

## CURRICULUM VITAE

Mario Chih-Hsiung Karl Deng, MD

### 1) February 16, 2011

### 2) Personal Data

<i>Name</i>	Mario Chih-Hsiung Karl Deng
<i>Date of Birth</i>	March 28, 1955
<i>Place of Birth</i>	Berlin, Germany
<i>Citizenship</i>	German
<i>US-Visa Status</i>	Permanent Residency (Outstanding Researcher Category)

### 3) Education/Academic Training

<i>1965-1974</i>	Humanistic (Ancient Greek/Latin) Grammar School Hansa-Gymnasium Hamburg & Graduation (German Grade Point Average 1.5)
<i>1971-1972</i>	Student Exchange, Bolsa Grande High School, Los Angeles, Ca, USA, Honor Roll, Debater of the Year, Graduation with „A“ Grade Point Average
<i>1974-1976</i>	Preclinical Studies, Medical School, Hamburg University, Germany
<i>1976-1981</i>	Clinical Studies, Medical School, Berlin Free University, Germany
<i>1981</i>	State Examination as a Doctor
<i>1988</i>	Medical Thesis and Doctoral Degree ("Cum Laude")
<i>1996</i>	Habilitation in Internal Medicine and Cardiology (Requirement for German full Professorship)

### 4) Postdoctoral Training

<i>1981-1982</i>	Internship in Internal Medicine, General Hospital Soltau
<i>1982-1986</i>	Residency in Internal Medicine, General Hospital Soltau and Mary's Hospital Bottrop, Germany
<i>1986-1988</i>	Residency in Radiology, Miners Hospital Bottrop, Germany
<i>1988-1992</i>	Fellowship in Cardiology, Duisburg Heart Institute, Germany

*1992-1993* Postdoctoral Fellowship, Division of Cardiovascular Medicine (Chief Victor J Dzau MD), Stanford University, USA (Molecular Biology Laboratory Hannah A Valantine MD and Cardiac Transplantation Program Sharon A Hunt MD)

### **5) Licensure/Board Qualification**

*1981* Licensure/Registration as a Doctor (Germany)

*1989* Board Certification in the Specialty of Internal Medicine (Germany)

*1990* Board Certification in the Subspecialty of Cardiology (Germany)

*1991* US Medical Examination (FMGEMS) and ECFMG English Proficiency Test

*1998* US Medical Licensing Examination Step 1 (Basic Sciences)

*1998* US Medical Licensing Examination Step 2 (Clinical Sciences I)

*2000* US Medical Licensing Examination Step 3 (Clinical Sciences II)

*2000* New York State Medical License 218687

*2011* California State Medical License

### **6) Military Service**

*1984-1986* Armed Forces Service, Department of Internal Medicine, Armed Forces Hospital Hamm, Germany

### **7A) Professional Organizations and Societies (Germany)**

*1992-* Member, German Cardiac Society

*1992-* Member, German Transplantation Society

*1994-* Co-Founder & Member, Working Group on Thoracic Organ Transplantation of the German Cardiac Society

*1994-* Member, German Society for Thoracic and Cardiovascular Surgery

*1996-* Co-Founder & Member, Regional German Transplant Cooperation of the University Hospitals in the Federal State of Nordrhein-Westfalen

### **7B) Professional Organizations and Societies (International)**

*1991-* Member, International Society for Heart and Lung Transplantation

- 1992- Member, European Society of Cardiology
- 1993- Member, American Association for the Advancement of Science
- 1994- Member, American Heart Association
- 1997- Member, Council on Heart Failure, International Society for Heart and Lung Transplantation
- 1998- Member, Working Group on Heart Failure of the European Society of Cardiology
- 1998- Member, American College of Cardiology
- 1998- Co-Founder and Member, Study Group on Advanced Heart Failure of the Working Group on Heart Failure of the European Society of Cardiology
- 1999- Member, Council on Mechanical Circulatory Support, International Society for Heart and Lung Transplantation
- 2003- Member, American Society of Transplantation
- 2004- Member, New York Academy of Science

#### **8) Academic Appointments (University)**

- 1992-1996 Assistant Professor of Medicine, Muenster University
- 1997-2000 Associate Professor of Medicine, Muenster University
- 2000 Professor of Medicine with Tenure (Apl.-Professor), Muenster University
- 2000-2011 Associate Professor of Medicine, Director of Cardiac Transplantation Research, The Heart Failure Center & Division of Circulatory Physiology (since 2004 Center for Advanced Cardiac Care in the Division of Cardiology), College of Physicians and Surgeons, Columbia University, New York, NY
- 2011- Professor of Medicine, Director of the Advanced Heart Failure Program, Division of Cardiology, Department of Medicine, David Geffen School of Medicine at the University of California in Los Angeles

#### **9) Hospital Appointments**

- 1992-2000 Attending Physician, Muenster University (Guenter Breithardt MD, FESC, FACC, Director: Department of Cardiology and Angiology, and Hans H Scheld MD, Director: Department of Cardiothoracic Surgery, Muenster University)
- 2000-2011 Attending Physician, New York Presbyterian Hospital, Columbia University Medical Center, New York, NY
- 2011 Cardiomyopathy Attending Physician at the UCLA-Ronald Reagan Medical Center, Medical Director of Mechanical Circulatory Support and the Medical Director of Heart Transplantation at the Ronald Reagan Medical Center

**10A) Honors (Prices)**

- 1991                      Baxter Poster Price, International Symposium on Current Issues in Thoracic Organ Transplantation Essen, Germany
- 1993                      Poster Price, International Symposium on Atherosclerosis Ulm, Germany
- 1997                      Ethicon Price, German Society for Thoracic and Cardiovascular Surgery

**10B) Honors (Committees and Positions)**

- 1997-1999                Cardiology Chairman, Working Group on Thoracic Organ Transplantation, German Cardiac Society
- 1996-1999                Secretary, Heart Committee, German Transplantation Society
- 1998-1999                Founding Chairman, Study Group on Advanced Heart Failure of the Working Group on Heart Failure of the European Society of Cardiology
- 1998-                      Member, International Steering Committee ISHLT/ANMCO Mitral-Valve-Repair-Study
- 1998-1999                Chairman, Working Group for the Establishment of Guidelines on a Unified German Cardiac Transplantation Waiting List of the National German Board of Physicians (Bundesärztekammer)
- 2002-2005                Medical Director, Mechanical Circulatory Support Device (MCSD) Database of the International Society for Heart and Lung Transplantation
- 2002-2005                Board of Directors, International Society for Heart and Lung Transplantation
- 2005-                      Board of Directors, Myocarditis Foundation

**10C) Honors (Fellowships)**

- 1998-                      Fellow of the European Society of Cardiology (FESC)
- 1999-                      Fellow of the American College of Cardiology (FACC)

**10D) Honors (Program Session Chairman)**

- 1997                      Co-Chair: Session on Management of Endstage Heart Failure. 15th Annual Scientific Sessions of the International Society for Heart and Lung Transplantation, London, UK, April 1997
- 1998                      Co-Chair: Session on Heart Transplantation. 64th Annual Meeting of the German Cardiac Society, Mannheim, Germany, April 16-18, 1998

- 1998 Co-Chair: Session of Mechanisms of Progression of Heart Failure: Endstage Heart Failure. Heart Failure Update 1998, Glasgow, UK, June 25-27, 1998
- 1998 Co-Chair: Session on hormonal, metabolic and immunologic modulation in heart failure. 71th Scientific Session of the American Heart Association, Dallas, TX, Nov 08-11, 1998
- 1999 Co-Chair: Poster-Session on perioperative Cardiology. 28<sup>th</sup> Annual Meeting of the German Society for Cardiothoracic and Vascular Surgery, Dresden, Germany, February 24-27, 1999
- 1999 Co-Chair: Meet the Experts: Prophylactic Strategies following Transplantation. 48<sup>th</sup> Annual Scientific Session of the American College of Cardiology, New Orleans, USA, March 7-10, 1999
- 1999 Co-Chair: Original Contributions Session: Ventricular Assist Devices. 48<sup>th</sup> Annual Scientific Session of the American College of Cardiology, New Orleans, USA, March 7-10, 1999
- 1999 Co-Chair: Original Contributions Session: Basic Research in Cardiac Surgery. 65<sup>th</sup> Annual Spring Cardiology Meeting of the German Cardiac Society, Mannheim, Germany, April 08-10, 1999
- 1999 Co-Chair: Session on Clinical effects of Adrenergic Blockade in Heart Failure. 72th Scientific Session of the American Heart Association, Atlanta, GA, Nov 07-10, 1999
- 2000 Invited Panelist: Luncheon Panel: Managing a Patient After Heart Transplantation: A General Cardiologist's Primer. 49<sup>th</sup> Annual Scientific Session of the American College of Cardiology, Anaheim, USA, March 12-15, 2000
- 2000 Chair: Poster-Session on Cardiac Transplantation. 20th Annual Scientific Sessions of the International Society for Heart and Lung Transplantation, Osaka, Japan, April 2000
- 2000 Co-Chair: Plenary Session on "Heart Failure: the syndrome approaches the end of the line". Heart Failure Update 2000, Venice, Italy, June 2000
- 2002 Co-Chair: Symposium on "New Surgical Treatments for Heart Failure". 51<sup>th</sup> Annual Scientific Session of the American College of Cardiology, Atlanta, USA, March 17-20, 2002
- 2005 Co-Chair: Symposium on "Molecular Studies on Myocardial Function". 54<sup>th</sup> Annual Scientific Session of the American College of Cardiology, Orlando, USA, March 6-9, 2005
- 2009 Co-Chair: Symposium on "New Perspectives in Cardiac Rejection". 29<sup>th</sup> Annual Scientific Session of the International Society for Heart and Lung Transplantation, Paris, France, April 22-25, 2009
- 2009 Co-Chair: Symposium on "Molecular Diagnostics in Organ Transplantation". 2nd Congress and Expo on Molecular Diagnostics-Symposium on Molecular Diagnostics, Beijing, People's Republic of China, November 19-21, 2009
- 2010 Co-Chair: State-Of-The-Art Symposium on "Antibody-Mediated Rejection in Heart Transplantation". 23<sup>rd</sup> Congress of the Transplantation Society, Vancouver, Canada, August 14-19, 2010

2010 Co-Chair: Symposium on “Biological Advances in Heart Transplantation”. 23<sup>rd</sup> Congress of the Transplantation Society, Vancouver, Canada, August 14-19, 2010

**10E) Honors (Invited Talks)**

1992 Invited talk on “Pathophysiology and Diagnosis in Severe Heart Failure”, University of Cologne, May 5, 1992

1994 Invited talk on “Organizational Proposals in Heart Transplantation”, Heart Committee Meeting of the German Transplantation Society, Bonn, February 18, 1994

1996 Invited talk on “Conservative treatment of heart failure and indications for transplantation”. Postgraduate Course on Transplantation, European Association for Cardiothoracic Surgery 1996, Prag, Oct 6, 1996

1996 Invited talk on “Differential diagnosis of early postoperative graft dysfunction after heart transplantation”. Long course "Pathology of Heart Transplantation", XXI. International Congress of the International Academy of Pathology, Budapest, Oct 25, 1996

1997 Invited talk on “Can molecular techniques be applied to improve the endomyocardial biopsy diagnosis of acute rejection?” International Symposium on Assessment of Acute Rejection & Allograft Coronary Disease. Thun Switzerland, July 11-12, 1997

1997 Invited talk on “Facing heart transplantation and LVAD implantation: What should cardiologists know about it?” International Symposium on Congestive Heart Failure: The Statements for Treatment of the Advanced Disease, Milan, Italy, Sept 28- Oct 1, 1997

1997 Invited talk on “Transplantatvasculopathy - Diagnosis, Prevention, Therapy”. Autumn Symposium of the German Cardiac Society Munich 1997

1999 Invited Panelist: Fireside Panel: Advances in Cardiac Transplantation. 48<sup>th</sup> Annual Scientific Session of the American College of Cardiology, New Orleans, USA, March 7-10, 1999

1999 Invited talk on “Treatment Strategies in Advanced Heart Failure” Meet the Expert Session. Heart Failure 1999, Gothenburg, Sweden, June 5-8, 1999

1999 Invited talk on “Management of Post-Transplantation Right Ventricular Dysfunction” Meet the Expert Session. Heart Failure 1999, Gothenburg, Sweden, June 5-8, 1999

1999 Invited talk on “Prediction of Cardiac Allograft Vasculopathy and Death from Cardiac Allograft Vaculopathy”. International Symposium on Changing Concepts for the Coronary Circulation, Munich, Germany, June 10-12, 1999

1999 Invited talk on “Efficiency and Quality Assurance Criteria in the Care of Long Term Cardiac Transplant Recipients”. Autumn Symposium of the German Cardiac Society, Nuremberg, Germany, October 01 and 02, 1999

- 2000 Invited talk on "Clinical Role of Reverse Remodeling in Heart Failure". XXIIInd Congress of the European Society of Cardiology, Amsterdam, Netherlands, August 26-30, 2000
- 2000 „The endstage: Is surgery or pharmacotherapy more appropriate in heart transplant listed patients?“. Symposium on „The different stages of chronic heart failure and the impact of comprehensive adrenergic blockade“ sponsored by Roche, New Orleans, USA, Nov 14, 2000
- 2001 „Reviewing the latest data on cardiac transplant or pharmacotherapy“. Symposium on „Playing the winning cards in chronic heart failure- translating trial evidence of adrenergic blockade into clinical practice“ sponsored by Roche, Monte Carlo, Monaco, Feb 24-26, 2001
- 2001 Invited talk on "Do we need specialized heart failure clinics?". Spring Meeting of the German Cardiac Society, Mannheim, Germany, April 19-21, 2001
- 2001 Invited talk on "Advanced Heart Failure Registries". Spring Meeting of the German Cardiac Society, Mannheim, Germany, April 19-21, 2001
- 2001 Invited talk on "The role of interleukin-6 in cardiac allograft rejection". 7th Basic Sciences Symposium of The Transplantation Society, Thun Switzerland, August 22-26, 2001
- 2001 Hyde Park Session talk on "The Benefit of Cardiac Transplantation must be tested in a Randomized Trial". 5th Scientific Meeting of the Heart Failure Society of America, Washington, USA, September 9-12, 2001
- 2001 Invited talk on "Endstage Heart Failure - Which Options". International Heart Failure Symposium, Lisboa, Portugal, Oct 26-27, 2001
- 2001 Invited talk on "Cardiac Assist Devices – From Toy to Bridge in the Chain of Survival". 21st Annual Meeting of the Belgium Society of Intensive Care and Emergency Medicine, Antwerp, Belgium, Nov 16, 2001
- 2002 Invited talk on "Comparative Outcomes & Clinical Profiles in Transplantation ". Columbia-Cornell Transplantation Lecture Series, New York, USA, May 07, 2002
- 2002 Invited talk on "Overview on the Mechanisms for Myocardial Recovery". ASAIO Meeting, New York, USA, June 13-15, 2002
- 2002 Invited talk on " MCSD Therapy". Canadian Cardiovascular Society Meeting, Edmonton, Canada, October 29, 2002
- 2002 Invited talk on " An International Perspective on MCSD Therapy ". Second International Symposium on Mechanical Circulatory Support, Bad Oeynhausen, Germany, December 5-7, 2002
- 2003 Invited talk on " Does My Patient Need a Heart Transplant? ". Heart Failure 2003: State of the Art, North Shore University Hospital, Manhasset, November 1, 2003
- 2003 Invited talk on " ISHLT-MCSD Database Update ". 5th Fall ISHLT-AHA Education Meeting on Mechanical Circulatory Support and Replacement, Orlando, Florida, November 7-8, 2003
- 2003 Invited talk on " Benefits of Cardiac Transplantation". Congres de la Societe de la Transplantation Francaise 2003, Paris, France, November 27-28, 2003

- 2003 Invited talk on “ Left Ventricular Replacement or Assist”. British Society for Heart Failure Autumn Meeting, Oxford, United Kingdom, November 28, 2003
- 2003 Invited talk on “ Pretransplant Risk Factors and Outcome after Heart Transplantation”. American Transplant Congress, Boston, MA, May 15-19, 2004
- 2004 Invited talk on “ Cardiac Allograft Rejection Gene-expression Observational (CARGO) Study”. Eurotransplant International Annual Meeting, Leiden, NE, Oct 8, 2004
- 2004 Invited talk on “ Mechanisms of Transplantation Vasculopathy”. German Cardiac Society Fall Meeting, Hamburg, GER, Oct 14-16, 2004
- 2005 Invited talk on “ Update on the ISHLT-Mechanical Circulatory Support Device Database”. Second Asian-Pacific Congress on Heart Failure, Singapore, Jan 9-12, 2005
- 2005 Invited talk on “ Mechanical Assist Devices: For Whom, When, and in Which Centres”. Annual Meeting of the Spanish Society of Cardiology, Coruna, SPAIN, June 16-18, 2005
- 2006 Invited Lecture on “The Cardiac Allograft Gene Expression Observational (CARGO) Study”. Mt. Sinai University Medical Center, New York, NY, USA, February 2006
- 2006 Invited talk on “ ISHLT-Guidelines for Mechanical Circulatory Support”. 6<sup>th</sup> International Symposium on Heart Failure, Florence, ITALY, April 28 2006
- 2006 Invited talk on “ Biology of Longterm Human Mechanical Circulatory Support”.European Society for Artificial Internal Organs, Umea, SWEDEN, June 23, 2006
- 2006 Invited talk on “ Advances in the Management of Heart Failure”. American Association of Critical Care Nurses AACN, New York, USA, May 12, 2006
- 2006 Invited talk on “ What does the Mechanical Circulatory Support Device Registry tell us so far?”. International Society for Rotary Blood Pumps, Leuven, BELGIUM, Sept 02, 2006
- 2006 Invited talk on “ Current and Future Role of Left Ventricular Assist Devices”. TCT 2006, Washington, USA, Oct 24, 2006
- 2006 Columbia University Faculty Presentation to Eugene Braunwald MD during the Lewis-Katz-Inaugural Meeting on “Functional Genomics & Systems Biology: Implications from the CARGO-Heart Transplant Rejection Study”. New York, USA, October 19, 2006
- 2007 Invited talk on “ Blood gene Profiling versus Histology in Heart Transplantation Monitoring”. Thirteenth Nantes Actualites Transplantation - INSERM, Nantes, France, June 14, 2007
- 2007 Invited talk on “ Molecular testing and prediction of rejection in cardiac transplantation”. 9<sup>th</sup> Banff Conference on Allograft Pathology, La Coruna, Spain, June 23-29, 2007

