James P Corsetti 09/May/2018

CURRICULUM VITAE

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May 9, 2018

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CITIZENSHIP

United States of America

EDUCATION

1982	M.D., Brown University
1980	Ph.D., Harvard University (Physical Chemistry)
1971	M.A., Harvard University (Physical Chemistry)
1969	B.S., University of Rhode Island (Chemistry)

POST DOCTORAL TRAINING

1982 - 86	University of Rochester Medical Center, Resident in Pathology
1985 - 86	University of Rochester Medical Center, Chief Resident in Pathology

MILITARY EXPERIENCE

1969 - 75	Rhode Island Army National Guard (Active duty Jan. 1970 to June 1970; Fort Jackson, SC and Fort Gordon, GA)

LICENSURE AND CERTIFICATION

1983	Diplomat, National Board of Medical Examiners
1983	State of New York - License 155702
1987	Certification, American Board of Pathology, Anatomic and Clinical Pathology
1998	Recertification, American Board of Pathology, Anatomic and Clinical Pathology
2008	Fellow of the Academy of Clinical Biochemistry

FACULTY APPOINTMENTS

1986 - 1992	Assistant Professor of Pathology and Laboratory Medicine University of Rochester School of Medicine and Dentistry, Rochester, NY 14642
1992 - 2010	Associate Professor of Pathology and Laboratory Medicine University of Rochester School of Medicine and Dentistry, Rochester, NY
2010 -	Professor of Pathology and Laboratory Medicine University of Rochester School of Medicine and Dentistry, Rochester, NY

PROFESSIONAL HOSPITAL AND ADMINISTRATIVE APPOINTMENTS

1986 -	Attending Pathologist, Strong Memorial Hospital
1986 - 1997	Director of General Clinical Chemistry Laboratory, Strong Memorial Hospital
1986 - 1997	Assistant Director of Clinical Chemistry Unit, Strong Memorial Hospital
1988 - 1997	Director of STAT Laboratory, Monroe Community Hospital
1996 - 1997	Assistant Director of Clinical Hematology Laboratory, Strong Memorial Hospital
1996 - 1998	Acting Director, Flow Cytometry Laboratory, Strong Memorial Hospital
1997 - 1997	Director of Laboratories, Wyoming County Community Hospital
1998 - 1999	Director of Cell Marker (Flow Cytometry) Laboratory, Strong Memorial Hospital
1998 - 1999	Assistant Director of Laboratories, Wyoming County Community Hospital
1998 - 2006	Director of Automated Laboratory, Strong Memorial Hospital
2006 - 2012	Associate Director of Protein Laboratory, Strong Memorial Hospital
1999 -	Director of Specimen Management Section, Strong Memorial Hospital
2006 - 2016	Associate Director of Automated Laboratory, Strong Memorial Hospital
2009 -	Director of Laboratories, University of Rochester Medical Center Laboratories at Ridgeland Road
2012 - 2014	Adjudicator, Laboratory Diagnostics Committee, University of Rochester Medical Center Laboratories
2014 -	Medical Director, Specimen Management Section and Reference Lab Testing, UR Medicine Labs
2014 -	Director of Protein Laboratory, Strong Memorial Hospital
2014 -	Laboratory Director, Strong West, University of Rochester Medical Center Laboratory
2017 -	Adjudicator, Laboratory Diagnostics Committee, University of Rochester Medical Center Laboratories
2017 -	Co-Director, UR Medicine Labs at Ridgeland Rd and Strong Memorial Hospital Chemistry and Hematology

My clinical service responsibilities are and have been extensive and wide-ranging. I am flexible, adaptable, and a quick study. This has enabled me to be a uniquely valuable resource to the Department. I have functioned in multiple areas at many different times, and more than once, when immediate coverage of a particular clinical service was crucial, my expertise was enlisted. My versatility is apparent from my current major clinical appointments: 1. Director of Laboratories of the URMC Laboratories at Ridgeland Road, 2. Associate Director of the SMH Automated Laboratory (Hematology), 3 Medical Director of the URMC Laboratories Specimen Management Section, 4. Adjudicator for the URMC Laboratory Diagnostics Committee which oversees laboratory test ordering practices within all units of the URMC, and 5. Laboratory Director of the Strong West Emergency/Urgent Care facility.

As Director of Laboratories of the URMC Laboratories at Ridgeland Road, I hold the New York State license under which all testing in the Laboratory is performed. At present this includes the areas of Chemistry, Diagnostic Immunology, Serology, Endocrinology, Hematology, Coagulation, HIV testing, and Urinalysis. The Laboratory is a for-profit endeavor and major initiative of the URMC Dept. of Pathology and Laboratory Medicine to provide clinical laboratory services primarily to the biotech and pharmaceutical industries as well as the academic community. It is a separate organization from the URMC Clinical Laboratories, and as such, it has independent governance under my license as Director of Laboratories. In the near future my responsibilities will expand dramatically as the Laboratory is slated to become the primary location for the performance of URMC outpatient clinical laboratory testing. Outpatient testing is a major program of the Dept. to provide clinical laboratory services to surrounding healthcare providers outside the URMC sphere. It is a significant effort as it currently makes up approximately 60% of the total outpatient workload.

