

UNIVERSITY OF PENNSYLVANIA - PERELMAN SCHOOL OF MEDICINE
Curriculum Vitae

Date: 7/26/2019

Steven F. Solga, MD
Associate Professor of Clinical Medicine

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Education:

1989	None	Penn State University (Undergraduate)
1991	None	Deep Springs College (Undergraduate)
1993	BA	Cornell University (Philosophy and Biology)
1997	MD	Duke University School of Medicine (Medical Degree)

Postgraduate Training and Fellowship Appointments:

1997-2000	Internal Medicine, Osler Program in Internal Medicine Johns Hopkins Hospital, Baltimore, MD
2000-2003	Gastroenterology Fellowship Johns Hopkins Hospital, Baltimore, MD
2003-2004	Advanced Transplant Hepatology Fellowship Johns Hopkins Hospital, Baltimore, MD

Faculty Appointments:

2004-2007	Assistant Professor of Medicine, Johns Hopkins School of Medicine, Baltimore, MD
2007-2014	Visiting Assistant Professor of Medicine (part-time), Johns Hopkins University, Baltimore, MD
2012-2016	Adjunct Clinical Assistant Professor of Medicine, Temple University, Philadelphia, PA
2016-present	Associate Professor of Clinical Medicine, University of Pennsylvania Perelman School of Medicine
2018-present	Program Director, Transplant Hepatology Fellowship, University of Pennsylvania Perelman School of Medicine

Hospital and Administrative Appointments, Practice Experience:

2004-2005	Assistant Medical Director of Liver Transplantation, Johns Hopkins Hospital, Baltimore, MD
2005-2007	Co-Director of Liver Transplantation, Johns Hopkins Hospital, Baltimore, MD

2007-2016	Solga Gastroenterology, Solo Independent Practice (Sole Proprietor), Bethlehem, PA Attending Physician, St. Luke's University Hospital, Bethlehem, PA
2012-2016	Chief of Gastroenterology, St. Luke's University Hospital, Bethlehem, PA
2010-present	Special Government Employee, US FDA

Specialty Certification:

2000	Diplomate in Internal Medicine, ABIM, MOC to 2020
2003	Diplomate in Gastroenterology, ABIM, MOC to 2023
2006	Certificate of Added Qualification, Transplant Hepatology, ABIM, MOC to 2025

Licensure:

2001-2007	Maryland Licensure, Board of Physician Quality Assurance
2003-2007	Maryland CDS
2003-present	Federal DEA
2007-present	Pennsylvania Licensure, State Board of Medicine
2016-present	New Jersey Licensure, State Board of Medicine

Awards, Honors and Membership in Honorary Societies:

1988	Braddock Scholar (Full Merit Science Scholarship), Pennsylvania State University
1997	Phi Beta Kappa and <i>magna cum laude</i> , Cornell University, Ithaca, NY
2003-2004	AASLD/Schering Advanced Hepatology Fellowship Award
2007	GI Faculty Teaching Award, Johns Hopkins University
2014	American Gastroenterology Association Fellow

Memberships in Professional and Scientific Societies and Other Professional Activities:National:

2002-present	American Association for the Study of Liver Diseases (Member)
2002-present	American Gastroenterological Association (Fellow)
2018-present	American Society of Transplantation (Member)
2005-2014	American Society for Gastrointestinal Endoscopy (Member)

Academic and Institutional Committees:

2004-present	Ad hoc reviewer, Hepatology, American Journal of Clinical Nutrition, Journal of Pediatric Gastroenterology and Nutrition, Biomarkers, Journal of Breath Research, Plos One
2004-present	Ad hoc reviewer, American Journal of Medicine, Digestive Disease and Sciences, Gastroenterology CME reviews, US News & World Report's website on Digestive Disorders, Hepatitis Section and others
2006	Reviewer, "Gastroenterology" CME reviews, Baltimore, MD
2006	Editorial reviewer, U.S. News & World Report's website on Digestive Disorders, Hepatitis Section
2007	NIH/National Heart, Lung, and Blood Institute, Program Project Grant Review Workgroup 017
2010-2011	Temporary Voting Member, Gastrointestinal Drugs Advisory Committee, US FDA
2011-2015	Member, Gastrointestinal Drugs Advisory Committee, US FDA
2011	Temporary Voting Member, Anti-infective Drugs Advisory Committee, US FDA
2013-2015	Chairperson, Gastrointestinal Drugs Advisory Committee, US FDA
2014	Temporary Voting Member, Arthritis Advisory Committee and Drug Safety and Risk Management Advisory Committee
2014	Temporary Voting Member, Anesthetic and Analgesic Drug Products Advisory Committee, US FDA
2014-present	Member, Editorial Board, World Journal of Gastroenterology
2016	Temporary Voting Member, Arthritis Advisory Committee, US FDA
2017	Temporary Voting Member, Drug Safety and Risk Management Advisory Committee, US FDA
2018	Temporary Voting Member, Drug Safety and Risk Management and Arthritis Advisory Committee, US FDA
2019	Member, Gastrointestinal Drugs Advisory Committee, US FDA

Major Academic and Clinical Teaching Responsibilities:

2001-2007	Small Group Leader: Human Pathophysiology/School of Medicine
2003-2007	Numerous Family Orientation Sessions on behalf of the JHU Comprehensive Transplant Center
2004-2007	Numerous lectures for CME courses, Johns Hopkins, Baltimore, MD
2005-2006	Liver Disease Section Leader, Human Pathophysiology/School of Medicine, Leader
2007-2016	Numerous ongoing lectures and educational activities for medical students and residents at St. Luke's University Hospital and Temple Regional Medical School, Bethlehem, PA

Lectures by Invitation (Last 5 years):

Feb, 2014	"Breath Analysis for the Gut Microbiome", Precision Monitoring of Metabolism Workshop, Princeton University, Princeton, NJ
Oct, 2016	"Ammonia Response to Oral Protein", Synlogic, Cambridge, MA
April, 2017	"The Patient Experience" PennLive GI CME
May, 2017	"Your Hangover, Your FDA" Hepatology Conference, HUP
Oct, 2017	"Your Hangover, Your FDA" Pediatric GI Grand Rounds, CHOP
April, 2018	"Jaundice and Itching" PennLive GI CME
March, 2019	"Alcohol" PennLive GI CME

Completed Research Support

2002-2007 Look Ahead Ancillary Study, "*Obesity, Type II Diabetes, and Nonalcoholic Fatty Liver Disease*. ROI DK60427. Co-Investigator. (PI= JM Clark) My role was in MR spectroscopy data acquisition and analysis as well as serving as clinical hepatologist. 1/02 to 1/07

2004-2006 *The Effect of a Probiotic on Hepatic Steatosis*. R21 AT 1305-01A1. (NIH/NCCAM). Principal Investigator. 2004-2006. This project evaluated the effect of a novel probiotic on fatty liver.

2006-2016 Mid Infrared Technologies for Health and the Environment. NSF EEC 0540832, C Gmachl, Princeton University. My role was Principal Investigator and Participating Faculty for "*Breath Ammonia in Humans*." This project evaluated breath ammonia collection in human subjects with early stage monitor prototypes and interface devices.

2016 "Ammonia Response to Oral Protein." PI, funded by Synlogic, Cambridge, MA. This project evaluated the blood and breath ammonia response to an oral protein challenge in healthy subjects

Other Experience

2004 Sponsor, Investigational New Drug Permit, US FDA, BB-11181, VSL #3 Probiotic
2007 NIH/National Heart, Lung, and Blood Institute, Program Project Grant Review

Bibliography:

Research Publications, peer reviewed (print or other media):

1. Solga, Steven F., Alkhuraishe A, Clark JM, Torbenson M, Greenwald A, Diehl AM, Magnuson T: Dietary composition and non-alcoholic fatty liver. Digestive Diseases and Science 10: 1578-1583, 2004.
2. Clark JM, Alkhuraishe A, Solga, Steven F, Alli P, Diehl AM, Magnuson TH: Roux-en-Y gastric bypass improves liver histology in patients with nonalcoholic fatty liver disease. Obesity Research 13: 1180-86, 2005.
3. Solga, Steven F, Clark JM, Alkhuraishe A, Torbenson M, Tabesh A, Schweitzer M, Diehl AM and Magnuson T: Race and co-morbid factors predict NAFLD histopathology in severely obese patients. Surgery for Obesity and Related Disorders 1: 6-11, 2005.

