

WORLD HEALTH ORGANIZATION COLLABORATING CENTRE

*GOVERNANCE, ACCOUNTABILITY & TRANSPARENCY
IN THE PHARMACEUTICAL SECTOR*

Annual Report
October 2019 -October 2020

Dr. Jillian C. Kohler
Director

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WHO WE ARE

This WHO CC involves the following multidisciplinary team of directors, faculty members, and research fellows:

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Director's Note:

I am delighted to present the Annual Report of 2019- 2020 for the World Health Organization Collaborating Centre (WHO CC) for Governance, Accountability, and Transparency in the Pharmaceutical Sector. This Report highlights the many excellent articles, seminar and other knowledge-based activities the WHO CC Fellows have undertaken during the past year.

The WHO CC was established in 2015 at the Leslie Dan Faculty of Pharmacy and assembles leading governance and related experts who are undertaking critical research and policy work on issues related to accountability, transparency and governance in the pharmaceutical sector on the global problem of corruption. The objectives of the WHO CC are:

- To use existing research facilities at the University of Toronto for research, policy analysis and training on issues related to the pharmaceutical component of health systems anti-corruption, transparency, and accountability (ACTA) in collaboration with WHO.
- To support the global dissemination of knowledge on issues related to the pharmaceutical component of health systems ACTA.
- To support collaboration and help intensify work the work of the WHO in relation to the pharmaceutical component of health systems ACTA.

Since the start of the COVID-19 pandemic, a number of the planned activities of the WHO CC have had to pivot. We have remained resilient and active by hosting webinars, research seminars, and workshops online and continue to reconfigure our upcoming events. The COVID-19 pandemic has illuminated the importance of addressing accountability and transparency issues in the pharmaceutical sector in order to reduce corruption risks. This is imperative if we hope to ensure access of the global population to essential medicines.

The WHO CC team is committed to finding more innovative ways to navigate and adapt to our new circumstances in order to ensure that our research, educational and knowledge products remain as relevant and accessible as always in our efforts to promote equitable access of the global population to essential medicines.

Sincerely,

Jillian C Kohler

Dr. Jillian C. Kohler, Director
WHO Collaborating Center for Governance, Accountability and
Transparency in the Pharmaceutical Sector

Professor, Leslie Dan Faculty of Pharmacy, University of Toronto

Workshops & Seminars

June 2, 2020

Online Seminar: **Coronavirus and the Corruption Outbreak**

Presenter: **Sarah Steingrüber**

Details: Sarah is an independent global health consultant based in Berlin, Germany, who works on anticorruption, transparency and accountability; access to medicines; global health supply chain, and private sector collective action. She has worked with the World Health Organisation, the World Bank, GIZ and the U4 Anti-Corruption Resource Centre, among others. She was previously the Programme Manager of the Transparency International Health Initiative in London, United Kingdom. Originally from Canada, Sarah has a Specialised Honours BA in Health Sciences from York University in Toronto and studied at Charité-Universitätsmedizin Berlin, LSHTM and at Uppsala Universitet in Sweden for her Master of Science in International Health and Diploma in International Public Health.

October 22, 2020

Online Workshop: **Accountability and Transparency in Opioid Access and Use in the Context of COVID-19: A Multi-Stakeholder Webinar Series. Session 1: Accountability, Transparency, Criminality, and Policy: A Case Study**

Presenter: **Tim Mackey**

Details: Tim K. Mackey, MAS, PhD, is a current fellow at the University of Toronto's World Health Organization Collaborating Centre for Governance, Accountability, and Transparency in the Pharmaceutical Sector. He is also an Associate Professor at UC San Diego, the Director of Healthcare Research and Policy at UC San Diego—Extension, and the Director of the Global Health Policy and Data Institute. Outside of academic work, he is the CEO and co-founder of the National Institutes of Health funded technology start-up S-3 Research LLC. His work on online opioid diversion and COVID19 fraudulent products has been covered by Vox/Recode, the Wall Street Journal, Politico PRO, CNN, and others.

