

Ernst WAGNER

Date of birth: May 10th, 1960
Place of birth: Dachau, Germany
Citizenship: Austrian

EDUCATION

Technical University of Vienna Diploma (Dipl.Ing.) 1983 Chemistry/Biochemistry
Technical University of Vienna Ph. D. (Dr. tech.) 1985 Organic Chemistry
University of Vienna, Medical Faculty Habilitation (Doz.) 1994 Biochemistry

RESEARCH AND PROFESSIONAL EXPERIENCE

1985-1987 Postdoc and Scientist at the Federal School of Technology (ETH) Zurich, Switzerland; working on sugar phosphates and origin-of-life chemistry (prebiotic formation of nucleic acid precursors).
1988-1995 Group leader, Institute of Molecular Pathology, Vienna, Austria; working on receptor-mediated gene delivery, artificial virus-like gene transfer systems containing targeting and endosomal escape domains
1996 Professor Biopharmaceutical Sciences, Utrecht University, The Netherlands.
1992-2001 Director Cancer Vaccines & Gene Therapy, Boehringer Ingelheim Austria; research, development and production of gene-modified cancer vaccines; human clinical gene therapy trials in Austria and Germany started in 1994 (first-on-world polymer-based gene therapy) and 1998.
1995-2002 Group leader, Institute of Biochemistry, Vienna University Biocenter.
Since 2001 C4 Professor for Pharmaceutical Biology - Biotechnology, LMU Munich, Germany.
Since 2005 Member of Munich Center of Nanoscience (CeNS)
2006-2008 Director, Department of Pharmacy
2007-2010 Coordinator of Area "Programmed Drug Delivery" within the DFG Excellence Cluster "Nanosystems Initiative Munich (NIM)"
2010-2019 Area Coordinator of "Biomedical Nanotechnologies" and Executive Board Member of "Nanosystems Initiative Munich (NIM)"
2016-2018 Deputy Director, Department of Pharmacy
2018-2020 Director, Department of Pharmacy

≥ 513 publications, ≥ 20 patents, ≥ 315 international lectures, > 52 296 citations on GS, h-index 115

SUPPORT OF YOUNG RESEARCHERS

95 Doctoral students (from many nations, including 7 CSC student fellows) graduated successfully under his supervision, plus 15 currently active PhD students. 15 academics under his former supervision (doctoral students or postdocs) received a professorship/associate professorship.

MEMBERSHIPS & COMMITTEE MEMBERSHIPS

Member of GÖCH (Austrian Chemical Society), GDCH (German Chemical Society), ACS (American Chemical Society), ASCGT (American Society for Gene and Cell Therapy), DGTT (German Society for Gene Therapy), Controlled Release Society (CRS), EurASc (European Academy of Science).

1995-2003 Gene Analysis & Therapy Panel of the Austrian Gene Technology Commission
1996-2003 DECHEMA Arbeitsgruppe Medizinische Biotechnologie

Ernst Wagner

1997-2000	Gene Therapy Committee, American Society for Gene Therapy
1998-2001	European Gene Therapy Working Group EFPIA
2001-2002	European Society for Gene Therapy, Committee nonviral vectors
Since 2005	Member of Center of Nanoscience (CeNS, Munich)
Since 2004	Member of EUFEPS Committee for Academic Research
2007-2010	Nonviral Vector Committee, ASGT, American Society for Gene Therapy
Since 2007	Deutsche Gesellschaft für Gentherapie (DG-GT), Beirat, physicochemical vectors
2010-2014	European Society for Gene and Cell Therapy, Committee nonviral vectors
2012-2016	Physical Gene & Cell Therapy and Vectorology Committee, ASGCT
2015-2016	Chair, Physical Gene & Cell Therapy and Vectorology Committee, ASGCT (now: Physical Delivery Therapeutics & Vector Development Committee)
2014-2017	Chemical Gene & Cell Therapy Committee, ASGCT (now: Nanoagents & Synthetic Formulations Committee)
Since 2018	European Academy of Sciences (EurASc), Officer, Devision Medicine and Life Sciences
2022-2025	Nonviral Therapeutic Delivery Committee, ASGCT

EDITORIAL ACTIVITIES

1995-1998	Editorial Board of "Cytokines and Molecular Therapy"
1999-2012	Editorial Board of "Gene Therapy and Regulation"
1999-2009	Editorial Board of "Gene Therapy"
1999-2001	Editorial Board of "Tumor Targeting"
1999-2004	Editorial Board of "AAPS PharmSci"
1998-2010	Editor of "Current Opinion in Molecular Therapeutics"
2002-2016	Associate Editor of "Journal of Gene Medicine"
2003-2016	Editorial Board of "European Journal of Pharmaceutical Sciences"
Since 2005	Editorial Board of "Journal of Controlled Release"
2007-2010	Associate Editor of "Molecular Therapy"
2007-2012	Editorial Board of "Bioconjugate Chemistry"
2008-2020	Editor, "Pharmaceutical Research"
Since 2009	Editorial Board of "Polymers"
2009-2014	Editorial Board of "Nanomedicine: NBM"
Since 2012	Editorial Board of "Pharmaceutical Nanotechnology"
Since 2015	Editorial Board of "European Journal of Pharmaceutics and Biopharmaceutics"
Since 2015	Editorial Board of "OpenNano"
2016-2022	Editor-in-Chief of "Journal of Gene Medicine"

HONORS

1996	F.C. Donders Chair for Biopharmaceutical Sciences, Utrecht University, Netherlands
2007	Honorary Member of Balkan Union of Oncology (BUON)
2012/13	Fudan University Key Laboratory, Shanghai, Senior Visiting Scholarship (guest professor)
2012	Election into Board of Scientific Advisors of Controlled Release Society (CRS)
2012	Attocube Research Award
2014	Sichuan University, Chengdu, Guest Professorship 2014-2017
2014	Phoenix Pharma Science Award 2014
2017	Election into CRS College of Fellows
2017	Election as Academician into European Academy of Sciences (EurASc)
2018	Honorary Professorship Sichuan University
2021	Honorary Professorship Jinan University
2022	Huaxia Medical Science and Technology Award (International Cooperation Promotion Award, with Fudan U)

GRANTS

1995-2000	Austrian FWF Forschungsschwerpunkt Projekt S07405-MOB
1997-2000	European Community (EC) FP4 Biotechnology Program Grant Bio4CT972191 Non-viral gene transfer vectors
2000-2003	Austrian FWF Project P14289
2000-2004	EC FP5 Research Training Network ('MakeMAC', Artificial Chromosomes)
2003-2009	DFG SFB486 network ('Nanoman', Synthetic viruses)
2004-2006	Sanders Stiftung Project (P450 Gene Therapy)
2004-2006	Dr. Mildred Scheel Stiftung Project (Colon cancer)
2005-2009	EC FP6 Network ('GIANT')
2006-2009	Participant in DFG research network SPP1230 (Gene therapy – vector safety)
2010-2012	Munich BMBF Spaltencluster m4, Project T12 (project leader Wagner), siRNA as new therapeutic platform suitable for personalized healthcare – Dynamic polymer systems to facilitate safe and efficient cytoplasmic delivery of siRNAs
2012-2016	SinoGermanCenter and DFG project 'Programmed dual targeted lipopolymers delivery systems for cancer gene therapy' (with Sichuan U / Prof. Z. Gu, Prof. Y. Nie)
2012-2017	European Community, Innovative Medicines Initiative (IMI) project 'Collaboration on the optimisation of macromolecular pharmaceutical access to cellular targets (COMPACT)', WP2 (siRNA), WP5 (Delivery across BBB)
2014-2017	SinoGermanCenter project 'Novel peptide-modified precise oligomers for cascade-targeting gene therapy of glioma' (with Fudan U / Prof. R. Huang)
2010-2018	DFG Research Group FOR 1406 'Exploiting the potential of natural compounds: Myxobacteria as source for therapeutic leads and chemical tools in cancer research.'
2006-2019	German Network of Excellence – Cluster Nanosystems Initiative Munich ('NIM').
2013-2021	DFG SFB824 'Polyplexes for systemic NIS gene transfer', co-PI with Prof. Ch. Spitzweg
2017-2021	DFG SFB1066 'Nanodimensional Polymer Therapeutics for Tumor Therapy' (Mainz), Project B5
2019-2022	DFG-NSFC Joint Sino-German Research Project (LRP1-targeted carbon nanodots for crossing BBB and delivering small molecule or protein drugs into brain) together with Prof. Rongqin Huang, Fudan University, and Prof. Yi Wang, Donghua University, Shanghai
2012-2024	DFG SFB1032 Nanoagents, projekt B4 (Molecular nanoagents utilizing the intracellular microRNA machinery for switching functions in cells)
2019-2024	European Community Horizon 2020, Unlocking Precision Gene Therapy (UPGRADE)
Since 2023	CNATM Cluster for Nucleic Acid Therapeutics Munich (BMBF Clusters4Future)

LIST OF PUBLICATIONS

Books/Volumes:

- L. Huang, M.C. Hung, E. Wagner (1999) Nonviral Vectors for Gene Therapy, Academic Press, San Diego.
- G. Storm, E. Wagner (1999) Volume **38** in Adv. Drug Del. Rev. Theme title: Membrane destabilization for improved cytosolic delivery.
- L. Huang, M.C. Hung, E. Wagner (2005) Nonviral Vectors for Gene Therapy, Second Edition, Elsevier, Academic Press
- L. Huang, Dexi Liu, E. Wagner (2014) Nonviral Vectors for Gene Therapy, Third Edition, Lipid- and Polymer-based Gene Transfer, Advances in Genetics **88**, Elsevier.
- L. Huang, Dexi Liu, E. Wagner (2015) Nonviral Vectors for Gene Therapy, Third Edition, Physical Methods and Medical Translation, Advances in Genetics **89**, Elsevier.

