

**EMORY UNIVERSITY SCHOOL OF MEDICINE
CURRICULUM VITAE**

Revised: 1/4/2011

1. **Name:** Ross J. Molinaro

2. **Office Address:**

a. Emory University Hospital Midtown 550 Peachtree Ave, Atlanta, GA 30308 Woodruff Building, Room 1239 1930-001-1AP (SOM:Pathology)	Telephone: 404-686-1913	Fax: 404-712-5596
b. Emory Clinical Translational Research Laboratory (CTRL) Woodruff Memorial Research Building 101 Woodruff Circle, Atlanta, GA 30322 Room 2307	404-727-9886	404-727-9656

3. **E-mail Address:** rjmolin@emory.edu

4. **Citizenship:** USA

5. **Current Titles and Affiliations:**
 - a. **Academic appointments:**
 - I. **Primary appointments:**

Assistant Professor (CT), Department of Pathology and Laboratory Medicine,
Emory University School of Medicine, 2008-present

Co-Director, Emory Clinical Translational Research Laboratory Service
Center, Emory University School of Medicine, CLIA ID # 11D1107626 (listed
as Medical Director), 2009-present

 - b. **Clinical appointments:**

Assistant Medical Director Core Laboratory, Emory University Hospital Midtown,
2008-present

 - c. **Other administrative appointments:**

Faculty Member, Commission on Accreditation in Clinical Chemistry (COMACC)
Clinical Chemistry Fellowship Program, Department of Pathology and Laboratory

Medicine, Emory University School of Medicine, 2008-present

6. Previous Academic and Professional Appointments:

- 2000-2002 Teaching Assistant, Clinical Chemistry, Instrumental Analysis, Parasitology, Research Associate, Department of Biotechnical and Clinical Laboratory Science, State University of New York at Buffalo, Buffalo, NY
- 2002 Teaching Assistant, General Chemistry, Department of Chemistry, Cleveland State University, Cleveland, OH
- 2003 Teaching Assistant, Advanced Biology, Lakewood High School, Lakewood, OH
- 2002-2006 Research Associate, Department of Chemistry, Cleveland State University, Cleveland, OH
- 2006-2008 Clinical Chemistry Post-Doctoral Fellow, Department of Pathology and Laboratory Medicine, Emory University School of Medicine, Atlanta, GA

7. Previous Administrative and/or Clinical Appointments:

- Phlebotomist/Laboratory Assistant; Mount St. Mary's Hospital, Niagara Falls, NY, 1999-2000
- Medical Technologist; Mount St. Mary's Hospital, Niagara Falls, NY, 2000-2002
- Medical Technologist; Lakewood Hospital, Lakewood, OH, 2002-2006

8. Licensures/Boards:

- Medical Technology (ASCP) (Certificate #214081), 2000
- State of Georgia, Clinical Laboratory Director (License #09003), 2009

9. Specialty Boards:

- American Board of Clinical Chemistry (ABCC) (Certificate #1027), 2008

10. Education:

- 2000 – B.S., Medical Technology
University at Buffalo, State University at New York, Buffalo, NY
- 2002 – M.S., Biotechnical and Clinical Laboratory Science
University at Buffalo, State University at New York, Buffalo, NY
Supervisor: Stephen T. Koury, Ph.D.
- 2006 – Ph.D., Clinical/Bioanalytical Chemistry & Molecular Medicine
Department of Chemistry, Cleveland State University/Cleveland Clinic, Cleveland, OH
Supervisor: Robert H. Silverman, Ph.D.

11. Postgraduate Training:

Emory University School of Medicine, Department of Pathology and Laboratory Medicine, Atlanta, GA, Clinical Chemistry Post-Doctoral Fellowship, Supervisors: James C. Ritchie, Ph.D. & Corinne R. Fantz, Ph.D. 2006-2008

12. Committee Memberships:**a. National and International:**

Observer, Clinical Chemistry and Toxicology Committee, Subcommittee on Serum Indices in the Clinical Laboratory (C56), Clinical and Laboratory Standards Institute, 2010-present

Member, American Association for Clinical Chemistry, Society for Young Clinical Laboratorians Committee, 2010-present

- Chair, Society for Young Clinical Laboratorians Sub-Committee, *SYCL360 Newsletter and Podcast*. 2010-present

- Chair, Society for Young Clinical Laboratorians Sub-Committee, 2012 SYCL Annual Meeting Workshop Organizing Sub-Committee. 2010-present

Chair, Editorial Board, American Society for Clinical Pathology *LabQ* Program, 2010-present

Member, Professional Practice Review Course Curriculum Organizing Committee, American Association for Clinical Chemistry, appointment begins 2011

b. Regional and State:

Chair, Continuing Education & Website Administrator, Northeast Ohio Section, American Association for Clinical Chemistry, 2006

Member, Professional Relations Committee, Southeast Section, American Association for Clinical Chemistry, 2007-2008

Member, Nominating Committee, Southeast Section, American Association for Clinical Chemistry, 2008

Chair, Membership Committee, Southeast Section, American Association for Clinical Chemistry, 2009-2010

Chair-Elect, Southeast Section, American Association for Clinical Chemistry, 2010

Chair, Southeast Section, American Association for Clinical Chemistry, 2011

c. Institutional:

Treasurer/Secretary, Medical Technology Class, State University of New York at Buffalo, Buffalo, NY, 1999-2000

Secretary, Interdisciplinary Graduate School Colloquium, Cleveland State University, Cleveland, OH, 2002-2003

President, Chemistry Graduate Student Association, Cleveland State University, Cleveland, OH, 2002-2003

Member, Diversity Council, Cleveland Clinic Foundation/Lerner Research Institute, Cleveland, OH, 2005-2006
Member, Advisory Committee, Emory Healthcare Medical Technology Program, Atlanta, GA, 2007-present
Member, Surgical Care Committee, Emory University Hospital Midtown, Atlanta, GA, 2008-present
Member, Emergency Department Care Committee, Emory University Hospital Midtown, Atlanta, GA, 2008-present
Member, Admissions Committee, Emory Healthcare Medical Technology Program, Atlanta, GA, 2008-present
Member, Pharmacy & Therapeutics Committee, Emory University Hospital Midtown, Atlanta, GA, 2009-present
Member (Research), Molecular Pathways and Biomarkers Program, Winship Cancer Institute, Emory University, Atlanta, GA, 2009-present
Member, CAPSTONE Medical Student Advisory Committee, Emory University School of Medicine, Atlanta, GA, 2010-present
Member, Faculty Mentorship Program (FMP) Working Group, Department of Pathology and Laboratory Medicine, Emory University School of Medicine, Atlanta, GA, 2010-present

13. Consultantships:

Media Lab Inc., 2006-2007
Eagle Pharmaceuticals Inc., 2008-2009
Drew-Scientific, 2008-2009
Bio-Rad Laboratories, Inc., 2009-present

14. Editorships and Editorial Boards:

Immunological Investigations, 2010-present
LabQ, American Society for Clinical Pathology (Executive Editor), 2011

15. Manuscript reviewer (Ad hoc):

Lab Medicine, 2007-present
Journal of Chromatography B, 2008-present
Clinical Chemistry, 2009-present

16. Honors and Awards:

2002 Teaching Assistant Award, State University at New York at Buffalo
2003 Teaching Assistant Award, State University at New York at Buffalo
2004 Best Poster Presentation, Seventh Graduate Student Symposium of the Cleveland State University/Cleveland Clinic Joint Ph.D. Program in Clinical/Bioanalytical Chemistry

- 2004 International Cytokine Society/International Society Interferon and Cytokine Research Travel Award
- 2004 College of Science Travel Award, Cleveland State University
- 2004 Achievement Award, Cleveland Clinic/Lerner Research Institute
- 2005 Distinguished Abstract Award, National Academy of Clinical Biochemistry
- 2005 Cleveland Clinic Innovator Award
- 2005 First Place, Best Graduate Student Oral Presentation, American Association for Clinical Chemistry Annual Meeting
- 2005 Travel Award, American Association for Clinical Chemistry Annual Meeting
- 2005 Travel Award, Cleveland State University
- 2005 Editor's Choice Award, *ASCP Tech Sample* Generalist Series "Difficulties in Identifying *Campylobacter* in Blood Cultures"
- 2006 First Place, Best Graduate Student Oral Presentation in Molecular Biology and Biochemistry, Cleveland State University 2nd Annual Regional Interdisciplinary Symposium
- 2006 Travel Award, Cleveland State University College of Science
- 2006 Award for Basic Science, Cleveland Clinic/Lerner Research Institute
- 2006 Second Place, Best Graduate Student Oral Presentation, American Association for Clinical Chemistry Annual Meeting
- 2006 Student Travel Grant, Van Slyke Foundation, American Association for Clinical Chemistry
- 2007 Domestic Travel Grant, American Association for Clinical Chemistry Society for Young Clinical Laboratorians
- 2007 Best Graduate Student Poster Presentation Award, American Association for Clinical Chemistry Annual Meeting
- 2007 Student Travel Grant, Van Slyke Foundation, American Association for Clinical Chemistry
- 2007 Paul E. Strandjord Young Investigator Award, Academy of Clinical Laboratory Physicians and Scientists
- 2008 Best Graduate Student Poster Presentation Award, American Association for Clinical Chemistry Annual Meeting
- 2008 Domestic Travel Grant, American Association for Clinical Chemistry Society for Young Clinical Laboratorians
- 2008 Paul E. Strandjord Young Investigator Award, Academy of Clinical Laboratory Physicians and Scientists
- 2008 Junior Faculty Travel Award, Mass Spectrometry: Applications to the Clinical Laboratory
- 2009 Fellow, National Academy of Clinical Biochemistry
- 2010 Outstanding Speaker Award, American Association for Clinical Chemistry
- 2010 Emory University Research Committee/Atlanta Clinical Translational Science Institute Research Award

