



Alias **Jeronimo**

Highest degree:

*Doctorem mathematicae et disciplinarum naturalium*, Leiden University (1994)

Current position:

Deputy and Senior Scientist (permanent position), Group Leader Crystallogenesis,  
Group Leader Structural Neurobiology

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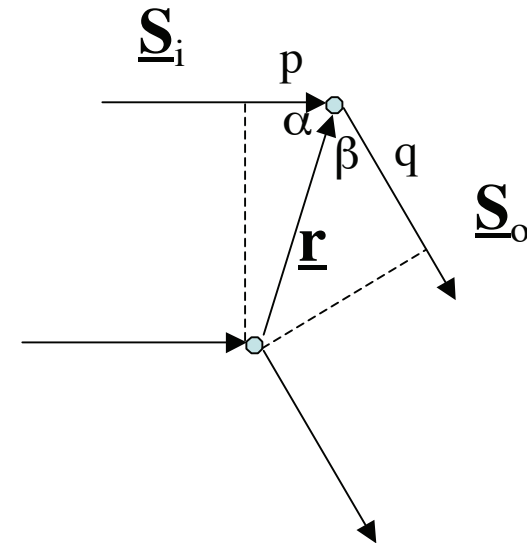
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Current interests:

Macromolecular Crystallography, Virology and Neurobiology

Raised fundings:

DFG, Sachbeihilfe, ME 2741/2 - Viral-gestörter zerebraler Metabolismus  
DFG, Sachbeihilfe, ME 2741/1 - Kdo-Aktivierung und -Transfer in *A. aeolicus*  
DAAD, PPP Tschechien, D/03/44441 - Chemical reactions and interactions inside  
protein crystals  
Totalling > 200 k€



**Role(s):** Visiting Professorship in Biophysics, University of South Bohemia at Ceske Budejovice  
Secretary of the International Organization for Biological Crystallization (IOBCr)  
X-ray radiation-, biological- and laboratory-safety officer  
Member of the central committee for science and knowledge transfer  
Convent member (Scientific personal representative)  
Promotion committee member  
Webmaster

**Employment:**

02. 03. - present Deputy and Group Leader (permanent position), Institute of Biochemistry (Director: Prof. Dr. R. Hilgenfeld) at the University of Lübeck
12. 98. - 01. 03. Senior Research Assistant (permanent position since May 2000), Structural Biology and Crystallography group (Head: Prof. Dr. R. Hilgenfeld) of the Institute of Molecular Biotechnology (*i.e.* Fritz Lipmann Institute) in Jena
09. 94. - 11. 98. Post-Doc (Funding 'Human Capital and Mobility' and bmb+f, Molekulare Naturstoffforschung) at the Structural Biology and Crystallography group (Head: Prof. Dr. R. Hilgenfeld) of the Institute of Molecular Biotechnology in Jena

**Education:**

08. 87. - 06. 94. Ph.D. studies at Leiden University (with Dr. B. Kraal and Prof. Dr. L. Bosch).  
Degree: *doctorem mathematicae et disciplinarum naturalium*  
Title Ph.D. thesis: GTP binding proteins and polypeptide chain elongation
09. 81. - 07. 87. Bio-Chemistry studies at Leiden University (with Dr. B. Kraal and Prof. Dr. L. Bosch). Degree: *doctorandus*  
Main topics: Biochemistry, Bioreactor-Technology and Computer Programming

***Publications 2000-2010 (890 times cited, cumm. cit. index 159, h-index 14):***

Wolfova J, Smatanova IK, Brynda J, **Mesters JR**, Lapkouski M, Kutý M, Natalello A, Chatterjee N, Chern SY, Ebbel E, Ricci A, Grandori R, Ettrich R, and Carey J: Structural organization of WrbA in apo- and holo-protein crystals. *BBA-Proteins Proteom.* 9, 1288-1298 (2009).

