

CURRICULUM VITAE
Jürgen Bernd Bulitta, Ph.D.

Since July 2020	Full Professor (tenured), Department of Pharmacotherapy and Translational Research (PTR), College of Pharmacy (COP), University of Florida (UF)
Since Sep 2019	Perry E. Foote Eminent Scholar Chair , Endowed Professorship, COP, UF
07/2015 to 06/2020	Associate Professor (tenured), Pre-eminence Position in Drug Discovery & Development, Dept. of Pharmacotherapy & Translational Research, COP, UF
03/2015 to 04/2015	NHMRC Career Development Fellow (CDF level 2, 'mid-career K-award')
02/2012 to 02/2015	ARC Discovery Early Career Researcher Award (DECRA) Fellow
08/2011 to 04/2015	Senior Research Fellow , Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Melbourne, Australia
03/2009 to 07/2011	Senior Scientist , Ordway Research Institute, Albany, NY
08/2006 to 03/2009	Post-doctoral fellow in pharmacometrics in infectious diseases, School of Pharmacy and Pharmaceutical sciences, SUNY Buffalo, NY (advisors: Drs William Jusko and Alan Forrest)
Education	
02/2008	Bayesian population modeling and population optimal design, visiting scientist with Dr. Stephen Duffull, Dunedin, New Zealand
03/2007 & 11/2007	Nonparametric population modeling, visiting scientist at the Laboratory for Applied Pharmacokinetics (LAPK), Drs. Jelliffe & Schumitzky, Los Angeles, CA
11/2003 to 09/2006	Ph.D. on "Innovative techniques for selecting the dose of antibiotics in empiric therapy – focus on β -lactams and cystic fibrosis patients", Institute for Biomedical and Pharmaceutical Research (IBMP), Nürnberg-Heroldsberg, Germany, and Julius-Maximilians-Universität Würzburg, Würzburg, Germany
07/2005 to 01/2006	Nonparametric population pharmacokinetic data analysis, 6-month internship at the Ordway Research Institute, Albany, NY (advisor: Dr George Drusano)
01/2005 to 06/2005	Modeling, simulation and meta-analyses of pharmacokinetic and pharmacodynamic data, with Dr. Steve Duffull, Univ. of Queensland, Brisbane, Australia
10/2004 to 01/2005	Population pharmacokinetics and pharmacodynamics with NONMEM, 3-month internship with Dr. Nick Holford, University of Auckland, New Zealand
10/1999 to 10/2003	MSc in Chemistry (Diplom), Friedrich-Alexander-Univ., Erlangen-Nürnberg, Germany; Focus: Inorganic, physical, organic, solid state, analytical, <i>computational & theoretical</i> chemistry (2 internships, 15 months); Minor: Microbiology
02/2003 to 10/2003	Diploma thesis: "Correlation of quantum mechanics and pharmacokinetics"
09/1986 to 07/1998	Primary School and Lyceum, Scheinfeld, Bavaria, Germany
Work experience	
04/2008 to 10/2008	Core organization team, 2 nd World Conference on Magic Bullets (Ehrlich II) in Nürnberg, Germany, (2,000 participants, 100 countries, www.ehrlich-2008.org)
07/1998 to 08/2007	Scientific co-worker, Institute for Biomedical & Pharmaceutical Research, Nürnberg, Germany; Participation in <u>~95 clinical studies</u> as pharmacokineticist, clinical writer, phase I/IV study coordinator, clinical monitor & biostatistician
02/2004 to 09/2004	Member of the core organization team of the World-Conference on Antiinfectives – Dosing the Magic Bullets in Nürnberg, Germany (~2,000 participants from 84 countries, www.ehrlich2004.org)
01/2001	Co-worker at the IBMP preparing for an <u>FDA audit</u> on several clinical trials
07/1998 to 09/1999	Civilian service at the Martha-Maria Nursing Home, Nürnberg, Germany
04/1995	Two-week work experience in geological sciences, Billingshurst, UK

Teaching:

Full courses: **Translational Clinical Pharmacology**, PK/PD, Berkeley Madonna, S-ADAPT, WinNonlin, NONMEM, NPAG / Pmetrics, Principles and Analysis of BIG Data

Lectures taught: *In vitro / in vivo* correlations, Bioavailability & bioequivalence Pharmacokinetic (**PK**) & pharmacodynamic (**PD**) principles Optimizing anti-infective therapy (3 at **NIH/NIAD**, 2 at **FDA**) *In vitro* and animal infection models to translate to humans Infections and treatment of critical bacterial 'superbugs' Strategies to prevent bacterial resistance, Population PK/PD modeling; Engaging in scientific discussions; Career dev.

Laboratory and clinical studies training: Basic and advanced lab techniques (incl. aseptic handling) Dynamic *in vitro* infection models and their fluid dynamics Biosafety procedures; coordination of clinical studies Clinical trial monitoring; systematic literature searches

Advising / mentoring: Primary supervisor or co-supervisor of 15 PhD students (10 completed) Supervising 16 postdocs (formal) and advising >50 PhD students (informal) Mentoring an award-winning Honors student (Ms. Neang Sok Ly) at Buffalo Mentoring 45 research intern students (high school, BSc, MSc, PharmD level) Training 15 research assistants / technicians and 20 visiting scientists

Leadership & Service: UF College of Pharmacy (COP): **Admissions Committee** (9/2016 to 7/2018), **Promotion & Tenure Committee** (2018/19), **Research Comm.** (since 2018), 4 Faculty or Associate Dean **Search Committees** (since 2016) Co-Leader of the MIPS Early Career Researcher Committee at Monash Co-president of the SUNY Buffalo Post-Doctoral Association **Editorial Board Member** of Antimicrob Agents Chemother, 1/2009 to 12/2017 Reviewer for over 20 journals (including **Nature**) since 2003 Reviewer for **NHMRC** (= Australian NIH), **ARC** (=Australian NSF), **NIH study sections (incl. DDR)**, **Wellcome Trust**, Singaporean Government Training, direction, and supervision of staff members

Communication: Responsible for advertising two international conferences via electronic media, fax and print media; responsible for PowerPoint presentations (up to 20 in parallel)

Languages: German (native), English (excellent), Latin (5 years), Korean (beginner)

Clinical studies: Work as clinical monitor of phase I/IV trials (for 5 years), work as co-study coordinator at the clinical site (2 studies), coordination and shipment of clinical materials for phase I/IV studies (responsible position for 3.5 years)

Report writing: Primary author of 32 full industry pharmacokinetic / pharmacodynamic modeling reports and preparation of PowerPoint presentations for Industry Writing clinical protocols for regulatory submissions and Ethics committees (35 protocols) and clinical study reports (2 Phase I/IV studies; 8 yr experience)

Software:

Creator & Author: SADAPT-TRAN

Excellent in: MS Word / EXCEL / PowerPoint / Outlook, Endnote, SigmaPlot, S-ADAPT, Phoenix / WinNonlin, NONMEM, Berkeley Madonna, and Pmetrics

Advanced in: MS Project, WinBUGS, Adapt V, Kinetica, Monolix, GraphPad Prism

Intermediate in: Clinical Trial Simulator, WinPOPT & POPT, WinNonmix, Maple, acsIXtreme, QSAR & computational chemistry software (incl. Material Studio, SIMCA-P, VAMP), ChemOffice, statistical packages, S-PLUS graphical editing (Photoshop) and printing software Experience in software qualification & validation for an FDA audit.

Programming skills: Perl (expert), Fortran (advanced), Reverse Coding (advanced), AWK (beginner), PHP & MySQL & Basic (beginner), Turbo-Pascal (beginner).

Hobbies: Playing the piano, table tennis, volleyball, running, swimming, cooking, photography

AWARDS

- September 2019 Perry E. Foote Eminent Scholar Chair Endowed Professorship, College of Pharmacy
- October 2017 Teaching & Service Excellence Incentive Award from the UF College of Pharmacy
- October 2017 Reviewer for Drug Discovery and Mechanisms of Antimicrobial Resistance [DDR] Study Section, NIH/NIAID
- October 2014 Australian National Health and Medical Research Council Career Development Fellowship (level II); 1 of 23 awards in all biomedical disciplines in Australia in 2015.
- December 2012 Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT) Denis Wade Johnson & Johnson New Investigators Award
- November 2011 Australian Research Council Discovery Early Career Researcher Award of a 3-year Fellowship; the only DECRA award in Pharmaceutical Sciences in Australia in 2011.
- May 2011 Giorgio Segré Prize 2010 for distinct contributions in Pharmacokinetics & Pharmacodynamics awarded by the European Federation for Pharmaceutical Sciences
- January 2009 Editorial Board Member of Antimicrobial Agents and Chemotherapy at an age younger than 30 years
- August 2008 ICAAC ID Fellows Grant at the 48th Annual ICAAC/46th IDSA Annual Meeting in Washington, DC, American Society for Microbiology, October 25 - 28, 2008
- June 2008 Best UB fellow research presentation at the Fellow Research Presentation Day (June 2, 2008) of the School of Pharmacy, SUNY Buffalo, NY
- March 2008 "Outstanding Modeling and Simulation Abstract Award" of the American Conference on Pharmacometrics (ACoP), Tucson, AZ
- September 2007 Best Fellow Presentation Award at the post-ICAAC meeting of the International Society of Anti-Infective Pharmacology (ISAP) in Chicago, IL
- July 2007 Prize for the best PhD thesis ("Fakultätspreis") in 2006/07 from the Institute of Chemistry and Pharmacy ("Fakultät für Chemie und Pharmazie") at the Univ. of Würzburg ("Julius-Maximilians-Univ. zu Würzburg"), Germany
- June 2007 Best UB fellow research presentation at the Fellow Research Presentation Day (June 8, 2007) of the School of Pharmacy, SUNY Buffalo, NY
- September 2006 George McCracken Infectious Diseases Fellow Award for the 46th Interscience Conference on Antimicrobial Agents and Chemotherapy in San Francisco, CA
- June 2006 Student Participation Award at the 56th Meeting of Nobel Laureates (18th Lindau meeting in chemistry) in Lindau, Germany (I was one of the 500 selected students worldwide from ~11,000 total)
- February 2003 Award for fastest studies in chemistry at the Friedrich-Alexander University, Erlangen-Nürnberg, Germany, since more than a decade
- May 2002 Award of membership and 5-yr scholarship of the German National Academic Foundation ("Studienstiftung des Deutschen Volkes")
- April 1999 Invited youngest post-graduate course instructor ever at the Department of Clinical Pharmacology, University of Cologne, Germany: Introduction to pharmacokinetics, pharmacodynamics and in-vitro/in-vivo correlations using WinNonlin[®] Professional.
- October 1998 Invited "Young Scientist" speaker at the "90-years anniversary of the Nobel-Prize honoring to Paul Ehrlich" organized by the Paul-Ehrlich Society; Frankfurt/Main, Germany; October 24, 1998.
- July 1998 Scholarship 5-yr from State of Bavaria, Germany, for highly talented students
- July 1998 Best secondary school qualification at the Lyceum Scheinfeld, Germany, 1998 and best qualification in chemistry
- February 1998 "Jugend forscht" (Jr. Scientific Competition in Germany): First prize in chemistry (regional competition): "Pharmacokinetic / pharmacodynamic modeling: Selection of resistant mutants of *Staphylococcus epidermidis* due to quinolone exposure in sweat"

EXECUTIVE SUMMARY

Funding	Total (since 2007)	Active	Under review
All 55 awarded grants and contracts	\$35m	\$15m	\$4m
Peer-reviewed grants (from NIH, FDA, Australian NHMRC [NIH] & ARC [NSF], South Korean NSF)	\$32m	\$15m	\$4m
Grants as Principal Investigator (PI) or PD/PI	\$22m	\$15m	
Peer-reviewed grants as PI	\$19m	\$15m	

Publications	Last 3 yr (since 2018)	Last 5 yr (since 2016)	Last 10 yr (since 2011)	Total (since 1999)
All papers	38	72	126	169
Peer-reviewed papers & book chapters	38	72	126	159 ^{a,b}
Original research papers	33	64	112	142
Review papers	3	6	10	20
Book chapters	1	1	3	6
h-index		36	39	42
i10-index ^c		112	118	124
Citations ^d	2,697	3,905	5,506	6,037

^a: 93% of papers in top-quartile (Q1) journals.

^b: Includes 49 peer-reviewed papers as first, last and/or corresponding author.

^c: Papers with at least 10 citations.

^d: ISI Web of Knowledge, Scopus, Google Scholar, and Publish or Perish.

Oral presentations: **89** since 1998
including **20** Invited international podium presentations since 2009

Conference abstracts: **234** since 1998

Teaching

Full courses taught: **2** (Translational Clinical Pharmacology 2017 & 2019, 3 credit hours)

Teaching contributions: **9** courses (multiple lectures each at UF, Monash University, & SUNY Buffalo)

Full workshops taught: **16** since 1999

Workshops lectures: **23** since 2004

Reviews & Awards

NIH study sections: **6** since 2017, plus reviewer for **4** international funding agencies since 2012

Reviewer for: **28** journals, Antimicrobial Agents and Chemotherapy Editorial board (2009-17)

Awards: **20** junior scientist / young investigator awards since 1998
 (see appendix for details)

RESEARCH GRANTS

GRANT APPLICATIONS – UNDER REVIEW

Bulman ZP (PD/PI), Mankin A (Co-I), **Bulitta JB** (Co-I), Lang Y (Co-I), Li J (Co-I), Hauser AR (Co-I), Ozer EA (Co-I)

Targeting Carbapenem-Resistant *Klebsiella pneumoniae* with Molecularly Precise Combination Strategies

National Institutes of Health, NIH / NIAID

4/1/2021 – 3/31/2026, \$3,772,557

Basso K (PD/PI), Guo Z (Co-PD/PI), **Bulitta JB (Co-PD/PI)**, Xiao R (Co-PD/PI), Butcher R (Co-PD/PI), Hatch M (Faculty), Whittamore J (Other Professional), Davey M (Faculty)

Acquisition of timsTOF Pro for Complex Lipidomic Analyses

National Institutes of Health (PAR-20-114)

2/1/2021 – 1/31/2022, \$681,216

ONGOING PROJECTS

New Project(s) Awarded In 2019:

1. Tsuji BT (PD/PI), **Bulitta JB (PD/PI)**, Louie A (Co-I), Moya B (Co-I), Drusano GL (Co-I), Chen L (Co-I), Kreiswirth BN (Co-I), Bulman ZP (Co-I)

Novel Strategies for Antibiotic Combinations to Combat Gram-negative Superbugs

National Institutes of Health, **NIH / NIAID**, 1R01AI148560-01

12/20/2019 – 11/30/2024, \$3,920k

2. Hochhaus G (PD/PI) / **Bulitta JB (PD/PI)**, Svensson M (Co-I), Sandell D (Co-I)

Systematic evaluation of the ex-throat plume properties of metered dose inhaler formulations

Support New Approaches to Improve Product Manufacturing and Quality

FDA 75F40119C10154 in response to FDABAA-19-00123-A3

10/01/2019 – 12/31/2021, \$923k

New Project(s) Awarded In 2018:

3. **Bulitta JB (PI)**, Lee RE (Co-I), Schweizer HP (Co-I), Louie A (Co-I), Moya B (Co-I), Drusano GL (Co-I), Basso KB (Co-I), Copik A (Co-I), Bonomo R (Co-I), Balasubramanian V (Co-I)

Combating resistant superbugs by understanding the molecular determinants of target site penetration and binding

National Institutes of Health, **NIH / NIAID**, 1R01 AI136803-01

8/10/2018 – 7/31/2023, \$5,728k

Goal: The goal of this project is develop novel assays to quantify antibiotic target site penetration and receptor binding in Gram-negative bacteria and to synthesize new antibiotic probes with greatly enhanced target site concentrations.

New Projects Awarded In 2017:

4. **Bulitta JB (PI)**, Louie A (Co-I), Boyce JD (Co-I), Bonomo R (Co-I), Drusano GL (Co-I)

Next-generation combination dosing strategies to combat resistant *Acinetobacter baumannii*

National Institutes of Health, **NIH / NIAID**, 1R01AI130185-01,

11/08/2017 – 10/31/2022, \$3,409k

Goal: The main goal of this project is to design and rationally optimize innovative, carbapenem-based combination dosing strategies to combat multidrug-resistant *Acinetobacter baumannii*.

5. Luna BM (PI), Spellberg B, **Bulitta JB (Sub-award PI)**, Louie A, Drusano GL, and Robert Bonomo
A Preclinical Mouse Model of *Acinetobacter baumannii* Infection For Antibacterial Development
Food and Drug Administration, FDABAA-17-00123, HHSF223201710199C
9/25/2017 – 12/31/2020, \$2,222k (UF-subaward: \$996k)

COMPLETED PROJECTS

New Projects Awarded In 2017:

6. **Bulitta JB (PI)**, Basso KB (Co-I), Garrett TJ (Co-I), Louie A (Co-I)
Combating resistant Gram-negative bacterial superbugs via omics techniques
DRPD-ROF2017, University of Florida Opportunity seed funding, 06/2017 – 5/2021, \$95k.

New Projects Awarded In 2018:

7. Miesel L (PI, main contract), **Bulitta JB (Sub-award PI)**
New Strain Testing and PK-PD Studies for Therapeutics in Murine Models of Bacterial Thigh Infections
National Institutes of Health, **NIH / NIAID**, HHSN272201700020IF
09/15/2018 – 09/14/2019, \$167k (UF part)

Goal: The overarching aim of this project is generate robust pharmacokinetic and pharmacodynamic data in mouse infection model and to provide the data analytical strategies as a tutorial for the research community.

New Projects Awarded In 2017:

8. **Bulitta JB (PI)**, Hochhaus G (Co-PI), Shur S (Co-I), Price R (Co-I)
Study to Investigate the Sensitivity of Pharmacokinetics in Detecting Differences in Physicochemical Properties of the Active Drug in Suspension Nasal Products for Local Action
HHSF223201310220C, Food and Drug Administration, 9/25/2017 – 02/29/2020, \$713k

9. Hochhaus G (PI), **Bulitta JB (Co-PI)**, Sheth PA (Co-I)
Comprehensive Evaluation of Formulation Effects on Metered Dose Inhaler Performance, Food and Drug Administration, U01 FD004943, 09/01/2017 – 8/31/2019, \$705k

10. Brown AN (PI), **Bulitta JB (Co-I)**, Lednicky J (Co-I)
Identification of antiviral therapies for the treatment of Zika virus using existing drugs
7ZK30, Florida Department of Health, 02/2017 – 06/2018, \$1,141k.

11. **Bulitta JB (PI)**, Shin BS (Co-PI), Kim TH (Co-I), Moya B (Co-I), Jiao Y (Co-I)
Supporting the rational development of a generic formulation by pharmacokinetic data analyses and simulations
International pharmaceutical industry, 03/2017 – 05/2017, \$13k.

12. **Bulitta JB (PI)**, Shin BS (Co-PI), Kim TH (Co-I), Moya B (Co-I), Jiao Y (Co-I)
Pharmacokinetic optimization of a new platelet aggregation inhibitor
International pharmaceutical industry, 03/2017 – 05/2017, \$9k.

