

## Curriculum Vitae

name	Kurt Hermann Josef Bockhorst
place of birth	Münster, Germany
marital status	Single
nationality	German
profession	Chemist
languages	German, English, (Spanish, French)
present working place	Diagnostic and Interventional Imaging, MRI Research Group (Dr. Narayana), University of Texas at Houston
present project	Spinal cord injury, ischemic injury in neonates by hypoxia
05/17/72	final high school exam ('Abitur')
10/72 to 06/74	Airforce
1975 to 1977	University of Dortmund, Germany
1977 to 1988	University of Aachen (RWTH), Germany
04/30/88	MS in Chemistry ('Diplom')
06/88 to 06/1994	Max-Planck-Institute for Neurological Research, Cologne, Germany
03/06/94	PhD ('Dr.rer.nat')
05/12/94	First prize for the development of novel contrast agents awarded by the German Radiological Society, Wiesbaden
06/94 to 05/97	Radiological Sciences, University of California at Los Angeles, USA
08/98 to 01/99	Herchel Smith Laboratory, Medicinal Chemistry, University of Cambridge, UK
02/99 to 12/02	Institute for Organic Chemistry, University of Bremen, Germany
since 09/04	Diagnostic and Interventional Imaging, University of Texas at Houston, USA

## **Skills**

**Programming:** Interactive Data Language (IDL)

**Operating systems:** Linux, Unix, MacOS X, Windows (95, XP)

**Software:** Microsoft Office, Open Office, GraphicConverter, Appleworks, ImageJ, EvIdent, StatView, BioMap

**MRI scanner control software:** Bruker's Tomikon and Paravision (versions 1 and 3), GE's Signa, Siemens' Vision.

**Animal experiments:** mice, rats, cats, monkeys

**International experience:** Germany (1987-1994), California (1994-1997), England (1997 to 1999), Germany (1999 to 2002), Texas (since 2004)

## **Hobbies**

Telemark skiing, Nordic-track skiing, hiking, mountain climbing, cooking, painting, globe-trekking, snorkeling, bicycling

# Publications

81 (including journals, abstracts and thesis)  
22 listed in PubMed (National Library of Medicine)

## Journals

### As first author:

Bockhorst KH, Ramu J, Mogatadakala KV, Liu S-J, Narayana PA  
Spatial Normalization of Rodent Brains for fMRI Analysis  
ISMRM, submitted 2005

Bockhorst K, Meier M, Busch E, Dreher W, Leibfritz D.  
Activation of the hippocampus with and without theta rhythm studied with perfusion weighted fMRI.  
Proc Intl Soc Magn Reson Med, 349 2002 (ISMRM Honolulu).

Bockhorst K, Meier M, Busch E, Dreher W, Roth G, Leibfritz D.  
Activation of the Hippocampus during Theta Rhythm: An fMRI Study  
J Cereb Blood Flow Metab 21, S510, 2001, (brain01 Taipeh).

Bockhorst KH, Smith JM, Smith MI, Bradley DP, Houston GC, Carpenter TA, Hall LD, Papadakis NG, Parsons AA, Huang CL, James MF.  
A quantitative analysis of cortical spreading depression events in the feline brain characterized with diffusion-weighted MRI.  
J Magn Reson Imaging. 2000 Nov;12(5):722-33.

Bockhorst K, Hoehn-Berlage M.  
An Optimized Synthesis of Manganese Meso-Tetra(4-sulfonatophenyl)porphine: A Tumor-Selective MRI Contrast Agent.  
Tetrahedron, 50, 8657-8660 (1994).

Bockhorst K, Els T, Kohno K, Hoehn-Berlage M.  
Localization of experimental brain tumors in MRI by gadolinium porphyrin.  
Acta Neurochir Suppl (Wien). 1994;60:347-9.

Bockhorst K, Els T, Hoehn-Berlage M.  
Selective enhancement of experimental rat brain tumors with Gd-TPPS.  
J Magn Reson Imaging. 1994 May-Jun;4(3):451-6.