As Associate Director of the Automated Laboratory, I am responsible for overseeing multiple high-volume areas including automated blood cell counting (CBC/differentials), manual differential counting, cell analysis of body fluids, and macroscopic and microscopic urinalysis. All of these areas are vital for the short and long term management of patients. This requires significant effort on my part in terms of responsibilities related to setting lab policy, instrumentation, quality control and assurance, consultation with the technical and clinical staff, training, and personnel management. I also am responsible for interpretive reporting of glucose tolerance testing results on a daily basis.

As Associate Director of the Protein Laboratory, I shared sign-out responsibilities (50%) for interpretation of third-party-reimbursable protein electrophoresis testing in addition to administrative duties in the laboratory. Our protein electrophoresis testing is high volume for a largely manual test, and it requires interpretive reporting of results by a pathologist. Typically, the Protein Laboratory receives about 60 cases per day with each case requiring significant time and effort for interpretation. In 2012, the Protein Laboratory ceased to exist as a separate entity; however, my sign-out responsibilities continued as above.

As Medical Director of the Specimen Management Section, I am responsible for setting policy related to issues regarding specimen handling including assessment of appropriateness for analysis, sample preparation for analysis, work flow optimization, and administration of the section (approximately 80 FTE's) that receives on the order of 6,000 tubes of blood per day as well as other specimens for distribution to the various laboratories in the Department.

As Adjudicator for the URMC Laboratory Diagnostics Committee, I am responsible for overseeing the process of approving test requests not in the URMC Laboratory Test formulary. This process was initiated to insure appropriate test-ordering practices in the context of best-practices medical care and efficient utilization of institutional resources and represents a novel initiative to manage the rising cost of reference laboratory testing.

As Laboratory Director of the new URMC urgent care facility of Strong West, I will be responsible for the provision of laboratory services for this installation.

In my years on the faculty of the URMC Dept. of Pathology and Laboratory Medicine, I have worn many hats and I have made many significant contributions to the clinical missions of the Department. Although, I have major expertise in Clinical Chemistry deriving not only from residency training but also from my pre-medical school training as a PhD in Physical Chemistry; I have been put in the breach multiple times in a variety of roles to assure continued delivery of laboratory services at the highest level. These range from my Directorships under contractual arrangements of the Department to provide laboratory services involving primarily a geriatrics hospital (Monroe Community Hospital) and a community hospital (Wyoming County Community Hospital) to Hematopathology, a specialized area, when the need arose for coverage. Not long after, duties expanded to include Directorship of the Flow Cytometry Laboratory, a position requiring highly-specialized expertise in the area of cell markers in hematopoietic malignancies. In each of these cases, my abilities to quickly take on such disparate sets of tasks have made me a valuable resource in terms of assuring the departmental mission. In spite of these significant past and present commitments to clinical service, I have managed to make significant contributions to the teaching programs of the Department and medical school and to cultivate a research program that now has the potential to make more significant contributions in terms of basic and translational research results in the area of cardiovascular disease including the possibility of IP applications.

PROFESSIONAL MEMBERSHIPS

Academy of Clinical Laboratory Physicians and Scientists
American Association for Clinical Chemistry
American Chemical Society
American Heart Association, Arteriosclerosis Council

PROFESSIONAL ADMINISTRATIVE ASSIGNMENTS

1988 - 1997	Chair, Blood Utilization Committee, MCH
1990 - 1997	Member, Medical Advisory Council, MCH
1990 - 2001	Member, Committee on Fellowship and Pilot Projects of the University of Rochester Cancer Center
1991 - 1998	Member, Residency Review Committee, Dept. of Pathology and Laboratory Medicine, University of Rochester Medical Center
1992 - 1998	Editor, Clinical Pathology Newsletter
1995 - 2009	Member, Rochester Institute of Technology Institutional Review Board for the Protection of Human Subjects in Research
1998 - 2010	Member, Council of the Medical Staff, University of Rochester Medical Center
2004 - 2010	Member, Strong Memorial Hospital Credentials & Privilege Review Committee
2008-	Member, Corporate Medical Policy Committee (Blue Cross Blue Shield Central NY Region)
2009 - 2012	Member, Steering Committee, URMC Dept. of Pathology and Laboratory Medicine
2013 -	Member, Steering Committee, URMC Dept. of Pathology and Laboratory Medicine

HONORS

1977 -	Sigma Xi Science Research Society
2000	Who's Who in Science and Engineering
2009	America's Top Pathologists.
2010	Who's Who in America.

TEACHING EXPERIENCE

University of Rochester Department of Pathology and Laboratory Medicine, Pathology Residency Program (1986 - present) - Clinical Chemistry: I have had major teaching responsibilities in Clinical Chemistry both in required and elective rotations. The initial rotation is required for certification in Clinical Pathology and is given approximately 4 - 6 times per year. My responsibilities focus on the modern automated clinical laboratory in which I spend, minimally 15 hours per rotation presenting in the form of lectures and case studies a wide range of important issues in this area (Laboratory Automation, Methods of Laboratory Quantitation, Blood Gas Measurement, Acid-Base Balance, Laboratory Quality Control, Laboratory Validation Procedures, Receiver-Operator Characteristic Analysis, Pancreatitis, Clinical Laboratory Planning).