Papers:

- 1) Noe, C.R., Knollmüller, M., Wagner, E., und Völlenkle, H. (1985). Selektivitäten bei Acetalisierungsreaktionen enantiomerenreiner Lactole am Beispiel von Octahydro-8,9,9-trimethyl-5,8-methano-2H-1-benzopyran-2-ol. *Chem. Ber.* 118, 1733-1745.
- 2) Noe, C.R., Knollmüller, M., Wagner, E., und Völlenkle, H. (1985). Kohlenhydrat-Modelle, I. Kinetische und thermodynamische Effekte bei Acetalisierungsreaktionen enantiomerenreiner Thiolactole. *Chem. Ber.* 118, 3299-3310.
- 3) Noe, C.R., Knollmüller, M., und Wagner, E. (1986). Ein einfaches Verfahren zur Herstellung anellierter Thiophene. *Monatsh. Chemie* 117, 621-629.
- 4) Noe, C.R., Knollmüller, M., Oberhauser, B., Steinbauer, G., und Wagner, E. (1986). Chirale Lactole, VI. Eine Methode zur Bestimmung der Absolutkonfiguration chiraler alpha-hydroxysubstituierter Nitrile, Alkine und Aldehyde. *Chem. Ber.* 119, 729-743.
- 5) Wagner, E., Xiang, Y.-B., Baumann, K., Gück, J., und Eschenmoser, A. (1990). Chemie von alpha-Aminonitrilen. Aziridin-2-carbonitril, ein Vorläufer von rac-O3-Phosphoserinnitrit und Glycolaldehydphosphat. *Helv. Chim. Acta* 73, 1391-1409.
- 6) Müller, D., Pitsch, S., Kittaka, A., Wagner, E., Wintner, C.E., und Eschenmoser, A. (1990) Chemie von alpha-Aminonitrilen. Aldomerisierung von Glycolaldehyd-phosphat zu racemischen Hexose-2,4,6-triphosphaten und (in Gegenwart von Formaldehyd) racemischen Pentose-2,4-diphosphaten: rac-Allose-2,4,6-triphosphat und rac-Ribose-2,4-diphosphat sind die Reaktionshauptprodukte. *Helv. Chim. Acta* 73, 1410-1468.
- 7) Wagner, E., Zenke, M., Cotten, M., Beug, H. and Birnstiel, M.L. (1990). Transferrin-polycation conjugates as carriers for DNA uptake into cells. *Proc. Natl. Acad. Sci. USA* 87, 3410-3414.
- 8) Zenke, M., Steinlein, P., Wagner, E., Cotten, M., Beug, H. and Birnstiel, M.L. (1990) Receptor-mediated endocytosis of transferrin polycation conjugates: An efficient way to introduce DNA into hematopoietic cells. *Proc. Natl. Acad. Sci. USA* 87, 3655-3659.
- 9) Cotten, M., Laengle-Rouault, F., Kirlappos, H., Wagner, E., Mechtler, K., Zenke, M., Beug, H. and Birnstiel, M.L. (1990) Transferrin-polycation-mediated introduction of DNA into human leukemic cells: stimulation by agents that affect the survival of transfected DNA or modulate transferrin receptor levels. *Proc. Natl. Acad. Sci. USA* 87, 4033-4037.
- 10) Wagner, E., Cotten, M., Foisner, R. and Birnstiel, M.L. (1991). Transferrin-polycation-DNA complexes: The effect of polycations on the structure of the complex and DNA delivery to cells. *Proc. Natl. Acad. Sci. USA* 88, 4255-4259.
- 11) Wagner, E., Cotten, M., Mechtler, K., Kirlappos, H. and Birnstiel, M.L. (1991). DNA-binding transferrin conjugates as functional gene-delivery agents: synthesis by linkage of polylysine or ethidium homodimer to the transferrin carbohydrate moiety. *Bioconjugate Chem.* 2, 226-231.
- 12) Curiel, D.T., Agarwal, S., Wagner, E., and Cotten, M. (1991). Adenovirus enhancement of transferrin-polylysine-mediated gene delivery. *Proc. Natl. Acad. Sci. USA* 88, 8850-8854.

- 13) Cotten, M., Oberhauser, B., Brunar, H., Holzner, A., Issakides, G., Noe, C.R., Schaffner, G., Wagner, E., and Birnstiel, M.L. (1991). 2'-O-methyl, 2'-O-ethyl oligoribonucleotides and phosphorothioate oligodeoxyribonucleotides as inhibitors of the in vitro U7 snRNP-dependent mRNA processing event. *Nucleic Acids Res.* 19, 2629-2635.
- 14) Wagner, E., Oberhauser, B., Holzner, A., Brunar, H., Issakides, G., Schaffner, G., Cotten, M., Knollmüller, M., and Noe, C.R. (1991). A simple procedure for the preparation of protected 2'-O-methyl or 2'-O-ethyl ribonucleoside-3'-O-phosphoramidites. *Nucleic Acids Res.* 19, 5965-5971.
- 15) Noe, C.R., Knollmüller, M., Steinbauer G., Wagner, E., Kurner, H., Ettmayer, P., and Vollenkle H. (1991) A simple method to direct the reduction of alpha-alkoxy-carbonyl compounds. *Monatshefte Chemie* 122, 299-317.
- 16) Oberhauser, B., and Wagner, E. (1992). Effective incorporation of 2'-O-methyl-oligoribonucleotides into liposomes and enhanced cell association through modification with thiocholesterol. *Nucleic Acids Res.* 20, 533-538.
- 17) Curiel, D.T., Wagner, E., Cotten, M., Birnstiel, M.L., Agarwal, S., Li, C.-M., Loechel, S., and Hu, P.-C. (1992) High-efficiency gene transfer by adenovirus coupled to DNA-polylysine complexes. *Human Gene Therapy* 3, 147-154.
- 18) Curiel, D.T., Agarwal, S., Romer, N., Wagner, E., Cotten, M., Birnstiel, M.L., and Boucher, R.C. (1992). Gene transfer to respiratory epithelial cells via the receptor-mediated endocytosis pathway. *Am. J. Resp. Cell Mol. Biol.* 6, 247-252.
- 19) Wagner, E., Cotten, M., Zatloukal, K. and Birnstiel, M. (1992) Transferrin receptor mediated gene transfer, *Quarterly News* 1, 13-25.
- 20) Wagner, E., Zatloukal, K., Cotten, M., Kirlappos, H., Mechtler, K., Curiel, D.T., and Birnstiel, M.L. (1992). Coupling of adenovirus to transferrin-polylysine/DNA complexes greatly enhances receptor-mediated gene delivery and expression of transfected genes. *Proc. Natl. Acad. Sci. USA* 89, 6099-6103.
- 21) Cotten, M., Wagner, E., Zatloukal, K., Phillips, S., Curiel,D.T., and Birnstiel, M.L. (1992). High-efficiency receptor-mediated delivery of small and large (48kb) gene constructs using the endosome disruption activity of defective or chemically inactivated adenovirus particles. *Proc. Natl. Acad. Sci. USA* 89, 6094-6098.
- 22) Wagner, E., Plank, C., Zatloukal, K., Cotten, M., and Birnstiel, M.L. (1992) Influenza virus hemagglutinin HA-2 N-terminal fusogenic peptides augment gene transfer by transferrin-polylysine/DNA complexes: Towards a synthetic virus-like gene transfer vehicle. *Proc. Natl. Acad. Sci. USA* 89, 7934-7938.
- 23) Zatloukal, K., Wagner, E., Cotten, M., Phillips, S., Plank, C., Steinlein, P., Curiel, D., and Birnstiel, M.L. (1992). Transferrinfection: A highly efficient way to express gene constructs in eukariotic cells. *Ann. N. Y. Acad. Sci.* 660, 136-153.
- 24) Plank, C., Zatloukal, K., Cotten, M., Mechtler, K., and Wagner, E. (1992) Gene transfer into hepatocytes using asialoglycoprotein receptor mediated endocytosis of DNA complexed with an artificial tetra-antennary galactose ligand. *Bioconjugate Chem.* 3, 533-539.
- 25) Cotten, M., Wagner, E., and Birnstiel, M.L. (1993). Receptor mediated transport of DNA into eukariotic cells. *Methods Enzymol.* 217, 618-644.
- 26) Gao, L., Wagner, E., Cotten, M., Agarwal, S., Harris, C., Romer, M., Miller, L., Hu, P.-c., and Curiel, D. (1993) Direct in vivo gene transfer to the airway epithelium employing adenovirus-polylysine-DNA complexes. *Human Gene Therapy* 4, 17-24.
- 27) Michael, S.I., Huang, C.-h., Romer, M.U., Wagner, E., Hu, P.-c. and Curiel, D.T. (1993) Binding-incompetent adenovirus facilitates molecular conjugate-mediated gene transfer by the receptor-mediated endocytosis pathway. *J. Biol. Chem.* 268, 6866-6869.
- 28) Cotten, M., Wagner, E., Zatloukal, K. and Birnstiel, M.L. (1993) Chicken adenovirus (CELO virus) particles augment receptor-mediated DNA delivery to mammalian cells and yield exceptional levels of stable transformants. *J. Virol.* 67, 3777-3785.
- 29) Wagner, E. (1993) Gentherapie: Neue Wege in der Krebsbehandlung. In "Genetische Kunst-Künstliches Leben", Ars Electronica 93, K. Gerbel, P. Weibel (Eds.) PVS Verleger, Wien, pp. 151-154.
- 30) Cotten, M. and Wagner, E. (1993) Non-viral approaches to gene therapy. *Current Op. Biotech.* 4, 705-710.