Mamat U, Schmidt H, Munoz E, Lindner B, Fukase K, Hanuszkiewicz A, Wu J, Meredith TC, Woodard RW, Hilgenfeld R, **Mesters JR**, Holst O: WaaA of the hyperthermophilic bacterium *aquifex aeolicus* is a monofunctional 3-deoxy-D-manno-oct-2-ulosonic acid transferase involved in lipopolysaccharide biosynthesis. *J Biol Chem.* 284, 22248-22262. (Epub online ahead of print: Jun 22, 2009).

Tan J, Vonnrhein C, Smart OS, Bricogne G, Bollati M, Kusov Y, Hansen G, **Mesters JR**, Schmidt CL, Hilgenfeld R: The SARS-unique domain (SUD) of SARS coronavirus contains two macrodomains that bind G-quadruplexes. *PLoS Pathog.* 5, e1000428 (2009).

Ponnusamy R, Moll R, Weimar T, **Mesters JR**, Hilgenfeld R: Variable oligomerization modes in coronavirus non-structural protein 9. *J Mol Biol.* 383, 1081-1096 (2008). Epub, July 30.

Robel I, Gebhardt J, **Mesters JR**, Gorbalenya A, Coutard B, Canard B, Hilgenfeld R, Rohayem J: Functional characterization of the cleavage specificity of the Sapovirus chymotrypsin-like protease. *J Virol.* 82, 8085-8093 (2008).

**Mesters JR**, Hilgenfeld R: Glutamate Carboxypeptidase II. In: *Handbook of Metalloenzymes Online Edition* (Ed. A. Messerschmidt). Wiley Interscience (2008).

Verschueren KHG, Pumpor K, Anemüller S, Chen S, **Mesters JR**, Hilgenfeld R: A Structural View of the Inactivation of the SARS-coronavirus main proteinase by benzotriazole esters. *Chem Biol.* 15, 597-606 (2008).

**Mesters JR**, Hilgenfeld R: Protein glycosylation, sweet to crystal growth? *Crystal Growth Design* 7 (ICCBM11 issue), 2251-2253 (2007). Epub, Oct 24.

Wolfova J, **Mesters JR**, Brynda J, Grandori R, Natalello A, Carey J, Smatanova IK: Crystallization and preliminary diffraction analysis of *E. coli* WrbA in complex with its cofactor flavin mononucleotide. *Acta Crystallogr.* F63, 571-575 (2007). Epub, June 11.

**Mesters JR**, Henning K, Hilgenfeld R: Human glutamate carboxypeptidase II inhibition: crystal structures of GCPII in complex with two potent inhibitors, quisqualate and 2-PMPA. *Acta Crystallogr.* D63, 508-513 (2007). Epub, Mar 16.

### **Mesters JR**

Practical protein crystallization. In: *Principles of Protein X-Ray Crystallography (Third Edition)* by Jan Drenth. Chapter 16, pp. 297-304. Springer Science+Business Media LLC, New York (2006).

**Mesters JR**, Tan J, Hilgenfeld R: Viral enzymes. *Curr Opin Struct Biol.* 16, 776-786 (2006). Epub, Nov 3.

Hilgenfeld R, Anand K, **Mesters JR**, Rao Z, Shen X, Jiang H, Tan J, Verschueren KGH: Structure and dynamics of SARS coronavirus main proteinase, (Mpro). *Adv Exp Med Biol.* 581, 585-591 (2006). Nidovirus conference book, Colorado Springs (June 2005), USA.

Ponnusamy R, **Mesters JR**, Ziebuhr J, Moll R, Hilgenfeld R: Non-structural proteins 8 and 9 of human coronavirus 229E. *Adv Exp Med Biol.* 581, 49–54 (2006). Nidovirus conference book, Colorado Springs (June 2005), USA.

Matthes N, **Mesters JR**, Coutard B, Canard B, Snijder EJ, Moll R, Hilgenfeld R: The non-structural protein Nsp10 of Mouse Hepatitis Virus binds zinc ions and nucleic acids. *FEBS Lett.* 580, 4143–4149 (2006).

Ondráček J, **Mesters JR**: Ensemble of crystallographic models enabled description of novel bromate-oxoanion species, trapped within a protein crystal. *Acta Crystallogr.* D62, 996–1001 (2006).

