# **Curriculum Vitae**

### **Personal data**

Name: Univ.-Prof. Dr. med. Christiane

Kuhl

Date of birth: April 28<sup>th</sup>, 1966

Place of birth: Bonn

Postal Address: Department of Diagnostic and

Interventional Radiology, University Hospital Aachen (UKA), RWTH Aachen

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Germany

ckuhl@ukaachen.de



# **Current position:**

Professor (W3) of Radiology and Chairman of the Department of Diagnostic and Interventional Radiology, University Hospital of Aachen, University of Aachen, RWTH

### **Professional Development**

2010 – to date	Director and Department Chair, Department of Diagnostic and Interventional Radiology, RWTH Aachen
20122013	President of the Radiological Society of Northrhine Westphalia
2009	Call to the position of Full Professor and Department Chair, Department of Diagnostic and Interventional Radiology, University of Aachen, RWTH
2009 – 2010	Vice president, University of Bonn Rheinische Friedrich-Wilhelms-Universität Bonn (Prorektorin), International Affairs
2004 – 2010	Vice Chairman, Department of Radiology, University of Bonn
2004	Full Professor of Radiology, Endowed Chair for Diagnostic Imaging in Oncology and Interventional Oncology, University of Bonn, Department of Radiology
1999 – 2004	Assistant professor of Radiology, Department of Radiology, University of Bonn

# **Clinical training**

2010	DEGIR certificate stage 4 (German Society of Interventional Radiology license to conduct and teach the entire range of interventional procedures).
2002	Board certification in Neuroradiology
2001 – 2002	Clinical training in Neuroradiological Interventions at the Department of Neuroradiology, Hospital of Duisburg, Germany
1999	Board certification in Radiology
1996 – 1997	Residency in Neurosurgery, Department of Neurosurgery, University of Bonn
1992 – 1999	Residency in Radiology, Department of Radiology, University of Bonn
01.07.1993	License as physician ("Approbation")
01.01.1992	Temporary license ("Vorläufige Approbation")

# **Clinical Focus**

- Hepatobiliary imaging, Imaging in Oncology
- Interventional Oncology: Percutaneous and transarterial treatment of cancer, including Radioembolisation, Chemoembolisation, Chemoperfusion, Radiofrequency Ablation, Microwave Ablation, Irrevesible Electroporation
- MR imaging of breast and prostate
- High Field MRI

### **Other Qualifications**

- Trainer for Interventional Radiology (German Society for Interventional Radiology)
- GCP-Training

# **University education**

1985 – 1991	University degree: State Examination in Medicine, Rheinische Friedrich-
	Wilhelms-Universität Ronn

# **School education**

1976 – 1985	High school Liebfrauenschule Bonn (Allgemeine Hochschulreife, Abitur)
1972 – 1976	Elementary School

### **Membership in Professional Societies**

- German Radiological Society (Deutsche Röntgengesellschaft, DRG)
- Radiological Society of North America (RSNA)
- American College of Radiology (ACR)
- International Society of Magnetic Resonance in Medicine (ISMRM)
- Society of Cardiovascular and Interventional Radiology (CIRSE)
- German Society of Interventional Radiology (DEGIR)
- European Society of Breast Imaging (EUSOBI)
- ASCO (American Society of Clinical Oncology)
- Cardiovascular and Interventional Radiology (CIRSE)
- Society of Interventional Radiology (SIR)
- World Conference on Interventional Oncology (WCIO)
- Deutsche Gesellschaft für Interventionelle Radiologie (DEGIR)

# **Research development**

2012 – to date	Research focus on prostate MRI
2009 – to date	Research focus on hepatobiliary MRI
2006 – to date	Research focus on interventional oncology procedures
1994 – to date	Research focus on MR imaging diagnosis of breast cancer
2000 – 2009	Research focus on high field MRI and neuroradiology
2000	Habilitation and "venia legendi" (professorship and teaching license)
1993	awarded the academic degree of "doctor medicinae" by the University of Bonn through the thesis " <sup>31</sup> P-MR-Spectroscopy: Systematic development of the method and clinical evaluation in patients with mitochondrial encephalomyopaties" ("summa cum laude")
1992-1994	Research on 31P MR spectroscopy of neuro-muscular disorders