- 2009 Invited talk on “Heart Transplantation in HIV-positive recipients”. 29<sup>th</sup> Annual Scientific Session of the International Society for Heart and Lung Transplantation, Paris, France, April 22-25, 2009
- 2008 Invited Lecture on “The Cardiac Allograft Gene Expression Observational (CARGO) Study”. Symposium on “Molecular Diagnostics in Organ Transplantation”. 1st Congress and Expo on Molecular Diagnostics-Symposium on Molecular Diagnostics, Beijing, People’s Republic of China, October 21-24, 2008

**10F) Honors (Visiting Professor)**

- 1994 “Correlation between Intracoronary Ultrasound and Cell Surface Markers in Cardiac Transplant Recipients”. Visiting Professor Department of Cardiology, Inselspital Berne University, Switzerland, February 28, 1994
- 1996 “Immunmediatoren und kardiale Pumpfunktion”. Visiting Professor Klinikum Innenstadt, Ludwig-Maximilians-University of Munich, Germany, February 13, 1996
- 1998 “The Immune Paradigm in Endstage Heart Failure: New Frontiers in Research and Patient Care”. Visiting Professor University of Minnesota, USA, Twin Cities Campus, April 2, 1998
- 1999 “Mechanisms of Cardiac Allograft Rejection”. Visiting Professor University of Marburg, Germany, January 21, 1999
- 2000 “Development of Cardiac Transplant Policy in Germany”. Visiting Professor Cambridge University, UK, March 03, 2000
- 2003 “International Perspective on Mechanical Circulatory Support Device Therapy”. Visiting Professor Mayo Clinic, Rochester, Minnesota, USA, February 10-11, 2003
- 2005 Grand Rounds Lecture “The Cardiac Allograft Gene Expression Observational (CARGO) Study”. Harvard University, Massachusetts General Hospital, Boston, Massachusetts, USA, October 2005
- 2005 Grand Rounds Lecture “The Cardiac Allograft Gene Expression Observational (CARGO) Study”. Cleveland Clinic Foundation, Cleveland, Ohio, USA, September 29, 2005
- 2006 Grand Rounds Lecture “Functional Genomics & Systems Biology: Implications from the CARGO-Heart Transplant Rejection Study”. Stanford University, Palo Alto, California, USA, June 01, 2006
- 2006 Grand Rounds Lecture “Functional Genomics & Systems Biology: Implications from the CARGO-Heart Transplant Rejection Study”. Baylor College/Methodist Hospital, Houston, USA, October 05, 2006
- 2006 Grand Rounds Lecture “Functional Genomics & Systems Biology: Implications from the CARGO-Heart Transplant Rejection Study”. Mayo Clinic/University of Minnesota, Rochester/Minneapolis, MN, USA, February 07/08, 2007
- 2007 Grand Rounds Lecture “Functional Genomics & Systems Biology: Implications from the CARGO-Heart Transplant Rejection Study”. Hahnemann University, Philadelphia, PA, USA, June 08, 2007

- 2007 Grand Rounds Lecture “Functional Genomics & Systems Biology: Implications from the CARGO-Heart Transplant Rejection Study”. Texas Heart Institute, Houston, TX, USA, July 25, 2007
- 2007 Grand Rounds Lecture “Clinical Implications from the CARGO-Heart Transplant Rejection Study”. Aurora St. Luke’s Medical Center, Milwaukee WI, USA, October 03, 2007
- 2007 Grand Rounds Lecture “Functional Genomics & Systems Biology: Implications from the CARGO-Heart Transplant Rejection Study”. Northwestern University, Chicago, IL, USA, December 12, 2007
- 2008 Grand Rounds Lecture “Functional Genomics & Systems Biology: Implications from the CARGO-Heart Transplant Rejection Study”. MidAmerica Heart Institute, Kansas City, USA, Mar 12, 2008
- 2008 Grand Rounds Lecture “Clinical Implications from the CARGO-Heart Transplant Rejection Study”. Yale University, New Haven, CT, USA, Apr 04, 2008
- 2008 Grand Rounds Lecture “Functional Genomics & Systems Biology: Implications from the CARGO-Heart Transplant Rejection Study”. University of British Columbia, Vancouver, CAN Apr 25, 2008
- 2008 Grand Rounds Lecture “Clinical Implications from the CARGO-Heart Transplant Rejection Study”. UCLA, Los Angeles, CA USA, Sep 07, 2008
- 2009 Grand Rounds Lecture “Leukocyte Gene Expression Profiling to Predict Multiorgan Dysfunction After Heart Failure Interventions”. University of Alabama, Birmingham USA May 20, 2009
- 2010 Grand Rounds Lecture “Clinical Implications from the CARGO-Heart Transplant Rejection Study”. Carolinas Heart Center, Charlotte, NC, USA, Feb 2010
- 2010 Grand Rounds Lecture “Clinical Implications from the CARGO-Heart Transplant Rejection Study”. University of Michigan, Ann Arbor, IL, USA, 2010
- 2010 Grand Rounds Lecture “Clinical Implications from the CARGO-Heart Transplant Rejection Study”. Vanderbilt University, Nashville, TN, USA, Apr 28, 2010

#### **11A) Fellowship and Grant Support (Peer-reviewed Funding)**

- 1992-1996 Co-Investigator: “Perioperative Echocardiography”. Funded by German Research Agency (580.000 DM).
- 1996-1999 Principal Investigator: Medical School Teaching Project Cardiac Intervention. Funded by Muenster University Educational Foundation (8.000 DM).
- 1998-2000 Principal Investigator: “Pathophysiological Role of the the Interleukin-6 System in Heart Failure”. Funded by German Research Agency (400.000 DM).
- 2000- Principal Investigator: “The Role of Glycoprotein 130 in Early Remodeling After Myocardial Infarction”. AHA-Grant-In-Aid (#0151112T) July 1, 2001-June 30, 2004 (US \$ 200,000) – No-Cost Extension Approved Jul 01 2004 – Jun 30 2005

- 2002-2004 Medical Director ISHLT MCS D Database 2001-2005 (US\$ 40,000/year)  
This work led to the NIH-MCSD-registry (INTERMACS) being awarded to the  
ISHLT-UAB consortium June 2005
- 2005-2009 Co- Investigator NIH-grant on Clinical Trials in Organ Transplantation (CTOT)  
Grant Number  
Salary Support 5% x 5 years
- 2005-2009 Co-Principal Investigator (PI Eric Rose MD, Co-PI Alan Moskowitz MD)  
Specialized Center for Clinically Oriented Research (SCCOR) on  
„Biology of Human Long-Term Mechanical Circulatory Support“ NHLBI (US\$12  
Mill)  
Grant Number P50 HL077096-01  
Salary Support 15% x 5 years  
*Priority Score 1.55 (NHLBI SEP 2-23-04)*  
*funded*
- 2007-12 Mentor: Training Grant on „Multidisciplinary Research in Cardiovascular Training “  
NIH/NHLBI  
*funded*
- 2009- Principal Investigator: R01 Investigator-initiated proposal on „Leukocyte Gene  
Expression Profiling to Predict Multiorgan Dysfunction After Heart Failure  
Interventions “ NIH/NIGMS/NHLBI  
tracking number GRANT10160484  
*pending*

**11B) Fellowship and Grant Support (Industrial/philanthropic Sponsored Research)**

- 1993-1995 Co-Investigator: “Metoprolol in Chronic Heart Failure”. Sponsored by Astra  
Chemicals (16.500 DM).
- 1994-1996 Principal Investigator: “Milrinone and Cytokines in Chronic Heart Failure”.  
Sponsored by Sanofi Winthrop (20.000 DM).
- 1995-1997 Principal Investigator: “Intravenous Enalapril and Cytokines in Chronic Heart  
Failure”. Sponsored by Merck, Sharp & Dome (10.000 DM).
- 1995-1997 Co-Investigator: “Safety and Efficacy of BY9199-063 as Echo-Contrast Agent in  
Aortic Stenosis and Heart Failure”. Sponsored by Brakko-Byk Gulden (20.000 DM).
- 1995-1997 Co-Investigator: “Urodilatin and Acute Renal Failure in Cardiac Surgery”.  
Sponsored by Boehringer-Mannheim (5.000 DM).
- 1996-1999 Principal Investigator: “Milrinone vs Nifedipine & Ischemia and Cytokines in  
Internal Mammary Grafting”. Sponsored by Sanofi Winthrop (40.000 DM).
- 1996-1998 Principal Investigator: “Cytokine-Reference Values”. Sponsored by Immunotech  
(12.500 DM).
- 1997-2000 Principal Investigator: “T-Cell and Monocyte Subsets and Cytokines with  
Mycophenolate vs Azathioprine after Cardiac Transplantation”. Sponsored by Roche  
(17.000 DM).

- 1997-1999 Principal Investigator: “Molecular Mechanisms of Rejection after Cardiac Transplantation”. Sponsored by Fujisawa (30.000 DM).
- 1997-2000 Principal Investigator: “Effect of Carvedilol on Ejection Fraction, Neurohormones, Cytokines, and Heart Rate Variability in Heart Transplant Candidates”. Sponsored by SmithKline Beecham/Roche (240.000 DM).
- 1998-2000 Principal Investigator Muenster: PROPHET (Prostaglandins for Pulmonary Hypertension Enable Transplantation)-Multicenter-Study
- 1999- Co-Investigator: “Candesartan in Heart Failure (CHARM)”. Sponsored by Astra Haessle (100.000 DM).
- 2000-2001 Principal Investigator Columbia University: “The Role of Interleukin-6 in Advanced Heart Failure”. Sponsored by WorldHeart Corporation, Ottawa, Canada (US \$ 25,000)
- 2000-2001 Principal Investigator Columbia University: “Development of a webbased Advanced Heart Failure Registry”. Sponsored by WorldHeart Corporation, Ottawa, Canada (US \$ 25,000)
- 2000-2001 Principal Investigator Columbia University: “The Giant Cell Myocarditis Immunosuppressant Trial and Registry ”. Sponsored by Mayo Clinic, Rochester, MN
- 2001-2007 Principal Investigator Columbia University: “Leukocyte Expression Profiling in Cardiac Transplantation”. Sponsored by XDx Inc (US\$ 500,000)
- 2007-2009 Principal Investigator Columbia University: “Invasive Monitoring Attenuation by Gene Expression Profiling (IMAGE)-Study”. Sponsored by XDx Inc (US\$ 500,000)
- 2007-2009 Principal Investigator „ Systems Biology of Long-Term Human Mechanical Circulatory Support “. Sponsored by Philipp Geier Philanthropic Research Support (US\$ 100,000)

## **12) Departmental and University Committees**

- 1996- Member, Medical State Oral Examination Committee
- 1996- Member, University Hospital Blood Transfusion Committee
- 1997 Member, Search Committee for Professor in Molecular Cardiology at Muenster University
- 1997- Coordinating Committee Member for Muenster University Specialized Program Research Grant on “Heart Failure and Arrhythmia – from the Molecular Basis to Bedside” (German Research Agency) (12 year Grant, 7.5 Mill DM)
- 1999 Member, Search Committee for Professor in Experimental Cardiology at Muenster University
- 2002- Member, Columbia-Cornell University Hospital Transplantation Executive Council
- 2003-2005 Member, Institutional Animal Use and Care Committee (IACUC), Columbia University College of Physicians & Surgeons

- 2006- Columbia University Heart Hospital Planning Group, Cultural Change Committee  
2007- Columbia University Heart Hospital Planning Group, Excellence of Care Committee

### **13) Teaching Experience and Responsibilities**

- 1974-76 Student Tutor in Medical School Teaching First Year Medical Students in the Orientation Session Project at Hamburg University
- 1977-80 Student Tutor in Medical School Teaching First and Second Year Medical Students in Physiology at Berlin Free University
- 1981- Nursing School Lectures in different Teaching Hospitals in Internal Medicine and Cardiology
- 1992- Medical School Lectures at Muenster University on Perioperative Cardiology
- 1992- Medical School Bedside Teaching Courses at Muenster University in Intensive Care Medicine
- 1992- Medical School Courses on Heart Failure & Transplant Outpatient Management
- 1992-2000 More than 30 Thesis Sponsorships & Thesis Examination committees
- 1995-2000 Principal Investigator: Medical School Teaching Project at Muenster University: First year Students in Charge of Cardiac Surgery Patients (Grant Support)
- 1999 Co-Founder of the Interdisciplinary Seminar on Theory of Medicine at Muenster University
- 1999 Participant, Seminar on Teacher Training for the Medical School, Muenster University
- 2000 Grand Rounds, St. Vincent's Medical Center, Bridgeport, Connecticut „LVAD-therapy in advanced heart failure“ Oct 3, 2000
- 2001 Grand Rounds, „Medical and Surgical Treatment Options in Advanced Heart Failure“, St. Francis Hospital Hartford, CT, Feb 28, 2001
- 2001- Columbia University College of Physicians & Surgeons Heart Institute Attending Physician for Teaching Rounds
- 2001- Columbia University College of Physicians & Surgeons Critical Care Unit Attending Physician for Teaching Rounds
- 2003 Columbia University College of Physicians & Surgeons Cardiology Fellows Teaching Rounds „Inotropic & Mechanical Circulatory Support Device Therapy for Advanced Heart Failure“, Feb 08 2003
- 2003 Columbia University College of Physicians & Surgeons Anesthesiology/Cardiothoracic Surgery Fellows Teaching Rounds „Immunosuppression after Heart Transplantation“ Mar 25 2003
- 2003 Columbia University College of Physicians & Surgeons Critical Care Grand Rounds „The Experience of Heart Transplantation in the Intensive Care Unit“ May 22 2003

- 2003 Columbia University College of Physicians & Surgeons Anesthesiology/Cardiothoracic Surgery Fellows Teaching Rounds „Updates in Immunosuppression“ Dec 09 2003
- 2004 Invited talk on “ Evaluation and Management of the Advanced Heart Failure Patient”. Columbia-sponsored CME-activity in Milford, PA, March 02, 2004
- 2004 Grand Rounds on “ Evaluation and Management of the Advanced Heart Failure Patient”. Orange Regional Medical Center, Middletown NY, March 30, 2004
- 2004 Course Director „Congestive Heart Failure and Cardiomyopathy“ Columbia University Medical Center
- 2005 Columbia University College of Physicians & Surgeons Pediatric Cardiology Grand Rounds „Update on Mechanical Circulatory Support Device Therapy for Advanced Heart Failure“, Feb 02 2005
- 2005 Preceptorship Columbia University School of Medicine”Clinical Clerkship in Medicine” - 3<sup>rd</sup> year Medical Students
- 2006 Preceptorship Columbia University School of Medicine”Clinical Clerkship in Medicine” - 3<sup>rd</sup> year Medical Students
- 2006 Cardiology Fellows Grand Rounds Lecture “Functional Genomics & Systems Biology: Implications from the CARGO-Heart Transplant Rejection Study”. Columbia University, USA, Aug 29, 2006
- 2008 Columbia University Department of Medicine Grand Rounds Lecture in “Frontiers in Medicine” on “Functional Genomics & Systems Biology: Implications beyond the CARGO-Heart Transplant Rejection Study”. Columbia University, New York USA, June 04, 2008

#### **14A) Other Professional Activities (Germany)**

- 1990 Co-Founder, Pre- and Post-Cardiac Transplant- Care-Program Duisburg Heart Institute (in Cooperation with the German Heart Center Berlin, Director: Roland Hetzer MD)
- 1992- Co-Founder & Medical Director, Interdisciplinary Heart Failure & Transplant Program, Muenster University (with Guenter Breithardt MD, FESC, FACC, Director: Department of Cardiology and Angiology, and Hans H Scheld MD, Director: Department of Cardiothoracic Surgery, Muenster University)
- 1999- Founding member, Muenster University Transplantation Center

#### **14B) Other Professional Activities (Scientific Committees/Grant Review)**

- 2004 American Heart Association North-East Spring Review Committee
- 2005 National Institutes of Health-Bioengineering Research Partnership (NIH-BRP) Review Committee Member on “Ventricular Assist Devices” July 11 2005

- 2006 National Institutes of Health-Bioengineering Research Partnership (NIH-BRP) Special Emphasis Panel Member on “Ventricular Assist Devices” July 19 2006
- 2006 National Science Foundation SBIR/STTR Phase I Review Panel Member on “Disease Diagnostics and Prognostics” Aug 24 2007

**14C) Other Professional Activities (Scientific Committees/Abstract Review)**

- 1997 Abstract Review Committee, Annual Meeting of the International Society for Heart and Lung Transplantation, London, UK, April 1997
- 1998 Abstract Review Committee, Annual Meeting of the International Society for Heart and Lung Transplantation, Chicago, USA, April 1998
- 1999- Member of the Scientific Committee of the German Cardiac Society for Preparation of the Annual Scientific Spring Meeting
- 1999 Member of the Scientific Committee of the European Society of Cardiology for Preparation of the XXIst Congress of the European Society of Cardiology in Barcelona 1999
- 2000 Member of the Scientific Committee of the European Society of Cardiology for Preparation of the XXIIInd Congress of the European Society of Cardiology in Amsterdam 2000
- 2000 Member of the Abstract Grading Committee of the American College of Cardiology of the 2001 Annual Scientific Sessions
- 2000 Member of the Scientific Committee of the European Society of Cardiology for Preparation of the XXIIIInd Congress of the European Society of Cardiology in Stockholm 2001
- 2001 Member of the Abstract Grading Committee of the American College of Cardiology of the 2002 Annual Scientific Sessions
- 2001 Member of the NIH-Panel on „Surrogate Endpoints in Future Clinical Trials Assessing Chronic Allograft Dysfunction“ sponsored by AST/ASTS, Bethesda, MD, Nov 5-6, 2001
- 2002 Member of the Abstract Review Committee, Annual Meeting of the International Society for Heart and Lung Transplantation, Washington, USA, April 2002
- 2003 Member of the Abstract Review Committee, Annual Meeting of the International Society for Heart and Lung Transplantation, San Francisco, USA, April 21-24, 2004
- 2003 Member of the Abstract Grading Committee of the American College of Cardiology of the 2004 Annual Scientific Sessions, New Orleans, USA, March 7-10 2004
- 2004 Member of the Abstract Grading Committee of the American College of Cardiology of the 2005 Annual Scientific Sessions, USA, March 2005
- 2005 Member of the Abstract Grading Committee of the European Society of Cardiology of the 2005 Annual Scientific Sessions, Stockholm, SWEDEN, Sept 2005