Webinars

April 28, 2020

Webinar: **Tackling Corruption in Healthcare Procurement**

Presenters: **Jillian Clare Kohler**, Kayumba Claver, and Stany Banzimana

Details: Jillian Clare Kohler, PhD, presented at an online webinar with the University of Rwanda, Regional Centre of Excellence for Vaccines, Immunisation and Health Supply Chain Management on

governance and pharmaceutical procurement, as part of a request from the University of Rwanda and the EAC Regional Centre of Excellence for Vaccines, Immunization and Health Supply Chain Management. Participant countries: Rwanda, South Sudan and Nigeria

April 21, 2020

Webinar: Introducing Anti-Corruption, Accountability, and Transparency (ACTA) Measures in the Pharmaceutical and Health Systems

Presenters: **Jillian Clare Kohler**, Kayumba Claver, and Stany Banzimana

Details: Jillian Clare Kohler, PhD, presented at an online webinar with University of Rwanda, Regional Centre of Excellence for Vaccines, Immunisation and Health Supply Chain Management.

October 1, 2020

Webinar: WHO CC Introduction Research Group for the Connaught Global Challenge

Presenter: **Quinn Grundy**

Details: Dr. Quinn Grundy presented her work on approaches to analysis for conflict of interest policies in the pharmaceutical sector. In collaboration with the WHO South-East Asia Region Office, Dr. Grundy will undertake a review of public sector, pharmaceutical committee conflict of interest policies, a key aim of which is to evaluate these policies in terms of their comprehensive and effectiveness. She discussed the benefits and challenges of adapting this framework to policies originating in the public sector in lower- and middle-income countries and whether alternatives exist.

Presentations, Lectures, Panels & Interviews

2019

American Public Health Association Annual Meeting

Lexchin, Joel –on conflict of interest and the quality of clinical practice guidelines. Philadelphia. [Peer reviewed].

2019

American Public Health Association Annual Meeting

Lexchin, Joel on data exclusivity, CUSMA and spending on biologics in Canada. Philadelphia. [Peer reviewed].

2019

American Public Health Association Annual Meeting

Lexchin, Joel on health Canada committees and panels and declarations of interest. Philadelphia. [Peer reviewed].

October 1, 2019

Canadian Conference on Global Health

Marcia Mclean, **Kohler, Jillian Clare** and Danny Edwards: Assessing National Governance of Medicine Promotion-- An Exploratory Study in Ghana. Ottawa, Ontario.

October 3, 2019

The Global Public Health HIV & Substance Use Research Seminar

Mackey, Tim. Finding a Needle in a Haystack? Using Historical Twitter Data to Characterize the 2015 Indiana HIV Outbreak. UC San Diego, Division of Infectious Disease and Global Public Health, San Diego, CA.

October 9, 2019

Public Safety Canada Fall 2019 Law Enforcement Roundtable on Illicit Drugs

Mackey, Tim. Plenary Session – Technology for Illicit Drugs. Winnipeg, Manitoba.

October 17, 2019

Opening plenary of Canadian Society for International Health Conference

“Human rights and universal health coverage,” with **Forman, Lisa**. Ottawa, Ontario.

October 18, 2019

Canadian Conference on Global Health

Kohler, Jillian Clare: How Corruption can undercut Universal Health Coverage. Ottawa, Ontario.

October 20, 2019

Canadian Conference on Global Health

Nicolas Morotz, Marvin Zhang and **Kohler, Jillian Clare**: An Assessment of the National Governance of Medicines Promotion in Brazil. Ottawa, Ontario.

November 9, 2019

Canadian Association for Food Law and Policy Conference: From Microbes to Multinationals: The Many Scales of Food Law and Policy

Di Ruggiero, Erica, Thacker, P., **Lemmens, Trudo**. (co-panelists). Public-Private Partnerships in the context of non-communicable disease prevention as part of “Negotiating Conflicts of Interests in Food: Controversies and Corporate Capture” Panel. Toronto, Canada

December 3, 2019

USPTO Combating the Proliferation of Unregistered, Unlicensed and Counterfeit Health and Safety Regulated Products

Mackey, Tim. Detecting Illegal Sales of Counterfeit Drugs on Various Social Media Platforms: Case Study. Alexandria, VA.

