

Sihem Bihorel (Ait-Oudhia), BS, MS (Immunology), MS (Pharmacometrics), PharmD, PhD

Assistant Professor

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RESEARCH INTERESTS

- Translational and clinical modeling and simulation:
 - Quantitative Systems Pharmacology and Toxicology (QSP/T)
 - Systems-based Pharmacokinetic/Pharmacodynamic (PK/PD)
 - Nonlinear Mixed Effect Modeling (NONMEM) analyses.
- Biologics and small molecularly targeted therapeutics.

KEY SKILLS

- **Pharmacometrics & Systems Modeling and Simulations**
 - PK/PD data analyses, population datasets analyses, PK/PD/QSP/T modeling and simulation.
 - Modeling and simulation tools: Phoenix WinNonlin, ADAPT II/V, S-ADAPT, NONMEM, Berkeley Madonna, Matlab, Simbiology, Monolix, R
 - Development of AMGET: R-based Post-processing Tool for ADAPT 5
- **In vitro Experimentation**
 - ELISA; Flow cytometry; 2D cell culture techniques; RT-PCR; Northern; Southern; and Western blots.
 - Proteomics: immunoassay with Multiplex.
 - 3 dimension and dynamic (3DD) cell culture with BelloCell System
- **Animal Experimentation: Mice & Rats**
 - Xenograft tumor inoculation and monitoring, organs extraction, jugular vein and femoral vein/artery cannulations, urinary bladder and ureteral cannulation, aortal exsanguinations, carotid artery catheterization, bile duct catheterization, entero-hepatic recirculation, anesthesia and euthanasia, tail vein and subcutaneous injections, gavage (per os), legislation on animal experimentation

EDUCATION

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|----------------------|---|
| Jan 2007-2010 | Ph.D. SUNY at Buffalo (USA) and Paris-Descartes University (France).
Advisors: Wojciech Krzyzanski (SUNY at Buffalo) & Jean-Michel Scherrmann (Paris-Descartes) |
| 2000-12/2006 | Pharm.D. Paris-Descartes University (France).
Advisor: Jean Michel Scherrmann. |
| 2005-2006 | Master of Science in Pharmacokinetics and Biopharmacy (DESS).
School of Pharmacy. Paris-Descartes University (France). |
| 2001-2002 | Master of Science in Immunology and Human Genetics (DEA).
Necker School of medicine. Paris-Descartes University (France). |
| 2000-2001 | Bachelor of Science in Biomedical Sciences (MSBM).
Saint-Pères School of medicine. Paris-Descartes University (France). |

PROFESSIONAL APPOINTMENTS

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| 07/2015 - | Assistant Professor. Department of Pharmaceutics. UF College of Pharmacy. |
| 2015 - 2018 | Adjunct Assistant Professor. Department of Pharmaceutical Sciences. SUNY at Buffalo. |
| 2011- 06/2015 | Research Assistant Professor. Department of Pharmaceutical Sciences, SUNY at Buffalo. |
| 2010-2011 | Post-doctoral Associate. Department of Pharmaceutical Sciences, SUNY at Buffalo. |

2007-2010	PhD research. Department of Pharmaceutical Sciences, SUNY at Buffalo.
12/2006	MS training internship. Department of Clinical Pharmacology. Sanofi aventis R&D. Paris.
2004-2005	Pharmacy resident at Cochin Hospital. Paris 14 th district, France
2002-2005	Dispensation of drugs in a retail pharmacy as a student-trainee. 12 th district, Paris, France
2001-2002	Master of Science training course. Necker School of Medicine. Paris-Descartes.
2000-2001	Bachelor of Science training course. Necker School of Medicine. Paris-Descartes.

AWARDS and HONORS

07/2019	Article PMID: 29725796 nominated by Springer Nature as exceptional article in clinical oncology. Highlighted on the webpage of the American Society of Clinical Oncology (ASCO).
06/2019	AFPE Pre-Doctoral Research Fellowship in Pharmaceutical Sciences to Brett Fleisher
04/2019	Best Poster/Abstract trainees for quantitative systems pharmacology by Tanaya Vaidya. Multi-Scale and Quantitative Systems Toxicological (QST) Analysis of Doxorubicin Action on Human Cardiomyocytes. ASCPT Annual Meeting, Washington DC.
03/2019	Abstract selected for Oral talk and for Poster Competition by Hardik Mody. In vitro Evaluation of Cimetidine Reno-protective Effects on Cisplatin-Induced Kidney Injury. American Society for Pharmacology and Therapeutics (ASPET aAnnual Meeting), Orlando, FL.
10/2018	Abstract Trainee Award to Tanaya Vaidya (PhD student) ACoP9 annual meeting. San Diego, CA.
09/2018	Outstanding Graduate Student Award to Tanaya Vaidya (PhD student) The Globalization of Pharmaceutics Education Network (GPEN), 2018.
08/2018	Graduate School Preeminence Award to Yesenia Franco (PharmD/PhD) University of Florida, College of Pharmacy.
06/ 2018	Figure selected for the cover of the Journal of Pharmacokinetics and pharmacodynamics. Systems pharmacological analysis of mitochondrial cardiotoxicity induced by selected tyrosine kinase inhibitors. PMID:29446053
04/2018	Commitment to research award to Maher Chaar (PharmD/research student) College of Pharmacy, University of Florida.
03/2018	Presidential Trainee Award to Tanaya Vaidya (PhD student) ASCPT annual meeting
09/2017	APhA-ASP Amazing Dedication Award to Maher Chaar (PharmD student) University of Florida, College of Pharmacy.
08/2017	Graduate School Preeminence Award to Brett Fleisher (PharmD/PhD) University of Florida, College of Pharmacy.
04/2017	Honorable Mention Postdoctoral Scientist Winner of the ASPET and best presentation award to Anusha Ande (Postdoctoral Associate)
03/2017	Top20% poster at the ASCPT annual meeting, Washington DC Poster title: "A mechanism-based PK/PD model for hematological toxicity induced by antibody-drug conjugates".
12/2016	Figure selected for the cover of the Journal of Pharmacokinetics and pharmacodynamics. Array of Translational Systems Pharmacodynamic Models of Anti-Cancer Drugs. PMID:27771815
09/2016	Colburn A. Wayne Memorial Award to Tanaya Vaidya (PhD Student) Best poster and oral presentations. ACCP annual meeting. Travel Award to Tanaya Vaidya (PhD Student). ACCP annual meeting.
08/2016	Merck/UF COP Award for outstanding research to Maher Chaar (PharmD student)
07/2016	Prosper Excellence Award (\$25,000, UF College of Pharmacy)

- 12/2014** **Discretionary award from the United University Professions (UUP, University at Buffalo).**
Nominated by the chair of the department of Pharmaceutical Sciences: Dr. William J. Jusko.
- 05/2014** **1st Place young investigator podia presentation at ASPET-Upstate New York Pharmacology Society**
Title: Bridging Sunitinib Exposure and Time-to-tumor Progression in Hepatocellular Carcinoma Patients by Mathematical Modeling of an Angiogenic Biomarker
- 04/2014** **PhRMA foundation award**
Starter research grant in translational medicine and therapeutics [
- 09/2013** **Career-development salary and research support package**
UB School of Pharmacy and Pharmaceutical Sciences
- 05/2012** **1st Place for poster presentation at the ASPET-Upstate New York Pharmacology Society**
Title: Computational Analysis of Paclitaxel-induced Tumor Priming That Leads To Enhanced Deposition and Efficacy of Nanoparticulate Doxorubicin
- 06/2011** **1st Place for poster presentation at the 3rd Buffalo postdocs' symposium**
Title: Clinical Impact of Paclitaxel Formulations on Neutropenia: A Pooled Pharmacokinetics Analysis of Four Paclitaxel Delivery Systems.
- 2010-2011** **Pfizer Fellowship for PK/PD modeling in oncology.**
- 2010-2011** **Novartis Fellowship for PK/PD modeling in rheumatology.**
- 06/2010** **Nominated by my Ph.D. committee for a Ph.D. thesis award in pharmacology and toxicology (section 9) from the French National Academy of Pharmacy.**
- 07/2009** **3rd place outstanding podia presentation award.** The Pharmaceutics Graduate Student Research Meeting at Purdue University, Indianapolis, USA
Title: Simultaneous PK/PD modeling of recombinant human erythropoietin after multiple intravenous dosing in rats.
- 2008-2009** **Johnson & Johnson Fellowship in Population PK/PD.**
- 2007-2008** **Amgen Fellowship in Pharmacokinetics, Pharmacodynamics, and Hematology.**