- 2006 Member of the Abstract Review Committee, Annual Meeting of the International Society for Heart and Lung Transplantation, San Francisco, USA, April 25-28, 2007
- 2007 Member of the Abstract Review Committee, Annual Meeting of the International Society for Heart and Lung Transplantation, Boston, USA, April 9-12, 2008
- 2007 Member of the Abstract Review Committee, American Transplant Congress, San Francisco, USA, May 5-9, 2007
- 2007 Member of the Abstract Grading Committee of the American College of Cardiology of the 2008 Annual Scientific Sessions, Chicago, IL, USA, March 29-April 01, 2008
- 2007 Member of the Abstract Review Committee, American Transplant Congress, Toronto, CANADA, May 31-June 04, 2008
- 2007 Member of the Abstract Review Committee, European Society of Cardiology, Munich, GERMANY, Aug 30, 2008
- 2009 Member of the Abstract Grading Committee of the American College of Cardiology of the 2009 Annual Scientific Sessions, Orlando, FL, USA, March 29-April 01, 2009

**14D) Other Professional Activities (Editorial Board)**

- 1995- Journal für Anästhesie und Intensivmedizin
- 1997- Journal of Cardiovascular Engineering
- 1997- Journal of Heart and Lung Transplantation
- 2002- Progress in Heart Failure Research
- 2006- Current Cardiology Reviews

**14E) Other Professional Activities (Editorial Review)**

- 1996- The Thoracic and Cardiovascular Surgeon
- 1996- Transplantationsmedizin
- 1997- Journal of Thoracic and Cardiovascular Surgery
- 1997- Journal of Heart and Lung Transplantation
- 1997- Annals of Thoracic Surgery
- 1998- German Journal of Cardiology
- 1999- Transplantation
- 1999- European Heart Journal

1999- European Journal of Heart Failure  
1999- Heart  
2000- Lancet  
2000- British Medical Journal  
2002- Circulation  
2002- Journal of the American College of Cardiology  
2002- New England Journal of Medicine  
2002- American Journal of Transplantation  
2004- Pediatric Transplantation  
2005- Transplant International  
2007- American Journal of Physiology  
2007- Physiological Genomics  
2007- American Journal of Cardiology

**14F) Other Professional Activities (Expert Testimony for Regulatory Agencies)**

2003- Expert Testimony on “The ISHLT-MCSD-Database”, US-Centers for Medicare and Services (CMS) Public Hearing, March 13, 2003, Baltimore, USA  
2006- Expert Testimony on “Allomap Gene Expression Profiling in Heart Transplantation”, California Medicare Public Hearing, May 17, 2006, Los Angeles, USA  
2006- Expert Testimony on “Allomap Gene Expression Profiling in Heart Transplantation”, California Technology Assessment Forum (CTAF) Public Hearing, October 18, 2006, Oakland, USA  
2007- Expert Testimony on “Allomap Gene Expression Profiling in Heart Transplantation”, US-Centers for Medicare and Services (CMS) Hearing, April 18, 2007, Baltimore, USA

**14G) Other Professional Activities (Corporate Scientific Advisory Committees)**

1995- International Novacor Cardiology Advisory Committee  
1996- European Novacor Cardiology Advisory Committee  
1998- International Advanced Heart Failure Advisory Committee  
2003 - XDx Inc International Advisory Committee

**14H) Other Professional Activities (National Program and Course Director/Faculty)**

- 1990 Co-Director: Second Duisburg Heart Transplantation Workshop, Oktober 27, 1990
- 1991 Co-Director: Third Duisburg Heart Transplantation Workshop, Oktober 26, 1991
- 1992 Co-Director: Third Muenster Transplant Meeting, Mai 24, 1993
- 1994 Co-Director: Fourth Muenster Transplant Meeting, June 15, 1994
- 1995 Co-Director: Fifth Muenster Transplant Meeting on "Psychosocial Aspects of Heart Transplantation", June 28, 1995
- 1996 Co-Director: Sixth Muenster Transplant Meeting on "Clinical-Pathological Aspects of Heart Transplantation", June 12, 1996
- 1996 Co-Director: Heart Transplantation 1996, Joint Symposium of Ludwig-Maximilians-University Munich and Westfälische Wilhelms-University Muenster, September 28, 1996
- 1996 Co-Director: First Muenster Symposium on Immune Monitoring in Organ Transplantation, Nov 30, 1996
- 1997 Co-Director: Seventh Muenster Transplant Meeting on "Mechanical Circulatory Support", June 27, 1997
- 1998 Co-Director: Eighth Muenster Transplant Meeting on "Current Concepts in Heart Failure Management ", July 3, 1998
- 1999 Co-Director: Ninth Muenster Transplant Meeting on "Perioperative Management in Heart Transplantation", June 18, 1999
- 2000 Co-Director: Tenth Muenster Transplant Meeting on "Transplantation Muenster 2000 ", June 30, 2000

**14J) Other Professional Activities (International Program and Course Director/Faculty)**

- 1998 Faculty: Educational Training Programme of the European Society of Cardiology on "Live and Let Die - Insights into Cardiovascular Remodeling Through Apoptosis", European Heart House, Nice, France, September 17-19, 1998
- 1999 Course Director: Educational Training Programme of the European Society of Cardiology on "Endstage Heart Failure: Medical, Mechanical, and Biological Treatment Options", European Heart House, Nice, France, February 11-13, 1999

**15A1) Publications (Original peer reviewed articles)**

First/Senior Author

1. Deng M, Scheld HH, Breithardt G. Betreuung vor und nach Herztransplantation - Das interdisziplinäre Herzinsuffizienz- und Herztransplantationsprogramm Münster. *Z Tx Med* 1993;5:107-117
2. Deng MC, Bell S, Huie P, Pinto F, St. Goar F, Hunt SA, Stinson EB, Sibley R, Hall BM, Valantine HA. Cardiac Allograft Vasculopathy: Relationship to Microvascular Cell Surface Markers and Inflammatory Cell Phenotypes on Endomyocardial Biopsy. *Circulation* 1995;91:1647-1654
3. Deng MC, Wiedner M, Erren M, Möllhoff T, Assmann G, Scheld HH. Arterial and venous cytokine response to cardiopulmonary bypass for low risk CABG and relation to hemodynamics. *Eur J Cardiothor Surg* 1995;9:22-29
4. Deng MC, Drees G, Deng PF, Scheld HH. Ethische Aspekte der mechanischen Überbrückung zur Herztransplantation. *Tx Med* 1994;6:254-261
5. Deng MC, R Gradaus, M Weyand, A Rahmel, D Hammel, A Hoffmeier, K Frye, F Günther, S Kerber, M Block, G Breithardt, HH Scheld. Retrospective comparison of survival patterns in subgroups of patients referred for cardiac transplantation: The ABC-relationship. *Tx Med* 1995;7:53-57
6. Deng MC, Breithardt G, Scheld HH. Interdisciplinary Heart Failure and Transplant Program Münster: A 5-year experience. *Int J Cardiol* 1995;50:7-17
7. Deng MC, R Gradaus, M Weyand, A Rahmel, D Hammel, A Hoffmeier, K Frye, F Günther, S Kerber, M Block, W Haverkamp, G Breithardt, H Scheld. Heart transplant candidates at high risk can be identified at the time of initial evaluation. *Transplant Int* 1996;9:38-45
8. Deng MC, Kämmerling L, Erren M, Günther F, Kerber S, Assmann G, Breithardt G, Fahrenkamp A, Scheld HH. Relation of interleukin(IL)-6, tumor-necrosis factor- $\alpha$ , IL-2, and IL-2-receptor-levels to cellular rejection, allograft dysfunction and mortality early after cardiac transplantation. *Transplantation* 1995;60:1118-1124
9. Deng MC, Dasch B, Erren M, Wiedner M, Möllhoff T, Assmann G, Scheld HH. Impact of left ventricular dysfunction on cytokines, hemodynamics and outcome in bypass surgery. *Ann Thor Surg* 1996;62:184-90
10. Deng MC (für die Arbeitsgruppe Thorakale Organtransplantation der DGK), Angermann CE, Beyersdorf F, Dengler TJ, Geiger A, Haaf B, Haverich A, Mohacsi P, Permanetter B, Pethig K, v. Scheidt W, Wahlers T, Weis M, Welz A, Zerkowski HR, Zimmermann R. Indikationen, Kontraindikationen und differentialtherapeutische Alternativen der Herztransplantation. Derzeitiger Stand und Ergebnisse einer Umfrage bei deutschen Transplantationsprogrammen. *Z Kardiol* 1996;85:519-527
11. Deng MC, Erren M, Lütgen A, Zimmermann P, Brisse B, Schmitz W, Assmann G, Breithardt G, Scheld HH. Interleukin-6 correlates with hemodynamic impairment during dobutamine administration in chronic heart failure. *Int J Cardiol* 1996;57:129-134
12. Deng MC, Mennewisch A, Artmann F, Bloching B, Kerber S, Breithardt G, Scheld HH. Improved spirometric exercise capacity 26 months after cardiac transplantation compared to end stage chronic heart failure. *Tx Med* 1996;8:128-131
13. Deng MC, Wilhelm M, Weyand M, Hammel D, Kerber S, Breithardt G, Scheld HH. Long term left ventricular assist device support: A novel pump rate challenge exercise protocol to monitor native left ventricular function. *J Heart Lung Transplant* 1997;16:629-635
14. Deng MC, Erren M, Arlt M, Dietl KH, Baba HA, Kerber S, Plenz G, Scheld HH. Graft dysfunction and immunological alterations early after heart transplantation. *Tx Med* 1997;9:66-74

15. Deng MC, Brisse B, Erren M, Khurana C, Breithardt G, Scheld HH. Ischemic versus dilated cardiomyopathy: Differing neurohumoral and hemodynamic profiles despite identical peak oxygen uptake. *Int J Cardiol* 1997;61:261-268
16. Deng MC, Haverich A, Hunt SA, Zimmermann R. Management before and after heart transplantation in Germany: Results of two national surveys. *Tx Med* 1997;9:188-191
17. Deng MC, Wilhelm MJ, Scheld HH. Effects of exercise during long-term support with a left ventricular assist device (letter). *Circulation* 1998;97:1212-1213
18. Deng MC. Interdisziplinäre Herz-Kreislaufmedizin. *Med Welt* 1998;49:1-5
19. Deng MC, Tjan TDT, Asfour B, Roeder N, Scheld HH. Transplant vasculopathy. *Herz* 1998;23:197-201
20. Baba HA, Schmid KW, Schmid C, Blasius S, Scheld HH, Böcker W, Deng MC. The relationship between heat shock protein 70, hemodynamics, and survival in the early period after heart transplantation. *Transplantation* 1998;65:799-804\*
21. Deng MC, Voigt G, Nippert RP, Scheld HH. A Heart Surgery Teaching Model - Integrating Medical Teaching by a Multiprofessional Approach. *Med Ausbild* 1998;15:31-38
22. Deng MC, Weyand M, Hammel D, Schmid C, Kerber S, Schmidt C, Breithardt G, Scheld HH. Selection and outcome of ventricular assist device patients: The Muenster experience. *J Heart Lung Transplant* 1998;17:817-825
23. Plenz G, Song ZF, Reichenberg S, Tjan TDT, Robenek H, Deng MC. Higher left ventricular interleukin-6-messenger-RNA expression in idiopathic dilated than in ischemic cardiomyopathy. *Thorac Cardiovasc Surgeon* 1998;46:213-216\*
24. Deng MC, Tjan TDT, Roeder N, Scheld HH. Perioperative Notfälle nach Herzoperationen und ihre Behandlung. *Intensiv Notfallbehandlung* 1998;23:73-84
25. Deng MC, Erren M, Roeder N, Dreimann V, Günther F, Kerber S, Baba HA, Schmidt C, Breithardt G, Scheld HH. T-Cell and monocyte subsets, inflammatory molecules, rejection and hemodynamics early after cardiac transplantation. *Transplantation* 1998;65:1255-1261
26. Tjan TDT, Kondruweit M, Scheld HH, Asfour B, Deng MC. Risikostratifizierung in der Herzchirurgie *Z Herz-, Thorax-, Gefäßchir* 1999;13:57-66\*
27. Deng MC, Erren M, Tamminga N, Tjan TDT, Werntze B, Zimmermann P, Weyand M, Hammel D, Möllhoff T, Scheld HH. Left ventricular assist system support is associated with persistent inflammation and temporary immunosuppression. *Thorac Cardiovasc Surgeon* 1999;47 (Supplement):326-331
28. Deng MC, Tjan TDT, Asfour B, Gradaus R, Böcker D, Loick HM, Baba HA, Breithardt G, Scheld HH, Borggreffe M, Hammel D. Combining non-pharmacological therapies for advanced heart failure: The Muenster experience with the assist device - defibrillator combination. *Am J Cardiol* 1999;83:158D-160D
29. Baba HA, Schmid KW, Takeda A, Wichter T, Erren M, Deng MC. Metallothionein: Localization in human transplant endomyocardium and relation to cytokines and allograft function. *J Heart Lung Transplant* 1999;18:963-971\*
30. Tjan TDT, Kondruweit M, Scheld HH, Roeder N, Borggreffe M, Schmidt C, Schober O, Deng MC. The bad ventricle – revascularization versus transplantation. *Thorac Cardiovasc Surg* 2000;48:1-6\*

31. Baba HA, Schmid C, August C, Schmid KW, Plenz G, Scheld HH, Deng MC. Reversal of metallothionein expression of the human myocardium after prolonged left ventricular mechanical support. *J Heart Lung Transplant* 2000;19:668-674\*
32. Deng MC, Plenz G, Erren M, Wilhelm MJ, Moennig G, Rothenburger M, Baba HA. Transplant Vasculopathy: a Model for Coronary Artery Disease? *Herz* 2000;25:95-99
33. Deng MC, Baba HA, Plenz G, Erren M, Wilhelm MJ, Moennig G, Scheld HH. Prediction of Morbidity and Mortality from Cardiac Allograft Vasculopathy. *Z Kardiol* 2000;89(Suppl 9):IX-63-IX-65
34. Deng MC, De Meester JMJ, Smits JMA, Heinecke J, Scheld HH, on behalf of COCPIT Study Group. The effect of receiving a heart transplant: analysis of a national cohort entered onto a waiting list, stratified by heart failure severity. *Br Med J* 2000;321:540-545
35. Erren M, Schluter B, Fobker M, Plenz G, Baba H, Willeke P, Kwiotek R, Junker R, Assmann G, Scheld HH, Deng MC. Immunologic effects of implantation of left ventricular assist devices. *Transplant Proc* 2001;33:1965-8\*
36. Plenz G, Song ZF, Tjan TDT, Koenig C, Baba HA, Erren M, Flesch MD, Wichter T, Scheld HH, Deng MC. Activation of the cardiac interleukin-6 system in advanced heart failure. *Eur J Heart Fail* 2001;3:415-421\*
37. Deng MC, Loebe M, El-Banayosi A, Gronda E, Jansen PGM, Vigano M, Wieselthaler G, Reichart B, Vitali E, Pavie A, Mesana T, Loisance D, Wheeldon DR, Portner PM. Mechanical circulatory support for advanced heart failure: effect of patient selection on outcome. *Circulation* 2001 103: 231 - 237
38. Plenz G, Eschert H, Erren M, Wichter T, Boehm M, Flesch M, Scheld HH, Deng MC. The IL6/IL6-receptor system is activated in donor hearts. *J Am Coll Cardiol* 2002;39:1508-1512\*
39. Gradaus R, Kerber S, Boecker D, Scheld HH, Breithardt G, Deng MC. Therapeutic options and heart failure survival score predictability in an academic heart failure center: an analysis of 120 consecutive patients during a 1-year period. *Eur J Heart Fail* 2002;4:207-214\*
40. Moellhoff T, Schmidt C, Van Aken H, Berendes E, Buerkle H, Marmann P, Reinbold T, Prenger-Berninghoff R, Tjan TDT, Scheld HH, Deng MC. Myocardial ischaemia in patients with impaired left ventricular function undergoing coronary artery bypass grafting – milrinone versus nifedipine. *Eur J Anesthesiol* 2002;19:796-802\*
41. Deng MC, Edwards LB, Hertz MI, Rowe AW, Kormos RL. Mechanical circulatory support device database of the international society for heart and lung transplantation: first annual report-2003. *J Heart Lung Transplant* 2003;22:653-62
42. Deng MC, Edwards LB, Hertz MI, Rowe AW, Keck B, Kormos RL, Naftel D, Kirklin J. Mechanical circulatory support device database of the international society for heart and lung transplantation: second annual report-2004. *J Heart Lung Transplant* 2004;23:1027-34
43. Deng MC, Edwards LB, Taylor DO, Hertz MI, Rowe AW, Keck B, Kormos RL, Naftel D, Kirklin J. Mechanical circulatory support device database of the international society for heart and lung transplantation: third annual report-2005. *J Heart Lung Transplant* 2005;24:1182-1187\*
44. Asai T, Baron HM, Prinz von Bayern M, Sakaguchi T, Arrecubieta C, Cespedes CA, Lee MH, Lowy FD, Marboe C, Deng MC, Naka Y. A Mouse Aortic Patch Model for Mechanical Circulatory Support. *J Heart Lung Transplant* 2005;24:1129-32\*