Al-Gharabli SI, Ali Shah ST, Weik S, Schmidt FM, **Mesters JR**, Kuhn D, Klebe G, Hilgenfeld R, Rademann J: An efficient method for the synthesis of peptide aldehyde libraries employed in the discovery of reversible SARS corona virus main protease (SARS-CoV Mpro) inhibitor. *ChemBioChem* 7, 1048–1055 (2006).

**Mesters JR**, Barinka C, Li W, Tsukamoto T, Majer P, Slusher BS, Konvalinka J, Hilgenfeld R: Structure of glutamate carboxypeptidase II, a drug target in neuronal damage and prostate cancer. *EMBO J.* 25, 1375–1384 (2006). Epub, Feb 9.

Tan J, Verschueren KH, Anand K, Shen J, Yang M, Xu Y, Rao Z, Bigalke J, Heisen B, **Mesters JR**, Chen K, Shen X, Jiang H, Hilgenfeld R: pH-dependent conformational flexibility of the SARS-CoV main proteinase (M(pro)) dimer: molecular dynamics simulations and multiple X-ray structure analyses. *J Mol Biol.* 354, 25–40 (2005). Epub, Sep 23.

Anand K, Ziebuhr J, Wadhvani P, **Mesters JR**, Hilgenfeld R: Coronavirus main proteinase (3CLpro) structure: basis for design of anti-SARS drugs. *Science* 300, 1763-1767 (2003). Epub, May 13.

Weber J, **Mesters JR**, Lepsik M, Prejdova J, Svec M, Sponarova J, Mlcochova P, Skalicka K, Strisovsky K, Uhlikova T, Soucek M, Machala L, Stankova M, Vondrasek J, Klimkait T, Kraeusslich HG, Hilgenfeld R, Konvalinka J: Unusual binding mode of an HIV-1 protease inhibitor explains its potency against multi-drug-resistant virus strains. *J Mol Biol.* 324, 739-754 (2002).

Anand K, Palm GJ, **Mesters JR**, Siddell SG, Ziebuhr J, Hilgenfeld R: Structure of coronavirus main proteinase reveals combination of a chymotrypsin fold with an extra alpha-helical domain. *EMBO J.* 21, 3213-3224 (2002).

Hogg T, **Mesters JR**, Hilgenfeld R: Inhibitory mechanisms of antibiotics targeting elongation factor Tu. *Curr Protein Pept Sci.* 3, 121-131 (2002).

**Mesters JR**, Hogg T, Hilgenfeld R: G proteins. In: *Encyclopedia of Life Sciences*. Macmillan (Nature), London, 2001 ([www.els.net](http://www.els.net)).

Vogele L, Palm GJ, **Mesters JR**, Hilgenfeld R: Conformational change of elongation factor Tu (EF-Tu) induced by antibiotic binding. Crystal structure of the complex between EF-Tu.GDP and aurodox. *J Biol Chem.* 276, 17149-17155 (2001). Epub, Jan 30.

Zuurmond AM, Martien de Graaf J, Olsthoorn-Tieleman LN, van Duyl BY, Morhle VG, Journak F, **Mesters JR**, Hilgenfeld R, Kraal B: GE2270A-resistant mutations in elongation factor Tu allow productive aminoacyl-tRNA binding to EF-Tu:GTP:GE2270A complexes. *J. Mol. Biol.* 304, 995-1005 (2000).

Hilgenfeld R, **Mesters JR**, Hogg T: Insights into the GTPase Mechanism of EF-Tu from Structural Studies. In: The Ribosome. Structure, Function, Antibiotics, and Cellular Interactions, eds. R.A. Garrett, S.R. Douthwaite, A. Liljas, A.T. Matheson, P.B. Moore, and H.F. Noller. Chapter 28, pp. 347-357. ASM Press, Washington DC (2000).