MENTORING ACTIVITIES

- Primary mentor of 5 postdocs (SUNY at Buffalo, UF College of Pharmacy)
- Primary mentor of 5 PhD students (Paris-Descartes, UF, SUNY at Buffalo)
- Chair, co-chair, & committee member for PhD students (Paris-Descartes, UF, SUNY at Buffalo)
- Primary mentor of 2 Master students (SUNY at Buffalo)
- Primary mentor of 29 PharmD students (Paris-Descartes, UF)
- Primary mentor of 8 international scholars with UF
- Primary mentor of 3 undergraduate, Bachelor students (SUNY at Buffalo, University of Central Florida)
- Primary mentor of 3 students from the ReTOOL Program: <http://retool.cop.ufl.edu/>
- Short term scholars: Primary mentor to 8 trainees at UF College of Pharmacy

PROFESSIONAL SOCIETIES

- Member, American Association for the Advancement of science (AAAS), 2018-present
- Member, Society for Immunotherapy in Cancer (SITC), 2017-present.
- Member, Society for Mathematical Biology (SMB), 2016-present
- Member, American College of Clinical Pharmacology (ACCP), 2016-present
- Member, American Society of Clinical Oncology (ASCO), 2012-present
- Member, American Society of Clinical Pharmacology and Therapeutics (ASCPT), 2012-present
- Member, International Society of Pharmacometrics (ISOP), 2011-present
- Member, American Association for Cancer Research (AACR), 2011-present
- Member, AAPS biotechnology and ADME Focus Group, 2011-present
- Member, American Society of Pharmacology & Experimental Therapeutics (ASPET), 2011-present
- Member, American Association of Pharmaceutical Scientists (AAPS), 2007-present
- Member, French Association of Pharmaceutical Scientists (FAPS), 2007-present

SERVICE and VOLUNTEER WORK

- **International Societies**
 - ISoP award committee member, 2017-present. Chair-elect 2018. Chair 2019.
 - Founder, Florida- International Society of Pharmacometrics (Florida-ISoP) group, 2018-present
 - Pharmacometabolomics community at ASCPT. 2018-2019. Leadership role.
 - ACCP Education Committee, 2018 – 2022. Leadership role.
 - ACCP publication committee, 2016-2018.
 - ACCP Young Professionals Outreach Committee, 2016-present
- **International Scientific Institutions**
 - Reviewer Ad'hoc (via phone) for Department of Defense (DoD). 2019-present.
 - Reviewer NIH, XNDA study section ZRG1 DKUS-N (10). 2018-present
 - Course Director and reviewer of text and media-based activity materials for an online course in a comprehensive curriculum on immuno-oncology by the Society of Immunotherapy in Cancer (SITC). Title: Emerging Considerations in the Use of Immune Checkpoint Inhibitors: HCC – 2017-present
 - Reviewer of grants: Natural Sciences and Engineering Research Council of Canada, 2017-present
 - Reviewer of grants: Cancer TMOI of the French National Alliance for Life and Health Sciences (AVIESAN) and the French National Cancer Institute (INCa), 2017-present.
 - Reviewer of grants at NIH Early Career Program, 2016-present.
- **International Scientific Conferences**
 - Chair: Immuno-Oncology Summit, Boston, August 2017
 - Chair: 6th International conference on Hematology, October 2016
 - Chair: International conference and expo in Biopharmaceutics & Biologics Drugs, September 2016.
 - Chair of the session Translational Biomarkers in drug development session- World Congress on Biomarkers & Diagnostics. May 2016, Philadelphia.
 - Chair/moderator: 6th international Conference & Exposition on Proteomics. March 2016, Atlanta
 - Volunteer reviewer for abstracts for ASCPT annual meeting, 2016-present.
 - Volunteer reviewer for abstracts at ACoP/ISoP meeting, 2011-present
 - Volunteer reviewer for abstracts at AAPS annual meeting, 2012-present
- **University of Florida, College of Pharmacy**
 - Member of the search committee for the Director of the Center for Pharmacometrics and Systems Pharmacology (Lake Nona, Orlando, FL). 2018.
 - Member of the search committee for the Chair of the Department of Pharmaceutics, UF. 2018.
 - Faculty Senate Council/Committee - Senate Nominating Committee 2017-2020
 - Faculty Governance Council - 2018 – 2021. UF College of Pharmacy
 - Academic and Professional Standards Committee - 2018 – Present. UF College of Pharmacy
 - Faculty Development Committee. 2016- Present. UF College of Pharmacy.
 - Graduate Students task Force. 2016-present. UF College of Pharmacy.
 - Graduate Education task Force. 2016-present. UF College of Pharmacy.
 - Scientific symposium planning committee, Lake Nona Leadership Council, 2017
 - Judge for posters and oral presentations at the annual graduate students showcase, 2018-present
 - Chair and faculty advisor of the Industry Pharmacy Organization (IPhO) at UF/COP in the Orlando Campus.
- **University at Buffalo, SUNY.**
 - Reviewer & judge for abstracts/posters: annual postdoctoral symposium. SUNY at Buffalo, 2011-2015
 - Reviewer & judge for abstracts/posters – Sigma/Xi research competition. SUNY at Buffalo, 2011-2015
- **Others**
 - IACUC committee member: Sanford Burnheim Cancer Research Institute, Orlando. FL. 2016-2019

EDITORIAL REVIEW

- Journal of Clinical Pharmacology, 2009-present
- Journal of Pharmacokinetics and Pharmacodynamics, 2011-present
- The AAPS Journal, 2011-present
- Pharmaceutical Research, 2011-present
- Drug Discovery Today, 2011-present
- Journal of Liposome Research, 2011-present
- Cancer Chemotherapy and Pharmacology, 2012-present
- Journal of Pharmacology and Experimental Therapeutics, 2012-present
- Drug metabolism and disposition, 2012-present
- Pharmacological Reviews, 2012-present
- Molecular Pharmacology, 2012-present
- Clinical Pharmacology & Therapeutics: Pharmacometrics and Systems Pharmacology, 2012-present
- Tumor Biology, 2014-present
- Journal of Pharmaceutical Sciences, 2011-present
- European Journal of Pharmaceutical Sciences, 2016-present
- BMC Cancer, 2016-present
- Letters in Drug Design & Discovery 2016-present
- Frontiers in Pharmacology, 2017-present
- Frontiers in Oncology, 2017-present
- Frontiers in Immunology, 2017-present

EDITORIAL BOARD

- Journal of Pharmaceutical Sciences, 2018-present
- Frontiers in Pharmacology, 2017-present
- Frontiers in Oncology, 2017-present
- Frontiers in Immunology, 2017-present
- Journal of Clinical Pharmacology and Toxicology, 2016-present
- Annals of Pharmacology and Pharmaceutics, 2016-present

TEACHING

- 1. 2011-2015**
Several course lectures at SUNY at Buffalo, NY: PHC 607/608/609/506/500/432/488-588
- 2. 2015-present**
Several course lectures and course coordinator at College of Pharmacy, University of Florida, FL:
PHA 5127/5128/6125/6418/6935/PC3/PC4/PC5/PC7/PC8/ReTool

SUCCESSFUL SCIENTIFIC GRANT PROPOSALS

- | | |
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| 07/2019 | CaRE² @UF seed grant Award |
| 06/2019 | American Foundation for Pharmaceutical Education (Pre-AFPE) |
| 01/2018 | Investigator initiated grant with Agilent Biomarker Research |
| 08/2017 | NIH-NCI sub-award 3P30CA075292-19S2 |
| 08/ 2017 | Investigator initiated grant with Hoffmann la Roche. |
| 06/2017 | Investigator initiated grant with Bohringer Ingelheim. |
| 07/2016 | Prosper Excellence Award from University of Florida |
| 05/2016 | R25 - Florida Cancer ReTOOL Program for Underrepresented Minority Students. |
| 04/2014 | Research starter grant in translational medicine and therapeutics (PhRMA Foundation) |
| 08/2013 | Center for Protein Therapeutics (Buffalo, NY) |

LANGUAGES

- Native speaker of French and Arabic
- Fluent speaker of English
- Conversational Spanish

