

**STANDARDIZED CURRICULUM VITAE**  
**University of Alabama at Birmingham**  
**School of Medicine Faculty**

Date: February 2<sup>nd</sup>, 2015

**PERSONAL INFORMATION**

Name: James A. Mobley  
Citizenship: United States  
Foreign Language (s): N/A  
Home Address: 5058 Park Side Circle, Birmingham, AL 35244  
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**RANK/TITLE:** Assistant Professor, Tenure-track  
Department: Surgery  
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**NON ACADEMIC APPOINTMENTS:**

2012-Present	Associate Scientist, Center for Structural Biology (CSB); University of Alabama at Birmingham
2012-Present	Associate Scientist, Comprehensive Arthritis, Musculoskeletal and Autoimmunity Center (CAMAC); University of Alabama at Birmingham
2010-Present	Associate Scientist, Center for Cardiovascular Biology (CCVB); University of Alabama at Birmingham
2009-Present	Associate Scientist, Center of Clinical & Translational Science (CCTS); University of Alabama at Birmingham
2008-Present	Associate Scientist, Center for Free Radicals Biology (CFRB); University of Alabama at Birmingham, School of Medicine, Birmingham Alabama
2008-Present	Associate Scientist, Nephrology Research & Training Center (NRTC); University of Alabama at Birmingham, Birmingham Alabama
2007-Present	Associate Scientist, Comprehensive Cancer Center (CCC); University of Alabama at Birmingham, Birmingham Alabama
2006-2009	Associate Scientist, Center for Nutrient Gene Interaction (CNGI); University of Alabama at Birmingham, Birmingham Alabama

**PROFESSIONAL CONSULTANTSHIPS:**

2006-2007	Analytical Development; It'sFresh! Inc., Victoria, MN
1989-1990	Environmental Chemistry Consultant; Evanite Battery Incorporated, R & D Department, Corvallis, Oregon

**EDUCATION:**

Institution	Degree	Year
The Ohio State University	Ph.D. (Medicinal Chemistry)	1995-2000

*Thesis Title: Oxidative mechanisms of estrogen induced carcinogenesis. Mentor, Dr. Robert Brueggemeier.*

Oregon State University                      B.S (Chemistry, ACS)                      1987-1991  
*Thesis Title: The Measurement of Redox Induced Changes in Inorganic Matrices as Potential Probes for Monitoring Chromium VI Levels in Groundwater. Mentor, Dr. James Ingle.*

#### **POSTDOCTORAL TRAINING:**

N/A – Jr. Faculty position was awarded directly out of graduate school

#### **ACADEMIC APPOINTMENTS:**

2012-Present	Assistant Professor, Biochemistry and Structural Biology Theme; University of Alabama at Birmingham
2009-Present	Director, UAB Comprehensive Cancer Center (CCC) Mass Spectrometry/ Proteomics Shared Facility; University of Alabama at Birmingham, CCC, Birmingham Alabama
2009-Present	Assistant Professor, Primary Appointment; University of Alabama at Birmingham, School of Medicine, <u>Department of Surgery</u> , Birmingham Alabama
2009-Present	Assistant Professor, Secondary Appointment; University of Alabama at Birmingham, School of Medicine, Department of Medicine, <u>Division of Preventative Medicine</u> , Birmingham Alabama
2009-Present	Assistant Professor, Secondary Appointment; University of Alabama at Birmingham, School of Natural Sciences and Mathematics, <u>Department of Chemistry</u> , Birmingham Alabama
2008-Present	Assistant Professor, Secondary Appointment; University of Alabama at Birmingham, School of Medicine, <u>Department of Pharmacology &amp; Toxicology</u> , Birmingham Alabama
2007-2009	Director, UAB CCC Clinical Proteomics Shared Facility; University of Alabama at Birmingham, CCC, Birmingham Alabama
2006-2009	Director, UAB Urologic Research Facility; University of Alabama at Birmingham, School of Medicine, Department of Surgery, <u>Division of Urology</u> , Birmingham Alabama
2006-2009	Assistant Professor, Primary Appointment; University of Alabama at Birmingham, School of Medicine, Department of Surgery, <u>Division of Urology</u> , Birmingham Alabama
2004-2006	Research Instructor; Vanderbilt University, School of Medicine, <u>Department of Biochemistry</u> , Mass Spectrometry Research Center, Nashville Tennessee
2002-2003	Research Assistant Professor; University of Massachusetts, School of Medicine, Department of Surgery, <u>Division of Urology</u> , Worcester Massachusetts
2001-2002	Research Instructor; University of Massachusetts, School of Medicine, Department of Surgery, <u>Division of Urology</u> , Worcester Massachusetts
2000-2001	Postdoctoral Research Associate (Faculty Status); University of Massachusetts, School of Medicine, Department of Surgery, <u>Division of Urology</u> , Worcester Massachusetts
1995-2000	Graduate Research Fellow; Ohio State University, School of Medicine, <u>Department of Pharmacy</u> , Columbus, Ohio

1992-1995	Chemist; Roxane Labs, Quality Control Division, Columbus, Ohio
1991-1992	Research Assistant; Oregon State University, <u>Department of Chemistry</u> , Corvallis, Oregon
1990-1991	Teaching Assistant; Oregon State University, <u>Department of Chemistry</u> , Corvallis, Oregon
1988-1989	Lab Technician; Oregon State University, <u>Department of Chemistry</u> , Corvallis, Oregon
1985-1988	Lab Technician; Evanite Fiber Corporation, <u>Division of R &amp; D</u> , Corvallis, Oregon

#### **AWARDS/HONORS:**

2007	MHRC Charles Barkley Mentoring Award
2000-2001	NIH Research Training Grant Award Interdisciplinary Studies of Hormone Function"; Endocrinology Department, University of Massachusetts Medical School
2000	Research Award; Society for Basic Urology Research; Mass Profiling the Serologic Proteome for Diagnosis of Prostate Cancer.
1999	Student Travel Award; Gordon Research Conference, Hormonal Carcinogenesis; Estrogen Increases Sensitivity to Oxidative DNA Damage in Breast Cancer Cell Lines.
1998	Hoechst-Roussel Award; Excellence in Medicinal Chemistry
1997	Student Travel Award; Gordon Research Conference, Hormonal Carcinogenesis; Understanding the connection between Catachol Estrogens and DNA Damage in Breast Cancer.
1996-2000	NIH Research Training Grant Award; Ohio State University, Pharmacy Department, Columbus, Ohio; "Estrogen Induced Oxidative Stress in Breast Cancer".
1990	Summer Internship Award; U.C. Davis Physics Department, Livermore Labs, Livermore, California; Modeling Propagated Error in Truncated Wave Functions.