- 31) Zatloukal, K., Schmidt, W., Cotten, M., Wagner, E., Stingl, G., and Birnstiel, M.L. (1993) Somatic gene therapy for cancer: the utility of transferrinfection in generating ‘tumor vaccines’. *Gene* 135, 199-207.
- 32) Harris, C.E., Agarwal S., Hu, P., Wagner E., and Curiel, D.T. (1993) Receptor-mediated gene transfer to airway epithelial cells in primary culture. *Am. J. Respir. Cell Mol. Biol.* 9, 441-7.
- 33) Noe, C.R., Knollmüller, M., Miculka, C., Dungler, K., Wagner, E., and Ettmayer, P. (1994) A method for the determination of the absolute-configuration of chiral alkanols. *Chemische Berichte* 127, 887-892.
- 34) Curiel, T.J., Cook, D.R., Bogedain, C., Jilg, W., Harrison, G.S., Cotten, M., Curiel, D.T., and Wagner, E. (1994) Foreign gene expression in Epstein-Barr virus transformed human B cells, *Virology* 198, 577-585.
- 35) Plank, C., Oberhauser, B., Mechtler, K., Koch, C., and Wagner, E. (1994) The influence of endosome-disruptive peptides on gene transfer using synthetic virus-like gene transfer systems. *J. Biol. Chem.* 269, 12918-12924.
- 36) Wagner, E., Cotten, M., Plank, C., Mechtler, K., Zatloukal, K., and Birnstiel, M.L. (1994) Receptor-mediated gene delivery into mammalian cells. In: "Animal cell technology: Products of today, prospects for tomorrow" R.E. Spier, J.B. Griffiths, W. Berthold (Eds.) Butterworth-Heinemann Ltd, Oxford, pp 30-34.
- 37) Wagner, E., Curiel, D. and Cotten, M. (1994) Delivery of drugs, proteins and genes into cells using transferrin as a ligand for receptor-mediated endocytosis. *Adv. Drug Del. Rev.* 14, 113-136.
- 38) Cheng, Q., Cant, C.A., Moll, T., Hofer-Warbinek, R., Wagner, E., Birnstiel, M.L., Bach, F.H., and de Martin, R. (1994) NF- κ B Subunit-specific regulation of the I κ B promoter. *J. Biol. Chem.* 269, 13551-13557.
- 39) Zatloukal, K., Cotten, M., Berger, M., Schmidt, W., Wagner, E. and Birnstiel, M.L. (1994) In vivo production of human factor VIII in mice after intrasplenic implantation of primary fibroblasts transfected by receptor-mediated, adenovirus-augmented gene delivery. *Proc. Natl. Acad. Sci. USA* 91, 5148-5152.
- 40) Wagner, E., Buschle, M., Cotten, M., Plank, C., Zauner, W., and Birnstiel, M.L. (1994) Synthetic virus-like gene delivery systems. *Proc Int Symp. Control. Rel. Bioact. Mater.* 21, 3-4.
- 41) Thurnher, M., Wagner, E., Clausen, H., Mechtler, K., Rusconi, S., Dinter, A., Berger, E.G., Birnstiel, M.L., and Cotten, M. (1994) Carbohydrate receptor-mediated gene transfer to human T-leukemic cells, *Glycobiology* 4, 429-435.
- 42) Cotten, M., Baker, A., Saltik, M., Wagner, E., and Buschle, M. (1994) Lipopolysaccharide is a frequent contaminant of plasmid DNA preparations and can be toxic to primary cells in the presence of adenovirus. *Gene Therapy* 1, 239-246.
- 43) Zelphati, O., Wagner, E., and Leserman, L. (1994) Synthesis and anti-HIV activity of thiocholesteryl-coupled phosphodiester antisense oligonucleotides incorporated into immunoliposomes. *Antiviral Research* 25, 13-25.
- 44) Maass, G., Zatloukal, K., Schmidt, W., Berger, M., Cotten, M., Buschle, M., Wagner, E., Birnstiel, M.L. (1994) Generation of tumor vaccines by adenovirus-enhanced transfection of cytokine genes into tumor cells. *Nato ASI Series H88*, 467-479.
- 45) Batra, R.K., Wang-Johanning, F., Wagner, E., Garver, R.I., Curiel, D.T. (1994) Receptor-mediated gene delivery employing lectin-binding specificity. *Gene Therapy* 1, 255-260.
- 46) Cotten, M., Saltik, M., Kursa, M., Wagner, E., Maass, G., and Birnstiel, M.L. (1994) Psoralen treatment of adenovirus particles eliminates virus replication and transcription while maintaining the endosomolytic activity of the virus capsid. *Virology* 205, 254-261.
- 47) Frank, S., Krasznai, K., Durovic, S., Lobentanz, E.-M., Dieplinger, H., Wagner, E., Zatloukal, K., Cotten, M., Utermann, G., Kostner, G. M., and Zechner, R. (1994) High-Level Expression of Various Apolipoprotein(a) Isoforms by “Transferrinfection”: The Role of Kringle IV Sequences in the Extracellular Association with Low-Density Lipoprotein. *Biochemistry* 33, 12329-12339.
- 48) Zatloukal, K., Schneeberger, A., Berger, M., Koszik, F., Schmidt, W., Wagner, E., Cotten, M., Buschle, M., Maass, G., Stingl, G., Birnstiel, M.L., (1994) Genetic modification of cells by receptor-mediated adenovirus-augmented gene delivery: a new approach for immunotherapy of cancer. *Verh. Dtsch. Ges. Pathol.* 78, 171-6.
- 49) Cook, D. R., Maxwell, I.H., Glode, L. M., Maxwell, F., Stevens, J. O., Purner, M. B., Wagner, E., Curiel, D. T., Curiel, T. J. (1994) Gene therapy for B-cell lymphoma in a SCID mouse model using an

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- immunoglobulin-regulated diphtheria toxin gene delivered by a novel adenovirus-polylysine conjugate. *Cancer Biother* 9, 131-41.
- 50) Zauner, W., Blaas, D., Küchler, E., and Wagner, E. (1995) Rhinovirus mediated endosomal release of transfection complexes. *J. Virol.* 69, 1085-1092.
- 51) Moll, T., Czyz, M., Holzmüller, H., Hofer-Warbinek, R., Wagner, E., Winkler, H., Bach, F.H., and Hofer, E. (1995) Regulation of the tissue factor promoter in endothelial cells. *J. Biol. Chem.* 270, 3849-3857.
- 52) von Rüden, T., Stingl, L., Cotten, M., Wagner, E., and Zatloukal, K. (1995) Generation of high-titer retroviral vectors following receptor-mediated, adenovirus-augmented transfection. *Biotechniques* 18, 484-489.
- 53) Zatloukal, K., Schneeberger, A., Berger, M., Schmidt, W., Kosik, F., Kutil, R., Cotten, M., Wagner, E., Buschle, M., Maass, G., Payer, E., Stingl, G., Birnstiel, M.L. (1995) Elicitation of a systemic and protective anti-melanoma immune response by an IL-2 based vaccine: assessment of critical parameters. *J. Immunol.* 154, 3406-3419.
- 54) Buschle, M., Cotten, M., Kirlappos, H., Mechtler, K., Birnstiel, M.L., and Wagner, E. (1995) Receptor-mediated gene transfer into T-lymphocytes via binding of DNA/CD3 antibody particles to the CD3 T cell receptor complex. *Human Gene Therapy* 6, 753-761.
- 55) Oberhauser, B., Plank, C., and Wagner, E. (1995) Enhancing endosomal exit of nucleic acids using pH-sensitive viral fusion peptides. Chapter 16 in "Delivery strategies for antisense oligonucleotide therapeutics", S. Akhtar (Ed.), CRC Press, Inc, Florida, p. 247-268.
- 56) Prchla, E., Plank, C., Wagner, E., Blaas, D., and Fuchs, R. (1995) Virus-mediated release of endosomal content in vitro: Different Behaviour of adenovirus and Rhinovirus serotype 2. *J. Cell Biology* 131, 111-123.
- 57) Zauner, W., Kichler, A., Schmidt, W., Sinski, A., Wagner, E. (1996) Glycerol enhancement of ligand-polylysine/DNA transfection. *Biotechniques* 20, 905-913.
- 58) Wagner, E. (1996) Rezeptorvermittelter Gentransfer: Anwendung in der Tumorimmuntherapie? Chapter 37 in "Molekularbiologische Grundlagen in der Gastroenterologie", Beger et al. (Ed), Scientific publishing services (P) LTD, Bangalore.
- 59) Stingl, G., Wolff, K., Bröcker, E.-B., R. Mertelsmann, K. Wolff, S. Schreiber et al.(1996) Phase I Study to the Immunotherapy of metastatic malignant melanoma by a cancer vaccine consisting of autologous cancer cells transfected with the human IL-2 gene. *Human Gene Therapy* 7, 551-563.
- 60) Morrison, C., Wagner, E. (1996) Extrachromosomal recombination occurs efficiently in cells defective in various DNA repair systems. *Nucleic Acid Res.* 24, 2053-58.
- 61) Wagner, E., Cotten, M., and Zatloukal, K. (1996) Receptor-mediated gene delivery with synthetic virus-like particles. p 67-77, in: Targeting of Drugs 5: Strategies for Oligonucleotide and Gene Delivery in Therapy, Cape Sounion, Greece. Ed. Grigoriadis, G., Plenum Press, New York
- 62) Plank, C., Mechtler, K., Wagner, E., and Szoka, F. (1996) Complement activation by polylysine-DNA complexes. In: Targeting of Drugs 5: Strategies for Oligonucleotide and Gene Delivery in Therapy, Cape Sounion, Greece. Ed. Grigoriadis, G., Plenum Press, New York.
- 63) Kichler, A., Zauner, W., Morrison, C., and Wagner, E. (1996) Ligand-polylysine mediated gene transfer. ACS book. Chapter 12, 120-128, in "Artificial Self-Assembling Systems for Gene Delivery", Felgner, P.L., et al. (Ed.), American Chemical Society, WashingtonDC.
- 64) Wagner, E., Cotten, M., Berger, M., Schmidt, W., Zauner, W., Buschle, M., Schweighoffer, T., Maass, G., Zatloukal, K., Schreiber, S., Stingl, G., and Birnstiel, M.L. (1996) Adenovirus enhanced receptor mediated transferrinfection (AVET) applied to the generation of tumor vaccines. Chapter in OECD Biotechnology, Gene Delivery Systems, A state-of-the-Art Review, pp 153-162.
- 65) Plank, C., Mechtler, K., Szoka, F., and Wagner, E. (1996) Activation of the complement system by synthetic DNA complexes: A potential barrier for intravenous gene delivery. *Hum. Gene Ther.* 7, 1437-1446.
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Lectures:

1. 13. 5. 1991, Gene Therapy Workshop, Broadway, Worcestershire, England, "Receptor-mediated gene delivery using transferrin-polycation conjugates".
2. 15. 10. 1991, Antisense Technology, 5. Mikrosymposium, Leverkusen, Deutschland, "Receptor-mediated Uptake of Nucleic Acids".
3. 8. 4. 1992, Keystone Symposium on Gene Transfer, Replacement and Augmentation, Copper Mountain, Colorado, USA, "Transferrin-polylysine mediated gene transfer and its augmentation by adenoviruses or peptides".
4. 10. 4. 1992, University of Colorado, Health Science Center, Denver, USA.
5. 2. 11. 1992, UCLA, Los Angeles, CA, USA, "Receptor-mediated gene transfer and its augmentation by the endosome-disruption activity of viruses or peptides".
6. 13. 11. 1992, 2. GFM-Tagessymposium, Deutsches Krebsforschungsinstitut, Heidelberg, Deutschland.
7. 15. 4. 1993, Keystone Symposium on Genetically Targeted Research & Therapeutics: Antisense & Gene Therapy, Keystone, Colorado, USA, "Receptor-Mediated Gene Transfer".
8. 21. 5. 1993, European Society for Animal Cell Technology, 12th Meeting, Würzburg, Deutschland, "Receptor-Mediated Gene Delivery into Mammalian Cells".
9. 15. 6. 1993, Ars Electronica, Symposium "Artificial Life", Linz, Österreich, "Gentherapie: Neue Wege in der Krebsbehandlung".
10. 2. 9. 1993, 12th Meeting of the International Society of Haematology, European and African Division, Wien, Österreich, "Receptor-mediated Gene Delivery and Potential Therapeutic Applications".
11. 16.11. 1993, Seattle, University of Washington, "Receptor-mediated gene delivery"
12. 20. 11. 1993, Second International Conference, Gene Therapy of Cancer, San Diego, "Adenovirus-augmented, receptor-mediated gene delivery for immunotherapy of melanoma".
13. 22.11. 1993 Birmingham, Alabama, UAB, "Adenovirus-augmented, receptor-mediated gene delivery"
14. 28. 1. 1994, Kolloquium Universitätsklinik Tübingen, "Rezeptorvermittelter Gentransfer in der somatischen Gentherapie".
15. 26. 4. 1994, XXI International Congress of the World Federation of Hemophilia, Mexico City, "Receptor-mediated gene delivery, application to hemophilia A"
16. 28. 6. 1994, Nice, 21st International CRS Symposium, "Synthetic virus-like gene delivery systems".
17. 11. 7. 1994, Hamburg, Medizinisches Kolloquium, "Somatische Gentherapie".
18. 8. 9. 1994, European Conference on Gene Therapy of Cancer, London, "Receptor-mediated Gene Transfer: Synthetic Virus-like Systems".
19. 14. 9. 1994, 49. Tagung der deutschen Gesellschaft für Verdauungs- und Stoffwechselkrankheiten, Ulm, Gentherapie in der Gastroenterologie, "Rezeptorvermittelter Gentransfer".
20. 18. 9. 1994, Goslar, Gene Therapy: Biosafety Aspects, "Receptor-mediated Gene Transfer: Synthetic Virus-like Systems".
21. 9. 10. 1994, Jahrestagung der Deutschen und der Österreichischen Gesellschaft für Hämatologie und Onkologie, Wien, Gene and Antigene Treatment, "Receptor-mediated Gene Transfer and applications for gene therapy of cancer".
22. 13. 10. 1994, Harvard Club of Boston, Artificial Self-Assembling Systems for Gene Transfer, "Virus-like gene transfer complexes using membrane active peptides"
23. 3. 11. 1994, 422. DEHEMA-Kolloquium, Frankfurt, Somatische Gentherapie, "Rezeptorvermittelter Gentransfer".

24. 30. 11. 1994, Annecy, Septiemes entretiens Jaques Cartier 1994, Fondation Marcel Merieux, Therapie Genique, "Receptor-mediated Gene Transfer: Synthetic Virus-like Systems".
25. 6. 2. 1995, Berlin, Universität Rudolf-Virchow, "Rezeptor-vermittelter Gentransfer".
26. 20. 2. 1995, Marburg, Philipps-Universität, Mini-Symposium Gentherapie (Tarik Möröy). "Receptor-mediated gene transfer; therapeutic applications"
27. 23. 2. 1995, Nice, 7th European Congress on Biotechnology; "Receptor-mediated gene transfer"
28. 30. 3. 1995, Keystone symposium on Gene therapy and Molecular Medicine, Steamboat Springs, USA. "Receptor mediated gene delivery and endosomal release".
29. 26. 4. 1995, Wiesbaden, 101. Tagung der Deutschen Gesellschaft für Innere Medizin; "Somatische Gentherapie: Methodische Grundlagen".
30. 30. 5. 1995, Ljubljana, School of Medicine, Slovenia. Lecture "Gene therapy and applications in oncology"
31. 1. 6. 1995, University of Utrecht, Faculty of Pharmacy, Netherland. Lecture "Receptor-mediated gene transfer: virus-like particles".
32. 2. 6. 1995, University of Groningen, Netherland. Lecture "Receptor-mediated gene transfer: virus-like particles".
33. 27. 6. 1995, Cape Sounion Beach, Greece, NATO ASI Meeting "Targeting of Drugs: Strategies for Oligonucleotide and Gene Delivery in Therapy".
34. 26. 7. 1995, GSF München, Abteilung Molekulare Virologie, Lecture "Nonviral Gene Delivery Systems"
35. 7. 9. 1995, Institut für Biomedizinische Alternsforschung, Innsbruck. Vortrag "Rezeptor-vermittelter Gentransfer für den Einsatz in der Tumorthерапie".
36. 28. 9. 1995, Wakefield, MA, USA, Symposium " Artificial Self-assembling Systems for Gene Transfer".
37. 30. 9. 1995, Rockville, MD, USA. Conference on: Stem Cell Gene Therapy. "Receptor-mediated Gene Transfer and endosomal release".
38. 26. 1. 1996, Erlangen. Internationales Symposium "Malignes Melanom". Vortrag "Möglichkeiten der Gentherapie".
39. 31. 5. 1996, "Somatische Gentherapie: eine realistische Zwischenbilanz", E.Broda Vorlesung, Wien.
40. 9. 9. 1996, "Kann Krebs immunologisch beeinflußt werden?", Pharmacon, Sylt/Westerland, Germany.
41. 19. 9. 1996, F.C. Donders Lecture "Gene transfer and applications", Utrecht, The Netherlands.
42. 20. 9. 1996, "Gene modified cancer vaccines", Gastroenterologie '96, 51. Tagung der DGVS, Aachen, Germany.
43. 26. 2. 1997 "Coupling of transferrin to polyethylenimine for gene delivery to tumor cells", Symposium on Recent advances in drug delivery systems, Salt Lake City, Utah
44. 14.-16. 3. 1997, Cold Spring Harbour, Gene transfer symposium
45. 3.-5. 5. 1997, Berlin, MDC Gene Therapy Symposium
46. 15.-16. 6. 1997, Stockholm, CRS meeting
47. 20. 6. 1997, Alpbach, "Gentherapie- Phantasie und Wirklichkeit"
48. 3. 7. 1997, Urbino, Summer School
49. 4,-5. 7. 1997, Strasbourg, Symposium C. Nicolau
50. 19.- 25. 8. 1997, Crete, International Gene therapy conference

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51. 13. 9. 1997, Vienna, ESO, New cytokines and genetic vaccines
52. 16. 9. 1997, Vienna, German Society of Experimental and Clinical Pharmacology and Toxicology.
53. 1.-3. 10. 1997, Paris, Gene Therapy
54. 12. 12. 1997, Freiburg i.B., 9th Symposium IECR, Vector Development and Targeting Strategies for Cancer Gene Therapy, Tumor Biology Center
55. 19.1.-25.1. 1998, Keystone, Synthetic Non-viral Gene Delivery Systems (Lecture and Co-organizer)
56. 23.4. 1998, London, EMEA Gene Therapy Workshop, "Gene Therapy in Practise"
57. 4.-5.5. 1998, Berlin-Buch, 6th MDC Symposium on Gene Therapy, "Receptor-targeting of nonviral vectors"
58. 6.5. 1998, Oxford, John Radcliffe Clinics, "Targeted gene transfer: an option for cancer therapy?"
59. 8.5. 1998, Amsterdam, 1. Pasman Symposium, "Receptor-targeting of nonviral vectors"
60. 11.6. 1998, Wien, 10-Jahresfeier CCRI und 11. Kind-Phillip-Tagung, "Cancer Gene Therapy"
61. 6.7.1998, Cividale (Udine), 14th Lecture course on biophysics and molecular biology, "Receptor ligands and shielding molecules for targeted gene delivery".
62. 18.-19.9.1998, Coimbra, Portugal, EC gene delivery meeting.
63. 11.-14. 3. 1999, Cold Spring Harbor, Vector Targeting Strategies for Therapeutic Gene Delivery, "Polycation-based DNA complexes for tumor-targeted in vivo gene transfer."
64. 29.-31.3. 1999, Berlin (Döllnsee-Schorfheide) "Cancer Gene Therapy: DNA complexes for tumor-targeted in vivo gene transfer", Graduiertenkolleg "Application of Molecular Methods for Development of New Therapies".
65. 5.6. 1999, Shizuoka (Japan) Special lecture at 8th Drug Delivery System Conference.
66. 22.6. 1999, Nice, FEBS '99, Lecture and Chairman Session Gene targeting/gene therapy
67. 24.6.-5.7. 1999, Marathon (Greece), NATO ASI "Targeting of Drugs: Strategies for Gene Constructs and Delivery".
68. 11.9. 1999, Linz, 31. Jahrestagung Intensivmedizin, Symposium "Molecular and cellular pathology in intensive care medicine", lecture "Gene Therapy"
69. 14.10. 1999, Vienna, AKH seminar, Abt. Innere Medizin I (Prof. Lechner) "Receptor-mediated gene delivery into tumors"
70. 17.-21.10. 1999, Lake Tahoe, 4th Gene delivery & cellular protein expression conference, "Transferrin-mediated gene delivery: ex vivo and in vivo"
71. 7.-9.11. 1999, Washington, Nature Biotechnology symposium: Gene Therapy: Delivering the medicines of the 21st century. "Polymer-based systems for tumor-targeted gene delivery"
72. 26.-28.11. 1999, Munich, 7th meeting of the ESGT, "Transferrin-PEI/DNA complexes for tumor-targeted gene transfer"
73. 21.2. 2000, Munich, "Receptor-mediated gene transfer and application in cancer gene therapy"
74. 12.-14.4. 2000, Noordwijk aan Zee, NL, 6th European Symposium on Controlled Drug Delivery, "Polycation-based gene transfer for cancer gene therapy"
75. 23.-25.5. 2000, Goldegg, "Tumor-directed gene transfer with nonviral vectors"
76. 7.-10.10. 2000, Stockholm, 8th meeting of the ESGT, "Tumour targeting with surface-shielded transferrin-PEI/DNA complexes"
77. 21.-22.10. 2000, Marburg, Int. Symposium on Molecular Radiology, "Tumor-targeting with nonviral vectors"
78. 27.-28.10. 2000, Paris, AFLM/AFM Symposium Intracellular Delivery of DNA by Non-viral Vectors, "Cell targeting using synthetic vectors"