Bockhorst K, Kohno K, Els T, Hoehn-Berlage M.  
Gadolinium(III)-TPPS: A Novel MR Contrast Agent for Selective Enhancement of Experimental Rat Brain Tumors.  
Journal of Magnetic Resonance Imaging, 3(p), 74 (1993).

Bockhorst K, Hoehn-Berlage M, Ernestus RI, Tolxdorf T, Hossmann KA.  
NMR-contrast enhancement of experimental brain tumors with MnTPPS: qualitative evaluation by in vivo relaxometry.  
Magn Reson Imaging. 1993;11(5):655-63.

Bockhorst K, Hohn-Berlage M, Kocher M, Hossmann KA.  
Proton relaxation enhancement in experimental brain tumors--in vivo NMR study of manganese(III)TPPS in rat brain gliomas.  
Magn Reson Imaging. 1990;8(4):499-504.

Bockhorst K, Hoehn-Berlage M, Kocher M, Hossmann KA.  
MRI contrast enhancement by MnTPPS of experimental brain tumours in rats.  
Acta Neurochir Suppl (Wien). 1990;51:134-6.

**as co-author:**

Ghaghada KB, Bockhorst KH, Mukundan S, Narayana PA, Annapragada AV  
Contrast-Enhanced High Resolution MR Angiography of the Rat Spinal Region  
ISMRM, submitted 2005

Wosik J, Nesteruk K, Kamel M, Xue L, Xie L-M, Bockhorst KH, Narayana PA  
Four-element 300 MHz Superconducting Array for Parallel Imaging  
ISMRM, submitted 2005

Ramu J, Bockhorst KH, Mogatadakala KV, Grill RJ, Narayana PA  
Functional Magnetic Resonance Imaging (fMRI) of Neurotrophin-3 (NT3) treated Spinal Cord  
Injured Rats  
ISMRM, submitted 2005

Ramu J, Bockhorst KH, Mogatadakala KV, Narayana PA  
Functional Magnetic Resonance Imaging of Experimental Spinal Cord Injury  
Neuroimage, submitted 2005.

Ghaghada K, Bockhorst K, Mukundan S, Annapragada A, Narayana P  
High Resolution Vascular Imaging of the Rat Spine using Liposomal Blood Pool MR Agent  
Radiology, submitted 2005.

Busch E, Bockhorst K, Meier M, Roth G, Leibfritz D, Dreher D  
Functional MRI of the Rat Motor Cortex Using Passive Forepaw Movement.  
Proc Intl Soc Mag Reson Med 10. , p. 1351, 2002 (ISMRM Honolulu).

Busch E, Bockhorst K, Meier M, Huege S, Roth G, Leibfritz D, Dreher D  
Functional MRI of the Rat Motor Cortex Using Passive Forepaw Movement.  
JCBFM, S, 2001 (brain01, Taipei).

Bradley DP, Smith MI, Netsiri C, Smith JM, Bockhorst KH, Hall LD, Huang CL, Leslie RA, Parsons  
AA, James MF.  
Diffusion-weighted MRI used to detect in vivo modulation of cortical spreading depression:  
comparison of sumatriptan and tonabersat.  
Exp Neurol. 2001 Dec;172(2):342-53.

Bradley, D.P., Smith M.I., Smith, J.M., Bockhorst, K.H.J., Hall, L.D., Huang, C.L.-H., Parsons,  
A.A., James, M.F.  
Inhibition of cortical spreading depression (CSD) initiation by tonabersat, but not sumatriptan,  
detected with MRI  
J Cereb Blood Flow Metab 21, S 84 (2001, Brain 01, Taipei).

Dreher W, E. Busch, K. Bockhorst, M. Meier, D. Leibfritz.  
Single-shot Multislice U-FLARE imaging. Application to functional MRI.  
Proc Intl Soc Mag Reson Med 9, 1220, (2001).

Busch E, Bockhorst K, Meier M, Huege S, Roth G, Leibfritz D, Dreher D.  
Functional MRI of the Rat Motor Cortex Using Passive Forepaw Movement.