January 4, 2020

American Economic Association – Allied Social Science Associations Annual Meeting

Mackey, Tim. Iran Sanctions, Access to Medicines and the JCOPA. Panel Session: The Hidden Costs of War and Sanctions. San Diego, CA.

January 21, 2020

Dalla Lana School of Public Health - Collaborative Program in Global Health.

Kohler, Jillian Clare: Corruption and the Health Sector. Toronto, Ontario.

February 1, 2020

Prince Mahidol Conference

Di Ruggiero, Erica. (panelist) “Perspectives on how international agencies monitor and evaluate their allocated resources and assess accountability” during Assessing Health Interventions for a Fair, Efficient, and Sustainable UHC Parallel Session. Bangkok, Thailand.

February 21, 2020

Presentation for Critical Psychiatry Conference (Second Edition)

Gagon, Marc-Andre: "Comprendre l'économie politique fantôme dans le secteur pharmaceutique." Douglass Mental Health University Institute, Verdun. Montreal, Quebec.

March 26, 2020

San Diego Supercomputer Center Webinar

Mackey, Tim. Leveraging Big Data, Machine Learning, and Data Visualization to Address the COVID-19 Pandemic. San Diego, CA, [video].

March 26, 2020

Lecture in graduate course in health law with Professor Martha Jackman

Gagon, Marc-Andre: "Réduire le coût des médicaments en adoptant un régime public entièrement financé par l'État." University of Ottawa. Ottawa, Ontario.

March 2020

Therapeutics Centre Weekly Seminar

Lexchin, Joel on Expedited Drug Approval Programs in Canada: How Useful Are They? St. Vincent's Hospital. Sydney, Australia.

April 6, 2020

Kickback—the Global Anticorruption Podcast

Vian, Taryn on corruption risks in the health sector and distrust in science in times of COVID-19.

<https://www.icrnetwork.org/what-we-do/kickback-global-anticorruption-podcast/>

April 7, 2020

Podcast: Interview/Podcast for the Radio Show "Ca s'explique"

Gagon, Marc-Andre: « Coronavirus: Encadrer la course aux traitements ». Radio-Canada: <https://ici.radio-canada.ca/premiere/balados/6108/ca-sexplique-balado-info-alexis-de-lancer/episodes>

April 15, 2020

DLSPH Centre for Global Health

Human rights and COVID-19 Webinar on “Equity, Rights and Global Health during COVID-19,” with **Forman, Lisa**. Toronto, Ontario.

April 15, 2020

Massey Dialogues

McGahan, Anita: A New Strategy for Global Health. Available at

<https://www.youtube.com/watch?v=WKrbpYxNldY>

April 20, 2020

TVO

McGahan, Anita interview with Steve Paikin, “What will workplaces look like in a brave new post-pandemic world?,” available at <https://www.tvo.org/article/what-will-workplaces-look-like-in-a-brave-new-post-pandemic-world>

April 29, 2020

CTV News

McGahan, Anita with Bev Thompson: Interview on Reopening the Economy. Available at:

<https://www.ctvnews.ca/video?clipId=1948947>

May 2020

Continuing professional development

Lexchin, Joel on conflict of interest in the Canadian healthcare system Faculty of Medicine, Dalhousie University

May 2020

Health Action International Virtual Café

Lexchin, Joel on longer patent life in Canada for pharmaceuticals. Online.

May 8, 2020

Munk School of Global Affairs & Public Policy Panel

McGahan, Anita: “COVID-19 and the World’s Grand Challenges,” with Anna Maria Tremonti, Joe Wong, Karlee Silver at <https://munkschool.utoronto.ca/event/29587/>

May 26-29, 2020

Canadian Association for Health Services & Policy Research

Orleans, E., **Di Ruggiero, Erica**, **Lexchin, Joel**, **Kohler, Jillian Clare**, Strengthening Governance Systems to Enhance Access to Antimalarial Medicines within Universal Health Coverage in a Low to Middle Income Country: A Case Study of Ghana. Saskatoon, Canada.

May 26-29, 2020

Canadian Association for Health Services & Policy Research

Orleans, E., **Di Ruggiero, Erica**, **Lexchin, Joel**, **Kohler, Jillian Clare**., Access to Medicines: A Global Health Challenge. Saskatoon, Canada.