4. Abougergi M, Rai R, Cohen CK, Montgomery R, Solga, SF : Trends in adult to adult live donor liver transplantation. Progress in Transplantation 16(1): 28-32, 2006.
5. Cope K, Solga, SF, Hummer L, Wigely FM, Diehl AM, Risby TH: Abnormal exhaled ethane concentrations in scleroderma. Biomarkers 11(1): 70-84, 2006.
6. Solga, SF, Alkhuraishe A, Cope K, Tabesh A, Clark JM, Torbenson M, Schwartz P, Magnuson T, Diehl AM, Risby TH: Breath biomarkers and nonalcoholic fatty liver disease: preliminary observations. Biomarkers 11(2): 174-183, 2006.
7. Hemker S, Ghosh P, Crawford S, Solga, SF, Horska A, Diehl AM, S Smith Clark JM: Quantitative Comparison and Evaluation of Software Packages for Assessment of Abdominal Adipose Tissue Distribution by Magnetic Resonance Imaging Int. J. Obs Res 32(1): 100-11, Jan 2008.
8. Solga, SF, Horska A, Hemker S, Crawford S, Diggs C, Diehl AM, Brancati F, Clark JM: Hepatic Fat and ATP Measurement in Overweight and Obese Adults using ¹H and ³¹P Magnetic Resonance Spectroscopy. Liver Int 28(5): 675-81, May 2008.
9. Solga, SF, Buckley G, Horska A, Diehl AM, Clark JM: The effect of a probiotic on hepatic steatosis. J Clin Gastroenterol 42(10): 1117-9, Nov 2008.
10. Lazo M, Solga SF, Horska A, Bonekamp S, Diehl AM, Brancati F, Wagenknecht L, Pi-Sunyer FX, Kahn S, Clark J: The Effect of a 12-Month Intensive Lifestyle Intervention on Hepatic Steatosis in Adults with Type 2 Diabetes Diabetes Care 33(10): 2156-63, October 2010.
11. Lewicki R, Kosterev AA, Thomazy DM, Risby TH, Solga SF, Schwartz TB, and Tittel FK: Real time ammonia detection in exhaled human breath using a distributed feedback quantum cascade laser based sensor. Proceedings of the SPIE 2011.
12. Solga SF, Mudalel M, Spacek LA, Lewicki R, Tittel F, Loccioni C, Russo A, Risby TH: Factors influencing breath ammonia determination. J Breath Res 7(3): 037101, Jun 2013.
13. Solga, SF, Mudalel M, Spacek LA, Risby TH: Fast and Accurate Exhaled Breath Ammonia Measurement. J Vis Exp 88, Jun 2014 Notes: doi: 10.3791/51658.
14. Solga SF, Mudalel M, Spacek LA, Lewicki R, Tittel FK, Loccioni C, Russo A, Ragnoni A, Risby TH: Changes in the Concentration of Breath Ammonia in Response to Exercise: A Preliminary Investigation. J Breath Res 8(3): 037103, Sep 2014.

15. Spacek L, Mudalel, M, Tittel, F, Lewicki, R, Risby, T, Stolfus, J, Solga SF : A High Protein Challenge Increases Gut-Derived Exhaled Breath Ammonia. Biomarkers 20(2): 149-56, Mar 2015.
16. Spacek, LA, Mudalel, M, Tittel, F, Risby, T, Solga, SF: Clinical utility of breath ammonia for evaluation of ammonia physiology in healthy and cirrhotic adults. J Breath Res 14:9(4): 047109, Dec 2015.
17. Spacek LA, Strzepka A, Saha S, Kotula J, Gelb J, Guilmain S, Risby T, Solga SF. Repeated Measures of Blood and Breath Ammonia in Response to Control, Moderate and High Protein Dose in Healthy Men. Sci Rep. 2018 Feb 7;8(1):2554.