79. 3.11. 2000, Vienna, FSP Symposium Genetic Modification of Cells and Animals for Investigation and Treatment of Disease, "Synthetic self-assembling gene transfer systems"
80. 17.-21.11. 2000, Fukuoka, 13th Annual meeting of the JAACT, Animal Cell Technology for Creation of new Era, "Tumor-targeted gene transfer with nonviral vectors"
81. 1.3. 2001, Vienna, 21st European Workshop for Rheumatological Research, "DNA therapeutics: A feasible option for treatment of inflammatory diseases?"
82. 6.3. 2001, Vienna, Gene Therapy Symposium VUW "Physical methods of DNA delivery for genetic vaccination"
83. 9.-13.9. 2001, Semmering, 5th Gene Delivery and Cellular Protein Expression Conference, "DNA Therapeutics: An Emerging Class of Molecular Medicines"
84. 23.-25.9. 2001, Vienna, 4th Central European Symposium on Pharmaceutical Technology, "Cancer Gene Therapy with Tumor-Targeted DNA Complexes"
85. 30.9.-3.10. 2001, Rome, Genome Medicine: Gene Therapy for the Millenium, "DNA Therapeutics: Cancer Gene Therapy"
86. 28.2.-3.3. 2002, Amsterdam, NDDO European Cancer Gene Therapy meeting, "DNA Therapeutics: Targeting Strategies"
87. 31.5. 2002, Vienna, CRS meeting, "DNA therapeutics for cancer gene therapy"
88. 6.6.-9.6. 2002, Boston, Annual meeting of American Society of Gene Therapy (ASGT) "Tumor-targeted DNA Polyplexes"
89. 5.9. 2002, Oslo, Radium Hospital, "DNA therapeutics for cancer treatment"
90. 23.9. 2002, Rockville, NIH, NCI/CRS 2nd international symposium on tumor targeted delivery, "Tumor-targeted DNA polyplexes for cancer gene therapy"
91. 28.1.2003, Giessen, "DNA based Therapeutics"
92. 14.2.2003, Maui, Hawaii, NCI-JSPS Conference, "Tumor-specific delivery"
93. 23.7. 2003, Glasgow, annual CRS meeting, "Nonviral vectors for targeted and intracytoplasmic delivery"
94. 29.9. 2003, Paris-Versailles, EUFEPS Conference on New Challenges in Drug Delivery, "Will artificial systems outpace viruses for gene delivery?"
95. 01.12.03, Wien, Österreich, European Doctorate in Chemistry and Technology of Drugs, Workshop on Antisense Research, "Targeted delivery of nucleic acid therapeutics"
96. 19.-20.2. 2004, Coimbra, Portugal, Doctoral Programme in Experimental Biology and Biomedicine Course, "Gene Therapy: applications and clinical studies, delivery methods"
97. 20.2. 2004, Coimbra, Portugal, Center for Neuroscience and Cell Biology, University of Coimbra, "Artificial viruses for tumor targeting: a new avenue for cancer therapy?"
98. 2.3. 2004, Saarbruecken, Saarland University, 5th International Conference and Workshop, Impact of Nanobiotechnology on New Drugs and Medicines (theme day), "Artificial Viruses for tumor-targeted therapies"
99. 24.3. 2004; Ulm University "Artificial viruses for targeted therapies"
100. 30.3. 2004; Utrecht University "Artificial viruses for targeted therapies"
101. 12.5. 2004; Marburg University, "Artificial viruses for targeted therapies"
102. 1.7. 2004; LMU München, Antrittsvorlesung "Ein Konzept für zielgerichtete Therapien: Synthetische Viren"
103. 12.7. 2004, Chicago, Fa. Abbott, „Targeted Delivery of siRNA and Other Nucleic Acids “
104. 13.9. 2004, Istanbul, International Pharmaceutical Technology Symposium (IPTS 2004), "Artificial Viruses – The Role of Membrane-Active Peptides in Intracellular Delivery"

105. 30.9. 2004, Philadelphia, National Hemophilia Foundation Workshop; “Targeted DNA Polyplexes with Bioresponsive Elements”
106. 8.10. 2004, Berlin, Jahrestagung der Gesellschaft für Mikrozirkulation und Vaskuläre Biologie (GfMVB), “Non-viral gene transfer to the vascular system”
107. 16.11. 2004, Weihenstephan, TU München, „Polyplexes for targeted therapies“
108. 18.11. 2004, Ulm, Klinikum, “Synthetische Viren für zielgerichtete Therapien”
109. 2. 3. 2005, Martinsried, BioM Symposium, „Tumor-Targeted Nucleic Acids for Therapy“
110. 20.5. 2005, Tokyo, 5th Anniversary International Symposium for Gene Design and Delivery, “Synthetic Virus-like Polyplexes for Tumor-Targeted Gene Therapy”
111. 2.6. 2005, St. Louis, Annual meeting of American Society of Gene Therapy (ASGT), “Bioresponsive Deshielding of Targeted DNA Polyplexes”
112. 29.11. 2005 Berlin-Golm/Potsdam, Fraunhofer Institut für Polymerforschung “Novel biodegradable polymers for gene delivery”
113. 21.3. 2006, Munich, Research Seminar of the Graduiertenkolleg 1202, “Artificial viruses for tumor-targeted therapy”.
114. 5.4. 2006, Nordwijk aan Zee, Netherlands, 9th European Symposium on Controlled Drug Delivery, “Bioresponsive shielding of polyplexes for targeted gene delivery into tumors”.
115. 21.4. 2006, Chicago, Abbott, “Novel biodegradable polymers for targeted siRNA delivery“.
116. 2.6. 2006, Baltimore, Annual meeting of American Society of Gene Therapy (ASGT), „Synthetic vectors for tumor targeting”.
117. 11.7. 2006, Sapporo, 1st FIP-APSTJ Joint Workshop on Gene Delivery, “Targeting and intracellular trafficking of polyplexes for tumor therapy”
118. 21.8. 2006, Big Sky, Montana, Gordon Conference, “Synthetic Vectors for Tumor Targeting”
119. 16.-20.9. 2006, Barcelona, ESF, Nanomedicine, “Gene Therapy using Non-Viral Vectors– A Practical Reality?”
120. 26.9. 2006, Halle-Wittenberg, PolyPharma 2006, “Application of polyplexes for targeted gene transfer”
121. 5.-6.10. 2006, Marburg, DPhG, “Nucleic acids for targeted therapies”
122. 15.2. 2007, GSF Munich, “Gene therapy using non-viral vectors - a practical reality?”
123. 26.-28.2. 2007, Drug Delivery Systems, Salt Lake City, Utah, USA. “Bioresponsive polymeric carriers for tumor-targeted gene therapy”
124. 13.3. 2007, Roche Applied Science, Penzberg, ”Programmed drug delivery: Synthetic pDNA, dsRNA and siRNA viruses for targeted therapy“
125. 21.3. 2007, Novartis, Basle, “Programmed drug delivery: Nanosystems for targeted pDNA, dsRNA or siRNA therapy”
126. 24.4. 2007, Chicago, “Programmed drug delivery: Nanoscaled polymer complexes for targeted pDNA or siRNA therapy “
127. 22.6. 2007, Mannheim-Ludwigshafen, Abbott Soliqs Nanosymposium, “Programmed drug delivery: tumor targeting strategies”.
128. 27.6. 2007, Paris, Eurocancer 2006, “Nonviral gene delivery to tumors”.
129. 7.9. 2007, Volos (Greece), Symposium of Balkan Union of Oncology, “Advances in cancer gene therapy: tumor-targeted delivery of therapeutic nucleic acids”.
130. 11.1. 2008, Basel, Novartis, “Nanoscaled dynamic nucleic acid / polymer complexes for therapeutic DNA and siRNA delivery”.

