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
Since Dec 2022	**Director** UF Target site Penetration and Drug Analysis Platform (TAP) Services
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 & optimal design, with Dr. Stephen Duffull, NZ
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 pharmaco-dynamic 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, *computational* & *theoretical* 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, 2nd 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 ~95 clinical studies 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 FDA audit 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/NIAID,** 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, acslXtreme, 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 & Pharmaco-dynamics 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 66 awarded grants / contracts (38 peer-reviewed)	$51m	$27m	$26m
Peer-reviewed grants (from NIH, FDA, DTRA Australian NHMRC [NIH] & ARC [NSF], S. Korean NSF)	$47m	$27m	$26m
Grants as Principal Investigator (PI) or PD/PI	$22m	$13m	$18m
Peer-reviewed grants as PI	$19m	$13m	$18m

Publications	Last 3 yr (since 2020)	Last 5 yr (since 2018)	Last 10 yr (since 2013)	Total (since 1999)
All papers	**34**	**59**	**124**	**190**
Peer-reviewed papers & book chapters	34	59	124	180 [a,b]
Original research papers	31	53	111	162
Review papers	2	4	9	21
Book chapters	0	1	3	6
h-index		39	43	49
i10-index [c]		124	131	138
Citations [d]	2,893	4,586	6,866	7,791

[a]: 93% of papers in top-quartile (Q1) journals.
[b]: Includes 57 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: **110** since 1998
including **26** Invited international podium presentations since 2009

Conference abstracts: **281** since 1998

Teaching

Trainees since 1999: **125** (PhD students, postdocs, junior researchers, and interns)

Full courses taught: **4** (Translational Clinical Pharmacology 2017, 2019, 2021, 2023, 3 credit hours)

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

Full workshops taught: **19** since 1999

Workshops lectures: **27** since 2004

Reviews & Awards

NIH study sections: **12** 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)

Jürgen B. Bulitta, Ph.D.

Orlando, FL, Jan 11, 2024

RESEARCH GRANTS

GRANT APPLICATIONS – UNDER REVIEW

Copik A (PD/PI, contact), Altomare D (PD/PI), Zhang W (Co-I), **Bulitta JB** (Co-I), Ropy Sayed A (Co-I), Lang Y (Co-I), Basso K (Co-I)
Bacterial vesicles for stimulation of Natural Killer cells to treat cancer
NIH/NCI R01 – PAR-22-085 (Microbial-based Cancer Imaging and Therapy - Bugs as Drugs)
07/01/2024 – 06/30/2029, $3,562,020

Bulitta JB (PD/PI), Cristofoletti R (Co-I), Lang Y (Co-I), Ropy Sayed A (Co-I)
Characterizing antibiotic efficacy via latest hollow fiber infection models and organs on a chip
Program: "Pre-Clinical Models of Infectious Diseases"
NIH/NIAID NIHAI75N93023R00003
07/01/2024 – 06/30/2025, $2,370,587

Shapiro (PD/PI, contact), Bakshi RP (Co-I), **Bulitta JB** (Co-I)
Efficacy of drugs deployed by human kinetics against malaria parasites in vitro
NIH/NIAID R01
04/01/2024 – 03/31/2029, $4,000,000

Drusano GL (co-equal multi PD/PI [contact]; PD/PI Project 2 and Amin Core), **Bulitta JB (co-equal multi PD/PI [non-contact]; PD/PI Project 1; Co-I Admin Core)**, Louie A (PD/PI Project 3), Lang Y (Mechanistic Assay Core Lead, Co-I of Project 1), Neely MN (Mathematical Modeling Core Lead), Boyce JD (Co-I), Schweizer HP (Co-I), Ropy Sayed A (Co-I), Lee RE (Co-I), Copik A (Co-I), Basso KB (Co-I), Bonomo RA (Co-I), Balasubramanian V (Other)
Translational development of new agents alone and in combination to combat Gram-negative pathogens important in Ventilator- Associated Bacterial Pneumonia: Leveraging the Gram-negative toolbox that is ready for prime time
National Institutes of Health, **NIH / NIAID**, **P01** for PAR-22-225
1/1/2024 – 12/31/2028, $11,817,521

Bulitta JB (PD/PI), Boyce JD (Co-I), Lang Y (Co-I), Lee R (Co-I), Louie A (Co-I), Bonomo RA (Co-I), Drusano GL (Co-I).
Mechanistically optimized beta-lactam combination dosing strategies to combat resistant *Klebsiella pneumoniae*
NIH/NIAID R01; Scored a **30th percentile**
07/01/2023 – 06/30/2028, $3,743,664

ONGOING PROJECTS

New Project(s) Awarded In 2023:

1. **Bulitta JB** (PD/PI, contact), Hochhaus G (PD/PI, non-contact), Cristofoletti R (Co-I)
Feasibility of predicting regional lung exposure from systemic pharmacokinetic data of generic orally inhaled drug products via population pharmacokinetic modeling and non-compartmental approaches
U01FD007936-01, FDA (for RFA-FD-23-017)
07/01/2023 – 06/30/2025, $499,996

2. Francine (PD/PI), **Bulitta JB** (Co-I)
Optimizing the dosing of antimalarial drugs through a PK/PD model system
UF PROSPER Seed Grant
6/1/2023 – 5/31/2025, $40,000

3. Peloquin C (PD/PI), Louie A (Co-I), **Bulitta JB** (Co-I)
Optimizing the Dose of Daptomycin for the Treatment of MRSA Bacteremia
UF DRPD-ROSF2023 seed grant
6/1/2023 – 5/31/2025, $90,000

New Project(s) Awarded In 2022:

4. 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)
Precise Combination Strategies Targeting Carbapenem-Resistant *Klebsiella pneumoniae*
National Institutes of Health, NIH / NIAID. R01 AI173064
12/05/2022 – 11/30/2027, $3,772,557 (UF subaward: 602,036)

5. Cristofoletti R (PD/PI), Hochhaus G (Co-I), **Bulitta JB (Co-I)**, Lang Y (Co-I), Mullin J (Co-I), Le Merdy M (Co-I), AlQaraghuli F (Co-I), Lukacova V (Co-I). Advancing *in vitro* and (patho)physiology-based pharmacokinetics models to understand and predict pulmonary absorption and tissue retention of inhaled drugs.
FDA BAA-22-00123/ PMQWP#359.
09/01/2022 – 08/31/2025, $1,844,000

6. Drusano GL (PD/PI), Louie A (PD/PI), **Bulitta JB (Co-I)**, Lang Y (Co-I), Kim S (Co-I), Neely M (Co-I), Prideaux B (Co-I)
Optimizing Multi-drug *Mycobacterium tuberculosis* Therapy for Rapid Sterilization and Resistance Suppression
12/01/2022 – 11/30/2027, $6,627,424

7. Roemer T (PD/PI), Louie A (UF-subaward PI), **Bulitta JB (Co-I)**, Lang Y (Co-I), Drusano (GL)
SBIR: Prokaryotics SBIR Phase 2b
National Institutes of Health, NIH / NIAID, SBIR for PA-21-259
7/1/2022 – 6/30/2025, $814,903k (UF-subaward), **Scored: Impact score 16**

8. Lang Y (PD/PI), **Bulitta J (Co-I)**
Determination of tobramycin concentrations in plasma and tracheal aspirate of pediatric patients using latest LC-MS/MS
National Institutes of Health, R34 – Philadelphia Children's Hospital Subcontract
03/01/2022 – 07/31/2024, $60,279 (UF subaward)

New Project(s) Awarded In 2021:

9. Roemer T (PD/PI), **Bulitta J (Consultant)**
Development of a mechanistically novel synergistic antibiotic to partner with a polymyxin potentiator
National Institutes of Health, **NIH / NIAID**, PA-21-259 SBIR with Prokaryotics
04/01/2022 – 09/30/2025, $15,595 (UF subaward)

New Project(s) Awarded In 2019:

10. 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
12/20/2019 – 11/30/2024, $3,920k

11. Shafer W (PD/PI)
Antimicrobial Resistance and Therapeutic Discovery Training Program
National Institutes of Health, **NIH / NIAID**, T32AI106699
2020 to 2024; Role: External lecturer

New Project(s) Awarded In 2018:

12. **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
8/10/2018 – 7/31/2024, $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.

COMPLETED PROJECTS

New Project(s) Awarded In 2022:

13. **Bulitta JB (PD/PI)**, Lang Y (PD/PI)
Supporting antimicrobial target site penetration research
Curza, Donation, 2022, $70k

New Project(s) Awarded In 2021:

14. **Bulitta JB (PD/PI)**, Lang Y (Co-I)
First characterization of antibiotic target site penetration and receptor binding by β-lactam antibiotics in *Mycobacterium tuberculosis*
UF College of Pharmacy, Research Enhancement, PROSPER Seed / Pilot Funding
7/1/2021 – 1/31/2022, $20k

15. 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). NIH S10 OD021758-01A1
02/01/2021 – 01/31/2022, $681,216

New Projects Awarded In 2019:

16. 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 – 12/31/2022, $923k

New Projects Awarded In 2018:

17. 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:

18. **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 – 10/31/2023, $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*.

19. **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

20. 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

21. 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 – 12/31/2021, $2,334k (incl. supplement; UF-subaward: $996k)

22. 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.

23. **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.

24. **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.

25. **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.

26. **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:

27. 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**.

28. **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.

29. 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:

30. 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:

31. 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.

32. 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**.

33. **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.

34. **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)

35. 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:

36. **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*.

37. 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**.

38. 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 00111118, Food and Drug Administration, 09/2013 – 11/2017, $1,418k

39. **Bulitta JB**, Landersdorfer CB, Li J, Bergen PJ, Nation RL
Collier Charitable Fund 2012 Round, Equipment support
01/2013 – 12/2013, $9k (AUD)

40. 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)

41. **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)

42. **Bulitta JB (CI, PI)**
2012 Monash Researcher Accelerator Program
01/2013 – 12/2014, $89k (AUD)

43. **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)

44. 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)

45. **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:

46. **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**.

47. 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)

48. **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)

49. 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:

50. **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)

51. 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)

52. **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)

53. **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)

54. 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)

55. **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:

56. **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)

57. 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)

58. **Bulitta JB (PI)**
Pharmacokinetic Modeling and Simulation for an antineoplastic agent
Collaborative pharmaceutical industry grant, 04/2010 – 06/2010, $7.5k (USD)

59. **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:

60. **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)

61. 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)

62. 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)

63. **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:

64. 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)

65. **Bulitta JB (Fellow)**, Jusko WJ (Mentor), Pharmacometrics Fellowship in Infectious Diseases
Johnson & Johnson, 08/21/2007 – 08/20/2008, fellowship grant renewal, $120k (USD)

66. 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)

67. **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)

68. **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 2023:

69. Boyce JD (Chief Investigator, CI), Tree J (CI), **Bulitta JB** (Partner Investigator, PI)
Controlling bacterial phenotypes by manipulating sRNA regulatory networks
Australian Research Council (ARC), DP240102507
01/01/2024 – 12/31/2026, $1,150,329 AUD (total), $80,000 AUD (UF Part)

70. Bulitta JB (PI), Sayed ARM, Lang Y, Copik A
Whole cell PBP-receptor binding of cefiderocol and comparator drugs in Gram-negative pathogens
Shionogi
10/1/2023 – 9/30/2024, $547,502 (total)

Applied for in 2022:

71. **Bulitta JB** (PD/PI, Contact), Purcell B (PD/PI), Heine H (Co-I), Lang Y (Co-I), Louie A (Co-I), Drusano GL (Co-I). Reinvigorating old antibiotics in efficacious combination therapies
MCDC RPP-22-10: ReVAMP: ReinVigorating Abandoned AntiMicrobial Products – Novel Broad Spectrum Antibacterial Medical Countermeasures (MCM) for Treatment of Biothreat Bacterial Infections
01/01/2023 – 12/31/2027, $18,802,044. (Enhanced White Paper submitted)

72. **Bulitta JB** (PD/PI, Contact), Purcell B (PD/PI), Heine H (Co-I), Lang Y (Co-I), Louie A (Co-I), Drusano GL (Co-I). Creating a prototype platform for the rational use of efficacious oral and intravenous double β-lactam antibiotic combinations that can combat resistant pathogens.
MCDC-RPP-22-11, objective area: Treatment (TRE-22-11): Therapeutic Medical Countermeasure Strategies for Addressing Emerging Bacterial Threats
01/01/2023 – 12/31/2027, $16,276,294. (Enhanced White Paper submitted)

73. Brown A, Drusano GL (Co-I), **Bulitta JB (Co-I)**, Lang Y (Co-I), Tuanyok A (Co-I)
Optimizing combination therapy for COVID-19
National Institutes of Health, NIH / NIAID, R01 for PA-20-185
09/01/2022 – 08/31/2027, $3,804,776

Applied for in 2021:

74. 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
11/1/2021 – 9/30/2026, $3,772,557 ($606k UF-subaward)

75. Bulitta JB (PD/PI), Drusano GL (Co-I), Heine H (Co-I), Purcell B (Co-I), Louie A (Co-I), Copik A (Co-I)
Project title: Rapid identification of Bacillus anthracis antibiotic susceptibility by state-of-the-art flow cytometry and automated confocal microscopy
White Paper for BAA 75D301-21-R-71738, Topic #3 (Subtopic 3.2): Strengthening emerging, re-emerging, and biothreat infectious disease surveillance, detection and preparedness through the Laboratory Response Network (LRN);
9/1/2021-8/31/2023, $750k

76. Bulitta JB (PD/PI)
HHMI 2021 Investigator Competition
Combating resistant bacterial 'superbugs' by an innovative, inter-disciplinary strategy
2021 to 2028, (no budget at time of submission)

77. Louie A (PD/PI), **Bulitta JB (Co-I)**, Drusano GL (Co-I), Jiao Y (Co-I)
Optimizing MAC combination drug therapy by pharmacodynamically maximizing the killing of extra- and intracellular macrolide-susceptible and -resistant strains and minimizing resistance emergence
National Institutes of Health, NIH / NIAID
4/1/2021 – 3/31/2026, $3,781,907

Applied for in 2020:

78. Bulman ZP (PD/PI), Mankin A (Co-I), **Bulitta JB** (Co-I), Jiao 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 ($601k UF-subaward)

79. Drusano GL (PD/PI), Louie A (Project Lead), **Bulitta JB (Project Lead)**, Jiao Y (Co-I), Schweizer H (Core Director), Basso K (Core Director), Neely M (Core Director), Boyce JD (Core Director), Bonomo RA (Core Director)
Identifying regimens to kill MDR and XDR A. baumannii and K. pneumoniae and suppress resistance
National Institutes of Health, NIH / NIAID**,** Combating Antibiotic-Resistant Bacteria (CARB) Interdisciplinary Research Units (**U19**; RFA-AI-20-001)
3/1/2021- 2/28/2026, $11,143,521

80. Brown AN (PD/PI), **Bulitta JB (Co-I)**, Drusano GL (Co-I)
The evaluation and optimization of nucleos(t)ide dosage regimens against SARS-CoV-2
National Institutes of Health, NIH / NIAID
12/1/2020 – 11/30/2023, $2,274,989

81. Drusano GL (PD/PI), Louie A (Co-I), **Bulitta JB (Co-I)**, Jiao Y (Co-I), Neely M (Co-I)
Combination Therapy Regimens for *Mycobacterium abscessus* species that Optimally Kill and Suppress Resistance Emergence
National Institutes of Health, NIH / NIAID
12/1/2020 – 11/30/2025, $3,482,579 (scored but not funded)

82. 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

83. 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:

84. 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

85. 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:

86. 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:

87. 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

88. 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:

89. **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)

90. 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**.

91. 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:

92. 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

93. 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)

94. **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)

95. Charman S (PI), Porter C, Pouton C, **Bulitta J**, Kirkpatrick C, Baell J, Owen D, Harvey A, Draffan A, Meutermans 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)

96. 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:

97. **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)

98. **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)

99. 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:

100. **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

101. **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)

102. **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 DDR - Drug Discovery & Mechanisms of Antimicrobial Resistance

06/2018 DDR - Drug Discovery & Mechanisms of Antimicrobial Resistance

07/2018 ZRG1 IDM-N (02) M - Topics in Drug Resistance, Drug Discovery and Clinical and Field Research

04/2019 ZRG1 IDM-U 02 - Topics in Microbial Infection Therapies, Resistance Mechanisms, and Diagnostics

12/2019 ZRG1 IDM-U 02 - Topics in Microbial Infection Therapies, Resistance Mechanisms, and Diagnostics

03/2020 ZRG1 IDM-N (02): Topics in Drug Discovery and Clinical Field Studies

07/2020 ZRG1 IDM-U(02): Drug Discovery, Clinical, and Field Research in Infectious Diseases

11/2020 ZRG1 IDM-U(02): Topics in Drug Discovery, Clinical, and Field Research

03/2021 ZRG1 AIDC Y 82: Antimicrobial Therapeutics and Resistance Special Emphasis Panel

07/2021 ZRG1 AIDC-V 02 M: Topics in infectious diseases vaccines, therapeutics and vector biology

02/2022 DDR - Drug Discovery and Mechanisms of Antimicrobial Resistance

10/2022 DDR - Drug Discovery and Mechanisms of Antimicrobial Resistance

02/2023 Department of Defense (DoD), Infectious Diseases grant review panel

06/2023 ZRG1 AIRT-J (01) Anti-Infective Resistance and Targets Study Section

11/2023 DMPA Drug Discovery and Molecular Pharmacology A Study Section

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

2018-2021:	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 Assoc. Campus Dean 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	*None yet*	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 *In vitro* (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, 2023 (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, 2020
PHA 5782C	**Patient Care 2** Optimal Patient dosing: Aminoglycosides and glycopeptides	Teaching partner	**2.0 h**, 2016, 2017, 2018, 2019, 2020, 2021
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** *In Vitro* / *In Vivo* 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**
Basic Kinetic Processes	taught in 2009 (2x), 2011 (2x), 2013, and 2014
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 *in vitro* / *in vivo* 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**
Introduction to Monte Carlo Simulations and Between Patient Variability	taught in 2010, 2011, 2012 (2x), 2013, 2014 and 2017
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) 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)	**12 h** taught since 2009 at various conferences and other occasions

Mentorship, Research Training and Supervision

Since 1999, I have trained, advised and supervised **126 students and postdocs**.

PhD students:	16	(including 14 completed)
PhD student committee:	10	(including 10 completed)
Postdocs:	19	
Visiting scientists:	20	
Research assistants:	16	
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	Dr. Yuli Qian	-	1 paper	Graduated in 2021
6	2016 - 2019	Dr. Xun Tao	Main	16 papers	12/2019 → Genentech
7	2016 - 2020	Dr. Stephanie Drescher	Co/M	5 papers, 1 book ch.	12/2020 → Pfizer
8	Jan-Dec 2020	Dr. Brett Fleischer	Main	1 paper	Transl PK/PD Genentech
9	8/2019-6/2020	Mr. Brandon Klee	-	1 paper	Changed labs
10	2019 – 2022	Dr. Eunjeong (Elena) Shin	Main	4 papers	Postdoc CASE Western
11	2019 – 2023	Dr. Carolin Werkman	Main	2 papers	Graduated 08/2023
12	2020 – ongoing	Mr. Jieqiang Zhou	Main	12 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. Sibo 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 - 2020	Dr. Tanaya Vaidya	Completed (Pharmaceutical Industry)
8	2017 - 2020	Ms. Alexandria Kesterson	Completed (Pharmaceutical Industry)
9	2019 – 2022	Ms. Elham Amini	Completed (Pharmaceutical Industry)
10	2019 – 2022	Mr. Simon Berger	Completed (Pharmaceutical Industry)

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	Assistant Professor (tenure track), Spain
4	2016 - 2019 2019 - 2020	Dr. Yuanyuan Jiao	Main	13 papers	Postdoc (2016-19), Res. Asst. Prof. at UF
5	2016 - 2019	Dr. Mong-Jen Chen (UF Res. Asst. Prof)	Co-M	1 book chapter, 4 papers	Senior Clinical Pharmacologist at AbbVie
6	2017 - 2018	Dr. Tae Hwan Kim	Main	20 papers	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 Bachhav	Co/M	1 paper	Senior Clinical Pharmacologist at AbbVie
10	2018 - 2021	Dr. Yinzhi Lang	Main	8 papers	Postdoc, UF, now Res. Asst. Prof. at UF
11	2019 - 2023	Dr. Alaa Ropy Sayed	Main	2 papers	Postdoc, UF now Res. Asst. Prof. at UF
12	2021 - 2022	Dr. Ravi Shukla	Main		Postdoc at Mount Sinai
13	2022 - ongoing	Dr. Yongzhen Zhang	Main	(soon)	Postdoc at 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 Dis.
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
16	2023 - ongoing	Ms. Yanan Zang	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 #5 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. Bradley JS[#], **Bulitta JB**[#], Cook R, Yu PA, Iwamoto C, Hesse EM, Chaney D, Yu Y, Kennedy JL, Sue D, Karchmer AW, Bower WA, Hendricks KA. ([#]: Joint first authors). Central Nervous System Antimicrobial Exposure and Proposed Dosing for Anthrax Meningitis. Clin Infect Dis, revision submitted.

2. Kaur JN, Singh N, Smith NM, Klem JF, Cha R, Lang Y, Chen L, Kreiswirth B, Holden PN, **Bulitta JB**, Tsuji BT. Next generation beta-lactam combinations to combat persisters: Harnessing imipenem to curb carbapenem resistance in metallo-β-lactamase-producing Klebsiella pneumoniae. In revision.

