

Manfred Scharl
Prof. Dr. rer. nat. Dr. h. c.
Curriculum vitae

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 Biozentrum, Am Hubland phchl@biozentrum.uni-wuerzburg.de
 D-97074 Würzburg

16.04.1953 Born in Friedberg/Hessen, Germany

Education and Professional Experience

1973 - 1978 Studies in Biology, Dipl. Biol. Faculty of Biology, University of Gießen
1979 Teaching certificate (L3, Gymnasium) for Biology and Chemistry, Univ. Gießen
1980 Dr. rer. nat., University of Gießen
1988 Habilitation, Faculty of Biology, Ludwig-Maximilian-University, Munich
1978 – 1979 Instructor for Genetics, University of Gießen
1980 – 1983 Postdoctoral Fellow Department of Genetics, University of Gießen
1982 Postdoc research at the laboratory of Dr. R. C. Gallo, National Institutes of Health,
 National Cancer Institute, Bethesda, Maryland, USA
1983 - 1984 Lecturer (Hochschulassistent), Department of Genetics, University of Gießen
1985 - 1991 Research Group Leader, Gene Center at the Max-Planck-Institute for Biochemistry,
 Martinsried b. Munich
1991-2019 Full Professor (C4) for Biochemistry, Medical School, University of Würzburg
1997 Offer Director at the Molecular Marine Biology Institute, Bergen, Norway. Declined.
2001-2020 Adjunct Professor for Experimental Cancer Research, University of Bergen, Norway
2006 Offer Head of Department, National University of Singapore. Declined
2015 Visiting Professor, Department of Biology, National University of Singapore
2016-2019 Visiting Professor, Department of Biology, Texas A&M University, Texas, USA
since 2019 Scholar in Residence, Xiphophorus Genetic Stock Center, Texas State University
 San Marcos, Texas, USA
since 2020 Senior Research Professor, Medical School, University of Würzburg

Academies, Scientific Societies, Committees and Boards

1996-2007 Vice-chairman and Chairman of the Theodor-Boveri-Institute for Biosciences
 (Biocenter), Würzburg
1997-2021 Chairman of the Scientific Advisory Board of the Sars International Centre for
 Marine Molecular Biology, Bergen, Norway
1999-2016 Member of the Advisory Board of the German Genetics Society
2002-2020 Vice-Chairman Rudolf-Virchow-Centre for Experimental Biomedicine, Würzburg
2005-2015 Member and chairman of the Scientific Advisory Board for the Centre of Molecular
 Biosciences, University of Goettingen
2005-2009 and Vice-President of the German Genetics Society
2012-2016
2009-2011 President of the German Genetics Society (Deutsche Gesellschaft für Genetik)
since 2011 Member German Academy of Sciences (Leopoldina)
2009-2012 Chairman of the Scientific Advisory Board of the Institut de Génomique
 Fonctionnelle de Lyon, Ecole Normale Supérieure de Lyon, France
2012-2015 Member of the "Structuring Commission of Medicine" of the state of Baden-
 Württemberg, Advisor to the Government
since 2013 Scientific Advisor of the Beijing Genome Institute, Hongkong

since 2015	President of PhysicoMedica, Academy of Sciences, Würzburg
since 2019	Chairman of the Scientific Advisory Board of the Sars-Fang Centre for Molecular Marine Biology, Qingdao, China
2020	Selection Committee for the International Prize of Biology, Japan Society for Promotion of Science
since 2021	Member European Academy of Sciences, Humanities and Letters (Academia Europaea)

Project Management

1998 – 2001	Coordinator EU-FAIR Project “Improvement and Risk Assessment of Transgenic Technologies in Fish”
1996 – 2003	Vice-chairman of Coordination Committee SFB 465 “Development and Manipulation of Pluripotent Cells”, DFG
since 2001	Member of Coordination Committee and Vice-Chairman of the DFG Research Center for Molecular Medicine (Rudolf Virchow Center Würzburg)
2004 - 2014	Coordinator and Chairman of the Graduate and Research Programme “Organogenesis” (GK1048, DFG)
2004 – 2009	Chairman of Coordination Committee and Vice-Chairman of the SFB-Transregio 17 “Ras-dependent pathways in human cancer”, DFG
since 2020	Co-PI Xiphophorus Genetic Stock Center (NIH ORIP R24)

Awards

1991	Heisenberg Awardee, DFG (German Research Foundation)
1991	Jenkinson Lecture, Oxford University
2004	Doctor honoris causa, University of Bergen, Norway
2007	Prince Hitachi Prize for Comparative Oncology, Japan
2011	Ray-Chaudhuri Lecture, University of Varanasi, India
2015	NUSS Lecture, National University of Singapore, Singapore
2016	Faculty Fellow Hagler Institute for Advanced Study at Texas A&M University, USA
2022	Svedberg Lecture, University of Uppsala, Sweden

University Committees

2001-2015	Chairman of the Examination Committee for Bachelor and Master students in Biomedicine, University of Würzburg
2003-2013	Member of the Committee for Scientific and Strategic Development, Faculty of Biology, University of Würzburg
2005-2013	Member of the Committee for International Relations of the University of Würzburg
2008-2012	Director of Research of the Comprehensive Cancer Center Mainfranken