131. 23.1. 2008, Aarhus, Interdisciplinary Nanoscience Center (iNANO) annual meeting, "Nucleic Acid based Therapeutics as Programmed Nanomedicines".
132. 27.2. 2008, York, "Tumor-targeted nucleic acids as programmed nanomedicines"
133. 11.3. 2008, Mainz, DGPT, 49th Annual meeting, Session on Therapeutic RNAs, "Nanoparticle-mediated delivery of siRNA and dsRNA "
134. 27.3. 2008, Ghent, " Synthetic viruses: nanoscaled dynamic polymer complexes for therapeutic DNA and RNA delivery "
135. 28.4. 2008, Palo Alto, Intradigm, " Synthetic viruses: nanoscaled dynamic polymer complexes for therapeutic DNA and RNA delivery "
136. 26.-28.5. 2008, Valencia, 7th International Symposium on Polymer Therapeutics: From Laboratory to Clinical Practice, "Polymer-based vectors designed to promote cytosolic delivery"
137. 2.6. 2008, Chicago, Abbott Laboratories, "The polymer perspective on systemic delivery of siRNA therapeutics: lessons learned during the last 3 years"
138. 11.6. 2008, Helsinki, Helsinki Drug Research 2008, Nanotechnology in pharmacy, "Mechanisms of non-viral gene delivery"
139. 23.6. 2008, Cardiff, Second Cellular Delivery of Therapeutic Macromolecules Symposium, "Interaction of Polyplexes With Cellular Barriers."
140. 23.7. 2008, Kulmbach, Roche , "Nanoscaled dynamic polymeric particles for therapeutic DNA and RNA delivery"
141. 4. 9. 2008, Boston, Alnylam, "Nanoscaled dynamic polymer particles for therapeutic RNA and siRNA delivery."
142. 4.-7. 9. 2008, Potomac, Maryland, American Academy for Nanomedicine, Nanoscaled dynamic polymeric particles for therapeutic RNA and siRNA delivery.
143. 20.-24.9. Barcelona, ESF, Nanomedicine, Therapeutic research strategies using polymer based vectors designed to promote cytosolic delivery.
144. 29.9.-2.10. Venice, CeNS meeting "Nanoscaled dynamic polymer particles for therapeutic RNA delivery"
145. 29.10. 2008 Düsseldorf Coley-Pfizer, "Nanoscaled dynamic polymeric particles for therapeutic DNA and RNA delivery"
146. 17.-18. 11. 2008, Annual Symposium of Japanese Society for Biomaterials in Tokyo, "Synthetic viruses: nanoscaled dynamic polymer complexes for therapeutic DNA and RNA delivery"
147. 23.11. 2008, Changchun, CIAC , Chinese Academy of Sciences, "Targeted dynamic polymer complexes for therapeutic pDNA and RNA delivery"
148. 26.-30.11. 2008, Sanya, Hainan, 6th Asia 3 Symposium, "Targeted dynamic polymer complexes for therapeutic DNA and RNA delivery."
149. 4.-6.3. 2009 Charité, Berlin 6th International Conference on Biomedical Applications of Nanotechnology, "Nanoscaled dynamic polymer particles for therapeutic DNA and RNA delivery"
150. 26. - 28. 4. 2009 (27.4.) Basel, European Nanomedicine meeting „Bioinspired Polymer Nanostructures for Medical Therapy“
151. 29.5.2009, London, IPSEN workshop, "Towards RNAi in vivo: Tumor Targeted Polyplexes"
152. 10-11.6. 2009 London , RNAi, siRNA & miRNA Conference, "Tumor Targeted RNA Polyplexes as Programmed Nanomedicines"
153. 6.7. 2009 Prague PMM, "Dynamic polymers for therapeutic DNA and RNA delivery"
154. 7.7. 2009 34th FEBS symposium 15, W01: Nanotherapeutics, Prague, "Programmed polymer complexes for targeted pDNA and siRNA therapy"

155. 10.7. 2009 Osaka 9th Annual Symposium for Gene Design and Delivery, and JSGT conference, "Dynamic Polymers for Therapeutic DNA and RNA Delivery"
156. 2.-3.9. 2009 Cologne, SPP1230 Summerschool "What you should know about nonviral vector systems"
157. 16.- 19. 9. 2009 San Servolo. SFB486 Nanoman Final Symposium
158. 28. -30. 9. 2009 Bled, Slovenia, EuroNanoMedicine "Dynamic functional nanodevices for tumor targeted nucleic acid therapy"
159. 8.-10.10. 2009, Munich, NIM Workshop
160. 3.-6.11. 2009, Fukuoka, Joint Symposium of Oligonucleotide Therapeutics Society and Antisense Symposium of ASJ Japan "Polymer-mediated oligonucleotide delivery and endosomal release pathways"
161. 23.11. 2009, Hannover, Annual Congress European Society of Gene and Cell Therapy (ESGCT). "Synthetic viruses - dynamic polymer nanosystems for therapeutic pDNA and RNA delivery"
162. 27.11. 2009, Barcelona, IRB, Barcelona Biomed Seminar. "Dynamic Polymers for RNA and DNA based Cancer Therapy".
163. 8.12. 2009 Institut Curie, Paris "Dynamic Polymers for DNA and RNA based Cancer Therapy"
164. 7.-9.12. 2009, GTRV Paris, 9.12., "Dynamic polymer nanoparticles for targeted DNA and RNA therapy"
165. 15.12. 2009, Bologna, Pediatric Oncology, University of Bologna, "Polymer-enhanced Therapeutic Nucleic Acid Delivery: Targeting, Shielding and Intracellular Release"
166. 3.3. 2010, Munich, Center for Advanced Studies (CAS), Workshop " From Nano to Makro - How will nanomedicine shape the future of pulmonary therapies? "
167. 14.- 17.3. 2010, Münster, Frontiers in Medicinal Chemistry, "Chemically programmed nanosystems for therapeutic DNA and RNA delivery"
168. 17. 5. 2010, Westpoint, Philadelphia, Merck Research Laboratories, "Programmed Nanomedicines: dynamic polymers for DNA and RNA delivery"
169. 30.5.-2.6. 2010, Bad Honnef, Haereus Polymer Symposium, "Programmed degradation of polymer nanosystems for intracellular pDNA and RNA delivery"
170. 26.-29.6. 2010, Cardiff, CDTM 2010, "Interaction of polyplexes with cellular barriers".
171. 1.7. 2010 University of Aachen, " Dynamic Polymer Nanoparticles for DNA and RNA based Cancer Therapy "
172. 10.-14. 7. 2010, Portland, Oregon, Controlled Release Society "Targeted Polymer Nanoparticles for RNA based cancer therapy"
173. 6.-9.9. 2010, Chengdu, Sino-German Symposium "Bioinspired systems for drug, protein and gene delivery" (German Organizer and speaker)
174. 14.-18.9. 2010 Suzhou, Symposium on Innovative Polymers for Controlled Delivery, (SIPCD), "Chemically programmed polymers for DNA and RNA based targeted cancer therapy"
175. 20.9. 2010 Shanghai, Fudan University "Targeted Polymer Nanoparticles for DNA and RNA based cancer therapy"
176. 6.9. 2010 Munich, 4th Annual Symposium on Nanobiotechnology (October 5 - 7, 2010), New Directions In Nanotheranostics: Imaging, Biosensors, Materials and DNA Technologies, "Dynamic polymer nanoparticles for DNA and RNA based cancer therapy"
177. 14.10. 2010 Berlin, SFB meeting, "Single and dual targeting of nucleic acid/ polymer nanoparticles"
178. 18.11. 2010 Barcelona, EuroTIDES, "Dynamic polymers for tumor-targeted delivery of siRNA and cytotoxic RNA"

179. 3.2. 2011 Frankfurt, Sanofi Aventis, "Targeted Polymer Nanoparticles for anticancer nucleic acid therapeutics"
180. 28.-29.4. 2011, Seoul, 5th International Symposium for Intelligent Drug Delivery System, at KIST, Korea "Dynamic pDNA and siRNA carriers based on biomimetic polymers"
181. 19.-21.5. 2011 Tallinn, Estonia, Conference 'Peptide Vectors and Delivery of Therapeutics', "Bioresponsive programmed carriers for nucleic acid delivery"
182. 16.6. 2011 Tartu University, Estland "Dynamic pDNA and siRNA carriers based on functionalized polymers"
183. 30.7.- 3.8. 2011 Controlled Release Society annual meeting Washington DC, Minisymposium bioresponsive systems, "Dynamic siRNA and DNA delivery systems based on bioresponsive polymers."
184. 11.-14.9. 2011 Jerusalem School on 'Molecular Medicine - cancer biology and therapy' "Nanoparticle-based programmed nucleic acid delivery: an option for nanomedicine?"
185. 13.10. 2011 Shanghai, Fudan University, The Chinese Pharmaceutical Conference 2011, "Precise Polymers for Targeted Therapeutic Nucleic Acid Delivery"
186. 28.10. 2011 Berlin Teltow, Sino-German Symposium on Multifunctional Biomaterials and Polymer-based Controlled Drug Release Systems, "Precise, Sequence-defined Polymers for Therapeutic Nucleic Acid Delivery"
187. 4.11. 2011 University of Frankfurt, "Polymeric carriers for pDNA and siRNA delivery"
188. 29.11. 2011 Leiden, Prosensa, "Precise polymeric carriers for therapeutic nucleic acid delivery"
189. 6.2. 2012 Stockholm "Polymers for nucleic acid delivery: Inspired by viruses to be targeted, dynamic and precise"
190. 2.3. 2012 Vienna, Pharma Center, "Polymers for Nucleic Acid Delivery: Inspired by Viruses to be Targeted, Dynamic and Precise"
191. 5.3. 2012 Saarbrücken, Biobarriers 2012, "Nonviral Gene Delivery Systems - Invading Target Cells by Multifunctional Carriers"
192. 7.3. 2012 Reutlingen-Tübingen, NMI, "Bioresponsive and sequence-defined polymers for pDNA and siRNA delivery"
193. 24.3. 2012 Dresden, Annual Meeting of the German Society for Cell Biology, "Polymers for DNA and RNA delivery: Inspired by viruses to be targeted, dynamic and precise"
194. 4.-6.4. 2012 Egmond aan Zee, The Netherlands, European Symposium on Controlled Drug Delivery, 4-6 April 2012, Precise sequence-defined multifunctional polymeric carriers for DNA and RNA therapy
195. 18.4. 2012 London, Imperial College, "Polymers as Shuttles for Therapeutic Nucleic Acids: Inspired by Viruses to be Targeted, Dynamic and Precise"
196. 25.4. 2012, Munich, Klinikum Rechts der Isar, Patienten- und Bürgerforum GAMBA, Stellungnahme zum Laiengutachten.
197. 9.5. 2012 Zürich, ETH, "Polymers for pDNA and siRNA delivery: Inspired by viruses to be targeted, dynamic and precise"
198. 16.-19.5. ASGT Annual meeting 2012, Educational session, "Polymeric Delivery Systems – Compacting, shielding, targeting and intracellular release"
199. 1.-5.7. 2012 Prague, Polymers in Medicine Symposium "Sequence-defined oligo(ethanamino)amides as dynamic carriers for targeted drug delivery"
200. 9.-12.7. 2012 Lausanne, ISP, "Sequence-defined oligo(ethanamino)amides for targeted siRNA and pDNA polyplex delivery"
201. 6.9. 2012 Shanghai, Fudan University "Sequence-defined oligoaminoamides as dynamic carriers for targeted nucleic acid and protein delivery"