45. Deng MC, Eisen HJ, Mehra RM, Billingham M, Marboe CC, Berry G, Kobashigawa J, Johnson FL, Starling RC, Murali S, Pauly DF, Baron H, Wohlgenuth JG, Woodward RN, Klingler TM, Walther D, Lal PG, Rosenberg S, Hunt SA, for the CARGO Investigators. Non-invasive detection of rejection in cardiac allograft recipients using gene expression profiling. *Am J Transplant* 2006;6:150-160
46. Asai T, Lee MH, Arrecubieta C, Bayern MPV, Cespedes CA, Baron HM, Cadeiras M, Sakaguchi T, Marboe CC, Naka Y, Deng MC, Lowy FD. Cellular Coating of the Left Ventricular Assist Device Textured Polyurethane Membrane Reduces Adherence of Staphylococcus aureus. *J Thorac Cardiovasc Surg* 2007;133:1147-53 \*
47. Prinz von Bayern M, Arrecubieta C, Oz S, Akashi H, Naka Y, Deng MC Lowy FD. Development of a murine ventricular assist device transcutaneous drive-line model. *J Heart Lung Transplant* 2008;27:812-4 \*
48. Li J, Cadeiras M, Prinz von Bayern M, Zhang L, Colovai AI, Dedrick R, Jaffe EA, Suci-Foca N, Deng MC. G6b-B cell surface inhibitory receptor expression is highly restricted to CD4+ T-cells and induced by interleukin-4-activated STAT6 pathway. *Hum Immunol* 2007;68:708-14
49. Cadeiras M, Bayern M, Burke E, Dedrick R, Gangadin A, Latif F, Oz S, Shahzad K, Sinha A, Marboe CC, Califano A, Tabak E, Deng MC. Expression Profiles in Patients with Antibody Mediated Rejection after Cardiac Transplantation. *J Heart Lung Transplant* 2008;27:932-4\*
50. Cadeiras M, Shahzad K, John MM, Gruber D, Bayern MV, Auerbach S, Sinha A, Latif F, Unniachan S, Memon S, Mital S, Restaino S, Marboe CC, Addonizio LJ, Deng MC. Relationship between a validated molecular cardiac transplant rejection classifier and routine organ function parameters. *Clin Transplant* 2010;24:321-327 \*
51. Sinha A, Shahzad K, Latif F, Cadeiras M, von Bayern M, Oz S, Naka Y, Deng MC. Peripheral Blood Mononuclear Cell Transcriptome Profiles Suggest T-cell Immunosuppression after Uncomplicated Mechanical Circulatory Support Device Surgery. *Hum Immunol* 2010;71:164-9 \*
52. Shahzad K, He J, Li Q, Aziz QA, Deng MC. Relationship between Prolonged QTc-interval, Cardiac Allograft Dysfunction and Elevated Molecular Gene Expression Profiling Test Score after Heart Transplantation. *J Heart Lung Transplant* 2010;29:711-213
53. Cadeiras M, von Bayern M, Sinha A, Shahzad K, Lim WK, Grenett H, Tabak E, Klingler T, Califano A, Deng MC. Drawing Networks of Rejection - A Systems Biological Approach to the Identification of Candidate Genes in Heart Transplantation. *J Cell Mol Med* 2010 (in press)
54. Deng MC, Alexander G, Wolters H, Shahzad K, Cadeiras M, Hicks A, Rowe T, Klingler TM, Eisen HJ. Low Variability of Intraindividual Longitudinal Leukocyte Gene Expression Profiling Cardiac Allograft Rejection Scores. *Transplantation* 2010;90:459-61
55. Shahzad K, Cadeiras M, Memon S, Zeeberg B, Klingler T, Sinha A, Tabak EG, Unniachan S, Deng MC. Gene Expression Signatures of Peripheral Blood Mononuclear Cells during the Early Post-Transplant Period in Patients Developing Cardiac Allograft Vasculopathy. *J Transplant* 2010;719696. Epub 2010 Dec 28
56. Shahzad K, Aziz QA, Leva JP, Cadeiras M, Ho EK, Vlad G, Vasilescu ER, Latif F, Sinha A, Burke E, Addonizio LJ, Restaino SW, Marboe CC, Suci-Foca N, Naka Y, Mancini D, Deng MC. New-onset graft dysfunction after heart transplantation-incidence and mechanism-related outcomes. *J Heart Lung Transplant* 2011;30:194-203

**15A2) Publications (Original peer reviewed articles)**

Co-Author

1. Kryne R, Deng M, Heinrich KW, Sons H, Krian A. Semiselective angiography of the internal mammary arteries as a preparation for coronary bypass surgery. *Am J Cardiol* 1990;66:377-378
2. Kryne R, Deng M, Stegmann B, Heinrich KW, Sons H, Krian A. Grafting with the internal mammary artery: Correlation between preoperative angiography and intraoperative findings. *Int J Cardiol* 1991;32:395-396
3. Park JW, Warnecke H, Deng M, Heinrich KW, Hetzer R. Frühdiastolische Ventrikelfunktionsanalyse zur Abstossungsdiagnostik nach Herztransplantation: eine prospektive serielle echokardiographische Studie. *Z Tx Med* 1991;3:33-38
4. Park JW, Warnecke H, Deng M, Schüler S, Heinrich KW, Hetzer R. Early diastolic left ventricular function as a marker of acute cardiac rejection: a prospective serial echocardiographic study. *Int J Cardiol* 1992;37:351-359
5. Park JW, Deng M, Warnecke H, Schüler S, Wirtz JH, Hummel M, Hetzer R, Heinrich KW. Herztransplantationsnachsorge: Probleme im Langzeitverlauf. *Dt. Ärztebl* 1993;90:A1-724-728
6. Hanster V, Oeding M, Deng M. Krankengymnastische Aspekte bei Kreislaufunterstützung und Herztransplantation. *Z Tx Med* 1993;5:140-142
7. Scheld HH, Hammel D, Deng M, Möllhoff T, Borggreffe M. Chirurgische Therapie der Koronaren Herzkrankheit. *Ärztliche Praxis* 1993;66:8
8. Scheld HH, Deng MC, Hammel D, Röder N, Rötter J. Kosten-Nutzen-Relation in der Herz-Transplantation. *Z Kardiologie* 1994;83 (Suppl 6):139-149
9. Deiwick M, Hamann PA, Weyand M, Deng MC, Möllhoff T, Budde T, Scheld HH. Heterotope Herztransplantation-eine Alternative in der Therapie der terminalen Herzinsuffizienz. *Tx Med* 1994;6:262-269
10. Weyand M, Hammel D, Hoffmeier A, Loeher A, Frye K, Kerber S, Deng M, Möllhoff T, Scheld HH. Erfahrungen mit dem tragbaren Links-Herz-Unterstützungssystem Novacor N 100. *Tx Med* 1994;6:245-253
11. Rahmel A, Deng MC, Kerber S, Hoffmeier A, Drees G, Scheld HH, Breithardt G. Herztransplantationsnachsorge: Das Münsteraner Modell. *Tx Med* 1994;6:270-276
12. Günther F, Deng M, Rahmel A, Kerber S, Frye K, Scheld HH, Breithardt G. Der herztransplantierte Patient in der Nachsorge. *Med Welt* 1995;46:202-210
13. Kerber S, Rahmel A, Heinemann-Vechtel O, Budde T, Deng M, Scheld HH, Breithardt G. Angiographic, intravascular ultrasound and functional findings early after orthotopic heart transplantation. *Int J Cardiol* 1995;49:119-129
14. Günther F, Schwammenthal E, Rahmel A, Lamp B, Kerber S, Deng M, Scheld HH, Breithardt. Erste Erfahrungen mit der Dobutamin-Belastungsechokardiographie bei herztransplantierten Patienten. *Z Kardiologie* 1995;84:411-418
15. Kondruweit M, Deng MC, Hammel D, Middelberg D, Roeder N, Scheld HH. Anwendung des modifizierten Cleveland Score in einer herzchirurgischen Klinik. *J Anästhesiologie Intensivmedizin* 1996;3:8-10
16. Müller FU, Boknik P, Horst A, Knapp J, Linck B, Schmitz W, Vahlensieck U, Deng MC, Scheld HH. The cAMP response element binding protein (CREB) is expressed and phosphorylated in the human heart. *Circulation* 1995;92:2041-2043

17. Zimmermann R (für die Arbeitsgruppe Thorakale Organtransplantation der DGK), Beyersdorf F, Costard-Jäckle A, Deng M, Dengler TJ, Fuhrmann B, Hardmann B, Haverich A, Hoberg E, Hummel M, Körner MM, Meiser B, Permanetter B, Rödiger W, Schäfers HJ, Wahlers T, Weis M, Zerkowski HR. Herztransplantation: Nachsorge und Rehabilitation. Derzeitiger Stand und Ergebnisse einer Umfrage bei deutschen Transplantationsprogrammen. *Z Kardiol* 1996;85:67-77
18. Scheld HH, Deng MC, Schmid C, Hammel D. Koronarchirurgie-Münsteraner Konzept. *Z Herz Thor Gefäßchir* 1996;10:53-60
19. Weyand M, Frye K, Fahrenkamp A, Hoffmeier A, Günther F, Deng M, Kerber S, Scheld HH. Cyclophosphamide as an adjunct to maintenance immunosuppression in cardiac transplantation. *Transplant Proc* 1995;27:1967-1968
20. Scheld HH, Hammel D, Schmid C, Weyand M, Deng M, Möllhoff Th, Kerber S. Beating heart implantation of a wearable Novacor left-ventricular assist device. *Thorac Cardiovasc Surg* 1996;44:62-66
21. Scheld HH, Soeparwata R, Deng MC, Deiwick M, Roeder N. Operationen bei eingeschränkter linksventrikulärer Pumpfunktion. *Z Kardiol* 1996;85 (Suppl. 6):287-301
22. Vahlensieck U, Boknik P, Knapp J, Linck B, Müller U, Neumann J, Herzig S, Schlüter H, Zidek W, Deng MC, Scheld HH, Schmitz W. Diadenosine hexaphosphate (AP<sub>6</sub>A) exerts negative chronotropic and inotropic effects via A<sub>1</sub>-adenosine receptors. *Br J Pharmacol* 1996;119:835-844
23. Soeparwata R, Rothenburger M, Deng MC, Tjan TDT, Hoffmeier A, Möllhoff T, Neuhof H, Scheld HH. Cytokine and cytokine receptor release in patients with cardiac tumors. *Ann Thorac Cardiovasc Surg* 1996;2-3:201-207
24. Kerber S, Heinemann-Vechtel O, Schmid C, Janssen F, Block M, Weyand M, Deng M, Scheld HH, Breithardt G. Intravaskulär-sonographische Befunde nach orthotoper Herztransplantation: Vergleich zu klinischen Faktoren. *Herz* 1996;21:320-329
25. Kondruweit M, Schmid C, Janssen F, Kerber S, Deng MC, Peters PE, Schlegel W, Scheld HH. ICTP, ein Marker zur Diagnose der Osteoporose nach Herztransplantation. *Tx Med* 1996;8:125-127
26. Kerber S, Heinemann-Vechtel O, Günther F, Rahmel A, Weyand M, Deng M, Scheld HH, Breithardt G. Coronary compliance in patients following orthotopic heart transplantation. An intravascular ultrasound study. *Eur Heart J* 1996;17:1891-1897
27. Kerber S, Puschkas C, Jonas M, Janssen F, Heinemann-Vechtel O, Kosch M, Deng MC, Schober O, Scheld HH, Breithardt G. Can Th-201 myocardial SPECT abnormalities in orthotopic heart recipients be explained by coronary vessel wall alterations assessed by intravascular ultrasound? *Int J Cardiol* 1996;57:91-96
28. Berendes E, Möllhoff T, Van Aken H, Schmidt C, Erren M, Deng MC, Weyand M, Loick HM. Effects of dopexamine on creatinine clearance, systemic inflammation, and splanchnic oxygenation in patients undergoing coronary artery bypass grafting. *Anesth Analg* 1997;84:950-957
29. Berendes E, Möllhoff T, Van Aken H, Erren M, Deng MC, Loick HM. Elevated plasma levels of serum amyloid A: An indicator of the acute phase response after cardiopulmonary bypass. *Crit Care Med* 1997;25:1527-1533
30. Kececioglu D, Kehl HG, Schmid C, Deng MC, Gehrman J, Weyand M, Scheld HH, Vogt J. Morphologic characterization and assessment of mitral regurgitation after repair of atrioventricular defects in children. *Thorac Cardiovasc Surgeon* 1997;45:70-74

31. Müller FU, Boknik P, Knapp J, Lüss H, Neumann J, Vahlensieck U, Böhm M, Deng MC, Scheld HH, Schmitz W. Quantification of the cAMP response element binding protein in ventricular nuclear protein from failing and nonfailing human hearts. *Biochem Biophys Res Comm* 1997;236:351-354
32. Roeder N, Hammel D, Deng MC, Schmid C, Scheld HH. Interne Qualitätssicherung Herzchirurgie - Münsteraner Erfahrungen. *Z Herz-, Thorax-, Gefäßchirurgie* 1997;11:1-5
33. Loick HM, Deng MC, Schmid C, Schmidt Ch. The usefulness of transesophageal echocardiography in detecting aortic atheromatous disease. In: Loick HM, Scheld HH, Van Aken H (eds) Impact of perioperative transesophageal echocardiography in cardiac surgery. *Thorac Cardiovasc Surg* 1997;45:321-325
34. Christiansen S, Schmid C, Schmidinger S, Deng M, Scheld HH. Morbus Werlhof - Risikofaktor in der Herzchirurgie? *Z Herz-, Thorax-, Gefäßchirurgie* 1997;11:198-202
35. Schmid C, Weyand M, Nabavi DG, Hammel D, Deng M, Ringelstein EB, Scheld HH. Cerebral and systemic embolization during left ventricular support with the Novacor N100 device. *Ann Thor Surg* 1998;65:1703-1710
36. Schmid C, Deng MC, Hammel D, Weyand M, Loick HM, Scheld HH. Emergency versus elective/urgent LVAD implantation. *J Heart Lung Transplant* 1998;17:1024-1028
37. Rötter J, Erren M, Knichwitz G, Tandler R, Roeder N, Deng MC, Hammel D, Scheld HH. Gastrointestinal complications after cardiopulmonary bypass. *Anästh Intensivmed Notfallmed Schmerzther* 1998;33:620
38. Schmid C, Weyand M, Hammel D, Deng MC, Nabavi D, Scheld HH. Effect of platelet inhibitors on thromboembolism after implantation of a Novacor N100-preliminary results. *Thorac Cardiovasc Surg* 1998;46:260-262
39. Vahlensieck U, Boknik P, Gombosova I, Huke S, Knapp J, Linck B, Lüss H, Müller FU, Neumann J, Schlüter H, Zidek W, Deng MC, Scheld HH, Zimmermann N, Schmitz W. Inotropic effects of diadenosine tetraphosphate (AP4A) in human cardiac preparations. Differences in comparison to other mammalian hearts. *J Pharmacol Exp Ther* 1999;288:805-813
40. Luo J, Jankowski J, Knobloch M, Van der Giet M, Gardanis K, Russ T, Vahlensieck U, Neumann J, Schmitz W, Tepel M, Deng MC, Zidek W, Schlueter H. Identification and characterization of diadenosine 5',5''-p1,p2-diphosphate and diadenosine 5',5''-P1,P3-triphosphate in human myocardial tissue. *FASEB J* 1999;13:695-705
41. Tjan TDT, Schmid C, Deng MC, Schmidt C, Kerber S, Kehl G, Scheld HH. Evolving short-term and long-term mechanical assist for cardiac failure – a decade experience in Muenster. *Thorac Cardiovasc Surg* 1999;47 (Supplement):294-297
42. Erren M, Arlt M, Willecke P, Schlüter B, Junker R, Deng MC, Assmann G, Dietl HD, Senninger N. Predictive value of the CD45RO positive T-helper lymphocyte subset for acute cellular rejection during the early phase after kidney transplantation. *Transplant Proc* 1999;31:319-321
43. Schmid C, Deng MC, Gradaus R, Kley S, Breithardt G, Scheld HH, UNI-NRW. Impact of "local donor" and "regionalization" on a German transplantation center. *Transplant Int* 1999;12:141-144
44. Plenz G, Reichenberg S, Koenig C, Deng MC, Robenek H. Type VIII collagen and granulocyte macrophage-colony stimulating factor (GM-CSF) in the arterial wall: GM-CSF modulates the expression of type VIII collagen in vascular smooth muscle cells and both mRNAs are codistributed during atherogenesis. *Art Thromb Vasc Biol* 1999;19:1658-1668

45. Petzold T, Feindt PR, Kalweit G, Deng MC, Schmid C, Fritz M, Preusse C, Schoenfelder B, Kuhn-Regnier F, Schoendube F, Gams E for the Transplant Cooperation UNI-NRW. Effects of modification of the allocation system on ischemia duration and costs of heart transplantation. *Thorac Cardiovasc Surg* 1999;47:153-156
46. El-Banayosi A, Deng M, Loisanca DY, Vetter H, Gronda E, Loebe M, Vigano M. The European experience of Novacor left ventricular assist (LVAS) therapy as a bridge to transplant: a retrospective multi-centre study. *Eur J Cardiothor Surg* 1999;15:835-84
47. Meyer U, Weingart D, Deng MC, Scheld HH, Joos U. Heart transplants - assessment of dental procedures. *Clin Oral Invest* 1999;3:79-83
48. Schmid C, Hammel D, Deng MC, Weyand M, Baba HA, Tjan TDT, Drees G, Roeder N, Schmidt C, Scheld HH. Ambulatory care of patients with left ventricular assist devices. *Circulation* 1999;100(suppl II):II-224-II-228
49. Asfour B, Byrne BJ, Baba HA, Hammel D, Hruban RH, Weyand M, Deng M, Scheld HH. Effective gene transfer in the rat myocardium via adenovirus vectors using a coronary recirculation model. *Thorac Cardiovasc Surg* 1999;49:311-316
50. Knapp J, Boknik P, Deng MC, Huke S, Luss I, Klein-Wiele O, Linck B, Luss H, Muller FU, Nacke P, Scheld HH, Schmitz W, Vahlensieck U, Neumann J. On the contractile function of protein phosphatases in isolated human coronary arteries. *Naunyn Schmiedebergs Arch Pharmacol* 1999;360:464-472
51. Wilhelm MJ, Deng MC, Scheld HH. Chirurgische Therapiekonzepte der fortgeschrittenen Herzinsuffizienz als Alternativen zur Herztransplantation. *Z Herz-, Thorax-, Gefaesschir* 2000;14:13-22
52. Pethig K, Dengler TJ, Mohacsi P, Deng MC, Wahlers T. Longterm management after heart transplantation – an assessment of current status. *Z Kardiol* 2000;89:93-99
53. Schmid C, Wilhelm M, Rothenburger M, Nabavi D, Deng MC, Hammel D, Scheld HH. Effect of high dose platelet inhibitor treatment on thromboembolism in Novacor patients. *Eur J Cardiothor Surg* 2000;17:331-335
54. Mohacsi P, Deng MC, Murphy R, Bergh CH, Gronda E, Komajda M, Pacher R, Spinar J, Swedberg K, Cleland JF. Implantable left ventricular assist systems (LVAS): Recent results. A report from a series of meetings sponsored by the study group on advanced heart failure of the working group on heart failure. *Eur J Heart Fail* 2000;2:13-18
55. Roetker J, Trosch F, Deng MC, Roeder N, Scheld HH. Medical liability disputes involving thoracic and cardiovascular surgeons. *Thorac Cardiovasc Surg* 2001;49:60-3
56. Rothenburger M, Wilhelm M, Hammel D, Schmid C, Plenz G, Tjan TD, Baba H, Schluter B, Scheld HH, Deng MC, Erren M. Immune response in the early postoperative period after implantation of a left-ventricular assist device system. *Transplant Proc* 2001;33:1955-7
57. Rothenburger M, Soeparwata R, Deng MC, Berendes E, Tjan TDT, Wilhelm MJ, Erren M, Boecker D, Scheld HH. The impact of endotoxin/anti-endotoxin core antibody-ratio on cytokine release and clinical events following cardiac surgery. *J Am Coll Cardiol* 2001;38:124-130
58. Rothenburger M, Soeparwata R, Deng MC, Schmid C, Berendes E, Tjan TD, Wilhelm MJ, Erren M, Boecker D, Scheld HH. Prediction of clinical outcome after cardiac surgery: the role of cytokines, endotoxin, and anti-endotoxin core antibodies. *Shock* 2001;16 Suppl 1:44-50