13. **Bulitta JB (PI)**, Louie A (Co-I), Jourjy J (Co-I)
Characterizing receptor binding of β -lactam antibiotics to combat resistant 'superbugs'
COP PROSPER 2017, College of Pharmacy, UF, 01/2017 – 12/2017, \$36k.

New Projects Awarded In 2016:

14. Landersdorfer CB (CIA), Boyce JD (CIB), **Bulitta JB (CIC)**, Oliver A, Nation RL, Peleg A (AI)
Targeting hypermutable 'superbugs' in chronic respiratory infections by optimised antibiotic combination dosage regimens

APP1101553, Australian National Health and Medical Research Council (NHMRC) Project grant, 01/2016 – 12/2018, \$698k (AUD); similar to an **R01**.

15. **Bulitta JB (PI)**, Hochhaus G (Co-PI), Shur S, (Co-I)

Pharmacokinetic Comparison of Locally Acting Orally Inhaled Drug Products
HHSF223201610099C, Food and Drug Administration, 09/2016 – 03/2018, \$766k.

16. Hochhaus G (PI), **Bulitta JB (Co-PI)**

Comprehensive evaluation of formulation effects on metered dose inhaler performance
5U01FD004943-06, Food and Drug Administration (FDA), 09/2016 – 08/2017, \$200k.

New Projects Awarded In 2015:

17. Boyce J, **Bulitta JB**, Seemann T

Unravelling small RNA regulatory networks to target and control bacteria
Australian Research Council (**ARC**) Discovery Project, DP150103715, 1/2015 – 12/2017, \$454k (AUD); similar to an **R01**.

New Projects Awarded In 2014:

18. Tsuji BT (PD/PI), Li J (PD/PI), Walsh TJ, Forrest A, Nation RL, **Bulitta JB (Co-I)**, Boyce JD, Petraitis V, Landersdorfer CB

Novel PK/PD Strategies for Polymyxin Combinations against Gram-negative Superbugs
National Institutes of Health, **NIH / NIAID**, **R01** AI111990
4/01/2014 – 3/31/2019, \$4,451k (USD)

Goal: This grant seeks to optimize novel polymyxin-based combination dosage regimens against Gram-negative superbugs. I am leading the mechanism-based modelling analysis and the integration of transcriptomic and genomic data for this project.

19. Roberts JA (CIA), Kirkpatrick CM (CIB), Lipman J (CIC), Landersdorfer CB (CID), **Bulitta JB (CIE)**, Bergen PJ (CIF). Dosing to maximise bacterial killing and prevent resistance in ICU

APP1062040, Australian National Health and Medical Research Council (**NHMRC**) Project grant, 01/2014 – 12/2017, \$802k (AUD); similar to an **R01**.

20. **Bulitta JB (PI)**

Targeting bacterial 'superbugs' by innovative combination dosing strategies and new antibiotics
APP1084163, Australian National Health and Medical Research Council (**NHMRC**)

Career development fellowship (CDF) Level 2

01/2015 – 12/2018 (this Australia-based award had to be resigned on 04/30/2015 due to Dr. Bulitta's move to the Univ. of Florida), \$455k (AUD); equivalent to a **mid-career K-award** (7-12 years post PhD).

Goals: This project seeks to develop novel combination dosing strategies and new antibiotics inhibiting cell-wall synthesis. Based on our NHMRC grant (PI Bulitta, 2013-2015) on *P. aeruginosa*, we will exploit our unique insights on synergistic penicillin-binding protein occupancy patterns to inhibit these targets via novel chemotypes.

21. **Bulitta JB (CIA, PI, Monash)**, Landersdorfer CB (CIB, Monash), Paik SH (CIC, Boryung Pharmaceuticals), Shin S (CID, Wonkwang University)

Optimising the efficacy and safety of fimasartan by translational, mechanism-based modelling
National Research Foundation of S. Korea
01/2014 – 12/2014, \$150k (AUD)

22. Porter C (CI), McIntosh M (CI), Kaminskas L (CI), **Bulitta JB (CI)**, Keller G (PI)

Perturbation of the extracellular architecture to promote the absorption and lymphatic transport of biological macromolecules
Australian Research Council (**ARC**) Linkage grant, LP140100377, 7/2014 – 6/2017, \$409k (AUD)

New Projects Awarded In 2013:

23. **Bulitta JB (CIA, PI)**, Oliver A (CIB), Landersdorfer CB (CIC), Velkov T (CID), Nation RL (CIE), Boyce JD (CIF), Kirkpatrick CM (CIG)

Combating bacterial 'superbugs' by innovative dosing strategies that combine available antibiotics to prevent resistance. APP1045105, Australian National Health and Medical Research Council (**NHMRC**) Project grant, 01/2013 – 06/2016, \$530k (AUD); similar to an **R01**.

Goals: This project has elucidated the mechanistic basis for synergy of multi β -lactam antibiotic combinations to combat highly β -lactam-resistant *P. aeruginosa*. Informed by novel mechanism-based, systems pharmacology models, my group has identified the optimal combination of target enzymes and the extent of target inhibition required for synergistic killing and resistance prevention of highly β -lactam-resistant *P. aeruginosa*.

24. Kaminskas L (CIA), **Bulitta JB (CIB)**, Porter C (CIC)

Optimising the therapeutic efficacy of protein-based drugs against lymph-resident diseases APP1044802, Australian National Health and Medical Research Council (**NHMRC**) Project grant, 01/2013 – 06/2016, \$336k (AUD); similar to an **R01**.

25. Hochhaus G (PI), **Bulitta JB (Co-I)**, Hindle M, (Co-I), Longest W (Co-I), Price R (Co-I), Shur S (Co-I), Hendeles L (Co-I), Alu-Hassan (Co-I), Tang Y (Co-I)

Study to investigate the sensitivity of pharmacokinetics in detecting differences in physicochemical properties of the active drug in suspension nasal products for local action HHSF223201310220C / PJ 001111118, Food and Drug Administration, 09/2013 – 11/2017, \$1,418k

26. **Bulitta JB**, Landersdorfer CB, Li J, Bergen PJ, Nation RL

Collier Charitable Fund 2012 Round, Equipment support 01/2013 – 12/2013, \$9k (AUD)

27. Sloan EK, Bunnett NW, Sexton PM, Halls M, Li J, **Bulitta JB**, Canals M, Graham B, Lane JR, Scammalls P, Porter CJ, Nowell CJ

National Health and Medical Research Council (**NHMRC**) Equipment grant (No. 9000179) 12/2013, \$45k (AUD)

28. **Bulitta JB (PI)**, Landersdorfer CB (Co-PI)

Innovative experimental and mechanism-based mathematical modelling approaches to understand and optimize innovative antibiotic combination regimens International Pharmaceutical Industry 03/2013 – 07/2013, \$136k (AUD)

29. **Bulitta JB (CI, PI)**

2012 Monash Researcher Accelerator Program 01/2013 – 12/2014, \$89k (AUD)

30. **Bulitta JB (CIA, PI)**, Tsuji BT (CIB), Harper M (CIC), Landersdorfer (CID)

Novel antibiotic dosing strategies to spare carbapenems against community-acquired infections 06/2013 – 02/2014, \$20k (AUD)

31. Landersdorfer CB (CIA), Yu A (CIB), Kaminskas L (CIC), Velkov T (CID), Martin L (CIE), **Bulitta JB (CIF)**

Optimising synergy of aminoglycoside conjugates with β -lactam antibiotics 06/2013 – 02/2014, \$20k (AUD)

32. **Bulitta JB (Co-PI)**, Bugg TD (Co-PI), Landersdorfer C, Dowson C, Velkov T, Roper D, Charman S.

Exploiting cell wall biosynthesis for novel multi-target therapeutics Monash-Warwick 2013-2014 Alliance Seed Fund 07/2013 – 06/2014, \$20k (AUD)

New Projects Awarded In 2012:

33. Bulitta JB (PI)

Targeting bacterial superbugs: novel approaches for optimisation of antibiotic combinations and resistance prevention

Australian Research Council (**ARC**) Discovery Early Career Researcher Award (DECRA) Fellowship, DE120103084, 1/2012 – 12/2014, \$375k (AUD); similar to **K99/R00**.

34. Landersdorfer CB (CIA, PI), Bulitta JB (CIB, Co-PI).

Population pharmacokinetic modelling and Monte Carlo simulations to optimise the dosage regimens of an anti-cancer drug; Collaborative pharmaceutical industry grant 05/2012 – 08/2012, \$10k (AUD)

35. Bulitta JB (CIA, PI), Velkov T (CIB), Landersdorfer CB (CIC), Boyce JD (CID)

Synergistic antibiotic combinations to prevent resistance of critical gram-negative 'superbugs' Monash Faculty grant 06/2012 – 01/2013, \$20k (AUD)

36. Ma Q (PI), Bulitta JB (Co-Mentor on population modeling)

Antiretroviral pharmacogenomics, pharmacokinetics and toxicity in neuroAIDS

National Institutes of Health, **NIH / NIMH**, 5K08MH098794
07/01/2012 – 06/31/2017, \$599k (USD)

New Projects Awarded In 2011:

37. Bulitta JB (PI)

Mechanism-based population pharmacokinetic / pharmacodynamic modeling of a new protein therapeutic product; Collaborative pharmaceutical industry grant 01/2011 – 07/2011, \$83k (USD)

38. Kirkpatrick CK (CIA), Landersdorfer CB (CIB), Bulitta JB (CIC)

Mechanism-based modeling and simulation of a protein pharmaceutical
Collaborative pharmaceutical industry grant, 09/2011 – 11/2011, \$30k (AUD)

39. Bulitta JB (CIA, PI), Landersdorfer CB (CIB), Kirkpatrick CM (CIC)

Translational, mechanism-based mathematical modeling of a new antibiotic bridging from *in vitro* models to animals and man

Collaborative pharmaceutical industry grant, 08/2011 – 12/2011, \$125k (AUD)

40. Bulitta JB (CIA, PI), Kirkpatrick CK (CIB), Landersdorfer CB (CIC)

Mechanism-based modeling and simulations of a the pharmacokinetics and pharmacodynamics of antibodies in oncology

Collaborative pharmaceutical industry grant, 10/2011 – 02/2012, \$50k (AUD)

41. Landersdorfer CB (CIA), Kirkpatrick CK (CIB), Bulitta JB (CIC)

Mechanism-based modeling and simulation of a protein pharmaceutical

Collaborative pharmaceutical industry grant, 11/2011 – 11/2012, \$193k (AUD)

42. Bulitta JB (CIA, PI), Landersdorfer CB (CIB), Bergen PJ (CIC), Kirkpatrick CM (CID)

Experimental approaches to optimize combination therapy for an new antibiotic against critical gram-negative bacteria; Collaborative pharmaceutical industry grant 12/2011 – 7/2012, \$159k (AUD)

New Projects Awarded In 2010:

43. Bulitta JB (PI), Landersdorfer CB (Co-PI)

Population Pharmacokinetic Modeling and Simulation for a muscle relaxant

Collaborative pharmaceutical industry grant, 05/2010 – 07/2010, \$16k (USD)

44. Landersdorfer CB (PI), Bulitta JB (Co-PI)

Population Pharmacokinetic Modeling and Simulation for an antineoplastic agent

Collaborative pharmaceutical industry grant, 08/2010 – 06/2010, \$15k (USD)

45. **Bulitta JB (PI)**

Pharmacokinetic Modeling and Simulation for an antineoplastic agent
Collaborative pharmaceutical industry grant, 04/2010 – 06/2010, \$7.5k (USD)

46. **Bulitta JB (PI)**, Landersdorfer CB (Co-PI).

Mathematical modeling of the mechanisms of action and mechanisms of resistance of a new antibiotic class in mono- and combination therapy
Collaborative pharmaceutical industry grant, 01/2010 – 06/2011, \$345k (USD)

New Projects Awarded In 2009:

47. **Bulitta JB (Co-PI)**, Landersdorfer CB (Co-PI)

Population Pharmacokinetic Modeling and Monte Carlo Simulations of an Antineoplastic Agent,
Collaborative pharmaceutical industry grant, 04/2009 – 06/2009, \$25k (USD)

48. Ambrose PG (PI), Bhavnani S (Co-PI), **Bulitta JB (Co-I)**, Forrest A (Co-I), Okusanya O (Co-I)

Population Pharmacokinetic Modeling and Meta-analysis over Several Studies
Collaborative pharmaceutical industry grant, 03/2009 – 06/2009, \$135k (USD)

49. Ambrose PG (PI), Bhavnani S (Co-PI), Forrest A (Co-I), Tsuji BT (Co-I), **Bulitta JB (Co-I)**

Infectious Disease Experimentation and Pharmacodynamic Modeling
Collaborative pharmaceutical industry grant, 04/2009 – 07/2009, \$100k (USD)

50. **Bulitta JB (Co-PI)**, Drusano GL (Co-PI), Landersdorfer CB (Co-I)

Mechanism-based Pharmacokinetic / Toxicodynamic Modeling and Monte Carlo Simulation grant
Collaborative pharmaceutical industry grant, 06/2009 – 3/2010, \$153k (USD)

New Projects Awarded In 2007 and 2008:

51. Nation RL (PI), Li J (Co-I), Tsuji BT (Co-PI), Forrest A (Co-I), **Bulitta J (Co-I)**, Paterson DL (Co-I)
“Targeting MDR hetero-resistant Gram-negatives: PK/PD for rational combinations”

NIH / NIAID (US), R01 Research Grant, 5R01AI079330, 07/2008 – 06/2012, \$2,213k (USD)

52. **Bulitta JB (Fellow)**, Jusko WJ (Mentor), Pharmacometrics Fellowship in Infectious Diseases

Johnson & Johnson, 08/21/2007 – 08/20/2008, fellowship grant renewal, \$120k (USD)

53. Tsuji BT (PI), Forrest A (Co-I), **Bulitta JB (Co-I)**

Experimentation and Mathematical Modeling of the PK/PD of an Antibiotic vs. *S. aureus*
Collaborative pharmaceutical industry grant, 03/2008 – 02/2010, \$400k (USD)

54. **Bulitta JB (Co-PI)** and Tsuji BT (Co-PI)

PK/PD/PG Models for the Dynamics of Bacterial Responses to Peptide Antibiotics
Collaborative pharmaceutical industry grant – Laboratory of Protein Therapeutics (SUNY Buffalo),
08/2008 to 07/2009, \$100k (USD)

55. **Bulitta JB (Co-PI)**, Landersdorfer CB (Co-PI)

Monte Carlo Simulation and Dose Optimization for an Antibiotic in Children
Collaborative pharmaceutical industry grant, 10/2008 – 03/2009, \$11.5k (USD)

Major Peer-Reviewed Grant Applications – Not Awarded

Applied for in 2020:

56. Brown AN (PD/PI), Drusano GL (PD/PI), **Bulitta JB (Co-I)**, Jiao Y (Co-I)
COVID-19: P01 NIAID Supplement
National Institutes of Health, NIH / NIAID
6/1/2020 – 7/31/2021, \$1,209,286

Ostrov D (PD/PI), Atkinson M (PD/PI), Gurka M (PD/PI), Brown A (PD/PI), Thompson L (PD/PI), **Bulitta JB (Co-I)**, Jiao Y (Co-I), Jain P (Co-I), Schatz D (Co-I), Wu S (Co-I), Rasmussen S (Co-I)
COVID-19: NIH - U54 COVID-19 Supplement (Ostrov)
National Institutes of Health
6/1/2020 – 7/31/2022, \$7,628,101

Applied for in 2019:

57. Brown AN (PI), **Bulitta JB (Co-I)**
Intelligent design of optimal dosage regimens with nucleos(t)ide analog drugs for the treatment of Zika virus
National Institutes of Health, **NIH / NIAID**, Application PRO00024228
9/1/2019 – 8/31/2024, \$3,811k

58. Hochhaus G (PD/PI) / **Bulitta JB (PD/PI)**, Svensson M (Co-I), Per Bäckman (Co-I)
Novel bioequivalence approaches to study regional distribution of inhalation drugs via physiologically-based and population pharmacokinetics
Support New Approaches to Improve Product Manufacturing and Quality
FDABAA-19-00123-A3
09/01/2019 – 08/31/2021, \$918k

Applied for in 2018:

59. Drusano GL (PI), Bulitta JB (Co-I), Louie A (Co-I), Moya T (Co-I), Brown AN (Co-I), Neely M (Co-I), Pucci MJ (Co-I), Hecker EA (Co-I)
Developing efficacious combination dosing strategies for a new polymyxin analogue to combat multidrug-resistant superbugs in VABP
National Institutes of Health, **NIH / NIAID**
12/1/2018 – 11/30/2023, \$5,548k

Applied for in 2017:

60. Tsuji BT (PI), **Bulitta JB (Co-I)**, Kreiswirth B (Co-I), Chen L (Co-I), Satlin M (Co-I), Walsh TJ (Co-I), Bulman ZB (Co-I)
Polymyxin- and Carbapenem-Resistant Enterobacteriaceae: Novel Combination Regimens Targeting MCR-1 and NDM
National Institutes of Health, **NIH / NIAID**, 1R01 A134825-01 (42nd percentile, resubmitted)
9/01/2018 – 9/01/2023, \$4,054k

61. Balasubramanian V (PI), Santanu Datta (Co-I), Shahul Hameed (Co-I), Nagakumar Bharatham (Co-I), Vasanthi Ramachandran (Co-I), Nainesh Katagihallimath (Co-I), Drusano GL (Co-I), Louie A (Co-I), **Bulitta JB (Co-I)**
E2: Building the grammar of Entry and Efflux of small molecules in Gram negative bacteria
National Institutes of Health, **NIH / NIAID**
3/01/2018 – 2/28/2022, \$3,920k

Applied for in 2015 to 2016:

62. **Bulitta JB (CIA, PI)**, Boyce JD (CIB), Landersdorfer CB (CIC), Nation RL (CID)
Innovative pharmacological approaches to combating resistant bacterial 'superbugs'
APP1088059, Australian National Health and Medical Research Council (**NHMRC**) Project grant,
01/2015 – 12/2018, \$789k (AUD) → awarded in 2017 as NIH R01 (see above)

63. Roberts JA (CIA), Lipman J (CIB), Boots R (CIC), **Bulitta JB (CID)**, De Waele (CIE), Udy A (CIF),
Koulenti D (CIG), Felton T (AI)
Developing innovative doses to maximise the effectiveness of commonly used antibiotics for treatment of
pneumonia in the intensive care unit
APP1099448, Australian National Health and Medical Research Council (**NHMRC**) Project grant,
01/2016 – 12/2018, \$939k (AUD); similar to an **R01**.

64. Shekar K (CIA), Roberts J (CIB), Fraser J (CIC), Brodie D (CID), Smith M (CIE), **Bulitta J (CIF)**
Antibiotic, Sedative and Analgesic Pharmacokinetics during Extracorporeal Membrane Oxygenation
(ASAP ECMO): An international multi-centre study to optimise drug dosing and improve patient outcomes
APP1106483, Australian National Health and Medical Research Council (**NHMRC**) Project grant,
01/2016 – 12/2018, \$721k (AUD); similar to an **R01**.

