## **Curriculum Vitae**

### Uwe Christians, M.D., Ph.D.

Professor (with tenure) Department of Anesthesiology University of Colorado, Anschutz Medical Campus

Professor für Experimentelle und Klinische Pharmakologie und Toxikologie (apl.) Institut für Pharmakologie Medizinische Hochschule Hannover Hannover, Germany

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Castle Fock, Colorado, October 20, 2021

INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Medizinische Hochschule Hannover, Hannover, Germany	M.D. (with highest honors)	1988	Medicine Undergraduate and graduate student
Medizinische Hochschule Hannover	Board certified Pharmacologist and Toxicologist	1992	Residency in Pharmacology and Toxicology
Medizinische Hochschule Hannover	Ph.D.	1995	Experimental and Clinical Pharmacology and Toxicology
Medizinische Hochschule Hannover	Board certified Clinical Pharmacologist	1996	Residency in Clinical Pharmacology
Stanford University, School of Medicine	Post-doctorate	1996-1999	Cardiothoracic Surgery/ Transplant Immunology
University of California, San Francisco, School of Pharmacy	Post-doctorate	1996-2000	Biopharmaceutical Sciences
University of Colorado, Denver	Diplomate, American Board of Clinical Pharmacology	2005	Clinical Pharmacology
British Association of Research Quality Assurance	Research Quality Assurance	2007	Master in Research Quality Assurance

### Education (Undergraduate, Graduate, Postgraduate, Fellowships)

### **Professional Licensure**

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1988 (active)	License to practice medicine, Germany
1988 (active)	Educational Commission for Foreign Medical Graduates (ECFMG), certificate number 427-538-4
1993 (active)	Board certified pharmacologist and toxicologist (Medical Board of the State of Lower Saxony, Germany)
1996 (active)	Board certified clinical pharmacologist (Medical Board of the State of Lower Saxony, Germany)
May 1997- May 1998	Restricted license to practice medicine at the University of California, San Francisco (according to § 2111)
August 2005 (active)	Distinguished Teaching License to practice medicine in the State of Colorado
December 2005 (active)	Diplomate, American Board of Clinical Pharmacology

### **Academic and Professional Positions Held**

1988-1995	Head of the Laboratory of Therapeutic Drug Monitoring and Drug Metabolism, Institut für Allgemeine Pharmakologie, Medizinische Hochschule Hannover, Hannover, Germany
1989-1995	Instructor in Pharmacology and Toxicology, Instrumental Analytics
1995- 1999	"Privatdozent" (Assistant Professor), Medizinische Hochschule Hannover, Germany
1997-2001	Visiting Assistant Professor, Department of Biopharmaceutical Sciences, University of California, San Francisco
1999- present	Professor of Clinical and Experimental Pharmacology and Toxicology (adj.), Medizinische Hochschule Hannover, Germany
2001-2004	Associate Professor, Department of Anesthesiology, University of Colorado Health Sciences Center, Denver Colorado, with joint appointment in Pharmaceutical Sciences
2002-2010	Director, Mass Spectrometry Core of the Clinical Nurtition Research Unit
2005-2008	Director of Pharmacology, Bionovo Inc.
2005- present	Professor (with tenure), Department of Anesthesiology, University of Colorado Health Sciences Center, Denver Colorado
2006- present	Appointment in Biomolecular Structure
2007- 2008	General Manager/ President Eurofins/Medinet Colorado

### **Other Administrative Positions Held**

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*1992-1995* Member of the Board of Directors, SFB280 Center grant (Deutsche Forschungsgemeinschaft)

*1993-1994* Member of the Board of Directors of the Department of Pharmacology and Toxicology, Medizinische Hochschule Hannover

1994-1995 Admissions committee for the School of Medicine, Medizinische Hochschule Hannover

1995 Member of the Examination Committee for the Second Part of the Medical Licensing Exam (Pharmacology/Internal Medicine), Medizinischen Hochschule Hannover

2001- 2007 Member of the Executive Committee of the Department of Anesthesiology, University of Colorado Health Sciences Center

2001-present Member University of Colorado Hospital Clinical Laboratory Services Committee