Society for Neuroscience Abstracts, p. xx, (2001, San Diego, USA).

Busch E, Bockhorst K, Meier M, Huege S, Roth G, Leibfritz D, Dreher D.  
Functional MRI of the Rat Motor Cortex Using Passive Forepaw Movement.  
J Cereb Blood Flow Metab 21, S xx (2001, Brain 01, Taipei, Taiwan).

Smith JM, James MF, Bockhorst KH, Smith MI, Bradley DP, Papadakis NG, Carpenter TA, Parsons AA, Leslie RA, Hall LD, Huang CL.  
Investigation of feline brain anatomy for the detection of cortical spreading depression with magnetic resonance imaging.  
J Anat. 2001 May;198(Pt 5):537-54.

Smith JM, Bockhorst KHJ, Bradley DP, Smith MI, Parsons AA, Hall LD, Huang CL-H, James MF  
Structure of the cat brain and detection of cortical spreading depression (CSD).  
European Journal of Neuroscience 12, Suppl.11, 503 (2000, FENS 2000, Brighton, UK).

James MF, Smith MI, Bockhorst KH, Hall LD, Houston GC, Papadakis NG, Smith JM, Williams AJ, Xing D, Parsons AA, Huang CL, Carpenter TA.  
Cortical spreading depression in the gyrencephalic feline brain studied by magnetic resonance imaging.  
J Physiol. 1999 Sep 1;519 Pt 2:415-25.

Smith JM, Bockhorst KHJ, James MF, Smith MI, Huang CL-H, Houston GC, Xing D, Williams EJ, Papadakis N, Parsons AA, Hall LD, Carpenter TA  
Diffusion-weighted MRI (DWI) of cortical spreading depression (CSD) in the cat  
J Cereb Blood Flow Metab 19, S 693 (1999).

Smith MI, James MF, Bockhorst KHJ, Hall LD, Houston GC, Huang CLH, Papadakis N, Smith JM, Williams EJ, Xing D, Parsons AA, Carpenter TA.  
Cortical Spreading Depression (CSD) Imaged in the Cat with Diffusion-Weighted MRI (DWI),  
Functional Neurology, 2, 205 (1998).

Smith, M.I., James, M.F., Bockhorst, K.H., Hall, L.D., Houston, G.C., Huang, C.L., Papadakis, N., Smith, M.J., Williams, E.J., Xing, D., Parsons, A.A., Carpenter, T.A. (1998). Cortical spreading depression (CSD) in the cat visualized with magnetic resonance imaging (MRI). Cephalalgia, 18, 400.(1998).

Lazareff JA, Bockhorst KH, Curran J, Olmstead C, Alger JR.  
Pediatric low-grade gliomas: prognosis with proton magnetic resonance spectroscopic imaging.  
Neurosurgery. 1998 Oct;43(4):809-17; discussion 817-8.

Harper RM, Bandler R, Alger J, Bockhorst KHJ, Mintorovitch J, Spriggs D.  
Functional Magnetic Resonance Imaging of Hippocampal and Cerebellar Activation to Pressor Challenges.  
Society for Neuroscience Abstracts, 23, 425 (1997).

Lazareff JA, Olmstead CE, O'Hanlon K, Abrajano J, Bockhorst KHJ, Alger JR, Fisher RS, Peacock WJ.  
H-MRSI studies of Creatine, Choline and NAA Regional Distribution in Normal Brain of Children with Low Grade Gliomas.  
Society for Neuroscience, Abstracts, 23, 1624 (1997).

Bizzi A, Righini A, Turner R, Le Bihan D, Bockhorst KH, Alger JR.  
Imaging focal reperfusion injury following global ischemia with diffusion-weighted magnetic resonance imaging and <sup>1</sup>H-magnetic resonance spectroscopy.  
Magn Reson Imaging. 1996;14(6):581-92.

Lazareff JA, Olmstead C, Bockhorst KH, Alger JR.  
Proton magnetic resonance spectroscopic imaging of pediatric low-grade astrocytomas.  
Childs Nerv Syst. 1996 Mar;12(3):130-5.

