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# Laboratory for Clinical Research of Vascular and Heart Diseases

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## Offer

- Screening and longitudinal follow-up of subjects at risk of cardiovascular diseases (CVD) or patients with manifest CVD
- Genetic studies of subjects at risk and patients with CVD
- Phase II–IV pharmacologic studies in cardiovascular medicine
- Research on blood pressure (BP) and hypertension, focused on BP measurement, genetics of hypertension, pharmacology of hypertension, arterial stiffness
- Research on arterial properties with noninvasive methods: arterial stiffness, endothelial dysfunction, intima-media thickness of carotid artery
- Research on biological markers of CVD in collaboration with different labs; e.g., markers of calcification, accelerated atherosclerosis, subclinical myocardial ischemia, nutrition parameters
- Statistical analysis of the data performed primarily by the physicians who do the research; final analysis is consulted with statisticians

## Expertise

- Prevention
- Clinical physiology
- Pharmacology of vascular and heart diseases

## Membres

- Prof. Jan Filipovský, M.D., Ph.D. – Research Group Leader
- Věra Běšťáková
- Július Gelžinský, M.D.
- Assoc. Prof. Jana Hirmerová, M.D., Ph.D.
- Monika Choltová
- Petra Karmosová, M.D.
- Assoc. Prof. Radek Kučera, M.D., Ph.D.
- Štěpán Mareš, M.D.
- Assoc. Prof. Otto Mayer, M.D., Ph.D.
- Assoc. Prof. Jitka Mlíková Seidlerová, M.D., Ph.D.
- Prof. Hana Rosolová, M.D., Ph.D.
- Veronika Svobodová

## Selected Publications

- Seidlerová J, Filipovský J, Mayer O, Wohlfahrt P, Cífková R.: *Positive effects of antihypertensive treatment on aortic stiffness in the general population.* Hypertens Res. 2014; 37, 64–68
- Wohlfahrt P, Krajčoviechová A, Seidlerová J, Mayer O, Bruthans J, Filipovský J, Laurent S, Cífková R.: *Arterial stiffness parameters: How do they differ?* Atherosclerosis 2013; 231: 359–364
- Mayer O, Seidlerová J, Bruthans J, Filipovský J, Timoracká K, Vaněk J, Černá L, Wohlfahrt P, Cífková R, Theuvsen E, Vermeer C.: *Desphospho-uncarboxylated matrix Gla-protein is associated with mortality risk in patients with chronic stable vascular disease.* Atherosclerosis 2014; 235: 162–168
- Hirmerová J, Seidlerová J, Šubrt I.: *Deep vein thrombosis and/ or pulmonary embolism concurrent with superficial vein thrombosis of the legs. Cross-sectional single center study of prevalence and risk factors.* International Angiology 2013; 32: 410–416
- Seidlerová J, Filipovský J, Mayer O Jr, Kučerová A, Pešta M.: *Association between endothelial NO synthase polymorphisms and arterial properties in the general population.* Nitric Oxide 2015; 44: 47–51
- Mayer O Jr, Filipovský J, Pešta M, Cífková R, Dolejšová M, Šimon J.: *Synergistic effect of angiotensin II type 1 receptor and endothelial nitric oxide synthase gene polymorphisms on arterial stiffness.* J Hum Hypertens. 2008; 22: 111–118
- De Bacquer D, Dallongeville J, Kotseva K, Cooney MT, Pajak A, Deckers JW, Mayer O, Vanuzzo D, Lehto S, Fras Z, Östör E, Ambrosio GB, De Backer G, Wood D, Keil U, Sans S, Graham I, Pyörälä K.: *Residual risk of cardiovascular mortality in patients with coronary heart disease: the EUROASPIRE Risk Categories.* Int J Cardiol. 2013; 168: 910–914

## **Are you interested in this expertise?**

**Please contact CPPT UK**

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## **Experts and their department**

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