2001- present Executive Committee, Colorado Center for Human Nutrition

2001- 2006 Executive Committee, Colorado Center for Altitude Medicine and Physiology

2002-2003 Member Faculty Senate, School of Medicine

### Memberships in Scientific, Professional and Scholarly Societies

1991- present	Deutsche Gesellschaft für Experimentelle und Klinische Pharmakologie und Toxikologie (German Society of Experimental and Clinical Pharmacology and Toxicology)
1992- present	International Society of the Study of Xenobiotics (ISSX)
1994- present	Arbeitsgemeinschaft Massenspektrometrie (Work Group Mass
	Spectrometry of the German Chemical Society)
1995- present	Deutsche Gesellschaft für Klinische Chemie (German Society of
	Clinical Chemistry)
1995-2001	American Association of Clinical Chemistry
1995- present	International Association of Therapeutic Drug Monitoring and Clinical
	Toxicology
1998-2000	American Association of Pharmaceutical Scientists
2004- present	American Society of Transplantation
2005- present	American Society of Clinical Pharmacology and Therapeutics
2007- present	American Association of Pharmaceutical Sciences (AAPS)

### **Honors and Awards**

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1989	Award of the "Freunde der Medizinischen Hochschule" Foundation for
	best thesis in 1988
1995	Young Investigator Award of the International Society of Therapeutic
	Drug Monitoring and Clinical Toxicology
1995	"Heisenberg" grant of the Deutsche Forschungsgemeinschaft

1997	Best Paper in "Drug Metabolism and Disposition" Award of the
	American Society of Pharmacology and Experimental Therapeutics
2008	Top Referee 2008, Journal of Chromatography B
2009-2010	Named Vice-Chair Therapeutic Drug Monitoring and Toxicology
	Section (THE), American Association of Clinical Pharmacology and
	Therapeutics (ASCPT)
2010-2011	Named Chair Biomarker and Imaging Section (BIO), American
	Association of Clinical Pharmacology and Therapeutics (ASCPT)
2015	C.E. Pippenger Award for Outstanding Contributions to Therapeutic
	Drug Monitoring, International Association of Therapeutic Drug
	Monitoring and Clinical Toxicology

### **Doctoral Theses Completed under Mentorship**

DOCKE

1. Strohmeyer S. Biology (Universität Hannover, Hannover, Germany): Metabolism of cyclosporine and its metabolites by liver microsomes and hepatocytes. 1989

2. Budniak J. Pharmacology (Medizinische Hochschule Hannover, Hannover, Germany): Cyclosporine metabolite patterns in blood and 24h- urine of liver transplant patients. 1991

3. Deters M. Pharmacology (Medizinische Hochschule Hannover, Hannover, Germany): Drug interactions of  $H_2$ - or calcium channel blockers with cyclosporine metabolism by human or rat microsomes or by rat hepatocytes. 1992

4. Sattler M. Biochemistry (Universität Hannover, Hannover, Germany). Cytochrom P450dependent extrahepatic metabolism of the immunosuppressive macrolides FK506 and rapamycin and of the undecapeptide cyclosporine. 1992

5. Almeida VMF. Pharmacology (Medizinische Hochschule Hannover, Hannover, Germany). Development of an *in vitro* system to study drug interactions at the cytochrome P450 enzyme level. Drug interactions between cyclosporine and antibiotics and antimycotics. 1993

6. Braun F. Pharmacology (Medizinische Hochschule Hannover, Hannover, Germany). Development of a specific and sensitive assay to measure FK506 and its metabolites in blood, bile and urine of liver graft patients. 1994

7. Holze I. Pharmacology (Medizinische Hochschule Hannover, Hannover, Germany). Synergistic immunosuppressive effects of combinations of FK506 and its metabolites 13-O-demethyl FK506 and 13,15-O-didemethyl FK506 *in vitro*. 1994

8. Lampen A. Biochemistry (Universität Hannover, Hannover, Germany). The cytochrome P450 system as a component of the transepithelial barrier of the gastrointestinal tract- Its influence on absorption and bioavailability of the immunosuppressants tacrolimus and sirolimus. 1994

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