

Curriculum vitae

Name: Walter Knöchel
Date of birth: 7.2.1945
Place of birth: Marburg (Lahn)
Nationality: German
Status: Married (Dr.rer.nat. Sigrun Knöchel)
Education:
1951-1955 Albert Schweitzer primary school, Essen
1955-1964 Helmholtz Gymnasium, Essen
1964 Abitur
1964-1969 Chemistry study, Freie Universität, Berlin
1967-1975 Medicine study, Freie Universität, Berlin

Degrees:

1969 Diplom Chemiker
1972 Dr.rer.nat.
1975 Staatsexamen, medicine
1976 Dr.med
1977 Habilitation, Biochemistry
1982 Approbation (license to practice medicine)

Positions held:

1969-1970: Graduate student at Institut für Organische Chemie der Freien Universität Berlin
1970-1972: Graduate student at Institut für Molekularbiologie und Biochemie der Freien Universität Berlin
1973-1980: Postdoc and Assistant Professor at Institut für Molekularbiologie und Biochemie der Freien Universität Berlin
1978: Guest scientist at Galveston, Texas, USA, University of Texas, Medical Branch, Prof. V. Holoubek
1980: Appointment as Professor(C3) for Biochemistry at Institut für Molekularbiologie und Biochemie der Freien Universität Berlin

1989: Elected as Professor(C4) and Director of the Institut für Biochemie, Universität Essen, rejected

1990: Appointment as Professor(C4) and Director of the Department/Institute of Biochemistry, Universität Ulm

Scientific awards:

1984: Otto Mangold-Preis; Gesellschaft für Entwicklungsbiologie

1997: Wissenschaftspreis; Stadt Ulm

Board of scientific journals:

1992-2004: Member of Editorial Board: Mechanisms of Development

1993-1997: Member of Editorial Board: Roux's Arch. of Developmental Biology

Other responsibilities:

1992-1993: Speaker of Landesforschungsschwerpunkt "Molecular basis of cellular differentiation, pattern formation and morphogenesis"

1991-1993: Vice Dean of the Faculty of Theoretical Medicine

1993-1997: Vice Dean of the Medical Faculty

1993-1997: Member of Senat (University of Ulm)

1994-2000: Member of Senatsausschuß für Graduiertenkollegs (DFG)

1994-1999: Speaker of DFG Research Group "Regulation of cellular differentiation by intercellular communication and intracellular signaling"

200-2001: President of the Society of Developmental Biology (GfE)

2000-2011: Speaker of DFG Collaborative Research Unit 497 "Signals and signal processing during cellular differentiation"

since 2012: Retired

Main research activity: Amphibian embryogenesis, pluripotency, germ layer induction, growth factors (BMP), transcription factors (Zn finger, homeodomain and fork head genes)

Publications

1. W. Knöchel & H. Tiedemann,
Rapidly Labelled Ribonucleic Acid in Chicken
Embryos: Evidence for Heterogeneous Ribonucleoprotein
Particles,
Biochim. Biophys. Acta 269, 104-117 (1972)
2. W. Knöchel, D. Hendrick, S. Schröter & H. Tiedemann, Translation of Rat
and Avian Globin Messenger RNA in an Ehrlich Ascites Cell-
System: Species Differences of Ribosomal Wash Factors,
Hoppe-Seyler's Z. Physiol. Chem. 354, 1389-1394 (1973)
3. D. Hendrick, W. Knöchel, W. Schwarz, S. Pitzel & H. Tiedemann, The
Translation of Rabbit Hemoglobin Messenger RNA in a Cell-Free
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4. W. Knöchel, Biological Activity of 125 Iodine Labelled Globin mRNA in a
Ehrlich Ascites Cell-Free System,
Mol. Biol. Rep. 1, 311-320 (1974)
5. W. Knöchel & H. Tiedemann,
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Biochim. Biophys. Acta 378, 383-393 (1975)
6. W. Knöchel, The Separation of 9 S RNA from Avian Immature Red Cells in
f2c-Histone mRNA and Globin mRNA,
Biochim. Biophys. Acta 395, 501-508 (1975)
7. W. Knöchel, Translation of Heterogeneous Nuclear RNA of Avian Immature
Blood Cells in a Cell-Free System of Ehrlich Ascites Cells
in: Second Symposium on Prenatal Development, Berlin, ed.
D. Neubert and H.J. Merker, G. Thieme Verlag Stuttgart, 76
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8. E.K.F. Bautz, A. Tissieres, G.G. Brownlee, G.H. Dixon, D. Hendrick, W.
Knöchel, J. Paul, R.G. Roeder, G. Schütz & H. Slor,
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9. W. Knöchel, D. Lange & D. Hendrick,
Molecular Weights, Poly(A)-Content and Partial Separation
Chick Globin mRNAs,
Mol. Biol. Rep. 3, 143-150 (1976)
10. W. Knöchel & U. Grundmann,
Nuclear Steady State RNA from Chicken Immature Red Blood
Cells: Distribution of Globin Coding and Poly(A)-Sequences
Biochim. Biophys. Acta 476, 47-56 (1977)