***Oral Presentations 2001-2010:***

Wie entstehen neue Influenzaviren, Öffentlicher Vortrag in der Vertretung des Landes Schleswig-Holstein beim Bund, Exzellenzkluster Entzündungsforschung, 21. April 2010, Berlin

Crystal growth techniques: Vapor diffusion, Microbatch under oil, Counterdiffusion, The ISBC *ensemble* A. McPherson, J. Ng, J. Mesters, J.A. Gavira, International School on Biological Crystallization (ISBC), May 18-22, 2009, Granada

On the use of seeding techniques, International School on Biological Crystallization (ISBC), May 18-22, 2009, Granada

Conventional Crystallization and its modifications, FEBS Advance Course „Advanced methods in macromolecular crystallization III“, October 3-10, 2008, Nove Hradý

Pre-crystallization stage: handling of protein solutions, International School on Protein Crystallization (ISPC) at ICCBM12, May 3-9, 2008, Cancun

Membrane protein crystallization, School of Crystallization at the Laboratory for Structural Biology of Infection and Inflammation, July 2007, Hamburg

Nucleation and growth of protein crystals, School of Crystallization at the Laboratory for Structural Biology of Infection and Inflammation, July 2007, Hamburg

Pre-crystallization stage: bio-informatics & protein preparation, School of Crystallization at the Laboratory for Structural Biology of Infection and Inflammation, July 2007, Hamburg

**Glycosylated proteins: challenges in crystallization, Practical Protein Crystallization 9 (PPC9), November 13-17, 2006, Uppsala**

**Conventional techniques and their modifications, Practical Protein Crystallization 9 (PPC9), November 13-17, 2006, Uppsala**

**Pre-crystallization stage: bioinformatics and protein preparation, Practical Protein Crystallization 9 (PPC9), November 13-17, 2006, Uppsala**

**Conventional crystallization methods and their modifications (using oils), FEBS PLC „Advanced methods in macromolecular crystallization II“, October 6-13, 2006, Nove Hrad**

**Structural evolution of Ritonavir Resistance in HIV-1 Proteinase, Fourth ICAV International and First Pacific Rim ICAV Meeting, September 23-25, 2006, Brisbane**

**Glutamate carboxypeptidase II, a drug target in neuronal damage and prostate cancer, Centre de Recherche du CHUL (Université LAVAL), August 19, 2006, Quebec**

**Protein glycosylation, a problem in crystal growth?, International School on Protein Crystallization (ISPC) at ICCBM11, August 14-16, Quebec**

**Pre-crystallization stage: bio-informatics & protein preparation International School on Protein Crystallization (ISPC) at ICCBM11, August 14-16, 2006, Quebec**

**Interest of macromolecular crystallization in pharmaceutical industry, International School on Protein Crystallization (ISPC), May 22-26, 2006, Granada**

**Post-translational modifications and additives in protein crystal growth, International School on Protein Crystallization (ISPC), May 22-26, 2006, Granada**

**Structural Evolution of Ritonavir-resistance in HIV-1 Proteinase, International Workshop on Discovery of Antiviral Compounds, April 26-29, 2006, Lübeck**

**The good, bad and ugly: About proteins, buffers and crystals, Vizier Workshop, February 2006, Leuven**

**Domain design and Prediction, Vizier Workshop, February 2006, Leuven**

Following the emergence of HIV drug resistance mutations by X-ray crystallography, HASYLAB Users Meeting, January 27, 2006, Hamburg

Model building, Vizier Training Workshop on Structural Biology, December 15-16, 2005, Hamburg

EF-Tu, a GTPase switch molecule in protein biosynthesis as an antibiotic target, Bayer HealthCare, October 2005, Wuppertal

Additives in crystal nucleation and growth, Crystallization Course (CC2005), October 2005, Nove Hradý

Diffraction theory, Crystallization Course (CC2005), October 2005, Nove Hradý

The principles of crystallography, Crystallization Course (CC2005), October 2005, Nove Hradý

Conventional crystallization methods and their modifications (using oils), Crystallization Course (CC2005), October 2005, Nove Hradý

Macromolecular Crystallography, 1st EuCheMS School on Protein chemistry (FECS), January 9 -14, 2005, Bressanone/Brixen

Ritonavir-resistance evolution, a structural exploration, joint HIV-PR inhibitors and Virulence Meeting, EU 5th Framework Projects, October 2004, Budapest