17. Society Memberships:

American Society for Clinical Pathology, 2001-present

American Society for Biochemistry and Molecular Biology, 2004-present
American Association for Clinical Chemistry, 2005-present
Academy of Clinical Laboratory Physicians and Scientists, Associate Member, 2007-present
Association of Clinical Scientists, 2009-present
International Society on Thrombosis and Haemostasis, 2009-present

18. Research focus:

- *Emory Clinical Translational Research Laboratory (ECTRL)*

ECTRL is a CLIA certified service center based on the main campus of Emory University. The focus of ECTRL is the development of clinical based laboratory testing methods, clinical utility examination, clinical trial laboratory testing, routine and special laboratory method development, and clinical laboratory method validation, encompassing clinical pathology translational research.

- *Biomarkers and Mass Spectrometry*

Our research investigates genomic, proteomic, and small molecule biomarkers of disease, including cancer pathogenesis involving viral infection. The development of associated clinical based testing methods, clinical utility examination, mass spectrometry method development, clinical method validation, and clinical pathology translational research is encompassed.

- *Xenotropic Murine Leukemia Virus-Related Virus (XMRV) and Cancer*

We are studying the novel prostate cancer associated retrovirus, Xenotropic Murine Leukemia Virus-Related Virus (XMRV) and investigate the role XMRV plays in cancer development and progression.

19. Patents:

a. Issued:

“Xenotropic Murine Retrovirus (XMRV) Compositions and Methods of Use”, No. 61/248,250, October 2, 2009, Emory Ref: 204382-0001-P1-US (443674)

b. Pending:

ReagenTrak™ - Computer program developed to monitor inventory in the clinical laboratory.

MoniTAT™ - Computer program developed to monitor turn-around-time for clinical laboratory testing

“Evaluation of Cellular Determinants Required for *in vitro* XMRV Infection of Human Prostate Cancer and Non-Cancerous Cells”, Provisional Patent Application No.

61/248,246, October 2, 2009, Emory Ref: 204382-0002-P1-US (443789)

20. Grant Support:

a. Active support:

I. Contracts:

Xceed Molecular Diagnostics
Title: Clinical Microarray for Diagnosis of Colon Cancer and
Rheumatoid Arthritis
July 2008
Role: PI (10% of salary)

Eagle Pharmaceuticals, Inc.
Title: Bioequivalence Study of a New Argatroban Formulation
November 2008
Role: Co-PI (5% of salary)

II. Other:

Emory URC Grant, 2010: *Characterization of Xenotropic Murine
Leukemia Virus-Related Virus (XMRV)*

HOPA Research Grant
Title: Pharmacokinetics of Lenalidomide
February 2010
PI: Donald Harvey, PharmD, FCCP, BCPS, BCOP (Emory University)
Role: Collaborator

b. Previous Support

Cleveland State University/Cleveland Clinic Foundation Molecular Medicine
Fellowship, 2004-2006 (\$48,000)

American Association for Clinical Chemistry Van Slyke Foundation Past
Presidents' Scholarship (*fully supported Clinical Chemistry Fellowship*),
2006-2008 (\$100,000)

Seed Grant, Emory University (Dennis Liotta, Ph.D.)
Title: Pathogenesis of XMRV
December 2008 (\$110,000)
Role: PI (10% of salary)

c. Pending/Applied Support

NIH/NCI U24 (RFA-CA-10-016), 2010: *Proteomics in Brain Cancer: Emory Proteome Characterization Center (EPCC)*. Role: Co-Investigator

American Cancer Society Research Scholar Award, 2010: *A Transforming Gene Product of a Prostate Cancer Associated Retrovirus*. Role: PI

NIH R01, 2010: *XMRV: Oncogenic Virus, Prostate Cancer*. Role: Co-Investigator

21. Clinical Service Contributions:**Emory University Hospital Midtown Committees:**

Emory University Hospital Midtown Emergency Department, 2008-present
Surgical Care, 2008-present
Pharmacy and Therapeutics, 2009-present

Emory University Hospital Committees:

Laboratory Operations, 2009-present

Additional Significant Accomplishments:

- Implementation of new chemistry and immunochemistry instrumentation in Emory University Hospital Midtown Core Laboratory
- Development of a novel liquid chromatography tandem mass spectrometry method to assess renal function.
- November 4th, 2010 completed *Quality Academy: Leadership for Healthcare Improvement*
 - *Quality project:* Eliminating Inventory Shortages at Emory University Hospital Midtown Core Labs. Developing a process that ensures efficient utilization and monitoring of instrument reagent inventory.
 - *Quality project:* Developing a cost-effective, novel computer program for laboratory staff to easily monitor turn-around-time parameters. Saved Emory Medical Labs ~\$25,000 in computer program license fees.
- Developed Emory Medical Student Clinical Laboratory Rotation

22. Formal Teaching:**a. Graduate Program:**

Residency Program:

Organize and lecture Clinical Pathology Didactic and Seminar Series:

“Immunological Techniques” April 2008
“Cardiac Testing” April 2009
“Diabetes” May 2009
“Minerals & Vitamins Testing” June 2009
“Immunoassay Techniques” August 2009
“Carbohydrates” October 2009
“Bone Disease” October 2009
“Liver Disease” November 2009

Medical Technology Program:

Organize and lecture in:

“Bone and Pancreas Disease” October 2008
“Cardiac Testing” October 2008
“Diabetes and Liver Testing” October 2008
“Renal and Liver Function Testing” October 2008
“Urinalysis” November 2008
“Body Fluid Testing” November 2008
“Critical Pathway Decision Making” December 2008
“Carbohydrates” October 2009
“Bone Disease” October 2009
“Liver Disease” November 2009
“Critical Pathway Decision Making” December 2009
“Carbohydrates” September 2010
“Adrenal Disorders” September 2010
“Renal Function and Disease” October 2010
“Critical Pathway Decision Making” December 2010

23. Supervisory Teaching:

a. School of Medicine:

Medical Student (SPICE) Clinical Laboratory Rotation, 2009-2010

- *Ms. Alexandra L. Silvertan* (3rd year), Emory University
- *Ms. Maggie Hodges* (3rd year), Emory University

b. Residency Program:

Pathology Residents rotation in Clinical Chemistry (Core Laboratory)

2009-present, Organize and didactic teaching:

“Laboratory Statistics”
“Comprehensive Metabolic Profile Testing”
“Diabetes”
“Lipids”
“Pediatrics”
“Renal Function”

c. Post-doctoral research fellows directly supervised:

Dr. Suganthi Suppiah, PhD, Georgia State University, USA. Characterization and identification of a novel human retrovirus, XMRV, associated with prostate cancer. 2009-2010

Dr. Jeanne Rhea, PhD, Georgia State University, USA. Pathogenesis of XMRV in human prostate carcinogenesis. 2009-present

Awards under mentorship of project “Development of a Mass Spectrometry Method to Identify XMRV Specific Peptides”:

- *Mass Spectrometry: Applications to the Clinical Laboratory travel award (planned meeting February, 2011)*

Dr. Xiugen Zhang, MD, PhD, Nanjing University, China. Retroviral protein expression and function. 2009-present

d. Clinical Chemistry Fellows trained at Emory University:

Dr. Marion Snyder (2007-2009). Current Position: Director Toxicology, Brigham and Woman’s Hospital, Boston, MA

Awards under mentorship of project “Ultra Performance Liquid Chromatography-Tandem Mass Spectrometry for Direct Monitoring of Argatroban Anticoagulation”:

- *Academy of Clinical Laboratory Physicians and Scientists Paul E. Strandjord Young Investigator Award (June, 2009)*

Dr. Alex Chin (2008-2010). Current Position: Clinical Biochemist, Calgary Laboratory Services, Clinical Assistant Professor, Department of Pathology and Laboratory Medicine, Faculty of Medicine, University of Calgary, Alberta, Canada

Dr. Charbel Abou-Diwan (2009-2011). Clinical Chemistry Postdoctoral Fellow, Emory University School of Medicine, Atlanta, GA

Awards under mentorship of project “Measurement of Tranexamic Acid Levels in Cardiopulmonary Bypass Patients Using a Novel Ultra Performance Liquid Chromatography-Tandem Mass Spectrometry Assay”:

- *Award for excellence in scholarship. Department of Pathology and Laboratory Medicine, Emory University. (June, 2010)*
- *Academy of Clinical Laboratory Physicians and Scientists Paul E. Strandjord Young Investigator Award (June, 2010)*
- *American Association for Clinical Chemistry Southeast Section Gerald C. Cooper award (June, 2010)*
- *Mass Spectrometry: Applications to the Clinical Laboratory travel award (February, 2010)*
- *Society of Young Clinical Laboratorians travel award. American Association for Clinical Chemistry Annual Meeting, Anaheim, CA (July, 2010)*
- *Student Travel Grant. American Association for Clinical Chemistry Annual Meeting, Anaheim, CA (July, 2010)*
- *Honorable Mention student poster contest. American Association for Clinical Chemistry Annual Meeting. (July, 2010)*

e. Students directly supervised:

Ms. Kristy E. Smith, Gwinnett Technical College. Emory Research Lab Internship. 2009

Ms. Ankita Tirath, Emory University 2nd-year Pre-Medical Undergraduate Student. Major: Biology. Supervised research lab experience. 2010-2011

24. Lectureships, Seminar Invitations, and Visiting Professorships:

Invited Speaker; Lecture, *Immunoassay Techniques*. Emory University, Pathology Resident Didactic Seminar. Atlanta, GA. September, 2007

Research Seminar, *Assessing Renal Function Using A Novel Liquid Chromatography-Tandem Mass Spectrometry Method For Iothalamate Identification And Quantitation*. Mass Spectrometry: Applications in the Clinical Laboratory, San Diego, CA. February, 2008

Invited Speaker; Teleconference, *Standardization Efforts and Clinical Laboratory*

Measurement Pitfalls of HbA1c as a Long-Term Estimation of Average Blood Glucose. The University of Texas Health Science Center at San Antonio, National Teleconference Network of Texas. February, 2008

Invited Speaker; Lecture and **International** Teleconference, *Targeting HbA1c: standardization and clinical laboratory measurement.* Quintiles Laboratories Global Headquarters Lecture and **International** Teleconference. Smyrna, GA. June, 2008

Invited Speaker; Research Seminar, *XMRV: A Novel Retrovirus in Prostate Cancer Patients.* Emory University Winship Cancer Center Molecular Pathways and Biomarkers Program. Atlanta, GA. February, 2009

Invited Speaker; Lecture, *Metabolic Syndrome: An update on prevalence, criteria, and laboratory testing.* American Association for Clinical Chemistry Rocky Mountain Section. Salt Lake City, UT. February, 2009

Invited Speaker; Research Seminar, *Using UPLC/MS/MS to Quantitate Argatroban in Special Patient Cases.* University at Alabama, Mass Spectrometry Clinical Users Meeting. Birmingham, AL. March, 2009

Round Table Discussion; Lecture and Moderator, *Metabolic Syndrome: An Update on Prevalence, Criteria, and Clinical Laboratory Testing.* American Association for Clinical Chemistry Annual Meeting. Chicago, IL. July, 2009

Invited Speaker; Lecture, *Metabolic Syndrome: An Update on Prevalence, Criteria, and Clinical Laboratory Testing.* Central Florida Point of Care Network and the Florida State Society of American Medical Technologists and the Florida Coalition of Professional Laboratory Organizations Annual Meeting, Orlando, Florida. August, 2009

Invited Speaker; Lecture, *Clinical Chemistry and Opportunities Complimenting Translational Science Research.* American Association for Clinical Chemistry Society for Young Clinical Laboratorians Career Development Series. Cleveland Clinic, Cleveland, OH. August, 2009

Invited Speaker; Lecture, *HbA1c and Clinical Utility in Hb Variant Prevalent Populations.* Internal Medicine Residents Conference, Emory University School of Medicine, Atlanta, GA. September, 2009

Invited Speaker; Lecture, *Clinical Chemistry and Opportunities Complimenting Translational Science Research.* Graduate Division of Biological and Biomedical Sciences Career Seminar. Emory University, Atlanta, GA. October, 2009

Invited Speaker; Research Seminar, *Localization and Characterization of XMRV.* XMRV Symposium, Cleveland Clinic, Cleveland OH. November, 2009

Invited Speaker; Lecture, *Direct Monitoring of Argatroban by Tandem Mass Spectrometry.*

Hemostasis, Bleeding and Therapeutic Approaches in 2009; New Therapies and New Paradigms. Emory University, Atlanta, GA. December, 2009

Invited Speaker; Grand Rounds Seminar, *Identification of XMRV in Prostate Cancer Cases at Emory University using FISH*. Department of Infectious Disease, Emory University School of Medicine, Atlanta, GA. March, 2010

Invited Symposia; Lecture and Moderator, *Metabolic Syndrome: Prevalence, Criteria, and Laboratory Testing*. American Association for Clinical Chemistry Annual Meeting, Anaheim, CA. July, 2010

Round Table Discussion; Lecture and Moderator, *Metabolic Syndrome: Update on Prevalence, Criteria, and Laboratory Testing*. American Association for Clinical Chemistry Annual Meeting, Anaheim, CA. July, 2010

