

PERSONAL INFORMATION Karl Broich**WORK EXPERIENCE**

January 2017–Present **Chair of EMA and HMA Telematics Management Board**
European Medicines Agency (EMA) (United Kingdom)

August 2014–Present **President**
Federal Institut for Drugs and Medical Devices (Germany)

September 2013–Present **Chair of CNS-Workgroup at the European Medicines Agency (EMA)**
European Medicines Agency (EMA) (United Kingdom)

May 2009–July 2014 **Vice-President**
Federal Institut for Drugs and Medical Devices (Germany)

June 2005–May 2009 **Department Head**
Federal Institute for Drugs and Medical Devices (Germany)

June 2000–May 2005 **Head of Section Neurology/Psychiatry**
Federal Institute for Drugs and Medical Devices (Germany)

March 1997–April 2000 **Deputy Medical Director**
Klinik und Poliklinik für Psychiatrie und Psychotherapie der Martin-Luther-Universität Halle-Wittenberg (Germany)

July 1993–February 1997 **Assistant Medical Director**
Klinik und Poliklinik für Psychiatrie und Psychotherapie der Martin-Luther-Universität Halle-Wittenberg (Germany)

September 1991–June 1993 **Chief Resident**
Klinik für Psychiatrie und Psychotherapie der Medizinischen Fakultät der Rheinischen-Friedrich-Wilhelms-Universität Bonn (Germany)

September 1990–August 1991 **Research Associate**
Dept. of Nuclear Medicine, Hospital of the University of Pennsylvania (United States)

September 1989–August 1990 **Senior Resident**
Klinik für Psychiatrie und Psychotherapie der Medizinischen Fakultät der Rheinischen-Friedrich-Wilhelms-Universität Bonn (Germany)

December 1985–August 1989 **Academic Assistant**
Klinik für Neurologie der Medizinischen Fakultät der Rheinischen-Friedrich-Wilhelms-Universität Bonn (Germany)

EDUCATION AND TRAINING

February 1993–Present

Board Certification for Neurology, Psychiatry and Cognitive Behavioural Psychotherapy; Assistant Lecturer and Supervisor for Cognitive Behavioural Psychotherapy