Applied for in 2013 to 2014:

65. Yu A (CIA), **Bulitta J (CIB)**
Smart Thin Films for Tunable Loading and Release of Antibiotics
Australian Research Council (ARC) Discovery Project (DP130101710),
1/2013 – 12/2015, \$348k (AUD) – scored highly, but not successful

66. Kaminskas L (CIA), Boyd B (CIB), **Bulitta JB (CIC)**
Understanding the fundamental basis of lymphatic recirculation and its role in maintaining the long
circulatory behaviour of macromolecular drugs and drug delivery systems
APP1060356, Australian National Health and Medical Research Council (NHMRC) Project grant,
01/2014 – 12/2016, \$542k (AUD)

67. **Bulitta JB (PD/PI)**, Louie A (PD/PI), Boyce J, Landersdorfer C, Drusano G, Velkov T, Peleg A, Yu A
Combating resistant *A. baumannii* by innovative combination dosing strategies
National Institutes of Health, **NIH / NIAID**, 1R01AI111969-01
3/01/2014 – 2/28/2019, \$4,626k (USD) → awarded in 2017 as NIH R01 (see above)

68. Charman S (PI), Porter C, Pouton C, **Bulitta J**, Kirkpatrick C, Baell J, Owen D, Harvey A, Draffan A,
Meurermans W, Parsons J, Burrows J
Biotechnology Transformation Hub for Innovative Drug Discovery
Australian Research Council (**ARC**) Industrial Transformation Research Hubs, IH130200018,
7/2014 – 6/2019, \$4,979k (AUD)

69. Kaminskas L, Owen DJ, Porter CJH, **Bulitta JB**, Bischof R
Improving the treatment of lung cancers using a novel drug delivery approach
National Institutes of Health, **NIH / NCI**, IR21CA186995-01
7/1/2014 – 6/30/2016, \$295k (USD)

Applied for in 2011 to 2012:

70. **Bulitta JB (PI)**, Oliver A (Co-I), Kosowska-Shick K (Co-I)
Modeling Unique Receptor Occupancy Patterns to Suppress Resistance and Persisters
NSF (DMS – Mathematical Biology) / NIH (joint grant announcement, NSF 10-579)
5/1/2011 to 4/30/2016, \$2,000k (USD)

71. **Bulitta JB (Co-PI)**, Tsuji BT (Co-PI)
Targeting Resistance Suppression in Community-acquired Gram Negative Bacteria
NIH – FDA Advancing Regulatory Science through Development of Innovative Methodologies in the Area
of Antimicrobial Development (U01), RFA-FD-11-026
9/1/2011 to 8/31/2012, \$147,875 → never reviewed by NIH/FDA (*i.e.* no one was funded)

72. Tsuji BT (PD/PI), Li J (PD/PI), Forrest A, Nation RL, **Bulitta JB**, Boyce JD, Landersdorfer CB
Combating Gram negative Superbugs: Novel Strategies for Polymyxin Combinations
NIH / NIAID (US), \$2,528k (USD), 12/2012 – 11/2016 – scored highly (26th percentile)

Applied for in 2008 to 2010:

73. **Bulitta JB (PI)**, Jusko WJ (Mentor), Drusano GL (Mentor)
Dynamics of genomic and phenotypic responses to antibiotics
NIH Pathway to Independence (PI) Award (K99/R00), PA-07-297
07/01/08 to 06/30/2011, \$592k (USD), Score: 202

74. **Bulitta JB (PI)**, Jusko WJ (Mentor) , Drusano GL (Co-Mentor)
Mathematical Models for the Dynamics of Bacterial Responses to Antibiotics
Burroughs Wellcome Fund
01/01/09 to 12/31/2013, \$500k (USD)

75. **Bulitta JB (PI)**
Unique Penicillin-Binding Protein Occupancy Patterns to Suppress Resistance and the Persister
Phenotype; 2011 NIH Director's New Innovator Award Program (DP2; RFA-RM-10-009),
9/30/2010 to 7/31/2015, \$1,500k (USD)

Grant reviewer (invited) for:

NIH Study Sections

- 10/2017 NIH DDR - Drug Discovery & Mechanisms of Antimicrobial Resistance
- 06/2018 NIH DDR - Drug Discovery & Mechanisms of Antimicrobial Resistance
- 07/2018 NIH ZRG1 IDM-N (02) M - Topics in Drug Resistance, Drug Discovery and Clinical and Field Research
- 04/2019 NIH ZRG1 IDM-U 02 - Topics in Microbial Infection Therapies, Resistance Mechanisms, and Diagnostics
- 12/2019 NIH ZRG1 IDM-U 02 - Topics in Microbial Infection Therapies, Resistance Mechanisms, and Diagnostics
- 03/2020 NIH ZRG1 IDM-N (02): Topics in Drug Discovery and Clinical Field Studies
- 07/2020 NIH SEP: Drug Discovery, Clinical, and Field Research in Infectious Diseases

International grant reviews

- 2012-15 Australian National Health and Medical Research Council (**NHMRC**)
- 2012-15 Australian Research Council (**ARC**)
- 2013 Wellcome Trust
- 2013 Singaporean Ministry of Health

University and College Governance and Service

- 2018-present: College of Pharmacy Research (COP) Committee
- 2019-2020: Faculty Search Committee Member in COP PTR Department
- 2018-2019: College of Pharmacy Promotion and Tenure Committee
- 2017-2018: College of Pharmacy grant reviewer
- 2019: Search Committee Member for UF COP Associate Campus Dean in Lake Nona
- 2018: Search Committee Member for UF COP Department Chair and for CPSP Center Director
- 2017-2018: Graduate Education Task Force
- 2017: Search Committee Member for two UF Tenure track faculty positions
- 2016-2018: Admissions committee at the College of Pharmacy, full-time member
- 2016: Poster judge at the Annual College of Pharmacy Research Showcase
- 2015-present: Participation in College of Pharmacy faculty meetings.
- 2011-2015: Co-Leader of the Monash Institute of Pharmaceutical Science (MIPS) Early Career Researcher Committee
- 2008 to 2009: Co-President of the SUNY Buffalo Post-Doctoral Association (PDA)
- 2007 to 2008: Executive committee member of SUNY Buffalo Post-Doctoral Assoc.

Editorial Board Member

Antimicrobial Agents and Chemotherapy, 2009 to 2017

American Society for Microbiology, Washington, DC; since 2009. (#1 of 228 journals in Pharmacology and Pharmacy according to Eigenfactor score, Impact factor: 4.302)

Pharmaceutics, Since 10/2020

MDPI, St. Alban-Anlage 66, 4052 Basel, Switzerland. (Impact factor: 4.421)

Journal Reviewer (invited)

#	Journal	IF	Since Year
1	Nature	40.137	2014
2	Antimicrobial Agents and Chemotherapy	4.302	2006
3	AAPS Journal	3.819	2008
4	ACS Chemical Biology	4.995	2016
5	BioMed Research International	2.476	2014
6	BMC Microbiology	2.644	2010
7	British Journal of Clinical Pharmacology	3.493	2009
8	Chemotherapy	2.066	2004
9	Clinical and Experimental Pharmacology and Physiology	2.010	2013
10	Clinical and Vaccine Immunology	2.425	2012
11	Clinical Microbiology and Infection	5.292	2017
12	Clinical Pharmacokinetics	5.216	2008
13	CPT: pharmacometrics & systems pharmacology	<i>None yet</i>	2013
14	Critical Care Medicine	7.050	2010
15	Diagnostic Microbiology and Infectious Disease	2.401	2009
16	European Journal of Clinical Pharmacology	2.902	2011
17	European Journal of Pharmaceutical Sciences	3.756	2010
18	International Journal of Antimicrobial Agents	4.307	2012
19	Journal of Antimicrobial Chemotherapy	5.071	2009
20	Journal of Clinical Pharmacology	2.812	2010
21	Journal of Clinical Pharmacy and Therapeutics	1.679	2010
22	Journal of Infection	4.201	2011
23	Journal of Pharmaceutical Sciences	2.713	2006
24	Journal of Pharmacokinetics and Pharmacodynamics	1.673	2006
25	Mathematics and Computers in Simulation	1.218	2011
26	mBio	6.956	2017
27	Pharmaceutical Research	3.002	2015
28	Pharmaceutics	4.770	2019

Memberships

German National Academic Foundation (“Studienstiftung des Deutschen Volkes”), since 2002.

American Society for Microbiology, since 2006.

American Association of Pharmaceutical Scientists, since 2006.

German Pharmaceutical Society, since 2008.

European Society of Clinical Microbiology and Infectious Diseases (ESCMID), since 2011.

International Society of Pharmacometrics (ISoP), founding member, since 2011.

Past memberships

Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT), 2011 to 2014.

Executive Committee member, SUNY Buffalo Post-Doctoral Association (PDA), 2007 - 2009.

Co-President, SUNY Buffalo Post-Doctoral Association (PDA), 2008 - 2009.

American College of Clinical Pharmacy, 2007 - 2009.

TEACHING

Course	Title	Role	Contact hours
PHA 6133	Translational Clinical Pharmacology Concepts and Principles of PKPD <i>In vitro</i> (IVIVC) → animal → human scaling Basic Modeling Methods and Study Design Empiric and Mechanistic Models for Translational Analyses Population Modeling Methods & Software Achieving Patient Target Goals Precisely Translational Drug Development in Action	Course leader, teacher, and coordinator	33 h 2017, 2019, 2021 (spring), every 2 years
PHA 6125	Advanced Pharmacokinetics Absorption, bioavailability, bioequivalence Drug disposition and elimination models Drug input models, Monte Carlo simulations	Teaching partner	7.5 h , 2016, 2017, 2018
PHA 6936	Grant Writing	Teaching partner	3.0 h , 2019, every yr
PHA 6418	Applied Translational Systems Pharmacology & Enhanced Pharmacodynamics Advanced PK/PD models in Berkeley Madonna, Irreversible effect models in ID	Teaching partner	4.5 h 2017, 2019
PHA 5755	Microbiology, Immunology and Virology Pharmacokinetics and pharmacodynamic principles that guide dosing of antibiotics	Teaching partner	2.0 h 2016, 2017, 2018, 2019 (fall), every year
PHA 5782C	Patient Care 2 Optimal Patient dosing: Aminoglycosides and glycopeptides	Teaching partner	2.0 h , 2016, 2017, 2018, 2019
PSC 3112	Drug discovery and development Preformulation: the physicochemical characterisation of drugs Drug and physiological properties that affect oral bioavailability	Teaching partner	3.0 h in 2013 & 2014
PSC 3212	Pharmaceutical regulatory framework <i>In Vitro</i> / <i>In Vivo</i> Correlations Bioavailability / Bioequivalence Studies Target drug effects	Teaching partner	4.5 h in 2013 & 2014
Workshop	How to write very high impact papers	Course leader	12 h in 2013
Winter school	Training program for PhD students How to Engage in Scientific Discussions	Teaching partner	1.5 h in 2012
PHC 607	Intermediate Pharmacokinetics Clinical Trial Simulation – a cutting edge in Pharmacometrics Bioavailability and Bioequivalence studies	Teaching partner	1.5 h in 2007
PHC 609	Advanced Pharmacodynamics Guides and Principles of Antimicrobial Chemotherapy	Teaching partner	1.5 h in 2007 & 2008

Basic Pharmacokinetics / Pharmacodynamics Workshop

Lecture Title	Contact hours
Benefits and Purposes of Modeling & Simulation in Biomedical Sciences	20 h taught in 2009 (2x), 2011 (2x), 2013, and 2014
Basic Kinetic Processes	
Introduction to Basic Components of Time-Course Models	
Introduction to PK models in Berkeley Madonna	
Drug release and absorption kinetics	
Model Building in Berkeley Madonna	
Overview of PD models	
Basic pharmacodynamic models in Berkeley Madonna	
Introduction to basic estimation methods	
Selecting the “best” model by use of diagnostic plots and model selection criteria	
Making most of pharmacometric software - the ‘right’ program for the ‘right’ task	
Benefits of population PK/PD? An Overview of Methods and Application (since 2008)	
Introduction into pharmacokinetics, pharmacodynamics and <i>in vitro</i> / <i>in vivo</i> correlations using WinNonlin® Professional (since 1999)	

Intermediate Translational Pharmacokinetics / Pharmacodynamics Workshop

Title	Contact hours
Population Pharmacokinetic and Mechanism-Based Population Pharmacokinetic / Pharmacodynamic Models	18 h taught in 2010, 2011, 2012 (2x), 2013, 2014 and 2017
Introduction to Monte Carlo Simulations and Between Patient Variability	
Features and Benefits of S-ADAPT and SADAPT-TRAN	
Dataset Structure and Key Estimation and Parameter Settings for Population Modeling	
Estimation of a Population PK Model and Monte Carlo Simulation to evaluate predictions with and without covariance	
Introduction to Population Estimation Algorithms	
Modeling Covariate Effects via a Pharmacokinetic / Pharmacodynamic Approach	
Qualifying Population Pharmacokinetic / Pharmacodynamic Models via Predictive Checks and Guide for Interpretation	
Population Pharmacokinetic Modelling with Between Subject and Between occasion variability	
Population Pharmacokinetic and Mechanism-Based Population Pharmacokinetic / Pharmacodynamic Models	
Overview and comparison of parametric and non-parametric estimation techniques. Properties & Capabilities (since 2008)	

Lecture Series on Infectious Diseases and Disease Modeling

Lecture Title	Contact hours
General Principles and Mechanism-based Mathematical Modelling of Anti-infectives to Maximize Bacterial Killing and Prevent Resistance (since 2010)	12 h taught since 2009 at various conferences and other occasions
Mechanism Based PK/PD Models of Anti-infectives (since 2010)	
Pharmacokinetic / Pharmacodynamic Models of Resistance (since 2009)	
Combination chemotherapy, taught at the National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), December 2009	
Mechanism-based Modeling, taught at the National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), December 2009	
PK/PD models of resistance – Understanding & limiting emergence of resistance via PK/PD modeling (since 2010)	
Mathematical Modeling and Pharmacokinetics/Pharmacodynamics (since 2012)	
Mathematical Modeling: Software Choices (since 2014)	

Mentorship, Research Training and Supervision

Since 1999, I have trained, advised and supervised **121 students and postdocs**.

PhD students: 15 (including 11 completed)
 PhD student committee: 9 (including 7 completed)
 Postdocs: 17
 Visiting scientists: 20
 Research assistants: 15
 Research intern students: 45

PhD students: Main advisor

#	Years	Student	Main / Co-advisor	Joint publications	Status
1	2009 - 2014	Dr. Neang Sok Ly	Co/M	14 papers	Graduated 08/2014
2	2011 - 2016	Dr. Soon-Ee Cheah	Co/M	7 papers	Graduated 12/2016
3	2014 - 2017	Dr. Rajbharan Yadav	Main	13 papers	Graduated 08/2017, Scientist, Translational PK/PD, Genentech
4	2014 - 2018	Dr. Vanessa Rees	Co/M	6 papers	Completed, Postdoc
5	2016 - 2017	Mr. Yuli Qian	-	1 paper	PhD student at UF
5	2016 - 2019	Dr. Xun Tao	Main	15 papers + 1 subm.	Graduated 12/2019, Assoc. Sci. Genentech
6	2016 - 2020	Dr. Stephanie Drescher	Co/M	3 papers + 1 subm. 1 book chapter	Graduated 12/2020
7	Jan-Dec 2020	Dr. Brett Fleischer	Main	<i>1 paper submitted</i>	Graduated 12/2020
8	8/2019-6/2020	Mr. Brandon Klee	-	1 paper	PhD student at UF (changed lab)
9	2019 – ongoing	Ms. Eunjeong (Elena) Shin	Main	3 papers	PhD student at UF
10	2019 – ongoing	Ms. Carolin Werkman	Main	2 papers	PhD student at UF
11	2020 – ongoing	Mr. Jieqiang Zhou	Main	6 papers	PhD student at UF

PhD students: Co-advisor

#	Years	Student	Main / Co-advisor	Joint publications	Status
1	2010 - 2011	Dr. Tracy Tai	Co	2 thesis chapters	Completed
2	2012 - 2016	Dr. Gemma Ryan	Co	1 paper (J Control Rel)	Completed
3	2012 - 2014	Dr. Lisa Black	Co	1 paper	Completed
4	2013 - 2016	Dr. Tasnuva Tamanna	Co	4 papers, 1 book ch.	Completed

PhD students (committee member)

#	Years	Student	Current position
1	2016 - 2017	Dr. Uta Schilling	Completed (Pharma. Industry, Europe)
2	2016 - 2019	Dr. Jie Shao	Completed (Pharmaceutical Industry)
3	2016 - 2019	Dr. Sibbo Jian	Completed (Pharmaceutical Industry)
4	2016 - 2019	Dr. Abhinav Kurumaddali	Completed (Pharmaceutical Industry)
5	2016 - 2020	Dr. Yi Ting Lien	Completed (Pharmaceutical Industry)
6	2017 - 2020	Dr. Tamara I. King	Completed (Pharmaceutical Industry)
7	2016 - ongoing	Dr. Tanaya Vaidya	Completed (Pharmaceutical Industry)
8	2017 - ongoing	Ms. Alexandria Kesterson	Completed (Pharmaceutical Industry)
9	2019 - ongoing	Mr. Simon Berger	PhD student at UF

Postdocs (main or co-main advisor)

#	Years	Postdoc	Role	Joint publications	First or current position
1	2009 (3 mo.)	Dr. Silvia E. Brown	Main	2 papers	Teacher, University
2	2009 - 2010	Dr. Hongmei Xu	Co-M	1 paper	Quantitative Clinical Pharmacology, AstraZeneca
3	2016 - 2018	Dr. Bartolomé Moyá Cañellas	Main	7 papers + 2 subm.	Assistant Professor (tenure track), Spain
4	2016 - 2019 2019 - 2020	Dr. Yuanyuan Jiao	Main	11 papers + 3 sub.	Postdoc (2016-19), Res. Asst. Prof. at UF
5	2016 - 2019	Dr. Mong-Jen Chen (UF Res. Asst. Prof)	Co-M	1 book chapter, 1 paper + 1 subm.	Senior Clinical Pharmacologist at AbbVie
6	2017 - 2018	Dr. Tae Hwan Kim	Main	18 papers + 1 subm.	Assistant Professor (tenured), Catholic Univ. of Daegu, Korea
7	2017 - 2020	Dr. Dhruvitkumar S. Sutaria	Main	8 papers	Assoc. Scientist at Genentech
8	2018 - 2020	Dr. Nirav Shah	Main	3 papers	Assoc. Scientist at J&J
9	2018 - 2020	Dr. Sagar Bacchav	Co/M	3 submitted	Senior Clinical Pharmacologist at AbbVie
10	2018 - ongoing	Dr. Yinzhi Lang	Main	4 papers	Postdoc, UF
11	2019 - ongoing	Dr. Alaa Ropy Sayed	Main	2 papers	Postdoc, UF

Postdocs (co-advisor)