202. 11.9. 2012 Shanghai, Shanghai Institute of Materia Medica (SIMM), Chinese Academia of Sciences, "Polymers as shuttles for therapeutic nucleic acids and proteins: Inspired by viruses to be targeted, dynamic and precise"
203. 7.-11.10. 2012 Hernstein-Vienna, *Oligonucleotide Delivery: Biology, Engineering and Development*, "Sequence-defined polymers as dynamic carriers for targeted nucleic acid delivery"
204. 7.-9. 11.2012 Kyoto University, 6th Annual Symposium on Nanobiotechnology, Kyoto Cell-Material Integration 2012, "Sequence-defined oligomers as bioresponsive shuttles for intracellular nucleic acid and protein transduction"
205. 27.-28. 11. 2012, Berlin, EuroTIDES 2012, "Precise polymers for siRNA delivery"
206. 20.12. 2012, University of Orleans, "Sequence-defined dynamic oligomer shuttles for targeted nucleic acid and protein delivery"
207. 15.2. 2013 Vienna, Genetic Transformation Technologies, "Polymers for pDNA and siRNA Delivery: Inspired by Viruses to be Targeted, Dynamic, and Precise".
208. 3.3. 2013 Kirchberg/Kitzbühl, Austria, NIM Winter School, "Nanomedicine: programmed nanocarriers for innovative drugs"
209. 20.-22.3. 2013 Tsukuba, Japan, "Sequence-defined oligo(ethanamino)amides as dynamic carriers for targeted siRNA and protein delivery"
210. 3.6. 2013 Montpellier, France, "Sequence-defined carriers for targeted siRNA and protein delivery"
211. 22.7. 2013 Honolulu, USA, CRS Annual meeting, "Sequence-Defined Multifunctional Carriers for Targeted siRNA Delivery"
212. 29.8. 2013, Fudan University, Shanghai, "Sequence-Defined Oligoaminoamides for Targeted Nucleic Acid Delivery – An Update"
213. 2.9. 2013, SIMM, Shanghai, "Sequence-Defined Oligoaminoamides for Targeted Nucleic Acid Delivery – An Update"
214. 3.9. 2013, Fudan University, Shanghai, "Endosomal Escape in Drug and Gene Delivery: The proton sponge effect: a myth or truth?"
215. 11.9. 2013, Indianapolis, ACS meeting, "Sequence-defined oligomers as shuttles for targeted nucleic acid and protein delivery"
216. 28.9.-2.10. 2013, Changchun, 4th International Advanced Biomaterials Symposium 2013 (IABS 2013), "Sequence-defined Carriers for Targeted Nucleic Acid and Protein Delivery"
217. 6.10. 2013, Naples, Italy, OTS annual meeting, Keynote lecture "Sequence-defined Carriers for Targeted Nucleic Acid Delivery"
218. 3.12. 2013 Copenhagen, "Precision oligomers for targeted for nucleic acid and protein delivery"
219. 4.12. 2013 Martinsried, Ethris, "Precision oligomers for targeted nucleic acid and protein delivery"
220. 22.3. 2014 Ulm, Annual meeting of DGGT, "Receptor targeted transfection by sequence-defined synthetic carriers"
221. 16.4. 2014 Martinsried, U3 Pharma, "Sequence-Defined Carriers for Innovative Drugs"
222. 25.4. 2014 Seoul, Korea Institute of Science and Technology, 8th International Symposium on Intelligent Drug Delivery System, "Sequence-defined oligoaminoamides for targeted delivery of nucleic acids, proteins or other drugs"
223. 10.7. 2014 Hamburg, GDCh lecture "Sequence-defined Oligomers: Chemical Evolution of Tumor-targeted Nucleic Acid and Gene Carriers" ("Sequenz-definierte Oligomere für die Chemische Evolution Tumor-gerichteter Nukleinsäureträger")
224. 22.7. 2014 Mainz „Sequence-defined oligomers: chemical evolution of macromolecular drug and gene carriers“ ("Sequenz-definierte Oligomere zur chemischen Evolution tumorgerichteter Nukleinsäureformulierungen")

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225. 15.9. 2014 Chengdu, Sichuan University, “Sequence-defined carriers for targeted intracellular drug and nucleic acid delivery”
226. 19.9. 2014 Suzhou, China, 16. - 19.9. 2014, 3rd Symposium on Innovative Polymers for Controlled Delivery (SIPCD 2014), “Beyond 25 years in polymeric gene delivery: challenges, breakthroughs and perspectives”
227. 24.9. 2014 Venice CeNS meeting Walk and Talk at Nanoscale, “50 years of polymeric gene delivery: challenges, breakthroughs and perspectives”.
228. 26.9. 2014 Frankfurt DPhG, plenary lecture and symposium, “Sequence-defined carriers for targeted intracellular drug and nucleic acid delivery”
229. 20.10. 2014 Utrecht university, “50 years of polymeric gene delivery: challenges, breakthroughs and perspectives”
230. 23.4.2015 Darmstadt, Technical University, “Sequence-defined artificial oligo-amino acids for targeted intracellular drug, protein and nucleic acid delivery”
231. 27.-29.7. 2015 Edinburgh, CRS Annual meeting, moderation of session “in vivo Nucleic Acid Delivery”
232. 22.9. 2015 Basel, Peptide Therapeutic Forum, “Sequence-defined oligomers containing natural and artificial oligo-amino acids for intracellular drug, protein and nucleic acid delivery”
233. 23.9. 2015 Basel, BioPro2015, 5th Novartis conference on biotechnology, “Sequence-defined carriers for targeted intracellular nucleic acid and protein delivery”
234. 29.10. 2015 Martinsried, IZB, LMU-Tokyo Symposium, “Sequence-defined carriers for intracellular nucleic acid and protein delivery”
235. 11.3. 2016 Lunteren, NL, Dutch Society for Cell and Gene Therapy (NVGCT) 2016 Spring Symposium, "Beyond 50 years of polyplexes: new directions in polymer-based nucleic acid delivery"
236. 13.-15.4. 2016 Egmond aan Zee, ESCDD, “Chemical evolution of sequence-defined oligomers for intracellular nucleic acid and protein delivery”
237. 15.-16.9. 2016 Mainz, Symposium SFB1066, Nanodimensional Polymeric Therapeutics for Tumor Immunotherapy, “Design of Nucleic Acid Nanoparticles for Cancer Therapy”
238. 2.11. 2016. Munich, LMU Center “Nanomedizin: Strategien zur zielgerichteten Therapie“.
239. 21.11. 2016 Hangzhou, LMU-ChAN annual symposium ”Tumor-targeted drug and gene delivery”
240. 23.11. 2016 Shanghai, Fudan University, “Chemical evolution of sequence-based oligomers for nucleic acid and protein delivery”
241. 28.-30.11. 2016 Tokyo, “Chemical evolution of sequence-defined carriers for nucleic acid and protein delivery”
242. 1.12. 2016 Kawasaki, iCONM , COINs seminar “Nucleic acid nanoparticles for cancer therapy”
243. 3.3. 2017 Salzburg, Symposium Nanotechnology, European Academy of Science and Arts, “Nanomedicine – strategies towards targeted therapy”
244. 4.3. 2017 Vienna, Symposium “Von stereoelektronischen Effekten zur Biomedizin” on occasion of Prof. C. Noe’s 70th birthday, “Nanotechnology in Biomedicine”
245. 14.3. 2017 Tutzing, SFB1032 conference, “siRNA and microRNA nanoagents for manipulating tumor cells”
246. 17.3. 2017 Shanghai, “Chemical evolution of intracellular delivery agents: new options for macromolecules, NBEs and screening?”
247. 27.4. 2017 Oberambach, FOR1406 Workshop: Nature’s Toolbox, “Facilitated delivery in natural product drug research”
248. 29.6. 2017 Valencia, PDDS meeting, “Bioinspired Sequence-defined Drug, Protein and Gene Carriers by Chemical Evolution”