ADDITIONAL INFORMATION

Expertise

Publications

1. Hartmann A, Biersack HJ, Tsuda Y, Broich K (1986) Jod123-Amphetamin-SPECT, Xenon133-Inhalationstechnik und kraniale Computertomographie beim ischämischen Insult. *psycho* 12:325-327
2. Broich K, Hartmann A, Biersack HJ, Horn R (1987) Crossed cerebello-cerebral diaschisis in a patient with cerebellar infarction. *Neurosci Lett* 83:7-12
3. Tsuda Y, Hartmann A, Biersack HJ, Valerius E, Baulig W, Broich K, Reichmann K (1987) Regional cerebral blood flow studies with 123I-amphetamine (IMP) SPECT and 133Xenon inhalation in human cerebrovascular disorders as compared with findings in normal baboons. In: Poeck K, Hacke W, Schneider R (eds) *Verh. Dtsch. Ges. Neurologie*, Bd.4. Springer Verlag, Heidelberg, p 584-586
4. Tsuda Y, Hartmann A, Biersack HJ, Valerius E, Broich K (1987) Semiquantifying regional cerebral IMP uptake using SPECT in stroke comparing with CBF indices by xenon inhalation method. In: Calabro A, Leonardi M (eds) *Computer Aided Neuroradiology. CIC Edizioni Internazionali*, p 105-108
5. Broich K, Hartmann A, Adam S, Biersack HJ (1988) Wert von Hirndurchblutungsmessungen bei der Demenz vom Alzheimer Typ. *psycho* 14:324-327
6. Grünwald F, Broich K, Adam S, Erkwor R, Bockisch A, Frede S, Hotze A, Reichmann K, Biersack HJ (1988) Nuklearmedizinische Diagnostik der Demenz vom Alzheimer-Typ. *Deutsche Medizinische Wochenschrift* 113:208-212
7. Tsuda Y, Hartmann A, Biersack HJ, Valerius E, Broich K, Reichmann K (1988) Semiquantifying regional cerebral blood flow by 123I-amphetamine (IMP) SPECT in cerebrovascular disorders: correlations with CBF indices by 133Xe inhalation method. *European Journal of Nuclear Medicine* 14:546-551
8. Adam S, Broich K, Hartmann A (1989) Sprachfunktionsstörungen bei der Demenz vom Alzheimer-Typ. In: Fischer P, Baas H, Enzensberger W (eds) *Verh. Dtsch. Ges. Neurologie*, Bd.5. Springer Verlag, Berlin, p 126-128
9. Broich K, Adam S, Hartmann A, Biersack HJ, Grünwald F (1989) Regionale Hirndurchblutungsstörungen und neuropsychologischer Befund bei der Demenz vom Alzheimer Typ. *Nervenarzt* 60:141-148
10. Broich K, Hartmann A, Adam S, Biersack HJ (1989) Regionale Perfusionsstörungen bei der Demenz vom Alzheimer Typ. In: Fischer P, Baas H, Enzensberger W (eds) *Verh. Dtsch. Ges. Neurologie*, Bd. 5. Springer Verlag, Berlin, p 237-240
11. Broich K, Hartmann A, Adam S, Biersack HJ (1989) Noninvasive measurement of regional cerebral blood flow and neuropsychological assessment in dementia of Alzheimer's type. In: Meyer J, Lechner H, Reivich M, Toole J (eds) *Cerebral Vascular Disease 7. Excerpta Medica*, Amsterdam, p 97-102
12. Grünwald F, Broich K, Kropp J, Hartmann A, Biersack HJ (1989) SPECT bei reversibler Symptomatik zerebrovaskulärer Erkrankungen. *Nucl Med* 28:221-225
13. Biersack HJ, Grünwald F, Reichmann K, Hotze A, Durwen H, Broich K, Shih WJ (1990) Functional brain imaging with single photon emission computed tomography using 99mTc-labelled HMPAO. In: Freeman L (ed) *Nuclear Medicine Annual 1990*. Raven Press, New York, p 59-96
14. Grünwald F, Biersack HJ, Elger CE, Broich K, Reichmann K (1990) Die Bedeutung der HMPAO-SPECT in der Neurologie. In: Elger C, Dengler R (eds) *Jahrbuch der Neurologie 1989/90*. Biermann Verlag, p 141-154
15. Grünwald F, Zierz S, Broich K, Schumacher S, Bockisch A, Biersack HJ (1990) HMPAO-SPECT imaging resembling Alzheimer type dementia in mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes (MELAS). *Journal of Nuclear Medicine* 31:1740-1742
16. Hartmann A, Lagreze H, Broich K, Fric M (1990) Treatment of acute cerebral ischemia by colloid solutions. In: Chopra JS, Jagannathan K, Sawhney IMS, Lechner H, Szendey GL (eds) *Progress in Cerebrovascular Disease. Current concepts in stroke and vascular dementia*. Elsevier, Amsterdam, p 27-36
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- (eds) Steroide und neurologische Erkrankungen. Thieme Verlag, Stuttgart, p 22-30
18. Broich K, Hartmann A, Solymosi L, Naaz B, Dettmers C, Fric M (1991) Regional cerebral blood flow in Binswanger's disease. In: Hartmann A, Kuschinsky W, Hoyer S (eds) Cerebral Ischemia and Dementia. Springer Verlag, Heidelberg, p 296-304
 19. Broich K, Horwich D, Alavi A (1991) HMPAO-SPECT and MRI in acute disseminated encephalomyelitis. *Journal of Nuclear Medicine* 32:1897-1900
 20. Grünwald F, Zierz S, Broich K, Dewes W, Böker T, Biersack HJ (1991) Brain SPECT Imaging with Tc-99m-HMPAO in Ophthalmoplegia Plus. *Clinical Nuclear Medicine* 16:20-23
 21. Hartmann A, Rommel T, Dettmers C, Tsuda Y, Lagreze H, Broich K (1991) Hemodilution in cerebral infarcts. *Arzneim.-Forsch./Drug Res* 41:348-351
 22. Hom R, Erkwow R, Broich K, Hasse-Sander I, Grünwald F, Biersack HJ, Solymosi L, Ries F, Möller HJ (1991) Contribution of HMPAO-SPECT and ¹³³Xe-rCBF to the differential diagnosis of dementia as experienced in clinical practice. In: Hartmann A, Kuschinsky W, Hoyer S (eds) Cerebral Ischemia and Dementia. Springer Verlag, Heidelberg, p 316-321
 23. Broich K, Alavi A, Kushner M (1992) positron emission tomography (PET) in cerebrovascular disorders. *Seminars in Nuclear Medicine* 22:224-232
 24. Broich K, Bülau P, Hartmann A, Solymosi L, Dettmers C, Ries F, Poersch S, Kalender W (1992) The effect of stable xenon inhalation on cerebral blood flow velocities and topographic electroencephalography in normal volunteers. In: Yonas H (ed) Cerebral Blood Flow Measurement with Stable Xenon-Enhanced Computed Tomography. Raven press, New York, p 292-295
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 32. Laux G, Broich K (1993) Sulpirid - ein atypisches Neurothymoleptikum. *Fundamenta Psychiatrica*:50-59
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 34. Menzel C, Grünwald F, Klemm E, Broich K, Kasper S, Reichmann K, Hotze AL, Biersack HJ (1993) Hirn-SPECT mit ¹²³I-markiertem Iodobenzamid (IBZM): Aspekte der semiquantitativen Auswertung. *Nucl Med* 32:227-230
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41. Laux G, Broich K (1995) Paroxetin. *internistische praxis*:147-148
42. Broich K (1996) Citalopram - ein neuer selektiver Serotonin-Wiederaufnahmehemmer. *Arzneimitteltherapie* 14:321-325
43. Broich K, Kasper S, Grünwald F, Danos P, Klemm E, Biersack HJ, Möller HJ (1996) Darstellung von Dopamin-D2-Rezeptoren mittels 123I-IBZM-SPECT bei psychiatrischen Fragestellungen. In: Peters UH, Schifferdecker M, Krahl A (eds) 150 Jahre Psychiatrie. Martini Verlag, Köln, p 519-520
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46. Broich K (1997) Olanzapin. Ein neues Neuroleptikum mit „atypischem“ Wirkungsprofil. *Arzneimitteltherapie* 15:33-37
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48. Broich K, Wielepp JP, Schlote K, Hinz E, Kinser JA, Lüscher D, Mende T, Mameros A (1997) Regionale Hirndurchblutung mit der ECD-SPECT bei Patienten mit Panikstörung. In: Brieger P, Mameros A (eds) Psychiatrie als Therapiefach. p 159-164
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52. Broich K (1998) Krankheitsverarbeitung und Bewältigung. In: Schlegel U, Westphal (eds) Neuroonkologie. Thieme Verlag, Stuttgart, p 405-408
53. Broich K (1998) Mirtazapin - ein neues noradrenalin- und serotoninspezifisches Antidepressivum. In: Barocka A (ed) Psychopharmakotherapie in Klinik und Praxis. Schattauer Verlagsgesellschaft, Stuttgart, p 158-166
54. Broich K (1998) Substanzinduzierte depressive Störungen. *psycho* 24:218-229
55. Broich K, Ehrh U (1998) Sertindol - ein neues "atypisches" Neuroleptikum. *Arzneimitteltherapie* 16:1-7
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58. Broich K, Schlote K (1998) Olanzapin - ein neues "atypisches" Neuroleptikum. *Fundamenta Psychiatrica* 12:35-46
59. Danos P, Kasper S, Grünwald F, Klemm E, Krappel C, Broich K, Höflich G, Overbeck B, Biersack HJ, Möller HJ (1998) Pathological regional cerebral blood flow in opiate-dependent patients during withdrawal: a HMPAO-SPECT study. *Neuropsychobiology* 37:194-197
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Neuropsychobiology 38:80-83

