

CURRICULUM VITAE

Laura Smy PhD

**Assistant Professor
Department of Pathology
Division of Administration**

OFFICE ADDRESS:

Froedtert/MCW Laboratory Building
9200 W Wisconsin Ave
Milwaukee, WI 53226

EDUCATION:

- 2016 PHD, University of Toronto, Toronto, ON, Canada
- 2017 - 2019 Clinical Chemistry Postdoctoral Fellow, Board Certified, University of Utah, Salt Lake City, UT
- 1997 Advanced Diploma in Medical Laboratory Technology, The Michener Institute of Education at UHN, Toronto, ON, Canada
- 2005 Certificate - Pathologist Assistant, Vancouver Community College, Vancouver, BC, Canada
- 2016 Doctorate of Philosophy - Pharmaceutical Sciences and Biomedical Toxicology, University of Toronto, Toronto, ON, Canada
- 2011 Honours Bachelor of Science - Chemistry and Biochemistry, University of Toronto, Toronto, ON, Canada

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

- 2017 - 2019 Clinical Chemistry Fellow, Pathology, University of Utah/ARUP Laboratories, Salt Lake City, UT

FACULTY APPOINTMENTS:

- 07/2019 - Present Assistant Professor, Pathology, Medical College of Wisconsin, Wauwatosa, WI

HOSPITAL AND CLINICAL ADMINISTRATIVE APPOINTMENTS:

- 07/2019 - 08/2022 Section Director of Point-of-Care, Froedtert Hospital, WI
- 07/2019 - Present Co-Director of Chemistry/Toxicology, Wisconsin Diagnostic Laboratories, WI
- 07/2020 - 04/2022 Associate Laboratory Director, Pewaukee and New Berlin Community Hospitals, WI
- 04/2022 - Present CLIA Laboratory Director, Froedtert Community Hospitals - New Berlin, Pewaukee, Oak Creek, Mequon

HOSPITAL STAFF PRIVILEGES:

- 03/2020 - Present Clinical Chemist - call coverage, Children's Wisconsin Hospital
- 01/2022 - Present CLIA Laboratory Director, Froedtert Community Hospitals - Pewaukee, New Berlin, Oak Creek, and Mequon

SPECIALTY BOARDS AND CERTIFICATION:

<u>Board Certified</u>	<u>Issue Date</u>	<u>Expiration</u>
Clinical Chemistry	02/2019	None

<u>Licensure</u>	<u>Number</u>	<u>Issue Date</u>	<u>Expiration</u>
Medical Laboratory Technologist from	10094	1997	None

the College of
Medical Laboratory
Technologists of
Ontario

AWARDS AND HONORS:

2012 - 2013 Cohen Benjamin Bursary Fund, University of Toronto
2013 - 2014 Open Fellowship, University of Toronto
2014 School of Graduate Studies Conference Grant, University of Toronto,
2014 Scace Graduate Fellowship,, University of Toronto
2015 Abstract of Distinction, National Academy of Clinical Biochemistry
2015 Student Poster Contest Honorable Mention, AACC
2015 Young Investigator Grant, MSACL
2015 Ontario Graduate Scholarship, University of Toronto
2015 SickKids Trainee Travel Grant, The Hospital for Sick Children,

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

1996 - Present Canadian Society for Medical Laboratory Sciences (CSMLS) (Member)
2012 - 2015 Canadian Society of Pharmacology and Therapeutics (CSPT) (Member)
2013 - 2019 American Society for Clinical Pharmacology and Therapeutics (ASCPT) (Member)
2013 - 2017 American Association for the Advancement of Science (AAAS) (Member)
2015 - Present Canadian Society of Clinical Chemists (CSCC) (Member)
2015 - Present American Association for Clinical Chemistry (AACC) (Member)
2016 - 2017 Endocrine Society (Member)
2017 - 2019 Academy of Clinical Laboratory Physicians and Scientists (ACLPS) (Member)
2021 - Present TIAFT - The International Association of Forensic Toxicologists (Member)
2022 - Present Academy of Clinical Laboratory Physicians and Scientists (ACLPS) (Member)

EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:

Editorial Board
07/2019 AACC CLN Daily News
Journal Review
Clinical Biochemistry
Ad-Hoc Reviewer
Health Science Reports
Therapeutic Drug Monitoring
Journal of Population Therapeutics and Clinical Pharmacology
Psychiatry Research