POSTER PRESENTATIONS

1. Mody H, Vaidya T, Nair S, Rump A, Garrett T, Lesko L, and **Ait-Oudhia S**. A Multi-Scale PBPK-Toxicodynamic Model for Cisplatin-induced Nephrotoxicity and Interaction with Cimetidine, a Reno-protective Agent of OCT2 Transporter. *American Conference of Pharmacometrics 10 (ACoP10)*. Orlando, FL. 2019.
2. Mody H, Rump A, Vaidya T, Lesko L, and **Ait-Oudhia S**. Pharmacodynamic modeling to investigate the influence of OCT2 inhibitor, Cimetidine on the anticancer effects of Cisplatin. *ACCP Virtual Symposium 2019*. ACCP Website. Sep 5, 2019 - Sep 6, 2019.
3. Mody H, Vaidya T, Lesko L, and **Ait-Oudhia S**. In vitro Evaluation of Cimetidine Reno-protective Effects on Cisplatin-Induced Kidney Injury. Experimental Biology annual meeting. *ASPET*. Orlando, FL. Apr 8, 2019 - Apr 10, 2019.
4. Mody H, Vaidya T, and **Ait-Oudhia S**. Protective Effects of Dexrazoxane on Doxorubicin-Induced Cardiotoxicity (DIC). *ASCPT annual meeting*, Washington, DC. Mar 13, 2019 - Mar 16, 2019.
5. Fleisher B, Mody H, Werkman C, and **Ait-Oudhia S**. Chloroquine and Osimertinib Induce Synergic Reduction in Cell Viability through Autophagy/Apoptosis Crosstalk. Experimental Biology. *ASPET*. Orlando, FL. Apr 8, 2019 - Apr 10, 2019.
6. Franco Y, Mody H, Perez L, Ande A, Fleisher B, and **Ait-Oudhia S**. Efficacy of Dual Her-2 and CDK 4/6 Signaling Blockade at Overcoming Primary HER2 Therapy Resistance in Breast Cancer. *Experimental Biology annual meeting*. *ASPET*. Orlando, FL. Apr 8, 2019 - Apr 10, 2019.
7. Vaidya T(g), and **Ait-Oudhia S**. Multiscale and Quantitative Systems Toxicological (QST) Analysis of Doxorubicin Action of Human Cardiomyocytes. Lake Nona Leadership Council. Lake Nona, Orlando, FL. 2019.
8. Vaidya T, Franco Y, Brown A, and **Ait-Oudhia S**. Multiscale and Quantitative Systems Toxicological (QST) Analysis of Doxorubicin Action of Human Cardiomyocytes. *ASCPT annual meeting 2019 QSP pre-conference*. Washington DC. 2019. **** Best QSP poster presentation**
9. Vaidya T and **Ait-Oudhia S**. Systems Pharmacology Model for Novel Triple and Sequential Combination Therapy to Overcome HER2 and mTOR Therapies Resistance in Breast Cancer. Globalization of Pharmaceuticals Education Network (GPEN) meeting at the National University of Singapore in 2018. **** Ambassador of the Department of Pharmaceutics at UF**.
10. Vaidya T and **Ait-Oudhia S**. Multiscale Quantitative Systems Toxicological (QST) Analysis of Doxorubicin Action of Human Cardiomyocytes. University of Florida Graduate Students Showcase. Gainesville, FL. 2019 .
11. Fleisher B, Mody H, Werkman C, **Ait-Oudhia S**. Osimertinib and Chloroquine Synergistic Interaction in Triple Negative Breast Cancer is Mediated Through Autophagy/Apoptosis Crosstalk. UF Research Showcase. Gainesville, FL. 2019.
12. Hurtado D, Varkey J, Fleisher B, Allen J, **Ait-Oudhia S**. Development and Validation of Physiologically-based Pharmacokinetic Model of Novel Tetracycline, Omadacycline. UF Research Showcase. Gainesville, FL. 2019.
13. Khan C, Franco Y **Ait-Oudhia S**. Evaluation of Trastuzumab/Chloroquine combination at Overcoming Resistance to HER2 Therapy in Breast Cancer. UF research showcase. Gainesville, FL. 2019.
14. Taha K, Mody H, Lazeau J **Ait-Oudhia S**. Investigation of the impact of dexrazoxane on the anticancer effects of doxorubicin. UF College of Pharmacy Graduate Showcase. Gainesville, FL. 2019.
15. Vaidya T, **Ait-Oudhia S**. *Poster*. Systems Toxicological Assessment of doxorubicin-induced Mitochondrial Toxicity in Human cardiomyocytes. Accepted. *Journal of Pharmacokin and Pharmacodyn (ACoP 2018)*. **** Trainee Abstract Awards**
16. Vaidya T and **Ait-Oudhia S**. Systems Pharmacological Analysis of a Tumor Priming Combination Therapy to Overcome HER2 and mTOR Therapies Resistance in Breast Cancer. ASCPT Annual meeting 2018, Orlando, FL.

****Predidential Trainee Abstract Award**

17. Fleisher B and **Ait-Oudhia S.** Retrospective Examination Of Clinical Pharmacology Reviews From FDA On Oncology Biologics For Potential Benefit Of Therapeutic Drug Monitoring. ASCPT Annual meeting 2018, Orlando, FL.
18. Fleisher Brett, **Ait-Oudhia S.** Clinical Pharmacology Reviews from FDA on Anti-cancer monoclonal antibodies for Potential Benefit of Therapeutic Drug Monitoring. University of Florida Precision Medicine Conference. Orlando, Florida. Mar 8-10, 2018.
19. Vaidya T, Kamta J, Char M, Ande A, **Ait-Oudhia S.** Mitochondrial Toxicity Induced by Selected Tyrosine Kinase Inhibitors: A systems Approach. 30th Annual graduate students showcase. UF College of Pharmacy. Gainesville. Feb 12th 2018
20. Vaidya T, Kamta J, Char M, Ande A, **Ait-Oudhia S.** Systems Pharmacological Analysis of Mitochondrial Toxicity Induced by Selected Tyrosine Kinase Inhibitors. University of Florida Precision Medicine Conference. Orlando, Florida. Mar 8-10, 2018.
21. Fleisher B, **Ait-Oudhia S.** Therapeutic Drug Monitoring of Biologics: A retrospective Analysis of FDA Purpuls'e Book. 30th Annual graduate students showcase. UF College of Pharmacy. Gainesville. Feb 12th 2018
22. Franco y, Perez L, **Ait-Oudhia S.** In Vitro Assessment of Novel Combination Therapy to Overcome Resistance to HER2 Targeted Therapy in Breast Cancer. 30th Annual graduate students showcase. UF College of Pharmacy. Gainesville. Feb 12th 2018
23. Vaidya T, Kamta J, Char M, Ande A, **Ait-Oudhia S.** Systems Pharmacological Analysis of a Triple Combination Therapy To Overcome HER2 and mTOR Therapies Resistance in Breast Cancer. Lake Nona Leadership Council. March 19th, 2018
24. Fleisher B, **Ait-Oudhia S.** Exposure-Response Relationships for Therapeutic Drug Monitoring of Biologics in Oncology. Lake Nona Leadership Council. March 19th, 2018
25. Franco Y., Perez L., and **Ait-Oudhia S.** Vitamin D for the Prevention of Doxorubicin-induced Cardiotoxicity. Lake Nona Leadership Council. March 19th, 2018
26. Vaidya T and **Ait-Oudhia S.** Quantitative Pharmacological Assessment of Trastuzumab-Anthracycline Induced Cardiotoxicity. ACoP meeting 2017, Fort Lauderdale, FL.
27. Ande A, and **Ait-Oudhia S.** Bench-to-Bedside Translation of Everolimus Efficacy in Hepatocellular Carcinoma Using a Multiscale Quantitative Systems Pharmacological Approach. ACoP meeting 2017, Fort Lauderdale, FL.
28. Franco Y., Perez L., and **Ait-Oudhia S.** A Proof of Concept In Vitro Study To Overcome Resistance To HER2 Targeted Therapy in Breast Cancer. ACCP meeting 2017, San Diego, CA.
29. Lien Y., Sharma V., Basu S., Haitao Y., Wang W., Zhou H., **Ait-Oudhia S.**, and Schmidt S. A novel interactive quantitative clinical pharmacology approach applied to biomarker identification in oncology. ACCP meeting 2017, San Diego, CA.
30. **Ait-Oudhia S.** Improving the delivery of trastuzumab to breast cancer tumors with a bottom-up, multi-scale systems pharmacological analysis of sequence combinations. San Antonio Breast Cancer Symposium Dec, 2017, Texas.
31. Char, M., Kamta, J., **Ait-Oudhia S.** In vitro Evaluation of Tyrosine Kinase Inhibitors Induced Cardiotoxicity. FSHP 51st Annual Meeting. August 2017. Florida Society of Health-System Pharmacists (FSHP), 51st Annual Meeting. Renaissance Resort at SeaWorld 6677 Sea Harbor Drive Orlando, Florida. Aug 4-6, 2017.
32. Ande A., Tran B., and **Ait-Oudhia S.** Novel Three Dimensional and Dynamic (3DD) Cell Culture System for Optimization of molecularly targeted combination therapy in a Dual HER2 and mTOR Refractory Breast cancer. Experimental Biology Annual Meeting. Chicago, IL. Apr 22nd, 2017. **1st place Poster competition presentation for postdocs.**
33. Tanaya Vaidya, and **Sihem Ait-Oudhia.** Novel trifunctional immunoliposome delivery system to minimize resistance and side effects for anticancer therapy. American Association of Cancer Research (AACR). Washington DC. Apr 2nd, 2017.
34. Brett Fleisher, and **Sihem Ait-Oudhia.** A network based analysis for the treatment of triple negative breast

cancer. American Association of Cancer Research (AACR). Washington DC. Apr 5th, 2017.

