

CURRICULUM VITAE*

Name: Kathryn L. Hassell, M.D.

Title: Professor of Medicine

Present Address: University of Colorado Denver
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Education: College of St. Scholastica, Duluth, Minnesota; B.A. – 1982
University of Minnesota Medical School, Minneapolis, Minnesota; M.D. -
1986
North Carolina Memorial Hospital, University of North Carolina, Chapel
Hill, North Carolina; Internal Medicine Residency - 1986-1989
University of Colorado Health Sciences Center, Denver, Colorado;
Hematology-Oncology Fellowship - 1989-1992

Academic Appointments:

1992-1993	Instructor in Medicine, Division of Hematology, University of Colorado Health Sciences Center, Denver, Colorado
1992-1993	Staff Physician, Denver VA Medical Center, Denver, Colorado
1993-1999	Assistant Professor of Medicine, University of Colorado Health Sciences Center, Denver, Colorado
1999-2007	Associate Professor, University of Colorado Health Sciences Center, Denver, Colorado
2008- present	Professor of Medicine, University of Colorado Denver, Aurora, Colorado
1991-2002	Associate Director, Colorado Sickle Cell Treatment and Research Center, Aurora, Colorado
2002-2003	Interim Director, Colorado Sickle Cell Treatment and Research Center, Aurora, Colorado
2003-present	Director, Colorado Sickle Cell Treatment and Research Center, Aurora, Colorado
1992-1994	Associate Director, University of Colorado Internal Medicine Residency Program, Denver, Colorado
1992-present	Hematologist, Pulmonary Hypertension Center, University of Colorado Health Sciences Center, Denver, Colorado

*Updated April 2014

1993-present	Hematologist, Bloodless Surgery Center, University of Colorado Health Sciences Center, Denver, Colorado
1993-present	Hematologist, University of Colorado Vascular Center, University of Colorado Health Sciences Center, Denver, Colorado
2000-present	Adult Hematologist, Mountain States Thrombophilia and Hemophilia Center, UCHSC, Denver, CO
2002-present	Hematologist, Colorado Center on Altitude Medicine and Physiology, University of Colorado Health Sciences Center, Denver, Colorado
2002-2003	Graduate Faculty, School of Public Health, University of Colorado Health Sciences Center, Denver

Governmental Appointments:

7/2006-8/2010	NIH/NHLBI Intergovernmental Personnel Agreement assignment to the Division of Blood Diseases and Resources, 0.60 FTE
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Academic Honors:

1978	Valedictorian, Class Speaker, High School Graduation
1978-1982	Benedictine Scholar
1979-1982	Alumni Scholar
1981-1982	President of Alpha Chi honor Society at College of St. Scholastica
1982	Class Speaker, Graduation, College of St. Scholastica
1982-1986	Bunker Memorial Scholar
1986	Alpha Omega Alpha Honor Society
1987	Gold Boot Award, Outstanding Internal Medicine Intern, Univ of North Carolina Chapel Hill
1989	Robert L. Ney Award, Outstanding Internal Medicine Resident, Univ of North Carolina Chapel Hill
1994	Young Investigators Travel Award, Council on Thrombosis AHA

Academic/Administrative Duties:

1993-2000	Director, Hematology/Oncology Fellows East Pavilion Clinics
1992-1994	Internal Medicine Residency Committee
1992-1994	Chairman, Warfarin Task Force, DUE Subcommittee
1992-1999	Residency Intern Selection Committee
1993-present	Director, University Hospital Coumadin/Coagulation Clinic
1994-1999	Faculty Senate
1995-1999	Associate Director, University of Colorado Hematology/Oncology Fellowship Program
1995, 1996	Chairperson, Abstract Review Committee, Hematology Section, AFMT Carmel Meetings
1997-2002	Director, Blount Medicine Attending Service
1997-2006	Faculty, Advanced Therapeutics and Pathophysiology, School of Pharmacy, University of Colorado Health Sciences Center

1997-2006	Faculty, Fourth Year Medical Student Applied Clinical Pharmacology Course, UCHSC
1999-2003	Faculty, Advanced Disease Management VI Course (on-line), School of Pharmacy, University of Colorado Health Sciences Center
2000-2006	Faculty, Cardiovascular Disease Epidemiology Course, Department of Preventive Medicine and Biometrics, UCHSC
2004-2005	Faculty, University of Colorado Health Sciences Center, Graduate Program, School of Public Health
2001-present	Faculty, Third Year Medical Student Medicine 6000 Course, School of Medicine, University of Colorado Health Sciences Center
2002-present	Faculty, Fourth Year Medical Student Preparing for Residency Course, University of Colorado Health Sciences Center
2002-present	Member, State of Colorado Genetics Newborn Screening Advisory Committee
2002-present	Director, State of Colorado Hemoglobinopathy Newborn Screening Confirmatory Testing and Follow-up Program
2003-Present	Faculty, Department of Pediatrics (Secondary Appointment)

Awards:

2003-2013	Denver's Top Doctor, by Magazine 5280 (peer selection)
2003	Bank One Colorado Faculty Community Service Award
2005	Colorado Coalition for the Medically Underserved Community Service Award
2007	Clinical Excellence Award, Vascular Disease Foundation
2009	NHLBI Star Award
2010	NHLBI Certificate of Merit
2010	NHLBI Star Award

Professional Memberships:

- Council on Thrombosis, American Heart Association
- American Society of Hematology
- International Society of Thrombosis & Haemostasis
- University of Colorado Cancer Center
- American Society of Clinical Pathologists
- Mountain States Regional Genetics Collaborative
- American Pain Society
- Fellow, American Heart Association

Major Committee and Service Responsibilities

National/International:

1995-1996	Chairperson, Abstract Review Committee, Hematology Section, AFMT Carmel Meetings
2000-2006	Data Safety and Monitoring Board for international trials in peripheral vascular disease, Colorado Prevention Center, Denver, CO

2005 Mid-Stream Evaluation Committee, NIH Comprehensive Sickle Cell Centers Program, NHLBI

2003-2006 Chairperson, External Advisory Committee, Southwestern Comprehensive Sickle Cell Center, Dallas, TX

2002-present Founder and Director, Sickle Cell Adult Provider Network

2005-2007 Member, Technical Advisory Panel for the Development of National Venous Thromboembolism Measures, Joint Commission for the Accreditation of Health Care Organizations (JCAHO) and the National Quality Forum (NQF)

2006-2011 Co-Chair, Steering Committee, NIH Multicenter Trial of Sildenafil for Pulmonary Hypertension in Sickle Cell Disease (Walk-PHASST), NHLBI

2006-2010 Intergovernmental Personnel Act (IPA) Appointment Activities

- Project Officer, International Thalassemia Clinical Research Network
- Development and planning of Hydroxyurea Use in Sickle Cell Disease Consensus Conference to be held by NIH in February, 2008
- Development, Adult Sickle Cell Health-Related Quality of Life
- Supportive Activities for the Sickle Cell Disease Clinical Research Network
- Collaborative activities with Centers for Disease Control to establish a nation wide surveillance system for sickle cell disease
- Development of new Healthy People 2020 Objectives for blood disorders

2006-2010 Member, Oversight Committee, Sickle Cell Disease Treatment Demonstration Project (national implementation of the 2003 Sickle Cell Treatment Act), Health Resources and Services Agency (HRSA)

2007-present Technical Working Group for Data Collection, Sickle Cell Disease Treatment Demonstration Project, HRSA

2009-present Member, Steering Committee, Registry and Surveillance for Hemoglobinopathies (RuSH), Centers for Disease Control and Prevention (CDC) and National Heart, Lung and Blood Institute (NHLBI)

2009-present Member, Hemoglobinopathies Work Group, Newborn Screening Translational Research Network (NBSTRN) (NICHD)

2009-present Member, NIH/NHLBI Sickle Cell Disease Management National Guidelines Development Panel

2010-present Chair, Sickle Cell Subcommittee of the national CTSA Pain Researchers Interest Group, NIH/NCAT

2010-present Member, Carrier Screening Task Force, Secretary's Advisory Committee for Heritable Diseases of the Newborn (HHS)

2010-present Public Health Task Force, American Society of Hematology

2010-present Member, Design/Oversight Committee, Hemoglobinopathies Uniform Medical Language/Ontology Initiative (NIH/HRSA)

2011-present Member, Information Technology Workgroup, NBSTRN (NICHD)

2011-present Associate Project Director, Mountain States Genetics Regional Collaborative, HRSA

2011-present Co-Chair, Clinical Integration Group, NBSTRN (NICHD)

2011-present Member, Clinical Laboratory Medical Directors' Committee, University of Colorado Hospital Clinical Laboratory

2011-present Member, Clinical Laboratory Services Committee, University of Colorado Hospital Clinical Laboratory

2012-present Member, CDC Sickle Cell Trait Toolkit Workgroup

- 2012-present Membership Committee of the American Pain Society
- 2012-present Member, Steering Committee, NewSTEPS Project, APHL (HRSA)
- 2012-present Member, Long-Term Newborn Screening Follow-Up Subcommittee of the national Discretionary Advisory Committee for Heritable Disorders of the Newborn, advisory to HHS Secretary
- 2013-present Member, American Association of Blood Banks Transfusion Standards Committee, representing the American Heart Association
- 2014-present Member, ACTION-APS Workgroup defining taxonomy for chronic sickle cell pain, American Pain Society
- 2014-present Member, External Advisory Panel regarding Implementation of Mandated NBS Testing, for the Discretionary Advisory Committee for Heritable Disorders of the Newborn
- 2014-present Chairperson, National Steering Committee for the Phase III Multicenter Study of Rivipansel (pharmaceutical study)
- 2014-present DSMB Member, NIH-funded R-34 “Comparing Pain Management Protocols for Sickle Cell Disease Patients in the Emergency Department”, P Tanabe, PI, Duke University

Institutional/Local/Regional:

- 1992-1994 Internal Medicine Residency Selection Committee
- 1992-1994 Warfarin Task Force, Drug Utilization Evaluation Committee
- 1994-1999 Department of Medicine Representative, Faculty Senate
- 1995-1999 Hematology/Oncology Fellowship Committee
- 1998 University of Colorado Ombudsman Search Committee
- 1998-1999 Anschutz Colorado Cancer Center Planning Committee
- 2002-2006 State Genetics Advisory Committee
- 2002-present State Department of Health Newborn Screening Advisory Committee
- 2006-present Anticoagulation Subcommittee (to P&T), University of Colorado Hospital
- 2005-present Bank One Faculty Community Service Selection Committee
- 2010-present Anticoagulation Advisory Subcommittee, University of Colorado Hospital
- 2013-present Pulmonary Embolism Working Group, University of Colorado Hospital

Clinical Practice Activities:

Services:

- Sickle Cell Inpatient Attending: Daily, 12 months/year
- Hematology/Oncology Inpatient Consult Service: 4 months/year
- Outpatient Hematology (Coagulation/Sickle Cell) Clinics: 2.5 days/week
- Outreach Hematology Clinics (Glenwood Springs): 6-8 clinics/year
- Anticoagulation Outpatient Clinical Service (supervision): Weekdays, 12 months/year
- Anticoagulation Inpatient Pharmacy-Directed Anticoagulation Service (supervision): Weekdays, 12 months/year
- Interpretation, Hemoglobin Electrophoresis Testing, University of Colorado Hospital Laboratory: 1 session/week