University of Rochester School of Medicine and Dentistry: Lecture in Liver Function Testing in "Stress, Adaptation, and Transition" medical school course (2009 - present). This is a lecture to the second-year medical school class devoted to exposition of the physiology and pathophysiology underlying appropriate test-ordering practices relevant to liver function.

Rochester General Hospital School of Medical Technology: Lectures in Lipids and Proteins and Case Presentations (2012 - present). There are two lectures (Lipids and Proteins) and one class of case presentation (Metabolic Disease) devoted to the academic portion of medical clinical laboratory technologist training given three times/year.

University of Rochester Department of Pathology and Laboratory Medicine, Year Two Case Seminars in Laboratory Medicine (2000 - 2009): This was a major activity in medical student teaching that centered on directing a required course in Laboratory Medicine for second year medical students as part of the sequence of blocks in the Second Year Case Seminars series. I designed the course at its inception and I have served as its Director ever since. The course consists of a multi-faculty approach to major areas of Laboratory Medicine including Blood Banking, Chemical Pathology, Hematology, Microbiology, and Molecular Diagnostics. The course includes 10 hours of lectures and 10 hours of laboratories in these areas. In addition to the planning, administration, and student evaluation, I am also responsible for 8 contact hours in the Clinical Chemistry laboratory of the course. I have chosen to focus in the last several years on the topic of liver function testing based on student feedback in terms of a perceived lack of coverage in other areas of the curriculum regarding this important subject.

University of Rochester Department of Pathology and Laboratory Medicine, Pathology 601 Course (1987 - 2000): I participated in a fourth year medical student elective in Laboratory Medicine in which I lectured in Clinical Chemistry. In 1999 and 2000, I served as Course Director.

University of Rochester Department of Pathology and Laboratory Medicine, Pathology Residency Program (1996 - 1999) - Clinical Hematology: I have had major resident teaching responsibilities in laboratory Hematology including methods of instrumental, microscopic and flow cytometric analyses. This activity was performed in the context of daily clinical service hematology

sign-out responsibilities (I was on-service 50% of the time) at which point I did one-on-one resident teaching using clinical material as a basis.
University of Rochester Department of Pathology and Laboratory Medicine (1982 - 1996): As a Resident, Chief Resident, and faculty, I participated extensively in the teaching of Pathology to first and second year medical students.
Wesleyan University (1977): I was director of the first year laboratory course in inorganic chemistry for a class of approximately 300 students that included delivering regular formal lectures.
Harvard University (1969 - 1975): As a Ph.D. candidate in physical chemistry, I served extensively as a Teaching Assistant in inorganic and physical chemistry courses (1969 - 1975).

PEER REVIEW

CARDIOVASCULAR DISEASE
Circulation
Arteriosclerosis, Thrombosis, and Vascular Biology
American Journal of Cardiology
Atherosclerosis
Cardiology Journal
Cardiovascular Therapeutics
PLoSONE
Journal of Clinical Endocrinology and Metabolism

OTHERS
American Journal of Physiology
Clinical Chemistry
European Journal of Clinical Investigation
Journal of Internal Medicine
Metabolism: Clinical and Experimental
Vascular Health and Risk Management
Thyroid

PRESENTATIONS

ABSTRACTS

May, 1992 "Cell Heterogeneity in the Uptake of LDL and Apo B Expression in Primary Rat Hepatocytes". **JP Corsetti**, JD Sparks, and CE Sparks. (Poster Presentation) XI International Symposium on Drugs Affecting Lipid Metabolism, Palazzo dei Congressi - Palazzo Affari, Florence, Italy.

April, 1993 "Particle-Stabilized Epitopes for Apolipoprotein Immunoassay Standardization". **JP Corsetti**, JD Sparks, MR Violante, and CE Sparks. (Poster Presentation) International Conference, HDL-Cholesterol and Triglycerides: Role in Coronary Heart Disease and Laboratory Measurement, Washington, DC.

Oct., 1994 "Subpopulations of Streptozotocin-Induced Diabetic Rats by Multivariate Statistical Analysis of Insulin, Glucose, and Lipoprotein Concentrations". **JP Corsetti**, CE Sparks, and JD Sparks. (Poster Presentation) Xth International Symposium on Atherosclerosis (Diabetes, Obesity, and Atherosclerosis Satellite Symposium), Toronto, Canada.

Sept., 1995 "Pseudoparaproteinemia Due to Hemoglobinopathy". R Lazova, J Sterry, and **JP Corsetti**. (Poster Presentation) American Society of Clinical Pathology/College of American Pathologists - National Meeting, New Orleans, LA.

Nov., 1995 "The Hepatic Pathway for Insulin-Mediated Intracellular Degradation of Apo B is Resistant to Insulin in Hyperinsulinemic Zucker Diabetic Fatty Rats". JD Sparks, TL Phung, R Khurana, **JP Corsetti**, and CE Sparks. (Poster Presentation) XII International Symposium on Drugs Affecting Lipid Metabolism, Houston, TX.