Carboxy- and aminopeptidases with dinuclear zinc centers: Structures, catalytic mechanism and inhibition, SFB 436 Microsymposium, October 2004, Jena

Conventional crystallization methods and their modifications (using oils), FEBS PLC „Advanced methods in macromolecular crystallization“, October 2004, Nove Hradý

Bio-Crystallography in Lübeck, 1<sup>st</sup> Baltic Sea Biocrystallography Meeting (BSBC1), September 2004, Travemünde

Ritonavir-resistance evolution, a structural exploration, HIV-PR inhibitors Meeting, EU 5th Framework Project, May 2004, Heidelberg

Glycosylation can be important for crystallization, DGK DGKK Meeting March 2004, Jena

Phasing, Crystallization Course (CC2003), October 2003, Nove Hradý

Diffraction theory, Crystallization Course (CC2003), October 2003, Nove Hradý

The principles of crystallography, Crystallization Course (CC2003), October 2003, Nove Hradý  
Structure of Membrane Glutamate Carboxypeptidase II, a Multifunctional Protein in Prostate and Brain,  
SFB604 and GK768 Microsymposium, September 2003, Jena  
Bio-Crystallography in Lübeck, 6<sup>th</sup> Heart of Europe Meeting on Bio-Crystallography, September 2003,  
Wittenberg  
HIV PR Inhibitor with Broad Specificity Displays Unusual Binding Mode, Department of Biochemistry and  
Molecular Biology, University of Hamburg, January 2003, Hamburg  
The role of zinc in protein structure and function, Berliner Herbsttagung, Hahn-Meitner-Institut,  
November 2002, Berlin  
Crystallization and Harvesting Tips, XIX IUCr Congress - Pre-Conference-Workshop, August 2002,  
Geneva  
EF-Tu-aurodox structure explains enhanced GTPase activity, GTPasen als zentrale Regulatoren zellulären  
Funktionen (DFG Schwerpunktprogramm), September 2001, Berlin

***Post-Doctoral Education:***

DSC training course at Microcal, Milton Keynes, May 13-15, 2008  
X-ray radiation refresher course at Norddeutsches Seminar für Strahlenschutz Kiel, February 25, 2008  
ITC training course at Microcal, Milton Keynes, November 6-8, 2007  
Didactics course at Lübeck University, October 31, 2007  
Biological safety course at Lübeck University, October 13-14, 2003  
X-ray radiation safety course at the LPS in Berlin, November 12-15, 2001  
Training course rotating anode FR591 at Nonius BV, Delft, January 6-8, 1998

***Teaching:***

## **Molecular Life Science**

**Structure Analysis (Bachelor students)**

**Biochemistry (Bachelor students)**

**Biochemistry Practical Course (Bachelor students)**

**Macromolecular Crystallography (Master students)**

**Structural Aspects of Protein Biosynthesis (Master students)**

**Virology (Master students)**

## **Medicine**

**Biochemistry Seminars**

**Biochemistry Practical Course**

## **Crystallogenesis (\* Course organization and management)**

**ICCBM12, May 2008, Qancun\***

**School for Crystallization at the Laboratory for Structural Biology of Infection and Inflammation,  
July 2007, Hamburg\***