Additional Responsibilities:

Director, Colorado Sickle Cell Treatment and Research Center
Collaborative Practice Agreement with Department of Pharmacy for Anticoagulation Services through the Outpatient Clinical Service
Medical Director, Hemoglobin Electrophoresis Section, Special Chemistry Department, University of Colorado Hospital Clinical Laboratory
Director, University of Colorado Anschutz Outpatient Anticoagulation Services
Medical Director, University of Colorado Hospital Inpatient Anticoagulation Service
Director, Chronic Red Blood Cell Exchange Sickle Cell Transfusion Services
Director, State of Colorado Hemoglobinopathy Newborn Screening Confirmatory Testing and Follow-up Program (also serves Wyoming and Utah)

Ongoing Academic Interests/Projects:

- Multi-organ failure syndrome in sickle cell disease
- Chronic organ damage, including pulmonary hypertension, in sickle cell disease
- Altitude-associated splenic infarction in sickle cell trait
- Multi-center trials for treatment of sickle cell disease and its complications
- Newborn screening for hemoglobinopathies
- Expansion of the Sickle Cell Adult Provider Network activities, including continued national educational efforts, development of research collaborations and best practices for adults with sickle cell disease
- Multicenter trials for anticoagulation therapy for DVT/PE.
- Diagnosis and treatment of antiphospholipid antibody syndrome
- Use of novel interventions for heparin induced thrombocytopenia
- Role of hypercoagulability in patent foramen ovale and stroke

Licensure/Certification:

NBME Diplomat
Internal Medicine Board Certification - 1989
Oncology Board Certification – 1991, 2001
Hematology Board Certification – 1992, 2002, 2012
Medical Licensure: Colorado

Selected Review and Referee Work :

Associate Editor: *Blood Coagulation & Fibrinolysis* (1998-present)

Reviewer For (representative):

- <i>Annals of Internal Medicine</i>	- <i>American Journal of Clinical Nutrition</i>
- <i>Arthritis Rheumatism</i>	- <i>American Journal of Medicine</i>
- <i>Anesthesia and Analgesia</i>	- <i>Journal of Vascular Surgery</i>
- <i>Blood, Coagulation & Fibrinolysis</i>	- <i>Circulation</i>
- <i>Critical Care Medicine</i>	- <i>Hematologic Oncology</i>

5. *"Sickle Cell Disease in Pregnancy"*
"vonWillebrand's Disease in Pregnancy"
Medical Disorders in Pregnancy -- National Conference
Breckenridge, CO -- February 1996
6. *"Altered Coagulation and Fibrinolysis in Severe Pulmonary Hypertension"*
American Thoracic Society National Meetings
New Orleans, LA -- May 1996
7. *"Antiphospholipid Syndromes and other Thrombotic Disorders"*
American Council of Life Insurance 21st Annual Meeting
Colorado Springs, CO -- June 1996
8. *"Care of Adult with Sickle Cell Disease"*
CME Program, Colorado Sickle Cell Treatment and Research Center
Colorado Springs, CO --September 1997
9. American College of Physicians Colorado Chapter Meeting, Colorado Springs, CO
"Evaluation of the Hypercoagulable State" February, 1995
"Use of Low Molecular Weight Heparin", February, 1997
"New Concepts in DVT/PE Management and Hypercoagulable Evaluation", Feb, 1999
"Coagulation Controversies", Feb 2011
"Multiple Small Feedings of the Mind: Thrombosis Management", Feb 2012
10. Annual Symposium on Critical Care, Trauma and Emergency Medicine, Las Vegas, NV
"Heparin-Induced Thrombocytopenia", March, 1998
"Coronary Artery Disease and Anticoagulation", February, 1999
"New Anticoagulants", February, 2000
"Thromboembolic Diseases Associated with Hypercoagulable States", February, 2000
"Sickle Cell Urgencies", February, 2000
11. *"The Role of LMWH in the Treatment of DVT"*
21st Annual Southwest Association of Hispanic American Physician Medical Congress
El Paso, TX, November, 2000
12. *"Argatroban: A New Agent for Heparin-Induced Thrombocytopenia"*
5th Annual Winter Oncology Conference
Whistler, BC, Canada, March, 2001
13. *"Heparin-Induced Thrombocytopenia"*
PACE Educational Conference for Laboratory Personnel
Allentown, PA, March, 2001
14. *"Outpatient Therapy for Thromboembolic Disorders"*
American Thoracic Society Postgraduate Course at Annual ATS Meeting
San Francisco, CA, June, 2001