July, 1996 "Characterization and Role of Insulin in the Hyperlipidemia of the Male Zucker Diabetic Fatty Rat", **James P. Corsetti**, Janet D. Sparks, Richard G. Peterson, Robert L. Smith and Charles E. Sparks. (Poster Presentation) 48'th Annual Meeting - American Association for Clinical Chemistry, Chicago, IL).

June, 2000 "Glucose-stimulated Insulin Secretion Suppresses Hepatic Triglyceride-rich Lipoprotein and Apo B Production *In Vivo*". Doru V. Chirieac, Lucian R. Chirieac, **James P. Corsetti,** Joanne Cianci, Charles E. Sparks, Janet D. Sparks. (Poster Presentation) American Diabetes Association Meeting, San Antonio, TX published in Diabetes. 2000;49(Supplement 1):A281.

May, 2004 "Apolipoprotein B Determines Overall Risk and Lp(a) Subgroup Risk for Recurrent Coronary Events in Postinfarction Patients with Metabolic Syndrome". **James P. Corsetti**, Wojciech Zareba, Arthur J Moss, Charles E Sparks. (Poster Presentation) 5'th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology, San Francisco, CA published in Arteriosclerosis, Thrombosis and Vascular Biology. 2004;24:E16.

July, 2005 "Elevated HDL Determines Risk of Recurrent Coronary Events within a High-Risk Subgroup of Non-Diabetic Postinfarction Patients with Hypercholesterolemia and Inflammation". **James P. Corsetti**, Wojciech Zareba, Arthur J. Moss, David L. Rainwater, and Charles E. Sparks. (Poster Presentation) 2'nd International Symposium on Triglycerides and HDL: Role in Cardiovascular Disease and the Metabolic Syndrome. New York, NY.

Oct., 2007 "Plasminogen Activator Inhibitor-1 Promoter Polymorphism (4G/5G) Predicts Risk of Recurrent Coronary Events in Non-Hypercholesterolemic, Non-Hypertriglyceridemic Postinfarction Patients". **James P. Corsetti,** Dan Ryan, Arthur J. Moss, Wojciech Zareba, and Charles E. Sparks. (Poster Presentation) XVI Drugs Affecting Lipid Metabolism Symposium. New York, NY published in Journal of Clinical Lipidology. 2007;1:447.

Oct., 2008 "The Effects of Anti-A and Anti-B on Platelet Function: An in vitro Model of ABO Non-Identical Transfusion". M. Refai, E. Masel, K Gettings, R Phipps, S Spinelli, **J Corsetti**, L Fialkow, C Francis, N Blumberg. 61'st AABB Annual Meeting. Montreal, Canada.

RESEARCH PRESENTATIONS

Oct., 2005 The Role of Metabolic Syndrome in Postinfarction Patients. Grand Rounds, Dept. of Pathology and Laboratory Medicine, University of Rochester Medical Center.

June, 2007 Outcome Event Mapping and Cardiovascular Disease. Metabolic Research Group, Dept. of Pathology and Laboratory Medicine. University of Rochester Medical Center.

Jan., 2008 Identification of High- and Low-Risk Patient Subgroups by Outcome Event Mapping. Metabolic Research Group, Dept. of Pathology and Laboratory Medicine. University of Rochester Medical Center.

Oct., 2011 Outcome Event Mapping and Dysfunctional HDL. AVIG Meeting, Cardiovascular Research Institute, University of Rochester Medical Center.

Sept., 2012 HDL: The "Good" Cholesterol? Grand Rounds, Dept. of Pathology and Laboratory Medicine, University of Rochester Medical Center.

Nov., 2015 Dysfunctional HDL in Pathways to Cardiovascular Disease Risk. Grand Rounds, Dept. of Pathology and Laboratory Medicine, University of Rochester Medical Center.

TECHNOLOGY PRESENTATIONS

Oct., 1995 Session Chairperson, Automation and the Clinical Laboratory, Upstate NY Section American Association for Clinical Chemistry Regional Meeting, Niagara-on-the-Lake, Canada.

March, 2006 Identification of High-Risk Patient Subgroups. Ortho-Clinical Diagnostics, Inc., Rochester, NY.

Dec., 2006 Identification of High-Risk Patient Subgroups by Outcome Event Mapping. Unipath. Diagnostics Co., Rochester, NY.

Nov., 2012 Robotics in the Clinical Laboratory. KUKA Robot Group, Rochester, NY.

ORIGINAL PUBLICATIONS

1. Corsetti JP, and Kohler BE. Ground and Excited-State Dipole Moments of all-trans retinal and all-trans-retinylidene-n-butylamine in solution. Journal Chemical Physics. 1977;67:5237 - 5243.

2. Corsetti JP. Solvent Shift Theory and the Photochemistry of 2,4-Hexadienal. Ph.D. Dissertation - Physical Chemistry. Harvard University 1979.