**Practical Protein Crystallization PPC9, November 2006, Uppsala**

**ICCBM11, August 2006, Quebec\***

**ISPC/ISBC, May 2006, May 2009, Granada**

**FEBS Advanced Course, October 2004, October 2006, and October 2008, Nove Hradý**

**DGK-DGKK Crystallization Course, March 2004, Jena\***

**ICCBM9, March 2002, Jena\***

**CC2001, CC2003, CC2005, October of each year, Nove Hradý**

### ***Last Century Publications:***

- Krasny L, **Mesters JR**, Tieleman LN, Kraal B, Fueik V, Hilgenfeld R & Jonak J (1998) Structure and expression of elongation factor Tu from *Bacillus stearothermophilus*. *J. Mol. Biol.* 283, 371-381.
- Christian A, Bilgin N, Lindschau C, **Mesters JR**, Kraal B, Hilgenfeld R, Erdmann VA & Lippmann C (1995) Phosphorylation of elongation factor Tu prevents ternary complex formation. *J. Biol. Chem.* 270, 14541-14547.
- Zeef LAH, **Mesters JR**, Kraal B & Bosch L (1995) A growth-defective kirromycin-resistant EF-Tu *E. coli* mutant and a spontaneously evolved suppression of the defect. *Gene* 165, 39-43.
- Kraal B, Zeef LAH, **Mesters JR**, Boon C, Vorstenbosch ELH, Bosch L, Anborgh PH, Parmeggiani A & Hilgenfeld R (1995) Antibiotic resistance mechanisms of mutant EF-Tu species in *E. coli*. *Biochem. Cell Biol.* 73, 1167-1177.
- Mesters JR**, Vorstenbosch ELH, de Boer AJ & Kraal B (1994) Complete purification of tRNA, charged or modified with hydrophobic groups, by using an in-line combination of both a wide-pore C4 and C18 column. *J. Chromatogr. A.* 679, 93-98.
- Mesters JR**, Zeef LAH, Hilgenfeld R, de Graaf JM, Kraal B & Bosch L (1994) The structural and functional basis for the kirromycin resistance of mutant EF-Tu species in *Escherichia coli*. *EMBO J.* 13, 4877-4885.
- Mesters JR**, Potapov AP, de Graaf JM & Kraal B (1994) Synergism between the GTPase activities of EF-Tu:GTP and EF-G:GTP on empty ribosomes. Elongation factors as stimulators of the ribosomal oscillation between two conformations. *J. Mol. Biol.* 242, 644-654.
- Kraal B, Bosch L, **Mesters JR**, de Graaf JM, Woudt LP, Vijgenboom E, Heinstra PWH, Zeef LAH & Boon C (1993) Elongation factors in protein synthesis. The GTPase superfamily (Ciba Foundation Symposium 176, pp. 28-52), eds. J. Marsh and J. Goode. John Wiley & Sons Inc., London.
- Mesters JR**, de Graaf JM & Kraal B (1991) Divergent effects of fluoroaluminates on the peptide chain elongation factors EF-Tu and EF-G. *FEBS. Lett.* 321, 149-152.
- Kraal B, de Graaf JM, **Mesters JR**, van Hoof PJM, Jacquet E & Parmeggiani A (1990) Fluoroaluminates do not affect the guanine-nucleotide binding centre of the peptide chain elongation factor EF-Tu. *Eur. J. Biochem.* 192, 305-309.
- Sweere APJ, **Mesters JR**, Janse L, Luyben KChAM & Kossen NWF (1988) Experimental simulation of oxygen profiles and their influence on the baker's yeast production: I. One-fermentor system. *Biotechnol. Bioeng.* 31, 567-578.
- Sweere APJ, **Mesters JR**, Kossen NWF & Luyben KChAM (1986) Regime analysis of the baker's yeast production. *Proc. Int. Conf. Bioreactor Fluid Dynamics*, 217-230, BHRA, Cambridge.

### ***Last Century Oral Presentations and Posters:***

- Mutations in the fireman's grip of HIV-1 protease. 4. Jenaer Proteolysetag, Erfurt, October 14, 1999.
- Mutations in the fireman's grip of HIV-1 protease. 2<sup>nd</sup> Heart of Europe Meeting on Bio-Crystallography, Lübben Spreewald, September 30 to October 2, 1999.

Refined structure of a model compound for the aminoacylated 3'-end of tRNA, bound to EF-Tu. European Meeting on Elongation Factors, Kemer, Turkey, September 25-28, 1999.

Crystal structure of a ternary complex of elongation factor Tu, a GTP analogue, and a minimal model for aminoacyl-tRNA. The Ribosome Conference, Helsingor, June 13-17, 1999 (Poster).

Peptidomimetic inhibitors of HIV-1 proteinase. Academy of Science, Praha, Czech Republic, April 18-22, 1999.

Stereochemical details of the interaction between HIV-1 proteinase and peptidomimetic inhibitors. 3. Jenaer Proteolysetag, Jena, December 11, 1998.