59. Chariat MN, Erren M, Chariat M, Deng M, Wolters HH, Dietl KH. Basiliximab in the therapy of acute rejection after organ transplantation. *Transplant Proc* 2001;33:2380
60. Grabellus F, Levkau B, Sokoll A, Welp H, Schmid C, Deng MC, Takeda A, Breithardt G, Baba HA. Reversible activation of nuclear factor- $\kappa$ B in human end-stage heart failure after left ventricular mechanical support. *Cardiovasc Res* 2002;53:124-130
61. Grabellus F, Schmid C, Levkau B, Breukelmann D, Halloran PF, August C, Takeda N, Takeda A, Wilhelm M, Deng MC, Baba HA. Reduction of hypoxia-inducible hemoxygenase-1 in the myocardium after left ventricular mechanical support. *J Pathology* 2002;197:230-237
62. Smits JMA, De Meester J, Deng MC, Scheld HH, Hummel M, Schoendube F, Haverich A, Vanhaecke J, van Houwelingen HC, on behalf of the COCPIT study group and the Eurotransplant Heart Transplant Programs. Mortality rates after heart transplantation. How to compare centre-specific outcome data? *Transplantation* 2003;75:90-6
63. Smits JMA, Deng MC, Hummel M, De Meester J, Schoendube F, Scheld HH, Persijn GG, Laufer G, Van Houwelingen HC, and the Comparative Outcome and Clinical Profiles in Transplantation (COCPIT) study group. A prognostic model for predicting waiting list mortality for a total national cohort of adult heart transplant candidates. *Transplantation* 2003;76:1185-1189
64. Hertz MI, Mohacsi PJ, Taylor DO, Trulock EP, Boucek MM, Deng MC, Keck BM, Edwards LB, Rowe AW. The registry of the international society for heart and lung transplantation: introduction to the twentieth annual reports-2003. *J Heart Lung Transplant* 2003;22:610-5
65. Klotz S, Deng MC, Hanafy D, Schmid C, Stypmann J, Schmidt C, Hammel D, Scheld HH. Reversible pulmonary hypertension in heart transplant candidates – pretransplant evaluation and outcome after orthotopic heart transplantation. *Eur J Heart Fail* 2003;5:645-653
66. Van den Hout WB, Smits JMA, Deng MC, Hummel M, Schoendube F, Scheld HH, Persijn GG, Laufer G; on behalf of the COCPIT study group and on Behalf of the Eurotransplant Heart Transplant Programs. The heart-allocation simulation model: A tool for comparison of transplantation allocation policies. *Transplantation* 2003;76:1492-1497
67. Klotz S, Deng MC, Wilhelm MJ, Hammel D, Schmid C, Scheld HH. Left ventricular pressure and volume unloading during pulsatile versus non-pulsatile LVAD-support. *Ann Thorac Surg* 2004;77:143-9
68. Kirchhoff WC, Gradaus R, Stypmann J, Deng MC, Tian TD, Scheld HH, Breithardt G, Brisse B. Vasoactive peptides during long-term follow-up of patients after cardiac transplantation. *J Heart Lung Transplant* 2004;23:284-288
69. Mussivand T, Carrier M, Chiu RC, Davies RA, Delgado DH, Deng MC, Haddad H, Hendry PJ, Keon WJ, Koshal A, Masters RG, Mesana T, Rao V. Under-utilization of mechanical circulatory support in Canada: why and what can be done? *Artif Organs* 2004;28:278-86
70. Hertz MI, Boucek MM, Deng MC, Edwards LB, Keck BM, Rowe AW, Taylor DO, Trulock EP. The Registry of the International Society for Heart and Lung Transplantation: introduction to the 2004 Annual Reports. *J Heart Lung Transplant* 2004;23:789-795
71. Evans RW, Williams GE, Baron HM, Deng MC, Eisen HJ, Hunt SA, Khan MM, Kobashigawa JA, Marton EN, Mehra MR, Mital SR. The economic implications of noninvasive molecular testing for cardiac allograft rejection. *Am J Transplant* 2005;5:1553-1558

72. Marboe CC, Billingham M, Eisen HJ, Deng MC, Baron HM, Mehra M, Hunt SA, Wohlgenuth J, Mahmood I, Prentice J, Berry G. Nodular endocardial infiltrates (Quilty lesions) cause significant variability in the diagnosis of ISHLT rejection grades 2 and 3A in endomyocardial biopsies from cardiac allograft recipients. *J Heart Lung Transplant* 2005;24:S219-S226
73. Taylor DO, Edwards LB, Boucek MM, Trulock EP, Deng MC, Keck BM, Hertz MI. Registry of the International Society for Heart and Lung Transplantation: twenty-second official adult heart transplant report--2005. *J Heart Lung Transplant* 2005;24:945-55
74. Arrecubieta C, Asai T, Bayern M, Loughman A, Fitzgerald JR, Shelton CE, Baron HM, Dang NC, Deng MC, Naka Y, Foster TJ, Lowy FD. The role of Staphylococcus aureus adhesins in the pathogenesis of ventricular assist device-related infections. *J Infect Dis* 2006;193:1109-19
75. Huang R, Deng M, Rogers JG, Howser R, Portner PM, Pierson RN III, Butler J. Effect of age on outcomes after left ventricular assist device placement. *Transplant Proc* 2006;38:1496-1498
76. von Scheidt W, Costard-Jaeckle A, Stempfle HU, Deng MC, Schwaab B, Haaff B, Naegel H, Mohacsi P, Trautnitz M; PROPHET Study Group. Prostaglandin E1 testing in heart failure-associated pulmonary hypertension enables transplantation: the PROPHET study. *J Heart Lung Transplant* 2006;25:1070-6. Epub 2006 Jul 18
77. Vlad G, Ho EK, Vasilescu ER, Fan J, Liu Z, cai JW, Jin Z, Burke E, Deng M, Cadeiras M, Cortesini R, Itescu S, Marboe C, Mancini D, Suciufoca N. Anti-CD25 treatment and FOXP3-positive regulatory T cells in heart transplantation. *Transplant Immunol* 2007;18:13-21
78. Pham MX, Deng MC, Kfoury AG, Teuteberg JJ, Starling RC, Valentine H. Molecular testing for long-term rejection surveillance in heart transplant recipients: Design of the Invasive Monitoring Attenuation Through Gene Expression (IMAGE) Trial. *J Heart Lung Transplant* 2007;26:808-14
79. Mehra MR, Kobashigawa JA, Deng MC, Fang KC, Klingler TM, Lal PG, Rosenberg S, Uber PA, Starling RC, Murali S, Pauly DF, Dedrick R, Walker MG, Zeevi A, Eisen HJ; CARGO Investigators. Transcriptional signals of T-cell and corticosteroid-sensitive genes are associated with future acute cellular rejection in cardiac allografts. *J Heart Lung Transplant* 2007;26:1255-63
80. Bernstein D, Williams GE, Eisen H, Mital S, Wohlgenuth JG, Klingler TM, Fang KC, Deng MC, Kobashigawa J. Gene expression profiling distinguishes a molecular signature for grade 1B mild acute cellular rejection in cardiac allograft recipients. *J Heart Lung Transplant* 2007;26:1270-80
81. Mehra MR, Kobashigawa JA, Deng MC, Fang KC, Klingler TM, Lal PG, Rosenberg S, Uber PA, Starling RC, Murali S, Pauly DF, Dedrick R, Walker MG, Zeevi A, Eisen HJ; CARGO Investigators. Clinical implications and longitudinal alteration of peripheral blood transcriptional signals indicative of future cardiac allograft rejection. *J Heart Lung Transplant* 2008;27:297-301
82. George I, Colley P, Russo MJ, Martens TP, Burke E, Oz MC, Deng MC, Mancini DM, Naka Y. Association of device surface and biomaterials with immunologic sensitization after mechanical support. *J Thorac Cardiovasc Surg* 2008;135:1372-9
83. Arrecubieta C, Matsunaga I, Asai T, Naka Y, Deng MC, Lowy FD. Vaccination with Clumping Factor A and Fibronectin Binding Protein A to Prevent Staphylococcus aureus Infection of an Aortic Patch in Mice. *J Infect Dis* 2008;198:571-5
84. Stewart AS, Russo MJ, Martens TP, Naseem TM, Deng MC, Wang R, Argenziano M, Oz M, Naka Y. Longer duration of continuous-flow ventricular assist device support predicts greater hemodynamic compromise after return of pulsatility. *J Thor Cardiovasc Surg* 2008;136:524-5

85. Cooper LT, Hare JM, Tazelaar HD, Edwards WD, Starling RC, Deng MC, Menon S, Mullen GM, Jaski B, Bailey KR, Cunningham MW, Dec GW. The usefulness of immunosuppression for giant cell myocarditis. *Am J Cardiol* 2008;102:1535-9
86. Lietz K, Long JW, Kfoury AG, Slaughter MS, Silver MA, Milano CA, Rogers JG, Miller LW, Deng MC, Naka Y, Mancini D. Impact of Center Volume on Outcomes of Left Ventricular Assist Device Implantation as Destination Therapy: Analysis of the Thoratec HeartMate Registry, 1998 to 2005. *Circ Heart Fail* 2009;2:3-10
87. Mignatti A, Sims DB, Colombo PC, Garcia LI, Bijou R, Deng MC, Jorde UP. Resting heart rate does not reflect the degree of beta-blockade in subjects with heart failure on chronic beta-blocker therapy. *Cardiovasc Ther* 2009;27:42
88. Arrecubieta C, Toba FA, von Bayern M, Akashi H, Deng MC, Naka Y, Lowy FD. SdrF, a Staphylococcus epidermidis surface protein, contributes to the initiation of ventricular assist device driveline-related infections. *PLoS Pathog* 2009;5:e1000411
89. Uriel N, Jorde UP, Cotarlan V, Colombo PC, Farr M, Restaino SW, Lietz K, Naka Y, Deng MC, Mancini D. Heart transplantation in human immunodeficiency virus-positive patients. *J Heart Lung Transplant* 2009;28:667-9
90. Lietz K, Long JW, Kfoury AG, Slaughter MS, Silver MA, Milano CA, Rogers JG, Miller LW, Deng M, Naka Y, Mancini D. Impact of center volume on outcomes of left ventricular assist device implantation as destination therapy: analysis of the Thoratec HeartMate Registry, 1998 to 2005. *Circ Heart Fail* 2009;2:3-10
91. Pham MX, Teuteberg JJ, Kfoury AG, Starling RC, Deng MC, Cappola TP, Kao A, Anderson AS, Cotts WG, Ewald GA, Baran DA, Bogaev RC, Elashoff B, Baron H, Yee J, Valantine HA, for the IMAGE Study Group. Gene Expression Profiling for Rejection Surveillance After Cardiac Transplantation. *N Engl J Med* 2010;362:1890-1900
92. Zahn D, Weidner G, Beyersmann, Smits JMA, Deng MC, Kaczmarek I, Meyer s, Reichenspurner H, Mehlhorn U, Wagner FM, Spaderna H. Composite risk scores and depression as predictors of competing waiting-list outcomes: theWaiting for a New Heart Study. *Transplant Int* 2010;

### **15B1) Publications (Case Reports)**

First/Senior Author

1. Deng M, Park JW, Roy-Chowdury R, Knieriem HJ, Reinhard U, Heinrich KW. Heart transplantation for restrictive cardiomyopathy: Development of cardiac amyloidosis in preexisting monoclonal gammopathy. *J Heart Lung Transplant* 1992;11:139-41
2. Deng MC, Kececioglu D, Weyand M, Moskopp D, Fahrenkamp A, Wendt M, Scheld HH. Successful Long-Term Course After Heart Transplantation for Anthracycline Cardiomyopathy in a Young Boy Despite Neurological Complications. *Thorac Cardiovasc Surgeon* 1994;42:122-124
3. Hammel D, Tjan TDT, Scheld HH, Schmid C, Loick M, Deng MC. Successful treatment of a Novacor LVAD malfunction without repeat sternotomy. *Thorac Cardiovasc Surgeon* 1998;46:154-156\*
4. Plenz G, Baba HA, Erren M, Scheld HH, Deng MC. Reversal of myocardial interleukin-6-mRNA expression following longterm left ventricular assist device support for myocarditis-associated low output syndrome (letter). *J Heart Lung Transplant* 1999;18:923-924\*

5. Shahzad K, Cadeiras M, Arai K, Abramov D, Burke E, Deng MC. Unexplained graft dysfunction after heart transplantation – role of novel molecular expression test score and QTc-interval: A case report. *Jcardiology Research and Practice* volume 2010;Article ID 230810, 5 pages\*

### **15B2) Publications (Case Reports)**

Co-Author

1. Kryne R, Deng M, Heinrich KW. Anomalous origin of the left coronary artery from the pulmonary trunk with multiple valvar incompetence. *Int J Cardiol* 1989;24:367-368
2. Deiwick M, Deng MC, Möllhoff T, Zander J, Scheld HH. Postcardiotomy low output syndrome in the elderly - successful use of extracorporeal membrane oxygenation using a surface heparinized circuit in an octogenarian patient. *Cardiol Elderly* 1995;3:393-396
3. Hoffmeier A, Schmid C, Weyand M, Kerber S, Deng MC, C Schmidt, Scheld HH. Mehrfache Operationen am transplantierten Herzen. *Thorac Cardiovasc Surg* 1996;44:216-218
4. Kececioglu D, Deng MC, Schmid C, Kehl HG, Baba HA, Yelbuz M, Scheld HH, Vogt J. Anomalous origin of the left coronary artery from the pulmonary artery with large anterior myocardial infarction and ischemia: successful tunnel repair and concomitant heterotopic heart transplantation as biological bridge to recovery. *Transplant Int* 1997;10:161-163
5. Mathys W, Deng MC, Meyer J, Junge-Mathys E. Fatal nosocomial Legionnaire's disease after heart transplantation. *J Hosp Infect* 1999;41:242-246
6. Bisleri G, Morgan JA, Deng MC, Mancini DM, Oz MC. Should HIV-positive recipients undergo heart transplantation? *J Thorac Cardiovasc Surg* 2003;126:1639-40

### **15C1) Publications (Reviews)**

First/Senior Author

1. Deng MC, Roeder N, Plenz G, Erren M, Brisse B, Soeparwata R, Scheld HH. Proinflammatory cytokines and cardiac pump function. *Z Kardiol* 1997;86:788-802
2. Deng MC, Baba HA, Erren M, Plenz G, Kerber S, Breithardt G, Scheld HH. Can molecular techniques be applied to improve the endomyocardial biopsy diagnosis of acute rejection? *Transplant Proc* 1998;30:881-883
3. Deng MC, Smits JMA, DeMeester J, Hummel M, Schoendube F, Scheld HH. Heart Transplantation is indicated only in the most severely ill patient: Perspectives from the German Heart Transplant Experience. *Curr Opin Cardiol* 2001; 16:97-104
4. Seiler P, Plenz G, Deng MC. The Interleukin-6 cytokine system in embryonic development, embryo-maternal interactions and cardiogenesis. *Eur Cytokine Netw* 2001;12:15-21
5. Plenz G, Borgmeier D, Koenig C, Tjan TDT, Böhm M, Flesch M, Deng MC. Downregulation of type VIII collagen mRNA expression and deposition in end-stage heart failure. (submitted)\*
6. Deng MC, Naka Y. Circulatory support in advanced heart failure. *Cardiol Rev* 2002;19:28-35
7. Deng MC, Naka Y. Mechanical circulatory support devices - state of the art. *Heart Fail Monit* 2002;2:120-8

8. Deng MC, Smits JMA, Packer M. Selecting patients for heart transplantaton: which patients are too well for transplant? *Curr Opin Cardiol* 2002;17:137-144
9. Deng MC. Cardiac Transplantation. *Heart* 2002;87:177-184
10. Deng MC, Ascheim D, Edwards NM, Naka Y. Endstage Heart Failure – Which Options? *Eur Heart J Supplements*;2002 (Supplement D):D122-130
11. Deng MC, Plenz G, Labarrere C, Marboe C, Baba HA, Erren M, Itescu S. The Role of IL6 Cytokines in Clinical Cardiac Allograft Rejection. *Transplant Immunol* 2002;9:115-120
12. Deng MC, Hauff H, Itescu S, Taranto S, Brown R, Scully B, Smits J, Edwards N. The seropositive donor heart. (submitted)
13. Deng MC. Book Review: Heart Transplantation (by Kirklin JK, Young JB, McGiffin CD). *N Engl J Med* 2002;347:2175-2176
14. Deng MC. The Mechanical Circulatory Support Device Database of the International Society for Heart and Lung Transplantation. *Curr Opin Cardiol* 2003;18:147-152
15. Baron H, Plenz G, Deng MC. Mechanisms of Transplant Vasculopathy. *Dtsch Med Wochenschr* 2004;129:2193-2197\*
16. Cadeiras M, Bayern M Prinz Von, Pal A, Asai T, Naka Y, Deng MC. Destination MCS-D-therapy – an alternative for endstage heart failure patients not eligible for heart transplantation. *Curr Opin Organ Transplant* 2005;10:369-375\*
17. Cadeiras M, Bayern M Prinz Von, Deng MC. Non-invasive diagnosis of acute cardiac allograft rejection. *Curr Opin Organ Transplant* (in press)\*
18. Cadeiras M, von Bayern M, Deng MC. Managing Drugs and Devices in Patients with Permanent Ventricular Assist Devices. *Curr Treat Options Cardiovasc Med* 2007;9:318-331

