Pozza A., Tecchio M., Tona F., Sonino N., Ermani M., Catena C., Bertello C., Mulatero P., Sabato N., Fabris B., Sechi LA. Nonalcoholic fatty liver disease in primary aldosteronism: a pilot study. *American Journal of Hypertension*, 23:2-5, 2010

Fallo F., Bertello C., Tizzani D., Fassina A., Boulkroun S., Sonino N., Monticone S., Viola A., Veglio F., Mulatero P. Concurrent primary aldosteronism and subclinical cortisol hypersecretion: a prospective study. *Journal of Hypertension*, 29: 1773-1777, 2011

Beuschlein F., Boulkroun S., Osswald A., Wieland T., Nielsen HN, Lichtenauer UD, Penton D, Schack VR, Amar L, Fischer E, Walther A, Tauber P, Schwarzmayr T, Diener S, Graf E, Allolio B, Samson-Couterie B, Benecke A, Quinkler M, Fallo F, Plouin F, Mantero F, Meitinger T, Mulatero P, Jeunemaitre X, Warth R, Violsen B, Zennaro M-C, Strom TM, Reincke M. Somatic mutations in ATP1A1 and ATP2B3 lead to aldosterone-producing adenomas and secondary hypertension. *Nature genetics*, 45: 440-445, 2013

Williams TA, Monticone S, Schack VR, Stindl J, Burrello J, Buffolo F, Annaratone L, Castellano I, Beuschlein F, Reincke M, Lucatello B, Ronconi V, Fallo F, Bernini G, Maccario M, Giacchetti G, Veglio F, Warth R, Vilsen B, Mulatero P. Somatic ATP1A1, ATP2B3, and KCNJ5 mutations in aldosterone-producing adenomas. *Hypertension*, 2014, 63:188-95, 2014

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