3. 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 Submitted.

Papers published in 2024:

1. **Bulitta JB**[#], Fang E, Stryjewski ME, Wang W, Atiee G, Stark JG, Hafkin B[#]. ([#]: joint corresponding authors) Population Pharmacokinetic Rationale for Intravenous Contezolid Acefosamil Followed by Oral Contezolid Dosage Regimens. Antimicrob Agents Chemother. Accepted Jan 9, 2024.

2. Zhou J, Qian Y, Lang Y, Zhang Y, Tao X, Moya B, Sayed ARM, Landersdorfer CB, Shin E, Werkman C, Smith NM, Kim TH, Kumaraswamy M, Shin BS, Tsuji BT, Bonomo RA, Lee R, **Bulitta JB**. Comprehensive stability analysis of 13 β-lactam and β-lactamase inhibitors in *in vitro* media, and novel supplement dosing strategy to mitigate thermal drug degradation. Antimicrob Agents Chemother. Accepted Jan 6, 2024.

3. Jiao Y, Yan J, Sutaria DS, Lu P, Vicchiarelli M, Reyna Z, Ruiz-Delgado J, Burk E, Moon E, Shah NR, Spellberg B, Bonomo RA, Drusano GL, Louie A, Luna BM, **Bulitta JB**. Population pharmacokinetics and humanized dosage regimens matching the peak, area, trough and range (PATR-matching) of amikacin plasma concentrations in immune-competent murine bloodstream and lung infection models. Antimicrob Agents Chemother. Accepted Dec 21, 2023.

4. Shin E, Zhang Y, Zhou J, Lang Y, Sayed ARM, Werkman C, Jiao Y, Kumaraswamy M, Bulman Z, Luna BM, **Bulitta JB**. Surprisingly high aminoglycoside penetration into human lung epithelial lining fluid revealed by population pharmacokinetics. Antimicrob Agents Chemother 2024 Jan 3:e0139323. PMID: 38169309

5. **Bulitta JB**, Shin E, Bergen PJ, Lang Y, Forrest A, Tsuji BT, Moya B, Li J, Nation RL, Landersdorfer CB. Distinguishing inducible and non-inducible resistance to colistin in *Pseudomonas aeruginosa* by Quantitative and Systems Pharmacology modeling at low and standard inocula. J Pharm Sci 2024; 113:202-213. PMID: 37879409

6. Vorbach BS, Zhou J, Lang Y, **Bulitta JB**, Yanong RPE. Population Pharmacokinetics of Enrofloxacin and Florfenicol in the Giant Danio (*Devario aequipinnatus*) Following Oral Administration of Both Antibiotics and Bath Administration of Enrofloxacin. Aquaculture 2024. 579: 740222. Link

Papers published in 2023:

7. Bower WA, Yu Y, Person MK, Parker CM, Kennedy JL, Sue D, Hesse EM, Cook R, Bradley J, **Bulitta JB**, Karchmer AW, Ward RM, Cato SG, Stephens KC, Hendricks KA. CDC Guidelines for the Prevention and Treatment of Anthrax, 2023. MMWR Recomm Rep. 2023; 72:1-47. PMID: 37963097

8. Amini E, Berger S, Schilling U, Jiao Y, Chen M-J, Bachhav S, Baumstein S, Tang Y, Al-Humiari M, Leon Astudillo C, Drescher S, Iley T, Shur J, Price R, Carrasco C, Conti D, Delvadia R, Oguntimein O, Witzmann K, Absar M, Luke M, Boc S, Dhapare S, Saluja B, Bielski E, Newman B, Bulitta JB, Hochhaus G **Bulitta JB**[#], Hochhaus G[#] ([#]: joint corresponding authors). Sensitivity of Pharmacokinetics to Differences in the Particle Size Distribution for Formulations of Locally Acting Mometasone Furoate Suspension-Based Nasal Sprays. Mol Pharm 2023. 20:5690-5700 PMID: 37773975

9. Tait J, Harper M, Cortes-Lara S, Rogers K, López-Causapé C, Smallman T, Lang Y, Lee W, Zhou J, **Bulitta JB**, Nation RL, Boyce JD, Oliver A, Landersdorfer CB. Ceftolozane/tazobactam against *Pseudomonas aeruginosa* cystic fibrosis clinical isolates in the hollow-fiber infection model: Challenges imposed by hypermutability and heteroresistance. Antimicrob Agents Chemother, 2023 Jul 10;e0041423. PMID: 37428034

10. Agyeman AA, López-Causapé C, Rogers KE, Lucas DD, Cortés-Lara S, Gomis-Font MA, Fraile-Ribot P, Figuerola J, Lang Y, Franklyn ERT, Lee WL, Zhou J, Zhang Y, **Bulitta JB**, Boyce JD, Nation RL, Oliver A, Landersdorfer CB. Ceftolozane/tazobactam plus tobramycin against free-floating and biofilm bacteria of hypermutable Pseudomonas aeruginosa epidemic strains: resistance mechanisms and synergistic activity: Running title: Ceftolozane/tazobactam plus tobramycin against Pseudomonas biofilm. Int J Antimicrob Agents. 2023 Jun 12:106887. PMID: 37315906

11. Lopez-Argüello S, Montaner M, Sayed A, Oliver A, **Bulitta JB**[#], Moya B[#]. Penicillin-Binding Protein 5/6 acting as a Decoy Target in *Pseudomonas aeruginosa* identified by Whole-Cell Receptor Binding and Quantitative Systems Pharmacology. Antimicrob Agents Chemother 2023; 67:e0160322. PMID: 37199612

12. Jiao Y, Yan J, Vicchiarelli M, Sutaria DS, Lu P, Reyna Z, Spellberg B, Bonomo RA, Drusano GL, Louie A, Luna BM, **Bulitta JB**[#]. Individual components of polymyxin B modelled via population pharmacokinetics to design humanized dosage regimens for a bloodstream and lung infection model in immune-competent mice. Antimicrob Agents Chemother 2023; 67:e0019723. PMID: 37022153

13. Drescher SK, Jiao Y, Chen M-J, Kurumaddali A, Shao J, Hochhaus G[#], **Bulitta JB**.[#] ([#]: Corresponding authors) Central and Peripheral Lung Deposition of Fluticasone Propionate Dry Powder Inhaler Formulations in Humans Characterized by Population Pharmacokinetics. Pharm Res 2023. doi: 10.1007/s11095-023-03472-6. PMID: 37081302

Papers published in 2022:

14. Brown AN, Lang Y, Zhou J, Franco EJ, Hanrahan KC, **Bulitta JB**, Drusano GL. Why Molnupiravir Fails in Hospitalized Patients. mBio. 2022:e0291622. PMID: 36374076

15. Smith N, Boissonneault KR, Chen L, Petraitis V, Petraitiene R, Tao X, Zhou J, Lang Y, Kavaliauskas P, Bulman Z, Holden P, Cha R, **Bulitta JB**, Kreiswirth B, Walsh T, Tsuji BT. Mechanistic Insights to Combating NDM and CTX-M Co-producing *Klebsiella pneumoniae* by Targeting Cell Wall Synthesis and Outer Membrane Integrity. Antimicrob Agents Chemother 2022; Antimicrob Agents Chemother 2022; 66:e0052722. PMID: 35924913

16. Kennedy JL, **Bulitta JB**, Chatham-Stephens K, Person MK, Cook R, Mongkolrattanothai T, Shin E, Yu P, Negron ME, Bower WA, Hendricks K. Postexposure Prophylaxis and Treatment of *Bacillus anthracis* Infections: A Systematic Review and Meta-analyses of Animal Models, 1947–2019. Clin Infect Dis 2022; 75:S379-91. PMID: 36251546

17. Bulman ZP, Wicha SG, Nielsen EI, Lenhard JR, Nation RL, Theuretzbacher U, Derendorf H, Tängdén T, Zeitlinger M, Landersdorfer CB, **Bulitta JB**, Friberg LE, Li J, Tsuji BT. Research Priorities Towards Precision Antibiotic Therapy to Improve Patient Care. Lancet Microbe 2022; 3:e795-e802. PMID: 35777386

18. Dharuman S, Wallace MJ, Reeve SM, **Bulitta JB**, Lee RE. Synthesis and Structure-Activity Relationship of Thioacetamide-Triazoles against *Escherichia coli*. Molecules 2022; 27:1518. PMID: 35268619

19. Tait JR, Bilal H, Rogers KE, Lang Y, Kim TH, Zhou J, Wallis SC, **Bulitta JB**, Kirkpatrick CMJ, Paterson DL, Lipman J, Bergen PJ, Roberts JA, Nation RL, Landersdorfer CB. Effect of Different Piperacillin-Tazobactam Dosage Regimens on Synergy of the Combination with Tobramycin against *Pseudomonas aeruginosa* for the Pharmacokinetics of Critically Ill Patients in a Dynamic Infection Model. Antibiotics (Basel) 2022; 11:101. PMID: 35052977

20. Huang Y, Rana AP, Wenzler E, Ozer EA, Krapp F, **Bulitta JB**, Hauser AR, Bulman ZP. Aminoglycoside-resistance gene signatures are predictive of aminoglycoside MICs for carbapenem-resistant *Klebsiella pneumoniae*. J Antimicrob Chemother 2022; 77:356-363. PMID: 34668007

21. Bilal H, Tait JR, Lang Y, Zhou J, Bergen PJ, Peleg AY, **Bulitta JB**, Oliver A, Nation RL, Landersdorfer CB. Simulated Intravenous versus Inhaled Tobramycin with or without Intravenous Ceftazidime Evaluated against Hypermutable *Pseudomonas aeruginosa* via a Dynamic Biofilm Model and Mechanism-Based Modeling. Antimicrob Agents Chemother 2022; 66:e0220321. PMID: 35041509

Papers published in 2021:

22. Bachhav SS, Sheth P, Sandell D, Svensson M, Bhagwat S, Conti DS, Oguntimein O, Dhapare S, Saluja B, Winner L, **Bulitta JB**, Hochhaus G. Systematic Evaluation of the Effect of Formulation Variables on In Vitro Performance of Mometasone Furoate Suspension-Metered Dose Inhalers. AAPS J. 2021; 24:9. doi: 10.1208/s12248-021-00638-1. PMID: 34874508

23. **Bulitta JB**. Informing and validating translational mechanism-based models for antibiotics by experimental and computational approaches. Clin Pharmacol Ther. 2021; 110:1426-1428. PMID: 34555178

24. 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 Z. Generating Genotype-Specific Aminoglycoside Combinations with Ceftazidime/Avibactam for KPC-Producing *Klebsiella pneumoniae*. Antimicrob Agents Chemother 2021. 65:e0069221. PMID: 34152820

25. Drusano GL, Bonomo RA, Marshall S, Rojas L, Adams M, Mojica M, Kreiswirth B, Chen L, Mtchedlidze 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

26. 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

27. 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

28. 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

29. 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:

30. 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

31. 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

32. 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

33. Kim TH*, Tao X* (*joint first authors), Moya B, Jiao Y, Green KB, Zhou J, Lang Y, Sutaria DS, Zavascki AP, Barth AL, Reeve SM, Schweizer HP, Deveson Lucas D, Boyce JD, Bonomo RA, Lee RE, Shin BS, Louie A, Drusano GL, **Bulitta JB**[#]. Novel cassette assay to quantify the outer membrane permeability of five β-lactams simultaneously in carbapenem-resistant *Klebsiella pneumoniae* and *Enterobacter cloacae*. **mBio**. 2020; 11. pii: e03189-19. PMID: 32047131

34. 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

35. 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:

36. 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

37. 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

38. **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

39. Kurumaddali A, Christopher D, Sandell D, Strickland H, Morgan B, **Bulitta JB**, Wiggenhorn 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

40. 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

41. Shah NR, **Bulitta JB**[#], Kinzig M, Landersdorfer CB, Jiao Y, Sutaria DS, Tao X, Höhl R, Holzgrabe U, Kees F, Stephan U, Sörgel F[#]. Novel population pharmacokinetic approach to explain the differences between cystic fibrosis patients and healthy volunteers via protein binding. Pharmaceutics. 2019; 11. pii: E286. PMID: 30988147

42. Jiao Y[#], Moya B, Chen MJ, Zavascki AP, Tao X, Sutaria DS, Louie A, Boyce JD, Deveson Lucas D, Kim TH, Tsuji BT, Bonomo RA, Drusano GL, **Bulitta JB**[#] ([#]: joint corresponding authors). Comparable Efficacy and Better Safety of Double β-Lactam Combination Therapy versus β Lactam plus Aminoglycoside in Gram-negatives: A Meta-analysis of Randomized, Controlled Trials. Antimicrob Agents Chemother. 2019; 63. pii: e00425-19. PMID: 30988147

43. **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

44. Rees V, Deveson Lucas D, López-Causapé Carla, Huang Y, Kotsimbos T, **Bulitta JB**, Rees M, Barugahare A, Peleg A, Nation RL, Oliver A, Boyce JD, Landersdorfer CB. Characterization of hypermutator *Pseudomonas aeruginosa* isolates from patients with cystic fibrosis in Australia. Antimicrob Agents Chemother. 2019; 63. pii: e02538-18. PMID: 30745381

45. **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*. Clin Pharmacokinet. 2019; 58: 143-56. PMID: 29936678

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

Papers published in 2018:

47. 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

48. 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

49. 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

50. 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

51. 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.

52. 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

53. 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.

54. 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

55. 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

56. 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

57. 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

58. 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

59. 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

60. 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:

61. Pires de Mello C, Tao X, Kim TH, **Bulitta JB**, Rodriquez 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

62. 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

63. 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

64. 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

65. 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 Sipjeondaebo-Tang on the Pharmacokinetics of S-1, an Anticancer Agent, in Rats Evaluated by Population Pharmacokinetic Modeling. Molecules. 2017; 22. pii: E1488. PMID: 28880240

66. 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

67. 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

68. Kim TH, Shin S, **Bulitta JB**, Youn YS, Yoo SD, Shin BS. Development of a physiologically relevant population pharmacokinetic in vitro-in vivo correlation approach for designing extended-release oral dosage formulation. Mol Pharm 2017; 14:53-65. PMID: 27809538

69. Bulman ZP, Ly NS, Lenhard JR, Holden P, **Bulitta JB**, Tsuji BT. Influence of rhlR and lasR on Polymyxin Pharmacodynamics in *Pseudomonas aeruginosa*: Implications for Quorum Sensing Inhibition with Azithromycin. Antimicrob Agents Chemother 2017; 61. pii: e00096-16. PMID: 28096154

70. 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

71. 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

72. 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

73. 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

74. Zavascki AP, Klee BO, **Bulitta JB**. Aminoglycosides against carbapenem-resistant Enterobacteriaceae in the critically ill: the pitfalls of aminoglycoside susceptibility. Expert Rev Anti Infect Ther. 2017; 15: 519-26. PMID: 28375030

75. Smith N, Bulman Z, Sieron A, **Bulitta JB**, Holden P, Nation R, Li J, Wright G, Tsuji BT. Pharmacodynamics of Polymyxin B against Polymyxin-Resistant *Escherichia coli* Harbouring mcr-1. J Antimicrob Chemother. 2017; 72: 2297-303. PMID: 28505268

76. **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

77. 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

Papers published in 2016:

78. Jacobs M, Grégoire N, Couet W, **Bullitta 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

79. 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

80. 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

81. 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 Hematopoitic Stem Cell Transplantation: Results from the BMT CTN 0101 Trial. J Antimicrob Chemother. 2016; 71:2234-40. PMID: 27121401

82. Bergen PJ, **Bulitta JB**, Kirkpatrick CMJ, Rogers K, McGregor M, Wallis SC, Paterson DL, Lipman J, Roberts JA, Landersdorfer CB. Effect of different renal function on anti-bacterial effects of piperacillin against *Pseudomonas aeruginosa* evaluated *via* the hollow fibre infection model and mechanism-based modelling; J Antimicrob Chemother. 2016; 71:2509-20. PMID: 27231278

83. 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

84. Tsuji BT, Landersdorfer CB, Lenhard J, Cheah S-E, Thamlikitkul V, Rao GG, Holden PN, Forrest A, **Bulitta JB**, Nation RL, Li J. Paradoxical Effect of Polymyxin B: High Drug Exposure Amplifies Resistance in *Acinetobacter baumannii*. Antimicrob Agents Chemother. 2016; 60:3913-20. PMID: 27067330

85. Cheah S-E, Johnson MD, Zhu Y, Tsuji BT, Forrest A, **Bulitta JB**, Boyce JD, Nation RL, Li J. Polymyxin Resistance in *Acinetobacter baumannii*: Genetic Mutations and Transcriptomic Changes in Response to Clinically Relevant Dosage Regimens. Sci Rep 2016; 6:26233. PMID: 27195897

86. Garonzik SM, Lenhard JR, Forrest A, Holden PN, **Bulitta JB**, Tsuji BT. Defining the Active Fraction of Daptomycin against Methicillin-resistant *Staphylococcus aureus* (MRSA) using a Pharmacokinetic and Pharmacodynamic Approach. PLoS One 2016; 11:e0156131. PMID: 27284923

87. Rao GG, Ly NS, **Bulitta JB**, Soon RL, San Roman MD, Holden PN, Landersdorfer CB, Nation RL, Li J, Forrest A, Tsuji BT. Polymyxin B in combination with doripenem against heteroresistant *Acinetobacter baumannii*: pharmacodynamics of new dosing strategies. J Antimicrob Chemother 2016; 71:3148-56. PMID: 27494922

88. Rees V, **Bulitta JB**, Oliver A, Tsuji BT, Rayner C, Nation RL, Landersdorfer CB. Resistance suppression by high intensity, short duration aminoglycoside exposure against hypermutable and nonhypermutable *Pseudomonas aeruginosa*. J Antimicrob Chemother 2016; 71:3157-67. PMID: 27521357

89. Kim TH, Kim M, Shin S, Chi Y-Ha, Paik S-H, Lee J-H, Yoo S, Youn Y, **Bulitta JB**, Joo S, Jeong S, Weon K-Y, Shin BS. Placental transfer and mammary excretion of a novel angiotensin receptor blocker fimasartan in rats. BMC Pharmacol Toxicol. 2016; 17:35. PMID: 27459959

90. Rao GG, Ly NS, Diep J, Forrest A, **Bulitta JB**, Holden PN, Nation RL, Li J, Tsuji BT. Combinatorial pharmacodynamics of polymyxin B and tigecycline against heteroresistant *Acinetobacter baumannii*. Int J Antimicrob Agents. 2016; 48:331-6. PMID: 27449542

91. Wittau M, Paschke S, Kurlbaum M, Scheele J, Ly NS, Hemper E, Kornmann M, Henne-Bruns D, **Bulitta JB**. Population Pharmacokinetics and Target Attainment of Ertapenem in Plasma and Tissue Assessed via Microdialysis in Morbidly Obese Patients after Laparoscopic Visceral Surgery. Antimicrob Agents Chemother 2016; 61. pii: e00952-16. PMID: 27795367

92. Lenhard JR, Gall JS, **Bulitta JB**, Thamlikitkul V, Landersdorfer CB, Forrest A, Nation RL, Li J, Tsuji BT. Comparative pharmacodynamics of four different carbapenems in combination with polymyxin B against carbapenem-resistant *Acinetobacter baumannii*. Int J Antimicrob Agents 2016; 48:719-24. PMID: 27773498

93. Sörgel F, Höhl R, Glaser R, Stelzer C, Munz M, Vormittag M, Kinzig M, **Bulitta JB**, Landersdorfer C, Junger A, Christ M, Wilhelm M, Holzgrabe U. Pharmacokinetics and pharmacodynamics of antibiotics in intensive care. Med Klin Intensivmed Notfmed 2016; 112:11-23. PMID: 27778050

94. Yadav R, **Bulitta JB#**, Nation RL, Landersdorfer CB#. (#: Joint senior authors). Optimization of synergistic combination regimens against carbapenem- and aminoglycoside-resistant clinical *Pseudomonas aeruginosa* isolates *via* mechanism-based pharmacokinetic / pharmacodynamic modeling. Antimicrob Agents Chemother 2016; 61. pii: e01011-16. PMID: 27821448

Papers published in 2015:

95. Rees VE, **Bulitta JB#**, Nation RL, Tsuji BT, Sörgel F, Landersdorfer CB#. Shape does matter: Short high-concentration exposure minimises resistance emergence for fluoroquinolones. J Antimicrob Chemother. 2015; 70:818-26. PMID: 25381167

96. Bergen PJ, Bulman ZP, Saju S, **Bulitta JB**, Landersdorfer C, Forrest A, Li J, Nation RL, Tsuji BT. Polymyxin combinations: pharmacokinetics and pharmacodynamics for rationale use. Pharmacotherapy. 2015; 35:34-42. PMID: 25630411

97. Cheah S-E, Li J, Nation RL, **Bulitta JB#**. Novel rate-area-shape modeling approach to quantify bacterial killing and regrowth for in vitro static time-kill studies. Antimicrob Agents Chemother 2015; 59:381-8. PMID: 25367905

98. Tamanna T, **Bulitta JB**, Yu A. Controlling antibiotic release from silica nano-porous drug carriers via self-assembled polyelectrolyte coating. J Mater Sci Mater Med. 2015; 26:117. PMID: 25665846

99. Ly NS, **Bulitta JB**, Rao GG, Holden PN, Landersdorfer CB, Rao GG, Forrest A, Bergen PJ, Nation RL, Li J, Tsuji BT. Colistin and doripenem combinations against *Pseudomonas aeruginosa*: profiling the time-course of synergistic killing and resistance prevention. J Antimicrob Chemother. 2015; 70:1434-42. PMID: 25712313

100. Yadav R, Landersdorfer CB, Nation RL, Boyce JD, **Bulitta JB#**. (#: Corresponding author) Novel approach to optimising synergistic carbapenem plus aminoglycoside combinations against carbapenem-resistant *Acinetobacter baumannii.* Antimicrob Agents Chemother. 2015; 59:2286-98. PMID: 25645842

101. **Bulitta JB#**, Ly NS, Landersdorfer CB, Wanigaratne NA, Velkov T, Yadav R, Oliver A, Martin L, Shin BS, Forrest A, Tsuji BT. (#: Corresponding author) Two mechanisms of killing of *Pseudomonas aeruginosa* by tobramycin assessed at multiple inocula via mechanism-based modeling. Antimicrob Agents Chemother. 2015; 59:2315-27. PMID: 25645838

102. Chan L, **Bulitta JB**, Ascher D, Haynes J, McLeod V, Porter C, Williams C, Kaminskas L. PEGylation does not significantly change the initial intravenous or subcutaneous pharmacokinetics or lymphatic exposure of trastuzumab in rats, but increases plasma clearance after subcutaneous administration; Mol Pharm. 2015; 12:794-809. PMID: 25644368

103. Kim TH, Shin S, Landersdorfer CB, Chi YH, Paik SH, Myung J, Yadav R, Horkovics-Kovats S, **Bulitta JB#**, Shin BS#. (#: Corresponding author) Population Pharmacokinetic Modeling of the Enterohepatic Recirculation of Fimasartan in Rats, Dogs and Humans. AAPS J. 2015; 17:1210-23. PMID: 25990964

104. Bulman Z, Sutton M, Ly NS, **Bulitta JB**, Holden P, Nation RL, Li J, Tsuji BT. Emergence of Polymyxin B Resistance Influences Pathogenicity in Mutator Pseudomonas aeruginosa; Antimicrob Agents Chemother. 2015; 59:4343-6. PMID: 25918151

105. Wittau M, Scheele J, Kurlbaum M, Brockschmidt C, Wolf AM, Hemper E, Henne-Bruns E, **Bulitta JB.** Population pharmacokinetics and target attainment of meropenem in plasma and tissue of morbidly obese patients. Antimicrob Agents Chemother. 2015; 59:6241-7. PMID: 26248353

106. Horkovics-Kovats S, Brunovský P, Pichler A, **Bulitta JB**. Population data analysis of dissolution time profiles: Assessment of physicochemical properties of the drug, drug particles and the pharmaceutical formulation. Eur J Pharm Sci 2015; 78:245-54. PMID: 26215465

107. Tamanna T, **Bulitta JB**, Landersdorfer CB, Cashin V, Yu A. Stability and controlled antibiotic release from thin films embedded with antibiotic loaded mesoporous silica nanoparticles. RSC Adv 2015; 5:107839-107846.