#### **PROFESSIONAL SOCIETIES/ MEMBERSHIPS:**

2012 – 2014	Human Proteomics Organization (HUPO)
2002 – Present	American Society for Mass Spectrometry (ASMS)
2001 – 2004	American Urologic Association (AUA)
2001 – Present	American Association for Cancer Research (AACR)
1988 – Present	American Chemical Society (ACS)

#### **COUNCILS AND COMMITTEES:**

2009	NIH Reviewer Challenge Grants
2006-2007	Reviewer for the US Army Medical Research and Materiel Command (USAMRMC)
2004-2006	Reviewer for the Office of Navy Research (ONR)

#### **UNIVERSITY ACTIVITIES:**

2011-Present	Co-Chair UAB School of Medicine Strategic Plan: Genomics and Proteomics
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2011-Present	Committee Member UAB SOM Personalized Medicine Taskforce
2011-Present	Thesis Committee Member, Kyle Fraser, Neurobiology
2010	Thesis Committee Member, Jeffrey Stuart, Cell Biology
2009-2013	Thesis Committee Member, Phillip Weber, Neurobiology
2009-2011	Search Committee Member for Division Chief of Urology at UAB
2008-2009	Executive Steering Team Member for the Implementation of CaBIG at UAB
2008-2012	Thesis Committee Member, Sara Jenkins, Pharmacology & Toxicology
2008-2012	Thesis Committee Member, Kathrine Tuggle, Environmental Health & Sciences
2008	Search Committee Member for Chair of Pharmacology & Toxicology at UAB
2007	Thesis Committee Member, Kyoko Kojima, Microbiology
2006	Executive Steering Team Member for the Informatics and Clinical Roadmap as part of the UAB's submission for the Clinical Translational Science Award (CTSA).

#### **EDITORIAL BOARD MEMBERSHIPS:**

2014-Present Associate Editor for MOJ Proteomics & Bioinformatics (MOJPB)  
2014-Present Editorial Board for Oncobiology and Targets

#### **MAJOR RESEARCH INTERESTS: (2-3 Sentences)**

My groups current focus at UAB include: 1) the identification of tissue specific and clinically relevant markers of prostate, breast, and pancreatic cancer by way of in-depth proteomics analysis of human biological fluids, tissue specimens, and more specifically exosome associated proteins isolated from our bio-bank with over 1000 specimens acquired *de-novo* over the past 6 years, 2) the development of pathway specific stable isotope putative peptide library's derived empirically from prostate and pancreatic cancer related studies in mice and humans, 3) the use of high-level informatics to combine various -omics datasets for use in translational studies of diseases. In this context, my laboratory is currently studying genomic and proteomic data generated from genetically engineered mice that present with an early form of pancreatic cancer to that of human controls and patients presenting with early stage and late stage pancreatic cancer.

#### **TEACHING EXPERIENCE:**

Individual Teaching Lectures

2010, 2012	Molecular Biology and Nutrition Sciences (NTR 747)
2007-2008	Proteomics and technology (TOX 712)
2006-2011	Protein Mass Spectrometry (BMG/PHR 744)
2006	UAB Introduction to Proteomics Workshop
2006	UAB Introduction to Biological & Clinical Proteomics

## Mentorships

### *Full Time Personnel*

2012-Present	Brandon Young, B.S., Research Technician, Lab Manager
2009-2011	Niesje Larson, B.S., Research Technician, Lab Manager
2009	Sean Clayton, B.S., Database Manager, IT
2007-Present	Kyoko Kojima, Ph.D., Research Associate, Microbiology
2007-2011	Senait Asmellash, Ph.D., Assistant Professor, Co-Director, MS and Proteomics Shared Facility
2006-Present	Greg Bowersock, B.S., Software Lead Specialist, IT/ Mass Spectrometry
2006-2011	Donald Shipman, B.S., Tissue Bank Manager, Pathology
2006-2009	Anton Poliakov, Ph.D., Research Instructor, Applications Biochemist
2006-2009	Joscelyn Bowersock, B.S., Research Technician, Lab Manager

### *Part Time Personnel*

2011-2014	Dongquan Chen, Ph.D., Associate Professor, Statistics/ Systems Biology
2011	J. Richman, M.D./ Ph.D., Assistant Professor, Statistics/ Systems Biology
2009-2011	Chinatsu Kojima, Ph.D., Research Assistant, Systems Biology
2009-2011	Liuyan Yang, M.S., Research Assistant, Statistics/ Systems Biology
2009	Anand Satyam, B.S., Web Designer, IT

### *Visiting Professors*

2012	Laura Stultz, Ph.D., Professor, Chemistry
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### *Student, Residents & Fellows (full time & shared)*

2014-Present	Kumudu Madduma, Ph.D., Volunteer, Inorganic Chemistry
2013	Pedro Ruiz, B.S., Rotating Graduate Student, GBM
2012	Hriday Bhambvani, High School Student
2012	Imani Alexander, High School Student
2011-2013	Michael Ludwig, B.S., Graduate Student, Microbiology
2011-2012	Taylor Kesterson, Undergraduate Student, Physics
2010	Chelsea Ball, B.S., Rotating Graduate Student, Neurology
2010	Michael Knox, M.D., Resident, Urology
2009-2010	David Crossman, Ph.D., Postdoctoral Fellow, Microbiology
2009	Oxana Munoz, M.D., Resident, Urology
2009	Sergey Ananyev, M.D., Resident, Urology
2008-2009	Christopher Shubert, B.S., Medical Student, Medicine
2008	German Henostroza, M.D., Fellow, Infectious Disease
2008	Bradley Troxler, M.D., Fellow, Pediatrics
2008	Sean Clark, M.D., Resident, Urology
2008	Benjamin Martin, M.D., Resident, Urology
2007-2010	Archer Smith, Ph.D., Postdoctoral Fellow, Biochemistry
2007-2010	Angela Betancourt, Ph.D., Postdoctoral Fellow, Pharmacology
2007-2008	Colleen Martin, B.S., Graduate Student, Pharmacology
2007	Jared Cox, M.D., Resident, Urology
2007	Joe Ritchie, B.S., Rotating Graduate Student, GBM

## MAJOR LECTURES:

Please See Oral Presentation Section

## GRANT SUPPORT:

### Funding (Active)

P30CA13148-38 (Partridge) 04/01/11 – 03/31/16 4.44 calendar  
Funding Agency: NIH-NCI; \$210,000 annual direct (MS/ Proteomics SF only)  
Comprehensive Cancer Center Core Support Grant: "UAB Bioanalytical and Mass Spectrometry Shared Facility"

The Comprehensive Cancer Center has been funded by NCI continuously since 1971 and functions administratively as a University-wide Interdisciplinary Research Center with involvement of faculty and resources from 36 departments in 6 schools of the institution.  
Role: Co-Investigator, Dr. Mobley will provide proteomics and mass spectrometry support to members of the Comprehensive Cancer Center carrying out clinical proteomics experiments.

UAB CCC MS/ Proteomics Shared Facility (Mobley); Chargebacks ~\$150,000 annual

5P20CA101955-05 (Buchsbaum) 07/01/10-12/31/15 2.40 calendar

Funding Agency: NCI- Pancreatic SPORE; \$172,349 annual direct (Project 1 only)

"Biomarker Discovery applied to an Animal Model of Pancreatic Cancer"

Role: Co-Investigator, Dr. Mobley provides proteomics and mass spectrometry support to this project.