Invited Speaker; Research Seminar, *Identification of a Novel Multi-Spliced RNA Transcript of XMRV*. American Society of Virology Meeting. Montana State University, Bozeman, MT. July, 2010

Invited Speaker; Lecture, *Career Opportunities in Laboratory Medicine for Ph.D.'s and Ph.D. Trainees*. "Career Opportunities in the Biomedical and Biological Sciences", Emory University School of Medicine Postdoctoral Symposium, Atlanta, GA. September, 2010

Invited Speaker; Research Seminar, *A Novel Subgenomic RNA Transcript of the Prostate Cancer Associated Retrovirus, XMRV*. 1st International Workshop on XMRV, NIH, Bethesda MD. September, 2010

Invited Speaker; Lecture, *AIC: Utility, Standardization, Current Methods of Analysis and Their Limitations*. Northwest Medical Laboratory Symposium, Portland, OR. October, 2010

Invited Speaker; Grand Rounds Seminar, *AIC: Standardization, Laboratory Testing, and Limitations*. Department of Endocrinology (Endocrine Conference), Emory University School of Medicine, Atlanta, GA. November, 2010

Invited Speaker; Lecture, *Laboratory Considerations in TDM and Small Molecule Testing by Mass Spectrometry Methods*. American Association for Clinical Chemistry Practical Applications of Mass Spectrometry Workshop, Johns Hopkins Medical Institutions, Baltimore, MD. November, 2010

Invited Speaker; Grand Rounds Seminar, *XMRV, A Novel Retrovirus in Humans*. Cancer Genetics and Epigenetics Seminar Series, Department of Biochemistry, Emory University School of Medicine, Atlanta, GA. December, 2011

25. Invitations to National or International Conferences:

Invited Speaker; Research Seminar, *Assessing Renal Function for Potential Kidney Donation using Iothalamate Quantitation by UPLC/MS/MS*. International HPLC Annual Meeting, Dresden, Germany. June, 2009

26. Other Activities:**a. Poster Presentations and Abstracts:**

RNA Activators of a Novel Tumor Suppressor Pathway in Prostate Cancer Cells. Seventh Graduate Student Symposium of the Cleveland State University/Cleveland Clinic Joint Ph.D. Program in Clinical/Bioanalytical Chemistry. June, 2004

RNA Activators of a Novel Tumor Suppressor Pathway in Prostate Cancer Cells. Joint International Cytokine Society/International Society Interferon and Cytokine Research Conference, San Juan, Puerto Rico. October, 2004

RNA Activators of a Novel Tumor Suppressor Pathway in Prostate Cancer Cells. 3rd Annual ShowCASE, Case Western Reserve University, Cleveland, OH. April, 2005

RNA Activators of a Novel Tumor Suppressor Pathway in Prostate Cancer Cells. Eighth Graduate Student Symposium of the Cleveland State University/Cleveland Clinic Joint Ph.D. Program in Clinical/Bioanalytical Chemistry. June, 2005

RNASEL and Prostate Cancer. Annual Meeting of the American Association for Clinical Chemistry, Orlando, FL. July, 2005

RNA Activators of a Novel Tumor Suppressor Pathway. 21st Annual Graduate Student Senate Colloquium, Kent State University, Kent, OH. April, 2006

RNASEL and Prostate Cancer. 2nd Annual Regional Interdisciplinary Symposium, Cleveland State University, Cleveland, OH. June, 2006

Ph.D. Thesis Defense, Department of Chemistry, Cleveland State University, Cleveland, OH. June, 2006

RNA Activators of a Novel Tumor Suppressor Pathway in Prostate Cancer Cells. Annual Meeting of the American Association for Clinical Chemistry, Chicago, IL. July, 2006

Advances in Clinical Mass Spectrometry. Waters Corporation Continuing Education Conference. Emory University Hospital, Atlanta, GA. March, 2007

Using LC-MS/MS to Assess Renal Function. Academy of Clinical Laboratory Physicians and Scientists, San Diego, CA. June, 2007

Development of a Quantitative Liquid Chromatography-Tandem Mass Spectrometry Method for Assessing Renal Function. American Association for Clinical Chemistry Annual Meeting, San Diego, CA. July, 2007

Effects of Direct Thrombin Inhibitors on Modified Clauss Methods for Fibrinogen and Associated Low Plasma Fibrinogen Levels During Anticoagulation with Bivalirudin. American Association for Clinical Chemistry Annual Meeting, Washington, D.C. July, 2008

Assessing Renal Function Using A Novel Liquid Chromatography-Tandem Mass Spectrometry Method For Iothalamate Identification And Quantitation. American Association for Clinical Chemistry Annual Meeting, Washington, D.C. July, 2008