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249. 8.9. 2017 Hongkong, "Chemical evolution of macromolecular sequences - for intracellular DNA, siRNA, protein and drug delivery"
250. 26.10. 2017 Lisbon, EurASc, "Chemical evolution of carriers for use in nanomedicine"
251. 27-29.10. 2017 China Pharmaceutical Conference 2017 "Bioinspired Design of Drug, Protein and Nucleic Acid Carriers by Chemical Evolution"
252. 30.10. 2017 Fudan U, "Bioinspired Design of Drug, Protein and Nucleic Acid Carriers by Chemical Evolution"
253. 27.11. 2017 Mainz, "Bioinspired evolution: the type of nucleic acid cargo directs the optimal carrier sequence"
254. 12.12. 2017 San Diego, Dec 11-15, 2017, Antibody Engineering & Therapeutics 2017, "Intracellular Protein Delivery – Towards Artificial Immunotoxins"
255. 25.-27.4. 2018 Graz, BioNanoMed 2018, "Bioinspired design of sequence-defined drug, protein and gene carriers via chemical evolution"
256. 22.-24.6. 2018 New York, CRS, 23.6. Nucleic acid carrier optimization by bioinspired chemical evolution
257. 24.-26.8. 2018 Changchun, 5th International Biomaterials Symposium, "Chemical Evolution of Sequence-Defined Carriers for Therapeutic Delivery"
258. 4.9. 2018 Tutzing, NIM conference "Future of Nanoscience", "Highlights of 12 years NIM Area V biomedical nanotechnologies.
259. 16.-17.10. 2018 Shanghai, ChinaNanoMedicine 2018, "Chemical evolution of bioinspired protein and nucleic acid carriers"
260. 18.10. 2018 Chengdu, NERCB, "Chemical evolution of bioinspired protein and nucleic acid carriers"
261. 19.10. 2018 Chengdu, Sichuan U, School of Pharmacy, "Chemical evolution of bioinspired protein and nucleic acid carriers"
262. 21.11. 2018 Beijing, PKU, "Bioinspired chemical evolution of nucleic acid nanomedicines"
263. 22.11. 2018 Beijing, LMU-ChAN "Drug Innovations: Successful Collaborations of Chemistry & Pharmacy within the LMU-China Academic Network"
264. 3.-5.12. 2018, Montpellier, SF Nano (Société Française de Nanomédecine) "Bioinspired chemical evolution of nucleic acid nanomedicines"
265. 20.-23.5. San Diego, TIDES 2019, "Optimization of novel polymeric delivery vehicles by chemical evolution"
266. 5.6. 2019, Munich, DPhG, „Therapeutische Nukleinsäuren und Gentherapie: Status und Ausblick“
267. 1.-4.9. 2019, Heidelberg, DPhG , "Molecular Therapeutics from DNA to Cas9/sgRNA: Chemical Evolution of Nanocarriers".
268. 19.9. 2019, Basel, Targimmune, "Ethylenimine-based lipopeptides for intracellular delivery: optimization for various nucleic acid cargos"
269. 16.-18.10. 2019 Munich, ICONAN conference, "Optimizing Nucleic Acid Nanomedicines by Chemical Evolution of Carrier Sequences"
270. 12. 11. 2019 Amsterdam TIDES Europe, "Optimizing Polymeric Delivery Vehicles by Chemical Evolution"
271. 20.2. 2020 Munich, CRS Local Chapter, "Chemical evolution of nucleic acid carriers"
272. 15. 20.3. 2020, Siracusa, ~~Delivery of Nucleic acid therapeutics, "Chemical evolution of artificial peptide carriers for nucleic acid delivery"~~
273. 7.-8. 9. 2020 Jena CRC1278 PolyTarget, (online) "Chemical evolution of peptide-like carriers for nucleic acid delivery"

274. 16.-18. 10. 2020 WBC 2020, Qingdao, China (online) "Chemical evolution of nucleic acid transfection carriers"
275. 18. 12. 2020 Shanghai (online), "Tumor-targeted siRNA polyplexes: Alternative mechanisms"
276. 17.-18. 2. 2021 Mashhad, Iran (online) 8th International E-Congress on Nanoscience & Nanotechnology (ICNN) "Knocking down and knocking out genes: chemical evolution of nucleic acid delivery carriers"
277. 28.6.2021 Paris, EUGLOH, "RNA gene medicines: evolution of synthetic carriers"
278. 29.8. 2021 Beijing, ChinaNANO 2021 "Modulating gene expression by siRNA, sgRNA or mRNA: chemical evolution of gene medicines" online recorded/hybrid, postponed
279. 28.9. 2021 ADRITELF and CRS Italy PhD Summer School on 'Manufacturing, preclinical development and clinical application of biologicals', "RNA gene medicines: evolution of synthetic nanocarriers"
280. 29.9. 2021 Tsinghua University, Beijing "RNA gene medicines: chemical evolution of synthetic nanocarriers"
281. 30.9. 2021 University of Nebraska Medical Center (David Oupicky) "Knocking down and knocking out genes: chemical evolution of nucleic acid delivery carriers"
282. 16.10.2021 SinoGerman Center Symposium, Fudan U "Gene Medicines: Chemical Evolution of Synthetic Delivery Carriers"
283. 20.-22.10. 2021 NanoMedicine 2021, Milan, online "RNA gene medicines: evolution of synthetic carriers"
284. 12.-14.11. 2021 WBC 2021, "RNA Medicines: Evolution of Synthetic Delivery Carriers"
285. 30.11. 2021 Novartis, Basel, "Chemical Evolution for Refining Nanocarriers for siRNA, mRNA, or Cas9/sgRNA Medicines"
286. 3.1.2022, Jinan U, Ceremony receiving Honorary Professorship, "Chemical Evolution of RNA and Protein Delivery for Advanced Therapy"
287. 2. 3. 2022, Tehran Polytechnic, AUT, Winter School on 'Injectable and Implantable polymeric drug delivery systems' lecture on "RNA Medicines: Chemical Evolution of Polymeric Nanocarriers"
288. 23.6. 2022, NanoSeries Conference, Madrid, online, "RNA Medicines: Chemical Evolution of Nanocarriers"
289. 24.6. 2022 , LMU CAS, "Chemical Evolution of Sequence-defined Carriers for RNA Delivery"
290. 18.7. 2022 Fulda (online), Summer School SFB 1066/SFB 1278 "DNA and RNA Medicines: Chemical Evolution of Carriers"
291. 08.-09.09.2022, Berlin, ENDOSCAPE symposium, gene delivery "Chemical evolution refining intracellular siRNA, Cas9/sgRNA or mRNA delivery" (onsite)
292. 27.09. 2022 Melborne, International Human Gene Therapy Conference, "DNA and RNA Medicines: Chemical Evolution of Synthetic Delivery Carriers" (online)
293. 12.10. 2022 Munich, SFB1032, "RNA delivery: chemical evolution of delivery carriers"
294. 29.10. 2022 Munich and online, World Symposium on Smart Materials Sciences and Engineering 2022 (SMSE), keynote, "RNA nanomedicines: smart materials for delivery"
295. 10.11. 2022 NanoTech 2022, 2nd Global Virtual Summit on Nanoscience & Nanotechnology, "DNA and RNA medicines: Evolution of nanocarriers"
296. 19.11. 2022 International Graduate Symposium on Biopharmaceuticals (IGSB), 18.-20.11. 2022 On-line, Suzhou, China "Sequence-Defined Chemical Evolution of RNA Carriers"
297. 7.-8. 12. 2022 KAST meeting, Seoul, KIST (onsite), keynote lecture "RNA Medicines: Chemical Evolution of Synthetic Carriers"
298. 22.12. 2022 Chinese Pharmaceutical Conference, Shanghai (online), Keynote lecture "Sequence-defined chemical evolution of RNA carriers"
299. 9.3. 2023 Boston (online), Targeted-Intracellular-Delivery-Summit, "RNA Medicines: Chemical Evolution of Synthetic Carriers"
300. 18.3. 2023, AMSE (Advanced Materials – Sciences and Engineering), Vienna, (onsite) "DNA and RNA medicines: evolution of nanocarriers"
301. 18.4. 2023, Munich Martinsried, Coriolis Academy, "Chameleon Nanocarriers for Delivery of RNA Nanomedicines"
302. 29.5. 2023, Materials World 2023, online, "Chameleon Nanocarriers for Delivery of RNA Nanomedicines"
303. 30.5. 2023, EMRS, Strasbourg, "Evolution of Chameleon Nanocarriers: RNA transfer at ultralow picogram dose"

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304. 10.6. 2023, NanoTech 2023 "Innovatory Advancements: Micro to Nanotechnology and Real-World Applications", online, "Evolution of Chameleon Nanocarriers for mRNA delivery at ultralow dose"
305. 17.7. 2023, Zhejiang online lecture, "Evolution of Nanocarriers for RNA Delivery".
306. 15.9. 2023, Valencia, Spain, online keynote, 2023PDDS 2023, "10th Edition of Global Conference on Pharmaceutics and Drug Delivery Systems. "Chameleon nanocarriers for dynamic delivery of RNA medicines"
307. 19.9. 2023, Würzburg, PhAT 2023, "RNA Arzneimittel: Evolution synthetischer Trägermoleküle"
308. 25.9. 2023 NanoMat2023, Barcelona, online keynote " RNA Medicines: Chemical Evolution of Nanocarriers".
309. 26.10. 2023 Future Materials 2023, Valencia 10:10 – 10:45, online keynote "Chameleon Nanocarriers for Delivery of RNA Nanomedicines".
310. 26.10. 2023 NanoMed 2023 Albufeira, Portugal, 14:00-14:30 online keynote "Chameleon Nanocarriers for Delivery of Therapeutic RNA"
311. 7.11. 2023 7th World Congress on Materials Science and Engineering, November 6 & 7, 2023, <https://materialsscience.mindauthors.com/> online keynote "Chameleon Nanocarriers for Dynamic Delivery of Therapeutic RNA"
312. 21.11. 2023 Zhejiang University, online, "Chemical Evolution of Cas9/sgRNA and mRNA Carriers"
313. 4.12. 2023, Hebei University, National Center for Nanoscience and Technology of China, online, "Therapeutic RNA: Chemical Evolution of Synthetic Carriers"
314. 11.12. 2023 Vienna, Vienna University, "Therapeutic RNA: Chemical Evolution of synthetic Carriers"
315. 12.12. 2023, London, Gene and Cell Therapy-Virtual Conference (GCT-Virtual), "Chemical Evolution of Amphiphilic Xenopeptides for RNA Delivery"