Fischer M, Bockhorst K, Hoehn-Berlage M, Schmitz B, Hossmann KA.  
Imaging of the apparent diffusion coefficient for the evaluation of cerebral metabolic recovery after cardiac arrest.  
Magn Reson Imaging. 1995;13(6):781-90.

Alger JR, Bockhorst KHJ.  
Examination of Frontal Lobe Metabolites in Normal Subjects using ProtonMagnetic Resonance Spectroscopic Imaging using Coronal Orientation.  
Journal of Cerebral Blood, Flow and Metabolism, S609 (1995).

Schmitz B, Fischer M, Bockhorst K, Hoehn-Berlage M, Hossmann KA.  
Resuscitation from cardiac arrest in cats: influence of epinephrine dosage on brain recovery.  
Resuscitation. 1995 Dec;30(3):251-62.

Schmitz B, Fischer M, Bockhorst K, Hoehn-Berlage M, Hossmann K-A.  
ADC Imaging for the Study of Brain Recovery after Resuscitation from Cardiac Arrest in Cats: Effect of High Dose Epinephrine for Cardiac Resuscitation  
J of Cerebral Blood Flow and Metabolism 15, Suppl 1, S232 (1995).

Hoehn-Berlage M, Bockhorst K.  
Quantitative magnetic resonance imaging of rat brain tumors: in vivo NMR relaxometry for the discrimination of normal and pathological tissues.  
Technol Health Care. 1994 Dec;2(4):247-54.

Hossmann KA, Fischer M, Bockhorst K, Hoehn-Berlage M.  
NMR imaging of the apparent diffusion coefficient (ADC) for the evaluation of metabolic suppression and recovery after prolonged cerebral ischemia.  
J Cereb Blood Flow Metab. 1994 Sep;14(5):723-31.

Els T, Bockhorst K, Hoehn-Berlage M.  
Comparison of the Blood Brain Barrier Tracer GdDTPA and the Tumor-Selective Contrast Agent MnTPPS in NMR Contrast Enhancement of Brain Tumors.  
Zentralblatt für Neurochirurgie, Supplement, 78 (1994).

Els T, Bockhorst K, Hoehn-Berlage M.  
NMR Contrast Enhancement of Brain Tumors: Comparison of the Blood BrainBarrier Tracer GdDTPA and the Tumor-Selective Contrast Agent MnTPPS.  
MAGMA, 1, 126-133 (1993).

Kloiber O, Bockhorst K, Hoehn-Berlage M, Hossmann K-A.  
Effect of Hypoxia on Bicuculline Seizures of Rat: NMR Spectroscopy and Bioluminescence Imaging.  
NMR in Biomedicine, 6, 333-338 (1993).

Wilmes LJ, Hoehn-Berlage M, Els T, Bockhorst K, Eis M, Bonnekoh P, Hossmann KA.  
In vivo relaxometry of three brain tumors in the rat: effect of Mn-TPPS, a tumor-selective contrast agent.  
J Magn Reson Imaging. 1993 Jan-Feb;3(1):5-12.

Kloiber O, Bockhorst K, Hoehn-Berlage M, Hossmann KA.  
Effect of hypoxia on bicuculline seizures of rat: NMR spectroscopy and bioluminescence imaging.

NMR Biomed. 1993 Sep-Oct;6(5):333-8.

Hoehn-Berlage M, Tolxdorff T, Bockhorst K, Okada Y, Ernestus RI.  
In vivo NMR T2 relaxation of experimental brain tumors in the cat: a multiparameter tissue characterization.

Magn Reson Imaging. 1992;10(6):935-47.

Hoehn-Berlage M, Norris D, Bockhorst K, Ernestus RI, Kloiber O, Bonnekoh P, Leibfritz D, Hossmann KA.

T1 snapshot FLASH measurement of rat brain glioma: kinetics of the tumor-enhancing contrast agent manganese (III) tetraphenylporphine sulfonate.

Magn Reson Med. 1992 Oct;27(2):201-13.