### **15C2) Publications (Reviews)**

Co-Author

1. Schmid C, Kerber S, Baba H, Deng M, Hammel D, Scheld HH. Graft vascular disease after heart transplantation. *Eur Heart J* 1997;18:554-559
2. Eckardt L, Haverkamp W, Johna R, Bocker D, Deng MC, Breithardt G, Borggrefe M. Arrhythmias in heart failure: current concepts of mechanisms and therapy. *J Cardiovasc Electrophysiol* 2000;11:106-117
3. Hertz MI, Mohacsi PJ, Boucek MM, Taylor DO, Trulock EP, Deng MC, Rowe AW. The registry of the International Society for Heart and Lung Transplantation: past, present, and future. *J Heart Lung Transplant* 2002;21:945-949
4. Feng S, Buell JF, Cherikh WS, Deng MC, Hanto DW, Kauffman HM, Leichtman AB, Lorber MI, Maters RG, McBride MA, Metzger RA, Nolte FS, O'Connor KJ, Roth D, Terrault NA, Henry ML. Organ donors with positive viral serology or malignancy: risk of disease transmission by transplantation. *Transplantation* 2002;74:1657-1663
5. Plenz GA, Deng MC, Robenek H, Volker W. Vascular collagens: spotlight on the role of type VIII collagen in atherogenesis. *Atherosclerosis* 2003;166:1-11

6. Mehra MR, Benza R, Deng MC, Russell S, Webber S. Surrogate markers for late cardiac allograft survival. *Am J Transplant* 2004;4:1184-91

### **15C3) Publications (Editorials)**

First/Senior Author

1. Deng M. Herztransplantation: Organisatorische Vorschläge. In Deng/Weyand/Scheld (Gastherausgeber): 3. Münsteraner Transplantationstreffen 1993. *Z Tx Med* 1993;5:118-120
2. Deng MC, Weyand M. Heart transplantation - organizational proposals. *Eurotransplant Newsletter* 1993;111:21-22
3. Scheld HH, Deng MC. Proposal for an urgency classification in cardiac surgery. *Thorac Cardiovasc Surgeon* 1998;46:183-187\*
4. Deng MC, DeMeester J, Scheld HH. Development of cardiac transplant policy in Germany. *Thorac Cardiovasc Surgeon* 1999;47:1-4
5. Deng MC, Tjan TDT, Asfour B, Scheld HH. Left ventricular assist devices – reasons to be enthusiastic. *Eur J Heart Fail* 1999;1:289-291
6. Deng MC, Breithardt G, Scheld HH. Towards an evidence based perspective in advanced heart failure care (editorial). *Z Kardiol* 1999;88(Suppl III):III/1-III/3
7. Deng MC, DeMeester J, Scheld HH. Development of cardiac transplant policy in Germany (editorial part 2). *Thorac Cardiovasc Surgeon* 2000;48:183-185
8. Deng MC, Smits JMA, Young JB. Proposition: The Benefit of Cardiac Transplantation in stable Outpatients with Heart Failure should be tested in a Randomized Trial. *J Heart Lung Transplant* 2003;22:113-117
9. Deng MC, Young JB, Stevenson LW, Oz MC, Rose EA, Hunt SA, Kirklin JK, Kobashigawa J, Miller L, Saltzberg M, Konstam M, Portner PM, Kormos R, on behalf of the Board of Directors of the International Society for Heart and Lung Transplantation (ISHLT). Destination Mechanical Circulatory Support – Proposal for Clinical Standards. *J Heart Lung Transplant* 2003;22:365-9
10. Plenz GAM, Eschert H, Deng MC. What are appropriate controls for cardiac interleukin-6 expression in heart failure (letter)? *Circulation* 2003;108:129\*
11. Deng MC. Heart transplantation – The increasing challenges of evidence-based decision-making (editorial). *J Am Coll Cardiol* 2004;43:803-4
12. Deng MC. The challenges of generating evidence to guide mechanical circulatory support-based management of advanced heart failure (editorial). *Eur Heart J* 2005;26:953-5
13. Deng MC, Eisen HJ, Mehra MR. Methodological challenges of genomic research – the CARGO study (Letter-To-The-Editor). *Am J Transplant* 2006;6:1086-1087
14. Starling RC, Pham M, Valantine H, Miller L, Eisen H, Rodriguez R, Taylor DO, Yamani MH, Kobashigawa J, McCurry K, Marboe C, Mehra MR, Zuckerman A, Deng MC. Molecular Testing in the Management of Cardiac Transplant Recipients: Initial Clinical experience (Invited Editorial). *J Heart Lung Transplant* 2006;25:1389-1395 \*
15. Latif F, Cadeiras M, von Bayern MP, Shahzad K, Sinha A, Deng MC. Challenges of long-term mechanical circulatory support therapy. *Expert Rev Med Devices* 2008;5:413-414

**15D1) Publications (Books/Chapters)**

First/Senior Author

1. Deng M. Pathophysiologie der chronischen Herzinsuffizienz, in Park JW(ed): Therapie der chronischen Herzinsuffizienz. Pabst-Verlag, Lengerich 1992
2. Deng MC. Prinzipien diätetischer Maßnahmen bei Koronarer Herzkrankheit. In: Heinrich KW (ed) Koronare Herzerkrankung und Fettstoffwechselstörung. Bibliomed Verlag, Melsungen 1994
3. Deng MC, Scheld HH (eds). Perioperative Betreuung in der Erwachsenenherzchirurgie-ein interdisziplinärer Leitfaden (2nd ed). Pabst-Verlag, Lengerich 1995
4. Deng MC, Scheld HH. Lehrvisite Herzchirurgische Intensivmedizin-ein pragmatisches Modell. In Köpcke, Neugebauer (Hrsg): Qualität der Lehre (Symposiumsband Köln 1995), Urban & Schwarzenberg 1996
5. Deng MC. Der Post-Transplant-Notfall. In Zerkowski/Baumann (eds): Ein Manual für die Praxis von Internisten, Kardiologen, Anästhesisten und Herzchirurgen. Steinkopff Darmstadt (in preparation)
6. Deng MC, Drees G, Scheld HH. Ethische Aspekte der Herztransplantation. In: Quante M, Ach JS (eds) Hirntod und Organverpflanzung. Frommann-Holzboog 1997; 136-147
7. Deng MC, Roeder N, Hammel D, Breithardt G, Scheld HH. Patientenorientierte Dokumentation in der Herztransplantation: Erfahrungen im Interdisziplinären Herzinsuffizienz- und Transplantationsprogramm Münster. In: Krian A, Scheld HH (eds): Dokumentation in der Herzchirurgie. Steinkopff, Darmstadt 1996
8. Deng MC. Zytokinregulation bei chronischer Herzinsuffizienz, extrakorporaler Zirkulation und Herztransplantation. Steinkopff-Verlag Darmstadt 1997
9. Deng MC, Scheld HH (eds). Klinisch-pathologische Aspekte der Herztransplantation. *Z Herz Thorax Gefäßchir* 1997;11 (Suppl. 1):1-44
10. Deng MC, Erren M, Dreimann V, Rotering H, Breithardt G, Scheld HH. Serial multiparametric immune monitoring as a guide to management early after cardiac transplantation. In: Faist E (ed): 4th International Congress on The immune Consequences of Trauma, Shock and Sepsis. *Monduzzi, Bologna*, 1997, 187-191
11. Deng MC, Scheld HH (eds). Proceedings of the 7th Muenster Heart Transplant Meeting "Mechanical Circulatory Support". *Thorac Cardiovasc Surg* 1999;47 (Supplement):293-332
12. Deng MC, Kerber S, Scheld HH (eds). Proceedings of the 8th Muenster Heart Transplant Meeting "Current Concepts in Heart Failure Management". *Z Kardiol* 1999;88(Suppl.3):III/1-III/51
13. Deng MC. Herztransplantation. In: Kleber FX (ed) Band Kardiologie, Lehrbuchreihe Innere Medizin, Uni-Med Verlag (in preparation)
14. Deng MC, Scheld HH. An international perspective towards cardiac transplantation. In: Shelton W (ed). The Ethics of Organ Donation and Transplantation. *JAI Press* 2001
15. Deng MC. Long-term outcomes with transplantation. In „Cardiac Transplantation - The Columbia Manual“ (eds Edwards NM, Chen JM, Mazzeo PA). *Humana Press New Jersey* 2004:185-202
16. Deng MC. Orthotopic heart transplantation: Highlights and limitations. In „Surgical Options in Heart Failure“ (eds Westaby S, Narula J). *Saunders Philadelphia* 2004:243-256

17. Deng MC, John R, Baron H, Itescu S, Suci-Foca N. Principles of Transplantation Immunology. In Bone Disease of Organ Transplantation (Eds Shane E, Compston J). *Elsevier, New York* 2005:3-30
18. Slaughter MS, Deng. Permanent Mechanical Circulatory Support. In: ISHLT-Monograph Series on Mechanical Circulatory Support (Eds Frazier OH, Kirklin JK). *Elsevier, New York* 2006:171-180
19. Deng MC, Naka Y. Mechanical Circulatory Support Therapy for Advanced Heart Failure. *Imperial College Press, London* 2007
20. Cadeiras M, Bayern M, Deng MC. Cardiac Transplantation: Any Role Left? In: Westaby S, Deng MC (Eds). Surgical Therapies in Heart Failure. Heart Failure Clinics of North America. *Elsevier, New York* 2007;3:321-47
21. Bayern M, Cadeiras M, Deng MC. Destination Therapy: Does Progress Depend on LVAD Development? In: Westaby S, Deng MC (Eds). Surgical Therapies in Heart Failure. Heart Failure Clinics of North America. *Elsevier, New York* 2007;3:349-67
22. Latif F, Shahzad K, Deng MC. Algorithm for Treatment of Advanced Heart Failure. In: Morgan J, Naka Y (Eds). Surgical Treatment Atlas for Heart Failure. *Springer, New York* 2010
23. Shahzad K, Sinha A, Latif F, Deng MC. Standardized operational procedures in clinical gene expression biomarker panel development. In: Scherer A (Ed). Batch effects and experimental noise in Microarray Analysis: sources and solutions. *John Wiley & Sons, Chichester* 2009
24. Deng MC, Raia F. The Relational Act – A Model to improve the Practice of Medicine. In: Health, Illness, Disease – 9th Global Conference - Making Sense of: Health, Illness and Disease Proceedings (Eds Vaccarella M, Deng MC). *The Inter-Disciplinary Press Oxford* 2010 (in press)

#### **15D2) Publications (Books/Chapters)**

Co-Author

1. Park JW, Deng M, Heinrich KW. Regionale Herztransplantationsnachsorge: Modell Duisburg. In Park JW(ed): Therapie der chronischen Herzinsuffizienz. Pabst-Verlag, Lengerich, 1992
2. Roeder N, Weyand M, Deng MC, Fugmann M, Scheld HH. Das Münsteraner EDV-Dokumentationssystem. In: Krian A, Scheld HH (ed) Qualitätssicherung in der Herzchirurgie. Steinkopff, Darmstadt 1995
3. Kondruweit M, Roeder N, Deng M, Middelberg D, Hammel D, Scheld HH. Anwendung des modifizierten Cleveland Scores in einer herzchirurgischen Klinik. In: Krian A, Scheld HH (eds) Qualitätssicherung in der Herzchirurgie. Steinkopff, Darmstadt 1995
4. Drees G, Deng MC, Scheld HH. Psychologische Probleme bei Herztransplantationen. In: Quante M, Ach JS (eds) Hirntod und Organverpflanzung. Frommann-Holzboog 1997; 189-195
5. Scheld HH, Deng MC, Hammel D. Leitfaden Herztransplantation-Interdisziplinäre Betreuung vor, während und nach Herztransplantation. Steinkopff, Darmstadt 1997
6. Roeder N, Hülsken G, Deng MC, Scheld HH. Multimediale Herzchirurgie - PC-System zur Unterstützung von Therapie und Lehre. In: Krian A, Scheld HH (eds): Dokumentation in der Herzchirurgie. Steinkopff, Darmstadt 1996
7. Roeder N, Hülsken G, Deng MC, Köpcke W, Scheld HH. Ein multimediales Lehrsystem für die Herzchirurgie. In: Jahrestagung der Gesellschaft für Medizinische Statistik und Dokumentation

1996

8. Breithardt G, Borggrefe M, Deng MC, Block M. Role of amiodarone in the management of heart failure. *New Trends in Arrhythmias*, Marilleva 1996:331-339
9. Scheld HH, Deng MC, Hammel D, Schmid C. Leitfaden Herztransplantation-Interdisziplinäre Betreuung vor, während und nach Herztransplantation (2nd ed). Steinkopff, Darmstadt 2001
10. Jaeger BR, Braun P, Nagel D, Park JW, Gysan DB, Oberhoffer M, Mellwig KP, Bahlmann G, Heigl F, Heinzler R, Militzer H, Moriaty P, Schuetterle S, Tachezy H, Kreuzer E, Deng MC, Reichart B, Seidel D. A combined treatment and H.E.L.P. apheresis for treatment of cardiac allograft vasculopathy. In: Kostner GM, Kostner KM (eds). *Atherosclerosis: Risk factors, diagnosis, and treatment*. Monduzzi Bologna 2002, pp 331-336
11. Itescu S, Schuster M, Burke E, Ankersmit J, Kocher A, Deng MC, John R, Lietz K. Immunobiologic consequences of assist devices. *Cardiol Clin* 2003;21:119-133
12. Pham J, Deng MC, Wohlgemuth J, Quertermous J. Application of genomic methodology for assessment of cardiac transplant rejection. In: *Handbook of Genomic Medicine* (Eds Geoffrey Ginsburg, Huntington F. Willard), Academic Press/Elsevier 2007

#### **15E1) Publications (Abstracts)**

First/Senior Author

1. Deng MC, Valantine H, Bell S, Huie P, Pinto F, St. Goar F, Hunt S, Stinson E, Sibley R, Popp R. Correlation of Vascular Endothelial Antigen Expression on RV Endomyocardial Biopsy with Intimal Hyperplasia by Intracoronary Ultrasound Imaging (abstr). *Perfusion* 1993;6:167
2. Deng MC, McCook O, Pratt R, Valantine HA. Detection of specific mRNA in formalin-fixed cardiac tissue by in-situ-hybridization with biotinylated oligonucleotides (abstr). *J Histochem Cytochem* 1993;41:1121
3. Deng MC, Bell S, Huie P, Pinto F, St. Goar F, Hunt SA, Stinson EB, Sibley R, Valantine HA. Korrelation von Intima-Hyperplasie (IntH) nach Herztransplantation (HTX) mit Zelloberflächenantigenen (AG), Immunzellphänotypen (PhT), Immunsuppression und Abstossung (abstr). *Z Kardiol* 1994;83(Suppl 1):88
4. Deng MC, Wiedner M, Erren M, Löher A, Assmann G, Scheld HH. Cytokine-profiles during cardiac surgery with extracorporeal circulation (abstr). *Cardiovasc Surg* 1994;2:29
5. Deng MC, Bell S, Huie P, Pinto F, St. Goar F, Hunt SA, Stinson EB, Sibley R, Valantine HA. Correlation of Cardiac Allograft Vasculopathy with Cell Surface Antigens, Immune Cells, Immunosuppression and Rejection (abstr). *Eur Heart J* 1994;15:275
6. Deng MC, Gradaus R, Weyand M, Rahmel A, Hammel D, Hoffmeier A, Frye K, Günther F, Kerber S, Stadlbauer T, Block M, Haverkamp W, Roeder N, Breithardt G, Scheld HH. Patients on the Waiting List for Cardiac Transplantation: Is a High Risk Subgroup Identifiable at Initial Evaluation (abstr)? *Thorac Cardiovasc Surgeon* 1995;43(Suppl. I):137
7. Deng MC, Dasch B, Erren M, Wiedner M, Möllhoff T, Assmann G, and Scheld HH. Does the Magnitude of Cytokine Response to Extracorporeal Circulation for Elective CABG Correlate with Extent of Preoperative Left Ventricular Dysfunction (abstr)? *Thorac Cardiovasc Surgeon* 1995;43(Suppl. I):111
8. Deng MC, Lütgen A, Erren M, Brisse B, Assmann G, Breithardt G, Scheld HH. Interleukin(IL)-6, IL-2-Rezeptor-, Tumor-Nekrose-Faktor- $\alpha$ - und IL-2-Muster korrelieren mit dem Grad der

- chronischen Herzinsuffizienz (abstr). *Z Kardiol* 1995;84(Suppl.I):10
9. Deng MC, Gradaus R, Weyand M, Rahmel A, Hammel D, Günther F, Kerber S, Block M, Haverkamp W, Roeder N, Breithardt G, Scheld HH. Bei Herztransplantationskandidaten ist zum Listungszeitpunkt eine 1-Jahres-Überlebenschance <50% abschätzbar (abstr). *Z Kardiol* 1995;84(Suppl.I):181
  10. Deng MC, Erren M, Dasch B, Möllhoff T, Scheld HH. Cytokine patterns, hemodynamics and clinical course in patients with left ventricular dysfunction undergoing elective CABG (abstr). *Eur Heart J* 1995;16 (Abstr Suppl):254
  11. Deng MC, Brisse B, Erren M, Khurana C, Breithardt G, Scheld HH. Neurohumoral-immunologische Aktivierung unter Spiroergometrie ist stärker bei ischämischer als bei dilatativer Kardiomyopathie (abstr). *Z Kardiol* 1995;84:Suppl.3:46
  12. Deng MC, Dasch B, Erren M, Wiedner M, Möllhoff T, Assmann G, and Scheld HH. Impaired preoperative left ventricular function predicts increased cytokine response to extracorporeal circulation for elective CABG (abstr). *Cardiovasc Surg* 1995;abstr suppl:49
  13. Deng MC, Kämmerling L, Erren M, Günther F, Kerber S, Breithardt G, Scheld HH. Zytokinverläufe als Prädiktoren des letalen Verlaufes nach Herztransplantation (abstr). *Intensivmed* 1995;32(Suppl 1):41
  14. Deng MC, Dreimann V, Erren M, Günther F, Kerber S, Baba HA, Breithardt G, Assmann G, Scheld HH. T-Cell Subsets, Immunocompetent Monocytes, and Interleukin-6 are Associated With Diastolic Dysfunction Early After Cardiac Transplantation (abstr). *J Heart Lung Transplant* 1996;15:S59
  15. Deng MC, Breithardt G, Scheld HH. Impact of prognostic factors on the treatment strategy in heart failure. *J Anästhes Intensiv* 2/1996;21-22
  16. Deng MC, Tamminga N, Erren M, Weyand M, Hammel D, Scheld HH. Novacor-Langzeit-Linksherzunterstützung: Anhaltende Interleukin-6- und Entzündungsaktivierung sowie temporäre Immunsuppression (abstr). *Z Kardiol* 1996;85(Suppl):76
  17. Deng MC, Wilhelm M, Weyand M, Hammel D, Kerber S, Breithardt G, Scheld HH. NOVACOR N 100 Unterstützungssystem: Belastungsprotokoll mit Pumpenfrequenzsenkung zur Abschätzung der Funktionsreserve des linken Ventrikels (abstr). *Thorac Cardiovasc Surg* 1997;45:146
  18. Deng MC, Tamminga N, Erren M, Soeparwata R, Tjan TD, Hammel D, Weyand M, Scheld HH. Chronische linksventrikuläre Unterstützung geht mit anhaltender Interleukin-6-assoziiierter Inflammation sowie temporärer Immunsuppression einher (abstr). *Thorac Cardiovasc Surg* 1997;45:146
  19. Deng MC, Wilhelm M, Weyand M, Hammel D, Kerber S, Breithardt G, Scheld HH. Novacor N 100 LVAS: Pump rate challenge protocol to test native left ventricular functional reserve (abstr). *J Heart Lung Transplant* 1997;16:94
  20. Deng MC, Tamminga N, Erren M, Weyand M, Hammel D, Scheld HH. Persistent inflammation and temporary immunosuppression in LVAS-patients: implications for management (abstr). *J Heart Lung Transplant* 1997;16:105
  21. Deng MC, Erren M, Dreimann V, Rotering H, Breithardt G, Assmann G, Scheld HH. Serial immune monitoring as a guide to management early after cardiac transplantation (abstr). *Shock* 1997;103
  22. Deng MC, Schlathölder K, Erren M, Süßmilch S, Assmann G, Scheld HH. Transforming growth factor  $\beta$  ist supprimiert während extrakorporaler Zirkulation (abstr). *Z Kardiol* 1997;
  23. Deng MC, Wilhelm M, Weyand M, Hammel D, Kerber S, Breithardt G, Scheld HH. Die