15. *“Management of Hypercoagulability”*
19th Annual Western Regional Oncology Conference
El Paso, TX, January, 2002
16. 2002 Winter Symposium – Caring for the Critically Ill Patient
St. Mary’s Hospital, Grand Junction, CO, January, 2002
“Anticoagulation for Pulmonary Embolism”
“Controversies in Anticoagulation”
18. ACP Montana Chapter Scientific Meeting, Missoula, MT, August, 2002
“Update in Anticoagulation and VTE”
“Update in Hematology”
19. Community Medical Center Education Series
“Antithrombotic EDGE: New and Current Issues”
Missoula, MT, January 15, 2003
20. Annual Western Regional Oncology Conference, El Paso, TX
“Coagulation Issues in Pregnancy”, January, 2003
“Heparin-Induced Thrombocytopenia”, January, 2004
“New Anticoagulant Therapy for Cancer: Now and the Future”, January, 2012
21. Mount Sinai School of Medicine CME/CPE Meeting
“Management of Hypercoagulability-focus on LMWH”
Cincinnati, OH, February 18, 2003
22. Mount Sinai School of Medicine CME
“Treatment in the Oncology Patient: Role of LMWH”
“The Use of LMWH and the impact on the Prophylaxis and Treatment of TED”
Dayton, OH, April 15, 2003
23. Health Learning Systems Faculty Orientation Meeting
Managing HIT: Preventing Life-and-Limb-Threatening Thrombosis”
Phoenix, AZ, April, 2003
24. USC Norris Cancer Hospital Grand Rounds
“Keeping Clots Away-The Role of Anticoagulation in Venous Thromboembolism Prophylaxis”
May 2, 2003
25. Diagnostica Stago Coagulation Symposium
“Monitoring New Anticoagulants: When and Why It’s Needed”
Los Angeles, CA, June 4, 2003
26. Denver Chapter of Orthopaedic Nurses Annual Meeting
“Anticoagulation and Surgery”
Doubletree Hotel, Aurora, CO, August 22, 2003

27. The Cleveland Clinic Grand Rounds
"Drug Induced Thrombocytopenia"
San Diego, CA, December 5, 2003
28. Understanding the Impact of HIT Scientific Conference
"Heparin Induced Thrombocytopenia Overview"
Amelia Island, FL, January 17, 2004
29. Washington Hospital Center CME
"Hypercoagulable States in Patients with PFO and Stroke"
January 21, 2004
30. 2004 Medical Hematology Oncology Fellows Forum
"Meet the Professor: Hematology Update"
Orlando, FL, March 4, 2004
31. Mountain States Regional Hemophilia and Thrombosis Program
"Inherited and Clotting Disorders"
Denver, CO, March 27, 2004
32. Critical Care 2004 Symposium
"Heparin Induced Thrombocytopenia"
Akron, OH, May 19, 2004
33. Nurse Practitioner Symposium
"Hematology: Blood Dyscrasias, Coagulopathies, Factor 5"
Keystone, CO, July 15, 2004
34. GlaxoSmith Kline HIT Preceptorship
"Basic Review of HIT"
Denver, CO, July 29, 2004
35. Diagnostica Stago Coagulation Symposium
"Current Concepts in Hemostasis Symposium"
Dearborn, MI, October 6, 2004
36. 3rd Annual Conference on Anticoagulant Management
"Heparin Induced Thrombocytopenia: recognition and Management"
San Diego, CA, October 23, 2004
37. 45th Annual Meeting of the American Society of Hematology
"Antiphospholipid Syndrome and Heparin Induced Thrombocytopenia"
San Diego, CA, December 3, 2004
38. American College Phlebology Conference
"Deep Vein Thrombosis: Hypercoagulable States"

Marco Island, FL, November 4, 2004

39. High Country ANNA Chapter
“Drug Gone Bad: Heparin Induced Thrombocytopenia”
Northlgenn, CO, March 10, 2005
40. Greater Kansas Society Health System Pharmacists Grand Rounds
“Evolving Drug Therapy for venous thromboembolism (VTE) Prophylaxis and Its Complications, Including Heparin-Induced Thrombocytopenia”
Kansas City, Missouri, March 31, 2005
41. American Society of Clinical Pathology National Teleconferences
“Sorting Out the Hemoglobins: Making a Difference from Birth to Old Age” March 2005
“Role of the Laboratory in Contemporary Sickle Cell Disease” October 2012
“When Clotting Strikes: Role of the Clinical Lab in Diagnosis and Management”
June 2013
42. 46th Annual Meeting of the American Society of Hematology
“Antiphospholipid Syndrome (APLS) and Heparin Induced Thrombocytopenia”
San Diego, CA, December, 2005
43. The International Society on Thrombosis and Hemostasis XXth Congress
“Routine Use of Oral Vitamin K for the Reversal of Anticoagulation with Warfarin in Patients Scheduled for Elective Procedures”
Sydney, Australia, August 12, 2005
44. North Central Medical Center Medical Staff Grand Rounds
“Postoperative Coagulation”
September 9, 2005
45. Diagnostica Stago Coagulation Symposium
“New Anticoagulants: Implications for the Laboratory”
Phoenix, AZ, October 4, 2005
46. American College of Chest Physicians Annual Meeting
“Making the diagnosis of HIT: Practical Matters”
Montreal, Canada, October 31, 2005
47. Colorado Women’s Cardiovascular Health Symposium
February 2006, UCDHSC Fitzsimons, Aurora, CO.
“Hypercoagulability in Women”
48. *“Advances in Pharmacologic Management of Venous Thromboembolic Disease and Heparin-Induced Thrombocytopenia (HIT)”*
April 2006, Greenville, SC
49. *“Important Issues in Thrombophilia and Thrombosis”*