Kloiber O, Hoehn-Berlage M, Miyazawa T, Bockhorst K, Hossmann K-A.

Restoration of Blood Flow and Recovery of Energy Metabolism after Global Ischemia of Rat Brain: An LDF and NMR Spectroscopy Study.

Journal of Cerebral Blood Flow and Metabolism, 11, S527 (1991).

Okada Y, Hoehn-Berlage M, Bockhorst K, Tolxdorff T, Hossmann KA.

Magnetic resonance imaging and regional biochemical analysis of experimental brain tumours in cats.

Acta Neurochir Suppl (Wien). 1990;51:128-30.

## **Conference proceedings not printed in journals**

### **as first author:**

Bockhorst KHJ, Lazareff JA, Alger JR.

Typical Localized MRS Volume Prescriptions in Pediatric Low Grade Astrocytomas do not Reflect Topographic Heterogeneity Identifiable with MRSI

Annual Meeting of the Society of Magnetic Resonance. Vancouver, Canada(1997), Book of Abstracts 1127.

Bockhorst KHJ, Lazareff JA, Mischel P, Alger JR.

Cell Proliferation and <sup>1</sup>H-MRSI of Low Grade Astrocytomas.

Annual Meeting of the Society of Magnetic Resonance. New York, USA(1996), Book of Abstracts, 981.

Bockhorst KHJ, Lazareff JA, Curran J, Alger JR.

MRSI of Pilocytic Astrocytomas: Evaluation of Metabolic Pattern.

Annual meeting of the Society of Magnetic Resonance. Nice, France (1995), Book of Abstracts, 1706.

Bockhorst K, Schmitz B, Fischer M, Hoehn -Berlage M, Hossmann K-A.

ADC during Cardiac Arrest and Resuscitation in Cats.

Annual Meeting of the Society of Magnetic Resonance, San Francisco, USA (1994), Book of Abstracts, 441 oral presentation.

Bockhorst K, Hoehn -Berlage M, Kocher M, Hossmann K-A.

NMR Contrast Enhancement of Experimental Brain Tumors Through Manganese(III) tetraphenylporphine Sulfonate. Tissue Characterization with T2 Relaxation and Magnetization M(0).

Annual Meeting of the Society of Magnetic Resonance in Medicine, New York, USA (1990), Book of

Abstracts, 230, oral presentation.

Bockhorst K, Hoehn -Berlage M, Kocher M, Hossmann K-A.  
NMR Contrast Enhancement of Experimental Brain Tumors. A Feasibility Study on MnTPPS.  
European Congress of NMR in Medicine and Biology. Strasbourg, France(1990), Book of Abstracts,  
53, oral presentation.

Bockhorst K, Höhn -Berlage M, Kocher M, Hossmann K-A.  
NMR Contrast Enhancement for Experimental Brain Tumors. A Feasibility Study on MnTPPS  
Bruker's User Meeting, Karlsruhe, Germany (1989).

as co-author:

Busch E, Bockhorst K, Meier M, Huege S, Roth G, Leibfritz D, Dreher W  
Functional MRI of the rat motor cortex using passive forepaw movement.  
SfN, 31 Meeting, 10-15 November 2001, San Diego, USA.

Busch E, Bockhorst K, Meier M, Leibfritz D, Dreher W  
Passive movement for functional MRI of the rat motor cortex.  
DGN, 75. Kongress, 25-29 September 2002, Mannheim, Deutschland.

Dreher W, E. Busch, K. Bockhorst, M. Meier, D. Leibfritz  
Single-shot Multislice U-FLARE imaging. Application to functional MRI  
Proc. Intl Soc Mag Reson Med 9, 1220, (2001).

Carpenter TA, Bockhorst KHJB, C.S.Bunch CS, G.C.Houston GC, J.M. SmithJM.  
A Recipe for Making Active Surface Coils from Readily Available Ingredients  
Bruker User Meeting October 1998, Karlsruhe, Germany ( abstract).