1U18NS082132-01 (West) 09/30/12 – 09/29/15 2.40 calendar

Funding Agency: NIH; \$230,000 annual direct

"LRRK2 and other novel exosome proteins in Parkinson's disease"

Role: Co-Investigator, Dr. Mobley provides proteomics and mass spectrometry support to this project

1U01 HL122626-01 (Ambalavanan) 09/01/14 – 08/30/19 0.60 calendar

Funding Agency: NIH

\$376,200 annual direct (UAB only)

"LungMAP Consortium"

Role: Co-Investigator, Dr. Mobley will be provides proteomics and mass spectrometry support to this project.

NIH DK073732-08 (Holmes) 07/02/11 – 04/30/15 1.20 calendar

Funding Agency: NIH

\$227,142 annual direct

"Endogenous oxalate synthesis"

Role: Co-Investigator, Dr. Mobley provides proteomics and mass spectrometry support to this project.

### Funding (Pending)

PI - Anita Hjelmeland/ Co-I James Mobley; R01, Funding Agency: NCI, Title "Biosynthetic Metabolic Pathway Regulates Glioma Growth and Initiating Cell Maintenance"

PI - Namasivayam Ambalavanan/ Co-I James Mobley; R01, Funding Agency: NIH, Title "STOP BPD"

PI – Ross Holmes/ Co-PI James Mobley/ Co-PI John Knight; R01, Funding Agency: NIH, Title “Vitamin C ingestion and urinary oxalate excretion”

PI – Louise Pennell/ Co-PI James Mobley; R01, Funding Agency: NIH, “Pancreatic biomarker identification using gastrointestinal lavage fluid”

#### Funding (Completed)

PI – James Mobley, Internal matching funds from the Comprehensive Cancer Center, the School of Medicine, the Department of Urology, in addition to Collaborations through Thermo Fisher and Agilent, Title “An LTQ Velos Orbitrap Pro Mass Spectrometer” PO Issued Oct 2012, [Agilent nHPLC-autosampler, Orbitrap Velos Pro, construction, and high speed multi-core server] Total Worth \$1.2 million.

PI – William Grizzle / Co-I James Mobley, Funding Agency: NIH, Title: “Using Innovative Technologies to Overcome High Disparities: Development of Prostate Cancer Biomarkers for High Risk Populations” Dates of Funding 08/01/09-07/31/11, Total Direct Funds Requested: \$275,000 annually.

PI – Coral Lamartiniere, Funding Agency: National Institutes of Health, Title: “Genomic and proteomic biomarkers of biological responses to exposure to investigate genomic and proteomic biomarkers in mammary and blood of rats and in blood of pubertal girls” Dates of Funding: 07/1/07 – 06/30/11, Total Direct Funds Requested: \$110,000 annually.

PI – William Grizzle / Co-I James Mobley, Funding Agency: NIH, Title: “Biomarker Reference Laboratory, EDRN” 03/01/06 - 06/30/10, Total Direct Funds Requested: \$225,000 annually.

PI – Sadis Matalon / Co-I James Mobley, Funding Agency: NIH, Title: “Identification and Validation of Pulmonary Biomarkers in Acute Chlorine Exposure as Predictors of Outcome” 08/1/09– 07/31/11, Total Direct Funds Requested: \$275,000

PI-Susanne Oparil/ Co-I James Mobley, Funding Agency: NIH, Title: “Identification of Estrogens Role on IKappaB Activation in Cardiovascular Disease” 09/01/09 – 08/31/14, Total Direct Funds Requested: \$275,000

PI-Edward Partridge, Funding Agency: UAB Comprehensive Cancer Center, Title: “UAB Bioanalytical & Mass Spectrometry Shared Facility” Dates of Funding 03/01/09-02/31/11, Total Direct Funds Requested: \$300,000 annually

PI – Richard Lopez/ Co-I James Mobley, Funding Agency; Joint UAB CCC-CFAR Research Funds, Title: “Identifying Ligands on HPV Infected Cells Recognized by Cytosolic gamma-delta T”, Dates of Funding: 3/1/09 – 2/30/10, Total Direct Funds Requested: \$100,000

PI – Steve Barnes/ Co-PI James Mobley, Funding Agency: NIH, Title: “Urinary peptide excretion and onset of puberty”, Dates of Funding: 01/01/08 – 12/31/10, Total Direct Funds Requested: \$275,000

PI – Steve Barnes/ Co-I James Mobley, Funding Agency: Alabama Eyesight Foundation, Title: “Estrogen-mediated regulation of the expression and distribution of the human alphaA-crystallin lens protein”, Dates of Funding: 07/01/07-06/30/09, Total Direct Funds Requested: \$143,383

PI - James Mobley, Funding Agency: Center for Nutrient Gene Interaction, Title: "New Investigator Award", Dates of Funding: 07/01/06-06/31/09, Total Direct Funds Requested: \$90,000

PI-Anton Poliakov/ Co-PI James Mobley, UAB Junior Faculty Development Grant, Title: "Prostasomes as a novel source of prostate cancer biomarkers", Dates of Funding: 04/01/08-03/31/09, Total Direct Funds Requested: \$30,000

PI – James Mobley, Funding Agency: UAB Pancreatic SPORE Pilot Project, Title: "Biomarker Discovery applied to an Animal Model of Pancreatic Cancer", Dates of Funding: 07/01/07-6/31/09, Total Direct Funds Requested: \$55,000

PI – James Mobley PI/ Co-PI Christopher Amling, Funding Agency: Health Services Foundation General Endowment Fund Application, Title: "An LTQXL Linear Ion Trap Mass Spectrometer with ETD for High Throughput Peptide Sequencing", Dates of Funding: 06/01/08-05/31/09, Total Direct Funds Requested: \$225,000

PI – Steve Barnes PI/ James Mobley Co-PI, Funding Agency: Health Services Foundation General Endowment Fund Application  
Title: "Instrumentation for HTP Quantitative Mass Spectrometry"  
Dates of Funding: 06/01/07-05/31/08, Total Direct Funds Requested: \$350,000

PI – Steve Barnes, Funding Agency: Health Services Foundation General Endowment Fund Application  
Title: "MALDI-Tof/Tof for High Throughput Protein Identifications"  
Dates of Funding: 06/01/06-05/31/07, Total Direct Funds Requested: \$200,000

PI –Chandrika Piyathilake PI/ James Mobley Co-I, Funding Agency: UAB Ovarian SPORE Pilot Project  
Title: "Identification of Serum & Urine Biomarkers in Cervical Intraepithelial Cancer"  
Dates of Funding: 09/01/07-08/31/08, Total Direct Funds Requested: \$20,000

## **OTHER:**

### Patents and Provisions

- 2013 Urine Proteomic Biomarkers in BPD
- 2011 Identification of key pathways in Kiss-1 induced cell death
- 2011 Novel biomarkers for the early diagnosis of pancreatic carcinoma
- 2009 Saliva Based Proteomic Marker for Cystic Fibrosis
- 2008 Ethnic Specific Proteomic Markers of Papilloma 16 in Urine
- 2004 A Novel Diagnostic Test for Prostate Cancer Emerges From the Determination of  $\alpha$ -Methylacyl-CoA Racemase in Prostatic Secretions
- 2003 A Novel Estrogen 17 $\alpha$ -20Z-21-[(4-Amino)Phenyl]-19-Norpregna-1,3,5(10),20-Tetraene-3,17 $\beta$ -Diol Induces Apoptosis in Prostate Cancer Cell Lines at Nanomolar Concentrations In Vitro
- 2002 Identification and Characterization of Disease Markers, and the Use Thereof for the Diagnosis and Classification of Disease