- National Hemophilia Foundation
 NHF On the Road 2006, Minneapolis, MN
 April, 2006
50. Society of Hospital Medicine National Meeting
 “*Optimizing Anticoagulation Regimens in Major Surgery and ACS*”
 Washington, DC, May 2006
 51. 60th Society for Vascular Surgery Annual Meeting
 “*Heparin Induced Thrombocytopenia: The Critical Need for Early Diagnosis and Treatment*”
 Philadelphia, PA, June 2006
 52. 8th National Hospital Medicine Conference
 “*Antiphospholipid Antibodies and Other Hypercoagulable States: Challenges in Diagnosis and Management*”
 San Diego, CA, September, 2006
 53. American College of Chest Physicians National Meeting
 “*The Emerging Role of Targeted Anticoagulation Therapies: Clinical and Pharmacoeconomics Considerations*”
 Salt Lake City, October, 2006
 54. 47th Annual Meeting of American Society of Hematology
 “*Advances in Management of Venous Thromboembolic Disorders Associated with Cancer and the Antiphospholipid Syndrome*”
 Orlando, FL, December, 2006.
 55. Society of Critical Care Medicine Conference
 “*Venous Thromboembolism and Heparin-Induced Thrombocytopenia: A Critical Care Planner*”
 Kissimee, FL, February, 2007
 56. Annual Rocky Mountain Hospital Medicine Society Meetings
 “*Diagnosis and Management of Venous Thromboembolism*” September, 2008
 “*Advances in Venous Thromboembolism and Anticoagulation*” October, 2009
 “*Thrombocytopenia Alphabet: DIC/TTP/HUS/HIT/ITP*” October, 2010
 “*Management of Sickle Cell Disease*” October, 2011
 “*When Good Blood Goes Bad: Thrombocytopenia Syndromes*” September, 2012
 “*Dilemmas in Transfusion Medicine*” August, 2013
 57. Annual Rocky Mountain Hospital Medicine Winter Meetings
 “*Anticoagulation in the Perioperative Patient*” February, 2009
 “*Oncologic Emergencies*” February, 2010
 “*Thrombocytopenia: When to Worry and Why*” February, 2011
 “*New Oral Anticoagulants and Their Use*” January, 2012

58. 36th Annual Vail Obstetrics and Gynecology Course
“Antiphospholipid Antibody Syndrome and Pregnancy”
 Vail, CO, February 2010
59. 19th Annual Cardiovascular Conference
“Genetic and Molecular Basis of Arterial Thrombosis”
“Molecular Diagnostics for Thrombosis and Bleeding”
 Beaver Creek, CO, February, 2010
60. Cecil Parker Lectureship, Annual Univ of S Alabama Sickle Cell Meeting
“Life’s Passages: Application of Transition to Sickle Cell Disease”
 Mobile, AL, April 2010
61. University of Nebraska Annual ASH Update
“ASH Update: Hemoglobinopathies and Thrombosis”
 February 2010, 2011, 2012, 2013
62. New England Pediatric Sickle Cell Consortium Conference
“Medical Aspects of Sickle Cell Disease in Transition”
 Boston, MA, September, 2010
63. 52nd Annual Meeting of the American Society of Hematology
 Chair, Educational Session on Hemoglobinopathies, and presenter:
“Pulmonary hypertension, tricuspid regurgitant velocity screening, and the nitric oxide pathway”
 San Diego, CA, December, 2011
64. Public Health Webinar Series on Hemoglobinopathies (National CDC series)
“Sickle Cell Adult Provider Network: Finding A Voice” April 26, 2012
65. 2013 Indiana Sickle Cell Disease Conference, Keynote Speaker
“Standards of Care for Sickle Cell Disease”
 Indianapolis, IN, April 2013
66. 2nd Annual Loma Linda University Sickle Cell Symposium
“Providing Adult Sickle Cell Care: Not Just Grown Up Children”
 Loma Linda, CA, September 2013
67. 1st Annual Eckman Sickle Cell Symposium
“Clinical Manifestations of Sickle Cell Disease: A Coat of Many Colors”
 Emory University, Atlanta, GA, November 2013

Selected Institutional CME Lectures/Grand Rounds:

National: Fayetteville Diagnostic Clinic, Fayetteville, AR
 Baptist Health Medical Center, Little Rock, AR
 Good Samaritan Hospital, Phoenix, AZ
 Maricopa Integrated Health System, Phoenix, AZ

Banner Health System, Phoenix, AZ
Veterans Administration Hospital, La Jolla, CA
Pocatello Memorial Hospital, Pocatello, ID
Evanston Hospital, Evanston, IL
St. Luke's Hospital, Kansas City, MO
St. Joseph Health System, Kansas City, MO
Kalispell Regional Medical Center, Kalispell, MT
St. Patrick's Hospital, Missoula, MT
Creighton University Medical Center, Omaha, NE
San Juan Medical Center, Farmington, NM
St. Vincent Hospital, Sante Fe, NM
Portland Blood Club, Portland, OR
St. Vincent Medical Center, Portland, OR
Portland Medical Center, Portland, OR
Fort Meade VA, Forte Meade, SD
Souix Valley Hospital, Souix Falls, SD
Rapid City Hospital, Rapid City, SD
University of South Dakota School of Medicine, Souix Falls, SD
Baylor All Saints Medical Center, Fort Worth, TX
William Beaumont Army Medical Center, El Paso, TX
Presybterian Hospital of Dallas, Dallas, TX
University Hospital San Antonio, San Antonio, TX
Brooke Army Medical Center, San Antonio, TX
Wilford Hall Lakeland Airforce Base, San Antonio, TX
Veterans Administration Hospital, Cheyenne, WY

Statewide: Porter's Hospital, Denver, CO
St. Joseph's Hospital, Denver, CO
St. Anthony's Hospital, Denver, CO
Littelton/Adventist Hospital, Denver, CO
Lutheran Medical Center, Wheatridge, CO
Lafayette Community Hosptial, Lafayette, CO
Presbyterian-St. Luke's Hospital, Denver, CO
National Jewish Hospital, Denver, CO
Rose Medical Center, Denver, CO
Swedish Medical Center, Englewood, CO
Kaiser Permanente, Denver, CO
Boulder Community Hospital, Boulder, CO
Penrose Hospital, Colorado Springs, CO
Memorial Hospital, Colorado Srings, CO
Valley View Hospital, Glenwood Springs, CO
Longmont Community Hospital, Longmont, CO
Northern Colorado Medical Center, Greeley, CO
Poudre Valley Hospital, Fort Collins, CO
St. Mary-Corwin Regional Medical Center, Pueblo, CO
Sedgwick County Health Center, Julesburg, CO
Aspen Valley Hospital, Aspen, CO

