Karen Smith, BSPharm, MS, PhD
Associate Professor, School of Pharmacy
Regis University
3333 Regis Boulevard
Denver, Colorado

Contact Information:
Email: ksmith003@regis.edu

EDUCATION

Post Doctoral Fellow
Sponsors: Arizona Health Care Cost Containment System (AZ Medicaid) ; Center for Health Outcomes and PharmacoEconomic Research (HOPE)

Doctor of Philosophy
Pharmaceutical Sciences
Pharmaceutical Economics, Policy, and Outcomes Research
The University of Arizona College of Pharmacy, Tucson, AZ

Master of Science
Department of Pharmacy
Pharmaceutical Outcomes Research and Policy Program
University of Washington School of Pharmacy

Bachelor of Science
Pharmacy Practice
University of Montana School of Pharmacy

PROFESSIONAL LICENSURE

Registered Pharmacist

PROFESSIONAL EXPERIENCE

8/2020 - present   **Professor, Regis University RHCHP School of Pharmacy**
Department of Pharmacy Practice, Regis University
Social and Administrative Sciences

8/2015 – 7/2020   **Associate Professor, Regis University RHCHP School of Pharmacy**
Department of Pharmacy Practice, Regis University
Social and Administrative Sciences

8/2011-7/2015   **Assistant Professor, Regis University RHCHP School of Pharmacy**
Department of Pharmacy Practice, Regis University
Social and Administrative Sciences

HONORS/AWARDS

Phi Lambda Sigma, Pharmacy Leadership Society
Nominee, Best Teacher Award, Second Year Pharmacy Students
Rho Chi, Academic Honor Society in Pharmacy

SELECTED REFEREED PUBLICATIONS

1. Golder S, **Smith K**, O'Connor K, Gross R, Hennessy S, Gonzalez-Hernandez G. A Comparative View of Reported Adverse Effects of Statins in Social Media, Regulatory Data, Drug Information Databases and Systematic Reviews. Drug Saf (2020) Oct 1. Online ahead of print. DOI: 10.1007/s40264-020-00998-1

2. Relationship between Patient Characteristics and Number of Phone Calls to Complete a Telehealth Comprehensive Medication Review: A Cross-sectional Analysis. Silva-Almodovar A, **Smith K**, Nahata M. JAmPharmAssoc June 26, 2020. DOI:https://doi.org/10.1016/j.japh.2020.06.019

3. **Smith K**, Golder S, Sarker A, Loke Y, O'Connor K, Gonzalez-Hernandez G. Methods to Compare Adverse Events in Twitter to FAERS, Drug Information Databases, and Systematic Reviews: Proof of Concept with Adalimumab. Drug Saf (2018) 41: 1397. https://doi.org/10.1007/s40264-018-0707-6

4. Duncan R, **Smith K**, Maguire M, Stadler III D. Alternatives To Opioids For Pain Management In The Emergency Department Decreases Opioid Usage And Maintains Patient Satisfaction. Am J Emerg Med. 2018 Apr 22. pii: S0735-6757(18)30325-5. doi: 10.1016/j.ajem.2018.04.043.

5. **Smith K**, Sarker A, Nikfarjam A, Malone D, Gonzales-Hernandez G. Mining Adverse Events In Twitter: Experiences Of Adalimumab Users. Value in Health 2017; 20: 5(A51). ISSN 1098-3015

6. Sarker A, O'Connor K, Ginn R, Scotch M, **Smith K**, Malone D, Gonzalez G. Social Media Mining for Toxicovigilance: Automatic Monitoring of Prescription Medication Abuse from Twitter. Drug Saf. 2016 Jan 9.

7. Paul MJ, Sarker A, Brownstein JS, Nikfarjam A, Scotch M, **Smith KL**, Gonzalez G. Social Media Mining for Public Heath Monitoring and Surveillance. Pacific Symposium on Biocomputing 21, 468-479. Jan. 2016

8. Sarker A, Ginn R, Nikfarjam A, O'Connor K, **Smith K**, Jayaraman S, Upadhaya T, Gonzalez G. Utilizing social media data for pharmacovigilance: A review. **Journal of Biomedical Informatics**, Volume 54, April 2015, 202-212.

9. Delate D, Rader N, Rawlings J, Smith K, Herner S. Clinical Outcomes of Continuation of Metformin Titration Instructions with Electronic Prescribing. Drugs-Real World Outcomes, 2015, 2:187-192. DOI 10.1007/s40801-015-0027-4

10. Ginn R, Pimpalkhute P, Nikfarjam A, Patki A, O'Connor K, Sarker A, **Smith K**, Gonzales G. Mining Twitter for adverse drug reaction mentions: a corpus and classification benchmark. In: Proceedings of the fourth workshop on building and evaluating resources for health and biomedical text processing; 2014. Link: http://www.nactem.ac.uk/biotxtm2014/papers/Ginnetal.pdf

11. Patki A, Sarker A, Pimpalkhute P, Nikfarjam A, Ginn R, O'Connor K, **Smith K**, Gonzales G. Mining adverse drug reaction signals from social media: going beyond extraction. In: Proceedings of BioLinkSig 2014; 2014. Link: http://phenoday2014.bio-lark.org/pdf/2.pdf

12. Sullivan P, **Smith K**, Globe G, Ghushchyan V, Shao-Lee L, Globe D. Asthma in the United States: Its Impact on Health-related Quality of Life. Journal of Asthma 10/2013; 50(8) 891-9.