Assessing Renal Function Using A Novel Liquid Chromatography-Tandem Mass Spectrometry Method For Iothalamate Identification And Quantitation. Centers for Disease Control and Prevention Collaboration Roundtable, Atlanta, GA. September, 2008

Validation of an Automated Clotting Assay for Monitoring Plasma Argatroban Levels in Comparison with a Novel Ultra-Performance Liquid Chromatography Tandem Mass Spectrometry Method. International Society on Thrombosis and Haemostasis, Boston, MA. July, 2009

Comparison of a Novel Ultra-Performance Liquid Chromatography Tandem Mass Spectrometry Method with the Activated Partial Thromboplastin Time and Prothrombin Time for Monitoring Argatroban. International Society on Thrombosis and Haemostasis, Boston, MA. July, 2009

Hemostatic Management in Jehovah's Witness Patient Undergoing Complex Cardiac Surgery. International Society on Thrombosis and Haemostasis, Boston, MA. July, 2009

Optimal Dosage for Fibrinogen Substitution After Severe Hemodilution in vitro. American Association for Clinical Chemistry Annual Meeting, Chicago, IL. July, 2009

Measurement of Plasma Tranexamic Acid Levels in Coronary Artery Bypass Graft Patients Using a Novel Ultra Performance Liquid Chromatography-Tandem Mass Spectrometry Assay. Mass Spectrometry: Applications to the Clinical Lab, San Diego, CA. February, 2010

Cellular Determinants Required for Infection of XMRV, a Novel Retrovirus Associated with Human Familial Prostate Cancer. 17th Conference on Retroviruses and Opportunistic Infections. San Francisco, CA. February, 2010

Organ and Cell Lineage Dissemination of XMRV in Rhesus Macaques during Acute and Chronic Infection. 17th Conference on Retroviruses and Opportunistic Infections. San

Francisco, CA. February, 2010

Colorectal Cancer Gene Expression Profiling Using a Novel Microarray Technology.

American Association for Clinical Chemistry Annual Meeting. Anaheim, CA. July, 2010

Clinical Utility of Point-of-Care Prothrombin Times and International Normalized Ratios in Predicting Coagulation Deficiency in Patients Undergoing Cardiopulmonary Bypass.

American Association for Clinical Chemistry Annual Meeting, Anaheim, CA. July, 2010

Measurement of Tranexamic Acid Levels in Cardiopulmonary Bypass Patients Using a Novel Ultra Performance Liquid Chromatography-Tandem Mass Spectrometry Assay.

American Association for Clinical Chemistry Annual Meeting, Anaheim, CA. July, 2010

b. Monthly Periodicals:

Molinaro RJ. Primary Author for the College of American Pathologists (CAP) Online Competency Testing Program for Clinical Chemistry.

- October 2006 – Acid-base, Anion Gap, and Electrolyte Testing
- July 2007 – Liver and Renal Testing

Invited Expert Opinion. *CAP Today*, Feature Story. September 2009. *Diabetes Markers*.

Invited Expert Opinion. *CAP Today*, Feature Story. February 2010. *Metabolic Syndrome*.

27. Bibliography:

a. Published and accepted research articles (clinical, basic science, other) in refereed journals:

1. **Molinaro RJ**, Bernstein JM, Koury ST. 2003. Localization and Quantitation of Eotaxin mRNA in Human Nasal Polyps. *Immunological Investigations*. Aug;32(3):143-54.
2. Zhou L, Civitello ER, Gupta N, Silverman RH, **Molinaro RJ**, Anderson DE, Torrence PF. 2005. Endowing Rnase H-inactive antisense with catalytic activity: 2-5A-morphants. *Bioconjugate Chemistry*. Mar-Apr;16(2):383-90.
3. Zhou A, **Molinaro RJ**, Krishnamurthy M, Silverman RH. 2005. Mapping of the Human RNASEL Promoter and Expression in Cancer and Normal Cells. *Journal of Interferon and Cytokine Research*. Oct;25(10):595-603.
4. Urisman A*, **Molinaro RJ***, Fischer N*, Plummer SJ, Casey G, Klein EA, Ganem D, Silverman RH, DeRisi JL. 2006. Identification of a Novel Gammaretroviral Genome in Prostate Tumors of Patients Homozygous for R462Q RNASEL Variant. **Cover Art.** *PLoS Pathogens*. March;2(3):e25. *These authors contributed equally to this work.