Craig Memorial Hospital, Craig, CO
 St. Mary's Hospital, Grand Junction, CO

At University of Colorado: School of Medicine Grand Rounds
 (Grand Rounds, University of Colorado Hospital Hospitalist Grand Rounds
 Didactic Lecture Series) Division of Cardiology Grand Rounds
 Division of Internal Medicine/Geriatrics Grand Rounds
 Department of Surgery Grand Rounds
 Division of Gastroenterology
 Division of Hematology/Oncology
 Division of Pulmonary/Critical Care
 Department of Obstetrics/Gynecology
 Department of Urology
 Department of Dermatology
 School of Pharmacy
 School of Nursing
 Denver VA Medical Center
 Denver Health and Hospitals
 University of Colorado Child Health Associates Program

<u>Classroom Teaching Record</u>	<u>Years</u>	<u>Students</u>
Applied Clinical Pharmacology Course Med 8029 Anticoagulation lectures (2 hours)	1999-2007	90
Advanced Disease State Management VI PRD 5360 (on-line) Hemoglobinopathies	1999	40
School of Pharmacy Integrated Organ Systems PHRD 4750 Hemoglobinopathies lectures (2 hours)	1999-2003	122
Child Health/Physician Assistant CHAS 5113 Iron metabolism lecture (1 hour) Hemoglobinopathies lecture (1 hour)	2003-2007	40
Preventive Medicine & Biometrics PRMD 6638 Coagulation risk factors for arteriovascular disease (2 hour seminar)	2003-2007	22
Med 6000 Pathophysiology Course Coagulation lecture (1 hour) Hemoglobinopathies lecture (1 hour) Small group sessions (4 hours)	2000-2005	132
Molecules to Medicine IDPT 5002 Hemoglobinopathies (1 hour) Patient Panel (3 hours)	2006-2007	138
Preparing for Residency Pharmacy IDPT 8008 Anticoagulation management (1 hour) Hypercoagulability (1 hour)	2003-2007	35
Department of Medicine Noon Conferences Hypercoagulability (2 hours)		40
Critical Care Lecture Series, Division of Pulmonary Medicine		8

Transfusion Medicine (1 hour)

Thrombocytopenia (1 hour)

Educational Activities:

- Symposium Planning (including scientific content, speaker selection, CME accreditation)
 - Annual Sickle Cell Update Symposium, Denver, CO 2003 - 2014
 - ISTH Conference: “Mechanisms of Thrombosis and Implications for Therapy”
Sydney, Australia, August 10, 2005
 - Annual National Sickle Cell Adult Provider Network Symposium
 - “National Adult Sickle Cell Symposium”
Cincinnati, OH April 7-8, 2005
 - “Pain in Adults with Sickle Cell Disease, Misconceptions, Myths and Management”
Memphis, TN April 8, 2006
 - “Health Care Delivery for Adults with Sickle Cell Disease”
Washington, DC, September 18, 2007
 - “Pain in Sickle Cell Disease: A Case-Based Discussion”
Hollywood, FL, February 6, 2010
 - “Sickle Cell Pain: Expanding Our Understanding”
Hollywood, FL, February 22, 2011
 - “Neurological Complications in the Adult Sickle Cell Patient”
Hollywood, FL, February 2012
 - “Adult Sickle Cell Care in the Era of Healthcare Reform”
Miami, FL, April 2013
 - 35th Sickle Cell Disease Program National Meeting, Washington, DC, September 17-23, 2007
 - 2nd – 6th Annual National Sickle Cell Research Meetings and Educational Symposia (2008-11)
Chairperson, Symposium Program Committee
- Hematology Curriculum Development, Blood and Lymph Block, Molecules to Medicine
Course University of Colorado School of Medicine
- Development of educational materials
 - Case-based learning materials for use of low molecular weight heparin
 - Monograph development for health care providers (listed under publications)
 - On-line primary care educational module, case-based, for sickle cell trait

Grant/Contract Support - Active

CO Department of Health-Genetics Contract

7/1/00 – present

Role: Supervisor of Hemoglobinopathy Newborn Screening Follow-up Program

Colorado Newborn Screening

\$145,000/year

The major goals of this project are defined in the Healthy People 2010 project designed to test and track newborn babies in Colorado born with an hemoglobinopathy.

Wyoming Newborn Screening Contract

7/1/00 - present

\$2,440/year

A contract to provide hemoglobinopathy newborn screening follow-up services for the State of Wyoming

Sickle Cell Disease Treatment Demonstration Project (PI: Chako/Overholser)9/1/09-8/31/14
Colorado Sickle Cell Care Network

\$1,529,000

Establish knowledgeable primary care medical homes and coordination of services for individuals with sickle cell disease.