35. Brett Fleisher, and **Sihem Ait-Oudhia**. Connectivity Map of Current Biomarkers for the Advancement of Targeted Therapy in Triple-Negative Breast Cancer. National Comprehensive Cancer Center Annual Conference. Orlando, Florida. Mar 22nd, 2017.
36. **Sihem Ait-Oudhia**, Weiyan Zhang, Donald E. Mager. A mechanism-based PK/PD model for hematological toxicity induced by antibody drug conjugates. ASCPT annual meeting, Washington DC, March 15th, 2017. ****Top 20% poster award.**
37. Tanaya R. Vaidya, **Sihem Ait-Oudhia**. Immunotherapy for HER2 breast cancer. ASCPT annual meeting, Washington DC, March 15th, 2017. ****Student travel award to Tanaya Vaidya.**
38. Anusha Ande, Maher Char, **Sihem Ait-Oudhia**. Bench-to bedside quantitative systems pharmacology approach to examine the mTOR signaling pathway in hepatocellular carcinoma. ASCPT annual meeting, Washington DC, March 15th, 2017.
39. Y Lien, V Sharma, S Basu, H Yang, W Wang, H Zhou, **S Ait-Oudhia**, S Schmidt. The quest for biomarkers in oncology: an opportunity for quantitative clinical pharmacology approaches. ASCPT annual meeting, Washington DC, March 15th, 2017.
40. Yesinia Franco, **Sihem Ait-Oudhia**. Systems pharmacological analysis to combat brain metastases in advanced stage breast cancer. Lake Nona Leadership Council, March 13th, 2017.
41. Tanaya R. Vaidya, **Sihem Ait-Oudhia**. Development and Evaluation of a Novel Tri-Functional Immunoliposome (TFIL) Formulation to Minimize Resistance and Side-Effects of Anti-Cancer Therapy. Lake Nona Leadership Council, March 13th, 2017.
42. Anusha Ande, Bao Nguyen, Ashley Brown, **Sihem Ait-Oudhia**. Novel Three Dimensional and Dynamic (3DD) Cell Culture System For Optimization Of Combinatorial Treatment Strategies Of Molecularly Targeted Anti-cancer Therapeutics. Lake Nona Leadership Council, March 13th, 2017.
43. Brett Fleisher, **Sihem Ait-Oudhia**. A Network Based Analysis of Translational Biomarkers in Triple-Negative Breast Cancer Medicine. Lake Nona Leadership Council, March 13th, 2017.
44. Brett Fleisher and **Sihem Ait-Oudhia**. Advancing Triple-Negative Breast Cancer Therapeutic Options Using a Cellular Protein Network. University of Florida Precision Medicine Conference. Gainesville, FL; Mar 8th, 2017.
45. Yesinia Franco, **Sihem Ait-Oudhia**. Defeating brain metastases in advanced stage breast cancer. University of Florida Precision Medicine Conference. Gainesville, Florida; Mar 8th, 2017.
46. Tanaya R. Vaidya, **Sihem Ait-Oudhia**. Novel Tri-Functional Immunoliposome (TFIL) Formulation for HER2 Breast Cancer. University of Florida Precision Medicine Conference. Gainesville, Florida; Mar 8th, 2017.
47. Anusha Ande, Bao Nguyen, Ashley Brown, **Sihem Ait-Oudhia**. Novel Three Dimensional and Dynamic (3DD) Cell Culture System in Oncology. University of Florida Precision Medicine Conference. Gainesville, Florida; Mar 8th, 2017.
48. Maher Char, Kamta jeff, Anusha Ande, Deborah A. Altomare, **Sihem Ait-Oudhia**. Cardiotoxicity of Tyrosine Kinase Inhibitors. University of Florida Precision Medicine Conference. Gainesville, Florida; Mar 8th, 2017.
49. Lydia Diep, Emily Bush, Danielle Kibby, **Sihem Ait-Oudhia**. The Protective Role of Vitamin D in Cancer and its Correlation with Prostaglandin Metabolizing Enzymes. Graduate students show case, University of Florida, GNV, Feb 17th, 2017.
50. Christy Vega, Joanna Wren, Joanna Longueira, Estefany Yanqui, **Sihem Ait-Oudhia**. Liposomal Doxorubicin (Doxil) in the Treatment of Breast Cancer. Graduate students show case, University of Florida, GNV, Feb 17th, 2017.
51. Jeff Kamta, Maher Char, Anusha Ande, Deborah A. Altomare, **Sihem Ait-Oudhia**. Advancing Cancer Therapy with Present and Emerging Immuno-Oncology Approaches. Graduate students show case, University of Florida, GNV, Feb 17th, 2017.
52. Marianela Robainas, Rafael Otaño, Stephen Bueno, **Sihem Ait-Oudhia**. Understanding The Role of PD1/PD-L1 Pathway Blockade and Autophagy in Cancer Therapy. Graduate students show case, University of Florida, GNV, Feb 17th, 2017.