#	Years	Postdoc	Role	Joint publications	First or current position
1	2010 - 2011	Dr. Samira M Garonzik	Co	3 papers	Associate Director Clin. Pharmacology and Pharmacometrics, BMS
2	2011 - 2012	Dr. Hee Ji Lee	Co	1 paper	Unknown
3	2011 - 2012	Dr. Shyamal Das	Co	1 paper	Tenured Sr. Lecturer, Univ. of Otago, NZ
4	2011 - 2013	Dr. Kashyap Patel	Co	1 paper	Sr. Pharmacometrician at Certara
5	2013 - 2014	Dr. Linda Chan	Co	2 papers	Unknown
6	2016 - 2017	Dr. Carolina de Miranda Silva	Co	1 paper	Translational Modeler, Merck

Visiting scientists and colleagues – host for focused advanced training

#	Years	Visiting Scientist	Current position
1	2007-08	Beom Soo Shin, PhD	Tenured Assoc. Professor, Sungkyunkwan, Korea
2	2007-08	Jenny Yang, PharmD	Associate Director, Clinical Research at Gilead Sciences
3	2007-08	Yoriko Harigaya, PharmD	Pharmacology Reviewer at FDA
4	2008-09	Qing Ma, PhD	Tenured Assoc. Prof., SUNY Buffalo
5	2009-11	Ashley N. Brown, PhD	Tenure Track Assistant Professor, UF
6	2010 (1-wk)	Vaishali Chudasama, PhD	Senior Modeler, Pharmaceutical Industry
7	2010 (1-wk)	Sihem Ait-Oudhia, PharmD PhD	Tenure Track Assistant Professor, UF
8	2010-12	Cornelia B. Landersdorfer, PhD	Tenured Senior Lecturer
9	2010-11	Nicolas Gregoire, PhD	Tenured Associate Professor
10	2010/11 (4-mo)	Maria Agudelo, M.D.	MD in Clinical Infectious Diseases
11	2010/11 (4-mo)	Carlos Rodriguez, M.D.	MD in Clinical Infectious Diseases
12	2010/11 (8-mo)	Anthony Nicasio, PharmD	Research Scientist in Infectious Diseases
13	2013 (2-wk)	Eduard Raby, PhD	Microbiology Registrar, Univ of Perth, AU
14	2013 (3-mo)	Soyoung Shin, PhD	Assistant Professor, Iksan University, Republic of Korea
15	2013 (3-mo)	Soo Heui Paik, PhD	Tenured Assistant Professor, Sunchon National University, Republic of Korea
16	2014-15	Miao Zhao, PhD	Postdoc, Institute of Antibiotics, Fudan University, China
17	2016 (1-wk)	Deanna Deveson, PhD	Senior scientist, Monash University, AU
18	2016 (6-mo)	Carolina de Miranda Silva, PhD	Postdoctoral researcher, UF
19	2020 (3-mo)	Soyoung Shin, PhD	Associate Professor (with Tenure), Iksan University, Republic of Korea
20	2021/22 (3-mo)	Silvia Daiana Lopez Arguello, PhD	Postdoc, Instituto de investigación Sanitaria Illes Balears (IdISBa), Palma de Mallorca, Spain

Research Assistants / Technicians / Project coordinators (main supervisor)

#	Years	Research Assistant	Current position
1	2009 - 2011	Ms. Rebecca E. D'Hondt	Research Scientist at Regeneron
2	2010 - 2011	Ms. Holland DeFiglio	Molecular Scientist at Regeneron
3	2012 - 2013	Ms. Jessica Shan	Sr. Researcher at CSL Behring
4	2012 - 2015	Ms. Yen Mei Chuah	Pharmacist in Malaysia
5	2013 - 2015	Ms. Kate Rogers	Sr. Research Assistant, Monash Univ.
6	2014	Ms. Lina Ly	Pharmacist
7	2014 - 2015	Ms. Preeti Yadav	Sr. Research Assistant, Monash Univ.
8	2016 - 2018	Ms. Lijie Zhang	Research Technician at UF
9	2018 (4-mo)	Ms. Maria Peacock	Research Technician at UF
10	2018 (5-mo)	Ms. Jonathan Beutel	Research Technician at UF
11	2018 - 2020	Mr. Jieqiang Zhou	Sr. Bio-analyst / LC-MS/MS at UF
12	2018 - ongoing	Mrs. Ann Ross	Sr. Research Coordinator at UF
13	2018 - ongoing	Ms. Rossie Jimenez	Research Technician at UF
14	2018 - ongoing	Ms. Keisha Cadet	Research Technician at UF
15	2021 - ongoing	Ms. Abeer Adel Shaban Elsayed	Research Technician at UF

Research Intern Students (main supervisor)

#	Years	Student	Background
1	1999 - 2000	Mr. Michael Rodamer	Co-mentor, Junior Research Project
2	1999 - 2000	Ms. Verena Jakob	Co-mentor, Junior Research Project
3	1999 - 2000	Mr. Timothy Armstrong	Co-mentor, Junior Research Project
4	2000 - 2001	Mr. Sven Hüttner	Co-mentor, Junior Research Project
5	2000 - 2001	Mr. Johannes Gareis	Co-mentor, Junior Research Project
6	2007 - 2009	Ms. Neang Sok Ly	BSc research intern student
7	2007 - 2009	Mr. Dung Ngo	Pharmacy (PharmD) research student
8	2011 - 2013	Ms. Annette Dahlberg	MSc student
9	2012 (6-mo)	Ms. Emelie Olsson	Summer intern student (MSc)
10	2012 - 2013	Ms. Yen Mei Chuah	Pharmacy (PharmD) research student
11	2012 - 2013	Ms. Jinq Ru Lim	Pharmacy (PharmD) research student
12	2012 - 2013	Ms. Yi-Chu (Emelie) Wang	Pharmacy (PharmD) research student
13	2012 - 2015	Mr. Gordon Shing Yip Lee	MSc student
14	2012/13 (6-mo)	Ms. Nicolin A. Wanigaratne	Research intern student (BSc)
15	2013 - 2014	Ms. Sin Loo Wang	Pharmacy (PharmD) research student
16	2013 - 2014	Ms. Lina Ly	Pharmacy (PharmD) research student
17	2013 - 2014	Ms. Sally Hoang	Pharmacy (PharmD) research student
18	2014 (6-mo)	Ms. Phyllis Phua	College Intern student
19	2014 (6-mo)	Ms. Yuling Huang	College Intern student
20	2014 (4-wk)	Mr. Tuck Wong	Pharmacy (PharmD) research student
21	2014 (6-wk)	Mr. Chanh Tin Michael Nguyen	Pharmacy (PharmD) research student
22	2014 (6-wk)	Ms. Cecilia Xu	Pharmacy (PharmD) research student
23	2014 (6-wk)	Ms. Bonnie Fung	Pharmacy (PharmD) research student
24	2014 (6-wk)	Ms. Nurhayati Ahmad Noorzi	Pharmacy (PharmD) research student
25	2014 (6-wk)	Mr. Andrew Zhao-Hui Li	Pharmacy (PharmD) research student
26	2016 (6-mo)	Mr. Markus T. Meyer	German Pharmacy student
27	2015-17 (8-mo)	Ms. Priscell Villegas	PharmD research student
28	2015/16 (8-mo)	Mr. Nrec N Dedaj	PharmD research student
29	2015/16 (8-mo)	Mr. Jeff H Kamta	PharmD research student
30	2015/16 (4-mo)	Mr. Adrian A Mottley	PharmD research student
31	2015/16 (4-mo)	Mr. Jose C Tamayo	PharmD research student
32	2015/16 (4-mo)	Mr. Adam Collin	PharmD research student
33	2015/16 (4-mo)	Ms. Stefanie Raghunandan	PharmD research student
34	2016 (4-mo)	Mr. Frank S Gonzalez	PharmD research student
35	2016 (3-wk)	Mr. Nick Smith	PharmD research student (SUNY Buffalo)
36	2016/17 (6-mo)	Ms. Louisa K. M. Schlaak	German Pharmacy student
37	2016-18 (8-mo)	Mr. Brandon O Klee	PharmD research student
38	2017 (3-mo)	Ms. Kirsten Prince	PharmD research student
39	2017 (2-mo)	Mr. Alex Duarte	Research intern student (BSc)
40	2017 (6-mo)	Mr. Benedikt C. Huck	German Pharmacy student
41	2017 (6-mo)	Mr. Nils Krumm	German Pharmacy student
42	2017 (2-mo)	Ms. Madeline Behr	BSc research intern student
43	2017-18 (6-mo)	Mr. Kajetan Nierychlewski	German Pharmacy student
44	2017-18 (3-mo)	Mr. Gustavo R. Alvira	PharmD research student
45	2018 (6-mo)	Ms. Ann-Christin Pape	German Pharmacy student

PUBLICATIONS

Please note: Antimicrobial Agents and Chemotherapy is one of the two internationally leading journals in antimicrobial pharmacology (together with The Journal of Antimicrobial Chemotherapy). It is the #1 cited journal in Pharmacology & Pharmacy and #4 cited journal in microbiology, with >48,000 citations. It is the #1 journal in Pharmacology & Pharmacy and #6 in Microbiology ranked by *Eigenfactor* score. Over half (68) of my 131 peer-reviewed papers were published in Antimicrobial Agents and Chemotherapy and The Journal of Antimicrobial Chemotherapy.

Full papers

Papers (submitted)

1. Jiao Y, **Bulitta JB**[#], Kinzig M, Landersdorfer CB, Tao X, Lang Y, Zhou J, Moya B, Höhl R, Holzgrabe U, Stephan U, Sörgel F[#] ([#]: joint corresponding authors). Comparable Renal Secretion and Reabsorption of Ciprofloxacin in Patients with Cystic Fibrosis and Healthy Volunteers assessed via Population Pharmacokinetics. Submitted.
2. Drescher SK, Jiao Y, Chen MJ, Kurumaddali A, Shao J, Shur J, Hindle M, Price R, Hochhaus G[#], **Bulitta JB**[#] (joint corresponding authors). Characterizing the Central and Peripheral Lung Deposition of Three Fluticasone Propionate Dry Powder Inhaler Formulations in Humans by Population Pharmacokinetics. *Submitted for review by FDA and other co-authors.*

Papers published in 2021:

1. **Bulitta JB**. Informing and validating translational mechanism-based models for antibiotics by experimental and computational approaches. Clin Pharmacol Ther. 2021; Letter to the Editor accepted June 11, 2021.
2. Huang Y, Sokolowski K, Rana A, Singh N, Wang J, Chen K, Lang Y, Zhou J, Kadiyala N, Krapp F, Ozer E, Hauser A, Li J, **Bulitta JB**, Bulman Zackery. Generating Genotype-Specific Aminoglycoside Combinations with Ceftazidime/Avibactam for KPC-Producing *Klebsiella pneumoniae*. Antimicrob Agents Chemother 2021. [PMID: 34152820](#)
3. Drusano GL, Bonomo RA, Marshall S, Rojas L, Adams M, Mojica M, Kreiswirth B, Chen L, Mchedlidze N, Bacci M, Vicchiarelli M, **Bulitta JB**, Louie A. Emergence of resistance to ceftazidime-avibactam in a derepressed bla_{PDC} producing *Pseudomonas aeruginosa* isolate in a Hollow Fiber Infection Model. Antimicrob Agents Chemother 2021. 65:e00124-21. [PMID: 33782013](#)
4. Lang Y*, Shah NR* (*joint 1st), Tao X, Reeve SM, Zhou J, Moya B, Sayed ARM, Dharuman S, Oyer JL, Copik AJ, Fleischer BA, Shin E, Werkman C, Basso KB, Deveson Lucas D, Sutaria DS, Megroz M, Kim TH, Loudon-Hossler V, Wright A, Jimenez-Nieves RH, Wallace MJ, Cadet KC, Jiao Y, Boyce JD, LoVullo ED, Schweizer HP, Bonomo RA, Bharatham N, Tsuji BT, Landersdorfer CB, Norris MH, Shin BS, Louie A, Balasubramanian V, Lee RE, Drusano GL, **Bulitta JB**. Combating multidrug-resistant bacteria by integrating a novel target site penetration and receptor binding assay platform into translational modeling. Clin Pharmacol Ther. 2021; 109:1000-1020. [PMID: 33576025](#)
5. Hochhaus G^{*,*}, Chen MJ* (joint first authors), Kurumaddali A, Schilling U, Jiao Y, Drescher SK, Amini E, Kandala B, Tabulov C, Shao J, Seay B, Abu-Hasan MN, Baumstein SM, Winner L, Shur J, Price R, Hindle M, Wei X, Carrasco C, Sandell D, Oguntimein O, Kinjo M, Delvadia R, Saluja B, Lee SL, Conti DS, **Bulitta JB**[#] (joint corresponding authors). Can Pharmacokinetic Studies Assess the Pulmonary Fate of Dry Powder Inhaler Formulations of Fluticasone Propionate? AAPS J. 2021; 23:48. [PMID: 33768368](#)

6. Franco E*, Tao X* (joint 1st authors), Hanrahan K, Zhou J, **Bulitta JB**, Brown AN. Combination Regimens of Favipiravir plus Interferon Alpha Inhibit Chikungunya Virus Replication in Clinically Relevant Human Cell Lines. *Microorganisms*. 2021; 9: 307. [PMID: 33540830](#)
7. Agyeman A, Rogers K, Tait J, Bergen PJ, Kirkpatrick CM, Wallis S, **Bulitta JB**, Paterson D, Lipman J, Nation RL, Roberts JA, Landersdorfer CB. Evaluation of meropenem-ciprofloxacin combination dosage regimens for the pharmacokinetics of critically ill patients with augmented renal clearance. *Clin Pharmacol Ther*. 2021; 109:1104-1115. [PMID: 33559617](#)

Papers published in 2020:

8. Sayed ARM, Shah NR, Basso K, Kamat M, Jiao Y, Moya B, Sutaria DS, Lang Y, Tao X, Liu W, Shin E, Zhou J, Werkman C, Louie A, Drusano GL, **Bulitta JB**. First penicillin-binding protein occupancy patterns for 15 β -lactams and β -lactamase inhibitors in *Mycobacterium abscessus*. *Antimicrob Agents Chemother*. 2020; 65: e01956-20. [PMID: 33106266](#)
9. Byrne JM, Waack U, Weinstein EA, Joshi A, Shurland SM, Iarikov D, **Bulitta JB**, Diep BA, Guina T, Hope WW, Lawrenz MB, Lepak AJ, Luna BM, Miesel L, Phipps AJ, Walsh TJ, Weiss WJ, Amini T, Farley JJ. FDA Public Workshop Summary: Advancing Animal Models for Antibacterial Drug Development. *Antimicrob Agents Chemother*. 2020; 65: e01983-20. [PMID: 33106262](#)
10. Lodise TP, Smith NM, O'Donnell N, Eakin AE, Holden PN, Boissonneault KR, Zhou J, Tao X, **Bulitta JB**, Fowler VG, Chambers HF, Bonomo RA, Tsuji BT. Determining the optimal dosing of a novel combination regimen of ceftazidime/avibactam with aztreonam against NDM-1-producing Enterobacteriaceae using a hollow-fibre infection model. *J Antimicrob Chemother*. 2020; 75): 2622-2632. [PMID: 32464664](#)
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12. Onufrak N, Smith NM, Satlin M, **Bulitta JB**, Tan X, Holden P, Nation RL, Li J, Forrest A, Tsuji BT, Bulman Z. In Pursuit of the Triple Crown: Mechanism-Based Pharmacodynamic Modeling for the Optimization 3-Drug Combinations against KPC-Producing *Klebsiella pneumoniae*. *Clin Microbiol Infect*. 2020; 26:1256.e1-1256.e8. [PMID: 32387437](#)
13. Smith NM, Lenhard JR, Boissonneault KR, Landersdorfer CB, **Bulitta JB**, Holden PN, Forrest A, Nation RL, Li J, Tsuji BT. Using machine learning to optimise antibiotic combinations: dosing strategies for meropenem and polymyxin B against carbapenem-resistant *Acinetobacter baumannii*. *Clin Microbiol Infect*. 2020; 26: 1207-1213. [PMID: 32061797](#)

Papers published in 2019:

14. Yadav R, Bergen PJ, Rogers K, Kirkpatrick CM, Wallis S, Huang Y, **Bulitta JB**, Paterson D, Lipman J, Nation RL, Roberts JA, Landersdorfer CB. Meropenem-tobramycin combination regimens combat carbapenem-resistant *Pseudomonas aeruginosa* in the hollow-fiber infection model simulating augmented renal clearance in critically ill patients. *Antimicrob Agents Chemother.* 2019; 64. pii: e01679-19. [PMID: 31636062](#)
15. Rees VE, **Bulitta JB**, Oliver A, Nation RL, Landersdorfer CB. Evaluation of tobramycin and ciprofloxacin as a synergistic combination against hypermutable *Pseudomonas aeruginosa* strains via mechanism-based modelling. *Pharmaceutics.* 2019; 11. pii: E470. [PMID: 31547301](#)
16. **Bulitta JB**[#], Jiao Y, Landersdorfer CB, Sutaria DS, Tao X, Shin E, Höhl R, Holzgrabe U, Stephan U, Sörgel F[#] (joint corresponding authors). Comparable Bioavailability and Disposition of Pefloxacin in Patients with Cystic Fibrosis and Healthy Volunteers Assessed via Population Pharmacokinetics. *Pharmaceutics.* 2019; 11. pii: E323. [PMID: 31295857](#)
17. Kurumaddali A, Christopher D, Sandell D, Strickland H, Morgan B, **Bulitta JB**, Wiggernhorn C, Stein S, Lyapustina S, Hochhaus G. Cascade Impactor Equivalence Testing: Comparison of the Performance of the Modified Chi-Square Ratio Statistic (mCSRS) with the Original CSRS and EMA's Average Bioequivalence Approach. *AAPS PharmSciTech.* 2019; 20:249. [PMID: 31286316](#)
18. Luna B, Yan J, Reyna Z, Moon E, Nielsen TB, Reza H, Lu P, Bonomo RA, Louie A, Drusano GL, **Bulitta JB**, She R, Spellberg B. Natural history of *Acinetobacter baumannii* infection in mice. *PLoS One.* 2019; 14:e0219824. [PMID: 31318907](#)
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21. **Bulitta JB**[#], Hope W, Eakin AE, Guina T, Louie A, Drusano GL, Hoover JL[#] ([#]: joint corresponding authors). Designing robust and informative *in vitro* and mouse infection models to support translation of antibiotic dosage regimens to humans. *Antimicrob Agents Chemother.* 2019; 63. pii: e02307-18. [PMID: 30833428](#)
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23. **Bulitta JB**[#], Jiao Y, Drescher S, Oliver A, Louie A, Moya B, Tao X, Wittau M, Tsuji BT, Zavascki AP, Shin BS, Drusano GL, Sörgel F, Landersdorfer CB. Four decades of β -lactam antibiotic pharmacokinetics in cystic fibrosis patients: Novel dosing strategies to combat *Pseudomonas aeruginosa*. *Clinical Pharmacokinet.* 2019; 58: 143-56. [PMID: 29936678](#)
24. Kim TH, **Bulitta JB**, Kim DH, Shin S, Shin BS. Novel extended in vitro-in vivo correlation model for the development of extended-release formulations for baclofen: From formulation composition to in vivo pharmacokinetics. *Int J Pharm.* 2019; 556:276-286. [PMID: 30543888](#)