108. Bergen PJ, Bulman ZP, Landersdorfer CB, Smith N, Lenhard JR, **Bulitta JB**, Nation RL, Li J, Tsuji BT. Optimizing Polymyxin Combinations Against Resistant Gram-Negative Bacteria. Infect Dis Ther. 2015; 4:391-415. PMID: 26645096

109. Landersdorfer CB, **Bulitta JB**, Sörgel F. Pharmacokinetics and Pharmacodynamics of Antibiotics in Bone. 2015; chapter 3, p. 21-38, in Zimmerli W: Bone and Joint Infections: From Microbiology to Diagnostics and Treatment. John Wiley & Sons, Chichester, West Sussex, UK.

Papers published in 2014:

110. Black LA, Landersdorfer CB, **Bulitta JB**, Griffith JE, Govendir M. Evaluation of enrofloxacin use in koalas (Phascolarctos cinereus) via population pharmacokinetics and Monte Carlo simulation. Journal of Veterinary Pharmacology and Therapeutics 2014; 37:301-11. PMID: 24219009

111. Rao GG, Ly NS, Haas CE, Garonzik S, Forrest A, **Bulitta JB**, Kelchlin PA, Holden PN, Nation RL, Li J, Tsuji BT. New Dosing Strategies for an 'Old' Antibiotic: Pharmacodynamics of Front-Loaded Regimens of Colistin at Simulated Pharmacokinetics of Patients with Kidney or Liver Disease, Antimicrob Agents Chemother 2014; 58:1381-8. PMID: 24342636

112. Dahlberg A, Kaminskas LM, Smith A, Nicolazzo J, Porter CJH, **Bulitta JB**, McIntosh M. The Lymphatic System Plays a Major Role in the Intravenous and Subcutaneous Pharmacokinetics of Trastuzumab in Rats. Mol Pharmacol 2014; 11:496-504. PMID: 24350780

113. Cheah S-E, **Bulitta JB**, Li J, Nation RL. Development and validation of a liquid chromatography – mass spectrometry assay for polymyxin B in bacterial growth media. J Pharm Biomed Anal 2014; 92:177-82. PMID: 24530981

114. Boak LM, Rayner CR, Grayson ML, Paterson DL, Spelman D, Khumra S, Capitano B, Forrest A, Li J, Nation RL, **Bulitta JB**[#]. Clinical population pharmacokinetics and toxicodynamics of linezolid. Antimicrob Agents Chemother 2014; 58:2334-43. PMID: 24514086

115. Shin BS, Yoo SD, Kim TH, **Bulitta JB**, Landersdorfer CB, Shin JC, Choi JH, Weon KY, Joo SH, Shin S. Quantitative determination of absorption and first-pass metabolism of apicidin, a potent histone deacetylase inhibitor. Drug Metab Dispos 2014; 42:974-82. PMID: 24644298

116. Kim TH, Shin S, Bashir M, Chi YH, Paik SH, Lee JH, Choi HJ, Choi JH, Yoo SD, **Bulitta JB**, Ma E, Joo SH, Shin BS. Pharmacokinetics and metabolite profiling of fimasartan, a novel antihypertensive agent, in rats. Xenobiotica 2014; 44:913-25. PMID: 24786684

117. Roberts JA, Udy AA, **Bulitta JB**, Stuart J, Jarrett P, Starr T, Lassig-Smith M, Roberts NA, Dunlop R, Hayashi Y, Wallis SC, Lipman J. Doripenem population pharmacokinetics and dosing requirements for critically ill patients receiving continuous venovenous haemodiafiltration. J Antimicrob Chemother 2014; 69:2508-16. PMID: 24879665

118. Tamanna T, Bulitta JB, Yu A. Mesoporous silica nanoparticles as an innovation in controlled drug delivery. In: Comprehensive guide for mesoporous materials; volume 4: Application and Commercialization. 2014. Editor: Mahmood Aliofkhazraei. Nova Science Publishers Inc., Hauppauge, NY, 2015. ISBN: 978-1-63482-092-9, pp.167-196.

Papers published in 2013:

119. **Bulitta JB**[#], Okusanya OO, Forrest A, Bhavnani SM, Clark K, Still JG, Fernandes P, Ambrose PG. ([#]: Corresponding author) Population Pharmacokinetics of Fusidic Acid: Rationale for Front-loaded Dosing Regimens due to Auto-inhibition of Clearance. Antimicrob Agents Chemother. 2013; 57:498-507. PMID: 23147726

120. Patel K, Batty KT, Moore BR, Gibbons PL, **Bulitta JB**, Kirkpatrick CM. Mechanism-based model of parasite growth and dihydroartemisinin pharmacodynamics in murine malaria. Antimicrob Agents Chemother. 2013; 57:508-16. PMID: 23147722

121. Landersdorfer CB, Ly NS, Xu H, Tsuji BT, **Bulitta JB**[#]. ([#]: Corresponding author) Quantifying subpopulation synergy for antibiotic combinations via mechanism-based modeling and a sequential dosing design. Antimicrob Agents Chemother. 2013; 57:2343-51. PMID: 23478962

122. Caliph SM, Cao E, **Bulitta JB**, Hu L, Han S, Porter CJH, Trevaskis NL. The Impact of Lymphatic Transport on the Systemic Disposition of Lipophilic Drugs. J Pharm Sci 2013; 102:2395-408. PMID: 23696002

123. Lee HJ; Bergen PJ, **Bulitta JB**, Tsuji BT, Forrest A, Nation RL, Li J. Colistin and rifampicin combination: synergistic activity against multidrug-resistant *Acinetobacter baumannii* in an *in vitro* PK/PD model. Antimicrob Agents Chemother 2013; 57:3738-45. PMID: 23716052

124. Ryan GM, Kaminskas LM, **Bulitta JB**, McIntosh MP, Owen DJ, Porter CJH. PEGylated polylysine dendrimers increase lymphatic exposure to doxorubicin when compared to PEGylated liposomal and solution formulations of doxorubicin; J Control Release 2013; 172:128-36. PMID: 23954628

125. Zavascki AP, **Bulitta JB**, Landersdorfer CB. Combination therapy for carbapenem-resistant Gram-negative bacteria. Expert Rev Anti Infect Ther 2013; 11:1333-53. PMID: 24191943

Papers published in 2012:

126. Drusano GL, Bonomo R, Bahniuk N, **Bulitta JB**, VanScoy B, DeFiglio H, Fikes S, Brown D, Drawz S, Kulawy R, Louie A. Resistance Emergence Mechanism and Mechanism of Resistance Suppression by Tobramycin for Cefepime for *Pseudomonas aeruginosa*. Antimicrob Agents Chemother; 2012; 56:231-4. PMID: 22005996

127. Nicasio A, **Bulitta JB**, Lodise TP, D'Hondt RE; Kulawy R; Louie A, Drusano GL. Evaluation of Once-Daily Vancomycin against Methicillin-Resistant *Staphylococcus aureus* in a Hollow-Fiber Infection Model. Antimicrob Agents Chemother 2012; 56:682-6. PMID: 22083484

128. Ly NS, Yang J, **Bulitta JB**, Tsuji BT. Impact of the Two-Component Regulatory Systems PhoP-PhoQ and PmrA-PmrB on Colistin Pharmacodynamics in *P. aeruginosa*. Antimicrob Agents Chemother 2012; 56:3453-6. PMID: 22470116

129. Tsuji BT, Brown T, Parasrampuria R, Brazeau D, Forrest A, Kelchlin P, Holden P, Peloquin C, Hanna D, **Bulitta JB**. Front-Loaded Linezolid Regimens Results in Increased Killing and Suppression of the Accessory Gene Regulator system of *Staphylococcus aureus*. Antimicrob Agents Chemother 2012; 56:3712-9. PMID: 22526313

130. Tsuji BT, **Bulitta JB**, Brown T, Forrest A, Kelchlin PA, Holden PN, Peloquin CA, Skerlos L, Hanna D. Pharmacodynamics of early, high-dose linezolid against vancomycin-resistant enterococci with elevated MICs and pre-existing genetic mutations. J Antimicrob Chemother 2012; 67:2182-90. PMID: 22685161

131. Das SC, Behara SR, **Bulitta JB**, Morton DAV, Larson I, Stewart PJ. Powder Strength Distributions for Understanding De-agglomeration of Lactose Powders. Pharm Res. 2012; 29:2926-35. PMID: 22695732

132. Deris ZZ, Yu HH, Davis K, Soon R, Jacob J, Ku CK, Poudyal A, Bergen PJ, Tsuji BT, **Bulitta JB**, Forrest A, Paterson D, Velkov T, Li J, Nation R. Colistin and Doripenem Combination is Synergistic against *Klebsiella pneumoniae* at Multiple Inocula and Suppresses Colistin Resistance in an *in vitro* PK/PD Model. Antimicrob Agents Chemother. 2012; 56:5103-12. PMID: 22802247

133. Landersdorfer CB, **Bulitta JB**, Kirkpatrick CMJ, Kinzig M, Holzgrabe U, Drusano GL, Stephan U, Sörgel F. Population Pharmacokinetics of Piperacillin at Two Dose Levels: Influence of Nonlinear Pharmacokinetics on the Pharmacodynamic Profile. Antimicrob Agents Chemother. 2012; 56:5715-23. PMID: 22908169

Papers published in 2011:

134. Prokocimer P, Bien P, Surber J, Mehra P, DeAnda C, **Bulitta JB**, Corey GR. Phase 2, randomized, double-blind, dose-ranging study evaluating the safety, tolerability, population pharmacokinetics, and efficacy of oral torezolid phosphate in patients with complicated skin and skin structure infections. Antimicrob Agents Chemother 2011; 55:583-92. PMID: 21115795

135. Shin BS, **Bulitta JB**, Balthasar JP, Kim M, Choi Y, Yoo SD. Prediction of human pharmacokinetics and tissue distribution of apicidin, a potent histone deacetylase inhibitor, by physiologically based pharmacokinetic modeling. Cancer Chemother Pharmacol. 2011; 68:465-75. PMID: 21069337

136. **Bulitta JB#**, Bingölbali A, Shin BS, Landersdorfer CB. (#: Corresponding author) Development of a new pre- and post-processing tool (SADAPT-TRAN) for nonlinear mixed-effects modeling in S-ADAPT. AAPS Journal 2011; 13:201-11; DOI: http://dx.doi.org/10.1208/s12248-011-9257-x . PMID: 21369876

137. **Bulitta JB#**, Landersdorfer CB. (#: Corresponding author) Performance and robustness of the Monte Carlo importance sampling algorithm using parallelized S-ADAPT for basic and complex mechanistic models. AAPS Journal 2011; 13:212-26; DOI: http://dx.doi.org/10.1208/s12248-011-9258-9 . PMID: 21374103

138. Brown AN, **Bulitta JB**, McSharry JJ, Weng Q, Adams JR, Kulawy R, Drusano GL. The Effect of Effect of half-life on the pharmacodynamic index of zanamivir against influenza virus delineated by a mathematical model. Antimicrob Agents Chemother 2011; 55:1747-53. PMID: 21263045

139. Shin BS, **Bulitta JB**, Hong DK, Kim HY, Kim MK, Choi Y, Lee JB, Hwang SW, Lee MH, Yoo SD. Population pharmacokinetics of a novel histone deacetylase inhibitor, cyclo{(2S)-2-amino-8-[(aminocarbonyl)hydrazono] decanoyl-1-L-tryptophyl-L-isoleucyl-(2R)-2-piperidinecarbonyl} (SD-2007), and its metabolic conversion to apicidin after intravenous injection and oral administration in rats. Chemotherapy 2011; 57:259-267. PMID: 21597290

140. Tsuji BT, Okusanya OO, **Bulitta JB**, Forrest A, Bhavnani SM, Fernandez PB, Ambrose PG. Application of pharmacokinetic-pharmacodynamic modeling and the justification of a novel fusidic acid dosing regimen: raising Lazarus from the dead. Clin Infect Dis 2011; 52:S513-9. PMID: 21546628

141. **Bulitta JB**, Kinzig M, Naber CK, Wagenlehner FM, Sauber C, Landersdorfer CB, Sörgel F, Naber KG. Population pharmacokinetics and penetration into prostatic, seminal, and vaginal fluid for ciprofloxacin, levofloxacin, and their combination. Chemotherapy 2011; 57:402-416. PMID: 22024700

142. **Bulitta JB**, Kinzig M, Landersdorfer CB, Holzgrabe U, Stephan U, Sörgel F. Comparable population pharmacokinetics and pharmacodynamic breakpoints of cefpirome in cystic fibrosis patients and healthy volunteers. Antimicrob Agents Chemother 2011; 55:2927-36. PMID: 21402834

143. Okusanya OO, Tsuji BT, **Bulitta JB**, Forrest A, Bulik CC, Bhavnani SM, Fernandes P, Ambrose PG. Evaluation of the pharmacokinetics-pharmacodynamics of fusidic acid against *Staphylococcus aureus* and *Streptococcus pyogenes* using in vitro infection models: implications for dose selection. Diagn Microbiol Infect Dis 2011; 70:101-11. PMID: 21513848

144. **Bulitta JB#**, Landersdorfer CB, Forrest A, Brown SV, Neely MN, Tsuji BT, Louie A. (#: Corresponding author) Relevance of Pharmacokinetic and Pharmacodynamic Modelling to Clinical Care of Critically Ill Patients. Current Pharmaceut Biotechnol 2011; 12:2044-61. PMID: 21554212

145. Bergen PJ, Forrest A, **Bulitta JB**, Tsuji BT, Sidjabat HE, Paterson DL, Li J, Nation RL. Clinically relevant plasma concentrations of colistin in combination with imipenem enhance pharmacodynamic activity against multidrug-resistant *Pseudomonas aeruginosa* at multiple inocula. Antimicrob Agents Chemother 2011; 55:5134-42. PMID: 21876058

146. Wittau M, Scheele J, **Bulitta JB**, Mayer B, Kaever V, Burhenne H, Henne-Bruns D, Isenmann R, Brockschmidt C. Pharmacokinetics of ertapenem in colorectal tissue. Chemotherapy 2011; 57:437-448. PMID: 22189340

147. Bergen PJ, Tsuji BT, **Bulitta JB**, Forrest A, Jacob J, Sidjabat HE, Paterson DL, Nation RL, Li J. Synergistic killing of multidrug-resistant *Pseudomonas aeruginosa* at multiple inocula by colistin combined with doripenem in an in vitro pharmacokinetic/pharmacodynamic model. Antimicrob Agents Chemother; 2011 55:5685-95. PMID: 21911563

Papers published in 2010:

148. Landersdorfer CB, Kirkpatrick CM, Kinzig M, **Bulitta JB**, Holzgrabe U, Jaehde U, Reiter A, Naber KG, Rodamer M, Sörgel F. Competitive inhibition of renal tubular secretion of ciprofloxacin and metabolite by probenecid. Br J Clin Pharmacol 2010; 69:167-78. PMID: 19564368

149. **Bulitta JB**, Landersdorfer CB, Hüttner SJ, Drusano GL, Kinzig M, Holzgrabe U, Stephan U, Sörgel F. Population pharmacokinetic comparison and pharmacodynamic breakpoints of ceftazidime in cystic fibrosis patients and healthy volunteers. Antimicrob Agents Chemother 2010; 54:1275-82. PMID: 20065059

150. **Bulitta JB#**, Yang JC, Yohonn L, Ly NS, Brown SV, D'Hondt RE, Jusko WJ, Forrest A, Tsuji BT. (#: Corresponding author) Attenuation of colistin bactericidal activity by high inoculum of *Pseudomonas aeruginosa* characterized by a new mechanism-based population pharmacodynamic model. Antimicrob Agents Chemother 2010; 54:2051-62. PMID: 20211900

151. Bergen PJ, **Bulitta JB**, Forrest A, Tsuji BT, Li J, Nation RL. Pharmacokinetic/pharmacodynamic investigation of colistin against *Pseudomonas aeruginosa* using an *in vitro* model. Antimicrob Agents Chemother 2010; 54:3783-9. PMID: 20585118

152. **Bulitta JB**, Kinzig M, Jakob V, Holzgrabe U, Sörgel F, Holford NH. Nonlinear pharmacokinetics of piperacillin in healthy volunteers--implications for optimal dosage regimens. Br J Clin Pharmacol 2010; 70:682-93. PMID: 21039762

153. Shin BS, Hwang SW, **Bulitta JB**, Lee JB, Yang SD, Park JS, Kwon MC, Kim do J, Yoon HS, Yoo SD. Assessment of bisphenol A exposure in Korean pregnant women by physiologically based pharmacokinetic modeling. J Toxicol Environ Health A. 2010; 73:1586-98. PMID: 20954083

154. Lim LM, Ly N, Anderson D, Yang JC, Macander L, Jarkowski A 3rd, Forrest A, **Bulitta JB**, Tsuji BT. Resurgence of colistin: a review of resistance, toxicity, pharmacodynamics, and dosing. Pharmacotherapy 2010; 30:1279-91. PMID: 21114395

Papers published in 2009:

155. Landersdorfer CB, **Bulitta JB**, Kinzig M, Holzgrabe U, Sörgel F. Penetration of antibacterials into bone: pharmacokinetic, pharmacodynamic and bioanalytical considerations. Clin Pharmacokinet 2009; 48:89-124. PMID: 19271782

156. **Bulitta JB**, Zhao P, Arnold RD, Kessler DR, Daifuku R, Pratt J, Luciano G, Hanauske AR, Gelderblom H, Awada A, Jusko WJ. Mechanistic population pharmacokinetics of total and unbound paclitaxel for a new nanodroplet formulation versus Taxol in cancer patients. Cancer Chemother Pharmacol 2009; 63:1049-63. PMID: 18791718

157. **Bulitta JB**, Zhao P, Arnold RD, Kessler DR, Daifuku R, Pratt J, Luciano G, Hanauske AR, Gelderblom H, Awada A, Jusko WJ. Multiple-pool cell lifespan models for neutropenia to assess the population pharmacodynamics of unbound paclitaxel from two formulations in cancer patients. Cancer Chemother Pharmacol 2009; 63:1035-48. PMID: 18791717

158. **Bulitta JB#**, Ly NS, Yang JC, Forrest A, Jusko WJ, Tsuji BT. (#: Corresponding author) Development and qualification of a pharmacodynamic model for the pronounced inoculum effect of ceftazidime against *Pseudomonas aeruginosa*. Antimicrob Agents Chemother 2009; 53:46-56. PMID: 18852268