## Ad Hoc Manuscript Review

2014-Present	Ad Hoc Reviewer for BBA Biochemica et Biophysica Acta
2013-Present	Ad Hoc Reviewer for Oncogene
2011-Present	Ad Hoc Reviewer Journal of Clinical Bioinformatics
2010-Present	Ad Hoc Reviewer for the Genome Research
2010	Ad Hoc Reviewer for the Journal Prostate
2009-Present	Ad Hoc Reviewer for Systems Biology in Reproductive Medicine
2009-Present	Ad Hoc Reviewer for the Journal BMC Bioinformatics
2009	Ad Hoc Reviewer for the Journal Proteome Science
2009	Ad Hoc Reviewer for the Journal Investigative Ophthalmology and Visual Science
2008-2012	Ad Hoc Reviewer for the Journal Shock
2008-2010	Ad Hoc Reviewer for the Journal Prostate
2008-2010	Ad Hoc Reviewer for the Journal Rapid Communications in Mass Spectrometry
2007-2009	Ad Hoc Reviewer for the Journal of Proteome Research
2006-Present	Ad Hoc Reviewer for the Journal Proteomics
2006-Present	Ad Hoc Reviewer for the Journal of Expert Reviews in Proteomics
2004-2007	Ad Hoc Reviewer for the Journal of the American Society for Mass Spectrometry
2003-Present	Ad Hoc Reviewer for the European Journal of Cancer

## MANUSCRIPTS:

### Manuscripts published

1. Comeaux EQ, Cuya SM, Kojima K, Jafari N, Wanzeck KC, **Mobley J.A.**, Bjornsti MA, van Waardenburg RC. "Tyrosyl-DNA Phosphodiesterase I Catalytic Mutants Reveal an Alternative Nucleophile that can Catalyze Substrate Cleavage." J Biol Chem. 2015 Jan 21. pii: jbc.M114.635284. PMID: 25609251
2. Ma C, Kojima K, Xu N, Mobley J, Zhou L, Yang ST, Liu XM. "Comparative proteomics analysis of high n-butanol producing metabolically engineered Clostridium tyrobutyricum." J Biotechnol. 2015 Jan 10;193:108-19. doi: 10.1016/j.jbiotec.2014.10.036. Epub 2014 Nov 5.
3. Chattopadhyay R, Tinnikov A, Dyukova E, Singh NK, Kotla S, **Mobley J.A.**, Rao GN. "12/15-Lipoxygenase-dependent ROS Production is required for Diet-induced Endothelial Barrier Dysfunction." Chattopadhyay R, Tinnikov A, Dyukova E, Singh NK, Kotla S, Mobley JA, Rao GN. J Lipid Res. 2015 Jan 3. pii: jlr.M055566.
4. Auer H, **Mobley J.**, Ayers L, Bowen J, Chuaqui R, Johnson L, Livolsi V, Lubensky I, McGarvey D, Monovich L, Moskaluk C, Rumpel C, Sexton K, Washington M, Wiles K, Grizzle W, Ramirez N The effects of frozen tissue storage conditions on the integrity of RNA and protein. Biotech Histochem. 2014 May 6. PMID: 24799092
5. Meares GP, Liu Y, Rajbhandari R, Qin H, Nozell SE, **Mobley J.A.**, Corbett JA, Benveniste EN. PERK Dependent Activation of JAK1 and STAT3 Contributes to ER Stress Induced Inflammation. Mol Cell Biol. 2014 Aug 11. pii: MCB.00980-14. PMID: 25113558
6. Betancourt A., **Mobley J.**, Wang J., Jenkins S., Chen D., Kojima K., Russo J., Lamartiniere C. Alterations in the Rat Serum Proteome Induced by Prepubertal Exposure to Bisphenol A and Genistein, J. Proteome Res. Jan 2014 ID: pr-2013-01027q.R1 PMID: 24552547

7. Ali T, Kokotos G, Magrioti V, Bone RN, **Mobley J.A.**, Hancock W, Ramanadham S. Characterization of FKGI18 as inhibitor of group VIA Ca<sup>2+</sup>-independent phospholipase A2 (iPLA2 $\beta$ ): candidate drug for preventing beta-cell apoptosis and diabetes. PLoS One. 2013 Aug 20;8(8):e71748. doi: 10.1371/journal.pone.0071748. PMID: 23977134
8. Chattopadhyay R, Dyukova E, Singh NK, Ohba M, **Mobley J.A.**, Rao GN. Vascular endothelial tight junctions and barrier function are disrupted by 15(S)-hydroxyeicosatetraenoic acid partly via Protein kinase C{epsilon}-mediated zona occludens-1 phosphorylation at threonine 770/772. J Biol Chem. 2014 Feb 7;289(6):3148-63. doi: 10.1074/jbc.M113.528190. Epub 2013 Dec 15. PMID: 24338688, PMC3916520
9. Goecks J, Mortimer NT, **Mobley J.A.**, Bowersock GJ, Taylor J, Schlenke TA. Integrative approach reveals composition of endoparasitoid wasp venoms. PLoS One. 2013 May 23;8(5):e64125. doi: 10.1371/journal.pone.0064125. Print 2013. PMID: 23717546, PMC3662768
10. Ali T, Kokotos G, Magrioti V, Bone RN, **Mobley J.A.**, Hancock W, Ramanadham S. Characterization of FKGI18 as Inhibitor of Group VIA Ca(2+)-Independent Phospholipase A2 (iPLA2 $\beta$ ): Candidate Drug for Preventing Beta-Cell Apoptosis and Diabetes. PLoS One. 2013 Aug 20;8(8): PMID: 23977134
11. Pridgeon JW, Yildirim-Aksoy M, Klesius PH, Kojima K, **Mobley J.A.**, Srivastava KK, Reddy PG. Identification of gyrB and rpoB gene mutations and differentially expressed proteins between a novobiocin-resistant Aeromonas hydrophila catfish vaccine strain and its virulent parent strain. Vet Microbiol. 2013 Oct 25;166(3-4):624-30. Epub 2013 Aug 2. PMID: 23968889
12. Fraser KB, Moehle MS, Daher JP, Webber PJ, Williams JY, Stewart CA, Yacoubian TA, Cowell RM, Dokland T, Ye T, Chen D, Siegal GP, Galemme RA, Tsika E, Moore DJ, Standaert DG, Kojima K, **Mobley J.A.**, West AB. LRRK2 secretion in exosomes is regulated by 14-3-3. Hum Mol Genet. 2013 Aug 6. PMID: 23886663, PMC383647
13. Ju S, Mu J, Dokland T, Zhuang X, Wang Q, Jiang H, Xiang X, Deng ZB, Wang B, Zhang L, Roth M, Welti R, **Mobley J.**, Jun Y, Miller D, Zhang HG. Grape exosome-like nanoparticles induce intestinal stem cells and protect mice from DSS-induced colitis. Mol Ther. 2013 Jul;21(7):1345-57. Epub 2013 Jun 11. PMID: 23752315, PMC3702113
14. Mortimer NT, Goecks J, Kacsoh BZ, **Mobley J.A.**, Bowersock GJ, Taylor J, Schlenke TA. Parasitoid wasp venom SERCA regulates Drosophila calcium levels and inhibits cellular immunity. Proc Natl Acad Sci U S A. 2013 May 20.
15. Pridgeon JW, Klesius PH, Song L, Zhang D, Kojima K, **Mobley J.A.** Identification, virulence, and mass spectrometry of toxic ECP fractions of West Alabama isolates of Aeromonas hydrophila obtained from a 2010 disease outbreak. Vet Microbiol. 2013 Feb 28. doi:pii: S0378-1135(13)00134-X. 10.1016/j.vetmic.2013.02.020. PMID: 23523171
16. Deng ZB, Zhuang X, Ju S, Xiang X, Mu J, Liu Y, Jiang H, Zhang L, **Mobley J.**, McClain C, Feng W, Grizzle W, Yan J, Miller D, Kronenberg M, Zhang HG. Exosome-like Nanoparticles from Intestinal Mucosal Cells Carry Prostaglandin E2 and Suppress Activation of Liver NKT Cells. J Immunol. 2013 Apr 1;190(7):3579-89. doi: 10.4049/jimmunol.1203170. Epub 2013 Mar 6. PMID: 23467936
17. Luo D., Banerjee P., Harner J., **Mobley J.A.**, Chen D. A cloud computing system to quickly implement new microarray data pre-processing methods. The Open Bioinformatics Journal. BSP-TOBIOIJ-2012-22
18. Kojima K., Bowersock G., Grizzle W., Klug C., **Mobley J.A.** "Validation of a robust proteomic analysis carried out on formalin-fixed paraffin-embedded tissues of the pancreas obtained from mouse and human", Proteomics. 2012 Nov;12(22): PMID:22997103