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25. Kim TH, Paik SH, Chi YH, **Bulitta JB**, Lee DY, Lim JY, Chung SE, Song CH, Jeong HM, Shin S, Shin BS. Regional Absorption of Fimasartan in the Gastrointestinal Tract by an Improved in situ Absorption Method in Rats. *Pharmaceutics*. 2018; 10. pii: E174. [PMID: 30282950](#)
26. Rees V, Yadav R, Rogers K, **Bulitta JB**, Wirth V, Oliver A, Boyce JD, Peleg A, Nation RL, Landersdorfer CB. Meropenem combined with ciprofloxacin combats hypermutable *Pseudomonas aeruginosa* from respiratory infections of cystic fibrosis patients. *Antimicrob Agents Chemother*; 62: pii: e01150-18. [PMID: 30104278](#)
27. Jiao Y, Kim TH, Tao X, Kinzig M, Landersdorfer CB, Drescher SK, Sutaria DS, Moya B, Holzgrabe U, Sörgel F#, **Bulitta JB**# (#: Joint senior authors). First population pharmacokinetic analysis showing increased quinolone metabolite formation and clearance in patients with cystic fibrosis compared to healthy volunteers. *Eur J Pharm Sci*. 2018; 123:416-428. [PMID: 30076955](#)
28. Pires de Mello CP, Tao X, Kim TH, Vicchiarelli M, **Bulitta JB**, Kaushik A, Brown AN. Clinical Regimens of Favipiravir Inhibit Zika Virus Replication in the Hollow-Fiber Infection Model. *Antimicrob Agents Chemother*. 2018; 62: pii: e00967-18. [PMID: 29967017](#)
29. Tamanna T, Landersdorfer CB, Ng H, **Bulitta JB**, Wood P, Yu A. Prolonged and continuous antibacterial and anti-biofilm activities of thin films embedded with gentamicin-loaded mesoporous silica nanoparticles. *Applied Nanoscience*. 2018; 8:1471-82.
30. Sutaria DS, Moya B, Green KB, Kim TH, Tao X, Jiao Y, Louie A, Drusano GL, **Bulitta JB**# (#: Corr. author). First penicillin-binding protein occupancy patterns of β -lactams and β -lactamase inhibitors in *Klebsiella pneumoniae*. *Antimicrob Agents Chemother*. 2018; 62: pii: e00282-18. [PMID: 29712652](#)
31. Drescher SK, Chen MJ, **Bulitta JB**, Hochhaus G. Pharmacokinetics and Pharmacodynamics of drugs delivered to the lung. In Hickey AJ (Editor): *Pharmaceutical Inhalation Aerosol Technology, Second Edition (Drugs and the Pharmaceutical Sciences) 3rd Edition*, CRC Press; Boca Raton, FL, USA, 2018.
32. Yadav R, Rogers KE, Bergen P, **Bulitta JB**, Kirkpatrick CM, Wallis S, Paterson D, Nation RL, Lipman J, Roberts JA, and Landersdorfer CB. Optimization and evaluation of piperacillin plus tobramycin combination dosage regimens against *Pseudomonas aeruginosa* for patients with altered pharmacokinetics via the hollow-fiber infection model and mechanism-based modeling. *Antimicrob Agents Chemother*. 2018; 62. pii: e00078-18. [PMID: 29463528](#)
33. Montagnat OD, Webster GR, **Bulitta JB**, Landersdorfer C, Wyber R, Sheel M, Carapetis JR, Boyd BJ. Lessons learned in the development of sustained release penicillin drug delivery systems for the prophylactic treatment of rheumatic heart disease (RHD). *Drug Deliv Transl Res*. 2018; 8:729-739. [PMID: 29404981](#)
34. Gulliver EL, Wright A, Deveson Lucas D, Mégroz M, Kleifeld O, Schittenhelm RB, Powell DR, Seemann T, **Bulitta JB**, Harper M, Boyce JD. Determination of the small RNA GcvB regulon in the Gram-negative bacterial pathogen *Pasteurella multocida* and identification of the GcvB seed binding region. *RNA*. 2018; 24:704-720. [PMID: 29440476](#)
35. Landersdorfer CB, Rees VE, Yadav R, Rogers KE, Kim TH, Bergen PJ, Cheah S-E, Boyce JD, Peleg AY, Oliver A, Shin BS, Nation RL, **Bulitta JB**#. Optimising a meropenem plus tobramycin combination dosage regimen against hypermutable and non-hypermutable *Pseudomonas aeruginosa* via mechanism-based modelling and the hollow-fibre infection model. *Antimicrob Agents Chemother*. 2018; 62. pii: e02055-17. [PMID: 29437610](#)

36. Landersdorfer CB[#], Yadav R, Rogers KE, TH Kim, Shin BS, Boyce JD, Nation RL, **Bulitta JB**[#]. (#: Corr. author) Combating carbapenem-resistant *Acinetobacter baumannii* by an optimised imipenem plus tobramycin dosage regimen – prospective validation via the hollow fibre infection and mathematical modelling. *Antimicrob Agents Chemother.* 2018; 62. pii: e02053-17. [PMID: 29339388](#)
37. Bergen PJ, **Bulitta JB**, Sime FB, Lipman J, McGregor MJ, Millen N, Paterson DL, Kirkpatrick CM, Roberts JA, Landersdorfer CB. Differences in suppression of regrowth and resistance despite similar initial bacterial killing for meropenem and piperacillin/tazobactam against *Pseudomonas aeruginosa* and *Escherichia coli*. *Diagn Microbiol Infect Dis.* 2018; 91:69-76. [PMID: 29395712](#)
38. Mangal N, Hamadeh I, Arwood M, Cavallari L, Samant T, Klinker K, **Bulitta JB**, Schmidt S. Optimization of voriconazole therapy for the treatment of invasive fungal infections in adults. *Clin Pharmacol Ther.* 2018; 104:957-965. [PMID: 29315506](#)

Papers published in 2017:

39. Pires de Mello C, Tao X, Kim TH, **Bulitta JB**, Rodriguez J, Pomeroy J, Brown AN. Zika virus (ZIKV) Replication is Substantially Inhibited by Novel Favipiravir and Interferon-alpha Combination Regimens. *Antimicrob Agents Chemother.* 2017; 62. pii: e01983-17. [PMID: 29109164](#)
40. Yadav R, **Bulitta JB**, Wang J, Nation RL, Landersdorfer CB. Evaluation of Pharmacokinetic / Pharmacodynamic Model-Based Optimized Combination Regimens against Multidrug-Resistant *Pseudomonas aeruginosa* in a Murine Thigh Infection Model by Using Humanized Dosing Schemes. *Antimicrob Agents Chemother.* 2017; 61. pii: e01268-17. [PMID: 28993331](#)
41. Yadav R, **Bulitta JB**[#], Schneider E, Shin BS, Velkov T, Nation RL, Landersdorfer CB[#]. (#: Joint senior authors). Aminoglycoside concentrations required for synergy with carbapenems against *Pseudomonas aeruginosa* determined via mechanistic studies and modeling. *Antimicrob Agents Chemother.* 2017; 61. pii: e00722-17. [PMID: 28893782](#)
42. Kim TH, Shin S, Kim S, **Bulitta JB**, Weon KY, Joo SH, Ma E, Yoo SD, Park GY, Kwon DR, Jeong SW, Lee DY, Shin BS. Alterations in Pharmacokinetics of Gemcitabine and Erlotinib by Concurrent Administration of Hyangsayukgunja-Tang, a Gastroprotective Herbal Medicine. *Molecules.* 2017; 22. pii: E1515. [PMID: 28891960](#)
43. Kim TH, Shin S, Shin JC, **Bulitta JB**, Weon KY, Yoo SD, Park GY, Jeong SW, Kwon DR, Min BS, Woo MH, Shin BS. Effect of Sipjeondaebotang on the Pharmacokinetics of S-1, an Anticancer Agent, in Rats Evaluated by Population Pharmacokinetic Modeling. *Molecules.* 2017; 22. pii: E1488. [PMID: 28880240](#)
44. De Miranda Silva C, Rocha A, Tozatto E, da Silva LM, Donadi EA, Dalla Costa T, Lanchote VL, Schmidt S, Bulitta JB[#]. (#: Corr. author) Development of an Enantioselective and Biomarker-Informed Translational Pharmacokinetic / Pharmacodynamic Model for Etodolac. *AAPS J* 2017; 19:1814-1825. [PMID: 28875479](#)
45. Lenhard JR, **Bulitta JB**, Connell TD, King-Lyons N, Landersdorfer CB, Cheah SE, Thamlikitkul V, Shin BS, Rao G, Holden PN, Walsh TJ, Forrest A, Nation RL, Li J, Tsuji BT. High-intensity meropenem combinations with polymyxin B: new strategies to overcome carbapenem resistance in *Acinetobacter baumannii*. *J Antimicrob Chemother* 2017; 72:153-65. [PMID: 27634916](#)
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48. Bergen PJ, **Bulitta JB**, Kirkpatrick CM, Rogers K, McGregor M, Wallis S, Paterson D, Nation RL, Lipman J, Roberts JA, Landersdorfer CB. Substantial impact of altered pharmacokinetics in critically ill patients on the antibacterial effects of meropenem evaluated *via* the dynamic hollow-fiber infection model. *Antimicrob Agents Chemother* 2017; 61. pii: e02642-16. [PMID: 28264846](#)
49. Lenhard JR, Smith NM, Bulman ZP, Tao X, Thamlikitkul V, Shin BS, Nation RL, Li J, **Bulitta JB**, Tsuji BT. High-Dose Ampicillin-Sulbactam Combinations Combat Polymyxin-Resistant *Acinetobacter baumannii* in a Hollow-Fiber Infection Model. *Antimicrob Agents Chemother*. 2017; 61. pii: e01268-16. [PMID: 28052852](#)
50. Tängdén T, Ramos Martín V, Felton TW, Nielsen EI, Marchand S, Brüggemann RJ, **Bulitta JB**, Bassetti M, Theuretzbacher U, Tsuji BT, Wareham DW, Friberg LE, De Waele JJ, Tam VH, Roberts JA. The role of infection models and PK/PD modelling for optimising care of critically ill patients with severe infections. *Intensive Care Medicine*. 2017; 43: 1021-32. [PMID: 28409203](#)
51. Lenhard JR, Thamlikitkul V, Silveira FP, Garonzik SM, Tao X, Forrest A, Shin BS, Kaye KS, **Bulitta JB**, Nation RL, Li J, Tsuji BT. Polymyxin-resistant, carbapenem-resistant *Acinetobacter baumannii* is eradicated by a triple combination of agents that lack individual activity; *J Antimicrob Chemother*. 2017; 72: 1415-20. [PMID: 28333347](#)
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54. **Bulitta JB**[#], Paik SH, Chi YA, Kim TH, Shin S, Landersdorfer CB, Jiao Y, Yadav R, Shin BS[#]. ([#]: Corresponding author) Characterizing the Time-course of Antihypertensive Activity and Optimal Dose Range of Fimasartan via Mechanism-based Population Modeling. *Eur J Pharm Sci*. 2017; 107: 32-44. [PMID: 28599987](#)
55. Bulman Z, Chen L, Walsh T, Satlin M, Qian Y, **Bulitta JB**, Peloquin C, Holden P, Nation R, Li J, Kreiswirth N, Tsuji BT. Polymyxin Combinations Combat *Escherichia coli* Harboring mcr-1 and blaNDM-5 in Preparation for a 'Post-Antibiotic Era'. *MBio*. 2017; 8. pii: e00540-17. [PMID: 28743810](#)

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56. Jacobs M, Grégoire N, Couet W, **Bulitta JB**. Distinguishing antimicrobial PK/PD models with different resistance mechanisms via Monte Carlo simulations and population modeling. *PLoS Comput Biol*. 2016; 12:e1004782. [PMID: 26967893](#)
57. Chan LJ, Ascher DB, Yadav R, **Bulitta JB**, Porter CJH, Williams CC, Kaminskas LM. Conjugation of 10 kDa Linear PEG onto Trastuzumab Fab' Is Sufficient to Significantly Enhance Lymphatic Exposure while Preserving in Vitro Biological Activity. *Mol Pharm*. 2016; 13:1229-41. [PMID: 26871003](#)
58. Ly NS, Bulman ZP, **Bulitta JB**, Baron C, Rao GG, Holden PN, Li J, Sutton MD, Tsuji BT. Optimization of Polymyxin B in Combination with Doripenem To Combat Mutator *Pseudomonas aeruginosa*. *Antimicrob Agents Chemother* 2016; 60:2870-80. [PMID: 26926641](#)
59. Hope WW, Walsh TJ, Goodwin J, Peloquin CA, Howard A, Kurtzberg J, Mendizabal A, Confer D, **Bulitta JB**, Baden L, Neely MN, Wingard JR, Blood and Marrow Transplant Clinical Trials Network. Voriconazole Pharmacokinetics Following Hematopoietic Stem Cell Transplantation: Results from the BMT CTN 0101 Trial. *J Antimicrob Chemother*. 2016; 71:2234-40. [PMID: 27121401](#)
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61. Cheah S-E, Li J, Tsuji BT, Forrest A, **Bulitta JB**[#], Nation RL[#]. ([#]: Joint senior authors) Colistin and polymyxin B dosage regimens against *Acinetobacter baumannii*: Differences in activity and the emergence of resistance. *Antimicrob Agents Chemother*. 2016; 60:3921-33. [PMID: 27067324](#)
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149. Landersdorfer CB, Kirkpatrick CM, Kinzig M, **Bulitta JB**, Holzgrabe U, Sörgel F. Inhibition of flucloxacillin tubular renal secretion by piperacillin. *Br J Clin Pharmacol* 2008; 66:648-59. [PMID: 19032173](#)
150. **Bulitta JB** & Holford NHG (14 March, 2008). Population Pharmacokinetic and Pharmacodynamic Methods. pp. 1-15 in: *Wiley Encyclopedia of Clinical Trials*, (Ralph B. D'Agostino, Lisa Sullivan, Joseph Massaro, eds.) Hoboken, NJ: John Wiley & Sons, Inc. dx.doi.org/10.1002/9780471462422.eoct338
151. **Bulitta JB** & Holford NHG (13 June, 2008). An Introductory Guide to Non-Compartmental Analysis. pp. 1-21 in: *Wiley Encyclopedia of Clinical Trials*, (Ralph B. D'Agostino, Lisa Sullivan, Joseph Massaro, eds.) Hoboken, NJ: John Wiley & Sons, Inc. dx.doi.org/10.1002/9780471462422.eoct340
152. **Bulitta JB**, Duffull SB, Kinzig-Schippers M, Holzgrabe U, Stephan U, Drusano GL, Sörgel F. Systematic comparison of the population pharmacokinetics and pharmacodynamics of piperacillin in cystic fibrosis patients and healthy volunteers. *Antimicrob Agents Chemother* 2007; 51:2497-507. [PMID: 17485505](#)
153. Landersdorfer CB, Kirkpatrick CM, Kinzig-Schippers M, **Bulitta JB**, Holzgrabe U, Drusano GL, Sörgel F. Population pharmacokinetics at two dose levels and pharmacodynamic profiling of flucloxacillin. *Antimicrob Agents Chemother* 2007; 51:3290-7. [PMID: 17576847](#)
154. Sakka SG, Glauner AK, **Bulitta JB**, Kinzig-Schippers M, Pfister W, Drusano GL, Sörgel F. Population pharmacokinetics and pharmacodynamics of continuous versus short-term infusion of imipenem-cilastatin in critically ill patients in a randomized, controlled trial. *Antimicrob Agents Chemother* 2007; 51:3304-10. [PMID: 17620371](#)

Papers published in 2004, 2005 and 2006:

155. Sörgel F, **Bulitta JB**, Landersdorfer CB. What we know and what we want to know about beta-lactams. Pharmacokinetics and pharmacodynamics of beta lactams. Pharm Unserer Zeit 2006; 35: 438-51. [PMID: 17009789](#)
156. Roos JF, **Bulitta J**, Lipman J, Kirkpatrick CM. Pharmacokinetic-pharmacodynamic rationale for cefepime dosing regimens in intensive care units. J Antimicrob Chemother 2006; 58:987-93. [PMID: 16943209](#)
157. Krueger WA, **Bulitta JB**, Kinzig-Schippers M, Landersdorfer C, Holzgrabe U, Naber KG, Drusano GL, Sörgel F. Evaluation by Monte Carlo simulation of the pharmacokinetics of two doses of meropenem administered intermittently or as a continuous infusion in healthy volunteers. Antimicrob Agents Chemother 2005; 49:1881-9. [PMID: 15855510](#)
158. Pletz MW, Rau M, **Bulitta JB**, De Roux A, Burkhardt O, Kruse G, Kurowski M, Nord CE, Lode H. Ertapenem pharmacokinetics and impact on intestinal microflora, in comparison to those of ceftriaxone, after multiple dosing in male and female volunteers. Antimicrob Agents Chemother 2004; 48:3765-72. [PMID: 15388432](#)
159. Sörgel F, Landersdorfer CB, **Bulitta JB**. Two new antibiotics with special qualities: the pharmacokinetics of linezolid and telithromycin. Pharm Unserer Zeit 2004; 33:28-36. [PMID: 14968710](#)
160. Sörgel F, **Bulitta J**, Holzgrabe U. Paul Ehrlich, seine Forschungsgebiete und ihre Wirkung auf die Gegenwart - Gedanken zu seinem 150. Geburtstag. Pharm. Ztg. 2004; 149: 1038-42.
161. Sörgel F, Landersdorfer C, **Bulitta J**, Keppler B. Vom Farbstoff zum Rezeptor: Paul Ehrlich und die Chemie. Nachrichten aus der Chemie 2004; 52:777-82.