53. Brett Fleisher, **Sihem Ait-Oudhia**. Developing a Cellular Protein Network for Clinical Triple-Negative Breast Cancer Biomarkers. Graduate students show case, University of Florida, GNV, Feb 17th, 2017.
54. Tanaya Vaidya, and **Sihem Ait-Oudhia**. *Poster*. Development and Evaluation of Tri-Functional Lipid Nanoparticles for Treatment of HER2-positive Breast Cancer. 30th Annual Research Showcase and Awards Recognition Day. University of Florida. Gainesville, FL. Feb 17, 2017.
55. Ande A., Tran B., and **Ait-Oudhia S**. Novel Three Dimensional and Dynamic (3DD) Cell Culture System for Optimization of molecularly targeted combination therapy in a Dual HER2 and mTOR Refractory Breast cancer. 30th annual UF College of Pharmacy Research Showcase. Gainesville, FL, Feb 17, 2017.
56. Franco Y., Ande A., and **Ait-Oudhia S**. Effects of Lapatinib on Refractory HER2-positive Breast Cancer Cells. UF College of Pharmacy Research Showcase. Gainesville, Florida. Feb 17, 2017.
57. Perez L., Ande A., and **Ait-Oudhia S**. Anti-Proliferative Effects of Abemaciclib on Difficult-to-treat Breast Cancer. UF Graduate Students Showcase. Gainesville, FL. Feb 17, 2017.
58. Knapp M., Wenningmann N., Tanaya Vaidya(g), and **Ait-Oudhia S**. Elucidating the mechanisms of doxorubicin-induced cardiotoxicity with a system pharmacological approach. UF Graduate Students Showcase. Gainesville, FL. Feb 17, 2017.
59. **Sihem Ait-Oudhia**. Multiscale Translational Systems Pharmacological Analysis of Paclitaxel-mediated Tumor Priming. The 3rd QSP meeting. San Francisco, Dec 5th, 2016.
60. Tanaya R. Vaidya and **Sihem Ait-Oudhia**. Development and Evaluation of Novel Immunoliposome To minimize Resistance and Side Effects in Cancer Therapy. Roche Global safety Meeting at Lake Nona (Orlando), FL. November 8th, 2016.
61. Le Merdy M, **Ait-Oudhia S**. Translational Systems Pharmacology To Optimize Sequential Combination Therapy Of Anti-Cancer Drugs. Roche Global Safety Meeting at lake Nona (Orlando), FL. November 8th, 2016.
62. Yesenia Franco, Anusha Ande, **Sihem Ait-Oudhia**. Effects of Lapatinib on Refractory HER2-positive Breast Cancer Cells. Lake Nona Research day. October 14th, 2016. Orlando, FL.
63. Tanaya R. Vaidya and **Sihem Ait-Oudhia**. Development and Evaluation of Tri-Functional Lipid Nanoparticles for Treatment of HER2-Positive Breast Cancer. Lake Nona Research day. October 14th, 2016. Orlando, FL.
64. Brett Fleisher, Charlotte Clark, **Sihem Ait-Oudhia**. Advances in Biomarkers for Triple-Negative Breast Cancer Targeted Therapy. Lake Nona Research day. October 14th, 2016. Orlando, FL.
65. Le Merdy M, **Ait-Oudhia S**. *In vivo* Optimization of a Time Sequence Combination of Paclitaxel with Trastuzumab in HER₂-positive Breast Cancer. Lake Nona Research day. October 14th, 2016. Orlando, FL.
66. Tran B.N., Ande A, **Ait-Oudhia S**. Effect of Paclitaxel on HER2-refractory Breast Cancer Cell Line – *Implications for combination therapy* - Lake Nona Research day. October 14th, 2016. Orlando, FL.
67. Jeff Kamta, Anusha Ande, **Sihem Ait-Oudhia**. Investigating the Mechanism of Action of Combretastatin A4 Phosphate, a Novel Vascular Disrupting Agent. Lake Nona Research day. October 14th, 2016. Orlando, FL.
68. Luis A. Perez, Anusha Ande, **Sihem Ait-Oudhia**. Effects of a CDK4/6 Inhibitor on HER2-positive Refractory Breast Cancer. Lake Nona Research day. October 14th, 2016. Orlando, FL.
69. Chaar M., Ferraro M., Johnson E., Le Merdy M., Brown A., **Ait-Oudhia S**. Preclinical evaluations of two vascular endothelial growth factor inhibitors in combination with rapamycin for the treatment of hepatocellular carcinoma. Lake Nona Research day. October 14th, 2016. Orlando, FL.
70. Tanaya Ravindra Vaidya and **Sihem Ait-Oudhia**. Development and Evaluation of Tri-Functional Lipid Nanoparticles for Treatment of HER2-Positive Breast Cancer Refractory to HER2 Therapy. ACCP Annual meeting. Bethesda Maryland. September 24-26th, 2016. ****Student Trainee Award & A. Colburn Wayne Memorial Award**
71. Chaar Maher, Matthew Ferraro, Johnson Erica, Le Merdy Maxime, Brown, Ashley, and **Ait-Oudhia Sihem**. 2016. Preclinical evaluations of two vascular endothelial growth factor inhibitors in combination with rapamycin for the treatment of hepatocellular carcinoma. ACCP Annual meeting. Bethesda Maryland. September 24-26th, 2016.

72. Davon M. Valverde and **Sihem Ait-Oudhia**. Elucidating the Synergistic Combinatorial Effects of Abiraterone Acetate and Prednisolone in Metastatic Prostate Cancer. ReTOOL Program. July 15th, 2016
73. **Ait-Oudhia S**. A Platform PK/PD Model for Antibody Drug Conjugates Induced Myelosuppression. 2016 PAGE meeting conference. Lisbon, Portugal. June 7-10th, 2016.
74. **Ait-Oudhia Si**. Multiscale systems pharmacology model for time sequence combination chemotherapy in breast cancer. AACR Annual meeting. New Orleans. April 16-20th, 2016.
75. Le Merdy M, **Ait-Oudhia S**. In Vivo Optimization of a Time Sequence Combination Chemotherapy of Paclitaxel with Trastuzumab in HER₂-positive Breast Cancer. ASCPT annual meeting, San Diego, California. March 8-12th, 2016.
76. Le Merdy M, **Ait-Oudhia S**. In Vitro Analysis of Trastuzumab Mechanism of action in HER₂-positive Breast Cancer alone or in Association with Paclitaxel in a Time Sequence Combination Chemotherapy. 5th Lake Nona Leadership Council (LNLC) at Orlando, FL. February 23rd, 2016
77. Chaar M., Ferraro M., Johnson E., Le Merdy M., Brown A, **Ait-Oudhia S**. Preclinical evaluations of two vascular endothelial growth factor inhibitors in combination with rapamycin for the treatment of hepatocellular carcinoma. 29th Annual research showcase and awards recognition day, College of Pharmacy, Gainesville, UF. January 22nd, 2016.
78. Le Merdy M, **Ait-Oudhia S**. In Vitro Analysis of Trastuzumab Mechanism of action in HER₂-positive Breast Cancer alone or in Association with Paclitaxel in a Time Sequence Combination Chemotherapy. 29th Annual research showcase and awards recognition day, College of Pharmacy, Gainesville, UF. January 22nd, 2016
79. Le Merdy M, **Ait-Oudhia S**. Proof of Concept of Novel Pharmacological Approach For The Treatment of HER2+ Breast Cancer: Tumor Priming Based On Sequential Combination Of Paclitaxel with Trastuzumab . Faculty mixer, College of Pharmacy, Gainesville, UF. November, 2015
80. **Sihem Ait-Oudhia**. In vivo Mechanisms of Drug-load Release for Antibody-drug Conjugates and Their Relationships To Drug Related Toxicity . October, 2015 Breast Cancer Research Day at Lake Nona, Orlando, FL. Organized by MiCART. October, 2015
81. Le Merdy M, **Ait-Oudhia S**. Proof of Concept of Novel Pharmacological Approach For The Treatment of HER2+ Breast Cancer: Tumor Priming Based On Sequential Combination Of Paclitaxel with Trastuzumab . Breast Cancer Research Day at Lake Nona, Orlando, FL. Organized by MiCART. October, 2015.
82. **Ait-Oudhia S**. In vivo Mechanisms of Drug-load Release for Antibody-drug Conjugates and Their Relationships To Drug Related Toxicity . ISoP annual meeting, Crystal City, Virginia, VA. October 20-26th, 2015
83. **Ait-Oudhia S**. In vivo Mechanisms of Drug-load Release for Antibody-drug Conjugates and Their Relationships To Drug Related Toxicity . AAPS annual meeting, Orlando, Florida, FL. October 25-29th, 2015
84. Miao X, Koch G, **Ait-Oudhia S**, Straubinger RM, and Jusko WJ. Multiscale Systems Models for the Combinatorial Pharmacodynamics of Gemcitabine and Trabectedin on Cell-Cycle in Pancreatic Cancer. AAPS annual meeting, Orlando, Florida, FL. October 25-29th, 2015. ****ePoster award**.
85. Xin Miao, Gilbert Koch, **Sihem Ait-Oudhia**, Robert M Straubinger, and William J Jusko. Multiscale Systems Models for the Combinatorial Pharmacodynamics of Gemcitabine and Trabectedin on Cell-Cycle in Pancreatic Cancer. QSP Conference. Increasing Drug Development Success: Understanding Drug-Disease Interactions Through Quantitative Systems Pharmacology. New York.
86. Miao X, Koch G, **Ait-Oudhia S**, Elmeliogy M, and Jusko WJ. Multiscale Systems Models for the Combinatorial Pharmacodynamics of Gemcitabine and Trabectedin on Cell-Cycle in Pancreatic Cancer. QSP meeting 2015.
87. Negin Salehi and **Sihem Ait-Oudhia**. Optimizing Combination Chemotherapy of Trastuzumab with Paclitaxel in HER2 positive Breast Cancer. Celebration of Academic Excellence at the School of Pharmacy and Pharmaceutical Sciences, SUNY at Buffalo, NY. April 16th, 2014. ****1st place poster award competition**
88. **Sihem Ait-Oudhia**, Donald E. Mager, Robert M. Straubinger, Garin Tomaszewski, Adrienne Groman, Patricia Zagst, Gerald Fetterly, and Renuka Iyer. Bridging Sunitinib Exposure and Time-to-tumor Progression in Hepatocellular Carcinoma Patients by Mathematical Modeling of an Angiogenic Biomarker. American Conference of Pharmacometrics. Harbor Beach Fort Lauderdale, Florida, FL. May 12th, 2013