Four diastereomeric peptidomimetic inhibitors of HIV-1 PR, 1<sup>st</sup> Heart of Europe Meeting on Bio-Crystallography, Walkmühle Mühlthal, October 8-10, 1998.

A crystallographic and molecular modelling study of the potencies of four diastereoisomers of peptidomimetic HIV-1 proteinase inhibitors. 18<sup>th</sup> European Crystallographic Meeting, Prague, August 15-20, 1998.

Resistance to antibiotic MDL 62,879 and amythiamicin: evidence for a novel binding mode to elongation factor Tu. 25th Silver Jubilee FEBS Meeting Copenhagen, Denmark, July 5-10, 1998 (FEBS 98 Abstracts, p. 141, Invited).

Towards crystallization of NO synthases. 3<sup>rd</sup> BMBF group-Meeting, Institute of Pharmacology and Toxicology, Julius-Maximilians University, Würzburg, May 20, 1998.

Towards the design of 3<sup>rd</sup> generation HIV proteinase inhibitors. 2. Jenaer Proteolysetag, Dornburg Thüringen, December 10, 1997.

Structure of *Thermus thermophilus* elongation factor Tu mutants lacking conserved histidine residues. Elongation Factor Meeting, Tällberg, September 17-20, 1997 (Poster).

Resistance elements in the elongation factors Tu from producers of EF-Tu-targeted antibiotics. Elongation Factor Meeting, Tällberg, September 17-20, 1997 (Poster).

Towards crystallization of NO synthases. 2<sup>nd</sup> BMBF group-Meeting, Hoechst Marion Roussel, Frankfurt a.M., June 10, 1997.

Protein-protein interactions in EF-TU\*GDP crystals. Human Capital and Mobility Network on Molecular Mechanisms of Elongation Factor Tu, Island of Spetses, May 20-24, 1997 (Poster).

Elongation factor Tu as a target for antibiotics. Jahrestagung der Gesellschaft für Kristallographie, Hamburg, May 10-12, 1997.

Towards crystallization of NO synthases. 1<sup>st</sup> BMBF group-Meeting, Hoechst Marion Roussel, Frankfurt a.M., June 16, 1996.

Structural studies on *Thermus thermophilus* EF-Tu mutants and complexes. Jahrestagung der Deutsche Gesellschaft für Biophysik, Leipzig, September 18-20, 1996 (Best Poster Award)

Elongation factor Tu as a target for antibiotics. Jahrestagung der Deutsche Gesellschaft für Biophysik, Leipzig, September 18-20, 1996 (Poster).

Creating a hole in a protein: The three-dimensional structure of the C82A mutant of EF-Tu. 3<sup>rd</sup> EU-Network Meeting on Elongation factor Tu, a regulatory GTPase under normal and extreme growth conditions. Ischia, May 24-26, 1996.

Structural studies on mutants and complexes of EF-Tu. International conference Perspectives on Protein Engineering, Montpellier March 2-6, 1996.

The three-dimensional structure of the complex between anthraniloyl-5'-adenosine monophosphate and *Thermus thermophilus* EF-Tu\*GppNHp. 2<sup>nd</sup> EU-Network Meeting on Elongation factor Tu, a regulatory GTPase under normal and extreme growth conditions. Oegstgeest, June 30 - July 2, 1995.

On the kirromycin resistance mechanism of mutant EF-Tu species. 1<sup>st</sup> EU-Network Meeting on Elongation factor Tu, a regulatory GTPase under normal and extreme growth conditions. Thurnau Bavaria, October 30 - November 1, 1994.

Different molecular mechanisms of kirromycin resistance in EF.Tu mutants during protein synthesis. Stichting Scheikundig Onderzoek Nederland (SON), Lunteren, December 7-8, 1992.

Fluoroaluminates and synergism between EF-Tu and EF-G on the ribosome. Meeting on EF-Tu and Ras P21, Thurnau Bavaria, November 3-5 1991.

Trace amounts of fluoroaluminates inhibit protein biosynthesis via elongation factor - ribosome interactions. Stichting Scheikundig Onderzoek Nederland (SON), Lunteren, December 10-11, 1990.