Long-Term NBS Follow-up for Hemoglobinopathies

6/1/2012-present

Mountain States Genetics Regional Collaborative

\$9000

In-person and teleconference meeting activities to explore regional capacity for long-term NBS follow-up of infants identified with hemoglobinopathies

Sickle Cell Transplantation to Prevent Disease Exacerbation in Young Adults (STRIDE) – Pilot Feasibility Project

pending (estimate 5/1/2014)

NHBLI R-34 Planning Grant

PI: Lakshmanan Krishnamurti, Emory University

Roles: Site PI, Organizing Committee

\$1000/subject enrolled

Phase II Multicenter, Randomized, Placebo-Controlled, Double-Blind, 12-Month Study to Assess Safety and Efficacy of SelG1 With or Without Hydroxyurea Therapy in Sickle Cell-Related Pain Crisis (SUSTAIN)

pending (estimated 6/1/2014-6/1/2018)

Selexys Pharmaceuticals SelG1-0005

Site PI: Kathryn Hassell

\$180,000

Phase 3, multicenter, randomized, double-blind, placebo-controlled, parallel-group study to evaluate the efficacy and safety of GMI-1070 (RIVIPANSEL) in the treatment of vaso-occlusive crisis in HOSPITALIZED subjects with sickle cell disease

Pfizer Pharmaceuticals

pending (estimated 9/1/2014-9/1/2019)

Roles: Chair, National Steering Committee

Site PI

Budget TBD

Previous Non-Industry Grant/Contract Support:

American Heart Association of Colorado

“Alterations in Natural Anticoagulant Mechanisms in Severe Pulmonary Hypertension”

PI: Kathryn L. Hassell, M.D.

07/01/95 - 06/30/96

\$25,000

National Institutes of Diabetes & Digestive & Kidney Diseases

“Validation of a New Mass Spectrometric Blood Folate Assay”

PI: J. Fred Kolhouse, M.D.

Role: Co-Investigator
09/30/96 - 09/29/98
\$272,731

CO Department of Health-IRIS II EHDI Contract

“A statewide database system designed to track sickle cell patients follow-up.”

PI: Kathryn Hassell, M.D.
1/1/01 12/31/04
\$109,600

CO Department of Health and Environment Contract

“A grant for providing sickle cell trait follow-up counseling”

PI: Kathryn Hassell, M.D.
4/1/04 05/30/05
\$6,770

NIH/NHLBI (Hassell) R-13 Conference Grant

“Consensus Conference Grant to develop guidelines for the treatment of sickle cell pain”

PI: Kathryn Hassell, M.D.
11/1/2005-12/31/2006
\$25,153

NIH/NHLBI Clinical Trial Agreements

Comprehensive Sickle Cell Center Trials Consortium (CSCC CTC) multicenter HuMg Study

Site PI: Kathryn Hassell, M.D.
6/1/2007 – 5/31/2008
\$98,498

“Comprehensive Sickle Cell Center Trials Consortium (CSCC CTC) Multicenter Arginine Study”

Site PI: Kathryn Hassell, M.D.
6/1/2006 – 5/31/2007
\$76,239

Comprehensive Sickle Cell Center Trials Consortium (CSCC CTC) Multicenter Priapism Study

Site PI: Kathryn Hassell, M.D.
6/1/2007 – 5/31/2008
\$38,962

NIH/NHLBI Contract

RFP HB-06-06 Phase II/III Trial of Sildenafil for Sickle Cell Associated Pulmonary Hypertension

Site PI: David Badesch, M.D.
Role: Co-Investigator
6/1/2006 – 12/31/2010
\$418,375

Mountain States Genetics Network

Pilot project to implement a genetic services program through community public health clinics to provide sickle cell trait follow-up.

PI: Kathryn Hassell, M.D.

2/1/2006-11/30/2007

\$15,374

Shifting demographics of sickle cell trait in Colorado

PI: Kathryn Hassell, M.D.

2/1/2006-11/30/2007

\$1,890

Mountain States Reginal Genetics Collaborative (HRSA)

Standardization of Hemoglobinopathies Newborn Screening Follow-up in Mountain States Region

PI: Kathryn Hassell, M.D.

2/1/2006-6/30/2011

\$12,000/year

National Newborn Screening Center (HRSA)

Sickle Cell Trait Primary Care Provider Education: Development of on-line primary care

educational module for sickle cell trait

PI: Kathryn Hassell, M.D.

7/1/10-6/30/11

\$50,000

Previous Industry Contracts:

- **Texas Biotechnology Corporation**

"Open Label Study of Novastan in Patients with Heparin-Induced Thrombocytopenia"

Site PI: Kathryn L. Hassell, M.D.

06/01/95-99/99/99

- **Cypros Pharmaceuticals**

"A dose-ranging study of efficacy and tolerability of multiple doses of Cordox™ (fructose 1,6 diphosphate) as adjunct therapy in the management of an acute sickle cell related painful vaso-occlusive episode."

Site PI: Kathryn L. Hassell, M.D.

09/01/98 - 09/01/00

- **Organon Pharmaceuticals**

"Multicenter randomized open lable study to compare the efficacy and study of once dai-lyof org 31540-SR90107A vs. adjusted dose intravenenous unfractunanted Heparin in the intial treatment in acute symptomatic pulmonary embolism."

Site PI: Kathryn L. Hassell, M.D.

06/01/2000 - 12/01/2002

- **Dupont Pharmaceuticals**

"A phase II multicenter randomized open lable perspective study to evaluate Tinzaparine vs. unfractunated Heparin in subjects receiving longterm Warfarin and require prental anti-coagulation after discharge of Warfarin therapy for an invasive surgical proce-dure."

Site PI: Kathryn L. Hassell, M.D.

02/01/2001-12/01/2002

- **Sanofi-Synthelabo Recherche**

“The Van Gogh- DVT trial, a multicenter, international, randomized, open- label assessor-blind, non-inferiority study comparing the efficacy and safety of once weekly subcutaneous SR34006 with the combination of (LMW) Heparin and vitamin K antagonist (VKA) in the treatment of acute symptomatic deep vein thrombosis”

Site PI: Kathryn Hassell, M.D.

12/2002 – 12/31/05

- **Organon USA**

“The primary objective of the study is to compare whether once weekly subcutaneous injection of idraparinux is at least as effective as heparin and vitamin K antagonist in the treatment of patients with acute symptomatic pulmonary embolism in terms of preventing recurrent venous thromboembolism.”