- Funktionsreserve des linken Ventrikels unter Belastung kann isoliert bestimmt werden (abstr). *Z Kardiol* 1997;
24. Deng MC, Binding N, Müller W, Kamp M, Hillebrand U, Kösters E, Witting U, Scheld HH. Der Stickstoff-Monoxid-Konzentrationsanstieg in der Ausatemluft während Fahrradergometer-Belastung ist bei transplantationsbedürftiger Herzinsuffizienz beschleunigt (abstr). *Z Kardiol* 1997;
  25. Deng MC, Erren M, Leschnik J, Hoffmann N, Brisse B, Scheld HH. Interleukin-6 response to milrinone and enalapril in heart failure (abstr). *Circulation* 1997;96:I-322
  26. Deng MC, Plenz G, Song ZF, Reichenberg S, Tjan TDT, Roeder N, Robenek H, Scheld HH. Linksventrikuläre Interleukin-6-messenger-RNA ist stärker exprimiert bei idiopathisch-dilatativer als bei ischämischer Kardiomyopathie (abstr). *Thorac Cardiovasc Surg* 1998;46:206
  27. Plenz G, Song ZF, Reichenberg S, Tjan TD, Roeder N, Asfour B, Robenek H, Deng MC. Bei terminaler Herzinsuffizienz korreliert die ventrikuläre Interleukin-6-Gen-Expression mit dem Grad der Pumpfunktionsstörung (abstr). *Z Kardiol* 1998;87:120\*
  28. Deng MC, Erren M, Tjan TDT, Roeder N, Asfour B, Süßmilch S, Schlathölter K, Schlüter B, Möllhoff T, Loick HM, Schmidt C, Scheld HH. Kontrastierende Regulation der antiinflammatorischen Zytokine Transforming Growth Factor  $\beta$  und Interleukin-10 bei Herzoperationen. *Z Kardiol* 1998;87:233
  29. Deng MC, Tjan TDT, Roeder N, Weyand M, Hammel D, Schmid C, Kerber S, Schmidt C, Breithardt G, Scheld HH. Should left ventricular assist devices be implanted earlier in the course of heart transplant candidacy (abstr)? *Eur Heart J* 1998;19:640
  30. Erren M, Kötting S, Willecke P, Junker R, Schlüter B, Kwiotek R, Tjan TDT, Deng MC. Implantation of left ventricular assist device (LVAD) is associated with temporary T cell immunosuppression (abstr). *J Invest Surg* 1998;11:239\*
  31. Erren M, Kötting S, Willecke P, Junker R, Schlüter B, Kwiotek R, Tjan TDT, Deng MC. Comparison of immunological parameters between between left ventricular assist device (LVAD) and coronary artery bypass patients pre and post surgery (abstr). *J Invest Surg* 1998;11:240\*
  32. Plenz G, Borgmeier D, Tjan TDT, Robenek H, Deng MC. Differential type VIII collagen mRNA expression in endstage idiopathic dilated and ischemic cardiomyopathy (abstr). *Eur Heart J* 1998;19:519\*
  33. Plenz G, Borgmeier D, Tjan B, Robenek H, Hammel D, Scheld HH, Deng MC. Herabregulation des kardialen Typ VIII Kollagen bei Kardiomyopathie im Endstadium (abstr). *Thor Cardiovasc Surg* (in press)\*
  34. Baba HA, Schmid C, August C, Schmid KW, Tjan TDT, Deng MC. Reversal of subendocardial metallothionein expression and myocyte diameter after prolonged left ventricular assist device support (abstr). *J Am Coll Cardiol* 1999;33(supplA):21A\*
  35. Baba HA, Tjan TDT, August C, Asfour B, Plenz G, Schmid C, Schmid KW, Hammel D, Weyand M, Scheld HH, Deng MC. Metallothionein is involved in reverse remodelling after prolonged left ventricular assist device support (abstr). *J Heart Lung Transplant* 1999;18:57\*
  36. Plenz G, Song ZF, Reichenberg S, Tjan TD, Borgmeier D, Robenek H, Deng MC. Funktionelle Bedeutung der atrialen Interleukin-6-Gen-Expression bei fortgeschrittener Herzinsuffizienz (abstr). *Z Kardiol* 1999;88:62
  37. Baba HA, Tjan TDT, August C, Asfour B, Plenz G, Schmid C, Schmid KW, Hammel D, Weyand M, Scheld HH, Deng MC. Metallothionein ist am "Reverse Remodeling" nach langzeitiger linksventrikulärer Kreislaufunterstützung beteiligt (abstr). *Z Kardiol* 1999;88:198

38. Erren M, Schlüter B, Junker R, Kötting S, Willeke P, Arlt M, Dietl KH, Marmann P, Reinbold T, Tjan TDT, Deng MC. Immunologische Effekte bei Implantation linksventrikulärer Assistsysteme (LVAD) (abstr). *Z Kardiol* 1999;88:221
39. Erren M, Schlüter B, Junker R, Kötting S, Willeke P, Arlt M, Dietl KH, Marmann P, Reinbold T, Tjan TDT, Deng MC. Immunologische Effekte bei Implantation der Assistsysteme (LVAD) Novacor® und TCI Heartmate® (abstr). *Z Kardiol* 1999;88:221
40. Rothenburger M, Erren M, Scheld HH, Deng MC. Einfluss von Linksherzunterstuetzungssystemen und aortokoronarer Bypass-Operationen auf die zellulaere und humorale Immunantwort. *TxMed* 1999;Supplement:19
41. Rothenburger M, Erren M, Scheld HH, Deng MC. Eosinophilie bei Patienten nach Implantation eines Linksherzunterstuetzungssystems im Vergleich zur orthotopen Herztransplantation. *TxMed* 1999;Supplement:90
42. Plenz G, Song ZF, Scheld HH, Borgmeier D, Baba HA, Erren M, Robenek H, Deng MC. Load-dependent upregulation of the atrial interleukin-6 gene in advanced human heart failure (abstr). *J Heart Lung Transplant* 2000;19:80
43. Plenz G, Borgmeier D, Tjan TDT, Asfour B, Robenek H, Hammel D, Scheld HH, Deng MC. Cardiac type VIII collagen mRNA is downregulated in advanced heart failure (abstr). *J Heart Lung Transplant* 2000;19:95
44. Deng MC, De Meester JMJ, Smits JMA, Heinecke J, Scheld HH, on behalf of COCPIT Study Group. The impact of heart failure severity on outcome in cardiac transplant recipients (abstr). *J Cardiac Fail* 2000;6(Supple 2):66
45. Angermann CE, Costard-Jaeckle A, Deng MC, for the EFICAT Investigators. Efficacy and safety of carvedilol in severe heart failure patients accepted for heart transplantation (abstr). *J Am Coll Cardiol* 2001;37(Suppl A):179A
46. Angermann CE, Costard-Jaeckle A, Deng MC, for the EFICAT Investigators. Is Carvedilol Safe and Efficacious in Severe Heart Failure Patients Accepted for Heart Transplantation (abstr)? *J Heart Lung Transplant* 2001;20:25
47. Plenz G, Weissen B, Seiler P, Robenek H, Scheld HH, Deng MC. Myocardial upregulation of the common signal transducer of interleukin-6 cytokines, gp130, in advanced heart failure (abstr). *Z Kardiol* 2001;90(Suppl 2):II/205
48. Deng MC, Smits JMA, De Meester JMJ, Mohacsi P, Gelijns A, Moskowitz A, Levin B, Scheld HH. Advanced Heart Failure Registries (abstr). *Z Kardiol* 2001;90(Suppl 2):II/3
49. Deng MC, Rose EA, Packer M. Do We Need An Ambulatory Heart Failure Clinic (abstr)? *Z Kardiol* 2001;90(Suppl 2):II/308
50. Deng MC, Hauff H, Itescu S, Taranto S, Scully B, Brown RS Jr., Smits J, Edwards NM. The seropositive Donor Heart (abstr). *J Heart Lung Transplant* 2002;21:160
51. Angerman CE, Costard-Jaeckle A, Deng MC. Carvedilol Increases Ejection Fraction and Decreases Left Ventricular Diameters in Patients With Severe Heart Failure of Ischemic and Nonischemic Etiology: Results From the EFICAT Multicenter Trial (abstr). *J Am Coll Cardiol* 2003;41:195A
52. Labarrere CA, Lee JB, Miller SJ, Siddiqui RA, Brizendine EJ, Pitts DE, Hormuth DA, Deng MC. Interleukin-6 and risk of coronary artery disease and graft failure in heart transplant recipients (abstr). *J Heart Lung Transplant* 22;2003:S164

53. Baron H, Lewis ER, Skopicki HA, Qu X, Plenz G, Eschert H, Deng MC. Potential Initiation of the Myocardial IL6/gp130 Survival Pathway via Toll Receptors After Experimental Myocardial Infarction (abstr). *Z Kardiol* 2003; 92(Suppl 1): 371
54. Deng MC, Mehra MC, Eisen HJ, Billingham M, Berry G, Marboe G, Itescu S, Johnson F, Kobashigawa J, Wohlgemuth JG, Quertermous T, Hunt S. Cardiac allograft monitoring using a novel clinical algorithm based on peripheral leukocyte gene expression profiling (abstr). *Circulation* 2003;108:IV-398
55. Mehra MC, Kobashigawa J, Hunt S, Eisen HJ, Starling R, Johnson F, Murali S, Zeevi A, Pauly D, Wohlgemuth JG, Morris MS, Woodward R, Deng MC. Molecular testing and prediction of clinical outcome in heart transplantation: A prospective multicenter trial (abstr). *J Heart Lung Transplant* 2004;23:S106
56. Deng MC, Mehra M, Hunt S, Valentine H, Miner R, Phillips J, Wohlgemuth JG, Chernoff D, Woodward E, Eisen HJ. Leukocyte gene expression signature of CMV viremia in cardiac allograft recipients is distinct from that seen during allograft rejection (abstr). *Am J Transplant* 2004;4e(suppl. 8):455
57. Labarrere CA, DiCarlo HL, Ortiz MA, Campana GL, Sosa MJ, Terry CL, Pitts DE, Hormuth DA, Deng MC. Inflammatory cytokines, C-reactive protein and cardiac allograft vasculopathy (abstr). *Am J Transplant* 2005 (in press)
58. Deng MC, Cadeiras M, Baron HM, Marboe CC, Starling RC, Eisen H, Valentine H, Hunt SA, Kobashigawa J, Mehra MR, Pauly DF, Murali S, Mital S, Berry G, Billingham M, Wohlgemuth J, Dedrick R. Early Detection of Cardiac Allograft Vasculopathy Through Gene Expression Profiling - Insights of the CARGO Study (abstr). *J Heart Lung Transplant* 2006;25:S98
59. Zeevi A, Dedrick RL, Rosenberg S, Starling R, Cadeiras M, Deng MC. Gene expression profiles of peripheral blood cells reflect multiple molecular pathways and distinct mechanisms associated with cardiac allograft rejection (abstr). *J Heart Lung Transplant* 2006;25:S140
60. Labarrere CA, Ortiz MA, Campana G, Sosa MJ, Terry C, Pitts DE, Hormuth DA, Deng MC. Myocardial interleukin-6 expression is associated with elevated C-reactive protein and cardiac allograft vasculopathy (abstr). *J Heart Lung Transplant* 2006;25:S106
61. Cadeiras M, Lim WK, Bayern M, Li JF, Baron HM, Marboe CC, Wohlgemuth J, Tabak E, Suciufoca N, Dedrick R, Califano A, Deng MC. Gene expression profiles during the first months after cardiac transplantation might predict longterm development of cardiac allograft vasculopathy (abstr). *Am J Transplant* 2006;6(Suppl.2):144
62. Deng MC, Cadeiras M, Lim WK, Baron HM, Marboe CC, Starling R, Eisen H, Hunt SA, Kobashigawa J, Mehra MR, Pauli D, Murali S, Wohlgemuth J, Klingler T, Dedrick R, Califano A. Reconstructing the CREB-network from 285 leukocyte-Oarrays in CARGO yields insight into transcription factor function during quiescence and rejection (abstr). *Am J Transplant* 2006; 6(Suppl.2):423
63. Li JF, Bayern M, Cadeiras M, Colovai AI, Dedrick R, Deng MC. Interleukin-4 induces expression of the cell surface inhibitory receptor G6B-B gene in peripheral CD4+ lymphocytes (abstr). *Am J Transplant* 2006;6(Suppl.2):361
64. Deng MC, Cadeiras M, Lim WK, Bayern M, Sinha A, Li JF, Baron HM, Rosenberg S, Dedrick R, Klingler T, Marboe CC, Suciufoca N, Califano A. CAMP-responsive element binding protein CREB molecular network is differentially enriched during rejection and quiescence in heart transplant recipients (abstr). *Circulation* 2006;114(Suppl II):II-55
65. Cadeiras M, Gangadin A, Bayern M, Baron HM, Dedrick R, Califano A, Marboe CC, Deng MC. Peripheral blood leukocyte gene expression signatures of antibody-mediated cardiac allograft

- rejection (abstr). *Am J Transplant* 2007 (in press)
66. Cadeiras M, Bayern M, Kim L, Wang H, Groff D, Gruber D, Restaino S, Mital S, Addonizio L, Marboe CC, Deng MC. Molecular testing score may correlate with cardiac allograft function (abstr). *Am J Transplant* 2007 (in press)
  67. Yala SM, Cadeiras M, Bayern M, Gangadin A, Naka Y, Carron N, Mancini DM, Giardina EV, Deng MC. Can we optimize the evaluation and treatment of women with end-stage heart failure? (abstr). *Am J Transplant* 2007 (in press)
  68. Gangadin A, Cadeiras M, Bayern M, Baron HM, Dedrick R, Califano A, Marboe CC, Deng MC. Gene Expression Profiling in patients with antibody-mediated rejection (abstr). *J Heart Lung Transplant* 2007;26:S136
  69. Deng MC, Sinha A, Cadeiras M, Bayern M, Lim W, Dedrick R, Klingler T, Marboe CC, Califano A. Unmasking networks to identify key regulatory modules during rejection and quiescence. A systems biology approach to heart transplantation (abstr). *J Heart Lung Transplant* 2007;26:S81
  70. Yala SM, Cadeiras M, Bayern M, Gangadin A, Naka Y, Mancini DM, Giardina EV, Deng MC. Gender related considerations in patients referred for heart transplant evaluation (abstr). *Am J Transplant* 2007;26:S208
  71. Deng MC, Cadeiras M, Lim WK, Bayern M, Sinha A, Li JF, Baron HM, Rosenberg S, Dedrick R, Klingler T, Marboe CC, Suci-Foca N, Califano A. Differential regulatory network patterns during rejection and quiescence in peripheral blood mononuclear cell gene signatures (abstr). *J Am Coll Cardiol* 2007 (in press)
  72. Deng MC, Cadeiras M, Lim WK, Bayern M, Sinha A, Li JF, Baron HM, Rosenberg S, Dedrick R, Klingler T, Marboe CC, Suci-Foca N, Califano A. Peripheral blood leukocyte gene expression correlates with cardiac allograft function (abstr). *J Am Coll Cardiol* 2007 (in press)
  73. Shahzad K, Cadeiras M, Latif F, Sinha A, Bayern M, Lal P, Marboe CC, Califano A, Deng MC. Whole genome gene expression profiling of peripheral blood mononuclear cells approach to the identification of patients with cardiac allograft vasculopathy (abstr). *Am J Transplant* 2008;suppl. 2 (vol 8):575
  74. Sinha A\*, Latif F\*, Shahzad K\*, Cadeiras M, von Bayern M, Oz S, Deng MC. Leukocyte Gene Set Enrichment Analysis of the Systemic Inflammatory Response to Mechanical Circulatory Support Device Implantation (abstr). *J Card Fail* 2008 (in press) \* co-first authors
  75. Shahzad K\*, Latif F\*, Sinha A\*, Cadeiras M, von Bayern M, Oz S, Deng MC. Gene Set Enrichment Analysis of hyperbilirubinemia-associated leukocyte expression profiles following Mechanical Circulatory Support Device Implantation (abstr). *J Card Fail* 2008 (in press) \* co-first authors
  76. Deng M C, Halpern B, Wolters H, Cadeiras M, Hicks A, Rowe T, Shahzad K, Klingler T, Eisen H J. Patient-Specific Longitudinal Pattern of AlloMap Test Scores (abstr). *J Heart Lung Transplant* 2009;28: S229
  77. Shahzad K, Latif F, Sinha A, Cadeiras M, Bayern M, Oz S, Deng MC. Whole Transcriptome Analysis of Changes in Immune Function Early after Mechanical Circulatory Support Device Implantation in End Stage Heart Failure Patients (abstr). *J Heart Lung Transplant* 2009;28: S183
  78. Shahzad K, Sladen RN, Latif F, Akashi H, Onat D, Sinha A, Rodriguez A, Wahlander S, Naka Y, Deng MC. Leukocyte gene expression signatures of multiorgan dysfunction after mechanical circulatory support device implantation in patients with heart failure (abstr). *Circulation* (in press)