19. Betancourt A.M., Wang J., Jenkins S., **Mobley J.A.**, Russo J., Lamartiniere C.A.. "Altered Carcinogenesis and Proteome in Mammary Glands of Rats after Prepubertal Exposures to the Hormonally-active Chemicals Bisphenol A and Genistein" *J Nutr.* 2012 Jul;142(7):1382S-8S. Epub 2012 May 30.
20. Katayama H, Wang J, Treekitkarnmongkol W, Kawai H, Sasai K, Zhang H, Wang H, Adams HP, Jiang S, Chakraborty SN, Suzuki F, Arlinghaus RB, Liu J, **Mobley J.A.**, Grizzle WE, Wang H, Sen S. "Aurora Kinase-A Inactivates DNA Damage Induced Apoptosis and Spindle Assembly Checkpoint Response Functions of p73" *Cancer Cell.* 2012 Feb 14;21(2):196-211.
21. Deng Z, Cheng Z, Xiang X, Yan J, Zhuang X, Liu C, Jiang H, Ju S, Zhang L, Grizzle W, **Mobley J.**, Roman J, Miller D, Zhang HG. "Tumor cell cross talk with tumor-associated leukocytes leads to induction of tumor exosomal fibronectin and promotes tumor progression." *Am J Pathol.* 2012 Jan;180(1):390-8. Epub 2011 Nov 7.
22. Webber PJ, Smith AD, Sen S, Renfrow MB, **Mobley J.A.**, West AB "Autophosphorylation in the Leucine-Rich Repeat Kinase 2 (LRRK2) GTPase Domain Modifies Kinase and GTP-Binding Activity", *JMB*, 2011 July
23. He QP, Wang J, **Mobley J.A.**, Richman J, Grizzle WE, "Self-calibrated warping for mass spectra alignment" *Cancer Inform.* 2011, Mar 22;10:65-82.
24. Wang J, Betancourt AM, **Mobley J.A.**, Lamartiniere CA, "Proteomic discovery of genistein action in the rat mammary gland" *J Proteome Res.* 2011 Apr 1;10(4):1621-31. Epub 2011 Feb 22.
25. Wang L, Clark ME, Messinger JD, **Mobley J.A.**, Bowersock G, Crossman DK, Kojima K, Curcio C. "Abundant Lipid and Protein Components of Drusen", *PLoS One.* 2010 Apr 23;5(4).
26. Takahashi K, Wall SB, Suzuki H, Smith AD, Hall S, Paulsen K, Kilian M, **Mobley J.A.**, Julian BA, Mestecky J, Novak J, Renfrow MB. Clustered O-glycans of IgA1: Defining macro- and micro-heterogeneity by use of electron capture/transfer dissociation. *Mol Cell Proteomics.* 2010 Sep 7
27. Betancourt AM, **Mobley J.A.**, and Lamartiniere CA, Proteomic Analysis of Changes in the Rat Mammary Gland Following In Utero Exposure to Bisphenol A, *J Proteomics.* 2010 Apr 18;73(6):1241-53. PMID: 20219716
28. Islam MM, Nautiyal M, Wynn RM, **Mobley J.A.**, Chuang DT, Hutson SM. "Branched-chain amino acid metabolon: interaction of glutamate dehydrogenase with the mitochondrial branched-chain aminotransferase (BCATm)." *J Biol Chem.* 2010 Jan 1;285(1):265-76. Epub 2009 Oct 26.
29. Deng Z, Poliakov A, Hardy R, Clements R, Liu C, Liu Y, Wang J, Xiang X, Zhang S, Michalek S, Grizzle W, Garvey T, **Mobley J.**, Zhang H Adipose tissue exosome-like vesicles mediate activation of macrophage- induced insulin resistance, *Diabetes.* 2009 Nov;58(11):2498-505. Epub 2009 Aug 12.
30. **Mobley J.A.**, Poliakov A. Detection of early unfolding events in a dimeric protein by amide proton exchange and native electrospray mass spectrometry *Protein Sci.* 2009 Aug;18(8):1620-7
31. Xiang X, Poliakov A, Liu C, Liu Y, Deng ZB, Wang J, Cheng Z, Shah SV, Wang GJ, Zhang L, Grizzle WE, **Mobley J.**, Zhang HG., Induction of myeloid derived suppressor cells by tumor exosomes, *I. J. Cancer*, 2008, Int J Cancer. 2009 Jun 1;124(11):2621-33.
32. Poliakov A, Spilman M, Dokland T, Amling CL, **Mobley J.A.**, Structural heterogeneity and protein composition of exosome-like vesicles (prostasomes) in human semen. *Prostate.* 2009 Feb 1;69(2):159-67.
33. Kojima K., Asmellash S., Klug C.A., Grizzle W.E., **Mobley J.A.**, Christein J.D. Applying Proteomic Based Biomarker Tools for the accurate Diagnosis of Pancreatic Cancer *Am. Col. Surg.* 2008 (J.G.I. Surg.)