159. Landersdorfer CB, Kinzig M, Hennig FF, **Bulitta JB**, Holzgrabe U, Drusano GL, Sörgel F, Gusinde J. Penetration of moxifloxacin into bone evaluated by Monte Carlo simulation. Antimicrob Agents Chemother 2009; 53:2074-81. PMID: 19223648

160. Landersdorfer CB, Kinzig M, **Bulitta JB**, Hennig FF, Holzgrabe U, Sörgel F, Gusinde J. Bone penetration of amoxicillin and clavulanic acid evaluated by population pharmacokinetics and Monte Carlo simulation. Antimicrob Agents Chemother 2009, 53:2569-78. PMID: 19307356

161. Abduljalil K, Kinzig M, **Bulitta JB**, Horkovics-Kovats S, Sörgel F, Rodamer M, Fuhr U. Modeling the autoinhibition of clarithromycin metabolism during repeated oral administration. Antimicrob Agents Chemother 2009; 53:2892-901. PMID: 19414584

162. Al-Sallami HS, Pavan Kumar VV, Landersdorfer CB, **Bulitta JB**, Duffull SB. The time course of drug effects. Pharm Stat 2009; 8:176-85. PMID: 19626596

163. Harigaya Y, **Bulitta JB**, Forrest A, Sakoulas G, Lesse AJ, Mylotte JM, Tsuji BT. Pharmacodynamics of vancomycin at simulated epithelial lining fluid concentrations against methicillin-resistant *Staphylococcus aureus* (MRSA): implications for dosing in MRSA pneumonia. Antimicrob Agents Chemother 2009; 53:3894-901. PMID: 19596879

164. **Bulitta JB**, Landersdorfer CB, Kinzig M, Holzgrabe U, Sorgel F. A New semiphysiological absorption model to assess the pharmacodynamic profile of cefuroxime axetil using nonparametric and parametric population pharmacokinetics. Antimicrob Agents Chemother 2009; 53:3462-71. PMID: 19528278

165. **Bulitta JB**, Duffull SB, Landersdorfer CB, Kinzig M, Holzgrabe U, Stephan U, Drusano GL, Sörgel F. Comparison of the pharmacokinetics and pharmacodynamic profile of carumonam in cystic fibrosis patients and healthy volunteers. Diagn Microbiol Infect Dis 2009; 65:130-41. PMID: 19748423

166. Shin BS, Hong SH, **Bulitta JB**, Lee JB, Hwang SW, Kim HJ, Yang SD, Yoon HS, Kim do J, Lee BM, Yoo SD. Physiologically based pharmacokinetics of zearalenone. J Toxicol Environ Health A 2009; 72:1395-405. PMID: 20077211

167. Shin BS, Hong SH, **Bulitta JB**, Hwang SW, Kim HJ, Lee JB, Yang SD, Kim JE, Yoon HS, Kim do J, Yoo SD. Disposition, oral bioavailability, and tissue distribution of zearalenone in rats at various dose levels. J Toxicol Environ Health A 2009; 72:1406-11. PMID: 20077212

168. Landersdorfer CB, Kirkpatrick CM, Kinzig M, **Bulitta JB**, Holzgrabe U, Drusano GL, Sörgel F. Competitive inhibition of renal tubular secretion of gemifloxacin by probenecid. Antimicrob Agents Chemother 2009; 53:3902-7. PMID: 20233180

Papers published in 2007 and 2008:

169. Lodise TP, Kinzig-Schippers M, Drusano GL, Loos U, Vogel F, **Bulitta JB**, Hinder M, Sörgel F. Use of population pharmacokinetic modeling and Monte Carlo simulation to describe the pharmacodynamic profile of cefditoren in plasma and epithelial lining fluid. Antimicrob Agents Chemother 2008; 52:1945-51. PMID: 17485507

170. Fung HL, Tsou PS, **Bulitta JB**, Tran DC, Page NA, Soda D, Mi Fung S. Pharmacokinetics of 1,4-butanediol in rats: bioactivation to gamma-hydroxybutyric acid, interaction with ethanol, and oral bioavailability. AAPS Journal 2008; 10: 56-69. PMID: 18446506

171. 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

172. **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

173. **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

174. **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

175. 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

176. 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:

177. 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

178. 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

179. 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

180. 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

181. 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

182. 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.

183. 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:

184. 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

185. 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

186. Sörgel F, **Bulitta JB**, Kinzig-Schippers M. Pharmakokinetik der Chinolone. Chemotherapie J 2002; 11:25-33.

187. 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

188. Sörgel F, Kinzig-Schippers M, **Bulitta JB**. Pharmakokinetisches Profil von Quinupristin-Dalfopristin. Chemotherapie J 2000; 9:42-53.

189. 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.

190. Sörgel F, Kinzig-Schippers M, Sauber C, **Bulitta JB**. Pharmakokinetik und Pharmakodynamik von Levofloxacin. Chemotherapie J 1999; 8:19-27.

191. 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 Persisters 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.
20. **Bulitta JB**. Targeting Gram-negative Bacterial 'Superbugs' by a Novel Target site Penetration and Receptor Binding Assay Platform. Chemical Institute of Canada, IUPAC / CCCE 2021 conference. August 13th to 20th, 2021. Virtual.
21. **Bulitta JB**. Hartmut Derendorf's impact on antimicrobial pharmacology over four decades and beyond. Symposium by the International Society for Anti-infective Pharmacology (ISAP). November 12, 2021. Virtual.
22. **Bulitta JB**. Ceftazidime / Avibactam in Hollow Fiber Infection Model vs P. aeruginosa Stably De-repressed Isolate. Ceftazidime / Avibactam in Hollow Fiber Infection Model vs P. aeruginosa Stably De-repressed Isolate. GRC Italy, New Antibacterial Discovery and Development, Gordon Research Conference, July 26, 2022, Il Ciocco, Tuscany, Italy.
23. **Bulitta JB,** Louie A, Drusano GL. Combating resistant superbugs by understanding the molecular determinants of target site penetration and binding, NIAID/NIH workshop on Gram-negative Tools for Drug Discovery, Aug 8, 2022, Bethesda, MD.
24. **Bulitta JB**. Novel assay platform to characterize antibiotic target site penetration and receptor binding in intact cells of bacterial superbugs. IV RedIF Congress 2022. Oct 5, 2022. Porto Alegre, Brazil.
25. **Bulitta JB**, Hochhaus G. Feasibility of predicting regional lung exposure from systemic pharmacokinetic (PK) data of generic OIDPs via population PK. **FDA public Workshop:** Considerations for and Alternatives to Comparative Clinical Endpoint and Pharmacodynamic Bioequivalence Studies for Generic Orally Inhaled Drug Products. April 21, 2023. University of Maryland, MD.
26. **Bulitta JB.** Leveraging mechanistic PK/PD relationships in intact bacteria to combat resistant superbugs. ASM Microbe, June 16, 2023. Houston, TX.

Invited International Research Presentations

27. 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.
28. 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.
29. 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.
17. **Bulitta JB**. Benefits and Applications of Translational Pharmacokinetic / Pharmacodynamic Modeling and Simulations. Daegu Catholic University, Daegu, South Korea. September 27, 2021.
18. **Bulitta JB**, Lang Y, Shin E. Phoenix WinNonlin – the Swiss Army Knife of Pharmacokinetics and Pharmacodynamics. SUNY at Buffalo, Buffalo, BY, USA, October 22, 2021.
19. **Bulitta JB.** Phoenix WinNonlin – the Swiss Army Knife of Pharmacokinetics and Pharmacodynamics. SUNY at Buffalo, Buffalo, BY, USA, September 16, 2022.

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.

24. **Bulitta JB**. Career development: Paths and strategies. Daegu Catholic University, Daegu, South Korea. September 23, 2021.

25. **Bulitta JB**. Translational Modeling Concepts and Applications to Support Drug Development and optimal patient Dosing. Sungkyunkwan University, Seoul, South Korea. September 29, 2021.

26. **Bulitta JB.** Novel bacterial target site penetration platform to synergistically kill Gram-negatives and Mycobacteria. NIAID/NIH – UF Research Symposium on Anti-Infectives. University of Florida, Orlando, FL. June 27, 2022.

27. **Bulitta JB**. Rationally selecting and designing β-lactam antibiotic combinations based on target site penetration and receptor binding to combat Gram-negatives and Mycobacteria. St. Jude Children's Research Hospital. Memphis, TN. June 29, 2022.

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 pharmaceutics 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, Holzgrabe 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, Holzgrabe 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, Holzgrabe 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 Persistern. 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 Persisters 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* Persisters 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 Universitary 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.

97. Bulitta JB. Super Bugs and Antibiotic Resistance. UF Microbes in Action Lecture series. Research Seminar. September 30th, 2020.

98. Bulitta JB, Brown AN. CTSI COVID-19 Rapid-Response Research Project Developing innovative therapeutic strategies to combating Sars-CoV-2. Gainesville, FL, (Virtual). October 13th, 2021.

99. 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.

100. Bulitta JB. Novel approaches to leverage molecules assays and disease specific pharmacokinetics for translational antimicrobial pharmacology. International Society for Antimicrobial Pharmacology (ISAP) – invited lecture (Virtual – global meeting). February 2nd, 2021.

101. Bulitta JB. Combating Resistant Bacterial Superbugs via Innovative Approaches that Leverage Molecular Assays for Translational Research – Opportunities for Next Generation Scientists. Dutch Student Association L.P.S.V. "Aesculapius". April 8th, 2021. Webinar.

102. Bulitta JB. Targeting Gram-negative Bacterial 'Superbugs' by a Novel Target site Penetration and Receptor Binding Assay Platform. Chemical Institute of Canada, IUPAC / CCCE 2021 conference. August 13th to 20th, 2021. Virtual.

103. Bulitta JB. Mechanisms of Antibiotic Action and Resistance Suppression. University of Florida Infectious Diseases Program Symposium at Lake Nona. October 21, 2021.

104. Bulitta JB. Combating Bacterial 'Superbugs' by an Innovative Platform for Target site Penetration and Receptor Binding - Bringing our technology to the 21st century". International E-Conference on Medicinal Plants and Natural Products during December 15, 2021. Virtual.

105. Bulitta JB. Ceftazidime / Avibactam in Hollow Fiber Infection Model vs P. aeruginosa Stably De-repressed Isolate. Ceftazidime / Avibactam in Hollow Fiber Infection Model vs P. aeruginosa Stably De-repressed Isolate. GRC Italy, New Antibacterial Discovery and Development, Gordon Research Conference, July 26, 2022, Il Ciocco, Tuscany, Italy.

106. Bulitta JB, Louie A, Drusano GL. Combating resistant superbugs by understanding the molecular determinants of target site penetration and binding, NIAID/NIH workshop on Gram-negative Tools for Drug Discovery, Aug 8, 2022, Bethesda, MD.

107. Bulitta JB. Novel assay platform to characterize antibiotic target site penetration and receptor binding in intact cells of bacterial superbugs. IV RedIF Congress 2022. Oct 5, 2022. Porto Alegre, Brazil.

108. Bulitta JB, Hochhaus G. Feasibility of predicting regional lung exposure from systemic pharmacokinetic (PK) data of generic OIDPs via population PK. FDA public Workshop: Considerations for and Alternatives to Comparative Clinical Endpoint and Pharmacodynamic Bioequivalence Studies for Generic Orally Inhaled Drug Products. April 21, 2023. University of Maryland, MD.

109. Bulitta JB. Combating Resistant Superbugs: A New Mechanistic Paradigm. May 25, 2023. SUNY Buffalo seminars. Buffalo, NY.

110. Bulitta JB. Leveraging mechanistic PK/PD relationships in intact bacteria to combat resistant superbugs. ASM Microbe, June 16, 2023. Houston, TX.

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 pharmaceutics 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. Bioinäquivalenz als Faktor zunehmender Resistenzentwicklung gegen Tuberkulostatika. Abstr. KP11, Pre-symposium: Clinical pharmaceutics 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 C, **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 antiinfectives – "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 pharmcodynamics 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 antiinfectives - "one size fits all" vs. individualized therapy; Abstract no. 517, World Conference on Magic Bullets; Nürnberg, Germany; September 9 - 11, 2004.

33. Sorgel 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.

46. Landersdorfer C, Kirkpatrick CMJ, Kinzig-Schippers M, **Bulitta J**, Holzgrabe U, Sörgel F. Doubling Time above MIC of Flucloxacillin by Pharmacokinetic Interaction with Piperacillin. Poster W4060; 2006 AAPS Annual Meeting, San Antonio, TX, USA; October 29 - November 2, 2006.

47. Yang JC, **Bulitta JB**, Forrest A, Tsuji BT. High Inocula *Pseudomonas aeruginosa* Attenuates Colistin Bactericidal Activity and Alters Pharmacodynamics. Abstract A-847. 47th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2007.

48. **Bulitta JB**, Yang J, Tsuji B, Jusko W, Forrest A. Mechanistic PK/PD Models for the Inoculum Effect (over 5 Orders of Magnitude) of Colistin and Ceftazidime against *Pseudomonas aeruginosa*. Abstract 1829; 2007 AAPS Annual Meeting, San Diego, CA, USA; November 11 - 15, 2007.

49. **Bulitta JB**, Yang J, Forrest A, Tsuji B. Mechanistic PK/PD Model for the Effect of Global Regulatory Systems on Time Course of Pharmacodynamics of Colistin against *Pseudomonas aeruginosa*. Abstract 1844; 2007 AAPS Annual Meeting, San Diego, CA, USA; November 11 - 15, 2007.

50. **Bulitta JB**, Kinzig M, Landersdorfer C, Naber K, Rodamer M, Jakob V, Wagenlehner F, Drusano G, Holzgrabe U, Sörgel F. Pharmacokinetic / Pharmacodynamic Comparison of Ciprofloxacin and Levofloxacin by a Population PK Meta-Analysis and Monte Carlo Simulation. Abstract 3359; 2007 AAPS Annual Meeting, San Diego, CA, USA; November 11 - 15, 2007.

51. Landersdorfer C, Kinzig M, **Bulitta J**, Jakob V, Holzgrabe U, Drusano G, Sörgel F. Penetration into Bone and Pharmacodynamic Profile of Amoxicillin and Clavulanic Acid evaluated by Population Pharmacokinetics and Monte Carlo Simulation. Abstract 1968; 2007 AAPS Annual Meeting, San Diego, CA, USA; November 11 - 15, 2007.

52. **Bulitta JB**, Landersdorfer CB, Schumitzky A, Van Guilder M, Jelliffe RW. Comparison of Bias and Precision of Nonparametric and Parametric Population Methods assessed via Nonparametric Bootstrap Methods in NPAG and NONMEM. American Conference on Pharmacometrics (ACoP), Tucson, AZ, March 9-12, 2008.

53. **Bulitta JB**, Zhao P, Arnold RD, Kessler DR, Daifuku R, Pratt J, Luciano G, Hanauske A-R, Gelderblom H, Awada A, Jusko WJ. Mechanistic Population Pharmacokinetics of Total and Unbound Paclitaxel for a New Nanodroplet Formulation vs. Taxol in Cancer Patients – A New Class of Models Based on Solubility Limited Drug Disposition. American Conference on Pharmacometrics (ACoP), Tucson, AZ, March 9-12, 2008.

54. **Bulitta JB**, Ly NS, Tsuji BT, Jusko WJ, Forrest A. Mechanism-based Models for Growth and Killing of *Pseudomonas aeruginosa* by Tobramycin to Quantify and Predict the Inoculum Effect. American Conference on Pharmacometrics (ACoP), Tucson, AZ, March 9-12, 2008.

55. Landersdorfer CB, **Bulitta JB**, Schumitzky A, Van Guilder M, Jelliffe RW. Comparison of Nonparametric and Parametric Population Methods based on a Monte Carlo Simulation Study with Indirect Response Models I to IV in NPAG and NONMEM. American Conference on Pharmacometrics (ACoP), Tucson, AZ, March 9-12, 2008.

56. Ly NS, **Bulitta JB**, Tsuji BT, Forrest A, Jusko WJ. Tolerance of *Pseudomonas aeruginosa* to antibiotics at high inocula. Fourth annual Celebration of Academic Excellence, Buffalo, NY, April 17, 2008.

57. **Bulitta JB**, Zhao P, Arnold RD, Kessler DR, Daifuku R, Pratt J, Luciano G, Hanauske A-R, Gelderblom H, Awada A, Jusko WJ. *In Vivo* Release and Population Pharmacokinetics of Total and Unbound Paclitaxel in Cancer Patients. Sigma Xi Research Day, Buffalo, NY, April 17, 2008.

58. Ly NS, **Bulitta JB**, Yang JC, Tsuji BT, Forrest A, Jusko WJ. Tolerance of *Pseudomonas aeruginosa* to Antibiotics at High Inocula. UB-Pfizer Alliance, Groton, CT, June 11, 2008.

59. Ly NS, **Bulitta JB**, Forrest A, Yang JC, Tsuji BT, Jusko WJ. An Efficient Approach to Model the Inoculum Effect of Beta-lactams by Partially Mechanistic Models. UB-Pfizer Alliance, Groton, CT, June 11, 2008.

60. **Bulitta JB**, Ly NS, Forrest F, Jusko WJ, Tsuji BT. Mechanism-Based Pharmacokinetic / Pharmacodynamic Model for the Inverse Inoculum Effect of Imipenem against *Pseudomonas aeruginosa*. UB-Pfizer Alliance, Groton, CT, June 11, 2008.

61. Harigaya Y, **Bulitta JB**, Forrest F, Field AC, Ngo DQ, Tsuji BT. Emergence of Resistance in MRSA at Simulated Vancomycin Epithelial Lining Fluid Concentrations. UB-Pfizer Alliance, Groton, CT, June 11, 2008.

62. Ly NS, **Bulitta JB**, Forrest A, Yang JC, Tsuji BT, Jusko WJ. An Efficient Approach to Model the Inoculum Effect of Ceftazidime by Partially Mechanistic Models. Great Lake Symposium '08, University of Toronto, Toronto, Canada; July 18-20, 2008.

63. **Bulitta JB**, Zhao P, Arnold RD, Kessler DR, Daifuku R, Pratt J, Luciano G, Hanauske A-R, Gelderblom H, Awada A, Jusko WJ. Multiple-Pool Lifespan Models for Neutropenia to Assess the Population Pharmacodynamics of Unbound Paclitaxel from Two Formulations in Cancer Patients. NIH - Quantitative and Systems Pharmacology Workshop, Bethesda, MD, USA; September 25, 2008.

64. **Bulitta JB**, Ly NS, Forrest A, Kelchlin PA, Tsuji BT. Inverse Inoculum Effect of Ciprofloxacin and Imipenem against *Pseudomonas aeruginosa* Characterized by New Mechanism-based Pharmacodynamic Models. Abstract: A-052. 48th Annual ICAAC / IDSA 46th Annual Meeting, Washington, DC, October 25-28, 2008.

65. Ly NS, **Bulitta JB**, Forrest A, Jusko WJ, Tsuji BT. Mechanism-Based Pharmacokinetic / Pharmacodynamic Model for the Inverse Inoculum Effect of Imipenem against *Pseudomonas aeruginosa*. Abstract 2552. 2008 AAPS Annual Meeting, Atlanta, GA, USA; November 16 - 20, 2008.

66. Bergen PJ, **Bulitta JB**, Forrest A, Li J, Nation RL. Pharmacokinetic/pharmacodynamic determinant of colistin activity against *Pseudomonas aeruginosa*. Proceedings of the Australian Society for Antimicrobials 2009, Melbourne, Australia, February 26 - 28, 2009.

67. Peiffer M, **Bulitta JB**, Haeberle HA, Kinzig M, Rodamer M, Jakob V, Nohé B, Sörgel F, Krueger WA. Pharmakokinetik / -dynamik von Piperacillin-Tazobactam im Plasma und im Alveolarfilm (epithelial lining fluid) unter kontinuierlicher Infusion bei kritisch kranken Patienten. Deutscher Anästhesiecongress, Leipzig, Germany; May 9 – 12, 2009.

68. **Bulitta JB**, Hüttner S, Landersdorfer C, Kinzig M, Holzgrabe U, Sörgel F. A New Semi-Physiological Absorption Model To Assess The Pharmacodynamic Profile Of Cefuroxime Axetil Using Nonparametric And Parametric Population Pharmacokinetics. Abstract 2807. 19th European Congress of Clinical Microbiology and Infectious Diseases, Helsinki, Finland; May 16 – 19, 2009.

69. Hüttner S, **Bulitta JB**, Kinzig M, Holzgrabe U, Stephan U, Sörgel F. Population pharmacokinetics and optimized dosage regimens of ceftazidime in cystic fibrosis patients and healthy volunteers. Abstract 2798. 19th European Congress of Clinical Microbiology and Infectious Diseases, Helsinki, Finland; May 16 – 19, 2009.

70. Jakob V, Abduljalil K, Kinzig M, **Bulitta JB**, Horkovics-Kovats S, Fuhr U, Sörgel F. Modelling the auto-inhibition of clarithromycin metabolism during repeated oral administration. Abstract 2798. 19th European Congress of Clinical Microbiology and Infectious Diseases, Helsinki, Finland; May 16 – 19, 2009.

71. Rodamer M, Sörgel F, Jakob V, Kinzig M, Basel B, Krüger W, Peiffer M, Lodise T, **Bulitta JB**. Epithelial Lining Fluid Concentrations Of Antibiotics – Methodological Artifacts? Abstract 2821. 19th European Congress of Clinical Microbiology and Infectious Diseases, Helsinki, Finland; May 16 – 19, 2009.