89. Vidya Perera, Annette S Gross^{1,4}, Alan Forrest, Gauri G Rao, **Sihem Ait-Oudhia**, Andrew J McLachlan. A Population Pharmacokinetic Model of Caffeine and Paraxanthine to Investigate Methylxanthine Abstinence and CYP1A2 Activity. American Conference of Pharmacometrics. Harbor Beach Fort Lauderdale, Florida, FL. May 12th, 2013
90. **Sihem Ait-Oudhia**, Donald E. Mager, Zhi-Jian Liu, Peter Veng-Pedersen, Martha Sola-Visner. Dynamic Model of Platelet Lifespan in Adult and Newborn Mice. Experimental Biology. Boston Convention & Exhibition Center. April 24th, 2013
91. **Sihem Ait-Oudhia**, Robert M. Straubinger, Donald E. Mager. Probing paclitaxel-induced tumor priming of nanoparticulate doxorubicin with pharmacokinetic/pharmacodynamic systems analysis . American Society of Clinical Pharmacology & Therapeutics. JW Marriott. Indianapolis, IN. March 7th, 2013
92. **Sihem Ait-Oudhia**, Robert M Straubinger, and Donald E Mager. Computational analysis of paclitaxel-induced tumor priming that leads to enhanced deposition and efficacy nanoparticulate doxorubicin. American Society of Pharmacology and Experimental Therapeutics-Upstate New York Pharmacology Society. SUNY, North campus. May 14th, 2012. **** 1st place award competition.**
93. Grimsrud K.N, **Ait-Oudhia S**, Durbin-Johnson B. P, Rocke D. M, Mama K. R, Rezende M. L, Stanley, Jusko W. J. Population pharmacodynamic analysis comparing detomidine, medetomidine and dexmedetomidine in the horse using an indirect response model. Annual symposium in the combined DVM/PhD and MD/PhD program, University UC Davis. March 15th, 2012
94. **Sihem Ait-Oudhia**, Robert M Straubinger, and Donald E Mager. Computational analysis of paclitaxel-induced tumor priming that leads to enhanced deposition and efficacy nanoparticulate doxorubicin . AACR meeting. McCormick Place, Chicago, IL. Poster # 23. March 31st-April 4th, 2012
95. **Sihem Ait-Oudhia**, Philip J. Lowe, Donald E.Mager. Bridging Clinical Outcomes to Canakinumab in Rheumatoid Arthritis Patients to a Population PK/PD Model Using IL-1 β Kinetics. AAPS annual meeting at Walter E. convention center, Washington DC. October 27th-31st, 2011.
96. **Sihem Ait-Oudhia**, Robert M Straubinger, and Donald E Mager. Clinical Impact of Paclitaxel Formulations on Neutropenia: A Pooled Pharmacokinetics Analysis of Four Paclitaxel Delivery Systems. Third annual postdocs' symposium. SUNY at Buffalo, NY. June 7th, 2011. **** 1st place award competition.**
97. **Ait-Oudhia Sihem**, Stacey Tannenbaum, Philip Lowe, and Mager DE. Population Pharmacokinetics Model of Canakinumab in Patients with Active Rheumatoid Arthritis . AAPS National Biotechnology Conference at Hilton San Francisco Union square, CA. Poster#3087. May 15th-18th, 2011
98. **Sihem Ait-Oudhia**, Robert M Straubinger, and Donald E Mager. Pooled Analysis of Four Paclitaxel Delivery Systems using a Unified Pharmacokinetic Model that Provides Insight into Formulation-Dependent Toxicity . American Conference on Pharmacometrics. Hotel Del Coronado, San Diego, CA. Poster#6. April 3rd-6th, 2011
99. **Sihem Ait-Oudhia**, Jean-Michel Scherrmann, Wojciech Krzyzanski. Target Mediated Disposition and Cell Lifespan to Describe Erythropoietin Pharmacokinetics and Pharmacodynamics in rats. Posters # 2088. FIP Pharmaceutical World Congress and AAPS annual meeting and exposition. New Orleans, Louisiana. November 12th-18th, 2010
100. **Sihem Ait-Oudhia**, An Vermeulen, Wojciech Krzyzanski. Non Linear Mixed Effect Modeling of the Non Stationary Disposition of Erythropoietin in Anemic Cancer Patients. Posters # 2089. FIP Pharmaceutical World Congress and AAPS annual meeting and exposition. New Orleans, Louisiana. November 12th-18th, 2010
101. **Sihem Ait-Oudhia**, Jean-Michel Scherrmann, Wojciech Krzyzanski. Time-Dependent Clearance and Hematological Pharmacodynamics upon Erythropoietin Multiple dosing in Rats. Posters # 2090. FIP Pharmaceutical World Congress and AAPS annual meeting and exposition. New Orleans, Louisiana. November 12th-18th, 2010
102. **Sihem Ait-Oudhia**, Jun Yang, Robert M. Straubinger, and Donald E. Mager. Meta-analysis of three paclitaxel delivery systems using a pharmacokinetic model and its associations with tolerability. Twelfth Buffalo Pharmaceutics Symposium. July 30th, 2010
103. **Sihem Ait-Oudhia**, Jean-Michel Scherrmann, Wojciech Krzyzanski. Target Mediated Disposition and Cell Lifespan To Describe Erythropoietin Pharmacokinetics and Pharmacodynamics Following Multiple Dosing in Rats. Pharmacology day. Center for the arts. SUNY at buffalo, NY. May 14th, 2010

104. **Sihem Ait-Oudhia** and Wojciech Krzyzanski. Comparison between Two Mechanisms for Time Dependent Clearance of Recombinant Human Erythropoietin after Multiple Dosing in Normal Rats. AAPS annual meeting and exposition. Los Angeles. November 8th-12th, 2009
105. **Sihem Ait-Oudhia** and Wojciech Krzyzanski. Pharmacokinetics and Pharmacodynamics Modeling of Recombinant Human Erythropoietin Following Multiple Dosing in healthy Rats. AAPS annual meeting and exposition. Los Angeles. November 8th-12th, 2009
106. **Sihem Ait-Oudhia**, An Vermeulen, Wojciech Krzyzanski. Comparison of Pharmacokinetics of Epoetin Alfa Following Multiple Subcutaneous Administrations in Healthy Volunteers and Anemic Cancer Patients. American Conference on Pharmacometrics at Foxwoods Resort, Mystic, Connecticut. October 4th-7th, 2009
107. **Sihem Ait-Oudhia** and Wojciech Krzyzanski. Simultaneous PK/PD modeling of recombinant human erythropoietin after multiple intravenous dosing in rats. Pharmaceutics Graduate Student Research Meeting (PGSRM) at Purdue University, Indianapolis. June 25th-27th, 2009.
108. **Sihem Ait-Oudhia** and Wojciech Krzyzanski. Comparison between two mechanisms for time dependent clearance of recombinant human erythropoietin (rHuEPO): Receptors down regulation or linear clearance attenuation? Fourth annual UB-Pfizer strategic alliance meeting at Groton, Connecticut. June 7th-10th, 2009
109. **Sihem Ait-Oudhia** and Wojciech Krzyzanski. Time dependent clearance of recombinant human erythropoietin (rHuEPO): Receptors down regulation or linear clearance attenuation? Pharmacology day. Ramada Inn, Getzville, New York, NY. May 15th, 2009
110. **Sihem Ait-Oudhia**, Wojciech Krzyzanski. Pharmacodynamic model of the tolerance effect on blood reticulocytes after multiple dosing of recombinant human erythropoietin in rats. AAPS annual meeting at Georgia World Congress Center. Atlanta, USA. Poster#1239. November 16-20th, 2008
111. Wojciech Krzyzanski, Pawel Wiczling, **Sihem Ait-Oudhia**, Xiaoyu Yan. Effect of treatment with rHuEPO on RBC survival in normal Wistar and anemic Belgrade rats. Workshop on Erythropoietin Receptor (EPOR) Expression and Function in Non-Hematopoietic Tissues. Bethesda, Maryland, July 8th-9th, 2009
112. **Sihem Ait-Oudhia**, Wojciech Krzyzanski. Recombinant Human Erythropoietin: Pharmacokinetics and pharmacodynamics of rHuEPO after repeated intravenous injections in normal Wistar rats. Fourth Annual Great Lakes Symposium. University of Toronto, Canada. July 18th-20th, 2008
113. **Sihem Ait-Oudhia**, Wojciech Krzyzanski. Recombinant human erythropoietin induces a tolerance effect on reticulocytes, hemoglobin and red blood cells after repeated intravenous injections in normal Wistar rats. The 37th ISEH annual scientific meeting featuring the 6th international neonatal hematology and immunology meeting in Boston, MA. July 9th-12th, 2008
114. **Sihem Ait-Oudhia**, Wojciech Krzyzanski. Pharmacokinetics and pharmacodynamics of recombinant human erythropoietin after repeated intravenous injections in normal Wistar rats. The 40th annual Pharmaceutics Graduate Student Research Meeting (PGSRM). Ann Arbor, MI. Poster#PS-13. June 26th-28th, 2008
115. Pawel Wiczling, **Sihem Ait-Oudhia**, Wojciech Krzyzanski. Assessment of effects of recombinant human erythropoietin on reticulocyte dynamics in rats using flow cytometry. AAPS National Biotechnology Conference meeting. Convention Center. Toronto, Canada. Poster#670. June 22nd-25th, 2008
116. **Sihem Ait-Oudhia**, Pawel Wiczling, Wojciech Krzyzanski. Distribution and quantification of hematopoietic cells in bone marrow, spleen, liver and blood in Wistar rats under homeostasis. Pfizer strategic alliance meeting at Groton, Connecticut. Poster # 05. June 9th-12th, 2008
117. Xiaoyu Yan, **Sihem Ait-Oudhia**, Juan Jose Perez-Ruixo, Wojciech Krzyzanski. Comparison of Basic Indirect Pharmacodynamic Responses Models and Lifespan Indirect Pharmacodynamic Response Models. AAPS annual meeting at San Diego Convention Center. San Diego, CA. Poster#1164. November 11-15th, 2007