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64. Broich K (1999) Substanzinduzierte unipolare und bipolare Störungen. In: Mameros A (ed) Handbuch der unipolaren und bipolaren Erkrankungen. Georg Thieme Verlag, Stuttgart, p 544-551
65. Ehart U, Brieger P, Broich K, Mameros A (1999) Psychotische Symptome als Initialerscheinung bei Multisystematrophie. Fortschr Neurol Psychiatr 67:104-107
66. Pillmann F, Schlote K, Broich K, Mameros A (2000) Electroencephalogram alterations during treatment with olanzapine. Psychopharmacology 150:216-219
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68. Breyer-Pfaff U, Broich K (2002) Pharmakokinetik atypischer Antidepressiva. In: Riederer P, Laux G, Pödingner W (eds) Neuro-Psychopharmaka. Ein Therapie-Handbuch. Band 3: Antidepressiva, Phasenprophylaktika und Stimmungsstabilisierer. Springer, Wien, p 561-562
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81. Broich K, Moller HJ (2008) Pharmacogenetics, pharmacogenomics and personalized psychiatry: are we there yet? Eur Arch Psychiatry Clin Neurosci 258 Suppl 1:1-2
82. Broich K, Rems L (2008) Bedeutung von Biomarkern für die Arzneimittelentwicklung aus Sicht des Bundesinstitutes für Arzneimittel und Medizinprodukte (BfArM) am Beispiel von neuropsychiatrischen Erkrankungen. In: Schmitz G, Endres S, Götte D (eds) Biomarker - Bedeutung für medizinischen Fortschritt und Nutzenbewertung. Schattauer, Stuttgart, p 38-55

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97. Möller HJ, Broich K (2010) Principle standards and problems regarding proof of efficacy in clinical psychopharmacology. *Eur Arch Psychiatry Clin Neurosci* 260:3-16
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Projects

- Memberships**
- Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde (DGPPN)
 - Arbeitsgemeinschaft Neuropsychopharmakologie und Pharmakopschiatie (AGNP)
 - Dt. Gesellschaft für Biologische Psychiatrie
 - European College of Neuropsychopharmacology (ECNP)
 - International Society for CNS Clinical trials in Methodology (ISCTM)
 - American Society for Experimental NeuroTherapeutics (ASENT)

Other Relevant Information