72. Landersdorfer C, Jakob V, Kirkpatrick C, Kinzig M, **Bulitta JB**, 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 2774. 19th European Congress of Clinical Microbiology and Infectious Diseases, Helsinki, Finland; May 16 – 19, 2009.

73. Peiffer M, **Bulitta JB**, Haeberle HA, Kinzig M, Rodamer M, Jakob V, Nohé B, Sörgel F, Krueger WA. Pharmacokinetics / -dynamics of piperacillin-tazobactam in plasma and alveolar epithelial lining fluid when administered as continuous infusion in severely ill patients. 19th European Congress of Clinical Microbiology and Infectious Diseases, Helsinki, Finland; May 16 – 19, 2009.

74. Yohonn L, Brown SV, **Bulitta JB**, Forrest A, Sun H, McPhee C, Holden PN, Kelchlin PA, Dodds Ashley E, Haas CE, Hardy D, Tsuji BT. Bactericidal Activity of Colistin against Clinical Isolates of *Pseudomonas aeruginosa* at High and Low Bacterial Density. Poster A-119. 109th General Meeting of the American Society for Microbiology, Philadelphia, USA; May 17 – 21, 2009.

75. **Bulitta JB**, Okusanya OO, Forrest A, Bhavnani SM, Reynolds DK, Pai MP, Still GJ, Fernandes P, Ambrose PG. Population Pharmacokinetics of CEM-102 in Healthy Subjects. Abstract: A1-1932. 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 12 - 15, 2009.

76. **Bulitta JB**, Li J, Poudyal A, Yu HH, Owen RJ, Tsuji BT, Nation RL, Forrest A. Quantifying Synergy of Colistin Combinations against MDR Gram Negatives by Mechanism-based Models. Abstract: A1-573. 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 12 - 15, 2009.

77. Tsuji BT, **Bulitta JB**, Kelchlin PA, Holden PN, Forrest A. Determining the "Active Fraction" of Daptomycin against MRSA by Evaluating Bactericidal Activity in the Presence of Protein and Pharmacodynamic Modeling. Abstract: A1-1270. 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 12 - 15, 2009.

78. Tsuji BT, **Bulitta JB**, Forrest A, Holden PN, Kelchlin PA, Brown T, Kuhn M, Irvine B, Skerlos L, Hanna D. Linezolid Pharmacodynamics and Pharmacogenomics against Sensitive and Resistant Subpopulations of

Enterococci faecalis Characterized by a New Mechanism-Based Model. Abstract: A1-548. 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 12 - 15, 2009.

79. Tsuji BT, **Bulitta JB**, Forrest A, Kelchlin PA, Brown T, Holden PN, Pai MP, Bhavnani SM, Fernandes P, Jones RN, Ambrose PG. Pharmacokinetics-Pharmacodynamics of CEM-102 Against Methicillin-Resistant *Staphylococcus aureus* using an *in vitro* Pharmacodynamic Model and Mechanism-Based Modeling. Abstract: A1-1933. 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 12 - 15, 2009.

80. Bergen PJ, **Bulitta JB**, Tsuji BT, Forrest A, Nation RL, Li J. *In Vitro* Pharmacodynamics of the Combination of Colistin and Imipenem against MDR *Pseudomonas aeruginosa* at Multiple Inocula. Abstract: A1-575. 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 12 - 15, 2009.

81. Li J, Poudyal A, Yu HH, Owen RJ, **Bulitta JB**, Forrest A, Tsuji BT, Nation RL. Pharmacodynamics of Rational Colistin Combinations against MDR *Klebsiella pneumoniae*, *Pseudomonas aeruginosa* and *Acinetobacter baumannii*. Abstract: A1-574. 49th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 12 - 15, 2009.

82. Okusanya OO, **Bulitta JB**, Forrest A, Tsuji BT, Bhavnani SM, Still JG, Fernandes P, Ambrose PG. CEM-102 Dosage Regimen Decision Support Using Population Pharmacokinetic and Mechanism-Based Pharmacokinetic-Pharmacodynamic Models. 47th Annual Meeting of the Infectious Diseases Society of America, Philadelphia, PA, USA; October 29 - November 1, 2009.

83. **Bulitta JB**, Bergen PJ, Tsuji BT, Li J, Nation RL, Forrest A. Population Pharmacodynamic Modeling of the Mechanism of Action and Emergence of Sub-populations of *Pseudomonas aeruginosa* for a Wide Range of Colistin Dosage Regimens. American Conference on Pharmacometrics, Mashantucket, CT, USA; October 4-7, 2009.

84. **Bulitta JB**, Ly NS, Forrest A, D'Hondt RE, Tsuji BT. Mechanism-based Modeling of Beta-lactam Antibiotics Binding to Specific Penicillin-Binding Proteins of *Pseudomonas aeruginosa* at Several Initial Inocula. American Conference on Pharmacometrics, Mashantucket, CT, USA; October 4-7, 2009.

85. **Bulitta JB**, Forrest A, Poudyal A, Yu HH, Owen RJ, Li J, Tsuji BT, Nation RL. Rational design of colistin and ciprofloxacin combination regimens against *Pseudomonas aeruginosa* using mechanism-based models (Abstr. 3192). 20th European Congress of Clinical Microbiology and Infectious Diseases, Vienna, Austria, April 10 - 13, 2010.

86. Li J, Poudyal A, Yu H, Owen R, **Bulitta J**, Forrest A, Tsuji B, Nation R. Targeting multidrug-resistant *Pseudomonas aeruginosa*: pharmacodynamics of the combination of colistin and ciprofloxacin (Abstr. 2063). 20th European Congress of Clinical Microbiology and Infectious Diseases, Vienna, April 10 - 13, 2010.

87. **Bulitta JB**, Bingölbali A, Landersdorfer CB. Development and Evaluation of a New Efficiency Tool (SADAPT-TRAN) for Model Creation, Debugging, Evaluation, and Automated Plotting using Parallelized S-ADAPT, Perl and R. PAGE 19 (2010) Abstr 1917 [www.page-meeting.org/?abstract=1917], Berlin, Germany, June 8 - 11, 2010.

88. **Bulitta JB**, Li J, Poudyal A, Yu HH, Owen RJ, Tsuji BT, Nation RL, Forrest A. Mechanism-based Modelling of the Synergy of Colistin Combinations against Multidrug-Resistant Gram Negative Bacteria. PAGE 19 (2010) Abstr 1918 [www.page-meeting.org/?abstract=1918], Berlin, Germany, June 8 - 11, 2010.

89. Landersdorfer CB, Tsuji BT, **Bulitta JB**. Mechanistic Modeling and Design of an Experimental Strategy to Elucidate Mechanisms of Synergy for Antimicrobial Combination Therapy. Quantitative and Systems Pharmacology Workshop II, National Institute of General Medical Sciences, Bethesda, Maryland, USA; September 9 - 10, 2010.

90. **Bulitta JB**, D'Hondt RE, Brown D, VanScoy B, Drusano GL, Louie A. Mechanistic Modeling of Unique Penicillin-Binding Protein Occupancy Patterns in *Pseudomonas aeruginosa*. Quantitative and Systems Pharmacology Workshop II, National Institute of General Medical Sciences, Bethesda, Maryland, USA; September 9 - 10, 2010.

91. Bergen PJ, Tsuji BT, **Bulitta JB**, Forrest A, Li J, Nation RL. Synergistic Killing of MDR *Pseudomonas aeruginosa* at Multiple Inocula by Colistin Combined with Doripenem in an *in vitro* PK/PD Model. Abstract: A1-659. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.

92. **Bulitta JB**, Bergen PJ, Tan CH, Tsuji BT, Forrest A, Poudyal A, Yu HH, Ku C, Nightingale R, Davis K, Nation RL, Li J. Translational Combination Modeling of the Synergy of Colistin with Rifampicin Against *Acinetobacter baumannii* and of Colistin with Doripenem Against *Pseudomonas aeruginosa*. Abstract: A1-660. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.

93. Rao G, Haas CE, Garonzik SM, Forrest A, **Bulitta JB**, Kelchlin P, Li J, Nation R, Tsuji BT. Pharmacodynamics of Colistin at Simulated Pharmacokinetics of Patients with Kidney or Liver Disease against *Pseudomonas*

aeruginosa. Abstract: A1-661. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.

94. **Bulitta JB**, D'Hondt RE, Oliver A, Mena A, VanScoy B, Kulawy R, Louie A, Drusano GL. Time-Course and Exposure Response of Error-Prone Replication in *Pseudomonas aeruginosa* Induced by Ciprofloxacin and Mechanism-based Modeling of Stochastic Mutations. Abstract: A1-671. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.

95. Tan CH, Tsuji BT, **Bulitta JB**, Forrest A, Nation RL, Li J. Colistin & Rifampicin Combinations Demonstrate Synergy and Suppression of Resistance against *Acinetobacter baumannii* in an *in vitro* PK/PD Model. Abstract: A1-1145. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.

96. Tsuji BT, Brown T, Kelchlin PA, Brown J, **Bulitta JB**, Forrest A. High Initial Dose Daptomycin Maximizes Bactericidal Activity against Methicillin-Resistant and Vancomycin-Intermediate *Staphylococcus aureus*. Abstract: A1-1363. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.

97. Brown AN, McSharry J, Weng Q, Kulawy R, **Bulitta JB**, Drusano GL. Explaining the Dynamically Linked PK/PD Index for Zanamivir Against Oseltamivir Resistant H1N1 Influenza Virus via Mechanism-based Mathematical Modeling. Abstract: A1-2003. 50th Interscience Conference on Antimicrobial Agents and Chemotherapy, Boston, MA, USA; September 12 - 15, 2010.

98. Xu H, Tsuji BT, Brown SV, D'Hondt RE, Forrest A, **Bulitta JB**. Mechanism-based Modeling of Growth and Killing of *Pseudomonas aeruginosa* by Polymyxin B and Aztreonam in Monotherapy or Sequential Combination Therapy. American Conference on Pharmacometrics 2011, San Diego, CA, USA, April 3 - 6, 2011.

99. Garonzik SM, **Bulitta JB**, Forrest A, Holden PN, Tsuji BT. Mechanism Based Model for the Characterization of the Inoculum Effect of Vancomycin against Methicillin Resistant *Staphylococcus aureus*. American Conference on Pharmacometrics 2011, San Diego, CA, USA, April 3 - 6, 2011.

100. Landersdorfer CB, Ly NS, Tsuji BT, **Bulitta JB**. Mechanism-based Modeling of Antimicrobial Combinations to Efficiently Characterize and Quantify Subpopulation Synergy. American Conference on Pharmacometrics 2011, San Diego, CA, USA, April 3 - 6, 2011.

101. **Bulitta JB**, Landersdorfer CB. Different Approaches to Estimate Covariate Effects with or without Uncertainty in the Covariate Values via the Importance Sampling Expectation Maximization Algorithm. American Conference on Pharmacometrics 2011, San Diego, CA, USA, April 3 - 6, 2011.

102. Poudyal A, Yu HH, Davis K, Ku C, Nightingale R, Jacob J, Tsuji BT, **Bulitta JB**, Forrest A, Li J, Nation RL. Colistin and Doripenem Combinations Demonstrate Synergy and Suppression of Resistance against *Acinetobacter baumannii* at multiple inocula in an in vitro PK/PD Model. Poster: P784. 21st ECCMID / 27 ICC, Milan, Italy, May 7 - 10, 2011.

103. H. Xu, A Forrest, BT Tsuji, **JB Bulitta**. Mechanism-based Modelling of the Antagonism between Polymyxin B and Levofloxacin against *Pseudomonas aeruginosa* using Mono- and Combination Therapy. 20th Annual Meeting of the Population Approach Group in Europe; PAGE 20 (2011) Abstr 2263 [www.page-meeting.org/?abstract=2263]; Athens, Greece, June 7 - 10, 2011.

104. **Bulitta JB**, D'Hondt RE, Landersdorfer CB, DeFiglio HS, Brown D, VanScoy B, Kulawy R, Drusano GL, Louie A. Survival of Non-Replicating Persisters (NRP) of *Pseudomonas aeruginosa* and Eradication of NRPs by Unique Penicillin-Binding Protein Occupancy Patterns. Abstract: A2-567. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

105. **Bulitta JB**, Kuhn M, Finegan S, George D, Barham R, Haddish-Berhane N, Betts A, Brown M, Hanna D, Montgomery J, Reilly U, Tomaras A, Landersdorfer CB, Forrest A, O'Donnell JP. Optimizing Synergy between a New LpxC Inhibitor (PF1090) and Polymyxin B Nonapeptide by Mechanism-based Modeling to Efficiently Support Drug Development. Abstract: A2-1170. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

106. Xu H, Tsuji BT, Forrest A, **Bulitta JB**. Subpopulation Synergy for Polymyxin B and Amikacin against *Pseudomonas aeruginosa* assessed by Mechanism-based Models. Abstract: A2-1181. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

107. **Bulitta JB**, Bergen PJ, Forrest A, Tan CH, Ly NS, Tsuji BT, Poudyal A, Yu HH, Ku C, Lee HJ, Davis K, Nation RL, Li J. Synergy of Colistin and Rifampicin against *Acinetobacter baumannii* Assessed via Translational, Mechanism-based Models Across Three Different *In Vitro* Systems. Abstract: A2-1171. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

108. Tsuji BT, Holden PN, Kelchlin PA, Ly NS, Forrest A, **Bulitta JB**, Nation RL, Li J. Synergy and Suppression of Resistance over 10 days by Colistin Combinations with Rifampin or Doripenem against *Acinetobacter baumannii* at High Bacterial Density. Abstract: A2-1175. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

109. Ly NS, Kelchlin PA, Holden PN, Rao G, Forrest A, **Bulitta JB**, Bergen PJ, Nation RL, Li J, Tsuji BT. The Combination of Colistin and Doripenem is Synergistic Against High Inoculum *Pseudomonas aeruginosa* in an *In Vitro* Hollow Fiber Infection Model. Abstract: A2-1176. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

110. Yu HH, Davis K, Soon RL, Deris ZZ, Jacob J, Ku CK, Poudyal A, Lee HJ, **Bulitta JB**, Forrest A, Tsuji BT, Li J, Nation RL. Colistin & Doripenem Combination is Synergistic and Suppressed Colistin Resistance against Klebsiella pneumoniae in an in vitro PK/PD Model. Abstract: A2-1177. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

111. Brown AN, **Bulitta JB**, McSharry J, Adams J, Kulawy R, Drusano GL. Efficacy of Oseltamivir / Zanamivir Combination Chemotherapy for Two Drug-Resistant H1N1 Influenza A Viruses in the Hollow Fiber Infection Model. Abstract: V-1550. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

112. Nicasio AM, **Bulitta JB**, Lodise TP, D'Hondt RE, Kulawy R, Louie A, Drusano GL. Evaluation of once-daily vancomycin against methicillin-resistant *Staphylococcus aureus* in a hollow fiber infection model. Abstract: A2-009. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

113. Garonzik SM, Forrest A, Wisniewski W, **Bulitta JB**, Poudyal A, Yu HH, Ku C, Nation RL, Tsuji BT, Li J. PD Interaction Between Colistin and other Antimicrobials against *Acinetobacter baumannii*, *Pseudomonas aeruginosa* and *Klebsiella pneumoniae*. Abstract: A2-1173. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

114. Forrest A, **Bulitta JB**. PK/PD Monte Carlo Simulations in Infectious Diseases: Impact of a Common Erroneous Assumption about PD Variability. Abstract: A1-1757. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

115. Wisniewski W, **Bulitta JB**, Forrest A. Power & Sample Size Considerations in Population PD Analyses: Example of Drugs with "AUC-Dependent" PD. Abstract: A1-1758. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

116. Xue B, Forrest A, **Bulitta JB**. Power & Sample Size in Population PD Analyses: Example of Drugs with "$fT_{>MIC}$ Dependent" PD. Abstract: A1-1759. 51th Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL, USA; September 17 - 20, 2011.

117. **Bulitta JB**, D'Hondt RE, Landersdorfer CB, DeFiglio H, Brown D, VanScoy B, Kulawy R, Drusano GL, Louie A. Double Beta-Lactam Combinations can Eradicate Non-replicating Persisters and Prevent Resistance of *Pseudomonas aeruginosa* via Unique Penicillin-Binding Protein Occupancy Patterns. Annual Scientific Meeting of the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT), Perth, Australia, December 4 - 9, 2011.

118. **Bulitta JB**, Bergen PJ, Forrest A, Tan CH, Ly NS, Tsuji BT, Poudyal A, Yu HH, Ku CK, Lee HJ, Davis K, Nation RL, Li J. Mechanism-Based Modelling over Three Experimental Tiers to Evaluate and Optimize the Synergy of Colistin and Rifampicin against *Acinetobacter baumannii*. Annual Scientific Meeting of the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT), Perth, Australia, December 4 - 9, 2011.

119. Landersdorfer CB, Ly NS, Tsuji BT, **Bulitta JB**. Synergy of Antimicrobial Combinations Characterized by a Novel Experimental and Mechanism-Based Modelling Approach. Annual Scientific Meeting of the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT), Perth, Australia, December 4 - 9, 2011.

120. Lee HJ, Ku C, Tsuji BT, Forrest A, **Bulitta JB**, Li J, Nation RL. Efficacy of colistin combination therapy against multidrug-resistant Gram-negative bacteria in mouse lung and thigh infection models. 22nd European Congress of Clinical Microbiology and Infectious Diseases, London, UK; March 31 - April 3, 2012.

121. Olsson E, Yu HH, Landersdorfer CB, Jacob J, **Bulitta JB**, Davis K, Deris ZZ, Ku CK, Poudyal A, Tsuji BT, Forrest A, Velkov T, Sidjabat HE, Paterson DL, Li J, Nation RL. Colistin and doripenem are synergistic *in vitro* against NDM-1 *Klebsiella pneumoniae.* 22nd European Congress of Clinical Microbiology and Infectious Diseases, London, UK; March 31 - April 3, 2012.

122. Deris ZZ, Yu HH, Davis K, Jacob J, Bergen PJ, Ku CK, Poudyal A, Tsuji BT, Forrest A, **Bulitta JB**, Velkov T, Li J, Nation RL. Enhanced bactericidal activity of colistin and doripenem in combination against multidrug-resistant Klebsiella pneumoniae at a high inoculum in an *in vitro* PK/PD model. 22nd European Congress of Clinical Microbiology and Infectious Diseases, London, UK; March 31 - April 3, 2012.

123. Landersdorfer CB, Ly NS, Tsuji BT, **Bulitta JB**. Mechanism-Based Modelling to Quantify Subpopulation Synergy for Antimicrobial Combinations. Gordon Research Conference on New Antibacterial Discovery & Development; Il Ciocco, Tuscany, Italy; April 15 - 20, 2012.

124. **Bulitta JB**, D'Hondt RE, Oliver A, Mena A, Landersdorfer CB, Brown D, VanScoy B, Kulawy R, Louie A, Drusano GL. Synergistic prevention of resistance by meropenem combined with tobramycin against a hypermutating

Pseudomonas aeruginosa strain. Gordon Research Conference on New Antibacterial Discovery & Development; Il Ciocco, Tuscany, Italy; April 15 - 20, 2012.