**15E2) Publications (Abstracts)**

Co-Author

1. Park JW, Warnecke H, Schüler S, Deng M, Hetzer R, Heinrich KW. Veränderungen der frühdiastolischen Ventrikelfunktion bei Abstossungsreaktion nach Herztransplantation: eine prospektive echokardiographische Studie (abstr). *Thorac Cardiovasc Surgeon* 1990;38:23
2. Knieriem HJ, Waggeling H, Schmidt B, Park JW, Deng M, Warnecke H, Gokel MJ. Morphologic changes of the conduction system and peripheral nerves after orthotopic heart transplantation (abstr). *J Heart Lung Transplant* 1991;10:191
3. Kececioglu D, Kehl HG, Deng M, Vogt J. Der Stellenwert der transösophagealen Echokardiographie (TEE) in der Pädiatrie (abstr). *Monatsschr Kinderheilkd* 1994;142:S1-S186
4. Kerber S, Heinemann-Vechtel O, Fechtrup C, Günther F, Budde T, Deng M, Scheld HH, Breithardt G. Coronary compliance in patients following orthotopic heart transplantation: an intravascular ultrasound study (abstr). *Eur Heart J* 1995;16 (Abstr Suppl):118
5. Günther F, Haverkamp W, Deng MC, Kerber S, Scheld HH, Breithardt G. Left ventricular diastolic filling assessed by Doppler echocardiography in the evaluation of patients before heart transplantation compared to peak exercise oxygen consumption (abstr). *Eur Heart J* 1995;16 (Abstr Suppl):208
6. Berendes E, Möllhoff T, Deng M, Loick HM. Low-dose-dopexamine: Effects on splanchnic oxygenation and endotoxin release after cardiopulmonary bypass (abstr). *Crit Care Med* 1996;24(1):A31
7. Kerber S, Heinemann-Vechtel O, Deng MC, Weyand M, Rahmel A, Block M, Scheld HH, Breithardt G. Normalized compliance in coronary artery segments of orthotopic heart recipients: an intravascular ultrasound study 12 and 79 weeks post Htx (abstr). *J Heart Lung Transplant* 1996;15:S46
8. Schmid C, Nabavi DG, Georgiadis D, Hammel D, Deng MC, Weyand M, Scheld HH. Systemic embolization during Novacor LVAD support (abstr). *J Heart Lung Transplant* 1996;15:S87
9. Berendes E, Loick HM, Deng M, Weyand M, Möllhoff T. Dopexamin: Hämodynamik und mesenteriale Perfusion nach extrakorporaler Zirkulation (abstr). *Intensivmed* 1995;32(Suppl 1):25
10. Wilhelm MJ, Hammel D, Block M, Deng M, Möllhoff T., Scheld HH. Sind transvenöse Defibrillatoren für die Arrhythmie-Behandlung bei Herztransplantationskandidaten geeignet? *Schweiz Med Wschr* 1995;125(Suppl. 66):19S
11. Hammel D, Möllhoff T, Weyand M, Deng MC, Scheld HH. Mechanische Unterstützungssysteme in der Therapie des Herzversagens (abstr). *Anaesthesist* 1995;44 (Suppl 1): 18
12. Kerber S, Heinemann-Vechtel O, Block M, Günther F, Janssen F, Fechtrup C, Deng MC, Scheld HH, Breithardt G. Strukturelle und funktionelle koronare Gefäßveränderungen in der Frühphase nach orthotoper Herztransplantation (abstr). *Z Kardiol* 1996;85:65
13. Rahmel A, Kerber S, Deng MC, Jonas M, Heinemann-Vechtel O, Kosch M, Scheld HH, Schober O, Breithardt G. Analyse der regionalen systolischen linksventrikulären (LV)-Funktion nach orthotoper Herztransplantation (abstr). *Z Kardiol* 1996;85:89
14. Vahlensieck U, Boknik P, Deng MC, Knapp J, Linck B, Müller FU, Neumann J, Scheld HH, Schlüter H, Schmitz W, Zidek W. Einfluß von Diadenosin-Hexaphosphat (AP6A) auf die Kontraktionskraft des menschlichen Herzens (abstr). *Z Kardiol* 1996;85:194
15. Berendes E, Loick HM, Allaert S, van Aken H, Deng M, Erren M, Möllhoff. Serum Amyloid A-Freisetzung als Marker der systemischen Inflammation nach extrakorporaler Zirkulation (abstr).

- Anästhesist* 1996;45(Suppl 12):A127
16. Schmid C, Reimann A, Stolle B, Rötger J, Deng M, Hammel D, Soeparwata R, Scheld HH. Ist der prophylaktische Einsatz der IABP bei Patienten mit schlechter linksventrikulärer Funktion sinnvoll? (abstr) *Z Kardiol* 1996;85(Suppl):37
  17. Berendes E, Möllhoff T, Loick HM, Allaert S, Erren M, Deng M, Van Aken H. Serum amyloid A synthesis and release following cardiopulmonary bypass (abstr). *Anesthesiology* 1996;V85, No 3A
  18. Möllhoff T, Berendes E, Hammel D, Deng M, Loick HM. Milrinone improves hemodynamics without increasing splanchnic blood flow before and during cardiopulmonary bypass (CPB) (abstr). *Anesth Analg* 1996;82:S320
  19. Berendes E, Loick HM, Möllhoff T, Erren M, Deng M, Van Aken H. Relationship of endotoxemia, interleukin-6 and acute phase proteins to hemodynamics and body core temperature after open heart surgery. *Anesth Analg* 1997;84:S62
  20. Schmid C, Deng MC, Hammel D, Weyand M, Scheld HH. Left ventricular assist devices – experience with the Novacor and Heartmate system (abstr). *J Heart Lung Transplant* 1997;16:95
  21. Weyand M, Herrmann M, Hammel D, Deng MC, Scheld HH. Computer tomographic (CT)-positive strokes in left ventricular assist (LVAD) recipients: Incidence, pathogenesis and outcome (abstr). *J Heart Lung Transplant* 1997;16:79
  22. Vahlensieck U, Boknik P, Deng MC, Gombosova I, Knapp J, Müller FU, Neumann J, Nacke P, Scheld HH, Schlüter H, Zidek W, Zimmermann N, Schmitz W. Effekt von Diadenosin-Tetraphosphat (AP<sub>4</sub>A) auf die Kontraktionskraft des menschlichen Herzens (abstr). *Z Kardiol* 1997;86(suppl II):101
  23. Berendes E, Möllhoff T, van Aken H, Erren M, Deng M, Weyand M, Loick HM. Effekte von Dopexamin auf Nierenfunktion und systemische Inflammation nach extrakorporaler Zirkulation (abstr). *Anästhesiol Intensivmed Notfallmed Schmerzther* 1997;32:S162
  24. Nabavi DG, Stockmann J, Georgiadis D, Schmid C, Deng M, Droste DW, Kemeny V, Schulte-Altedornburg G, Scheld HH, Ringelstein EB. Risk estimation for thromboembolism in heart transplantation candidates supported with left ventricular assist devices (abstr). *Cerebrovasc Dis* 1997;7(suppl 4):34
  25. Berendes E, Loick, HM, Möllhoff T, Erren M, Deng M, Van Aken H. Beziehung inflammatorischer Mediatoren zu Körpertemperatur und Hämodynamik nach extrakorporaler Zirkulation (EKZ) (abstr). *Intensivmed Notfallmed* 1997;34 (Suppl 1):42
  26. Hillebrand D, Menke M, Brisse B, Fechrup C, Lamp B, Rahmel A, Deng M, Scheld HH, Breithardt G. Quantitative analysis of coronary luminal diameter after endothelium-independent vasodilatation in heart transplant patients during a 3 year follow-up. *Cardiovasc Drugs Ther* 1997 (11) suppl.2, 364
  27. Lieder F, Brisse B, Lamp B, Kleemann A, Borggreffe, Kerber S, Rahmel A, Fechrup C, Deng M, Scheld HH, Breithardt G. Endothelium-dependent coronary artery response to cold-pressor test after heart transplantation. *Cardiovasc Drugs Ther* 1997 (11) suppl.2, 363
  28. Lieder F, Brisse B, Lamp B, Kleemann A, Borggreffe B, Kerber S, Rahmel A, Fechrup C, Deng M, Scheld HH, Breithardt G. Coronary vasomotion in response to sympathetic stimulation by cold pressor test after heart transplantation. *Int Angiol* 1997 (16) suppl.1, 119
  29. Menke M, Hillebrand D, Brisse B, Lamp B, Kleemann A, Deng M, Kerber S, Breithardt G. Follow-up of elevated sympathoadrenergic activity after heart transplantation with normal LV.function-

- Comparison of long-term heart transplant patient and normal controls. *J Heart Fail* 1997 (4) 147
30. Menke M, Hillebrand D, Brisse B, Lamp B, Janssen F, Kleemann A, Kerber S, Deng M, Scheld HH, Breithardt G. Elevated sympathoadrenergic activity after heart transplantation with normal LV-function during a follow-up of 3 years. *Cardiovasc Drugs Ther* 1997 (11) suppl.2, 364
  31. Lamp B, Hammel D, Kerber S, Deng MC, Breithardt G, Block M. Multisite pacing in severe heart failure-how many patients are eligible? *Pace* 1998;21:973
  32. Baba HA, Deng MC, Scheld HH, Böcker W, Schmid KW. In situ localization of metallothionein in biopsies from human heart transplants (abstr). *Eur Heart J* 1998;19:310
  33. Schmid C, Hammel D, Weyand M, Deng MC, Schmidt C, Scheld HH. Ambulatory care of patients with left ventricular assist devices (abstr). *Circulation* 1998;98(suppl):
  34. Schmid C, Hammel D, Weyand M, Deng MC, Schmidt C, Scheld HH. Ambulante Behandlung nach LVAD-Implantation. *TxMed* 1998 Supplement;116
  35. Kerber S, Böckmann J, Reinecke H, Ribbing M, Deng MC, Weyand M, Schmid C, Hammel D. Strukturelle und funktionelle Gefäßwandveränderungen in der Frühphase nach orthotoper Herztransplantation (abstr). *Z Kardiol* 1999;88 (suppl):126
  36. Dorszewski A, Baron H, Deng MC, Plenz G. Expression von Tumor-Nekrose-Faktor- $\alpha$  und Interleukin-6 in stenotischen Läsionen cholesterinreich gefütterter Kaninchen (abstr). *Z Kardiol* 1999;88:162
  37. Klotz S, Schmid C, Vestring T, Roetker J, Deng MC, Scheld HH. Intramesenterical administration of papaverin for mesenteric hypoperfusion after cardiac surgery. *Thorac Cardiovasc Surg* 2000;48(suppl 1):58
  38. Rothenburger M, Soeparwata R, Tjan T, Erren M, Wilhelm M, Deng MC, Kerber S, Schmidt C, Scheld HH. Endotoxin, anti-endotoxin, antibodies, and cytokines following coronary artery bypass grafting using cardiopulmonary bypass. *Thorac Cardiovasc Surg* 2000;48(suppl 1):140
  39. Plenz G, Weissen B, Robenek H, Severs N, Deng M, Scheld H. Alteration of the connexin 40 and 43 expression in advanced heart failure (abstr). *Z Kardiol* 2001;90(Suppl 2):II/131
  40. Baba HA, Schmid C, Deng MC, Levkau B, Grabelius F. Reversible Aktivierung des Transkriptionsfaktors NF-kB im Myokard nach linksventrikulärer mechanischer Unterstützung (abstr). *Z Kardiol* 2001;90(Suppl 2):II/200
  41. Smits JMA, Deng MC, De Meester J, et al, on behalf of the COCPIT study group and the Eurotransplant Heart Transplant Programs. A model to predict waiting list mortality for adult heart transplant candidates (abstr). *Circulation* 2001;104 (Suppl II):II-759
  42. Plenz G, Eschert H, Weissen B, Deng M, Robenek H, Severs N, Breithardt G, Scheld HH. Differential expression of connexins in dilated and ischemic cardiomyopathy (abstr). *Thorac Cardiovasc Surg* 2002 (in press)
  43. Smits JMA, Deng MC, De Meester J, et al, on behalf of the COCPIT study group and the Eurotransplant Heart Transplant Programs. How to improve Prediction of Waiting List Mortality in Heart Transplant Candidates (abstr). *J Heart Lung Transplant* 2002;21:159
  44. Eschert H, Hassanpour A, Musswessels I, Weissen B, Robenek H, Deng MC, Scheld HH, Plenz G. CNTF, CT-1, LIF and gp130 are differentially expressed in DCM and ICM (abstr). *Z Kardiol* 2002;91(Suppl 1):I-102
  45. Trautnitz M, Behr J, Galiano SV, Klauss V, Stempfle HU, Deng M, Klotz S, Costard-Jaeckle A, von

- Scheidt W. Pharmacological testing of reversibility of elevated pulmonary vascular resistance (PVR) with prostaglandin E1 (PGE1) before heart transplantation (Htx): Final results of the preoperative testing of the Multicenter PROPHET study (abstr). *Z Kardiol* 2002;91(Suppl 1):I-30
46. Nakao M, Cho J, Wu R, Lewis E, Lou F, Zheng H, Lui R, Homma S, Deng M, Skopicki HA (abstr). Enhanced Cardiomyocyte transplantation with vascular endothelial growth factor and IGF transduction in a mouse model of acute myocardial infarction. *J Am Coll Cardiol* 2003;41:209A
  47. Marboe CC, Billingham M, Eisen HJ, Feller E, Deng MC, Mehra MC, Hunt S, Wohlgemuth JG, Mahmood I, Morris MS, Berry G. Refining pathological classification of acute rejection in cardiac allograft recipients: A multicenter study using peripheral blood gene expression profiling (abstr). *J Heart Lung Transplant* 2004;23:S42
  48. Mehra M, Deng M, Eisen H, Tayama D, Wohlgemuth J, Hunt S. Distinct molecular pathways are associated with differences in efficacy of tacrolimus and cyclosporine in heart transplantation (abstr). *Transplantation* 2004 (in press)
  49. Bernstein D, Mital S, Addonizio L, Hunt S, Deng MC, Baron H, Murali S, Tayama DY, Klingler TM, Wohlgemuth JG, Webber S. Gene expression profiling of cardiac allograft recipients with mild acute cellular rejection (abstr). *J Heart Lung Transplant* 2005;24:S65
  50. Eisen HJ, Deng MC, Klingler TM, Williams GE, Wohlgemuth JG, Mehra MR (abstr). Longitudinal monitoring of cardiac allograft recipients using peripheral blood gene expression profiling: A retrospective observational analysis of molecular testing in 19 case studies. *J Heart Lung Transplant* 2005;24:S162
  51. Starling RC, Deng MC, Kobashigawa JA, Walther D, Wohlgemuth J, Rosenberg S, Mehra MR. The influence of corticosteroids on the alloimmune molecular signature for cardiac allograft rejection (abstr). *J Heart Lung Transplant* 2005;24:S65
  52. Mehra MR, Kobashigawa JA, Deng MC, Johnson FL, Baron HM, Uber PA, Lal P, Klingler T, Rosenberg S, Eisen HJ. The Clinical Role Of Gene Expression Testing In Anticipating The Future Development Of Acute Cardiac Allograft Rejection (abstr). *J Heart Lung Transplant* 2006;25:S110
  53. Marboe CC, Deng MC, Berry G, Billingham M, Eisen HJ, Pauly D, Baron HM, Klingler T, Lal P, Mahmood I, Wohlgemuth J, Starling R. Increased Molecular Testing Scores Associated with Agreement among Cardiac Pathologists for the Diagnosis of ISHLT 3A and higher Rejection (abstr). *J Heart Lung Transplant* 2006;25:S105
  54. Cheema FH, Aggarwal S, Forster CS, Martens TP, Topkara VK, George I, Russo M, Bailey SH, Paultre F, Esrig B, Oz MC, Mancini DM, Deng MC, Naka Y. UNOS status at the time of heart transplantation predicts long-term survival (abstr). *J Heart Lung Transplant* 2006;25:S44
  55. George I, Colley P, Burke E, Martens T, Morrow B, Russo M, Soneru C, Tabaksblat M, Spadaccio C, Lill Z, Cheema F, Itescu S, Deng MC, Mancini D, Oz MC, Naka Y. Sensitization in axial flow devices versus pulsatile left ventricular assist devices (abstr). *J Heart Lung Transplant* 2006;25:S146
  56. Suciufoca N, Ho E, Scotto L, Lin H, Deng MC, Cadeiras M, Marboe C, Cortesini R, Mancini D. Relationship between cardiac allograft vasculopathy and expression of ILT3, ILT4 and FoxP3 in endomyocardial biopsies (abstr). *J Heart Lung Transplant* 2006;25:S74
  57. Suciufoca N, Vasilescu ER, Colovai AI, Ho E, Medinger L, Deng MC, Cadeiras M, Cortesini R, Marboe C, Itescu S, Mancini D. Anti-HLA antibodies in heart transplantation (abstr). *J Heart Lung Transplant* 2006;25:S154
  58. Russo MJ, Martens TP, Deng MC, Wang R, Argenziano M, Oz MC, Naka Y, Stewart AS. Longer duration of continuous flow ventricular assist device support predicts greater hemodynamic

- compromise with return to pulsatility (abstr). *Circulation* 2006;114(Suppl II):II-484
59. Cooper LT, Hare JM, Tazelaar HD, Starling RC, Deng MC, Menon S, Mullen GM. A prospective treatment trial of immunosuppression for giant cell myocarditis (abstr). *Circulation* 2006;114(Suppl II):II-626
  60. Mehra M, Kobashigawa J, Deng MC, Klingler T, Lal P, Rosenberg S, Uber P, Starling R, Baron H, Wohlgemuth J, Eisen H (abstr). The role of IL1R2 and FLT3 gene expression in cardiac allograft rejection: a precise measure of corticosteroid effect (abstr)? *Circulation* 2006;114(Suppl II):II-709
  61. Bernstein D, Berry G, Billingham M, Marboe CC, Deng MC, Mital S, Eisen H, Williams GE, Baron H, Klingler TM, Wohlgemuth JG, Kobashigawa J. Gene expression profiling distinguishes moderate to severe rejection from mild acute cellular rejection in cardiac allograft recipients (abstr)? *J Heart Lung Transplant* 2007;26:S121
  62. Mehra M, Deng MC, Starling R, Murali S, Pauly D, Lal P, Cadeiras M, Baron H, Rosenberg S, Eisen H. Does induction therapy influence the utility of gene expression testing for cardiac allograft rejection? (abstr)? *J Heart Lung Transplant* 2007;26:S121