34. Chaurand P, Latham JC, Lane KB, **Mobley J.A.**, Polosukhin VV, Wirth PS, Nanney LB, Caprioli RM. Imaging Mass Spectrometry of Intact Proteins from Alcohol-Preserved Tissue Specimens: Bypassing Formalin Fixation. *J Proteome Res.* 2008 Jul 10.
35. Poliakov A, Chang JR, Spilman MS, Damle PK, Christie GE, **Mobley J.A.**, Dokland T. Capsid size determination by Staphylococcus aureus pathogenicity island SaPI1 involves specific incorporation of SaPI1 proteins into procapsids. *J Mol Biol.* 2008 Jul 11;380(3):465-75.
36. Sanders M., Dias E., Xu B., **Mobley J.A.**, Dowsett M., Caprioli R., Arteaga C. "Differentiating Proteomic Biomarkers in Breast Cancer by Laser Capture Microdissection and MALDI MS". *Journal of Proteome Research.* 2008 Apr;7(4):1500-7. PMID: 18386930, PMC2738605
37. Chaurand, P., Rahman M.A., Hunt T., **Mobley J.A.**, Gu G., Caprioli R.M. and Kasper S. Monitoring Mouse Prostate Development by Profiling and Imaging Mass Spectrometry. *Mol Cell Proteomics.* 2008 Feb;7(2):411-23., PMID: 17991918
38. Chang J.R., Poliakov A., Prevelige P.E., **Mobley J.A.**, and Dokland T., Incorporation of scaffolding protein gpO in Bacteriophages P2 and P4, *J.* 2008 Jan 20;370(2):352-61.
39. Islam M.M., Wallin R., Wynn R.M., Conway M., Fujii H., **Mobley J.A.**, Chuang D.T., Hutson S.M., A Novel Branched-Chain Amino Acid Metabolite: Protein-Protein Interactions in a Supramolecular Complex, *JBC*, 2007, Feb 21.
40. Norris J.L., Cornett S., **Mobley J.A.**, Seeley E.H., Roder H., Chaurand P., Caprioli R.M. Preparing MALDI TOF Mass Spectra for Statistical Analysis: A Practical Approach (*IJMS*, 260, 2-3, 1Feb 2007, pp. 221-221).
41. Chaurand P., Norris J.L., Cornett D.S., **Mobley J.A.**, Caprioli R.M., New Developments in Profiling and Imaging of Proteins from Tissue Sections by MALDI Mass Spectrometry, *J Proteome Res.* 2006 Nov;5(11):2889-900.
42. Cornett D.S., **Mobley J.A.**, Dias, E.C., Andersson M., Arteaga C.L., Sanders M.E., Caprioli, R.M.; Histology Directed MALDI-MS Profiling Improves Throughput and Cellular Specificity in Human Breast Cancer, *Mol Cell Proteomics.* 2006 Oct;5(10):1975-83. Epub 2006 Jul 18.
43. Amann J.M., Chaurand P., Gonzalez A., **Mobley J.A.**, Massion P. Caprioli R.M., Carbone D.P. Selective Profiling of Proteins in Cancer Cells from Fine Needle Aspirates by MALDI-TOF Mass Spectrometry, *Clin Cancer Res.* 2006 Sep 1;12(17):5142-50.
44. Yet-Kin Lau, **Mobley J.A.**, Lau KM, Ho SM. A Cytochrome P450 1A1 Variant is Over-Expressed in Ovarian Cancer Cell lines and Tissues, *Cancer Res.* 2005 May 1;65(9):3726-34.
45. Lam YW, **Mobley J.A.**, Ho SM. Identification of the Antiangiogenic Cytokine, Platelet Factor 4 as a Marker for Metastatic Prostate Cancer Through Protein Profiling Combined with Multidimensional Separation Of The Serologic Proteome. *Proteomics.* 2005 Jul;5(11):2927-38
46. Zielie PJ, **Mobley J.A.\***, Ebb R, Jiang Z, Ho SM. A Novel Diagnostic Test for Prostate Cancer Using RT-PCR to Determine  $\alpha$ -Methylacyl-CoA Racemase Levels in Prostatic Secretions. *Journal of Urology*, Sept 2004 ( \* - Equal contribution to first Author)
47. **Mobley J.A.**, Lam YW, Lau KM, Pais VM, L'Esperance JO, Steadman B, Burgos Fuster LM, Blute RD, Zielie PJ, Taplin ME, Ho SM. Diagnosing Prostate Cancer Through Changes in the Low Molecular Weight Serologic Proteome. *Journal of Urology*, July 2004.
48. **Mobley J.A.**, L'Esperance JO, Wu M, Hanson RH, Ho SM. A Novel Estrogen 17 $\alpha$ -20Z-21-[(4-Amino)Phenyl]-19-Norpregna-1,3,5(10),20-Tetraene-3,17 $\beta$ -Diol Induces Apoptosis in Prostate Cancer Cell Lines at Nanomolar Concentrations In Vitro, *Molecular Cancer Therapeutics*, 2004, May;3(5).

49. **Mobley J.A.**, Leav I, Wotkowicz C, Lam Y, Zielie P, Evans J, L'Esperance B, Jiang Z, Ho SM, Branched Chain Fatty Acids in Dairy and Beef Products Enhance  $\alpha$ -MethylAcyl-CoA-Racemase in Prostate Cancer Cells In-Vitro. *Cancer Epidemiol Biomarkers Prev.* 2003 Aug;12(8):775-83
50. **Mobley J.A.**, Brueggemeier RW, Estrogen Receptor Mediated Increased Sensitivity to DNA Damage In Breast Cancer Cell Lines. *Carcinogenesis.* 2004 Jan;25(1):3-9. Epub 2003 Sep 26.
51. Kim YC, **Mobley J.A.**, Brueggemeier RW, Synthesis and Estrogen Receptor Binding Affinities of 7-Hydroxy-3-(4-hydroxyphenyl)-4H-1-Benzopyran-4-Ones Containing a Basic Side Chain, *Bioorganic Medicinal Chemistry Letters*, 2003; 13 (8).
52. **Mobley J.A.**, Brueggemeier RW, Increasing the DNA Damage Threshold in a Breast Cancer Cell Line. *Tox. & Appl. Pharm.* 2002; 180 (3) 219-226.
53. Pais V, Dahl D, Trainer A, **Mobley J.A.**, Gallagher K, Demetrius L, Blute R. Evaluation of Surgical Margins Achieved by Laparoscopic Radical Prostatectomy *Am. Col. Surg.* 2001 Supp. Vol. LII: 600.
54. Brueggemeier RW, Gu X, **Mobley J.A.**, Joomprabutra S, Bhat AS, Whetstone JL, Effects of phytoestrogens and synthetic combinatorial libraries on aromatase, estrogen biosynthesis, and metabolism. *Ann N Y Acad Sci.* 2001 Dec; 948:51-66.
55. **Mobley J.A.**, Brueggemeier RW, Measurement of Oxidative DNA Damage by Catechol Estrogens and Analogs In-Vitro. *Chem. Research.& Tox.* 1999; 12(3); 270-277.