5. Rennert H, Sadowl C, Edwards J, Bantly D, **Molinaro RJ**, Orr-Urtreger A, Bagg A, Moore J, Silverman RH. 2006. An Alternative Spliced *RNASEL* Variant in Peripheral Blood Leukocytes. *Journal of Interferon and Cytokine Research*. Nov;26(11):820-6.
6. Zhou L, Thakur CS, **Molinaro RJ**, Paranjape JM, Hoppes R, Jeang KT, Silverman RH, Torrence PF. 2006. Delivery of 2-5A Cargo into Living Cells using the Tat Cell Penetrating Peptide: 2-5A-tat. *Bioorganic Medicinal Chemistry*; Dec 1;14(23):7862-74.
7. **Molinaro RJ**, Malathi K, Jha BK, Varambally S, Chinnaiyan AM, Silverman RH. 2006. Identification of RNA Activators of 2',5'-Oligoadenylate Synthetase in Prostate Cancer Cells. *Nucleic Acids Research*; 34(22):6684-95.
8. **Molinaro RJ**, Szlam F, Levy JH, Fantz CR, Tanaka KA. 2008. Low Plasma Fibrinogen Levels with the Clauss Method during Anticoagulation with Bivalirudin. *Anesthesiology* Jul;109(1):160-1.
9. Bolliger D, Szlam F, **Molinaro RJ**, Rahe-Meyer N, Levy JH, Tanaka KA. 2009. Finding the optimal concentration range for fibrinogen replacement after severe haemodilution: an *in vitro* model. *Br J Anaesth*. Jun;102(6):793-9.
10. Rumph B, Bolliger D, Narang N, **Molinaro RJ**, Levy JH, Szlam F, Tanaka KA. 2010. *In vitro* comparative study of hemostatic components in fibrinogen-deficient and warfarin treated Plasma. 2009. *J Cardiothorac Vasc Anesth*. Jun;24(3):408-12. Epub Oct 12.
11. Bolliger D, Sreeram G, Duncan A, **Molinaro RJ**, Szlam F, Chen EP, Tanaka KA. 2009. Prophylactic Use of Factor IX Concentrate in a Jehovah's Witness Patient. *Ann Thorac Surg*. Nov;88(5):1666-8.
12. Bolliger D, Szlam F, **Molinaro RJ**, Escobar MA, Levy JH, Tanaka KA. 2010. Thrombin generation and fibrinolysis in anti-factor IX treated blood and plasma spiked with factor VIII inhibitor bypassing activity or recombinant factor VIIa. *Haemophilia*. May;16(3):510-7. Epub Dec 29.
13. Bolliger D, Szlam F, Levy JH, **Molinaro RJ**, Tanaka KA. 2010. Haemodilution-induced profibrinolytic state is mitigated by fresh-frozen plasma: implications for early haemostatic intervention in massive haemorrhage. *Br J Anaesth*. Mar;104(3):318-25. Epub Feb 3.
14. Stowell SR, Arthur CM, Dias-Baruffi M, Rodrigues LC, Gourdine JP, Heimbürg-Molinaro J, Ju T, **Molinaro RJ**, Rivera-Marrero C, Xia B, Smith DF, Cummings RD. 2010. Innate immune lectins kill bacteria expressing blood group antigen. *Nat Med*. Mar;16(3):295-301. Epub Feb 14.

15. Arnold RS, Makarova NV, Osunkoya AO, Suppiah S, Scott TA, Johnson NA, Bhosle SM, Liotta D, Hunter E, Marshall FF, Ly H, **Molinaro RJ**, Blackwell JL, Petros JA. 2010. XMRV infection in patients with prostate cancer: novel serologic assay and correlation with PCR and FISH. Cover Page Article. *Urology*. Apr;75(4):755-61.
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1. Onlamoon N, Das Gupta J, Sharma P, Rogers K, Suppiah S, Rhea J, **Molinaro R**, Gaughan C, Dong B, Klein EA, Devare S, Qiu X, Schochetman G, Hackett J, Silverman RH, Villinger F. Infection, viral dissemination and antibody responses of Rhesus macaques with the human gammaretrovirus XMRV. *Journal of Virology*, under revision. Submitted November 18, 2010.
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1. **Molinaro RJ**. 2007. The Metabolic Syndrome: A Growing Problem in the United States. *MLO Med Lab Obs*. Nov;39(11):24-7.

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d. Book chapters:

1. **Molinaro RJ.** 2010. Quantitation of argatroban in plasma using liquid chromatography electrospray tandem mass spectrometry (UPLC-ESI-MS/MS). *Methods Mol Biol.* 603:57-63. *Clinical Applications of Mass Spectrometry Methods and Protocols.*
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e. Books edited and written:

Editor, Board of Certification Study Guide for the Clinical Laboratory Certification Examinations, 5th Edition, Clinical Chemistry and Laboratory Operations Sections, American Society for Clinical Pathology, 2009

f. Manuals, videos, computer programs, and other teaching aids:

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