3. Corsetti JP, Cox MT, Cox C, Blumberg N, Leary J, and Doherty R. A Comparison of Quantitative Acid Elution Technique and Flow Cytometry for Detecting Low Levels of Fetomaternal Hemorrhage. Annals Clinical Laboratory Science. 1987;17:197 - 206.

4. Szilagyi PG, **Corsetti JP**, Callahan CM, McCormick K, and Metlay LA. A Patient with Clinical Features of Leprechaunism and Abnormal Pancreatic Exocrine Hypoplasia. Pediatric Pathology. 1987;7:51- 61.

5. Corsetti JP, Cowles J, Cox MT, and Blumberg N. A Rapid and Accurate Single-Drop Modification of the Acid-Elution Technique for Detecting Fetomaternal Hemorrhage. Vox Sanguinis. 1988;54:39 - 42.

6. Corsetti JP, Sotirchos S, Cox C, Cowles J, Leary J, and Blumberg N. The Correction of Cellular Autofluorescence in Flow Cytometry by Mathematical Modeling of Cellular Fluorescence. Cytometry. 1988;9:539 - 547.

7. Corsetti JP, Weidner CH, Cianci J, and Sparks CE. The Labeling of Lipoproteins for Studies of Cellular Binding with a Fluorescent Lipophilic Dye. Analytical Biochemistry. 1991;195:122 - 128.

8. Corsetti JP, Sterry J, Sparks CE, Sparks JD, and Weintraub M. The Effect of Weight Loss on Serum Lipoprotein(a) Levels in an Obese Population. Clinical Chemistry. 1991;37:1191 - 1195.

9. Corsetti JP, Way BA, Sparks CE, and Sparks JD. Immunolocalization, Quantitation and Cellular Heterogeneity of Apolipoprotein B in Rat Hepatocytes. Hepatology. 1992;15:1117 - 1124.

10. Corsetti JP, Sparks JD, and Sparks CE. Cellular Heterogeneity in Binding and Uptake of LDL in Primary Rat Hepatocytes. Hepatology. 1993;17:645 - 650.

11. Corsetti JP, Cox C, Schulz TJ, and Arvan DA. The Use of Combined Serum Amylase and Lipase for Suspected Acute Pancreatitis. Clinical Chemistry. 1993;39:2495 - 2499.

12. Sparks JD, **Corsetti JP**, and Sparks CE. Liver Regrowth and Apolipoprotein B Secretion by Rat Hepatocytes Following Partial Hepatectomy. Metabolism. 1994;43:681 - 690.

13. Lazova RZ, Sterry JA, and **Corsetti JP**. Pseudoparaproteinemia Due to Hemoglobinopathy. Clinical Chemistry. 1995;41:1321 - 1322.

14. Sparks JD, Phung TL, Bolognino M, Cianci J, Khurana R, Peterson RG, Sowden MP, **Corsetti JP**, and Sparks CE. Lipoprotein Alterations in 10 and 20 Week Old Zucker Diabetic Fatty Rats: Hyperinsulinemic Versus Insulinopenic Hyperglycemia. Metabolism. 1998;47:1315 - 1324.

15. Corsetti JP, Sparks JD, Peterson RG, Smith RL, and Sparks CE. Effect of Dietary Fat on the Development of Non-Insulin Dependent Diabetes Mellitus in Obese Zucker Diabetic Fatty Male and Female Rats. Atherosclerosis. 2000;148:131 - 141.

16. Sparks JD, Shaw WN, **Corsetti JP**, Bolognino M, Pesek JF, and Sparks CE. Insulin-Treated Zucker Diabetic Fatty Rats Retain the Hypertriglyceridemia Associated with Obesity. Metabolism. 2000;49:1424 - 1430.

17. Chirieac DV, Chirieac LR, **Corsetti JP**, Cianci J, Sparks CE, and Sparks JD. Glucose-Stimulated Insulin Secretion Suppresses Hepatic Triglyceride-Rich Lipoprotein and Apo B Production. Am Jour Physiol Endocrinol Metab. 2000;279:E1003 - E1011.

18. Corsetti JP, Zareba W, Moss AJ, Ridker PM, Marder VJ, Rainwater DL, and Sparks CE. Metabolic syndrome best defines the multivariate distribution of blood variables in postinfarction patients. Atherosclerosis. 2003;171:351 - 358.

19. Corsetti JP, Zareba W, Moss AJ, and Sparks CE. Apolipoprotein B Determines Risk for Recurrent Coronary Events in Postinfarction Patients with Metabolic Syndrome. Atherosclerosis. 2004;177:367 - 373.

20. Corsetti JP, Zareba W, Moss AJ, and Sparks CE. Serum Glucose and Triglyceride Determine High-Risk Subgroups in Non-Diabetic Postinfarction Patients. Atherosclerosis. 2005;183:293 - 300.

21. Corsetti JP, Zareba W, Moss AJ, Rainwater DL, and Sparks CE. Elevated HDL Is a Risk Factor for Recurrent Coronary Events in a Subgroup of Non-Diabetic Postinfarction Patients with Hypercholesterolemia and Inflammation. Atherosclerosis. 2006;187:191 - 197.