LOCAL/REGIONAL APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

2015 - 2017 Member, Alumni Association, The Michener Institute for Education at UHN
01/2020 - 01/2022 Member, nominating committee, Chicago Local Section, American Association for
Clinical Chemistry
02/2021 - Present Member, Treasurer as of 12/2021, Steering Committee, Midwest Toxicology Collaborative
09/2022 - Present Member-at-Large, Beaker Steering Committee, Froedtert Health Enterprise
01/2023 - Present Chair-elect, Chicago Local Section, American Association for Clinical Chemistry

NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

2018 - 2019 Fellow Member, Pediatric and Maternal-Fetal Division Board, American Association for Clinical
Chemistry
2020 - 2022 Member-at-Large, Pediatric and Maternal Fetal Division, American Association for Clinical
Chemistry
09/2021 - 08/2022 Member, Education Committee, Academy of Clinical Laboratory Physicians and Scientists
(ACLPS)
07/2022 - Present Secretary, Pediatric and Maternal Fetal Division, American Association for Clinical
Chemistry

RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:

Active

Non-Peer Review

Title: Effect on Laboratory Results of Cyanocobalamin and/or Methylene Blue Treatment

Source: Department of Pathology and Laboratory Medicine

Role: Principal Investigator

Dates: 06/2022 - Present

Prior

Peer Review

Title: William L. Roberts Grant

Source: University of Utah and ARUP Laboratories

Role: Recipient

Dates: 01/2018 - 2019

Title: William L. Roberts Grant

Source: University of Utah and ARUP Laboratories

Role: Recipient

Dates: 09/2018 - 06/2020

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

Local

- Smy L, Carleton B, Koren G, Hair cortisol as a biomarker of the safety of inhaled corticosteroid use during pregnancy and childhood [Poster], The Leslie Dan Faculty of Pharmacy Graduate Research in Progress Symposium, Toronto, ON, 06/16/2013
- Smy L, Shaw K, Smith A et al, Hair cortisol as a novel biomarker of HPA suppression by inhaled corticosteroids in children [Poster], The Leslie Dan Faculty of Pharmacy Graduate Research in Progress Symposium, Toronto, ON, 06/17/2015
- Smy L, Law R, Sadler A et al, Evaluation of imatinib concentrations in samples submitted for BCR-ABL1 testing [Oral presentation], Department of Pathology Grand Rounds, University of Utah,, 05/04/2018
- Smy, L, Lee M, De Biase I, Genzen J, Yuzyuk T, Nuclear Magnetic Resonance (NMR)-Based Serum Metabolic Profiles: Impact of Fasting Status [Oral presentation], Department of Pathology Grand Rounds, University of Utah, 05/17/2019

National

- Smy L, Koren G, Safety of inhaled corticosteroid use during pregnancy [Poster], The 10th Laurence E. Becker Symposium, Pharmacogenomics: Optimizing Patient Care Through Genome, Toronto, ON, 06/06/2012
- Smy L, Koren G, Safety of inhaled corticosteroid use during pregnancy [Poster], The joint conference Modern Therapeutics 2012: Advances in Physiology, Pharmacology and Pharmaceutical Sciences Canadian Society of Pharmacologists and Toxicologists, Toronto, ON, 06/12/2012 - 06/15/2012
- Smy L, Leadley M, Aleksa K, Koren G, Development of a rapid LC-MS/MS method for hair cortisol determination to assess the HPA axis [Poster], The Association for Mass Spectrometry: Applications to the Clinical Lab (MSACL) 2015 US Conference, San Diego, CA, 03/28/2015 - 04/01/2015
- Smy L, Shaw K, Smith, A et al, Hair cortisol as a novel biomarker of HPA suppression by inhaled corticosteroids in children [Poster], The 13th Laurence E. Becker Symposium, Children are Not Small Adults: Metabolic and Endocrine Disorders of Childhood and Adolescence, Toronto, ON, 06/03/2015
- Smy L, Shaw K, Smith A et al, Hair cortisol as a novel biomarker of HPA suppression by inhaled corticosteroids in children [Poster], The Canadian Society of Pharmacology and Therapeutics annual