Editorials, Reviews, Other Reports:

1. Solga SF, Diehl AM: NAFLD, Lumen-Liver Interactions and Possible Role for Probiotics. Journal of Hepatology 38(5): 681-87, 2003.
2. Solga, SF: Probiotics Can Treat Hepatic Encephalopathy. Medical Hypotheses 61(2): 307-13, 2003.
3. Solga SF, Diehl AM: Drug Treatments for Nonalcoholic steatohepatitis. Hospital Pharmacy Europe Page: 81-3, March 2004.
4. Solga SF, Diehl AM: Gut Flora-Based Therapy in Liver Disease? The Liver Cares About the Gut. Hepatology 39(5), 1197-00 2004.
5. Solga, SF, Ahorska A, Clark JM, Diehl AM: Hepatic 31P Magnetic Resonance Spectroscopy: A Hepatologist's User Guide. Liver International 25: 490-00, 2005.
6. Risby TH, Solga SF: Current Status of Clinical Breath Analysis. Applied Physics B May 2006 Notes: published online.
7. Dunbar K, Solga SF: Black Cohosh and Safety. Liver Int 27(7): 1017-8, Sep 2007.
8. Bonekamp S, Kamel I, Solga SF, Clark J : Can imaging modalities diagnose and stage hepatic fibrosis and cirrhosis accurately? J Hepatol 50(1): 17-35, Jan 2009.
9. Solga SF, Risby TH: What is normal breath? Challenge and opportunity. IEEE Sensors 10: 7-9, 2010.
10. Solga SF, Risby TH: Issues and Challenges in Human Breath Research; Perspectives from Our Experience, Chapter; In Volatile biomarkers; non-invasive diagnosis in physiology and medicine. A. Amann, D. Smith (eds.). Elsevier, 1st edition: 19-24, May 2013.
11. Solga SF: Breath volatile organic compounds for the gut-fatty liver axis: Promise, peril, and path forward. World J Gastroenterol 20(27): 9017-25, Jul 2014.

12. Spacek L, Solga, SF: Comment on: When to Perform Hepatic Resection for Intermediate-Stage Hepatocellular Carcinoma. Hepatology Page: 2789, May 2015.
13. Dave K, Mudalel M, Hummel J, Solga, SF: N-Acetylcysteine Treats Intravenous Amiodarone Induced Liver Injury. World J Gastroenterol 21(9): 2816-19, 2015.
14. Spacek L, Solga SF: Comment on: Acute and chronic hepatitis E virus infection in human immunodeficiency virus-infected U.S. women. Hepatology. 2016 Nov;64(5):1811-1812.
15. Spacek L, Solga SF: Comment on: Obeticholic Acid in Primary Biliary Cholangitis. N Engl J Med Nov 2016; 375:e41
16. Solga SF, Goldberg DS, Spacek LA, Forde K. Comment on Outcomes of Early Liver Transplantation for Patients with Severe Alcoholic Hepatitis. Gastroenterology. Jan 2019. 156(1):284-285.
17. Solga SF, Serper MS, Young R, Forde KA. Transplantation for Alcoholic Hepatitis: Are We Achieving Justice and Utility? Hepatology. 2019 Apr;69(4):1798-1802

Books Chapters:

1. Solga, Steven F. and Bayless T: Whipple's Disease, in Infectious Disease. Gorbach, Bartlett, and Blacklow, Williams, & Wilkins 3rd edition, 2003.
2. Solga, SF, Diehl AM: Management of Hepatic Encephalopathy, in Current Surgical Therapy. Cameron, JL, Elsevier Mosby 8th edition, 2004.
3. Salen P and Solga, Steven F: Feeding Tubes: Complications and Replacement. Harwood-Nuss' Clinical Practice of Emergency Medicine 6th edition, 2015.

Alternative Media:

1. Solga SF: "Hepatitis C" website chapter. hopkins-gi.org 2005.