Special Issue

Novel Mechanisms in Renal Blood Pressure Regulation: From Neuropeptides to Angiotensin II and Dopamine Receptors

Message from the Guest Editors

Many neuropeptides, including angiotensin II and neurotransmitters such as dopamine, were originally found in the brain and later found in peripheral organs and tissues, including the kidney. The kidney plays an important role in the regulation of blood pressure. Healthy kidneys maintain blood pressure within a normal range by controlling the balance of fluids and electrolytes. Dopamine is locally generated in the kidney, and its five receptors, D1R, D2R, D3R, D4R, and D5R, are expressed in specific segments of the nephron. Angiotensin II is also synthesized in the kidney and its receptors. AT1R and AT2R are also expressed in specific segments of the nephron. The intrarenal dopaminergic and angiotensin systems are important in the regulation of water and electrolyte transport and ultimately blood pressure. Mice with germline or nephron segment silencing in any one of the dopamine or angiotensin receptors are impacted in their ability to excrete a sodium load and regulate their blood pressure. For this Special Issue, we invite original and review articles on all aspects related to NPFF, angiotensin II, and dopamine in the regulation of renal function and blood pressure.

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Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

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