- meeting, Toronto, ON, 06/07/2015 - 06/10/2015
- Smy L, Shaw K, Carleton B, Koren G, Hair cortisol as a biomarker of the HPA axis in pregnant women with asthma [Poster], The Canadian Society of Pharmacology and Therapeutics annual meeting, Toronto, ON, 06/07/2015 - 06/10/2015
- Smy L, Shaw K, Smith A et al, Hair cortisol as a novel biomarker of HPA suppression by inhaled corticosteroids in children [Poster], The Canadian Laboratory Medical Congress, Montreal, QC, 06/20/2015 - 06/24/2015
- Smy L, Leadley M, Aleksa K, Koren G, Development of a rapid LC-MS/MS method for hair cortisol determination to assess the HPA axis [Poster], The Canadian Laboratory Medical Congress: Joint Congress of the Canadian Association of Pathologists and Canadian Society of Clinical Chemists, Montreal, QC, 06/20/2015 - 06/24/2015
- Smy L, Shaw K, Carleton B, Koren G, Hair cortisol as a biomarker of the HPA axis in pregnant women with asthma [Oral presentation, Distinguished abstract award, Honorable mention student poster contest], The American Association for Clinical Chemistry Annual Meeting, Atlanta, GA, 07/26/2015 - 07/30/2015
- Smy L, Law R, Sadler A et al, Evaluation of imatinib concentrations in samples submitted for BCR-ABL1 testing [Oral presentation], ACLPS Annual Meeting, Houston, TX, 05/31/2018 - 06/02/2018
- Smy L, McMillin G, Urine buprenorphine and metabolite patterns in a large cohort of patients [Poster], The American Association for Clinical Chemistry Annual Meeting, Chicago, IL, 07/29/2018 - 08/02/2018
- Smy L, Kushnir M, Frank E, High Sensitivity LC-MS/MS Method for Measurement of 3-Methoxytyramine and Observations in Samples Positive for Metanephrines and Dopamine, The Association for Mass Spectrometry: Applications to the Clinical Lab (MSACL) 2019 US Conference, Palm Springs, CA, 03/31/2019 - 04/04/2019
- Smy, L, Lee M, De Biase I, Genzen J, Yuzyuk T., Nuclear Magnetic Resonance (NMR)-Based Serum Metabolic Profiles: Impact of Fasting Status [Oral presentation], ACLPS Annual Meeting, Salt Lake City, UT, 05/30/2019 - 06/01/2019
- Smy L, Incorporating Six Sigma into your lab quality management system- have you incorporated it yet? [Oral presentation], American Association for Clinical Chemistry Roundtable Session, Anaheim, CA, 08/04/2019 - 08/06/2019
- Smy, L, Ho, A, Greer, R, Seiter, J, McMillin, G, Determining the Best Course of Action to Manage Interference in Drug Testing by Immunoassay [Poster], American Association for Clinical Chemistry Annual Meeting, Atlanta, GA, 09/25/2021 - 09/30/2021
- Smy, L, Six Sigma in the Lab [Oral presentation], American Association for Clinical Chemistry Roundtable Session, Atlanta, GA, 09/25/2021 - 09/30/2021

International

- Chaudhry SA, Smy L, Shere M, Koren G, Systematic review of the fetal safety of adalimumab [Poster], The 2nd International OTIS-ENTIS Conference, Toronto, ON, 09/19/2014 - 09/21/2014
- Smy L, Carleton B, Koren G, The safety of inhaled corticosteroid use in pregnancy and childhood [Poster], The 2nd International OTIS-ENTIS Conference, Toronto, ON, 09/19/2014 - 09/21/2014
- Smy L, Shaw K, Amstutz U et al, Assessment of Hair Cortisol as a Potential Biomarker for Possible Adrenal Suppression Due to Inhaled Corticosteroid Use in Children with Asthma: A Retrospective Observational Study [Featured Poster], ENDO 2017, Orlando, FL, 05/01/2017 - 05/04/2017
- Smy, L, The Journey to Incorporating Six Sigma Metrics in the Clinical Laboratory [Oral presentation], Canadian Society of Clinical Chemists Education Roundtable, Webinar, 10/07/2021

COMMITTEE SERVICE:

Medical College of Wisconsin

- 2019 - 2021 Member, Spurious Results Contamination Task Force, Medical College of Wisconsin and Wisconsin Diagnostic Laboratories
- 10/2021 - Present Member, Program Evaluation Committee Pathology Residency Training Program, Pathology and Laboratory Medicine
- 11/2022 - Present Member, Quality Committee, Pathology and Laboratory Medicine

Hospital

- 07/2019 - Present Chair, Member as of 09/2022, Point-of-Care Management Committee, Froedtert

Hospital and the Medical College of Wisconsin
2019 - Present Chair, Point-of-Care Working Group for Collaboration, Froedtert Health and Wisconsin Diagnostic Laboratories
2019 - Present Co-Chair, Point of Service Testing Committee, Froedtert Hospital
10/2021 - Present Member, Provider Builder Committee (for Beaker/EPIC), Froedtert Hospital
09/2022 - Present Member-at-Large, Beaker Steering Committee, Froedtert Health Enterprise

MEDICAL COLLEGE TEACHING ACTIVITIES:

Resident and Fellow Education

07/2019 - Present Teaching pathology residents during their chemistry and toxicology rotations, which are two sessions of 3 months per year. Each year there are four 2nd-year and 4th-year residents that participate.