Editorial Work

1986 – 2006	Associate Editor Diseases of Aquatic Organisms
1993 – 1996	Associate Editor Pigment Cell Research
1991 – 1999	Associate Editor Molecular Marine Biology and Biotechnology
1997 – 2016	Associate Editor Gene, 2011-2016 Executive Editor
since 1999	Section Editor Korean Journal of Biological Sciences
since 2004	Member of the Editorial Board of Zebrafish
since 2007	Editor in Chief of Sexual Development
since 2017	Advisory Board of the European Zoological Journal
since 2019	Editorial Board of Marine Life Science & Technology
since 2022	Editorial Board of the Philosophical Transactions of the Royal Society

Ad hoc reviewer (selection)

<i>Grants and fellowships</i>	European Molecular Biology Organization, Human Frontier Science Program, International Union against Cancer, Medical Research Council of Great Britain, National Research Council of Norway, National Science Foundation (USA), French National Research Association, German National Research Fund Organization
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(DFG), Swiss National Fund, Austrian National Research Council, and other funding organizations

Scientific journals Cancer Research, Cytogenetics and Cell Genetics, Current Biology, Development, Developmental Biology, EMBO Journal, Gene, J. of Investigative Dermatology, Mechanisms of Development, Molecular and General Genetics, Molecular Marine Biology and Biotechnology, Nature, Nature Genetics, Nature Biotechnology, Nature Reviews, Oncogene, Pigment Cell Research, PLoS Genetics, PLoS Biology, PNAS, Science, Zebrafish

Editorial Advisor Current Biology, PLoS Biology, PLoS Genetics, BMC Biology

Memberships

Deutsche Krebs-Gesellschaft (Arbeitsgemeinschaft Experimentelle Krebsforschung), European Pigment Cell Society, Deutsche Zoologische Gesellschaft, German Genetics Society, Senckenberg Research Society, Society for Biochemistry and Molecular Biology (GBM), Physico-Medica Würzburg (local Academy of Sciences)

10 Most Important Publications

Meyer A, Schloissnig S, Franchini P, Du K, Woltering JM, Irisarri I, Wong WY, Nowoshilow S, Kneitz S, Kawaguchi A, Fabrizius A, Xiong P, Dechaud C, Spaik HP, Volff JN, Simakov O, Burmester T, Tanaka EM, **Schartl M**. Giant lungfish genome elucidates the conquest of land by vertebrates. **Nature** 590: 284, 2021

Du K, Stöck M, Kneitz S, Klopp C, Woltering JM, Adolphi MC, Feron R, Prokopov D, Makunin A, Kichigin I, Schmidt C, Fischer P, Kuhl H, Wuertz S, Gessner J, Kloas W, Cabau C, Iampietro C, Parrinello H, Tomlinson C, Journot L, Postlethwait JH, Braasch I, Trifonov V, Warren WC, Meyer A, Guiguen Y, **Schartl M**. The sterlet sturgeon genome sequence and the mechanisms of segmental rediploidization. **Nature Ecology & Evolution** 4: 841, 2020

Powell DL, Garcia M, Keegan M, Reilly P, Du K, Díaz-Loyo AP, Banerjee S, Blakkan D, Reich D, Andolfatto P, Rosenthal GG, **Schartl M**, Schumer, M. Natural hybridization reveals incompatible alleles that cause melanoma in swordtail fish. **Science** 368, 731-736, 2020.

Warren WC, Garcia-Perez R, Xu S, Lampert KP, Chalopin D, Stock M, Loewe L, Lu Y, Kuderna L, Minx P, Montague MJ, Tomlinson C, Hillier LW, Murphy DN, Wang J, Wang Z, Garcia CM, Thomas GCW, Volff JN, Farias F, Aken B, Walter RB, Pruitt KD, Marques-Bonet T, Hahn MW, Kneitz S, Lynch M, **Schartl M**, Clonal polymorphism and high heterozygosity in the celibate genome of the Amazon molly. **Nature Ecology & Evolution** 2, 669-679, 2018

Schartl M, Walter RB, Shen Y, Garcia T, Catchen J, Amores A, Braasch I, Chalopin D, Volff JN, Lesch KP, Bisazza A, Minx P, Hillier L, Wilson RK, Fuerstenberg S, Boore J, Searle S, Postlethwait JH, and Warren WC, The genome of the platyfish, *Xiphophorus maculatus*, provides insights into evolutionary adaptation and several complex traits. **Nature Genetics** 45: 567, 2013

Schartl M, Hornung U, Hissmann K, Schauer J, and Fricke H, Genetic relatedness among east African coelacanths. **Nature** 435: 901, 2005

Stöck M, Lamatsch DK, Steinlein C, Epplen JT, Grosse WR, Hock R, Klapperstück T, Lampert KP, Scheer U, Schmid M, **Schartl M**, A bisexually reproducing all-triploid vertebrate. **Nature Genetics** 30: 325, 2002

Schartl M, Nanda I, Schlupp I, Wilde B, Epplen JT, Schmid M, Parzefall J, Incorporation of subgenomic amounts of DNA as compensation for mutational load in a gynogenetic fish. **Nature** 373: 68, 1995

Adam D, Dimitrijevic N, **Schartl M**, Tumor suppression in *Xiphophorus* by an accidentally acquired promoter. **Science** 259: 816, 1993

Wittbrodt J, Adam D, Malitschek B, Maueler W, Raulf F, Telling A, Robertson SM, **Schartl M**, Novel putative receptor tyrosine kinase encoded by the melanoma-inducing Tu locus in *Xiphophorus*. **Nature** 341: 415, 1989