22. Corsetti JP, Rainwater DL, Moss AJ, Zareba W, and Sparks CE. High Lipoprotein-Associated Phospholipase A_2 Is a Risk Factor for Recurrent Coronary Events in Postinfarction Patients. Clinical Chemistry. 2006;52:1331 - 1338.

23. Multiple co-authors including **Corsetti JP**. Collaborative Meta-Analysis of Individual Participant Data from Observational Studies of Lp-PLA_2 and Cardiovascular Diseases. European Journal of Cardiovascular Prevention and Rehabilitation. 2007;14:3 - 11.

24. Corsetti JP, Ryan D, Moss AJ, Rainwater DL, Zareba W, and Sparks CE. Glycoprotein Ibα Polymorphism (T145M), Elevated Lipoprotein-Associated Phospholipase A2, and Hypertriglyceridemia Predict risk for Recurrent Coronary Events in Diabetic Postinfarction Patients. Diabetes. 2007;56:1429 - 1435.

25. Ryan TP, Sloand JA, Winters PC, **Corsetti JP**, Fisher SG. Chronic Kidney Disease Prevalence and Rate of Diagnosis. American Journal of Medicine. 2007;120:981 - 986.

26. Goldenberg I, Moss AJ, Block R, Ryan D, **Corsetti JP,** McNitt S, Eberly SW, Zareba W. Polymorphism in the Cholesteryl Ester Transfer Protein Gene and the Risk of Early Onset Myocardial Infarction among Cigarette Smokers. Annals of Noninvasive Electrocardiology. 2007;12:364 - 374.

27. Corsetti JP, Ryan D, Moss AJ, Zareba W, and Sparks CE. NAD(P)H Oxidase Polymorphism (C242T) and High HDL Cholesterol Associate with Recurrent Coronary Events in Post infarction Patients. Atherosclerosis. 2008;196:461-468.

28. Corsetti JP, Ryan D, Moss AJ, Rainwater DL, Zareba W, and Sparks CE. Plasminogen Activator Inhibitor-1 Polymorphism (4G/5G) Predicts Recurrence in Non-Hyperlipidemic Postinfarction Patients. Arteriosclerosis, Thrombosis, and Vascular Biology. 2008;28:548-554.

29. Corsetti JP, Ryan D, Rainwater DL, Moss AJ, Zareba W, Block RC, and Sparks CE. Lp(a) and Risk of Recurrent Cardiac Events in Obese Postinfarction Patients. Obesity. 2008;16:2717-2722.

30. Block R, **Corsetti JP,** Goldenberg I, Vorobiof G, McNitt S, Ryan D, Zareba W, Moss AJ. The Common Apolipoprotein A-1 Polymorphism -75A>G is Associated with Ethnic Differences in Recurrent Coronary Events after Recovery from an Acute Myocardial Infarction. Heart International. 2009;4:e8.

31. Multiple co-authors including **Corsetti JP**. Lipoprotein-Associated Phospholipase A_2 and Risk of Coronary Disease, Stroke, and Mortality: Collaborative analysis of 32 Prospective Studies. Lancet. 2010;375:1536-1544.

32. Corsetti JP, Gansevoort RT, Sparks CE, Dullaart RPF. Inflammation reduces HDL protection against primary cardiac risk. European Journal of Clinical Investigation. 2010;40:483-489.

33. Casas JP, Ninio E, Panayiotou A, Palmen J, Cooper JA, Ricketts SL, Nicolaides AN, **Corsetti JP,** et al. *PLA2G* Genotype, Lp-PLA2 Activity and Coronary Heart Disease Risk in 8506 Cases and 12,620 Controls of European Ancestry. Circulation. 2010;121:2284-2293.

34. Corsetti JP, Ryan D, Rainwater DL, Moss AJ, Zareba W, and Sparks CE. Cholesteryl Ester Transfer Protein Polymorphism (TaqIB) Associates with Risk in Postinfarction Patients with High C-Reactive Protein and High-Density Lipoprotein Cholesterol Levels. Atherosclerosis, Thrombosis, and Vascular Biology. 2010;30:1657-1664.

35. Corsetti JP, Gansevoort RT, Navis GJ, Sparks CE, Dullaart RPF. *LPL* Polymorphism (D9N) Predicts Cardiovascular Disease Risk Directly and Through Interaction with *CETP* Polymorphism (TaqIB) in Women with High HDL Cholesterol and CRP. Atherosclerosis. 2011;214:373-376.

36. Refaai MA, Fialkow LB, Heal JM, Henrichs KF, Spinelli SL, Phipps RP, Masel E, Smith BH **Corsetti JP**, Francis CW, Bankey PE, Blumberg N**.** An Association of ABO Non-Identical Platelet and Cryoprecipitate Transfusions with Altered Red Cell Transfusion Needs in Surgical Patients. Vox Sanguinis. 2011;101:55-60.

37. Corsetti JP, Sterry J, Sakpal M, LeFevre BH, Ryan D. Glycerol as a Reference Material for Fecal Fat Quantitation Using Low-Resolution Time Domain ^{1}H NMR Spectroscopy. Clin Biochem, 2011;44:1352-1354.