Papers published between 1999 and 2003:

162. Pletz MW, Preechachatchaval V, **Bulitta JB**, Allewelt M, Burkhardt O, Lode H. ABT-773: pharmacokinetics and interactions with ranitidine and sucralfate. Antimicrob Agents Chemother 2003; 47:1129-31. [PMID: 12604553](#)
163. Jetter A, Kinzig-Schippers M, Walchner-Bonjean M, Hering U, **Bulitta JB**, Schreiner P, Sörgel F, Fuhr U. Effects of grapefruit juice on the pharmacokinetics of sildenafil. Clin Pharmacol Ther 2002; 71:21-9. [PMID: 11823754](#)
164. Sörgel F, **Bulitta JB**, Kinzig-Schippers M. Pharmakokinetik der Chinolone. Chemotherapie J 2002; 11:25-33.
165. Sörgel F, **Bulitta JB**, Kinzig-Schippers M. How well do gyrase inhibitors work? The pharmacokinetics of quinolones. Pharm Unserer Zeit 2001; 30:418-27. [PMID: 11575179](#)
166. Sörgel F, Kinzig-Schippers M, **Bulitta JB**. Pharmakokinetisches Profil von Quinupristin-Dalfopristin. Chemotherapie J 2000; 9:42-53.
167. Sörgel F, Kinzig-Schippers M, Steinhauer S, **Bulitta JB**. Chemie und Pharmakokinetik von Linezolid. In von Eiff C. (Eds.): Oxazolidinone: Eine neue Klasse von Antibiotika. 47-60; SM Verlagsgesellschaft mbH, Wessobrunn; 1999.
168. Sörgel F, Kinzig-Schippers M, Sauber C, **Bulitta JB**. Pharmakokinetik und Pharmakodynamik von Levofloxacin. Chemotherapie J 1999; 8:19-27.
169. Kinzig-Schippers M, Fuhr U, Zaigler M, Dammeyer J, Rüsing G, Labedzki A, **Bulitta JB**, Sörgel F. Interaction of pefloxacin and enoxacin with the human cytochrome P450 enzyme CYP1A2. Clin Pharmacol Ther 1999; 65:262-74. [PMID: 10096258](#)

Invited International Podium Presentations

1. Bulitta JB. Invited presentation on: Combination chemotherapy, Workshop on “Pharmacodynamics: How Can It Help You – Combination Chemotherapy?” at the National Institute of Allergy and Infectious Diseases (**NIAID**), National Institutes of Health (NIH), November 30 to December 1, 2009.
2. Bulitta JB. Invited presentation on: Mechanism-based Modeling, Workshop on “Pharmacodynamics: How Can It Help You? – Mechanism-based Modeling” at the National Institute of Allergy and Infectious Diseases (**NIAID**), National Institutes of Health (NIH), November 30 to December 1, 2009.
3. Bulitta JB, Bingölbali A, Landersdorfer CB. Invited presentation on: PK modelling: obtaining PK profiles despite sparse sampling. 20th European Congress of Clinical Microbiology and Infectious Diseases, Vienna, April 10 - 13, 2010.
4. Bulitta JB, Louie A, Tsuji BT, Brown AN, McSharry JJ, D'Hondt RE, Landersdorfer CB, Forrest A, Drusano GL: Invited presentation on: Antibiotics / Antivirals – Curing Infections and Preventing Bacterial and Viral Resistance and Persists via Mechanism-Based Modeling and Simulation. 6th International Symposium on Measurement & Kinetics of In Vivo Drug Effects, Noordwijkerhout, April 21 - 24, 2010.
5. Bulitta JB. Mathematical Modeling and Pharmacokinetics/Pharmacodynamics. Presentation: 1212. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.
6. Bulitta JB. Modeling and Simulation of Penetration Data. Presentation: 1908. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.
7. Bulitta JB, Landersdorfer CB, Ly NS, Bergen PJ, Lee HJ, Patel K, Tsuji BT, Kirkpatrick CM, Nation RL, Li J, Forrest A. Mechanism-based modelling of antibiotics to optimally cure patients and prevent resistance: progress, gaps, and future perspectives. PAGANZ 2012 Population Approach Group in Australia & New Zealand, Melbourne, Australia. February 8, 2011.
8. Bulitta JB. From Receptor Occupancy to Patient Cure and Resistance Prevention: Mechanism-based Modelling to Optimize Antibiotic Combinations. 2011 PharmSciFair – European Federation for Pharmaceutical Sciences, Prague, Czech Republic, June 13 - 17, 2011.
9. Bulitta JB. Translational approaches to inform selection of rational antibiotic combinations for patients. First international conference on Polymyxins. Prato, Italy. May 3, 2013.
10. Bulitta JB. How preclinical pharmacometrics can help optimizing dosage regimens for patients? 20th North American International Society for the Study of Xenobiotics (ISSX) Meeting. Orlando, Florida, USA; October 21, 2015.
11. Bulitta JB. Next-Generation Antibiotic Combination Dosing Strategies to Combat Multidrug-Resistant Bacterial ‘Superbugs’. Annual meeting of the III Brazilian Association of Pharmaceutical Sciences (ABCF): Frontiers of Pharmaceutical Science in the Omics Era. Porto Alegre, Brazil. June 15, 2016.
12. Bulitta JB. Antimicrobial Toxicodynamics of Oxazolidinones. ASM Microbe 2016, Boston, MA, USA; June 20, 2016.
13. Bulitta JB. Quantitative and Systems Pharmacology: An Innovative Tool to Rationally Optimize Combination Therapy. American Conference on Pharmacometrics ACOP7, Seattle, WA; October 24, 2016.
14. **Bulitta JB**. Antibacterial Resistance: Preclinical PK/PD – Integrating Knowledge and Innovating Therapies. ESPAG / ISAP Workshop Presentation at the 27th ECCMID, Vienna Austria, April 21, 2017.
15. Bulitta JB. Invited presentation on: Quality PK Data to Support PK/PD and Translational Analyses. **NIAID** Workshop ‘PKPD for Development of Therapeutics against Bacterial Pathogens’ at the National Institutes of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), Bethesda, MD; June 14-15, 2017.

16. **Bulitta JB**. Invited presentation on: Quality PK Data to Support PK/PD and Translational Analyses. **NIAID** Workshop 'PKPD for Development of Therapeutics against Bacterial Pathogens' at the National Institutes of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), Bethesda, MD; June 14-15, 2017.
17. **Bulitta JB**, Hochhaus G. Novel bioequivalence approach to study regional distribution of inhalation drugs: Validation through physiologically-based and population pharmacokinetics. FY 2019 Generic Drug Regulatory Science Initiatives Public Workshop (U.S. FDA). Silver Spring, MD, May 1, 2019.
18. Luna B, **Bulitta JB**. Development and Pharmacokinetic Challenges of a Murine Model for *Acinetobacter baumannii* infection. Advancing Animal Models for Antibacterial Drug Development Workshop. FDA Center for Drug Evaluation and Research. Silver Spring, MD, March 5, 2020.
19. **Bulitta JB**, Hochhaus. Pharmacokinetic Comparison of Locally Acting Nasal Suspension Spray Products. DIA/FDA Complex Generic Drug-Device Combination Products Conference. Silver Spring, MD. October 19, 2020.

Invited International Research Presentations

20. Bulitta JB, Li J, Bergen PJ, Poudyal A, Yu HH, Owen RJ, Tsuji BT, Nation RL, Forrest A. New Mechanism-Based Models Linking Receptor Binding with Bacterial Responses for Optimizing Antimicrobial Drug Development and Therapy. 7th Annual Congress of International Drug Discovery Science and Technology (IDDST), Shanghai, China; October 22 – 25, 2009.
21. Bulitta JB, Louie A, Drusano GL. Mechanism-Based Approach to Combination Antimicrobial Chemotherapy. Gordon Research Conference on New Antibacterial Discovery & Development, Galveston, TX, USA, March 15, 2010.
22. Bulitta JB. Preventing resistance of bacterial "superbugs" by synergistic combinations of antibiotics. ASCEPT 2012 Sydney, Australia. December 5, 2012.

Invited Full Courses Taught on Pharmacokinetic / Pharmacodynamic Modeling:

1. **Bulitta JB**. Invited post-graduate course instructor at the Department of Clinical Pharmacology, University of Cologne, Germany. 4-h lecture on: Introduction into pharmacokinetics, pharmacodynamics and in-vitro/in-vivo correlations using WinNonlin[®] Professional, April 1999.
2. **Bulitta JB**. Workshop: Pharmacokinetic and pharmacodynamic calculations with WinNonlin[®]. Institute for Clinical Pharmacology – Department of Clinical Pharmacology, University of Cologne, Cologne, Germany; November 17, 2001.
3. Landersdorfer CB, **Bulitta JB**. Workshop on: Efficient Structural Model Building via a Combined Simulation Estimation Approach using Berkeley Madonna and S-ADAPT. Department of Pharmaceutical Sciences, SUNY at Buffalo, Buffalo, NY; July 31 – Aug 1, 2009.
4. Landersdorfer CB, **Bulitta JB**. Introductory Workshop on Modeling and Simulation in Biomedical and Pharmaceutical Sciences. Monash University, Melbourne, Australia, October 27 - 29, 2009.
5. **Bulitta JB**. Introduction to Population PK/PD Modeling using S-ADAPT and SADAPT-TRAN. Ordway Research Institute, Albany, NY, USA, March 5-11, 2010.
6. **Bulitta JB**. Workshop: Introduction to Pharmacokinetics (PK), Pharmacodynamics (PD), and Population PK/PD modeling and Simulations using Berkeley Madonna and S-ADAPT, University of Würzburg, Würzburg, Germany; June 15 - 16, 2010.
7. **Bulitta JB**, Landersdorfer CB. Population PK/PD Modeling with S-ADAPT and SADAPT-TRAN. SUNY at Buffalo, Buffalo, NY, USA, August 20-21, 2010.
8. Landersdorfer CB, **Bulitta JB**. Introductory and Intermediate Workshop on Modeling and Simulation in Pharmaceutical & Biomedical Sciences. Monash University, Melbourne, Australia, March 15 to 18, 2011.

9. **Bulitta JB**, Landersdorfer CB. Population PK/PD Modeling. SUNY at Buffalo, Buffalo, NY, USA, September 23-24, 2011.
10. **Bulitta JB**, Landersdorfer CB, Forrest A. General Principles and Mechanism-based Mathematical Modelling of Anti-infectives to Maximize Bacterial Killing and Prevent Resistance. PAGANZ 2012 Population Approach Group in Australia & New Zealand, Melbourne, Australia. February 7, 2012.
11. Landersdorfer CB, **Bulitta JB**. Population Modeling and Simulation Workshop. SUNY at Buffalo, Buffalo, NY, USA, September 14-15, 2012.
12. Landersdorfer CB, **Bulitta JB**. Introductory and Intermediate Workshop on Modeling and Simulation with Berkeley Madonna in Pharmaceutical & Biomedical Sciences. SUNY at Buffalo, Buffalo, BY, USA, April 22 to 23, 2013.
13. Landersdorfer CB, **Bulitta JB**. Population PK/PD Modeling and Simulation Workshop. SUNY at Buffalo, Buffalo, BY, USA, September 16 to 17, 2013.
14. Landersdorfer CB, **Bulitta JB**. Introductory and Intermediate Workshop on Modeling and Simulation with Berkeley Madonna in Pharmaceutical & Biomedical Sciences. SUNY at Buffalo, Buffalo, BY, USA, September 11 to 12, 2014.
15. **Bulitta JB**. Population PK/PD Modeling & Simulation. Univ. of Florida, Gainesville, FL, USA, November 10, 2015.
16. **Bulitta JB**. Mechanism-based Population Pharmacokinetic / Pharmacodynamic Modeling using S-ADAPT. SUNY at Buffalo, Buffalo, BY, USA, August 30 to 31, 2018.

Invited Course Lectures Taught at International Conferences or International Universities on Pharmacokinetic / Pharmacodynamic Modeling:

1. **Bulitta JB**. Quantitative Structure Pharmacokinetics Relationships (QSPKR): How to estimate pharmacokinetic parameters. World Conference on Magic Bullets - Pre-Conference Workshops; Nürnberg, Germany; September 8, 2004.
2. **Bulitta JB**, Jusko WJ. Mechanism Based PK/PD Models of Anti-infectives. Johnson & Johnson Workshop. Johnson & Johnson Pharmaceutical Research & Development, Raritan NJ, USA, August 24, 2007.
3. **Bulitta JB**, Landersdorfer CB. Making the most of the available pharmacometric software - the 'right' program for the 'right' task. Workshop lecture for SUNY Buffalo Graduate Students, July 31, 2007.
4. **Bulitta JB**, Tsuji BT, Forrest A. Benefits of Mathematical Modeling for Infectious Disease Drug Development – UB Pfizer Strategic Alliance. Pfizer, Groton, CT, USA, June 8, 2008.
5. **Bulitta JB**, Jelliffe RW. Overview and comparison of parametric and non-parametric estimation techniques. PK/PD workshop presentation at the 2nd World Conference on Magic Bullets – Ehrlich II, Nürnberg, Germany, October 3-5, 2008.
6. **Bulitta JB**. Overview of PK/PD software tools for estimation and optimal design – the 'right' program for the 'right' task. PK/PD workshop presentation at the 2nd World Conference on Magic Bullets – Ehrlich II, Nürnberg, Germany, October 3-5, 2008.
7. **Bulitta JB**, Tsuji BT, Ly NS, Jusko WJ, Forrest A. Mechanism-based models for anti-infectives – what do they have to offer? ISAP workshop presentation at the 2nd World Conference on Magic Bullets – Ehrlich II, Nürnberg, Germany, October 3-5, 2008.
8. **Bulitta JB**. Why population PK/PD? An Overview of Methods and Application. ISAP Workshop Presentation at the 48th Annual ICAAC / IDSA 46th Annual Meeting, Washington, DC, October 24, 2008.

9. **Bulitta JB.** Pre-Conference Workshop of the International Society for Anti-infective Pharmacology (ISAP) on: PK/PD models of resistance. 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 11, 2009.
10. **Bulitta JB,** Landersdorfer CB, Jelliffe RW. Post-Conference Workshop of the Nonparametric Population Models – Properties & Capabilities. International Congress of TDM & Clinical Toxicology, Montreal, Canada; October 9, 2009.
11. **Bulitta JB.** Invited presentation on: Combination chemotherapy, Workshop on “Pharmacodynamics: How Can It Help You – Combination Chemotherapy?” at the National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), November 30 to December 1, 2009.
12. **Bulitta JB.** Invited presentation on: Mechanism-based Modeling, Workshop on “Pharmacodynamics: How Can It Help You? – Mechanism-based Modeling” at the National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), November 30 to December 1, 2009.
13. **Bulitta JB.** PK/PD models of resistance – Understanding & limiting emergence of resistance via PK/PD modeling. ISAP Workshop Presentation at the 50th Annual ICAAC, Boston, MA, September 11, 2010.
14. **Bulitta JB.** Mathematical Modeling and Pharmacokinetics/Pharmacodynamics. Presentation: 1212. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.
15. **Bulitta JB.** PK/PD models of resistance – Understanding & limiting emergence of resistance via PK/PD modeling. ISAP Workshop Presentation at the 51st Annual ICAAC, Chicago, IL, September 16, 2011.
16. **Bulitta JB.** Mechanism-based modeling to prevent the emergence of bacterial resistance. ISAP Workshop Presentation at the 52nd Annual ICAAC, San Francisco, CA, September 8, 2012.
17. **Bulitta JB.** Mathematical Modeling: Software Choices. ISAP Workshop Presentation at the 54th Annual ICAAC, Washington, DC, September 5, 2014.
18. **Bulitta JB.** Population PK/PD modelling: Software Choices. ESCMID Postgraduate Technical Workshop: Advanced Antimicrobial Pharmacokinetic and Pharmacodynamic Modelling & Simulation; Liverpool, UK, October 6-8, 2014.
19. **Bulitta JB.** Concepts in Pharmacokinetics & Pharmacodynamics and Translational Pharmacometrics. University of North Carolina; Chapel Hill, NC, December 12, 2014.
20. **Bulitta JB.** Translational PK/PD Modeling of Antibiotics – Making a Difference. ISAP Workshop Presentation at the 55th Annual ICAAC/ICC, Dan Diego, CA, September 17, 2015.
21. **Bulitta JB.** Demonstrating impact – bibliographic and other tools to let your CV shine. Departmental Seminar, Orlando, University of Florida, February 25, 2016.
22. **Bulitta JB.** Antibacterial Resistance: Preclinical PK/PD – Integrating Knowledge and Innovating Therapies. ESPAG / ISAP Workshop Presentation at the 27th ECCMID, Vienna Austria, April 21, 2017.
23. **Bulitta JB.** Invited presentation on: Quality PK Data to Support PK/PD and Translational Analyses. NIAID Workshop ‘PKPD for Development of Therapeutics against Bacterial Pathogens’ at the National Institutes of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), Bethesda, MD; June 14-15, 2017.

Oral Presentations (including invited presentations listed above)

1. Bulitta JB, Hess KJ, Sörgel F, Jaehde U, Kinzig-Schippers M. Modellierung der Resistenzentwicklung von *Staphylococcus epidermidis* gegen Gyrasehemmer. Oral Presentation at the PEG-Consensus-Conference for parenteral antibiotics; Frankfurt/Main, Germany; October 24, 1998.
2. Bulitta JB, Hess KJ, Sörgel F, Jaehde U, Kinzig-Schippers M. Modellierung der Resistenzentwicklung von *Staphylococcus epidermidis* gegen Gyrasehemmer. Abstr. KP27, Pre-symposium: Clinical pharmaceuticals in science and practice, Annual meeting of the German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft, DPhG); Tübingen, Germany; November 5 - 6, 1998.
3. Bulitta JB. Introduction into pharmacokinetics, pharmacodynamics and in-vitro/in-vivo correlations using WinNonlin® Professional for physicians, pharmacists and scientists of other natural sciences. Institute for Clinical Pharmacology – Department of Clinical Pharmacology, University of Cologne, Cologne, Germany; April 23, 1999.
4. Bulitta JB. Workshop: Pharmacokinetic and pharmacodynamic calculations with WinNonlin®. Institute for Clinical Pharmacology – Department of Clinical Pharmacology, University of Cologne, Cologne, Germany; November 17, 2001.
5. Bulitta JB. Ab initio-Vorhersage der Pharmakokinetik von Chinolonen in silico. Pre-symposium: Annual meeting of the German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft, DPhG); Würzburg, Germany; October 8 - 11, 2003.
6. Bulitta JB, Horn AH, Sörgel F, Holzgrave U, Clark T. Quantitative Struktur Pharmakokinetik Beziehungen bei Chinolonen – Vorhersage von Plasmakonzentrationen in silico. Oral Presentation at a Ph.D. student meeting of the German Pharmaceutical Society (DPhG); Freudenstadt-Lauterbad, Germany; March 26, 2004.
7. Bulitta JB. Quantitative Structure Pharmacokinetics Relationships: How to estimate pharmacokinetic parameters. World Conference on Magic Bullets - Pre-Conference Workshops; Nürnberg, Germany; September 8, 2004.
8. Bulitta JB, Holford NHG. Assessment of predictive performance of pharmacokinetic models based on plasma and urine data. PAGANZ 05 Population Approach Group in Australia & New Zealand, Brisbane, Australia; February 9, 2005.
9. Bulitta JB, Duffull SB, Kinzig-Schippers M, Holzgrave U, Stephan U, Sörgel F. Cystic Fibrosis Patients are Pharmacokinetically Comparable to Healthy Volunteers; 15th symposium of the International Society of Anti-Infective Pharmacology; Washington, DC, USA; December 19, 2005.
10. Bulitta JB. "Optimal" Dosing of Cystic Fibrosis Patients via Population PKPD & Monte Carlo Simulation. Invited seminar presentation at the Department of Pharmaceutical Sciences, SUNY Buffalo, Buffalo, NY, USA; January 10, 2006.
11. Bulitta JB, Duffull SB, Landersdorfer C, Drusano GL, Kinzig-Schippers M, Holzgrave U, Stephan U, Sörgel F. Optimized prolonged infusion of beta-lactams with allometric dosing for cystic fibrosis patients. Oral Presentation at a Ph.D. student meeting of the German Pharmaceutical Society (DPhG); Nürnberg-Heroldsberg, Germany; September 8, 2006.
12. Bulitta JB. Innovative techniques for selecting the dose of antibiotics in empiric therapy – focus on beta-lactams and cystic fibrosis patients. Public thesis defense, University of Würzburg, Würzburg, Germany, September 25, 2006.
13. Bulitta JB, Yang JC, Tsuji BT, Jusko WJ, Forrest A. Mechanistic PK/PD Models for the Inoculum Effect (over 5 Orders of Magnitude) of Colistin and Ceftazidime against *Pseudomonas aeruginosa*. Fellow Research Presentation Day of the School of Pharmacy and Pharmaceutical Sciences, SUNY Buffalo, NY, USA, June 8, 2007.
14. Bulitta JB, Landersdorfer CB. Making the most of the available pharmacometric software - the 'right' program for the 'right' task. Workshop lecture for SUNY Buffalo Graduate Students, July 31, 2007.
15. Bulitta JB, Jusko WJ. Mechanism Based PK/PD Models of Anti-infectives. Johnson & Johnson Workshop. Johnson & Johnson Pharmaceutical Research & Development, Raritan NJ, USA, August 24, 2007.
16. Bulitta JB, Yang JC, Tsuji BT, Jusko WJ, Forrest A. Modeling Growth & Killing of *P. aeruginosa* by Colistin for a Range of Bacterial Inocula – a Mechanism-based Population PK/PD Modeling Approach. Post-ICAAC meeting of the International Society of Anti-Infective Pharmacology (ISAP) in Chicago, IL, USA, September 20, 2007.
17. Bulitta JB, Tsuji BT, Yang JC, Ly NS, Forrest A, Jusko WJ. Optimization of Therapy against Multidrug-Resistant Gram-negative Pathogens by Mechanism-based Pharmacodynamic Modeling. Invited presentation, Cincinnati, OH, USA, January 15, 2008.