Manuscripts submitted but not yet accepted

1. Ashley J., Grunda J., **Mobley J.A.**, Clines G., Ramanadham S. "Evidence for Indirect, GPRC6A-Independent Impact of Osteocalcin on Adipocytes" (Submitted to *Cellular Logistics*)

Manuscripts in preparation

1. Fang L., Kojima K., Zhou L., Crossman D., **Mobley J.A.\***, Grams J. "Analysis of the human proteome in subcutaneous and visceral fat depots in diabetic and non-diabetic patients with morbid obesity" (\*co-corresponding; formatted to go out for submission to *Proteomics Journal* in February 2015)
2. Ludwig M.R., Kojima K., Bowersock G.J., Chen D., Jhala N.C., Buchsbaum D.J., Grizzle W.E., Klug C.A., and **Mobley J.A.** "Surveying the Serologic Proteome in a Tissue Specific Kras(G12D) Knockin Mouse Model of Pancreatic Cancer" (formatted to go out for submission to *Proteomics Journal* in February 2015)
3. Liu Z., **Mobley J.A.**, Moehle M.S., DeLucas L.J., West A.B. "LRRK2 Autophosphorylation Enhances GTPase Activity" (Submission TBD)
4. Moehle M.S., Daher J.P., Hull T.D., Boddu R., **Mobley J.A.**, West A.B. "The G2019S LRRK2 Mutation Increases Myeloid Cell Chemotactic Responses and Enhances LRRK2 Binding to Actin-Regulatory Proteins" (Ready for submission to *HMG*)

## BOOK CHAPTERS:

Jenkins S., Betancourt A.M., Wang J, **Mobley J.A.**, and Lamartiniere C.A.. Proteomic basis for the increased susceptibility of the mammary gland to carcinogenesis after perinatal exposure to bisphenol A. In: Environment and breast cancer. Ed: Jose Russo. Springer. 2011. p 103-126.

## PUBLISHED ABSTRACTS (1997 to 2008): *truncated; prior to 2008*

1. American Society for Mass Spectrometry, Denver, CO, Poster Presentations, (2008): Seven Corresponding Authorship Posters/ Presentations in the area of Clinical Proteomics carried out on Tissues and Biological Fluids from diagnosis and prognosis to pharmaco-proteomics with focus on Cystic Fibrosis to Prostate Cancer.
2. American Society for Mass Spectrometry, Seattle, WA, Poster Presentations, (2006): Four Secondary Authorship Presentations in the area of Clinical Proteomics carried out on Tissues and Biological Fluids.
3. AACR-Annual Meeting, Poster Presentation (2006), Histology Directed Matrix Deposition for an Automated Workflow in MALDI-ToF Profiling of Tissue Samples.
4. American Society for Mass Spectrometry, Poster Presentation (2005): Monitoring Proteomic Changes from the Top to Bottom Using a Progressive Model of Breast Cancer.
5. American Society for Mass Spectrometry, Poster Presentation (2005): Novel Strategies in Top-Down-Directed Characterization of Proteins Identified Through Protein Profiling.
6. American Society for Mass Spectrometry, Poster Presentation (2005): Preparing MALDI Mass Spectra for Statistical Analysis: A Practical Approach The Invasive Proteome: Analyzing differentially expressed proteins from infiltrating tumor cells in glioblastoma multiforme using mass spectrometry.
7. AACR-Annual Meeting, Poster Presentation (2004), Mass profiling and multidimensional separation of serologic proteome of patients with advanced disease.
8. AACR-NCI-EORTC Molecular Targets and Cancer Therapeutics Conference, Poster Presentation (2003), A Novel 17 $\alpha$ - Modified Estrogen Induces Apoptosis in Prostate Cancer Cell Lines at Nanomolar Concentrations In Vitro.
9. American Urologic Society, New England Section, Poster Presentation (2003), A Novel Diagnostic Test for Prostate Cancer Using RT-PCR to Determine  $\alpha$ -Methylacyl-CoA Racemase Levels in Prostatic Secretions
10. American Urologic Society, New England Section, Poster Presentation (2003), Influence of Steroid Hormones on  $\alpha$ -Methylacyl-CoA Racemase Expression using In-Vitro Cell Lines and the Lymph Node Sections.
11. American Urologic Society, New England Section, Poster Presentation (2003), Branched Fatty Acids in Dairy and Beef Products Markedly Enhance  $\alpha$ - Methylacyl-CoA Racemase Expression in Prostate Cancer Cells In-Vitro.
12. American Urologic Society, National Meeting, Poster Presentation (2002), A Novel Estrogenic Compound Induces Apoptosis-Necrosis Through an Estrogen Receptor  $\beta$  Pathway in The DU145 Prostate Cancer Cell Line.
13. American Urologic Society, New England Section, Poster Presentation (2001), Citrus Drinks Increase Urinary Citrate and pH Levels In Patients at High Risk for Kidney Stone Formation
14. Society for Basic Urologic Research, Poster Presentation (2000), Protein Mass Profiling Strategies for Protein Marker Discovery
15. American Association for Cancer Research, Poster Presentation (1999), Estrogen Receptor Mediated Increased Sensitivity to DNA Damage In Breast Cancer Cell Lines

## POSTER EXHIBITS

1. Gordon Research Conference, Hormonal Carcinogenesis, Poster Presentation (1999), Estrogen Increases Sensitivity to Oxidative DNA Damage in Breast Cancer Cell Lines.
2. Gordon Research Conference, Hormonal Carcinogenesis, Poster Presentation (1997), Understanding the connection between Catachol Estrogens and DNA Damage in Breast Cancer.
3. Annual meeting of the Western Region Hazardous Substance Research Center, Poster Presentation (1992), Redox Transformations of Inorganic Species: Coupling to the Biogeochemical Matrix.
4. Annual meeting of the Western Region Hazardous Substance Research Center, Poster Presentation (1992), Monitoring of Environmental Redox Conditions

## ORAL PRESENTATIONS:

Invited lectures at international courses and meetings

1. VII Congreso de la Asociación Mexicana de Biología Molecular en Medicina, Cuernavaca Morelos Mexico, Invited Speaker (2008): Current Applications in Clinical Proteomics; from Imaging & Profiling Mass Spectrometry to Multiplexing Tools for Quantification
2. Toppan Forms Japan, It's Fresh, & Novel Products, Tokyo, Japan, Invited Speaker (2007): Development of QC Approaches for Detection of Spoiled Food Products
3. Federal University of Porto Alegre, Porto Alegre, Brazil, Invited Speaker (2006): Mass Spectrometry Analysis in Clinical Proteomics "The Growing Science of Biomarker Discovery"
4. Proteomics Workshop, University of Puerto Rico Medical School, Rio Piedras, Puerto Rico Invited Speaker (2004), Mass profiling of tissues and biological fluids; connecting the bridge between data analysis and protein identification.
5. UPR RISE Activity, University of Puerto Rico Medical School, Rio Piedras, Puerto Rico Invited Speaker (2004), University of Puerto Rico Medical School, An update on proteomic and genomic approaches applied to prostate cancer detection.