#### **Awards**

2018	Impact Award of the National Consortium of Breast Centers (NCoBC), USA
2015	Named "RWTH Fellow"
2015	Gold Medal of the International Society of Magnetic Resonance in Medicine
2008	Wachsmann-Preis (Award for Educational Excellence) of the German Radiological Society)
2007	Outstanding Teacher Award, Intl Society for Magnetic Resonance in Medicine
2004, 2006, 2008	"Best of ASCO", American Society of Clinical Oncology
2006	Honorary Fellow, Breast Imaging Section, Royal College of Radiologist, UK
2006	European Magnetic Resonance Award
2004	ACRIN (American College of Radiology Imaging Network) Award

2003	Award of the German Radiological Society (Holthusen-Ring)
2000, 2001, 2002, 2011 RADIOLOGY Editor's Recognition Award	
2000	Award of the Ministery of Education and Research (BMBF)
2000	Highlight-Award of the German Radiological Society

# Memberships in research groups

- Working Group on Breast MRI des United States Health Service's Office on Women's Health,
   American College of Radiology, Commission on Standards and Accreditation
- BI-RADS-Committee des American College of Radiology
- Medizin-Ausschuss der Strahlenschutzkommission des Deutschen Bundestags (2005-2010)
- Board of Trustees der International Society for Magnetic Resonance in Medicine (2000-2004)
- Scientific Advisory Board of the German Mammographic Screening Program (2007-2009)
- Breast Committee des American College of Radiology Imaging Network (ACRIN)
- Working Group on Prostate MRI

#### **Peer Reviewer**

- RöFo
- European Radiology
- Journal of Magnetic Resonance Imaging (JMRI)
- Magnetic Resonance Imaging (MRM)
- The Breast
- Cancer
- Radiology
- Journal of the National Cancer Institute (JNCI)
- Journal of Clinical Oncology (JCO)
- NATURE (New Technology Section)
- The Lancet
- Journal of the American Medical Association (JAMA)

### **Editorial Board Duties**

- Scientific Editorial Board, European Radiology (2000)
- Scientific Editorial Board, RöFo
- Associate Editor, Radiology, 2003-2008
- Consultant to the Editor, Radiology, 2006 2008
- Guest Editor, Radiological Clinics of North America: Breast MR Imaging
- Associate Editor, The Breast Journal
- Associate Editor, Diagnostic Imaging International
- Editorial Board, Breast Diseases
- Deputy Editor, Journal of Magnetic Resonance Imaging
- Deputy Editor, Breast Cancer Research

### Invited Lectures (Visiting professorship and major meetings)

### Visiting professorships:

- University of Hong Kong, Hong Kong, China, 2010
- Harvard University, BIDMC, Boston, MA, USA, 2007
- Catholic University of Chile, Santiago de Chile, Chile, 2005
- University of Montreal, Canada, 2004

#### **Named Lectures:**

- Keynote Lecture, Australasian Society of Breast Diseases, Brisbane (2017)
- Keynote Lecture, National Consortium of Breast Centers, Las Vegas (2016, 2017)
- Keynote Lecture, Society of Breast Imaging, Austin (2016)
- Plenary lecturer, ISMRM 2004 and 2013
- 14th Annual Henry M. Selby Lecture, Memorial Sloan Kettering Cancer Center, NY, 2012
- Keynote lecture, Autralasian Society of Breast Diseases, 2011
- Keynote lecture, Braslian Congress of Radiology, 2010
- Keynote lecture, European Society of Breast Imaging, 2010
- The European Surgical Oncology Lecture, London, November 2008
- Peter E. Peters Honorary Lecture, ECR Wien, 2008

#### **Lectures in Major Academic and Scientific Events:**

### Neuroradiological:

- Stanford University International Symposium on High Field MRI, 2004 2006
- American Society of Spine Radiology (ASSR), 2005
- American Society of Neuroradiology (ASNR), 2004 2006

# Radiological:

- European Congress of Radiology, 2005-2017
- International Society of Magnetic Resonance in Medicine (ISMRM), 2002 2008, 2013-2017
- European Breast Cancer Conference 2004 2008
- Radiological Society of North America (RSNA), 2004 2017
- International Congress of Radiology (ICR), 2004 2008
- Stanford University International Symposium on High Field MRI, 2004 2008

### Participation in consensus conferences:

- European Science Foundation Standing Committee for the European Medical Research Councils, 2006
- St. Gallen Consensus Conference on Primary Therapy of Early Breast Cancer, 2005, 2007, 2011
- EUSOMA Consensus Conference on the Management of LCIS, 2004
- Breast Cancer Linkage Consortium, 2004
- Breast Cancer in Pregnancy, Berlin, 2014