18. Bulitta JB, Landersdorfer CB, Schumitzky A, Van Guilder M, Jelliffe RW. Systematic Comparison of Nonparametric and Parametric Population Methods for a Multi-Subpopulation PK Model. Invited presentation, Cincinnati, OH, USA, January 16, 2008.
19. Bulitta JB, Yang JC, Tsuji BT, Ly NS, Jusko WJ, Forrest A. Mechanism-based Pharmacodynamic Modeling of Phenotypic Tolerance in *Pseudomonas aeruginosa* for Ceftazidime. PAGANZ 08 Population Approach Group in Australia & New Zealand, Dunedin, New Zealand; February 14, 2008.
20. Bulitta JB, Ly NS, Tsuji BT, Jusko WJ, Forrest A. Development of a mechanism-based pharmacodynamic model for tobramycin that can describe phenotypic tolerance of *P. aeruginosa* for a range of initial inocula. University of Otago, Dunedin, New Zealand; February 28, 2008.
21. Bulitta JB, Tsuji BT, Yang JC, Ly NS, Jusko WJ, Forrest A. Mechanism-based models for anti-infectives: How are they superior to traditional efficacy-driver analyses? Research Presentation. Pfizer, Groton, CT, USA, March 3, 2008.
22. Bulitta JB, Ly NS, Yang JC, Tsuji BT, Jusko WJ, Forrest A. Mechanism-based Pharmacodynamic Modeling of Phenotypic Tolerance in *Pseudomonas aeruginosa* for Beta-Lactams. Fellow Research Presentation Day of the School of Pharmacy and Pharmaceutical Sciences, SUNY Buffalo, NY, USA, June 2, 2008.
23. Forrest A, Tsuji BT, Bulitta JB. Future mechanistic PK/PD models for ID – UB Pfizer Strategic Alliance. Pfizer, Groton, CT, USA, June 10, 2008.
24. Bulitta JB, Jelliffe RW. Overview and comparison of parametric and non-parametric estimation techniques. PK/PD workshop presentation at the 2nd World Conference on Magic Bullets – Ehrlich II, Nürnberg, Germany, October 3-5, 2008.
25. Bulitta JB. Overview of PK/PD software tools for estimation and optimal design – the ‘right’ program for the ‘right’ task. PK/PD workshop presentation at the 2nd World Conference on Magic Bullets – Ehrlich II, Nürnberg, Germany, October 3-5, 2008.
26. Bulitta JB, Tsuji BT, Ly NS, Jusko WJ, Forrest A. Inverse and normal inoculum effects of antibiotics – a new paradigm for co-modeling the time-course of bacterial killing across a range of initial inocula. 2nd World Conference on Magic Bullets – Ehrlich II, Nürnberg, Germany, October 3-5, 2008.
27. Forrest A, Bulitta JB, Tsuji BT. Modeling the time course of bacterial growth and killing *in vitro* and *in vivo*. ISAP workshop presentation at the 2nd World Conference on Magic Bullets – Ehrlich II, Nürnberg, Germany, October 3-5, 2008.
28. Bulitta JB, Tsuji BT, Ly NS, Jusko WJ, Forrest A. Mechanism-based models for anti-infectives – what do they have to offer? ISAP workshop presentation at the 2nd World Conference on Magic Bullets – Ehrlich II, Nürnberg, Germany, October 3-5, 2008.
29. Bulitta JB, Tsuji BT, Forrest A*. Motivation and philosophy for development of mechanistic PK/PD models in infectious diseases. 2nd World Conference on Magic Bullets – Ehrlich II, Nürnberg, Germany, October 3-5, 2008.
30. Landersdorfer CB, Kinzig M, Hennig FF, Bulitta JB, Holzgrabe U, Drusano GL, Sörgel F, Gusinde J. Bone Penetration of Antibiotics - Review and Future Perspectives including Bayesian Population PK / PD Methods. 2nd World Conference on Magic Bullets – Ehrlich II, Nürnberg, Germany, October 3-5, 2008.
31. Bulitta JB. Mechanistic Population Pharmacokinetics and Multiple-pool Cell Lifespan Models for Total and Unbound Paclitaxel for a New Nanodroplet Formulation vs. Taxol in Cancer Patients, Basel, Switzerland, October 7, 2008.
32. Bulitta JB. Overview, Applications, and Future Perspectives of Mechanism-based Population Pharmacokinetic Pharmacodynamic Modeling, Monash University, Melbourne, Australia, October 13, 2008.
33. Bulitta JB. Mechanism-based models for the inoculum effect of antibiotics against *Pseudomonas aeruginosa*. Invited presentation, Cincinnati, OH, USA, October 23, 2008.
34. Bulitta JB. Why population PK/PD? An Overview of Methods and Application. ISAP Workshop Presentation at the 48th Annual ICAAC / IDSA 46th Annual Meeting, Washington, DC, October 24, 2008.
35. Bergen PJ, Bulitta JB, Forrest A, Li J, Nation RL. Pharmacokinetic /Pharmacodynamic Investigation of Colistin against *Pseudomonas aeruginosa* using an *in vitro* Model. Abstract A-1671. 48th Annual ICAAC / IDSA 46th Annual Meeting, Washington, DC, October 25-28, 2008.
36. Poudyal A, Owen RJ, Bulitta JB, Forrest A, Tsuji BT, Turnidge JD, Spelman D, Howden BP, Nation RL, Li J. High Initial Inocula and Stationary Growth Phase Substantially Attenuate Killing of *Klebsiella pneumoniae* and *Acinetobacter baumannii* by Colistin. Abstract A-1673. 48th Annual ICAAC / IDSA 46th Annual Meeting, Washington, DC, October 25-28, 2008.
37. Bulitta JB, Tsuji BT, Forrest A. Benefits of Mathematical Modeling for Infectious Disease Drug Development – UB Pfizer Strategic Alliance. Pfizer, Groton, CT, USA, June 8, 2008.

38. Landersdorfer CB, Bulitta JB. Workshop on: Efficient Structural Model Building via a Combined Simulation Estimation Approach using Berkeley Madonna and S-ADAPT. Department of Pharmaceutical Sciences, SUNY at Buffalo, Buffalo, NY; July 31 – Aug 1, 2009.
39. Bulitta JB. Pre-Conference Workshop of the International Society for Anti-infective Pharmacology (ISAP) on: PK/PD models of resistance. 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 11, 2009.
40. Bulitta JB, Landersdorfer CB, Jelliffe RW. Post-Conference Workshop of the Nonparametric Population Models – Properties & Capabilities. International Congress of TDM & Clinical Toxicology, Montreal, Canada; October 9, 2009.
41. Bulitta JB, Li J, Bergen PJ, Poudyal A, Yu HH, Owen RJ, Tsuji BT, Nation RL, Forrest A. New Mechanism-Based Models Linking Receptor Binding with Bacterial Responses for Optimizing Antimicrobial Drug Development and Therapy. 7th Annual Congress of International Drug Discovery Science and Technology (IDDST), Shanghai, China; October 22 – 25, 2009.
42. Landersdorfer CB, Bulitta JB. Introduction to Pharmacokinetic and Pharmacodynamic Modeling and Simulation in Berkeley Madonna and S-ADAPT, October 27-29, 2009.
43. Bulitta JB. Invited presentation on: Combination chemotherapy, Workshop on “Pharmacodynamics: How Can It Help You – Combination Chemotherapy?” at the National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), November 30 to December 1, 2009.
44. Bulitta JB. Invited presentation on: Mechanism-based Modeling, Workshop on “Pharmacodynamics: How Can It Help You? – Mechanism-based Modeling” at the National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), November 30 to December 1, 2009.
45. Bulitta JB. Antibakterielle Kombinationstherapie: Zusammenspiel von Wirk- und Resistenzmechanismen zur Eradikation von resistenten Bakterien und Persistieren. Pharmaceutical Seminars, Free University of Berlin, Berlin, Germany, February 22, 2010.
46. Bulitta JB, Louie A, Drusano GL. Mechanism-Based Approach to Combination Antimicrobial Chemotherapy. Gordon Research Conference on New Antibacterial Discovery & Development, Galveston, TX, USA, March 15, 2010.
47. Bulitta JB, Bingölbali A, Landersdorfer CB. Invited presentation on: PK modelling: obtaining PK profiles despite sparse sampling. 20th European Congress of Clinical Microbiology and Infectious Diseases, Vienna, April 10 - 13, 2010.
48. Bulitta JB. Invited presentation on: Combination therapy of *P. aeruginosa* with special reference to modeling of polymyxins *in vitro* and to preliminary animal models. Université catholique de Louvain, Brussels, Belgium, April 20, 2010.
49. Bulitta JB, Louie A, Tsuji BT, Brown AN, McSharry JJ, D’Hondt RE, Landersdorfer CB, Forrest A, Drusano GL. Invited presentation on: Antibiotics / Antivirals – Curing Infections and Preventing Bacterial and Viral Resistance and Persists via Mechanism-Based Modeling and Simulation. 6th International Symposium on Measurement & Kinetics of In Vivo Drug Effects, Noordwijkerhout, April 21 - 24, 2010.
50. Bulitta JB. Workshop: Introduction to Pharmacokinetics, Pharmacodynamics, and Population PK/PD modeling and Simulations using Berkeley Madonna and S-ADAPT, University of Würzburg, Würzburg, Germany; June 15 - 16, 2010.
51. Bulitta JB, Landersdorfer CB. Population PK/PD Modeling with S-ADAPT and SADAPT-TRAN. SUNY at Buffalo, Buffalo, NY, USA, August 20-21, 2010.
52. Bulitta JB. PK/PD models of resistance – Understanding & limiting emergence of resistance via PK/PD modeling. ISAP Workshop Presentation at the 50th Annual ICAAC, Boston, MA, September 11, 2010.
53. Bulitta JB, D’Hondt RE, Brown D, VanScoy B, Kulawy R, Drusano GL, Louie A. Unique Penicillin-Binding Protein Occupancy Patterns Lead to *Pseudomonas aeruginosa* Persists or Can Cause Synergistic Killing. Abstract: A1-1140. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.
54. Bulitta JB. Mathematical Modeling and Pharmacokinetics/Pharmacodynamics. Presentation: 1212. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.
55. Bulitta JB. Modeling and Simulation of Penetration Data. Presentation: 1908. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.
56. Bulitta JB. From Receptor Occupancy to Patient Cure and Resistance Prevention: Mechanism-based Modelling to Optimize Antibiotic Combinations. 2011 PharmSciFair – European Federation for Pharmaceutical Sciences, Prague, Czech Republic, June 13 - 17, 2011.

57. Bulitta JB. PK/PD models of resistance – Understanding & limiting emergence of resistance via PK/PD modeling. ISAP Workshop Presentation at the 51st Annual ICAAC, Chicago, IL, September 16, 2011.
58. Bulitta JB, Landersdorfer CB, Ly NS, Bergen PJ, Lee HJ, Patel K, Tsuji BT, Kirkpatrick CM, Nation RL, Li J, Forrest A. Mechanism-based modelling of antibiotics to optimally cure patients and prevent resistance: progress, gaps, and future perspectives. PAGANZ 2012 Population Approach Group in Australia & New Zealand, Melbourne, Australia; February 8, 2012.
59. Bulitta JB. Utilizing insights on resistance mechanisms via quantitative mathematical models to optimize patient therapy and antibiotic drug development. Hospital Universitario Son Espases, Palma de Mallorca, Spain; April 11, 2012.
60. Bulitta JB and Landersdorfer CB. Translational, mechanism-based modelling for early and late drug development to prospectively optimise mono- and combination therapy in patients and support rational decision making. Actelion, Allschwil, Switzerland. April 13, 2012.
61. Bulitta JB, Landersdorfer CB. Pharmacokinetic / pharmacodynamic models to prevent bacterial resistance and support rational development of new and old antibiotics. ISAP Workshop Presentation at the 52nd Annual ICAAC, San Francisco, CA, September 8, 2012.
62. Bulitta JB. Preventing resistance of bacterial “superbugs” by synergistic combinations of antibiotics. ASCEPT 2012 Sydney, Australia. December 5, 2012.
63. Bulitta JB. Beta-lactam antibiotics: Time to elucidate how to optimally use them – 85 years after their discovery. SUNY at Buffalo, Buffalo, NY, USA. April 23, 2013.
64. Bulitta JB. Translational approaches to inform selection of rational antibiotic combinations for patients. First international conference on Polymyxins. Prato, Italy. May 3, 2013.
65. Bulitta JB, Shan J, Velkov T, Landersdorfer CB. Synergistic Beta-lactam plus Aminoglycoside and Double Beta-lactam Combinations against High Inocula of *Acinetobacter baumannii*. 53rd Interscience Conference on Antimicrobial Agents and Chemotherapy, Denver, CO, USA; September 10 - 13, 2013.
66. Bulitta JB. Unleashing synergistic β -lactam antibiotic combinations via a systems pharmacology approach. SUNY at Buffalo, Buffalo, NY, USA. September 11, 2014.
67. Bulitta JB. Enabling mechanistically optimized antibiotic therapies via novel systems biology and pharmacometric approaches. University of North Carolina, Chapel Hill, NC, USA; September 18, 2014.
68. Bulitta JB. Developing Innovative Dosing Strategies based on Mechanistic Insights on Drug Action, Resistance and Pharmacokinetics. Wonkwang University, Iksan City, South Korea; September 30, 2014.
69. Bulitta JB. Bacterial cell wall synthesis: One of the most successful drug targets of all time. University of Florida, Orlando, FL, USA; December 9, 2014.
70. Bulitta JB. Innovative approaches to combat resistant bacterial superbugs via synergistic combinations of available and new antibiotics. University of North Carolina, Chapel Hill, NC, USA; December 12, 2014.
71. Bulitta JB. Targeting resistant bacterial ‘superbugs’ by rationally designed antibiotic combinations and developing new antibiotics. University of Florida, Gainesville, FL, USA; January 14, 2015.
72. Landersdorfer CB, Yadav R, Rogers K, Nation RL, Bulitta JB. Prospective Validation of Optimized Combinations against Carbapenem-Resistant *Acinetobacter baumannii* (CRAB) via Dynamic in vitro Hollow Fiber Infection Model (HFIM). ICAAC / ICC 2015, San Diego, CA, USA; September 18, 2015.
73. Bulitta JB. How preclinical pharmacometrics can help optimizing dosage regimens for patients? 20th North American International Society for the Study of Xenobiotics (ISSX) Meeting. Orlando, FL, USA; October 21, 2015.
74. Bulitta JB. Quantitative and System Pharmacology approaches for translational antibiotic drug development. Lake Nona Leadership Council Meeting, CPSP, UF. Orlando, FL, USA; February 23, 2016.
75. Bulitta JB. Next-Generation Antibiotic Combination Dosing Strategies to Combat Multidrug-Resistant Bacterial ‘Superbugs’. Annual meeting of the III Brazilian Association of Pharmaceutical Sciences (ABCF). Porto Alegre RS, Brazil; June 14, 2016.
76. Bulitta JB, Velkov T, Rogers K, Shan J, Oliver A, Nation RL, Boyce JD, Tsuji BT, Landersdorfer CB. Penicillin-Binding Protein Occupancy Patterns Determine Phenotypic Tolerance of *Pseudomonas aeruginosa* at High Bacterial Density. Session 247. ASM Microbe 2016, Boston, MA, USA; Jun 19, 2016.
77. Bulitta JB. Antimicrobial Toxicodynamics of Oxazolidinones. ASM Microbe 2016, Boston, MA, USA; June 20, 2016.
78. Bulitta JB. Quantitative and Systems Pharmacology: An Innovative Tool to Rationally Optimize Combination Therapy. American Conference on Pharmacometrics ACOP7, Seattle, WA; October 24, 2016.
79. Bulitta JB. Translational Antimicrobial PK/PD Laboratory – Quantitative and Systems Pharmacology. Lake Nona Leadership Council Meeting, CPSP, UF. Orlando, FL, USA; March 14, 2017.