125. Forrest A, Okusanya OO, **Bulitta JB**. A New Mathematical Model For Anti-infective Pharmacokinetics-Pharmacodynamics Which Accommodates Random Mutations. Astract number: A2-1266. 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 9 - 12, 2012.
126. Soon RL, Forrest A, **Bulitta JB**, Tsuji BT. A Novel Mathematical Modeling Approach to Characterize the Pharmacodynamics of Ceftolozane / Tazobactam, a β-lactam & β-lactamase Inhibitor Combination. Abstract: A2-1762. 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 9 - 12, 2012.
127. Rao GG, Ly NS, Nation RL, Forrest A, **Bulitta JB**, Li J, Tsuji BT. An Evaluation of Polymyxin B and Tigecycline combinations against *Acinetobacter baumannii*. Abstract: E-785. 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 9 - 12, 2012.
128. Rao GG, Ly NS, Soon RL, San Roman MD, Kelchlin PA, Holden PN, Bergen P, **Bulitta JB**, Forrest A, Nation RL, Li J, Tsuji BT. Polymyxin B in Combination with Doripenem against *Acinetobacter baumannii* demonstrates High Synergy and Suppression of Resistance. Abstract: A2-024. 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 9 - 12, 2012.
129. Lee HJ, Wang J, Ku C, Tsuji BT, Forrest A, **Bulitta JB**, Li J, Nation RL. Synergistic Killing of Colistin Combination Therapy against Multidrug-resistant *Acinetobacter baumannii* in Mouse Lung and Thigh Infection Models. Abstract: A2-031. 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 9 - 12, 2012.
130. **Bulitta JB**, D'Hondt RE, Oliver A, Mena A, Landersdorfer CB, Brown D, VanScoy B, Kulawy R, Louie A, Drusano GL. Synergistic Prevention of Resistance by Meropenem Combined With Tobramycin Against a Hypermutating *Pseudomonas aeruginosa* Strain. Abstract: A2-011. 52nd Interscience Conference on Antimicrobial Agents and Chemotherapy, San Francisco, CA, USA; September 9 - 12, 2012.
131. Jacobs M, Grégoire N, Couet W, **Bulitta JB**. Characterization of semi-mechanistic pharmacokinetic-pharmacodynamic models of antibacterial activity via Monte Carlo simulations. 23rd European Congress of Clinical Microbiology and Infectious Diseases, Berlin, Germany; April 27 - 30, 2013.
132. Landersdorfer CB, Velkov T, Shan J, **Bulitta JB**. Beta-lactams in monotherapy and combination achieving significant killing and limited regrowth against high inocula of *Klebsiella pneumoniae* and *Acinetobacter baumannii*. 23rd European Congress of Clinical Microbiology and Infectious Diseases, Berlin, Germany; April 27 - 30, 2013.
133. Cheah S-E, Boyce JD, **Bulitta JB**, Li J, Nation RL. Polymyxin Dosing Regimens: Implications for Activity and Resistance in *Acinetobacter baumannii*. Abstract: A2-034. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; September 6 - 9, 2014.
134. Rao GG, Ly NS, **Bulitta JB**, Forrest A, Li J, Nation RL, Tsuji BT. A Mechanism-based PK/PD Model for Antimicrobial Combinations of Polymyxin B and Doripenem against *Acinetobacter baumannii*. Abstract: A2-035. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; September 6 - 9, 2014.
135. Rao GG, Jacobs DM, Bowers DR, **Bulitta JB**, Forrest A, Holden P, Nation RL, Li J, Russo TA, Tsuji BT. Pharmacodynamics Polymyxin B Combinations against *Klebsiella pneumoniae Carbapenemase*. Abstract: A2-036. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; September 6 - 9, 2014.
136. Bulman ZP, Ly NS, Sutton MD, **Bulitta JB**, Forrest A, Nation RL, Li J, Tsuji BT. Antibiotic Pharmacodynamics and Bacterial Virulence in the *Pseudomonas aeruginosa* 'Mutators'. Abstract: A2-038. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; September 6 - 9, 2014.
137. Rao GG, Jacobs DM, Bowers DR, **Bulitta JB**, Forrest A, Holden P, Nation RL, Li J, Russo TA, Tsuji BT. Pharmacodynamics Polymyxin B Combinations against *Klebsiella pneumoniae Carbapenemase*. Abstract: A2-036. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; September 6 - 9, 2014.
138. Rees VE, Rogers KE, **Bulitta JB**, Landersdorfer CB. Shape of the Concentration Time Profile Does Matter for Ciprofloxacin and Tobramycin vs. *Pseudomonas aeruginosa*. Abstract: A2-051. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; September 6 - 9, 2014.
139. Hope WW, Walsh TJ, Goodwin J, Peloquin C, Howard A, Kurtzberg J, Menizabal A, Confer D, **Bulitta JB**, Neely M, Baden L, Wingard J. Relationship Between Voriconazole Concentrations and the Probability of Breakthrough Fungal Infections. Abstract: A1-706. 54th Interscience Conference on Antimicrobial Agents and Chemotherapy, Washington, DC, USA; September 6 - 9, 2014.
140. Munz MR, **Bulitta JB**, Höhl R, Jensen A, Junger A, Glaser R, Stelzer C, Kinzig M, Bertsch T, Holzgrabe U, Sörgel F. Individualizing meropenem prolonged infusions in intensive care unit patients via population modeling

of renal function and infection biomarkers over time. Paracelsus Science Get Together, July 3, 2015, Nürnberg, Germany.

141. Shin S, **Bulitta JB**, Kinzig M, Stelzer C, Hüttner S, Kim TH, Shin BS, Sörgel F. Population Pharmacokinetics, Enterohepatic Recirculation and Gender Differences of Roxithromycin in Humans. Paracelsus Science Get Together, July 3, 2015, Nürnberg, Germany.

142. Glaser R, Stelzer C, Wilhelm M, Munz M, Kinzig M, **Bulitta JB**, Holzgrabe U, Sörgel F. First Report on Very Long Terminal Half-life of Cytarabine in Patients with Hematological Malignancies assessed via Population Pharmacokinetics. Paracelsus Science Get Together, July 3, 2015, Nürnberg, Germany.

143. Bergen PJ, **Bulitta JB**, Lipman J, Millen N, McGregor M, Kirkpatrick CM, Roberts JA, Landersdorfer CB. Differences in Suppression of Regrowth & Resistance Despite Similar Initial Killing for Meropenem and Piperacillin/Tazobactam Against *P. aeruginosa* and *E. coli.* Abstract: A-478. 55th Interscience Conference on Antimicrobial Agents and Chemotherapy / ICC 2015, San Diego, CA, USA; September 17-21, 2015.

144. Phua P, Landersdorfer CB, Rogers K, Tsuji BT, **Bulitta JB.** Combating Extended-spectrum Beta-lactamase (ESBL) producing *Escherichia coli* and *Klebsiella pneumoniae* by Rationally Selected Combinations of Oral Antibiotics. Abstract: A-504. 55th Interscience Conference on Antimicrobial Agents and Chemotherapy / ICC 2015, San Diego, CA, USA; September 17-21, 2015.

145. Rees VE, **Bulitta JB**, Nation RL, Yadav R, Rogers K, Cheah S-E, Oliver A, Landersdorfer CB. Shape of the Meropenem Profile in Combination with Tobramycin is Critical to Combat Hypermutable *Pseudomonas aeruginosa.* Abstract: A-508. 55th Interscience Conference on Antimicrobial Agents and Chemotherapy / ICC 2015, San Diego, CA, USA; September 17-21, 2015.

146. Lenhard JR, **Bulitta JB**, Landersdorfer CB, Thamlikitkul V, Cheah S-E , Holden PN, Gall JS, Rao GG, Forrest A, Nation RL, Li J, Tsuji BT. High Intensity Meropenem Combinations with Polymyxin B Combat Carbapenem-resistant *Acinetobacter baumannii*. Abstract: A-937. 55th Interscience Conference on Antimicrobial Agents and Chemotherapy / ICC 2015, San Diego, CA, USA; September 17-21, 2015.

147. Lenhard JR, Cheah S-E, Landersdorfer CB, **Bulitta JB**, Holden PN, Morocco A, Thamlikitkul V, Rao GG, Satlin MJ, Petraitis V, Walsh TJ, Forrest A, Nation RL, Li J, Tsuji BT. Novel Polymyxin B Regimens in Combination with Meropenem Suppress *Acinetobacter baumannii* Resistance Over 14 Days. Abstract: A-938. 55th Interscience Conference on Antimicrobial Agents and Chemotherapy / ICC 2015, San Diego, CA, USA; September 17-21, 2015.

148. Shin S, **Bulitta JB**, Kinzig M, Stelzer C, Hüttner S, Kim TH, Shin BS, Sörgel F. Enterohepatic Recirculation and Gender Differences of Roxithromycin in Humans Assessed via Population Pharmacokinetics. Abstract: T-054. Sixth American Conference on Pharmacometrics (ACoP6), Crystal City, VA, USA; October 5-8, 2015.

149. **Bulitta JB**, Paik S-H, Shin S, Landersdorfer CB, Kim TH, Kim MG, Jeong SW, Yadav R, Shin BS. Novel Mechanism-based Population Pharmacokinetic/Pharmacodynamic Model of Blood Pressure and the Antihypertensive Activity of Fimasartan. Abstract: W-057. Sixth American Conference on Pharmacometrics (ACoP6), Crystal City, VA, USA; October 5-8, 2015.

150. Upadhyay M, Thapa SK, Kim TH, Shin BS, **Bulitta JB**, Shin S. Pharmacokinetics of L-Citrulline and L-Arginine in Rats Simultaneously Characterized by a New Population Model. Abstract: R6311. AAPS 2015 Annual Meetings and Exposition, Orlando, FL, USA; October 25-29, 2015.

151. Kim TH, Yoo SD, Kim MG, Choi HG, Lee Y, **Bulitta JB**, Seok SH, Shin BS. New Population Pharmacokinetic IVIVC Modeling Approach Using Baclofen. Abstract: R6300. AAPS 2015 Annual Meetings and Exposition, Orlando, FL, USA; October 25-29, 2015.

152. Glaser R, Stelzer C, Wilhelm M, Munz M, Kinzig M, **Bulitta JB**, Holzgrabe U, Sörgel F. First Report on Very Long Terminal Half-life of Cytarabine in Patients with Hematological Malignancies assessed via Population Pharmacokinetics. Abstract: R6293. AAPS 2015 Annual Meetings and Exposition, Orlando, FL, USA; October 25-29, 2015.

153. **Bulitta JB**, Paik S-H, Shin S, Landersdorfer CB, Kim TH, Kim MG, Jeong SW, Yadav R, Shin BS. Novel Mechanism-Based Population Pharmacokinetic/Pharmacodynamic Model of Blood Pressure and the Antihypertensive Activity of Fimasartan. Abstract: R6294. AAPS 2015 Annual Meetings and Exposition, Orlando, FL, USA; October 25-29, 2015.

154. Shin S, **Bulitta JB**, Kinzig M, Stelzer C, Hüttner S, Kim TH, Shin BS, Sörgel F. Population Pharmacokinetics, Enterohepatic Recirculation and Gender Differences of Roxithromycin in Humans. Abstract: R6292. AAPS 2015 Annual Meetings and Exposition, Orlando, FL, USA; October 25-29, 2015.

155. Villegas P, Collin A, Raghunandan S, Jourjy J, **Bulitta JB**, Schmidt S. Do antibiotics with long half-lives lead to extensive emergence of bacterial resistance? 29th Annual Research Showcase, College of Pharmacy, UF. Gainesville, FL; January 22, 2016.

156. Dedaj NN, Mottley AA, Jourjy J, Schmidt S, **Bulitta JB**. Novel Antibiotic Combinations to Target Resistant *Klebsiella pneumoniae* and *Escherichia coli*. 29th Annual Research Showcase, College of Pharmacy, UF. Gainesville, FL; January 22, 2016.

157. Tamayo JC, Kamta JH, Schmidt S, Jourjy J, **Bulitta JB.** Urgent Need for Novel Antibiotic Combinations to Target Multidrug-resistant *Pseudomonas aeruginosa* and *Acinetobacter baumannii*. 29th Annual Research Showcase, College of Pharmacy, UF. Gainesville, FL; January 22, 2016.

158. **Bulitta JB**, Meyer MT, Qian Y, Jiao Y, Moyà B. Combating multidrug-resistant bacterial 'superbugs' via quantitative systems pharmacology approaches. College of Pharmacy Mixer, UF, Gainesville, FL; February 26, 2016.

159. Rees VE, **Bulitta JB**, Peleg AY, Nation RL, Oliver A, Landersdorfer CB. Hypermutable *Pseudomonas aeruginosa* Linked with Antibiotic Resistance in Australian Cystic Fibrosis Patients. Abstract: Sat-256. ASM Microbe 2016, Boston, MA, USA; June 16-20, 2016.

160. Bulman ZP, Satlin MJ, Kreiswirth BN, **Bulitta JB**, Landersdorfer CB, Lenhard JR, Petraitis V, Walsh TJ, Holden PN, Forrest A, Nation RL, Li J, Tsuji BT. Polymyxin Based Triple Combinations Combat ST258 KPC-2 producing *Klebsiella pneumoniae*. Abstract: Sat-449. ASM Microbe 2016, Boston, MA, USA; June 16-20, 2016.

161. Lenhard JR, Smith NS, Bulman ZP, **Bulitta JB**, Landersdorfer CB, Thamlikitkul V, Holden PN, Forrest A, Nation RL, Li J, Tsuji BT. A Polymyxin B, Ampicillin/Sulbactam, and Meropenem Combination Combats Polymyxin-Resistant *Acinetobacter baumannii* over 14 Days. Abstract: Sun-503. ASM Microbe 2016, Boston, MA, USA; June 16-20, 2016.

162. Yadav R, **Bulitta JB**, Nation RL, Landersdorfer CB. Optimization of synergistic combinations against carbapenem- and aminoglycoside-resistant clinical isolates of *Pseudomonas aeruginosa via* mechanism-based modeling. Abstract: Sun-504. ASM Microbe 2016, Boston, MA, USA; June 16-20, 2016.

163. Bergen PJ, **Bulitta JB**, Kirkpatrick CM, McGregor M, Rogers K, Wallis SC, Paterson DL, Lipman J, Roberts JA, Landersdorfer CB. Altered Pharmacokinetics as Observed in Critically Ill Patients Substantially Impact on the Anti-Bacterial Effects of Meropenem against *Pseudomonas aeruginosa*. Abstract: Sun-508. ASM Microbe 2016, Boston, MA, USA; June 16-20, 2016.

164. Rees VE, **Bulitta JB**, Tsuji BT, Oliver A, Nation RL and Landersdorfer CB. Aminoglycoside resistance prevention by short-term, high concentration exposure in *Pseudomonas aeruginosa* assessed via novel mechanism-based modeling. Abstract: Sun-511. ASM Microbe 2016, Boston, MA, USA; June 16-20, 2016.

165. Smith NM, Lenhard JR, Trang M, Bulman Z, **Bulitta JB**, Landersdorfer CB, Nation RL, Li J, Forrest A, Tsuji BT. Probability of Target Attainment for Meropenem and Polymyxin B Combinations Against Carbapenem-Resistant *Acinetobacter baumannii*. Abstract: Sun-518. ASM Microbe 2016, Boston, MA, USA; June 16-20, 2016.

166. Bergen PJ, **Bulitta JB**, Kirkpatrick CM, Rogers K, McGregor M, Wallis SC, Paterson DL, Lipman J, Roberts JA, Landersdorfer CB. Mechanism-based model to quantitatively characterise the impact of altered piperacillin pharmacokinetics on bacterial killing and resistance. World Conference on Pharmacometrics 2016, Brisbane, Queensland, Australia; August 21-24, 2016.

167. Rees VE, **Bulitta JB**, Oliver A, Sörgel F, Tsuji BT, Rayner C, Nation RL, and Landersdorfer CB. Mechanism-based modelling to assess suppression of bacterial resistance by high intensity, short duration tobramycin exposure. World Conference on Pharmacometrics 2016, Brisbane, Queensland, Australia; August 21-24, 2016.

168. Yadav R, **Bulitta JB**, Nation RL, Landersdorfer CB. Mechanism-based PK/PD modelling approach to optimize synergistic combinations against carbapenem- and aminoglycoside-resistant clinical isolates of *Pseudomonas aeruginosa*. World Conference on Pharmacometrics 2016, Brisbane, Queensland, Australia; August 21-24, 2016.

169. Jiao Y, Moya B, Qian Y, Tao X, **Bulitta JB**. Clinical safety and efficacy of double β-lactam antibiotic combination therapy in treating Gram-negative bacterial infections – a systematic analysis. Joint Lake Nona-Roche Meeting 2016, Orlando, FL, USA; November 7-8, 2016.

170. Moya B, Jiao Y, Qian Y, Tao X, Louie A, **Bulitta JB**. Inactivation of Penicillin Binding-Protein 2 is critical for killing of *Pseudomonas aeruginosa* at high but not at low bacterial density. Joint Lake Nona-Roche Meeting 2016, Orlando, FL, USA; November 7-8, 2016.

171. De Miranda Silva C, Rocha A, Tozatto E, da Silva LM, Donadi EA, Lanchote VL, Schmidt S, **Bulitta JB**. Modeling Acute Pain Decrease Based on In Vitro COX-2 Inhibition via an Enantioselective Systems Pharmacology Approach for Etodolac. AAPS 2016 Annual Meetings and Exposition, Denver, CO, USA; November 13-17, 2016.

172. Yadav R, **Bulitta JB**, Wang J, Nation RL, Landersdorfer CB. Mechanism-Based PK/PD Modeling Approach to Optimize Synergistic Combinations against Multidrug-Resistant Pseudomonas Aeruginosa and In Vivo Evaluation in a Murine Thigh Infection. AAPS 2016 Annual Meetings and Exposition, Denver, CO, USA; November 13-17, 2016.

173. Moya B, Zhang L, Klee B, Villegas P, Dedaj N, Tao X, Qian J, Jiao Y, **Bulitta JB.** Eradication of Non-replicating Bacterial Persisters by Aminoglycoside Antibiotics. 30th Annual Research Showcase and Awards Recognition Day, College of Pharmacy, UF, Gainesville, FL, USA; February 17, 2017.

174. De Miranda Silva C, Schmidt S, **Bulitta JB**. A systems pharmacology approach to model acute pain profile based on in vitro COX-2 inhibition using etodolac as a model drug. 30th Annual Research Showcase and Awards Recognition Day, College of Pharmacy, UF, Gainesville, FL, USA; February 17, 2017.

175. Drescher SK, **Bulitta JB**, Hochhaus G. Pharmacokinetic / pharmacodynamic correlation of pulmonary and cardiac effects of fenoterol in asthmatic patients after different routes of administration. 30th Annual Research Showcase and Awards Recognition Day, College of Pharmacy, UF, Gainesville, FL, USA; February 17, 2017.

176. Landersdorfer CB, Oh A, Bilal H, Kotsimbos T, Peleg A, Boyce JD, **Bulitta JB**, Oliver A, Shin BS, Nation RL, Bergen P. Pharmacodynamics of ceftazidime plus tobramycin combination dosage regimens against hypermutable *Pseudomonas aeruginosa* isolates at simulated epithelial lining fluid concentrations in a dynamic *in vitro* model. Poster EP0352. 27th ECCMID, Vienna, Austria; April 22-25, 2017.

177. Jiao Y, Moya B, Y Qian, X Tao, **JB Bulitta**. Equivalent efficacy and better safety of double beta-lactam vs. beta-lactam plus aminoglycoside combinations for Gram-negative infections – a systematic review of 12 randomized clinical trials. Poster EP0427. 27th ECCMID, Vienna, Austria; April 22-25, 2017.

178. Yadav R, Rees V, Rogers K, Bergen P, Kim T, Cheah S, Peleg A, Boyce JD, Shin BS, Oliver A, Nation RL, **Bulitta JB**, Landersdorfer CB. Optimizing a meropenem plus tobramycin combination dosage regimen against hypermutable and non-hypermutable *Pseudomonas aeruginosa* via mechanism-based modelling and the hollow-fibre infection model. Poster: OS0468. 27th ECCMID, Vienna, Austria; April 22-25, 2017.

179. Moya B, Jiao Y, Qian Y, Tao X, Louie A, **Bulitta JB**. Inactivation of penicillin-binding protein 2 is critical for killing *Pseudomonas aeruginosa* at high but not at low bacterial density. Poster: P0237. 27th ECCMID, Vienna, Austria; April 22-25, 2017.

180. Smith NM, Bulman ZP, Sieron AO, **Bulitta JB**, Nation RL, Li J, Wright GD, Tsuji BT. The Dynamics of Plasmid-Mediated(mcr-1) versus Chromosome-Mediated Polymyxin B Resistance in Isogenic *Escherichia coli*. Session 340 – AAID02. ASM Microbe 2017, New Orleans, LA, USA; June 1-5, 2017.

181. **Bulitta JB**, Kinzig M, Landersdorfer CB, Naber K, Rodamer M, Jakob V, Wagenlehner F, Drusano GL, Holzgrabe U, Sörgel F. Pharmacokinetic / Pharmacodynamic Comparison of Ciprofloxacin and Levofloxacin by a Population PK Meta-Analysis and Monte Carlo Simulation. Paracelsus Medical University, Science Get Together 2017, Nürnberg, Germany; June 23, 2017.

182. Munz MR, Höhl R, Glaser R, Jensen A, Stelzer C, Kinzig M, Schlaak LK, Junger A, Bertsch T, Holzgrabe U, **Bulitta JB**, Stein H, Sörgel F. Cilastatin but not imipenem accumulates in intensive care unit patients with sepsis: individualizing prolonged infusions by population pharmacokinetics. Paracelsus Medical University, Science Get Together 2017, Nürnberg, Germany; June 23, 2017.

183. Prince K, Dedaj N, Zhang L, Kim TH, Moya B, Tao X, Qian Y, Jiao Y, Sutaria DS, **Bulitta JB**. Extensive, synergistic killing of polymyxin-resistant *Klebsiella pneumonia carbapenemase* producing *Klebsiella pneumoniae* by beta-lactam plus amikacin combinations. Poster presentation. 30th Annual Research Showcase, College of Pharmacy, UF. Gainesville, FL; February 12, 2018.

184. Sutaria DS, Moya B, Green KB, Kim TH, Tao X, Jiao Y, Louie A, Drusano GL, **Bulitta JB**. *Klebsiella pneumoniae*: first Penicillin-Binding Protein occupancy patterns of β-lactam antibiotics in this 'superbug.' Poster presentation. 30th Annual Research Showcase, College of Pharmacy, UF. Gainesville, FL; February 12, 2018.

185. Moya B, Shan J, Zhang L, Sutaria DS, Boyce JD, Basso KB, Bonomo RA, Landersdorfer CB, Velkov T, **Bulitta JB**. First whole-cell assay to study the time-course of -lactams inactivating Penicillin-Binding Proteins (PBPs) and first comprehensive PBP binding data in *Acinetobacter baumannii* (AB). Poster presentation. 30th Annual Research Showcase, College of Pharmacy, UF. Gainesville, FL; February 12, 2018.

186. Moya B, Shan J, Zhang L, Sutaria DS, Boyce J, Basso KB, Bonomo RA, Landersdorfer CB, Velkov T, **Bulitta JB**. First whole-cell assay to study the time-course of β-lactams inactivating Penicillin-Binding Proteins and first comprehensive PBP binding data in *Acinetobacter baumannii*. Gordon Research Conference on New Antibacterial Discovery & Development, Ventura, CA, USA; March 11-16, 2018.