Smith MI, James MF, Bockhorst KHJ, Hall LD, Houston GC, Huang CLH, PapadakisN, Smith JM,  
Williams EJ, Xing D, Parsons AA, Carpenter TA.,  
Cortical Spreading Depression (CSD) in the Cat Visualised with MagneticResonance Imaging (MRI)  
Migraine International Symposium, London, UK (1998).

Harper RM, Bandler R, Alger JR, Bockhorst KHJ, Mintorovitch J, Woo M, Spriggs D.  
Functional Magnetic Resonance Imaging during Blood Pressure Manipulation.  
Society for Neuroscience Washington DC, USA (1996).

Lazareff JA, Olmstead CE, O'Hanlon K, Abrajano J, Bockhorst KHJ, AlgerJR, Fisher RS, Peacock WJ.  
Proton Magnetic Resonance Spectroscopic Imaging of Brain of ChildrenwithCNS Tumors.  
Society for Neuroscience, Washington DC, USA (1996).

Fischer M, Schmitz B, Bockhorst K, Hossmann K-A.  
NMR Imaging of the Apparent Diffusion Coefficient (ADC) after Resuscitation from 15 min Cardiac  
Arrest in Cats.  
Annual Meeting of Resuscitation. Pittsburg, USA (1994).

Schmitz B, Fischer M, Bockhorst K, Hossmann K-A.  
Effects of Standard and High Dose Epinephrine on Brain Recovery Following Resuscitation from  
Cardiac Arrest in Cats: An NMR Investigation.  
European Academy of Anaesthesiology. Hamburg, Germany (1994).

Eis M, Hoehn -Berlage M, Bockhorst K, Hossmann K-A.  
A Time Efficient Method for Combined T1/T2 Relaxation Time Measurements.Evaluation for Multi-  
Parameter Tissue Characterization.

Annual Meeting of the Society of Magnetic Resonance in Medicine, San Francisco, USA (1991), Book of Abstracts, 701.

Ernestus R-I, Hoehn -Berlage M, Bockhorst K, Kloiber O, Bonnekoh P, Hossmann K-A.  
Differenzierung zwischen Hirntumoren und peritumoralem Ödem durch das tumorspezifische NMR-Kontrastmittel MnTPPS.

42. Jahrestagung der Gesellschaft für Neurochirurgie, Bremen, Germany (1991).

Ernestus R-I, Hoehn -Berlage M, Bockhorst K, Kloiber O, Wilmes L, Bonnekoh P, Hossmann K-A.  
Application of the Tumor-Specific NMR Contrast Agent MnTPPS in Experimental Brain Tumors.  
Second Congress of the Paneuropean Society of Neurology. Wien, Austria (1991).

Hoehn -Berlage M, Bockhorst K, Wilmes L, Gyngell M, Ernestus R-I, Kloiber O, Eis M, Hossmann K-A, Frahm J.

In vivo Charakterisierung und Differenzierung experimenteller Hirntumoren der Ratte: NMR Relaxometrie und Spektroskopie.

Jahrestagung der deutschen Gesellschaft für Biophysik. Homburg/Saar, Germany (1991).

Hoehn -Berlage M, Wilmes L, Ernestus R-I, Kloiber O, Eis M, Bockhorst K, Handels H, Tolxdorff T, Hossmann K-A.

Tissue Characterization of Different Types of Experimental Rat Brain Tumors by T1 and T2 Relaxation Measurements. Response to the Tumor-Specific Contrast Agent MnTPPS.

Annual Meeting of the Society of Magnetic Resonance in Medicine. San Francisco, USA (1991) Book of Abstracts, 929.

Hoehn -Berlage M, Kloiber O, Miyazawa T, Kocher M, Bockhorst K, Hossmann K-A.

Restoration of Blood Flow and Recovery of Energy Metabolism after Global Ischemia of Rat Brain: An LDF and NMR Spectroscopy Study.

Annual Meeting of the Society of Magnetic Resonance in Medicine. San Francisco, USA (1991), Book of Abstracts, 438.