80. Bulitta JB. Antibacterial Resistance: Preclinical PK/PD – Integrating Knowledge and Innovating Therapies. ESPAG / ISAP Workshop Presentation at the 27th ECCMID, Vienna, Austria, April 21, 2017.
81. Rees V, Bulitta JB, Oliver A, Peleg A, Nation RL, Landersdorfer CB. Optimised combination therapy: The future to eradicate hypermutable bacteria. Abstract: OS0992. 27th ECCMID, Vienna, Austria, April 21, 2017.
82. Bulitta JB. Invited presentation on: Quality PK Data to Support PK/PD and Translational Analyses. **NIAID** Workshop 'PKPD for Development of Therapeutics against Bacterial Pathogens' at the National Institutes of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), Bethesda, MD; June 14-15, 2017.
83. Zhang L, Kim TH, Prince K, Dedaj N, Moya B, Tao X, Qian Y, Jiao Y, Sutaria D, Barth A, Zavascki AP, Louie A, Drusano GL, Bulitta JB. Extensive, synergistic killing of polymyxin-resistant *Klebsiella pneumoniae* carbapenemases producing *Klebsiella pneumoniae* by β -lactam plus amikacin combinations. Abstract: 8450. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Madrid, Spain; April 22, 2018.
84. Bulitta JB. Next-generation combination dosing strategies to target resistant Gram-negatives – leveraging unique penicillin-binding protein (PBP) occupancy patterns. Invited lecture at the UF Emerging Pathogens Institute, Gainesville, FL, May 16, 2018.
85. Bulitta JB. Combating resistant bacterial 'superbugs' by maximizing target site concentrations and elucidating synergistic receptor occupancy patterns. Ohio State University, Columbus, OH, Aug 29, 2018.
86. Bulitta JB. Collaborating for success – in the 21st Century. Lake Nona Leadership Council VIII. Orlando, FL, March 12, 2019.
87. Bulitta JB, Hochhaus G. Novel bioequivalence approach to study regional distribution of inhalation drugs: Validation through physiologically-based and population pharmacokinetics. FY 2019 Generic Drug Regulatory Science Initiatives Public Workshop (U.S. **FDA**). Silver Spring, MD, May 1, 2019.
88. Bulitta JB. Targeting resistant bacterial 'superbugs' by maximizing drug penetration and leveraging synergistic receptor occupancy patterns. Case Western Reserve University, Cleveland, OH, May 18th, 2019.
89. Bulitta JB. Next-generation antibiotic combination dosing strategies for our future. Children's Hospital Los Angeles and University of Southern California, Los Angeles, CA, June 12th, 2019.
90. Bulitta JB. Molecular Tools to Combat Antimicrobial Resistance via an Inter-Disciplinary Strategy. St. Jude Children's Research Hospital, Memphis, TN, July 17th, 2019.
91. Bulitta JB. Next-generation antibiotic combination dosing strategies to combat multidrug-resistant bacterial superbugs. University of Illinois at Chicago, Chicago, IL, August 13th, 2019.
92. Bulitta JB. Combating resistant superbugs by understanding the molecular determinants of target site penetration and binding. NIAID/NIH Workshop on antibiotic target site penetration. Bethesda, MD, Aug 22nd, 2019.
93. Bulitta JB. Next-generation antibiotic combination dosing strategies to combat multidrug-resistant bacterial superbugs. University of Central Florida, Lake Nona, FL, Nov 1st, 2019.
94. Bulitta JB. Identification of Effective Antivirals Against SARS-CoV-2 via Translational Antiviral Pharmacology. University of Florida, Lake Nona / Gainesville, May 12th, 2020.
95. Bulitta JB. Combating Bacterial and Viral Superbugs via 21st Century Translational Approaches UF, Orlando / Gainesville, FL. Videoconference, Pharmacotherapy and Translational Research Division meeting. May 5th, 2020.
96. Bulitta JB. Providing Rational Dosage Regimens to Combat SARS-CoV-2 by Translational Pharmacology, UF Clinical and Translational Science Institute (CTSI) – Research Seminar. June 1st, 2020.

Conference Presentations

1. Sörgel F, **Bulitta J**, Naber KG, Kinzig-Schippers M, Jaehde U. Standardized measurement of sweat concentration of quinolones and their potential relationship to selection of resistant mutants of *staphylococcus epidermidis*. Abstr. T115, 2nd European Congress of Chemotherapy (ECC) and 7th Biennial Conference on Antiinfective Agents and Chemotherapy, Hamburg, Germany; May 10 - 13, 1998.
2. Sörgel F, **Bulitta J**, Gatchev E, Kinzig-Schippers M, Rüsing G, Doser K, Thyroff-Friesinger U, Rauch C, Vlahov V. Results from pharmacokinetic studies analyzed by most modern LC-MS/MS – do we need to rewrite the PK of "old" antibiotics? Astr. M 336, 2nd European Congress of Chemotherapy (ECC) and 7th Biennial Conference on Antiinfective Agents and Chemotherapy, Hamburg, Germany; May 10 - 13, 1998.
3. Sauber C, Rüsing G, **Bulitta J**, Kinzig-Schippers M, Sörgel F. Analysis of rifampicin, isoniazid and pyrazinamide by LC-MS/MS in plasma. Abstr. 276, The 46th ASMS Conference on Mass Spectrometry and Allied Topics; Orlando, Florida/USA; May 31 - June 4, 1998.

4. Vycudilik W, Rüsing G, Sauber C, Kinzig-Schippers M, **Bulitta J**, Sörgel F. Application of LC-MS/MS to pharmacokinetic and forensic issues of glibenclamide. Abstr. 279, The 46th ASMS Conference on Mass Spectrometry and Allied Topics; Orlando, Florida/USA; May 31 - June 4, 1998.
5. Sauber C, Vycudilik W, Kinzig-Schippers M, Rüsing G, **Bulitta J**, Holzgrabe U, Sörgel F. Die LC-MS/MS als Methode zur Klärung pharmakokinetischer und forensischer Fragen zu Glibenclamid. Abstr. KP5, Pre-symposium: Clinical pharmaceuticals in science and practice: Poster presentation: Rational use of antibiotics at the annual meeting of the German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft, DPhG); Tübingen, Germany; November 5 - 6, 1998.
6. Rüsing G, Kinzig-Schippers M, Rangoonwala R, Vlahov V, **Bulitta J**, Bacracheva N, Hess KJ, Nickel P, Sörgel F. Bioinequivalenz als Faktor zunehmender Resistenzentwicklung gegen Tuberkulostatika. Abstr. KP11, Pre-symposium: Clinical pharmaceuticals in science and practice: Poster presentation: Rational use of antibiotics at the annual meeting of the German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft, DPhG); Tübingen, Germany; November 5 - 6, 1998.
7. Rüsing G, **Bulitta J**, Müller C, Kinzig-Schippers M, Sörgel F. Sensitive analysis of naloxon-3-glucuronide by LC-MS/MS in plasma. Abstr. 2170, AAPS Annual Meeting; San Francisco, California/USA; November 15 - 19, 1998.
8. **Bulitta J**, Hess KJ, Sörgel F, Kinzig-Schippers M. Modeling the emergence of resistance against quinolone antibiotics in *Staphylococcus epidermidis*. Abstr. 2357, AAPS Annual Meeting; San Francisco, California/USA; November 15 - 19, 1998.
9. Kinzig-Schippers M, Rangoonwala R, Vlahov V, Rüsing G, **Bulitta J**, Bacracheva N, Hess KJ, Sörgel F. Bioinequivalence of tuberculostatics as a possible contributing factor to emergence of pathogen resistance. Abstr. 3437, AAPS Annual Meeting; San Francisco, California/USA; November 15 - 19, 1998.
10. Jetter A, **Bulitta J**, Zaigler M, Sauber C, Fuhr U, Kinzig-Schippers M, Sörgel F. Modelling of intestinal absorption of clavulanic acid. Abstr. A19 (podium discussion), Annual congress for clinical pharmacology 1999; Berlin, Germany; June 10 - 12, 1999.
11. Steinhauer S, Kinzig-Schippers M, Kleinschnitz M, Sauber C, **Bulitta J**, Sörgel F. Most sensitive analysis of felodipine in human plasma by LC-MS/MS after special sample work-up. Abstr. 2178, AAPS Annual Meeting; New Orleans, Louisiana/USA; November 14 - 18, 1999.
12. Sauber C, Kinzig-Schippers M, Rüsing G, Heuberger S, **Bulitta J**, Holzgrabe U, Sörgel F. Determination of trovafloxacin by LC-MS/MS in human plasma and urine. Abstr. 2841, AAPS Annual Meeting; New Orleans, Louisiana/USA; November 14 - 18, 1999.
13. Steinhauer S, Kinzig-Schippers M, Rüsing G, Wenner M, Heuberger S, **Bulitta J**, Sörgel F. Sensitive analysis of roxithromycin in human plasma by LC-MS/MS. Abstr. 2844, AAPS Annual Meeting; New Orleans, Louisiana/USA; November 14 - 18, 1999.
14. Rüsing G, Kinzig-Schippers M, Sauber C, Steinhauer S, Wahode H, **Bulitta J**, Holzgrabe U, Sörgel F. Sensitive analysis of diclofenac in human plasma by LC-MS/MS after special sample work-up. Abstr. 2847, AAPS Annual Meeting; New Orleans, Louisiana/USA; November 14 - 18, 1999.
15. Sörgel F, Allen A, Pay V, Bygate E, Kinzig-Schippers M, **Bulitta J**, Bird N, Naber KG. Distribution of gemifloxacin into saliva, sweat, tears, and nasal secretion in healthy volunteers. Abstr. M117, 3rd European Congress of Chemotherapy; Madrid, Spain; May 7 - 10, 2000.
16. **Bulitta J**, Kinzig-Schippers M, Naber CK, Naber KG, Sauber C, Kleinschnitz M, Wahode H, Rodamer M, Sörgel F. Limitations in the use of drug cocktails to compare the pharmacokinetics of drugs: ciprofloxacin vs. levofloxacin. Abstr. 506, 40th Interscience Conference on Antimicrobial Agents and Chemotherapy; Toronto, Canada; September 17 - 20, 2000.
17. Kinzig-Schippers M, Hinder M, Loos U, Sauber C, **Bulitta J**, Holzgrabe U, Sörgel F. Tissue Penetration of Cefditoren into Bronchial Mucosa and Epithelial Lining Fluid in Patients Undergoing Fiberoptic Bronchoscopy. Poster T3282, AAPS Annual Meeting; Denver, Colorado/USA; October 21 - 25, 2001.
18. **Bulitta J**, Kinzig-Schippers M, Naber CK, Naber KG, Sauber C, Kleinschnitz M, Wahode H, Rodamer M, Sörgel F. Limitations in the use of drug cocktails to compare the pharmacokinetics of drugs: ciprofloxacin vs. levofloxacin. Poster R5168, AAPS Annual Meeting; Denver, Colorado/USA; October 21 - 25, 2001.
19. **Bulitta J**, Horkovics-Kovats S, Borek M, Skott A, Illauer M, Rodamer M, Kinzig-Schippers M, Sörgel F. Self-Inhibition of Clarithromycin's Metabolism in Humans at Steady-State. Poster A-1625, 43rd Interscience Conference on Antimicrobial Agents and Chemotherapy; Chicago, Illinois/USA; September 14 - 17, 2003.
20. Sörgel F, **Bulitta J**, Kinzig-Schippers M, Landersdorfer C, Tomalik-Scharte D, Jetter A, Fuhr U, Cascorbi I. Dosing of anti-infectives - "One size fits all" vs. individualized therapy. Poster P K18, Annual meeting of the German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft, DPhG); Würzburg, Germany; October 8 - 11, 2003.
21. **Bulitta J**, Kinzig-Schippers M, Jetter A, Tomalik-Scharte D, Szymanski J, Fuhr U, Illauer M, Skott A, Sörgel F. Pharmacokinetics and pharmacodynamics of subcutaneous interferon alpha-2b. Poster P K2, Annual meeting of

- the German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft, DPhG); Würzburg, Germany; October 8 - 11, 2003.
22. Gareis J, Hüttner S, Kinzig-Schippers M, **Bulitta J**, Heß K-J, Sörgel F. Evidence of opiates in human urine after consumption of poppy seed cake. Poster P K5, Annual meeting of the German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft, DPhG); Würzburg, Germany; October 8 - 11, 2003.
 23. Rodamer M, Horkovics-Kovats S, Borek M, Skott A, Illauer M, **Bulitta J**, Kinzig-Schippers M, Sörgel F. Self-inhibition of clarithromycin's metabolism in humans at steady-state. Poster P K13, Annual meeting of the German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft, DPhG); Würzburg, Germany; October 8 - 11, 2003.
 24. Hüttner S, Holt DW, **Bulitta J**, Heß K-J, Sörgel F. Effects of freshly squeezed grapefruit juice on CYP 3A4 activity. Poster P K7, Annual meeting of the German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft, DPhG); Würzburg, Germany; October 8 - 11, 2003.
 25. Jakob V, Rodamer M, **Bulitta J**, Kinzig-Schippers M, Heß K-J, Sörgel F. Prediction of caffeine half-life by subject age. Poster P K8, Annual meeting of the German Pharmaceutical Society (Deutsche Pharmazeutische Gesellschaft, DPhG); Würzburg, Germany; October 8 - 11, 2003.
 26. **Bulitta J**, Horkovics-Kovats S, Borek M, Hüttner S, Kinzig-Schippers M, Sörgel F. Self-inhibition of clarithromycin's metabolism in humans at steady-state; Abstract no. 081, World Conference on Magic Bullets; Nürnberg, Germany; September 9 - 11, 2004.
 27. **Bulitta J**, Fuhr U, Landersdorfer C, Tomalik-Scharte D, Szymanski J, Kinzig-Schippers M, Sörgel F. Pharmacokinetics and pharmacodynamics of subcutaneous interferon alpha-2b; Abstract no. 082, World Conference on Magic Bullets; Nürnberg, Germany; September 9 - 11, 2004.
 28. Naber KG, **Bulitta J**, Jakob V, Kinzig-Schippers M, Sörgel F. Limitations in the use of drug cocktails to compare the pharmacokinetics of drugs: ciprofloxacin vs. levofloxacin; Abstract no. 213, World Conference on Magic Bullets; Nürnberg, Germany; September 9 - 11, 2004.
 29. Wagenlehner F, Naber KG, Kinzig-Schippers M, **Bulitta J**, Sörgel F. Plasma concentrations, urinary excretion and bactericidal activity of linezolid versus ciprofloxacin in healthy volunteers after a single oral dose; Abstract no. 255, World Conference on Magic Bullets; Nürnberg, Germany; September 9 - 11, 2004.
 30. Rodamer M, Fuhr U, Tomalik-Scharte D, Jetter A, **Bulitta J**, Kinzig-Schippers M, Sörgel F. Personalized isoniazid dosing based on genotyping for arylamine *N*-Acetyltransferase Type 2; Abstract no. 447, World Conference on Magic Bullets; Nürnberg, Germany; September 9 - 11, 2004.
 31. Sakka SG, Glauner A, **Bulitta J**, Kinzig-Schippers M, Sörgel F. Continuous versus intermittent bolus administration of imipenem in critically ill patients with pneumonia; Abstract no. 467, World Conference on Magic Bullets; Nürnberg, Germany; September 9 - 11, 2004.
 32. Sörgel F, **Bulitta J**, Kinzig-Schippers M, Hüttner S. Dosing of anti-infectives - "one size fits all" vs. individualized therapy; Abstract no. 517, World Conference on Magic Bullets; Nürnberg, Germany; September 9 - 11, 2004.
 33. Sörgel F, **Bulitta J**, Horkovics-Kovats S, Kinzig-Schippers M, Borek M, Nesme B, Jakob V. Crucial role of "appropriate" reference product and food effects in clinical trials - a plea for drug level measurements in phase III - trials; AAPS Annual Meeting, Chicago, Illinois/USA; October 30 - November 2, 2004.
 34. Horkovics-Kovats S, Nesme B, Kinzig-Schippers M, **Bulitta J**, Sörgel F. Gender Differences in the Metabolism of Clarithromycin after Oral Doses of 500 mg; Presentation number: A-8; Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; December 16 - 19, 2005.
 35. **Bulitta J**, Duffull SB, Kinzig-Schippers M, Holzgrabe U, Stephan U, Sörgel F. Cystic Fibrosis Patients are Pharmacokinetically Comparable to Healthy Volunteers; Presentation number: A-12; Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; December 16 - 19, 2005.
 36. **Bulitta J**, Kinzig-Schippers M, Holzgrabe U, Sörgel F, Holford NHG. Replicate Design to Study the Population Pharmacokinetics of Piperacillin. Description of Saturable Elimination and Application to the Design of Optimal Dosage Regimens; Presentation number: A-30; Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; December 16 - 19, 2005.
 37. **Bulitta J**, Horkovics-Kovats S, Kinzig-Schippers M, Holzgrabe U, Sörgel F, Holford NHG. Use of Replicated Design to Assess Between Occasion Variability of Oral Amoxicillin / Clavulanic Acid and for Monte Carlo Simulations; Presentation number: A-32; Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; December 16 - 19, 2005.
 38. **Bulitta J**, Lodise TP, Drusano GL, Kinzig-Schippers M, Holzgrabe U, Sörgel F. Bias and Uncertainty of Monte Carlo Simulations with Beta-Lactams Abstract 969, 15th Annual Meeting of the Population Approach Group in Europe (PAGE); Brugge, Belgium; June 14 - 16, 2006.
 39. Landersdorfer C, Kirkpatrick CMJ, Kinzig-Schippers M, **Bulitta J**, Holzgrabe U, Sörgel F. New Insights into the Most Commonly Studied Drug Interaction with Antibiotics: Pharmacokinetic Interaction between Ciprofloxacin,

- Gemifloxacin and Probenecid at Renal and Non-renal Sites. Abstract 882, 15th Annual Meeting of the Population Approach Group in Europe (PAGE); Brugge, Belgium; June 14 - 16, 2006.
40. **Bulitta J**, Landersdorfer C, Kinzig-Schippers M, Jakob V, Rodamer M, Drusano GL, Thyroff-Friesinger U, Holzgrabe U, Sörgel F. Population Pharmacokinetics, Pharmacodynamics and Breakpoints of Cefuroxime Axetil in Healthy Volunteers via Monte Carlo Simulation. Presentation number: A-1119; 46th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 27 - 30, 2006.
 41. Landersdorfer C, Gusinde J, Kinzig-Schippers M, Hennig F, **Bulitta J**, Holzgrabe U, Drusano GL, Sörgel F. Pharmacokinetic-pharmacodynamic profile of moxifloxacin in bone evaluated by Monte Carlo simulation. Poster T2332; 2006 AAPS Annual Meeting, San Antonio, TX, USA; October 29 - November 2, 2006.
 42. **Bulitta J**, Drusano GL, Landersdorfer C, Holzgrabe U, Kinzig-Schippers M, Stephan U, Sörgel F. Assessment of Optimized Dosage Regimens for Beta-lactams with Ceftazidime as a Probe by Population Pharmacokinetics and Monte Carlo Simulation. Poster T3373; 2006 AAPS Annual Meeting, San Antonio, TX, USA; October 29 - November 2, 2006.
 43. Landersdorfer C, Kirkpatrick CMJ, **Bulitta J**, Kinzig-Schippers M, Holzgrabe U, Drusano GL, Sörgel F. Population Pharmacokinetics of Piperacillin at Two Dose Levels: Influence of Nonlinear Pharmacokinetics on the Pharmacodynamic Profile. Poster T3374; 2006 AAPS Annual Meeting, San Antonio, TX, USA; October 29 - November 2, 2006.
 44. **Bulitta J**, Landersdorfer C, Drusano GL, Kinzig-Schippers M, Holzgrabe U, Stephan U, Sörgel F. Characterizing Absorption in Cystic Fibrosis Patients: Population Pharmacokinetics and Pefloxacin as a Probe. Poster W4055; 2006 AAPS Annual Meeting, San Antonio, TX, USA; October 29 - November 2, 2006.
 45. **Bulitta J**, Duffull SB, Landersdorfer C, Drusano GL, Kinzig-Schippers M, Holzgrabe U, Stephan U, Sörgel F. Pharmacodynamic Comparison of Cystic Fibrosis Patients and Healthy Volunteers by Population Pharmacokinetics and Monte Carlo Simulation: Poster W4056; 2006 AAPS Annual Meeting, San Antonio, TX, USA; October 29 - November 2, 2006.
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