May 26, 2020

Webinar for Group of 78

Gagon, Marc-Andre: "The Battle for Universal Pharmacare in Canada." Ottawa, Ontario.

June 4, 2020

Dalla Lana School of Public Health Webinar Series

Organizer and moderator, **Forman, Lisa**, "Exploring the human rights dimensions of COVID-19," cosponsored by Dalla Lana School of Public Health's Centre for Global Health and the Faculty of Law's Mary and Philip Seeman Health Law, Policy, and Ethics Seminar Series. Toronto, Ontario.

July 14, 2020

Webinar for Drug Safety and Effectiveness Cross-Disciplinary Training

Gagon, Marc-Andre: "Reforming public drug coverage in Canada; Performance, models, and Assessment of Financing Options". University of Manitoba. Winnipeg, Manitoba.

July 15, 2020

Trinity College Dublin School of Law

Conference: COVID-19 and Public International Law International Organizations, Global Governance and the Pandemic

"What future for international law institutions and norms after COVID-19?" **Forman, Lisa**. Virtual. Dublin, Ireland.

July 23, 2020

International Honor Society of Nursing

Grundy, Quinn. "Understanding the relationships among nursing, industry, and health: Addressing the commercial determinants of health," special session and live Q&A, 31st International Nursing Research Congress, Sigma Theta Tau Online.

July 29, 2020

RIGHTS CON

Kohler, Jillian Clare: Equitable access of the global population to COVID- 19 treatments and vaccines demands that pharmaceutical companies relinquish profit for the public good.

August 2020

Conflict of interest and the quality of clinical practice guidelines

Lexchin, Joel: A PharmedOut Webinar. Institutional Corruption and Clinical Practice Guidelines. Online.

Invited Presentations:

2019

Mackey, Tim Invited Participant and Presenter, U.S. Food and Drug Administration Second Online Opioid Summit, Silver Spring, MD

October 28, 2019

Milken Institute Future of Health Summit

Mackey, Tim. The Role of Corporations in Addressing the Opioid Crisis. Washington DC, [invited panel presentation].

October 29, 2019

Milken Institute Future of Health Summit

Mackey, Tim. Combating the Opioid Crisis: Investment and Health IT Innovation. Washington DC, [invited panel presentation].

November 19, 2019

MITO2019 Conference

Lemmens, Trudo Invited Presentation: “Data Transparency and Privacy in the Context of Rare Diseases” Special Panel on “Big Data and Informatics in Research,” Toronto, Ontario.

November 23, 2019

British Columbia Cancer Summit

Lemmens, Trudo Invited Presentation, “Personalized” Medicine: Ethical and Legal Implications of the New Medical Paradigm”, Special Session, “Ethical Issues as Cancer Care Transforms,” Vancouver, BC.

November 23, 2019

British Columbia Cancer Summit

Lemmens, Trudo Invited Presentation, “Ethical, Legal, and Policy Challenges of Niche Markets and Pharmacogenomics,” Special Session “Ethical Considerations in the Provision of Pharmaceutical Care with a Patient-Centered Approach” Vancouver, BC.

December 2, 2019

Ontario Pharmacy Evidence Network Atlas of Professional Pharmacy Services Ontario College of Pharmacists, Toronto, Ontario. Presenter: **Cadarette, Suzanne**

January 21, 2020

Dalla Lana School of Public Health - Collaborative Program in Global Health

Kohler, Jillian Clare on Corruption and the Health Sector. Toronto, Ontario.

January 26, 2020

Prince Mahidol Award Conference

Kohler, Jillian Clare on How Corruption undercuts Universal Health Coverage. Declined due to Coronavirus.

January 31, 2020

Prince Mahidol Conference

Di Ruggiero, Erica. (invited panelist). “The political economy of health promotion in the context of universal health coverage efforts” during Implementation Challenges and Innovative Solutions for UHC 2030 Plenary. Bangkok, Thailand

February 27, 2020

Atlas Update

Ontario Pharmacy Evidence Network (OPEN) Advisory Committee, Waterloo, Ontario. Presenter:
Cadarette, Suzanne

May 7, 2020

Canadian Society of Hospital Pharmacists Webinar

Thompson, Alison invited to present: "Prescribing the Right Course of Action: Pharmacy Ethics in a Pandemic." Online.