# **Principal Investigator of Clinical Trials**

- 2016-2019 Co-Principal Investigator, ECOG/ACRIN EA1141 study
- 2015-2019 Scientific Coordinator and PI, EU Horzin2020 Project "HYPMED"
- 2015-2017 Principal Investigator, photon counting CT, sponsored by BMBF and DFG
- 2003-2007 Principal Site Investigator of the ACRIN/ACR study "Contralateral Breast Cancer Screening with MRI" (Studie 6667)

- 2002-2007 Principal Investigator of the multicenter trial "EVA" ("Multi-modale Früherkennung des familiären Mammakarzinoms"), German Cancer Aid (Deutsche Krebshilfe)
- 2000-2003 Principal Site Investigator of the Multicenter Trial "High-Risk Breast Cancer MR and US Screening Trial" (Studie 6884), sponsored by the American College of Radiology Imaging Network
- 2000-2005 Principal Investigator of the BMBF-sponsored trial of the consortium "Technical Development and Clinical Evaluation of Magnetic Resonance Elastography of Breast Cancer"
- 2000-2004 Principal Investigator of the multicenter trial "Gadomer17"
- 1998-2002 Principal Site Investigator of the multicenter trial "International Breast MRI Consortium" (Studie 6883), National Institutes of Health/National Cancer Institute

### List of 10 most important publications

1) Kuhl CK, Schrading S, Strobel K, Schild HH, Hilgers RD, Bieling HB.

Abbreviated breast magnetic resonance imaging (MRI): first postcontrast subtracted images and maximum-intensity projection-a novel approach to breast cancer screening with MRI. J Clin Oncol. 2014;32:2304-10.

2) Kuhl C, Weigel S, Schrading S et al.

Prospective multicenter cohort study to refine management recommendations for women at elevated familial risk of breast cancer: the EVA trial.

J Clin Oncol. 2010;28:1450-7

- 3) **Kuhl CK**. The "coming of age" of nonmammographic screening for breast cancer. JAMA. 2008;299:2203-5.
- 4) **Kuhl CK**, Schrading S, Bieling HB, Wardelmann E, Leutner CC, Koenig R, Kuhn W, Schild HH. MRI for diagnosis of pure ductal carcinoma in situ: a prospective observational study. Lancet. 2007;370:485-92.
- 5) Lehman C, Gatsonis K, **Kuhl CK** et al.

  Breast MRI of the contralateral breast in patients with a recent diagnosis of breast cancer.

N Engl J Med. 2007;356:1295-303.

6) **Kuhl CK**, Träber F, Gieseke J et al.

Whole-body high-field-strength (3.0-T) MR imaging in clinical practice. Part II. Clinical applications. Radiology. 2008;247:16-35.

7) Kuhl CK, Träber F, Schild HH.

Whole-body high-field-strength (3.0-T) MR imaging in clinical practice. Part I. Technical considerations and clinical applications.

Radiology. 2008;246:675-96.

8) **Kuhl CK**, Schrading S, Leutner CC et al.

Mammography, breast ultrasound, and magnetic resonance imaging for surveillance of women at high familial risk for breast cancer.

J Clin Oncol. 2005 20;23:8469-76.

- 9) Bluemke DA, Gatsonis CA, Chen MH, DeAngelis GA, DeBruhl N, Harms S, Heywang-Kobrunner SH, Hylton N, **Kuhl CK**, Lehman C, Pisano ED, Causer P, Schnitt SJ, Smazal SF, Stelling CB, Weatherall PT, Schnall MD. Magnetic resonance imaging of the breast prior to biopsy. JAMA. 2004;292:2735-42
- 10) Kuhl CK, Mielcareck P, Klaschik S, Leutner C, Wardelmann E, Gieseke J, Schild HH.

Dynamic breast MR imaging: are signal intensity time course data useful for differential diagnosis of enhancing lesions?

Radiology. 1999;211:101-10.

# Bibliometric data (as of October 9<sup>th</sup>, 2017)

•	no of "published items" (WoS):	275
•	no. of original papers:	173
•	sum of citations (WoS Core Collection):	8.569
•	sum of citations (Google Scholar):	15.142
•	h-Index (Google Scholar):	54
•	i10-Index (Google Scholar):	119
•	mean no. of citations per item (WoS)	31,16
•	most frequently cited paper (Google Scholar):	1.424

Kuhl CK et al. Radiology. 1999;211:101-10