187. Zhang L, Kim TH, Prince K, Dedaj N, Moya B, Tao X, Qian Y, Jiao Y, Sutaria DS, **Bulitta JB**. Extensive, synergistic killing of polymyxin-resistant *Klebsiella pneumoniae* carbapenemases producing *Klebsiella pneumoniae* by beta-lactam plus amikacin combinations. Gordon Research Conference on New Antibacterial Discovery & Development, Ventura, CA, USA; March 11-16, 2018.

188. Sutaria DS, Moya B, Green KB, Zhang L, Kim TH, Qian Y, Tao X, Jiao Y, Louie A, Drusano GL, **Bulitta JB**. *Klebsiella pneumoniae* – first Penicillin-Binding Protein occupancy patterns of β-lactams in this 'superbug.' Gordon Research Conference on New Antibacterial Discovery & Development, Ventura, CA, USA; March 11-16, 2018.

189. Tao X, Kim TH, Qian Y, Moya B, Zhang L, Jiao Y, Sutaria DS, Louie A, Bonomo RA, Drusano GL, **Bulitta JB**. Quantifying outer membrane permeability of five beta-lactams in *Klebsiella pneumoniae carbapenemase* producing *K. pneumoniae* via a novel cassette assay. Gordon Research Conference on New Antibacterial Discovery & Development, Ventura, CA, USA; March 11-16, 2018.

190. Kurumaddali A, Schilling U, Chen MJ, Jiao Y, Seay B, Baumstein SM, Abu-Hasan MN, Conti DS, Oguntimein M, Delvadia R, Winner L, Tabulov C, Saluja B, **Bulitta JB**, Hochhaus G. Inhalation Profile Modeling for Fluticasone Propionate Dry Powder Inhalers in Healthy Volunteers during a Four Way Cross-over Bioequivalence Study. ASCPT annual meeting, March 21-24, 2018, Orlando, Florida.

191. **Bulitta JB**, Shan J, Moya B, Sutaria DS, Boyce JD, Bonomo RA, Landersdorfer CB, Velkov T. First comprehensive Penicillin-binding protein occupancy patterns of beta-lactams in *Acinetobacter baumannii*. Abstract: 8477. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Madrid, Spain; April 21-24, 2018.

192. Zhang L, Kim TH, Prince K, Dedaj N, Moya B, Tao X, Qian Y, Jiao Y, Sutaria DS, 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. *(Oral presentation)*

193. Tao X, Kim TH, Qian Y, Moya B, Zhang L, Jiao Y, Sutaria DS, Bonomo RA, Barth A, Zavascki AP, Drusano GL, Louie A, **Bulitta JB**. Novel cassette assay to simultaneously characterize the outer membrane permeability of five beta-lactams in *Klebsiella pneumoniae* carbapenemase-producing *K. pneumoniae*. Abstract: 8462. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Madrid, Spain; April 21-24, 2018.

194. Qian Y, Moya B, Zhang L, Tao X, Kim TH, Jiao Y, Sutaria DS, **Bulitta JB**. Imipenem kills *Pseudomonas aeruginosa* substantially faster than meropenem and doripenem most likely due to more rapid outer-membrane penetration. Abstract: 8432. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Madrid, Spain; April 21-24, 2018.

195. Sutaria DS, Moya B, Zhang L, Kim TH, Qian Y, Tao X, Jiao Y, Louie A, Drusano GL, **Bulitta JB**. First data on Penicillin-binding protein occupancy patterns of beta-lactams in *Klebsiella pneumoniae*. Abstract: 8364. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Madrid, Spain; April 21-24, 2018.

196. Yadav R, Bergen PJ, Rogers K, Kirkpatrick C, Wallis S, **Bulitta JB**, Paterson DL, Nation RL, Lipman J, Roberts J, Landersdorfer C. Evaluation of meropenem plus tobramycin combination regimens to combat carbapenem-nonsusceptible *Pseudomonas aeruginosa* for critically-ill patients with augmented renal clearance via the hollow-fibre infection model and mechanism-based modelling. Abstract: 2466. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Madrid, Spain; April 21-24, 2018.

197. Rees V, Deveson D, Huang Y, Oliver A, **Bulitta JB**, Peleg A, Kotsimbos T, Causape CL, Rees M, Nation RL, Boyce J, Landersdorfer C. Characterisation of mutator *Pseudomonas aeruginosa* from Australian cystic fibrosis patients. Abstract: 4483. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Madrid, Spain; April 21-24, 2018.

198. Yadav R, Rogers K, Rees V, Huang Y, Peleg A, Kotsimbos T, Boyce J, **Bulitta JB**, Rao G, Oliver A, Bergen PJ, Shin BS, Nation RL. Meropenem plus tobramycin combination dosage regimens against clinical hypermutable *Pseudomonas aeruginosa* at simulated epithelial lining fluid concentrations in the hollow-fibre infection model. Abstract: 3384. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Madrid, Spain; April 21-24, 2018.

199. Smith N, Lakota EA, Lenhard J, **Bulitta JB**, Mergenhagen K, Pogue J, Kaye K, Nation RL, Li J, Forrest A, Tsuji B. Translating Polymyxin B and Meropenem Synergy against Carbapenem-Resistant *Acinetobacter baumannii*: Moving Toward a Rational, Combinatorial Pharmacokinetic Target. Abstract: 6368. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Madrid, Spain; April 21-24, 2018.

200. Sutaria DS, Moya B, Green KB, Jiao Y, Tao X, Louie A, Drusano GL, **Bulitta JB**. First comprehensive beta-lactam binding data to penicillin-binding proteins in *Klebsiella pneumonia.* ASM Microbe 2018, Atlanta, GA, USA; June 7-11, 2018.

201. Tao X, Kim TH, Moya B, Jiao Y, Sutaria DS, Bonomo R, **Bulitta JB**. Simultaneous characterization of the outer membrane permeability in the presence and absence of Polymyxin B in *Klebsiella pneumoniae carbapenemase* producing *K. pneumoniae*. ASM Microbe 2018, Atlanta, GA, USA; June 7-11, 2018.

202. **Bulitta JB**, Tao X, Kim TH, Moya B, Sutaria DS, Jiao Y, Zhou J, Beutel JA, Green KB, Barth A, Zavascki AP. Targeting polymyxin- and carbapenem-resistant Klebsiella pneumoniae (KPC-KP) via a novel, integrated mechanistic approach. ASM/ESCMID 2018, Lisbon, Portugal; Sep 4-7, 2018.

203. Sutaria DS, Moya B, Nierychlewski K, Shan J, Boyce JD, Jiao Y, Tao X, Bonomo RA, Velkov T, Louie A, Drusano G, **Bulitta JB**. Comprehensive Penicillin-Binding Protein (PBP) Occupancy Patterns of 18 Drugs in Acinetobacter baumannii. ASM/ESCMID 2018, Lisbon, Portugal; Sep 4-7, 2018.

204. Sutaria DS, Jiao Y, Kinzig M, Tao X, Stephan U, **Bulitta JB**, Sorgel F. Gastrointestinal transit kinetics of cefaclor and cefadroxil in cystic fibrosis patients and healthy volunteers compared via population pharmacokinetics. AAPS PharmSci 360, Washington DC, USA; Nov 4-7, 2018.

205. Jiao Y, Tao X, Moya B, Sutaria DS, Drescher SK, **Bulitta JB**. Receptor binding informed QSP modeling to design and rationally optimize synergistic, oral double lactam combination therapy against resistant Escherichia coli. ACoP9, San Diego, CA, USA; Oct 7-10, 2018.

206. Sutaria DS, Jiao Y, Tao X, Stephan U, Kinzig M, Sorgel F, **Bulitta JB**. Comparable population pharmacokinetics of cefadroxil in cystic fibrosis patients and healthy volunteers. ACoP9, San Diego, CA, USA; Oct 7-10, 2018.

207. Tao X, de Mello CP, Kim TH, Vicchiarelli M, **Bulitta JB**, Kaushikc A, Brown AN. Clinical regimens of Favipiravir (FAV) inhibit Zika virus (ZIKV) replication in the Hollow Fiber Infection Model (HFIM). ACOP 2018, San Diego, CA, USA, Oct 6-11, 2018.

208. Sutaria DS, Jiao Y, Tao X, Kinzig M, Stephan U, **Bulitta JB**, Sorgel F. Population pharmacokinetics of oral cephalosporins in cystic fibrosis patients and healthy volunteers. ASCPT, Washington DC, USA; March 13-16, 2019.

209. Moya B, Sutaria DS, Tao X, Boyce JD, Deveson Lucas D, Zhou J, Lang Y, Jiao Y, Shah NR, Kim TH, Schweizer HP, Bonomo RA, Lee RE, Louie A, Drusano GL, **Bulitta JB**. First whole-cell assay to study the time-course of beta-lactams binding to penicillin binding proteins in *Acinetobacter baumannii*. 29th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Amsterdam, Netherlands; April 13-16, 2019.

210. **Bulitta JB**, Kinzig M, Jiao Y, Tao X, Höhl R, Sörgel F. First simultaneous population pharmacokinetic characterization of a beta-lactam / beta-lactamase inhibitor combination: gastrointestinal transit and absorption kinetics of amoxicillin / clavulanic acid. 29th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Amsterdam, Netherlands; April 13-16, 2019.

211. Tao X, Zhou JQ, Lang YZ, Moya B, Jiao YY, Sutaria DS, Shah NR, Kim TH, Schweizer H, Bonomo RA, Lee RE, Louie A, Drusano G, **Bulitta JB**. Outer membrane permeability of 15 beta-lactams in multidrug-resistant *Acinetobacter baumannii* characterized via LC-MS/MS. 29th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Amsterdam, Netherlands; April 13-16, 2019.

212. Rees VE, **Bulitta JB**, Oliver A, Nation RL, Landersdorfer CB. Impact of hypermutation on the time-course of resistance emergence of *Pseudomonas aeruginosa* exposed to diverse clinically important antibiotics in monotherapy and combination. 29th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Amsterdam, Netherlands; April 13-16, 2019. *(Oral presentation)*

213. Agyeman A, Bergen PJ, Rogers K, Kirkpatrick CM, Wallis S, **Bulitta JB**, Paterson DL, Lipman J, Nation RL, Roberts J, Landersdorfer CB. Evaluation of synergistic meropenem-ciprofloxacin combination dosage regimens for critically ill patients with altered pharmacokinetics via mechanism-based modelling and the dynamic hollow fibre infection model. 29th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Amsterdam, Netherlands; April 13-16, 2019.

214. Qian Y, Tao X, Kim TH, Zhou J, Lang Y, Moya B, Sutaria DS, Jiao Y, Shah NR, **Bulitta JB**. Comprehensive thermal stability data and optimal supplement dosing schemes for in vitro time-kill experiments with 10 beta-lactams and 3 beta-lactamase inhibitor in Mueller-Hinton broth. 29th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Amsterdam, Netherlands; April 13-16, 2019.

215. **Bulitta JB**, Fang E, Atiee GJ, Stark JG, Hafkin B. Population pharmacokinetics of the new oxazolidinone prodrug contezolid acefosamil (MRX-4) and its metabolites after single and multiple ascending intravenous doses in healthy volunteers. 29th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Amsterdam, Netherlands; April 13-16, 2019.

216. Shah NR, Sutaria DS, Moya B, Oyer J, Jiao Y, Tao X, Copik A, Boyce JD, Bonomo RA, Louie A, Drusano GL, **Bulitta JB**. Morphological Profiling of Acinetobacter baumannii in Response to 13 β-lactams and β-lactamase Inhibitors with Different Penicillin-Binding Protein (PBP) Occupancy Patterns. ASM Microbe 2019, San Francisco, CA, June 20-24, 2019.

217. Tao X, Zhou J, Lang Y, Kim TH, Moya B, Jiao Y, Sutaria DS, Shah NR, Schweizer HP, Boyce JD, Bonomo RA, Lee RE, Drusano GL, Louie A, **Bulitta JB**. Novel outer membrane (OM) permeability assay which can account for a time-dependent release of β-lactamase enzymes by *Acinetobacter baumannii* for 12 β-lactams. ASM Microbe 2019, San Francisco, CA, June 20-24, 2019.

218. Sutaria DS, Shah NR, Ropy A, Moya B, Jiao Y, Tao X, Zhou J, Lang Y, Shin E, Louie A, Drusano GL, **Bulitta JB**. Comprehensive Penicillin-Binding Protein (PBP) Occupancy Patterns of 29 Drugs in *Klebsiella pneumoniae.* ASM/ESCMID 2019; Boston, MA, September 3-6, 2019.

219. Tao X, Shah NR, Lang Y, Zhou J, Sutaria DS, Ropy A, Moya B, Jiao Y, Shin E, Louie A, Drusano GL, Schweizer HP, Bonomo RA, Lee RE, **Bulitta JB**. Characterizing Outer Membrane (OM) Permeability and Morphological Changes for Beta-lactam Antibiotics against *Acinetobacter baumannii (Ab).* ASM/ESCMID 2019, Boston, MA; September 3-6, 2019.

220. Shah NR, **Bulitta JB**, Kinzig M, Landersdorfer CB, Jiao Y, Sutaria DS, Tao X, Höhl R, Holzgrabe U, Kees F, Stephan U, Sörgel F. Novel population pharmacokinetic approach to explain the differences between cystic fibrosis patients and healthy volunteers via protein binding. American Conference on Pharmacometrics (ACoP10); Orlando, FL; October 20-23, 2019.

221. Tao X, Hanrahan KC, Zhou J, **Bulitta JB**, Brown AN. Investigating the Mechanism of Action for Favipiravir against ZIKV Infection by Studying Target Site Penetration and Mathematic Modeling. American Conference on Pharmacometrics (ACoP10); Orlando, FL; October 20-23, 2019.

222. Shah NR, Sutaria DS, Sayed AR, Oyer J, Jiao Y, Tao X, Copik A, Boyce JD, Bonomo RA, Louie A, Drusano GL, **Bulitta JB**. Morphological Profiling of *Acinetobacter baumannii* in Response to β-lactams. UF College of Pharmacy, Annual Research Showcase. Gainesville, FL; Feb 10, 2020.

223. Ropy A, Shah NR, Sutaria DS, Basso K, Zhou J, Lang Y, Oyer J, Copik A, Tao X, Jiao Y, Moya B, Louie A, Drusano GL, **Bulitta JB**. Targeting *Mycobacterium abscessus* Penicillin-binding proteins with β-lactams. UF College of Pharmacy, Annual Research Showcase. Gainesville, FL; Feb 10, 2020.

224. Lang Y, Tao X, Zhou J, Jiao Y, Sutaria DS, Shin E, Shah NR, Ropy A, Moya B, **Bulitta JB**. Outer membrane permeability of five carbapenems in Verona Integron-Enconded Metallo-beta-lactamase (VIM) producing *Pseudomonas aeruginosa* (PA911). UF College of Pharmacy, Annual Research Showcase. Gainesville, FL; Feb 10, 2020.

225. Shin E, Sutaria DS, Shah NR, Ropy A, Jiao Y, Tao X, Lang Y, Zhou J, **Bulitta JB**. Elucidating the target receptor occupancy patterns of β-lactam antibiotics that elicit synergistic bacterial killing of *Klebsiella pneumoniae* – a Gram-negative bacterial superbug. UF College of Pharmacy, Annual Research Showcase. Gainesville, FL; Feb 10, 2020.

226. Zhou J, Lang Y, Tao X, Shah NR, Sutaria DS, Ropy A, Shin E, Jiao Y, Louie A, Drusano GL, **Bulitta JB**. Characterizing Outer Membrane Permeability in *Acinetobacter baumannii* strain HUMC1. UF College of Pharmacy, Annual Research Showcase. Gainesville, FL; Feb 10, 2020.

227. Ropy A, Shah NR, Sutaria DS, Lang Y, Tao X, Basso K, Zhou J, Jiao Y, Moya B, Louie A, Drusano GL, **Bulitta JB**. First Penicillin-Binding Protein (PBP) Occupancy Patterns of β-lactams and β-lactamase inhibitors in *Mycobacterium abscessus* and *M. avium* complex. Gordon Research Conference on New Antibacterial Discovery and Development, Il Ciocco, Lucca (Barge), Italy. March 1-5, 2020.

228. Jiao Y, Tanudra A, **Bulitta JB**, O'Donnell J. Sulbactam-durlobactam (ETX2514) activity against carbapenemase producing *Acinetobacter baumannii* in the presence or absence of imipenem or meropenem using an in vitro hollow-fiber infection model. 30th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Paris, France; April 18-21, 2020. (Conference cancelled due to COVID-19).

229. Jiao Y, Chia JH, Lin KY, Griffith DN, Sutaria DS, Chiang CW, Yeh YC, Chien JC, Lo JH, Shah NR, Tao X, Miesel L, **Bulitta JB**. Population Pharmacokinetics and Pharmacodynamics of Colistin A and B in the Murine Thigh Infection Model with *Pseudomonas aeruginosa*: An Integrated Experimental and Modeling Approach. 30th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Paris, France; April 18-21, 2020. (Conference cancelled due to COVID-19).

230. Jiao Y, Lin KY, Sutaria DS, Chia JH, Griffith DN, Chiang CW, Yeh YC, Chien JC, Lo JH, Shah NR, Tao X, Miesel L, **Bulitta JB**. Model-informed Exposure Response Analyses for Ceftazidime and Levofloxacin against *Klebsiella pneumoniae* and *Pseudomonas aeruginosa* in Murine Thigh Infection Models. 30th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Paris, France; April 18-21, 2020. (Conference cancelled due to COVID-19).

231. Lang Y, Tao X, Zhou J, Shah NR, Sutaria DS, Ropy A, Moya B, Jiao Y, Louie A, Drusano GL, Schweizer HP, Bonomo RA, Lee RE, **Bulitta JB**. Characterizing Outer Membrane (OM) Permeability for β-lactam Antibiotics in Acinetobacter baumannii strain HUMC1. 30th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Paris, France; April 18-21, 2020. (Conference cancelled due to COVID-19).

232. Shin E, Sutaria DS, Shah NR, Ropy A, Jiao Y, Tao X, Lang Y, Zhou J, **Bulitta JB**. Penicillin-binding protein (PBP) receptor occupancy patterns of 14 beta-lactam antibiotics and beta-lactamase inhibitors that elicit extensive bacterial killing of *Klebsiella pneumoniae*. ASM Microbe 2020, Boston, MA; June 18-22, 2020. (Conference cancelled due to COVID-19).

233. Ropy A, Shah NR, Sutaria DS, Lang Y, Tao X, Basso K, Zhou J, Jiao Y, Moya B, Louie A, Drusano GL, **Bulitta JB**. First Penicillin-Binding Protein (PBP) Receptor Occupancy Patterns of 11 β-lactams and β-lactamase inhibitors in *Mycobacterium abscessus*. ASM Microbe 2020, Boston, MA; June 18-22, 2020. (Conference cancelled due to COVID-19).

234. Lang Y, Tao X, Zhou J, Jiao Y, Sutaria DS, Shin E, Shah NR, Ropy A, Moya B, **Bulitta JB**. Outer membrane permeability of five carbapenems in Verona Integron-Enconded Metallo-beta-lactamase (VIM) producing *Pseudomonas aeruginosa* (PA911). UF College of Pharmacy, Annual Research Showcase. Gainesville, FL; Feb 10, 2020. ASM Microbe 2020, Boston, MA; June 18-22, 2020. (Conference cancelled due to COVID-19).

235. Zhou J, Lang Y, Qian Y, Kim TH, Tao X, Sayed AR, Shin E, Werkman C, Louie A, Drusano GL, Landersdorfer C, **Bulitta JB**. Thermal stability of β-Lactam antibiotics in broth, agar and water: Precisely achieving target concentrations in vitro by supplement dosing algorithm that offset thermal degradation. Virtual ISAP Meeting, Online; February 2-3, 2021.

236. Lang Y, Kim TH, Tao X, Zhou J, Basso K, Boyce JD, Bonomo RA, Lee RE, Louie A, Drusano GL, **Bulitta JB**. Novel cassette assays to quantify the outer membrane permeability of β-Lactams in carbapenem-resistant Gram-negative bacteria. Virtual ISAP Meeting, Online; February 2-3, 2021.

237. Sayed AR, 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**. Inhibitory Binding Profiles for β-lactams and Penicillin-Binding Proteins in Mycobacterium abscessus. Virtual ISAP Meeting, Online; February 2-3, 2021.

238. Lang Y, Zhou J, Smith NM, Tao X, Sayed AR, Shin E, Werkman C, Cha R, Tsuji BT, **Bulitta JB**. Outer membrane (OM) permeability of six β-Lactams in New Delhi Metallo-β-lactamase (NDM) and CTX-M-co-producing *Klebsiella pneumoniae*. UF College of Pharmacy 34th Annual Research Showcase, Gainesville, FL; April 13-14, 2021.

239. Zhou J, Lang Y, Kim TH, Tao X, Sayed AR, Shin E, Werkman C, Louie A, Drusano GL, Landersdorfer C, **Bulitta JB**. Characterizing thermal stability of β-Lactam antibiotics in broth, agar and water. UF College of Pharmacy 34th Annual Research Showcase, Gainesville, FL; April 13-14, 2021.

