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**Millions in Funding for Heidelberg Chemist**
**Andres Jäschke Receives ERC Advanced Grant**

Heidelberg chemist Prof. Dr Andres Jäschke has been awarded a highly endowed grant from the European Research Council (ERC). He is receiving an ERC Advanced Grant for leading researchers in Europe worth 2.5 million euros. The funding over a period of five years will support a project in chemical biology investigating the as yet unknown modifications of ribonucleic acids (RNAs) and the role of these so-called coenzyme-linked RNAs as a biological regulatory mechanism. The Advanced Grant is awarded to researchers pursuing groundbreaking work in their field. Prof. Jäschke teaches and conducts research at the Institute of Pharmacy and Molecular Biotechnology at Heidelberg University.

In the ERC-funded project entitled "Coenzyme- and metabolite-linked RNAs as a new paradigm in epitranscriptomics", Prof. Jäschke and his team will study ribonucleic acids that are bound to coenzymes – small organic molecules that assist enzymes during metabolic reactions. Prof. Jäschke’s team has already discovered one such type of RNA in various bacteria. Meanwhile, modified ribonucleic acids have already been found in plants and fungi as well as humans. "Our current research focuses on the search of other types of coenzyme-linked RNA to figure out how they are made in the cell, how they degrade, and what they do," explains Prof. Jäschke.

The team is especially interested in the nucleotide components, a structural feature found in most coenzymes. The Heidelberg researchers will explore whether the nucleotide part enables cells to incorporate the coenzyme into specific RNAs, giving the nucleotide a new and so far overlooked role. "The research into coenzyme-linked ribonucleic acids has the potential to radically change our understanding of the functions of coenzymes, to uncover a novel regulatory mechanism in biology, and to understand why these coenzymes have been preserved through 3.5 billion years of evolution," says Prof. Jäschke. In this way, the researchers also hope to glean new insights into the relationship between gene regulation and metabolism.

Andres Jäschke (born 1962) studied chemistry at Humboldt University in Berlin, where he also earned his doctorate in 1993. He was a postdoctoral researcher at the Massachusetts Institute of Technology in the USA for two years before joining the Free University of Berlin as a research group leader in 1995. In 2002 Andres Jäschke joined the faculty of Heidelberg University as a professor of pharmaceutical and bioorganic chemistry. For his scientific work Prof. Jäschke has been awarded, among others, the BioFuture Prize of the Federal Ministry of Education and Research.

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