11. W. Knöchel & E. Kohnert-Stavenhagen,
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Embryo Brain?
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12. W. Knöchel, K. Asahi, J. Born & H. Tiedemann,
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Deoxyribonuclease I,
Mol. Biol. Rep. 3, 269-274 (1977)
13. W. Knöchel & U. Grundmann,
The Putative 15 S Precursor of Globin mRNA Contains a Poly
Sequence,
Biochim. Biophys. Acta 517, 99-108 (1978)
14. W. Knöchel & C. Finke,
The Influence of rRNA and tRNA on the Translation of Avian
Globin mRNA in Cell-Free Systems of Protein Synthesis,
Biochim. Biophys. Acta 519, 365-371 (1978)
15. U. Grundmann & W. Knöchel,
Sequences Coding for Proteins Expressed in Liver and for
Globin in Poly(A)⁺ and Poly(A)⁻ RNA Fractions from Nuclei
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16. W. Knöchel & U. Grundmann,
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17. C. Lehmann, M. Warnhoff, W. Knöchel, D. Lange, J. Born & H. Tiedemann,
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Loop Hybridization,
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20. W. Knöchel, C. Vogelsberg & E.F. Brost,
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and Hind III on Chicken Embryo rDNA,
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21. W. Knöchel, N.T. Patel & V. Holoubek,
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22. W. Knöchel & D. Bladauski,
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30. M.E. John & W. Knöchel,
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31. W. Meyerhof, M.E. John & W. Knöchel,
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polyadenylated nuclear RNA from gastrula stage of *Xenopus
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and 1037 Base Pair Hind III Fragments,
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and *Xenopus tropicalis*,
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maternal mRNA of *Xenopus laevis* oocytes,
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conditioned by TGF- β treated ectoderm enhances the inducin
activity,
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globin gene clusters,
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(EF-1 α) polypeptides in *Xenopus laevis* embryos,
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family, in early embryos of *Xenopus laevis*:analysis of
mesoderm inducing activity.
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cDNA sequence of *X. laevis* bone morphogenetic protein 2 (B
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related XFD-2/XFD-2' genes in *Xenopus laevis* embryos,
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75. H. Tiedemann, H. Tiedemann, H. Grunz and W. Knöchel
Molecular mechanism of tissue determination and pattern
formation in amphibian embryos,
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Xenopus laevis embryos,
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transcription factors,
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Transcription patterns of four different fork head/HNF-3 related genes (4,
6, 9 and 10) in *Xenopus laevis* embryos
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DNA recognition site analysis of *Xenopus* winged helix
proteins,
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Xenopus laevis,
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for the establishment of head structures,
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laevis embryos,
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Amphibian Embryos,
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W. Knöchel,
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embryos,
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Expression of the highly conserved RNA binding protein Koc
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factors XFD-4/XFD-4', the orthologues to mammalian MFH-1,
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