

Propositions belonging to the thesis

Novel Insights into the Molecular Regulation of Renal and Cardiovascular Homeostasis

1. Endothelial expression of Frizzled 5 is required to suppress expression of vascular regression-associated factors. (*this thesis*)
2. Interaction with endothelial cells drives pericyte maturation, and may suppress pathological differentiation into a fibrotic phenotype. (*this thesis*)
3. Obesity and hypertension show minimal interaction in the development of heart failure with preserved ejection fraction. (*this thesis*)
4. Transcriptional dysregulation, caused by genetic variation affecting DNA regulatory elements, could contribute to onset and progression of chronic kidney disease. (*this thesis*)
5. Applying self-transcribing active regulatory region sequencing, in parallel with circular chromosome conformation capture sequencing, allows the identification of genes that are transcriptionally dysregulated by disease-associated genetic variation interfering with DNA regulatory elements. (*this thesis*)
6. Rapid vascularization is of vital importance for survival and function of tissue-engineered grafts and remains one of the major limiting factors toward their clinical implementation. (*Banfi, Frontiers in Bioengineering and Biotechnology, 2018*)
7. Targeting Frizzled receptor signaling can be a potential and attractive approach for human cancer therapy. (*Zeng, International Journal of Molecular Sciences, 2018*)
8. Instead of being an individual entity, heart failure with preserved ejection fraction represents a group of multiple diseases caused by different etiologies that produce the same symptoms. (*Borlaug, Journal of the American College of Cardiology, 2016*)
9. With physical activity and caloric restriction we already have two of the safest and cost-effective therapies available for obese patients having heart failure with preserved ejection fraction. (*Pandey, Journal of the American College of Cardiology, 2018*)
10. Only few GWAS results are directly medically actionable, so follow-up research is essential to translate novel associations into medical innovations. (*Struck, Human Genomics, 2018*)
11. Progression is often presented as success, but driven by failure.