240. Shin E, Sayed AR, Sutaria DS, Jiao Y, Tao X, Lang Y, Zhou J, Oyer JL, Copik AJ, Jimenez RH, Cadet KC, Shah NR, Werkman C, **Bulitta JB**. Synergistic killing of Klebsiella pneumoniae by double β-Lactams combinations assessed via flow cytometry and Qualitative Systems Pharmacology. UF College of Pharmacy 34th Annual Research Showcase, Gainesville, FL; April 13-14, 2021

241. Werkman C, Shah NR, Deveson Lucas D, Oyer J, Megroz M, Sayed AR, Moya B, Wright A, Sutaria DS, Tao X, Lang Y, Zhou J, Shin E, Jimenez-Nieves RH, Cadet K, Copik AJ, Boyce JD, **Bulitta JB**. Killing of *Acinetobacter baumannii* via Synergistic Penicillin-Binding Proteins Occupancy Patterns. UF College of Pharmacy 34th Annual Research Showcase, Gainesville, FL; April 13-14, 2021.

242. Shin E, Sayed AR, Shah NR, Lang Y, Zhou J, Werkman C, **Bulitta JB**. Optimizing antibiotic combinations based on synergistic receptor occupancy patterns in Gram-negative superbugs. ACCP 2021 Virtual Poster Symposium, Online; May 25-26, 2021.

243. Zhou J, Lang Y, Qian Y, Kim TH, Tao X, Sayed AR, Shin E, Werkman C, Louie A, George Drusano GL, Landersdorfer C, **Bulitta JB**. β-Lactam antibiotic stability in broth, agar and water: Achieving target concentrations in vitro precisely by a supplement dosing algorithm that offset thermal degradation. World Microbe Forum, Online; June 20-24, 2021.

244. Shin E, Sayed AR, Lang Y, Shah N, Zhou J, Werkman C, **Bulitta JB**. Novel, integrated flow cytometry, automated confocal microscopy, and quantitative systems pharmacology approach to assess synergistic killing of *Klebsiella pneumoniae* by double β-Lactams combinations. World Microbe Forum, Online; June 20-24, 2021.

245. Lang Y, Zhou J, Smith NM, Tao X, Sayed AR, Shin E, Werkman C, Cha R, Tsuji BT, **Bulitta JB**. Outer membrane (OM) permeability of six β-Lactams in two New Delhi Metallo-β-lactamase (NDM) and CTX-M-co-producing *Klebsiella pneumoniae*. World Microbe Forum, Online; June 20-24, 2021.

246. Werkman C, Shah NR, Lucas D, Oyer J, Megroz M, Sayed AR, Moya B, Wright A, Sutaria DS, Tao X, Lang Y, Zhou J, Shin E, Jimenez R, Cadet K, Copik A, Boyce J, **Bulitta JB**. Simultaneous inactivation of Penicillin-Binding Proteins 2 and 3 (PBP2 and PBP3) elicits synergistic bacterial killing in a new, resistance-deprived *Acinetobacter baumannii*. World Microbe Forum, Online; June 20-24, 2021.

247. Lang Y, Zhou J, Smith NM, Tao X, Sayed AR, Shin E, Werkman C, Cha R, Tsuji BT, **Bulitta JB**. Outer membrane permeability of six β-lactams in New Delhi Metallo-β-lactamase and CTX-M-Coproducing *Klebsiella pneumoniae*. ESCMID 2021, Online; July 9-12, 2021.

248. Shin E, Sayed AR, Sutaria DS, Jiao Y, Tao X, Lang Y, Zhou J, Oyer JL, Copik AJ, Jimenez RH, Cadet KC, Shah NR, Werkman C, **Bulitta JB**. Synergistic killing of Klebsiella pneumoniae by double β-Lactams combinations assessed via flow cytometry and Qualitative Systems Pharmacology. ESCMID 2021, Online; July 9-12, 2021.

249. Zhou J, Lang Y, Qian Y, Kim TH, Tao X, Sayed AR, Shin E, Werkman C, Louie A, Drusano GL, Landersdorfer C, **Bulitta JB**. Thermal stability of β-Lactam antibiotics in broth, agar and water: Precisely achieving target concentrations in vitro by supplement dosing algorithms. ESCMID 2021, Online; July 9-12, 2021.

250. Werkman C, Shah NR, Lucas D, Oyer J, Megroz M, Sayed AR, Moya B, Wright A, Sutaria DS, Tao X, Lang Y, Zhou J, Shin E, Jimenez R, Cadet K, Copik A, Boyce J, **Bulitta JB**. Synergistic bacterial killing elicited by simultaneous inactivation of Penicillin-Binding Proteins 2 and 3 (PBP2 and PBP3) in a resistance deprived *Acinetobacter baumannii*. ESCMID 2021, Online; July 9-12, 2021.

251. Zhang Y, Lang Y, Zhou J, Tao X, Sayed ARM, Shin E, Werkman C, **Bulitta JB**. A novel assay to characterize the rate of target site penetration of a β-lactamase inhibitor in Klebsiella pneumoniae carbapenemase-2 (KPC-2) producing Klebsiella pneumoniae (KP). 35th Annual UF College of Pharmacy Research Showcase, Gainesville, FL; February 7-8, 2022.

252. Sayed ARM, Elsayed AAS, Shah NR, Sutaria DS, Shin E, Lang Y, Cadet K, Jimenez-Nieves RH, Zhou J, Werkman C, Tsuji BT, Louie A, Drusano GL, **Bulitta JB**. Whole-cell PBP binding profiles for some carbapenems and cefoxitin in Klebsiella pneumoniae (KP). 35th Annual UF College of Pharmacy Research Showcase, Gainesville, FL; February 7-8, 2022.

253. Shin E, Sayed ARM, Lang Y, Zhou J, Oyer JL, Moya B, Elsayed ASS, Sutaria DS, Shah NR, Werkman C, Jimenez-Nieves RH, Cadet K, Tao X, Jiao Y, Copik AJ, Bonomo RA, Schweizer HP, Lee RE, Boyce JD, Louie A, Tsuji BT, Drusano GL, **Bulitta JB**. Synergistic killing of Klebsiella pneumoniae by double β-lactams combinations assessed via Flow Cytometry and Quantitative Systems Pharmacology. 35th Annual UF College of Pharmacy Research Showcase, Gainesville, FL; February 7-8, 2022.

254. Zhou J, Lang Y, Franco EJ, Hanrahan KC, Zhang Y, Drusano GL, **Bulitta JB**. A sensitive intracellular UPLC-MS/MS assay in infected ACE2-transfected A529 cells for nucleos(t)ide antivirals to combat SARS-CoV-2. 35th Annual UF College of Pharmacy Research Showcase, Gainesville, FL; February 7-8, 2022.

255. Werkman C, Shah NR, Deveson Lucas D, Oyer JL, Megroz M, Moya B, Sayed ARM, Elsayed AAS, Wright A, Sutaria DS, Tao X, Lang Y, Zhou J, Shin E, Landersdorfer CB, Jimenez-Nieves RH, Cadet K, Jiao Y, Copik AJ, Bonomo RA, Louie A, Drusano GL, Boyce JD, **Bulitta JB**. Synergistic receptor binding patterns elicited bacterial killing by simultaneous inactivation of Penicillin-Binding Proteins 1a, 1b, 2 and 3 in a resistance-deprived Acinetobacter baumannii. 35th Annual UF College of Pharmacy Research Showcase, Gainesville, FL; February 7-8, 2022.

256. Sayed ARM, Elsayed AAS, Shah NR, Sutaria DS, Moya B, Lang Y, Shin E, Zhou J, Werkman C, Tsuji B, Louie A, Drusano GL, **Bulitta JB**. First whole-cell penicillin-binding protein (PBP) binding profiles of carbapenems and cefoxitin in Klebsiella pneumoniae (KP) – characterizing the mass balance of penetration and binding in periplasm. 32nd European Congress of Clinical Microbiology & Infectious Diseases (ECCMID), Hybrid: online and Lisbon, Portugal; April 23-26, 2022.

257. Shin E, Sayed ARM, Lang Y, Zhou J, Oyer J, Moya B, Elsayed AAS, Sutaria DS, Shah NR, Werkman C, Jimenez-Nieves RH, Cadet KC, Tao X, Jiao Y, Copik AJ, Bonomo RA, Schweizer HP, Lee RE, Boyce JD, Louie A, Tsuji BT, Drusano GL, **Bulitta JB**. Synergistic Penicillin-Binding Protein (PBP) occupancy patterns against Klebsiella pneumoniae (KP) characterized via confocal microscopy, flow cytometry, and quantitative systems pharmacology. 32nd European Congress of Clinical Microbiology & Infectious Diseases (ECCMID), Hybrid: online and Lisbon, Portugal; April 23-26, 2022. (Oral Presentation)

258. Tait J, Anderson D, Rogers K, Lang Y, Lee WL, Zhou J, **Bulitta JB**, Nation R, Creek D, Landersdorfer C. Time course analysis of the metabolic footprint of an MDR hypermutable Pseudomonas aeruginosa clinical isolate challenged with ceftolozane/tazobactam in a hollow-fibre infection model. 32nd European Congress of Clinical Microbiology & Infectious Diseases (ECCMID), Hybrid: online and Lisbon, Portugal; April 23-26, 2022.

259. Lang Y, Zhou J, Franco EJ, Hanrahan KC, Drusano GL, Brown AN, **Bulitta JB**. Combating SARS-CoV-2 by mechanistic insights from a highly sensitive intracellular UPLC-MS/MS assay for the parent and active triphosphate metabolite of EIDD-1931 (NHC) in infected ACE2-transfected A529 cells. 32nd European Congress of Clinical Microbiology & Infectious Diseases (ECCMID), Hybrid: online and Lisbon, Portugal; April 23-26, 2022.

260. Werkman C, Shah NR, Deveson Lucas D, Oyer J, Megroz M, Moya B, Sayed ARM, Elsayed AAS, Wright A, Sutaria DS, Tao X, Lang Y, Zhou J, Shin E, Landersdorfer CB, Jimenez-Nieves RH, Cadet KC, Jiao Y, Copik AJ, Bonomo RA, Louie A, Drusano GL, Boyce JD, **Bulitta JB**. Simultaneously inactivating three or all four Penicillin-binding Proteins (PBPs) among PBP1a, 1b, 2 and 3 synergistically kills Acinetobacter baumannii (AB). 32nd European Congress of Clinical Microbiology & Infectious Diseases (ECCMID), Hybrid: online and Lisbon, Portugal; April 23-26, 2022. (Top Rated Poster Award)

261. Shin E, Sayed ARM, Lang Y, Zhou J, Oyer JL, Moya B, Elsayed AAS, Sutaria DS, Shah NR, Werkman C, Jimenez-Nieves RH, Cadet K, Tao X, Jiao Y, Copik AJ, Bonomo RA, Schweizer HP, Lee RE, Boyce JD, Louie A, Tsuji BT, Drusano GL, **Bulitta JB**. Mechanistic insights on synergistic killing of Klebsiella pneumoniae by double β-lactam combinations assessed via Flow Cytometry and Quantitative Systems Pharmacology (QSP). ASM Microbe, Hybrid: online and Washington, DC; June 9-13, 2022.

262. Zhang Y, Lang Y, Zhou J, Tao X, Sayed ARM, Shin E, Werkman C, Smith NM, Tsuji BT, **Bulitta JB**. Periplasmic target site penetration rates of two β-lactamase inhibitors in Klebsiella pneumoniae carbapenemase-2 (KPC-2) producing Klebsiella pneumoniae (KP) characterized by a novel assay. ASM Microbe, Hybrid: online and Washington, DC; June 9-13, 2022.

263. Sayed ARM, Elsayed AAS, Shah NR, Sutaria DS, Moya B, Lang Y, Shin E, Zhou J, Werkman C, Cadet K, Jimenez-Nieves RH, Tsuji BT, Louie A, Drusano GL, **Bulitta JB**. Penicillin-Binding Protein (PBP) binding profiles in intact Klebsiella pneumoniae (KP) – characterizing the mass balance of penetration and binding in periplasm. ASM Microbe, Hybrid: online and Washington, DC; June 9-13, 2022.

264. Werkman C, Shah NR, Deveson Lucas D, Oyer JL, Megroz M, Moya B, Sayed ARM, Elsayed AAS, Wright A, Sutaria DS, Tao X, Lang Y, Zhou J, Shin E, Landersdorfer CB, Jimenez-Nieves RH, Cadet K, Jiao Y, Copik AJ, Bonomo RA, Louie A, Drusano GL, Boyce JD, **Bulitta JB**. Synergistic killing of Acinetobacter baumannii (AB) elicited by simultaneous inactivation of three or all four Penicillin-Binding Proteins (PBPs) among PBP1a, 1b, 2 and 3. ASM Microbe, Hybrid: online and Washington, DC; June 9-13, 2022.

265. Shin E, Sayed ARM, Lang Y, Zhou J, Werkman C, Oyer JL, Moya B, Elsayed AAS, Zhang Y, Shah NR, Tao X, Copik AC, Bonomo RA, Schweizer HP, Lee RE, Boyce JD, Louie A, Tsuji BT, Drusano GL, **Bulitta JB**. Combating Bacterial 'Superbugs' via a Novel Target Site Penetration and Receptor Binding Assay Platform and a Translational Quantitative and Systems Pharmacology Approach. 2022 New Antibacterial Discovery and Development Gordon Research Conference, Ciocco in Lucca, Italy; July 24-29, 2022.

266. Zhou J, Lang Y, Zhang Y, Sayed ARM, Shin E, Werkman C, Louie A, Tsuji BT, Bulman ZP, Drusano GL, **Bulitta JB**. Intracellular accumulation and washout kinetics of aminoglycosides (AGS) in multidrug-resistant (MDR) *Klebsiella pneumoniae*. AAPS PharmSci 360, Boston; October 16-19, 2022.

267. Werkman C, Shah NR, Lucas DD, Oyer JL, Megroz M, Moya B, Sayed ARM, Elsayed A, Wright A, Sutaria DS, Tao X, Lang Y, Zhou J, Shin E, Landersdorfer CB, Jimenez-Nieves RH, Cadet KC, Jiao Y, Copik AJ, Bonomo RA, Louie A, Drusano GL, Boyce JD, **Bulitta JB**. Simultaneously inactivating three or all four Penicillin-Binding Proteins (PBPs) among PBP1a, 1b, 2 and 3 synergistically kills *Acinetobacter baumannii* (AB). AAPS PharmSci 360, Boston; October 16-19, 2022.

268. Sayed ARM, Elsayed AAS, Shah NR, Sutaria DS, Moya B, Cadet KC, Jimenez-Nieves RH, Shin E, Lang Y, Zhou J, Zhang Y, Werkman C, Tsuji BT, Louie A, Drusano GL, **Bulitta JB**. Whole-cell Penicillin-Binding Protein (PBP) binding profiles of avibactam, aztreonam, ceftazidime and elicited morphological changes in *Klebsiella pneumoniae* (KP). AAPS PharmSci 360, Boston; October 16-19, 2022.

269. Jiao Y, Lin KY, Dutaria DS, Chia JH, Griffith DN, Chiang CW, Yeh YC, Chien JC, Shah NR, Tao X, Miesel L, **Bulitta JB**. Model-informed exposure response analyses for ceftazidime and levofloxacin against Klebsiella pneumoniae and *Pseudomonas aeruginosa* in murine thigh infection models. 33rd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Copenhagen, Denmark; April 15-18, 2023.

270. Lang Y, Zhang Y, Zhou J, Myrick JR, Sayed AR, Elsayed A, Werkman C, Shin E, Cadet KC, Jimenez-Nieves RH, Louie A, Drusano GL, **Bulitta JB**. Combating *Mycobacterium tuberculosis* (Mtb) by mechanistic insights from a highly sensitive UPLC-MS/MS assay for the parent and M2 metabolite of bedaquiline associated with Mtb and their impact on mycobacterial energy metabolites. 33rd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Copenhagen, Denmark. Apr 15-18, 2023.

271. Shin E, Sayed AR, Lang Y, Zhang Y, Zhou J, Oyer JL, Moya B, Elsayed A, Sutaria DS, Shah NR, Werkman C, Jimenez-Nieves RH, Cadet KC, Tao X, Jiao Y, Copik AJ, Bonomo RA, Schweizer HP, Lee RE, Boyce JD, Louie A, Tsuji BT, Barth AL, Zavascki AP, Drusano GL, **Bulitta JB**. Synergistic penicillin-binding protein (PBP) occupancy patterns in Klebsiella pneumoniae (KP) prospectively validated in a dynamic in vitro hollow fiber infection model. 33rd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Copenhagen, Denmark. Apr 15-18, 2023.

272. Werkman C, Shah NR, Megroz M, Oyer JL, Deveson Lucas D, Moya B, Sayed AR, Elsayed A, Wright A, Sutaria DS, Tao X, Lang Y, Zhang Y, Zhou J, Shin E, Landersdorfer C, Jimenez-Nieves RH, Cadet K, Jiao Y, Copik AJ, Bonomo RA, Louie A, Drusano GL, Boyce JD, **Bulitta JB**. Synergistic killing of Acinetobacter baumannii (AB) elicited by simultaneous inactivation of three or all four Penicillin-Binding Proteins (PBPs) among PBP1a, 1b, 2 and 3. 33rd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Copenhagen, Denmark. Apr 15-18, 2023.

273. Zhang Y, Lang Y, Zhou J, Tao X, Sayed AR, Shin E, Werkman C, Smith NM, Tsuji BT, Bulitta JB. Periplasmic target site penetration rates of four β-lactamase inhibitors in Klebsiella pneumoniae carbapenemase-2 (KPC-2) producing Klebsiella pneumoniae. 33rd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Copenhagen, Denmark. Apr 15-18, 2023.

274. Sayed ARM, Elsayed AAS, Moya B, Cadet KC, Jimenez-Nieves RH, Shin E, Lang Y, Zhang Y, Werkmena C, Tsuji BT, Drusano GL, **Bulitta JB**. Whole-cell Penicillin-Binding Protein (PBP) binding of ceftazidime, avibactam and aztreonam and elicited morphological changes in Klebsiella pneumoniae (KP). 33rd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID). Copenhagen, Denmark. Apr 15-18, 2023.

275. Cadet KC, Megroz M, Jimenez-Nieves RH, Deveson Lucas D, Wright A, Zhang Y, Moya B, Sayed ARM, Boyce JD, **Bulitta JB**. The AdeIJK efflux pump and AmpC β-lactamase predominantly contribute to the MICs of 42 β-lactams and β-lactamase inhibitors in wild-type Acinetobacter baumannii (AB) whereas the OXA-51-like β-lactamase and AdeABC pump do not. 33rd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Copenhagen, Denmark; April 15-18, 2023.

276. Jimenez-Nieves RH, Megroz M, Cadet KC, Deveson Lucas D, Wright A, Zhang Y, Moya B, Sayed ARM, Boyce JD, **Bulitta JB**. Impact of two chromosomal efflux pumps and two β-lactamases on the susceptibility of 42 β-lactams and β-lactamase inhibitors using eight isogenic in Acinetobacter baumannii (AB) knockout strains. NIAMRRE Annual Conference, Gainesville, FL; May 16-18, 2023.

277. Jimenez-Nieves RH, Megroz M, Cadet KC, Deveson Lucas D, Wright A, Zhang Y, Moya B, Sayed AR, Boyce JD, **Bulitta JB**. Impact of two chromosomal efflux pumps and two β-lactamases on the susceptibility of 42 β-lactams and β-lactamase inhibitors using eight isogenic in Acinetobacter baumannii (AB) knockout strains. ASM Microbe, Houston, TX; June 15-19, 2023.

278. Sayed AR, Elsayed AAS, Moya B, Cadet KC, Jimenez-Nieves RH, Shin E, Moya B, Lang Y, Zhou J, Zhang Y, Werkman C, Tsuji BT, Drusano GL, **Bulitta JB**. Time-course of whole-cell Penicillin-Binding Protein (PBP) binding and morphological alterations by eleven β-lactam antibiotics in Klebsiella pneumoniae (KP). ASM Microbe. Houston, TX. Jun 15-19, 2023.

279. Werkman C, Oyer JL, Shah NR, Megroz M, Deveson Lucas D, Moya B, Sayed AR, Elsayed AAS, Wright A, Sutaria DS, Tao X, Lang Y, Zhou J, Shin E, Landersdorfer CB, Jimenez-Nieves RH, Cadet KC, Jiao Y, Copik AJ, Bonomo RA, Louie A, Drusano GL, Boyce JD, **Bulitta JB**. Quantifying β-lactam penetration by flow cytometry and confocal microscopy in a double β-lactamase and double efflux pump knockout strain of Acinetobacter baumannii (AB). ASM Microbe. Houston, TX. Jun 15-19, 2023.

280. Shin E, Sayed AR, Lang Y, Zhou J, Oyer JL, Moya B, Elsayed AAS, Sutaria DS, Shah NR, Werkman C, Jimenez-Nieves RH, Cadet KC, Tao X, Jiao Y, Copik AJ, Bonomo RA, Schweizer HP, Lee RE, Boyce JD, Tsuji BT, Drusano GL, **Bulitta JB**. Next-generation Quantitative and Systems Pharmacology Modeling of Synergistic Penicillin-Binding Protein (PBP) occupancy patterns in Klebsiella pneumoniae (KP). ASM Microbe. Houston, TX. Jun 15-19, 2023.

281. Zhou J, Lang Y, Zhang Y, Sayed AR, Shin E, Werkman C, Louie A, Tsuji BT, Bulman ZP, Drusano GL, **Bulitta JB**. Intracellular accumulation and washout kinetics of three aminoglycosides (AGS) in a highly AGS-resistant Klebsiella pneumoniae with a 16S rRNA methyltransferase. ASM Microbe. Houston, TX. Jun 15-19, 2023.