Invited workshops, etc. at national postgraduate courses and meetings and at other universities

1. Baxter Healthcare, Round Lake Park Illinois, Invited Speaker (2013): Successes and Failures in Biomarker Discovery using Mass Spectrometry Driven Proteomics.
2. Baxter Healthcare, Round Lake Park Illinois, Invited Speaker (2013): Identification of Serologic Biomarkers to Predict Responders Vs. non-Responders Prior to Treatment for Stem Cell Generation.
3. OHSU Department of Urology, Portland Oregon, Invited Speaker (2011): Identification of Protein Biomarkers in Prostate Cancer Patients that Stratify Indolent Vs. Aggressive Disease.
4. OHSU Department of Biomedical Engineering, Portland Oregon, Invited Speaker (2011): Combining Genomics, Proteomics, and Systems Analysis to Weed out High Impact Markers Associated with Pre-Cancerous Lesions of the Pancreas
5. OHSU Cancer Institute, Portland Oregon, Invited Speaker (2009): The Future of Clinical Proteomics, Building Better!
6. Genedata, Tokyo Japan, Osaka Japan, & Boston, MA, Invited Speaker (2008): Spectral Preprocessing, and High Level Informatics; The Latest Approaches in Biomarker Discovery

7. American Chemical Society, Little Rock, AR, Invited Speaker, (2008): Mass Spectrometry Driven Proteomics; Plug & Play, Quantitative, and Biomarker Discovery
8. Atlanta-Athens MS discussion group (AAMSDG), Glycomics Research Center, Invited Speaker (2008): The In's and Out's of Mass Spectrometry Driven Biomarker Discovery; From Data Processing to Protein ID
9. University of Georgia, Department of Biochemistry & Molecular Biology, Athens, GA, Invited Speaker (2008): Biomarker Discovery, Clinical Proteomics, and Mass Spectrometry; From SELDI to HTP Peptidomics, What Works and Why!
10. James C. Kimbrough Urological Seminar, San Diego, CA, Invited Speaker (2008): New Developments in Clinical Proteomics; Focus on Urologic Malignancies
11. Department of Urology Naval Medical Center, San Diego, CA, Invited Speaker (2005): Newly Emerging Strategies in the Detection and Treatment of Prostate Cancer.
12. American Urologic Society, National Meeting, Orlando, FL, Podium Presentation (2002), Mass Profiling of Serologic Proteins Combined with Data Mining Algorithms Together Form A Highly Sensitive and Accurate Tool for the Diagnosis and Characterization of Prostate Cancer.
13. Medicinal Chemistry Society, Lafayette, IN, Podium Presentation (1998), Estrogen Metabolism and Oxidative DNA Damage.

#### Invited lectures at local and regional courses and meetings

1. Southern Research Institute; Cancer Research Seminar, Birmingham Alabama, Invited Speaker (2014): Translating Pre-Pancreatic Cancer in Genetically Engineered Mouse Models to Human Disease
2. UAB / UMN SPORE in Pancreatic Cancer, Clinical Core Mini-Retreat, Birmingham Alabama, Invited Speaker (2014): Diagnosis of Pre-Pancreatic Cancer Using Genetically Engineered Mouse Models and Human Biospecimens.
3. UAB Center for Metabolic Bone Disease, Birmingham Alabama, Invited Speaker (2011): MS/ Proteomics Shared Facility Overview
4. UAB Comprehensive Cancer Center, Birmingham Alabama, Invited Speaker (2011): MS/ Proteomics Shared Facility Overview
5. HudsonAlpha, Huntsville Alabama, Invited Speaker (2011): A Novel Perspective on the Initiation and Progression of Prostate Cancer; Diet, Aging, and AMACR
6. HudsonAlpha and UAB Genetics Department Retreat, Birmingham Alabama, Invited Speaker (2011): Using Systems Analysis to Pinpoint Early Markers of Disease in Cross-Species and Multiplatform Translational Studies
7. UAB Bioinformatics and Statistics; International Proteomics Collaborations, Birmingham Alabama, Invited Speaker (2010): Today's proteomics technologies; emphasis on biomarker discovery in translational animal models of disease
8. UAB Comprehensive Cancer Center, Birmingham Alabama, Invited Speaker (2009): Clinical Proteomics Shared Facility Overview
9. UAB Nephrology & Research Training Center, Birmingham Alabama, Invited Speaker (2009): Biomarker Discovery; Applications In Diseases of the Kidney
10. UAB Bioinformatics and Statistics Shared Facility Oversight Committee Meeting, Birmingham Alabama, Invited Speaker (2009): Mass Spectrometry and Informatics; where we meet in the middle?
11. Flying Ions, Birmingham Alabama, Invited Speaker (2009): The Latest Tools in Mass Spectrometry; Focus on Global "Omics" Studies
12. UAB School of Medicine Senior Leadership Retreat, Birmingham Alabama, Invited Speaker (2009): The Future of Mass Spectrometry at UAB.



13. UAB Bioinformatics Departmental Seminar Series, Birmingham, AL, Invited Speaker (2007): Spectral Preprocessing and Statistical Analysis Workflow of MALDI-ToF Data Applied to Clinical Studies.
14. Southern Urology Seminar, Destin, FL, Invited Speaker (2007): Current Strategies in Biomarker Discovery as Applied to the Detection and Monitoring of Prostate Cancer
15. UAB Pancreatic SPORE, Birmingham, AL, Invited Speaker (2007): Clinical Proteomics Applied to an Animal Model of Pancreatic Cancer
16. UAB Division of Hematology/ Oncology Research Conference, Birmingham, AL, Invited Speaker (2006) Discovery Proteomics Using HTP Mass Spectrometry
17. UAB Proteomics Minisymposium, Birmingham, AL, Invited Speaker (2006): Discovering Pathophysiologic Peptide & Protein Biomarkers
18. UAB Proteomics Workshop, Birmingham, AL, Invited Speaker (2006): Qualitative Proteomics
19. US TOO Prostate Cancer Support Group, Birmingham, AL, Invited Speaker (2007): Current Strategies in Biomarker Discovery as Applied to the Detection and Monitoring of Prostate Cancer
20. UAB Introduction to Mass Spectrometry Lecture Series, Birmingham, AL, Invited Speaker (2006): Imaging Mass Spectrometry Principals and Practice.
21. UAB Department of Surgery/ Division of Urology, Birmingham, AL, Invited Speaker (2006): Newly Emerging Tools for Disease Driven Biomarker Discovery.

#### **MISCELLANEOUS:**

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|--------------|---|
| 2013 – 2014  | Dr. Mobley initiated and hosted a monthly “Proteomics Lunch & Learn” series that included the other MS PI’s on campus. These were very well received and highly attended. We will be hosting a new series in the spring of 2015.  |
| 2011-2012    | Dr. Mobley worked with Dr. Stephen Barnes, Dr. Matthew Renfrow and his shared facility’s oversight committee to develop a single UAB Mass Spectrometry portal that allows anyone to locate the primary and secondary mass spectrometry facilities on campus ( <a href="http://www.uab.edu/proteomics/">http://www.uab.edu/proteomics/</a> ). This was a big step in the right direction, and long time coming, to bring the mass spectrometry community at UAB together in order to generate a more diverse yet concerted view of the ever-changing high-end MS technologies on campus.   |
| 2007-Present | Dr. Mobley personally designed an educational-based web site that highlighted his new clinical proteomics Urologic Research Facility that presented an overview and references indicating the types of new research focuses that could be carried out at UAB at that time. This included Imaging Mass Spectrometry applications, quantitative global nano-LCMS approaches, and Pathway analysis. This web page has constantly been improved to accommodate new research focuses and technologies, and evolved into the current UAB CCC MSP-SF web site ( <a href="http://www.uab.edu/proteomics/bmsf/">http://www.uab.edu/proteomics/bmsf/</a> ). This site is expected to undergo yet another set of improvements including the addition of educational videos within the next few months. |