

## General information

Name	<b>Altschmied, Joachim</b> , Prof. Dr. rer. nat.
Date of birth	12.06.1959, Langen/Hessen, male
Work address	Environmentally-induced Cardiovascular Degeneration, Clinical Chemistry and Laboratory Diagnostics, Medical Faculty, University Hospital and Heinrich Heine University Düsseldorf
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Current position	Principal investigator
Children	/

## University training and degree

Subjects of study	1979-1984, Biology, Technical University Darmstadt, Diplom-Biologe
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## Advanced academic qualifications

Titular Professor	2020, Faculty of Mathematics and Natural Sciences, Heinrich Heine University Düsseldorf
Habilitation (changed)	2010, Habilitation and Venia legendi: Cell Biology, Faculty of Mathematics and Natural Sciences, Heinrich Heine University Düsseldorf, Prof. Dr. W. Martin
Habilitation	1998, Habilitation and Venia legendi: Biochemistry, Medical Faculty, Julius-Maximilians University Würzburg, Prof. Dr. M. Scharl
Doctorate	1988, Dr. rer. nat., Technical University Darmstadt, Prof. Dr. H.G. Gassen, Prof. Dr. R. Renkawitz

## Postgraduate professional career

since 2022	Principal investigator, Medical Faculty, Heinrich Heine University Düsseldorf
2008-2022	Head of the Central Biosafety Level 2 Laboratory of the IUF- Leibniz Research Institute for Environmental Medicine
1999-2008	Group Leader, Molecular Hematology, University Hospital of the Johann-Wolfgang Goethe University, Frankfurt
1992-1999	Postdoctoral Fellow and Lecturer, Institute of Physiological Chemistry I, Julius-Maximilians University Würzburg
1988-1991	Postdoctoral Fellow, Salk Institute for Biological Studies, La Jolla, CA, USA

## Other

since 2021	Editorial Board member Antioxidants
since 2020	Grant reviewer for the Polish National Science Centre
since 2019	Editorial Board member Genes
since 2011	Editorial Board member ISRN Molecular Biology
2011-2016	Board of Directors German Genetics Society

since 2010	Grant reviewer for the Association for International Cancer Research (AICR)
1997	Travel Award, SmithKline Beecham Foundation Young Investigator Travel Award, American Association for Cancer Research
1988-1990	Stipend special program "Gene Technology", German Academic Exchange Service (DAAD)
1985-1987	Kekulé-Stipend, Foundation "Stipendien-Fonds" of the Chemical Industry and the Foundation Volkswagenwerk
1979-1984	Stipend, Studienstiftung des Deutschen Volkes

## 10 most important publications

1. Ale-Agha N, Jakobs P, Goy C, Zurek M, Rosen J, Dyballa-Rukes N, Metzger S, Greulich J, von Ameln F, Eckermann O, Unfried K, Brack F, Grandoch M, Thielmann M, Kamler M, Gedik N, Kleinbongard P, Heinen A, Heusch G, Gödecke A, **Altschmied J\***, Haendeler J\*. Mitochondrial Telomerase Reverse Transcriptase Protects From Myocardial Ischemia/Reperfusion Injury by Improving Complex I Composition and Function. *Circulation*. 2021;144:1876-1890.
2. Jander K, Greulich J, Gonnissen S, Ale-Agha N, Goy C, Jakobs P, Farrokh S, Marziano C, Sonkusare SK, Haendeler J, **Altschmied J**. Extra-Nuclear Functions of the Transcription Factor Grainyhead-Like 3 in the Endothelium-Interaction with Endothelial Nitric Oxide Synthase. *Antioxidants (Basel)*. 2021;10:428
3. Gonnissen S, Ptok J, Goy C, Jander K, Jakobs P, Eckermann O, Kaisers W, von Ameln F, Timm J, Ale-Agha N, Haendeler J, Schaal H, **Altschmied J**. High Concentration of Low-Density Lipoprotein Results in Disturbances in Mitochondrial Transcription and Functionality in Endothelial Cells. *Oxid Med Cell Longev*. 2019;2019:7976382.
4. Ale-Agha N, Goy C, Jakobs P, Spyridopoulos I, Gonnissen S, Dyballa-Rukes N, Aufenvenne K, von Ameln F, Zurek M, Spannbrucker T, Eckermann O, Jakob S, Gorressen S, Abrams M, Grandoch M, Fischer JW, Köhrer K, Deenen R, Unfried K, **Altschmied J\***, Haendeler J\*. CDKN1B/p27 is localized in mitochondria and improves respiration-dependent processes in the cardiovascular system-New mode of action for caffeine. *PLoS Biol*. 2018;16:e2004408.
5. Kohlgrüber S, Upadhye A, Dyballa-Rukes N, McNamara CA, **Altschmied J**. Regulation of Transcription Factors by Reactive Oxygen Species and Nitric Oxide in Vascular Physiology and Pathology. *Antioxid Redox Signal*. 2017;26:679-699.
6. Haendeler J\*, Mlynek A, Büchner N, Lukosz M, Graf M, Guettler C, Jakob S, Farrokh S, Kunze K, Goy C, Guardiola-Serrano F, Schaal H, Cortese-Krott M, Deenen R, Köhrer K, Winkler C, **Altschmied J\***. Two isoforms of Sister-Of-Mammalian Grainyhead have opposing functions in endothelial cells and in vivo. *Arterioscler Thromb Vasc Biol*. 2013;33:1639-1646.
7. Zschauer TC, Kunze K, Jakob S, Haendeler J, **Altschmied J**. Oxidative stress-induced degradation of thioredoxin-1 and apoptosis is inhibited by thioredoxin-1-actin interaction in endothelial cells. *Arterioscler Thromb Vasc Biol*. 2011;31:650-656.
8. Schnütgen F, De-Zolt S, Van Sloun P, Hollatz M, Floss T, Hansen J, **Altschmied J**, Seisenberger C, Ghyselinck NB, Ruiz P, Chambon P, Wurst W, von Melchner H. Genomewide production of multipurpose alleles for the functional analysis of the mouse genome. *Proc Natl Acad Sci U S A*. 2005;102:7221-7226.
9. Delfgaauw J, Duschl J, Wellbrock C, Froschauer C, Scharf M, **Altschmied J**. MITF-M plays an essential role in transcriptional activation and signal transduction in Xiphophorus melanoma. *Gene*. 2003;320:117-126.

10. Baudler M, Scharl M, **Altschmied J**. Specific activation of a STAT family member in Xiphophorus melanoma cells. *Exp Cell Res*. 1999;249:212-220.

## **Patents**

1. Kühn R, von Melchner H, **Altschmied J** (2007) Conditional gene trapping constructs for the disruption of genes, Patent Nr. EP20000974397.
2. Kühn R, von Melchner H, **Altschmied J** (2001) Conditional gene trapping constructs for the disruption of genes, Patent Nr. WO/2001/029208.
3. Gatz C, **Altschmied J**, Gassen HG, Hillen, W (1990) DNA sequences, recombinant DNA molecules and process for the preparation of the enzyme mutarotase from *Acinetobacter calcoaceticus*, Patent Nr. US 4963488/EP0214548.