May 14, 2020

Harvard Business School Club of Washington

Mackey, Tim Invited Co-presenter, Webinar. "Innovating Through Crisis: Don't Just Survive – Thrive", [co-presented with Prof. Lynda Applegate, Harvard Business School]

May 27, 2020

Center for International Private Enterprise

Mackey, Tim Invited Co-presenter, Webinar. "COVID-19 and Corruption: Exploring Corruption Risks in the Health Sector", [co-presented with Mostafa Hunter (UNDP) and Sarah Steingruber], available at: <https://www.cipe.org/events/covid-19-and-corruption-exploring-corruption-risks-in-the-health-sector/>

June 2, 2020

UCTV

Mackey, Tim Co-presenter, Webinar. "Why Digital Health is More Important Than Ever: Leveraging Emerging Technologies in the Fight Against COVID-19", [co-presented with Nex Cubed Dr. Daniel Haders III], available at: <https://www.uctv.tv/shows/Why-Digital-Health-is-More-Important-Than-Ever-Leveraging-Emerging-Technologies-in-the-Fight-Against-COVID-19-35959>

June 2020

Drug Safety and Effectiveness Cross-disciplinary Training (DSECT) Symposium

Real-worlds experience and skills result from the DSECT Program. Toronto, Ontario (Virtual Conference). Presenters: **Cadarette, Suzanne**, KN Hayes

July 14, 2020

Cochrane Learning Webinar

Grundy, Quinn. Invited presenter: "Cochrane's new Conflict of Interest policy - How do I deal with "non-financial" interests?" Online.

July 21, 2020

A-CAPP Center

Mackey, Tim. Counterfeit Online: The Pharma Experience. Online Conference: A Brand's New World. [invited discussion panel]. Michigan State University, [virtual conference].

Awards

Recipient: **Kohler, Jillian Clare**

Connaught Global Challenge Award: **Advancing Anti-Corruption, Transparency, and Accountability Mechanisms to Tackle Corruption in the Pharmaceutical System**

Amount: \$249,400

Objectives: This initiative will create a vibrant and multidisciplinary global network of experts who will harness their knowledge to focus on what anti-corruption, transparency and accountability (ACTA) mechanisms can reduce corruption in the pharmaceutical sector globally. We identify three priority areas of focus: 1) Optimal Anti-Corruption, Transparency and Accountability (ACTA) Mechanisms for the Pharmaceutical System; 2) Examination of the Regulation of the Global Pharmaceutical Industry; and, 3) Harnessing of Technology to Curb Corruption in the Pharmaceutical Procurement.

Publications

Amri, A., Siddiqi, A., O'Campo, P., Enright, T. **Di Ruggiero, E.** (2020). Underlying Equity Discourses of the WHO: A scoping review protocol. *Social Science Protocol*, 3:6. <http://journals.ed.ac.uk/social-science-protocols/article/view/4383>

Baxi, S. M., Beall, R., Yang, J., & **Mackey, T. K.** (2019). A multidisciplinary review of the policy, intellectual property rights, and international trade environment for access and affordability to essential cancer medications. *Globalization and health*, 15(1), 57.

Benea, C., Turner, K. A., Roseman, M., Bero, L. A., **Lexchin, J.**, Turner, E. H., & Thombs, B. D. (2020). Reporting of financial conflicts of interest in meta-analyses of drug trials published in high-impact medical journals: comparison of results from 2017 to 2018 and 2009. *Systematic Reviews*, 9, 1-16.

Cai, M., Shah, N., Li, J., Chen, W. H., Cuomo, R. E., Obradovich, N., & **Mackey, T. K.** (2020). Identification and characterization of tweets related to the 2015 Indiana HIV outbreak: A retrospective infoveillance study. *Plos one*, 15(8), e0235150.

Chit, A., & **Grootendorst, P.** (2019). The Effect of Government Policy on Pharmaceutical Drug Innovation. In *Oxford Research Encyclopedia of Economics and Finance*.