ORAL PRESENTATIONS

▪ Invited Speaker:

1. Therapeutic Area Case Study: QSP in Immuno-oncology. **Short Course lecture: State of the Art PKPD and QSP Modeling.** 12th International ISSX Meeting, July 28th, 2019
2. Combining Experimental and Computational Systems Pharmacological Approaches to Dissect Anti-Cancer Drugs Effects and Associated Toxicities. **Seminar.** 3rd UF Drug Discovery Symposium. Gainesville, FL. May 3rd, 2019.
3. Nonlinear Mixed Effect Modeling Using Monolix. **Workshop leader/Instructor.** Rutgers Ernest Mario School of Pharmacy. New Jersey, USA. Dec 3, 2018 - Dec 6, 2018.
4. Utility of a novel three dimensional and dynamic (3DD) cell culture system to profile the efficacy and safety of oncology drugs: A multiscale systems pharmaco-toxicological approach. **Seminar.** Rutgers Ernest Mario School of Pharmacy. New Jersey, USA. Dec 6, 2018.
5. Case Studies in Systems Pharmacology & Pharmacometrics: Improving Drug Delivery and Translational Research in Oncology. **Seminar.** Roswell Park Cancer Institute, Buffalo, NY. Nov 7th, 2017.
6. Opportunities and Challenges of a Career in Academia. **Seminar.** Joint meeting for Industry Pharmacy Organization (IPHO) and Student Personalized Medicine Coalition (sPMC). Orlando, FL. Oct 15th, 2017.
7. Application of translational systems pharmacology and pharmacometrics to cancer therapy. **Seminar.** Eshelman School of Pharmacy, University of North Carolina. Oct 5th, 2017.
8. Confounders of Drug Accumulation and Elimination in Pharmacokinetics. **Seminar.** 16th USDA annual meeting, Orlando, FL. Sep 29th, 2017.
9. Advances, challenges and future of translational systems pharmacology in cancer immunotherapy. **Symposium.** Immuno-Oncology Summit 2017. August 28-Sept 1st in Boston.
10. Improving the delivery of biologics to solid tumors with a bottom-up, multi-scale, systems pharmacological analysis of sequence combinations. **Seminar.** University of Pharmacy at Montreal. Montreal. Apr 11th, 2017.
11. Development and evaluation of a tri-functional lipid nanoparticles for treatment of HER2-Positive breast cancer refractory to HER2 therapy. **Lecture.** 15th World Congress on Cancer Therapy, Biomarkers & Clinical Research. San Francisco, California. Dec 5th, 2016.
12. Immunotherapy with Novel Tri-Functional Lipid Nanoparticles to Overcome Resistance to HER2 Therapy in Breast Cancer. **Lecture.** 14th Annual Conference on Translational Medicine and Oncologists Meet. San Francisco, California, USA. Nov 28th, 2016.
13. My Career in Academia. Student Personalized Medicine Coalition. College of Pharmacy. **Lecture.** University of Florida. October 15th, 2016.
14. Mechanisms of Hematological Toxicity of Antibody Drug Conjugates: Role of Drug-load. **Lecture.** 6th International conference on Hematology. October 3rd, 2016. Orlando. Florida.
15. Novel tri-functional lipid nanoparticles for immunotherapy of resistant HER2-positive breast cancer. **Symposium.** International conference & expo on Biopharmaceutics and Biologic Drugs. San Antonio. September 15th, 2016.
16. Improving Drug Delivery into Solid Tumors with Systems Pharmacology. **eSeminar.** QSP group at Glaxo Smith Klein. July 14, 2016.
17. Application of *In Vitro* Dynamic System in Cancer Therapy. **eSeminar.** QSP group at Roche. Host Antje Waltz. June 10, 2016.
18. The Evolving Role of Biomarkers in Quantitative Systems Pharmacology. **Lecture.** Biomarkers & Diagnostics World Congress 2016. Philadelphia, PA. May 18, 2016.
19. Proteomics Approaches for Identification & Validation of Predictive Biomarkers Applied to Translational Systems Pharmacology in Oncology. **Symposium.** 6th International Conference & Exposition on Proteomics. Atlanta, Georgia. Mar 29, 2016. **S**
20. Proteomics Approach for In Vitro Proof of Mechanism of Action of Trastuzumab in a Time Sequence Association

- with Paclitaxel in HER2-positive Breast Cancer. **Lecture.** 6th International Conference and Expo on Proteomics. Mar 28, 2016.
21. Case studies in systems pharmacology: Improving drug delivery and translational research. **Seminar.** Lake Nona Leadership Council Research Symposium, Orlando, FL. February 24th, 2016.
 22. Model-based Identification of Predictors for Safety and Efficacy in Oncology. **Lecture.** Burnett School of Medicine. University of Central Florida (UCF). Host: Dr. Griff Parks. October 23rd, 2015.
 23. Bridging PK/PD Relationships with Biomarker Modeling. **Lecture.** University of Florida, School of Pharmacy at Gainesville, Florida, FL. May 22nd, 2015.
 24. Models of Hematopoietic Systems. **Course.** Annual Buffalo PKPD workshop at the Niagara Falls Convention Center. June 12th, 2015.
 25. Bridging PK/PD Relationships with Biomarker Modeling". University of Florida. **Lecture.** The center for Pharmacometrics and Systems Pharmacology at Lake Nona, Orlando, Florida, FL. April 23rd, 2015.
 26. Bridging PK/PD Relationships with Biomarker Modeling. **Lecture.** University of North Carolina, School of Pharmacy at Chapel Hill. North Carolina, NC. April 6th, 2015.
 27. Model-based Identification of Predictors for Safety and Efficacy in Rheumatology and Oncology. **Lecture.** Children Hospital of Philadelphia, UPENN, Philadelphia, PA. February 17th, 2015.
 28. Model-based Identification of Predictors for Safety and Efficacy in Oncology. **Lecture.** Washington State University at Spokane. Washington, WA. January 24th, 2015.
 29. Model-based Identification of Predictors for Safety and Efficacy in Oncology. **Lecture.** Department of Pharmaceutical Sciences at the university at Buffalo, NY. September 24th, 2014.
 30. Bridging PK/PD Relationships with Biomarker Modeling in Oncology. **Lecture.** Pharmacology day at Montreal University, Montreal, Canada. August 18th, 2014.
 31. In Vivo Mechanisms of Drug-load Release for Antibody Drug Conjugates and Their Relationships To Drug-related Toxicity: Application to T-DM1 and SGN-35 Induced Thrombocytopenia and Neutropenia. **Seminar.** Annual meeting of the Center for protein Therapeutics, Buffalo, NY. July 31st, 2014.
 32. Bridging Sunitinib Exposure and Time-to-tumor Progression in Hepatocellular Carcinoma Patients by Mathematical Modeling of an Angiogenic Biomarker. **Lecture.** American Society of Pharmacology and Experimental Therapeutics(ASPET)-Upstate New York Pharmacology Society. May 19th, 2014.
 33. Models of Hematopoietic Systems. **Course.** Annual Buffalo PKPD workshop at the Niagara Falls Convention Center. June 12th, 2014.
- **Presentations during postdoctoral and PhD trainings:**
 1. PKPD model for canakinumab pharmacokinetics, IL-1b capture and responses in the CRP inflammatory biomarker and rheumatoid arthritis ACR scores. Seminar for a collaborative work between the University at Buffalo and Novartis Pharmaceutical Corporation. May 26th, 2011
 2. PhD thesis defense: "Pharmacokinetic/Pharmacodynamic modeling of recombinant human erythropoietin: preclinical study in healthy rats and clinical study in anemic cancer patients". Thesis advisor: Jean Michel Scherrmann, Pharm. D., Ph. D. June 2nd, 2010
 3. Simultaneous PK/PD modeling of recombinant human erythropoietin upon multiple intravenous dosing in normal rats. Department seminar at SUNY at Buffalo, NY. January 7th, 2010
 4. Simultaneous PK/PD modeling of recombinant human erythropoietin after multiple intravenous dosing in rats. Pharmaceutics Graduate Student Research Meeting at Purdue University, Indianapolis, IN. June 25th-27th, 2009.
 5. Comparison between two mechanisms for time dependent clearance of recombinant human erythropoietin (rHuEPO): Receptors down regulation or linear clearance attenuation? Pharmacology day. Ramada Inn, Getzville, New York, NY, USA. May 15th, 2009
 6. Population pharmacokinetic modeling of recombinant human erythropoietin (rHuEPO): Comparison between two phase I studies in healthy volunteers and anemic cancer patients. Department seminar at SUNY at buffalo, NY. April 9th, 2009