Hoehn -Berlage M, Bockhorst K, Ernestus R-I, Kloiber O, Wilmes L, Norris D, Leibfritz D, Hossmann K-A.

Porphyrinderivate als tumorspezifische Kontrastmittel: Die Wirkung von

Mangan(III)Tetraphenylporphinesulfonat auf T1 und T2 in experimentellen Hirntumoren.

Jahrestagung der Deutschen Gesellschaft für Biophysik. Homburg/Saar, Germany (1991).

Kloiber O, Höhn-Berlage M, Norris D, Bockhorst K, Ernestus R-I, Bonnekoh P, Leibfritz D, Hossmann K-A.

Selektive Tumordarstellung mit "T1-Snapshot" NMR im experimentellen Hirntumor des Rattenhirns. Interkranialer Druck, Hirnödeme und Hirndurchblutung. Bonn, Germany (1990).

Ernestus R-I, Hoehn -Berlage M, Bockhorst K, Kloiber O, Hossmann K-A.

Differentiation of Tumor and Edema in Experimental Tumors of the Cat Brain. Application of Tumor-Specific NMR Contrast Agent Manganese(III)Tetra Phenylporphine Sulfonate.

Annual Meeting of the Society of Magnetic Resonance in Medicine. New York, USA (1990), Book of Abstracts, 640.

Hoehn -Berlage M, Okada Y, Bockhorst K, Hossmann K-A, Tolxdorff T.

Comparison of in vivo NMR Relaxation Parameters with in vitro Biochemical Analysis of Experimental Brain Tumors in Cats.

Annual Meeting of the Society of Magnetic Resonance in Medicine. New York, USA (1990), Book of Abstracts, 594.

Hoehn -Berlage M, Norris D, Kloiber O, Bockhorst K, Hossmann K-A.

T1 Snapshot FLASH Measurements of Rat Brain Glioma: Influx of the Tumorspecific Contrast Agent MnTPPS.  
European Congress of NMR in Medicine and Biology. Strasbourg, France(1990), Book of Abstracts, 141.

Hoehn- Berlage M, Norris D, Bockhorst K, Kloiber O, Hossmann K-A, Leibfritz D.  
Characterization of Kinetics of the Tumor-Specific Contrast Agent Manganese Tetrakisphenylporphine Sulfonate: T1 Snapshot Measurement of Rat Brain Glioma.  
Annual Meeting of the Society of Magnetic Resonance in Medicine. New York, USA (1990), Book of Abstracts, 734.

Hoehn- Berlage M, Bockhorst K, Okada Y, Hossmann K-A, Tolxdorff T, Upmeyer F.  
Multiparameter Tissue Characterization of Experimental Brain Tumor in Cat. A Multiexponential T2 Evaluation at 4.7 T.  
Tissue Characterization in MR Imaging. Wiesbaden, Germany (1989).

Hoehn- Berlage M, Bockhorst K, Kocher M, Hossmann K-A.  
Experimental Brain Tumors in Cats: Multiparametric Tissue Characterization Based on Multiexponential T2 Evaluation at 4.7 T.  
Annual Meeting of the Society of Magnetic Resonance in Medicine. Amsterdam, The Netherlands (1989). Book of Abstracts, 782.

Gersonde K, Bockhorst K, Höhn -Berlage M, Staemmler M.  
Manganese and Gadolinium Porphyrin Complexes with High Relaxivity and Tumor Selectivity Useful for NMR Imaging and Photodynamic Therapy.  
Annual Meeting of the Society of Magnetic Resonance in Medicine. San Francisco, USA (1988), Work in Progress, 10.

Thesis

Bockhorst K.  
Metallporphyrin-Derivate als NMR-Kontrastmittel: Charakterisierung experimenteller Hirntumoren mittels NMR-Relaxometrie .  
Ph.D. (Dr. rer. nat.), Max-Planck-Institut für Neurologische Forschung, Köln und RWTH, Aachen (1992).

Bockhorst K.  
Optimierung von Metallporphyrinen im Einsatz als NMR-Kontrastmittel.  
Chemistry MS, RWTH Aachen (1988).