Site PI: Kathryn L. Hassell, M.D.

4/2002 - 7/14/04

- **Novartis Pharmaceuticals**

ICL 670A Clinical Trial Multicenter study randomized trial to compare efficacy of Deferal and ICL670 Iron Chelator drug

Site PI: Kathryn Hassell

1/1/04 – 12/31/2009

- **McNeil (Quintiles) Pharmaceuticals**

Phase III, multicenter, 52 week randomized, double blind, placebo controlled study of the clinical efficacy and safety of ICA-17043 in patients with sickle cell disease who have had more than 2 acute sickle related painful crises within preceding 12 months

Site PI: Kathryn Hassell, M.D.

8/1/05-11/30/2007

- **Novartis Pharmaceuticals**

“A single-arm, open-label study of the Palatability and Tolerability of Exjade Taken with Meals, with Different Liquids or Crushed and Added to Food”

Site PI: Rachelle Nuss

Role: Co-Investigator

6/16/2008 to 3/31/2011

- **Glycomimetics, Inc**

GMI-1070-201 “A phase 2 randomized, double-blind, placebo-controlled study of the efficacy, safety, and pharmacokinetics of GMI-1070, a pan-selectin inhibitor, in subjects hospitalized for sickle cell vaso-occlusive crisis”

Site PI: Kathryn Hassell

\$144,000

11/1/2009 to 12/31/2013

- **Emmaus Medical**

“A Phase III, Prospective, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Multicenter Study of L-Glutamine Therapy for Sickle Cell Anemia and Sickle^{β0}-Thalassemia ”

Site PI: Kathryn Hassell

\$85,000

6/11/2012 to 12/31/2013

- **TerumoBCT**

“Evaluation of Spectra Optia Apheresis Red Blood Cell Exchange Protocol in Patients with Sickle Cell Disease”

Site PI: Kathryn Hassell

\$150,000

1/1/2013 to 8/31/2013

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3. R.A. Marlur, R. Ellison, A. Neumann, D.C. Kressin and **K.L. Hassell**. Correlation of antiphospholipid antibodies and protein S deficiency with thrombosis in HIV-infected men. *Blood, Coagulation, Fibrinolysis* 5:455-462, 1994.
4. J.C. Deutsch, C.R. Santhosh-Kumar, **K.L. Hassell** and J.F. Kolhouse. Ascorbic acid oxidation leads to different degradation products depending on type of oxidant stress. *Analytical Chemistry*, 66:345-350, 1994.
5. J.F. Kolhouse, **K.L. Hassell**, J.C. Kolhouse, J.C. Deutsch and C.R. Santhosh-Kumar. Measurement of excitatory sulfur amino acids, cysteine sulfinic acid, cysteic acid, homocysteine sulfinic acid, and homocysteic acid in serum by stable isotope dilution gas chromatography-mass spectrometry and selected ion monitoring. *Analytical Biochemistry* 220:249-256, 1994.
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8. J.F. Kolhouse, N.M. Kolhouse, **K.L. Hassell**, J.C. Deutsch and C.R. Santhosh-Kumar. Quantitation of red blood cell folates by stable isotope dilution gas chromatography-mass spectrometry utilizing a folate internal standard. *Analytical Biochemistry* 225:1-9, 1995.
9. G.R. Buchanan, D.W. Luckey, D.L. Wethers, **K.L. Hassell**, G.M. Woods, Z.R. Rogers, J.L. Lear, J.L. O’Connell and P.A. Lane. Functional asplenia in hemoglobin SC disease. *Blood* 85:2238-2244, 1995.
10. B.L. Steel, **K.L. Hassell**, C. Rajagopalan, T. Parsons, T. Braun, and R.A. Marlur. Unique case of brothers with moderate Factor XI deficiency and one with severe bleeding after surgery. *Clin Appl Thrombosis/Hemostasis* 2:14-17, 1996.
11. **K.L. Hassell**. A practical guide to hypercoagulability testing. *Internal Medicine* 17:55-65, 1996.
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- Group. Surgery in patients with hemoglobin SC disease. *American Journal of Hematology* 57:101-108, 1998.
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 14. C.H. Welsh, **K.L. Hassell**, D.C. Kressin, D.B. Badesch and R.A. Marlar. Coagulation and fibrinolytic profiles in patients with severe pulmonary hypertension. *Chest* 110:710-717. 1998.
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 20. Dodge SM, **Hassell K**, Anderson CA, et al. Antiphospholipid antibodies are common in patients referred for percutaneous patent foramen ovale closure. *Catheter Cardiovasc Intervent* 61:123-127 2004.
 21. **Hassell, KL**. The management of patients with HIT who require anticoagulant therapy. *Chest* 127;2:1S-8S, 2005.
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 26. National Quality Forum, Technical Review Panel. National Voluntary Consensus Standards for Prevention and Care of Venous Thromboembolism: Policy, Preferred Practices, and Initial Performance Measures. A Consensus Report, 2006 ISBN 1-933875-05-4.
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32. Pratte K, Baron A, Ogden L, **Hassell KL** et al. Plasminogen Activator Inhibitor-1 is Associated with Coronary Artery Calcium in Type 1 Diabetes. *Journal of Diabetes and Its Complications*, Epub Sep 1 2008.
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12. **K.L. Hassell**, D.C. Kressin, and R.A. Marlur. Use of Hexagonal Array Antiphospholipid Antibody Testing to Detect Lupus Anticoagulation in HIV-Infected Men. Presented at the XIVth Congress of the International Society on Thrombosis and Haemostasis, *Thrombosis and Haemostasis*, 69(5):1035, 1993.
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