Cuomo, R. E., Cai, M., Shah, N., Li, J., Chen, W. H., Obradovich, N., & **Mackey, T. K.** (2020). Characterising communities impacted by the 2015 Indiana HIV outbreak: A big data analysis of social media messages associated with HIV and substance abuse. *Drug and Alcohol Review*.

Di Ruggiero, E. Global Health Governance in the Sustainable Development Goal Era. Chapter for inclusion in the 2nd edition of *Global Health and Global Health Ethics*. Co-Editors: Benatar S. & Brock, G., Cambridge University Press (in press).

Diep, D., Mosleh-Shirazi, A., & **Lexchin, J.** (2020). Quality of advertisements for prescription drugs in family practice medical journals published in Australia, Canada and the USA with different regulatory controls: a cross-sectional study. *BMJ open*, 10(7), e034993.

Elder, K., Turner, K. A., Cosgrove, L., **Lexchin, J.**, Shnier, A., Moore, A., ... & Thombs, B. D. (2020). Reporting of financial conflicts of interest by Canadian clinical practice guideline producers: a descriptive study. *CMAJ*, 192(23), E617-E625.

Forman, L. (2020). The Evolution of the Right to Health in the Shadow of COVID-19. *Health and Human Rights*, 22(1), 375. <https://www.hhrjournal.org/2020/04/the-evolution-of-the-right-to-health-in-the-shadow-of-covid-19/>

Forman, L. (2019). Is the right to medicines a canary in the human rights coalmine? A Comment on Amy Kapczynski, “The right to medicines in an age of neoliberalism.” *Humanity online symposium*, <http://humanityjournal.org/author/lisa-forman/>

Forman, L., Brolan, C. E, and Kenyon, K. H. (2019). Global health, human rights, and the law. *The Lancet*. 394:30, 1987 (correspondence).

Forman, L. (In press). International human rights law and the social determinants of health. For inclusion in Solomon Benatar and Gillian Brock, eds, *Global Health and Global Health Ethics* (Cambridge University Press).

Forman, L., and Kohler, J. (2020). Global health and human rights in the time of COVID-19: Response, restrictions and legitimacy. *19:5 Journal of Human Rights*, 1-10.

Gagnon, M. A. (2020). Understanding the Battle for Universal Pharmacare in Canada; Comment on “Universal Pharmacare in Canada”. *International Journal of Health Policy and Management*.

Gagnon, M. (2019). Co-pay cards in Canada: Improving choice or Institutionalizing bribes? *Canadian Medical Association Journal* 191 (45): E1235-E1236.

Gleeson, D., **Lexchin, J.**, Labonté, R., Townsend, B., **Gagnon, M. A.**, **Kohler, J.** & Shadlen, K. C. (2019). Analyzing the impact of trade and investment agreements on pharmaceutical policy: provisions, pathways and potential impacts. *Globalization and health*, 15(1), 78.

Grundy, Q., Cussen, C.* & Dale, C. (In press). Constructing a problem and marketing solutions: A critical content analysis of the nature and function of industry-authored oral health educational materials. *Journal of Clinical Nursing*.

Grundy, Q., Dunn, A. & Bero, L. (2020). Improving researchers' conflict of interest declarations. *BMJ*, 368:m422.

Grundy, Q., Mayes, C., Holloway, K, Mazzarello, S.*, Thombs, B. & Bero, L. (2020). Conflict of interest as ethical shorthand: Understanding the range and nature of “non-financial conflicts of interest” in biomedicine. *J Clinical Epidemiology*, 120: 1-7. Doi: 10.1016/j.jclinepi.2019.12.014

Grundy, Q., Mazzarello, S.* & Bero, L. (2020). A comparison of policy provisions for managing “financial” and “non-financial” interests across health-related research organizations: A qualitative content analysis. *Accountability in Research*, 27(4), 212-237. Doi: 10.1080/08989621.2020.1748015

Habibi, R., Burci, G. L., de Campos, T. C., Chirwa, D., Cinà, M., Dagron, S., **Forman, L** ... & Negri, S. (2020). Do not violate the International Health Regulations during the COVID-19 outbreak. *The Lancet*, 395(10225), 664-666.