38. Corsetti JP, Ryan D, Moss AJ, McCarthy JJ, Goldenberg I, Zareba W, Sparks CE. Thrombospondin-4 Polymorphism (A387P) Predicts Cardiovascular Risk in Postinfarction Patients with High HDL Cholesterol and C-Reactive Protein Levels. Thrombosis and Haemostasis. 2011;106:1170-1178.

39. Corsetti JP, Gansevoort RT, Bakker SJL, Navis GJ, Sparks CE, and Dullaart RPF. Apolipoprotein E Predicts Incident Cardiovascular Disease Risk in Women but not in Men with Concurrently High Levels of High-Density Lipoprotein Cholesterol and C-Reactive Protein. Metabolism Clinical and Experimental. 2012;61:996-1002. doi:10.1016/j.metabol.2011.11.010.

40. Le NT, **Corsetti JP**, Sparks J, Sparks CE, Fujiwara K, and Abe JI. Reactive Oxygen Species (ROS), SUMOylation, and Endothelial Inflammation. International Journal of Inflammation, vol. 2012, Article ID 678190, 13 pages, 2012. doi:10.1155/2012/678190.

41. Corsetti JP, Bakker SJL, Sparks CE, and Dullaart RPF. Apolipoprotein A-II Influences Apolipoprotein E-Linked Cardiovascular Disease Risk in Women with High Levels of HDL Cholesterol and C-Reactive Protein. PLoS ONE 2012;7(6): e39110. doi:10.1371/journal.pone.0039110.

42. Corsetti JP, Salzman P, Ryan D, Moss AJ, Zareba W, and Sparks CE. Plasminogen Activator Inhibitor-2 Polymorphism Associates with Recurrent Coronary Event Risk in Patients with High HDL and C-Reactive Protein Levels. PLoS ONE 2013;8(7): e68920. doi:10.1371/journal.pone.0068920.

43. Sparks CE, **Corsetti JP**, Sparks JD. High-density Lipoproteins: Taking the Good with the Bad. Current Opinion in Lipidology. 2014;25:230-232.

44. Corsetti JP, Gansevoort RT, Bakker SJL, Sparks CE, Vart P, Dullart RPF. Apolipoprotein B Attenuates Albuminuria Associated Cardiovascular Disease in PREVEND Participants. Journal of the American Society of Nephrology. 2014;25:2906-2915.

45. Szepietowska B, McNitt S, Kutyifa V, Ryan D, **Corsetti JP**, Sparks C, Moss AJ, Zareba W. Insulin resistance predicts the risk for recurrent coronary events in post-infarction patients. Cardiol J. 2015 Mar 3. doi: 10.5603/CJ.a2015.0014.

46. Corsetti JP, Gansevoort RT, Bakker SJL, Dullart RPF. Apolipoprotein E Levels Together with Apolipoprotein E Genotypes Associate with Incident Cardiovascular Disease Risk in Subjects of the Prevention of Renal and Vascular Endstage Disease (PREVEND) Study. J Clinical Lipidology. 2016;10:842-850. http://dx.doi.org/10.1016/j.jacl.2016.03.003. (PMID: 27578115).

47. Corsetti JP, Salzman P, Ryan D, Moss AJ, Zareba W, and Sparks CE. Influences on Plasminogen Activator Inhibitor-2 Polymorphism-Associated Recurrent Cardiovascular Disease Risk

in Patients with High HDL Cholesterol and Inflammation. Atherosclerosis. 2016;250:1-8. http://dx.doi.org/10.1016/j.atherosclerosis.2016.04.017. (PMID: 27174532).

48. Corsetti JP, Salzman P, Ryan D, Moss AJ, Zareba W, and Sparks CE. Data in support of a central role of plasminogen activator inhibitor-2 polymorphism in recurrent cardiovascular disease risk in the setting of high HDL cholesterol and C-reactive protein using Bayesian network modeling. Data in Brief. 2016;8:98-104: http://dx.doi.org/10.1016/j.dib.2016.05.026. (PMID: 27284570).

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BOOK CHAPTERS

Corsetti JP, and Arvan DA. Acute Pancreatitis. In "Diagnostic Strategies for Common Medical Problems". Black ER, Bordlley DR, Tape TG, and Panzer RJ, eds., ACP, Philadelphia, 1999.

Corsetti JP, and Arvan DA. Acute Viral Hepatitis. In "Diagnostic Strategies for Common Medical Problems". Black ER, Bordlley DR, Tape TG, and Panzer RJ, eds., ACP, Philadelphia, 1999.

Corsetti JP, and Arvan DA. Hypercalcemia. In "Diagnostic Strategies for Common Medical Problems". Black ER, Bordlley DR, Tape TG, and Panzer RJ, eds., ACP, Philadelphia, 1999.

Corsetti JP, and Arvan DA. Obstructive Jaundice. In "Diagnostic Strategies for Common Medical Problems". Black ER, Bordlley DR, Tape TG, and Panzer RJ, eds., ACP, Philadelphia, 1999.