EXTRAMURAL TEACHING:

Medical Student Education

2013 - 2016 The Michener Institute for Education at UHN, Instructed and supervised approximately 145 first- and second-year students in their Haematology and Hemostasis and Clinical Chemistry courses inclusive of theory, laboratory exercises, and clinical simulation
2019 - Present Froedtert and Medical College of Wisconsin, Medical student education for Department of Pathology Elective courses

Resident and Fellow Education

2002 - 2010 The Hospital for Sick Children, Guided, directed, and assessed the training of over 50 residents, fellows, MLT students, and new employees to meet rotational requirements or attain competency in haematology laboratory tests

Graduate Student Education

2018 - 2019 University of Utah, Taught quality management, assurance, and control concepts to a graduate level class

COMMUNITY SERVICE ACTIVITIES:

2010 Volunteer, Department of Cell and Systems Biology University of Toronto, Toronto, ON
2010 - 2017 Volunteer, New College Alumni Association University of Toronto, Toronto, ON
2012 - 2014 Pharmaceutical Sciences Graduate Student Association Executive Graduate Student Union Representative Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, ON

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. Smy L, Shaw K, Smith A, Russell E, Van Uum S, Rieder M, Carleton B, Koren G. Hair cortisol as a novel biomarker of HPA suppression by inhaled corticosteroids in children. *Pediatr Res.* 2015 Jul;78(1):44-7.
2. Smy L, Chan AC, Bozzo P, Koren G. Is it safe to use inhaled corticosteroids in pregnancy? *Can Fam Physician.* 2014 Sep;60(9):809-12, e433-5. PMID: PMC4162695
3. Smy L, Shaw K, Amstutz U, Smith A, Berger H, Carleton B, Koren G. Hair cortisol as a hypothalamic-pituitary-adrenal axis biomarker in pregnant women with asthma: a retrospective observational study. *BMC Pregnancy Childbirth.* 2016 Jul 20;16(1):176. PMID: PMC4955128
4. Smy L, Shaw K, Amstutz U, Staub M, Chaudhry S, Smith A, Carleton B, Koren G. Assessment of hair cortisol as a potential biomarker for possible adrenal suppression due to inhaled corticosteroid use in children with asthma: A retrospective observational study. *Clin Biochem.* 2018 Jun;56:26-32.
5. Smy L. Adding imatinib mesylate to the list of therapeutic drugs to monitor. *Clinical and Forensic Toxicology News (Quarterly, AACC/CAP).* June 2018.
6. Smy L, Straseski JA. Measuring estrogens in women, men, and children: Recent advances 2012-2017. *Clin*

- Biochem. 2018 Dec;62:11-23.
7. Needham LL, Smy L, Lee MA, Kunzler TM, Genzen JR. Phlebotomy tube interference with nuclear magnetic resonance (NMR) lipoprotein subclass analysis. *Clin Chim Acta*. 2019 Jan;488:235-241.
 8. Smy L, Sadler AJ, McMillin GA. Evaluation of Imatinib Concentrations in Samples Submitted for BCR-ABL1 or Imatinib Testing-Evidence to Support Therapeutic Drug Monitoring for Dose Optimization? *Ther Drug Monit*. 2020 Aug;42(4):559-564.
 9. Smy L, De Biase I, Genzen JR, Yuzyuk T. The nuclear magnetic resonance metabolic profile: Impact of fasting status. *Clin Biochem*. 2021 Jan;87:85-92.

Non-Refereed Journal Publications/Original Papers

1. Smy L, Kushnir MM, Frank EL. A high sensitivity LC-MS/MS method for measurement of 3-methoxytyramine in plasma and associations between 3-methoxytyramine, metanephrines, and dopamine. *J Mass Spectrom Adv Clin Lab*. 2021 Aug;21:19-26. PMID: PMC8601001