Hafner, T., Banda, M., **Kohler, J.,** Lumpkin, M., Adeyeye, M. C., Nfor, E., ... & Guzman, J. (2020). Integrating pharmaceutical systems strengthening in the current global health scenario: three ‘uncomfortable truths’. *Journal of Pharmaceutical Policy and Practice*, 13(1), 1-4.

Hapuhennedige, S., Bernsen, E. C., & **Kohler, J. C.** (2020). Exploring Accountability and Transparency Within International Organizations: What Do We Know and What Do We Need to Know? *In Integrity, Transparency and Corruption in Healthcare & Research on Health*, Volume I (pp. 125-139). Springer, Singapore.

Jue, J., Shah, N. A., & **Mackey, T. K.** (2020). An interdisciplinary review of surgical data recording technology features and legal considerations. *Surgical Innovation*, 27(2), 220-228.

Klein, P. G., Mahoney, J. T., **McGahan, A. M.,** & Pitelis, C. N. (2019). Organizational governance adaptation: Who is in, who is out, and who gets what. *Academy of Management Review*, 44(1), 6-27.

Kohler, J. C., & Mackey, T. K. (2020). Why the COVID-19 pandemic should be a call for action to advance equitable access to medicines. *BMC medicine*, 18(1), 1-3.

Kohler, J. C., & Dimancesco, D. (2020). The risk of corruption in public pharmaceutical procurement: how anti-corruption, transparency and accountability measures may reduce this risk. *Global Health Action*, 13(sup1), 1694745.

Kohler, J. C., & Wright, T. (2020). The Urgent Need for Transparent and Accountable Procurement of Medicine and Medical Supplies in Times of COVID-19 Pandemic. *Journal of Pharmaceutical Policy and Practice*, 13(1), 1-4.

Kohler, J. C. (2019). I Know It When I See It: The Challenges of Addressing Corruption in Health Systems: Comment on " We Need to Talk About Corruption in Health Systems". *International journal of health policy and management*, 8(9), 563.

Koller T., Clarke D., and **Vian T.** (2020). Promoting anti-corruption, transparency and accountability to achieve Universal Health Coverage. *Global Health Action*, 13(sup1). Article 1700660.
<https://doi.org/10.1080/16549716.2019.1700660>

Lexchin, J. Clinical Practice Guidelines and Managing Financial Conflicts of Interest. *eLS*, 1, 263-269.

Lexchin, J. (2020). Drug Promotion in India Since 2000: Problems Remain. *International Journal of Health Services*, 0020731420932109.

Lexchin, J. (2020). It's Time to Finally Kill the Zombies; Comment on "Universal Pharmacare in Canada". *International Journal of Health Policy and Management*.

Li, J., Chen, W. H., Xu, Q., Shah, N., **Kohler, J. C., & Mackey, T. K.** (2020). Detection of self-reported experiences with corruption on twitter using unsupervised machine learning. *Social Sciences & Humanities Open*, 2(1), 100060.

Li, J., Xu, Q., Shah, N., & **Mackey, T. K.** (2019). A machine learning approach for the detection and characterization of illicit drug dealers on Instagram: model evaluation study. *Journal of medical Internet research*, 21(6), e13803.

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Mackey, T. K., Kuo, T. T., Gummadi, B., Clauson, K. A., Church, G., Grishin, D., ... & Palombini, M. (2019). 'Fit-for-purpose?'—challenges and opportunities for applications of blockchain technology in the future of healthcare. *BMC medicine*, 17(1), 1-17.

Mackey, T. K. (2019). Opening the Policy Window to Mobilize Action Against Corruption in the Health Sector: Comment on " We Need to Talk About Corruption in Health Systems". *International Journal of Health Policy and Management*, 8(11), 668.

Mackey, T., Bekki, H., Matsuzaki, T., & Mizushima, H. (2020). Examining the potential of blockchain technology to meet the needs of 21st-century Japanese health care: viewpoint on use cases and policy. *Journal of medical Internet research*, 22(1), e13649.

Mackey, T. K., & Cuomo, R. E. (2020). An interdisciplinary review of digital technologies to facilitate anti-corruption, transparency and accountability in medicines procurement. *Global Health Action*, 13(sup1), 1695241.

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