7. Recombinant Human Erythropoietin (rHuEPO): Physiology, pharmacokinetics and pharmacodynamics. Amgen PK/PD and drug metabolism symposia. October 2nd, 2008
8. Pharm.D thesis. Title: "A big Pharma survey on 101 compounds: A retrospective analysis for the determination of the maximal tolerated dose and the top dose in healthy volunteers during early phase I in clinical trials." December 1st, 2006

INSTRUCTIONAL EXPERIENCES

1. NONMEM using KIWI. Center for Pharmacometrics & Systems Pharmacology, Orlando, FL. Instructor: Jill Fiedler-Kelly, 2018.
2. Monolix for PK/PD mechanistic modeling. Center for Pharmacometrics & Systems Pharmacology, Orlando, FL. Instructor: Marc Lavielle. October, 2017.
3. Simcyp workshop on PBPK. Lake Nona, Orlando, FL. November 30th- Dec 1st, 2016.
4. 3rd Annual SECIM Metabolomics Symposium workshop at Sanford Burnheim for Cancer Research. Lake Nona, Orlando, Florida. May 3-4th, 2016
5. Proteomics workshop at ICBR. Gainesville, Florida. April 28-29th, 2016.
6. PK Sim workshop at the Center for Pharmacometrics and Systems Pharmacology at Lake Nona, Orlando, FL. October 29th-30th, 2015
7. GastroPlus workshop at Cognigen corp and Simulation Plus. Buffalo, NY. September 29th-30th, 2014
8. Grant Writing Workshop at AACR annual meeting, Chicago, Illinois. March 31st, 2012
9. Matlab Simbiology for Pharmacokinetics and Mechanistic Modeling. SUNY at Buffalo. March 22nd-23rd, 2011
10. R for Pharmacometrics. Sponsor: Mango Solutions. ISoP. April 2nd-3rd, 2011
11. Effective Graphics for PKPD Analysis using R. Mango Solutions. ISoP. April 2nd-3rd, 2011
12. ADAPT5 software application for population PK/PD analysis. SUNY at Buffalo, NY. April 8th, 2010
13. SymCyp software. "Prediction of Drug Kinetics in Humans from In Vitro Data". SUNY at Buffalo. Instructor: Dr. Amin Rostami-Hodjegan, Ph.D. April 1st-3rd, 2010
14. S-ADAPT software with NM-TRAN for population PK/PD analysis. Ordway Research Institute, Albany, NY, USA. Instructors: Dr. Jurgen Bulitta and Dr. Cornelia Landersdorfer March 5th-10th, 2010
15. Pharsight Phoenix WinNonlin Transitioning to WinNonlin v.6 Training. SUNY at Buffalo, NY. Instructor: Dr. Daniel Weiner. February 1st, 2010
16. Monolix software for population PK/PD analysis. SUNY at Buffalo, NY. Instructors : Dr. France Mentré, Ph.D. and DR. Marc Lavielle. March 23rd-24th, 2009
17. Workshop on "R" language implemented in population PK/PD analysis. SUNY at Buffalo, NY. Instructor: Dr. Jeff Wald. January 22nd-23rd, 2009
18. Molecular Genetic Methodologies for Pharmaceutical Sciences. SUNY at Buffalo, NY. Instructor: Dr. Daniel Brazeau. August 4th-8th, 2008
19. acslX. Mathematical modeling and simulation model. SUNY at Buffalo, NY. May 13th-15th, 2008
20. Clinical Trial Simulation. SUNY at Buffalo, NY. Instructor: Dr. Jeff Wald. May 24th-25th, 2007

PUBLICATIONS

▪ Book Chapters:

1. **Sihem Ait-Oudhia**, Yi Ting (Kayla) Lien, Sumit Basu, Lawrence Lesko, Stephan Schmidt. Application of Pharmacometrics and Systems Pharmacology to Current and Emerging Biologics in Inflammatory Bowel Diseases. [Accepted for publication]. Editors: Diane Mould and Honghui Zhou.

▪ Peer-Reviewed Research Articles :

1. Wenningmann N, Knapp M, Ande A, Vaidya TR, **Ait-Oudhia S**. [Insights into Doxorubicin-induced Cardiotoxicity: Molecular Mechanisms, Preventive Strategies, and Early Monitoring](#). Mol Pharmacol. 2019 Jun 4;. doi: 10.1124/mol.119.115725. [Epub ahead of print] PubMed PMID: 31164387.
2. Vaidya TR, Ande A, **Ait-Oudhia S**. [Combining Multiscale Experimental and Computational Systems Pharmacological Approaches to Overcome Resistance to HER2-targeted Therapy in Breast Cancer](#). J Pharmacol Exp Ther. 2019 Jun;369(3):531-545. doi: 10.1124/jpet.118.255752. Epub 2019 Mar 21. PubMed PMID: 30898866.
3. Kim S, Sharma VD, Lingineni K, Farhan N, Fang L, Zhao L, Brown JD, Cristofolletti R, Vozmediano V, **Ait-Oudhia S**, Lesko LJ, Trame MN, Schmidt S. [Evaluating the Clinical Impact of Formulation Variability: A Metoprolol Extended-Release Case Study](#). J Clin Pharmacol. 2019 May 14;. doi: 10.1002/jcph.1433. [Epub ahead of print] PubMed PMID: 31087554.
4. Chaar M, Kamta J, **Ait-Oudhia S**. [Mechanisms, monitoring, and management of tyrosine kinase inhibitors-associated cardiovascular toxicities](#). Onco Targets Ther. 2018;11:6227-6237. doi: 10.2147/OTT.S170138. eCollection 2018. Review. PubMed PMID: 30288058; PubMed Central PMCID: PMC6163027.
5. Franco YL, Vaidya TR, **Ait-Oudhia S**. [Anticancer and cardio-protective effects of liposomal doxorubicin in the treatment of breast cancer](#). Breast Cancer (Dove Med Press). 2018;10:131-141. doi: 10.2147/BCTT.S170239. eCollection 2018. Review. PubMed PMID: 30237735; PubMed Central PMCID: PMC6138971.
6. Ande A, Chaar M, **Ait-Oudhia S**. [Multiscale systems pharmacological analysis of everolimus action in hepatocellular carcinoma](#). J Pharmacokinet Pharmacodyn. 2018 Aug;45(4):607-620. doi: 10.1007/s10928-018-9590-0. Epub 2018 May 3. PubMed PMID: 29725796.
7. Vaidya T, Kamta J, Chaar M, Ande A, **Ait-Oudhia S**. [Systems pharmacological analysis of mitochondrial cardiotoxicity induced by selected tyrosine kinase inhibitors](#). J Pharmacokinet Pharmacodyn. 2018 Jun;45(3):401-418. doi: 10.1007/s10928-018-9578-9. Epub 2018 Feb 14. PubMed PMID: 29446053.
8. Ande A, Vaidya TR, Tran BN, Vicchiarelli M, Brown AN, **Ait-Oudhia S**. [Utility of a Novel Three-Dimensional and Dynamic \(3DD\) Cell Culture System for PK/PD Studies: Evaluation of a Triple Combination Therapy at Overcoming Anti-HER2 Treatment Resistance in Breast Cancer](#). Front Pharmacol. 2018;9:403. doi: 10.3389/fphar.2018.00403. eCollection 2018. PubMed PMID: 29765318; PubMed Central PMCID: PMC5938355.
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