13. Warholak TL, **Smith KL**, Legner D, Rupp MT, Lee JK. Features of Electronic Prescribing Software: A Pilot Study of Importance and Satisfaction in Ambulatory Care. AZ Journal of Pharmacy, 4(1) 15-20, 2012.

14. **Smith KL**, Warholak TL, Armstrong EP, Leib M, Rehfeld RA, Malone DC. Association of Risk Factors and Health Outcomes among Persons with Asthma. Journal of Asthma, 2009, vol. 46(3) p. 234-7.

SELECT REFEREED PRESENTATIONS

1. Nu P, **Smith K**, EHall, Lim M, Quraishy A, Chua R. Comparative Opioid Use After Open Versus Minimally Invasive Spinal Surgery. American College of Clinical Pharmacy Virtual Poster Symposium May 26, 2020

2. Lim K, R Alajeed, **Smith K**, Hall E, Quairishi A, Calkins, L.**:** Comparative Opioid Use After Open Versus Minimally Invasive Spine Surgery. Western States Conference for Pharmacy Residents, Fellows and Preceptors, Podium Presentation and Abstract. May 20, 2019

3. Heinrich A, Dagen K, **Smith K**, Goldwire M. Cross sectional study of pharmacy awareness and preparedness for adverse drug reaction reporting to MedWatch. Poster presented at: 2019 American Society for Health-System Pharmacists; Dec 9, 2019; Las Vegas, NV.

4. Golder S, **Smith K**, Loke YK, Abeed S, Gonzalez-Hernandez G, Comparing Adverse Events Data from Systematic Reviews and Consumer Social Media Posts. 25th Cochrane Colloquium. Edinburgh: Scotland. 16-18 September 2018

5. Lilley J, **Smith K**, Delate T, Herner S. Management of Contraindicated Drug-Drug Interactions in the Ambulatory Care Setting. Pharmacy Services. Mountain States Conference, Abstract 1159, May 11, 2018

6. Liang E, Calkins L, **Smith K**, Nguyen P. Impact of Mandating Antibiotic Indication Upon Order Entry. Western States Conference for Pharmacy Residents, Fellows and Preceptors 2018, Podium Presentation and Abstract.

7. **Smith K**, Sarker A, Malone D, Gonzales G. Mining Adverse Events in Twitter: Experiences of Adalimumab Users. International Society of Pharmacoeconomics and Outcomes Research 22nd International Meeting, May 20-24, 2017

8. Ronis K, DiCesare N, **Smith K**, Lalama J. Evaluation of a fixed enoxaparin dosing protocol for venous thromboembolism prophylaxis in morbidly obese patients. American Society of Health System Pharmacists 2017 Midyear Clinical Meeting, 12/5/2017.

9. Wackernah R, **Smith K**, Lo J, Milhorn L. Effectiveness of Tobacco Cessation Classes in Adult Psychiatric Patients. Rocky Mountain Interprofessional Research & Evidence Based Symposium, 28th Annual Meeting, 4/15/2016.

10. Kurita A, Quraishy A, Salek F, **Smith K**, Hall E. An Evaluation Of Pharmacist Interventions On Inappropriate Acid Suppressive Therapy And Their Impact On Clostridum Difficile Infections. Western States Conference for Pharmacy Residents, Fellows and Preceptors 2016.

11. Goldwire MA, **Smith K**, Haight R, McCollum M. Impact of high and low-ranking team-members on individual-scores in a team-based learning integrated literature evaluation (ILE) course. Poster presented at: 2015 American Association of Colleges of Pharmacy Annual Meeting; Jul 13, 2015; National Harbor, MD.

12. Goldwire MA, **Smith K**, McCollum M. Relationship between intra-semester quizzes and cumulative exam score in a team-based learning literature evaluation course. Poster presented at: 2015 American Association of Colleges of Pharmacy Annual Meeting; Jul 13, 2015; National Harbor, MD.

SELECT GRANT ACTIVITY

1. Social Media Mining for Pharmacovigilance. National Institutes of Health, 2 R01 LM011176-06A1, 9/01/2018-8/31/2020, G Gonzales (PI), University of Pennsylvania Perleman School of Medicine, Institute for Bioinformatics.
   Role: Co-Investigator

2. Mining Social Network Postings for Mentions of Potential Adverse Drug Reactions. National Institutes of Health, National Library of Medicine, 1 R01 LM011176-01, 09/10/2012-08/31/2016. G Gonzales (PI), Arizona State University Biomedical Informatics.
   Role: Co-Investigator