OTHER PUBLICATIONS

Corsetti JP. Book Review of *Geriatric Clinical Chemistry Reference Values, eds: Faulkner WR and Meites S. American Association for Clinical Chemistry Press, Washington, DC, 1994.* J Am Geriatrics Soc 42:1135(1994).

"Journal Club" presentation of [**Corsetti JP**, Rainwater DL, Moss AJ, Zareba W, and Sparks CE. High Lipoprotein-Associated Phospholipase A_2 Is a Risk Factor for Recurrent Coronary Events in Postinfarction Patients. Clinical Chemistry. 2006;52:1331 - 1338] in Clinical Laboratory. 2007;53:113.

PATENTS

2015 US Patent 8,979,753 (issued March17, 2015); "Identifying Risk of a Medical Event"; Inventors: **Corsetti JP**, Sparks CE, Ryan D, Moss AJ.

CONSULTATION

2010 - University of Rochester Medical Center Clinical Trials Laboratory, multiple clients.

RESEARCH GRANTS

COMPLETED AWARDS

1986 - 87 PHS S7RR05403(BRSG Sub), Zonal Heterogeneity of Hepatic Lipoprotein Metabolism by Flow Cytometry, **PI - JP Corsetti**, $7,141.

1987 - 88 NYS Health Research Council D4-031, Heterogeneity of Hepatic Lipoprotein Metabolism in Streptozotocin-Induced Diabetic Rats, **PI - JP Corsetti**, $20,000.

1988 Marion Laboratories, Diltiazem and Intracellular Calcium Mediation of Lipoprotein Metabolism, **Co-PI - JP Corsetti**, PI - Charles E. Sparks, $53,872.

1988 - 91 American Heart Association Grant-in-Aid 880793, Lipoprotein Regulation by Insulin and Free Cytosolic Calcium, **PI - JP Corsetti**, $99,000.

1998 University of Rochester Medical Center, Dept. of Pathology and Laboratory Medicine Faculty Development Program, Hepatocellular Heterogeneity of Lipoprotein Metabolism, **PI - JP Corsetti**, $5,000.

2009 Ortho-Clinical Diagnostics, Inc. Blood Samples Collection from Human Subjects for Metabolic Disease Study. **PI - James P. Corsetti**. $400,000./year.

FUTURE RESEARCH

Beginning in 2003 as reported in a series of thirteen first-authored publications, we have investigated recurrent cardiovascular disease (CVD) risk in post-MI patients in terms of blood biomarkers and SNP's representative of metabolic, inflammatory/oxidative stress, and thrombogenic processes. The overarching idea driving this work was based on concepts from personalized medicine suggesting that different blood and genetic biomarkers would be specific in predicting risk in a given patient. However, limitations in current state-of-the-art approaches prevent identification of such markers. As a transitional phase, we hypothesized that personalized medicine tenets may be approached by recognizing patient subgroups with common pathophysiologic features for whom sets of biomarkers would be effective. Based on these ideas, we developed an approach for recognition of such patient subgroups that we call "outcome event mapping" (OEM). OEM is a graphical exploratory data analysis tool that maps risk over a bivariate risk domain of two biomarkers. With it, we have identified several high-risk subgroups in post-MI patients. One of these is particularly worthy of note as it occurs in patients with high levels of HDL cholesterol and C-reactive protein. This finding is surprising as high levels of HDL cholesterol (the "good" cholesterol) have for decades been considered anti-atherogenic and thus protective against CVD risk. However, there is accumulating evidence that HDL becomes dysfunctional and actually pro-atherogenic under conditions of low-grade systemic inflammation. We believe this notion underlies our observation of high HDL-associated risk.

Recently, we identified a similar subgroup of subjects from a generally healthy population from the Netherlands with no history of CVD. Thus, the high-risk high HDL/high CRP subgroup appears to be present in both primary and recurrent CVD, and as such it becomes an important patient subgroup for further study as many therapeutic approaches aimed at further reducing CVD risk beyond treatment with statins involves various means of raising HDL levels. Already such attempts have proved flawed (torcetrapib) in that several have been terminated in light of findings of actually increased CVD risk with such approaches.

Thus, our plans are: first, to investigate and probe pathophysiologic mechanisms involved in risk establishment in such patients by epidemiologic studies using blood and genetic biomarkers with our OEM approach and advanced statistical analyses (Bayesian network modeling) oriented toward identification of pathophysiologic mechanisms and elucidation of relationships among them; and second, to perform proteomic and lipidomic analyses of normal and altered HDL particles to work-out physico-chemical changes related to inflammation-induced dysfunctional transformation. In the first case, we have performed Bayesian network modeling on a database (4 clinical, 17 biomarker, and 53 SNPs) of postinfarction patients with results showing five major pathways leading to risk. We have further developed based on the Bayesian network results a multivariable risk model especially attuned for determining risk on a personalized basis dependent on the measurement of ten risk variables. Furthermore, we have extended the approach to make possible the querying of the risk model such that optimal strategies for reducing risk on a personalized basis can be provided. Such strategies may include altering levels of risk factors that are potentially modifiable as well as identifying as drug target candidates those factors that are highly influential but not currently modifiable.