BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Scott C. Woller	Assistant Professor (Clinical) of Internal Medicine
eRA COMMONS USER NAME (credential, e.g., agency login) scottwoller	School of Medicine

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Wisconsin - Milwaukee, Milwaukee, WI	B.S.	1990-93	Biological Sciences
University of Wisconsin Comprehensive Cancer Center, Madison, WI	Fellow	1997	
Northwestern University Medical School, Chicago, IL	M.D.	1996-00	Medicine
University of Utah School of Medicine, Salt Lake City, UT	Intern	2000-01	Internal Medicine
University of Utah School of Medicine, Salt Lake City, UT	Resident	2001-03	Internal Medicine
University of Utah School of Medicine, Salt Lake City, UT	Chief Resident	2003-04	Internal Medicine

A. Personal Statement

Dr. Woller completed medical school at Northwestern University Medical School in 2000 and an Internal Medicine residency at the University of Utah in 2003. Dr Woller joined the University of Utah School of Medicine faculty after serving a Chief year, and is presently Assistant Professor of Internal Medicine (Clinical). Dr Woller is co-director of the Thrombosis Clinic at the Intermountain Medical Center, and Medical Director for Anticoagulation Management for the Intermountain Healthcare Urban Central Region. Dr. Woller has been invited to present in the arena of thrombosis nationally and abroad, and serves as referee for multiple peer-review journals. Dr. Woller is currently principal investigator or co-investigator of 13 clinical studies in the arena of venous thromboembolism prevention and therapy.

B. Positions and Honors

Positions and Employment

1993	Research Assistant, University of Wisconsin, McArdle Laboratories for Cancer Research, Salt Lake City, UT
1994 - 1996	Research Associate, University of Wisconsin, Center for Tobacco Research and Intervention, Madison, WI
2003 - Present	Attending Physician, Ft. Harrison Veterans Administration Medical Center, Helena, MT
2004 - Present	Assistant Professor, University of Utah, School of Medicine, Department of Internal Medicine, Salt Lake City, UT
2007 - Present	General Internal Medicine Attending Physician, Intermountain Medical Center, Murray, UT
<u>Honors</u>	
2002 - 2003	William D. Odell Resident of the Year award. University of Utah Department of Internal Medicine
2002	Grand Prize. American College of Physicians / American Board of Internal Medicine 2002 Annual State Meeting Poster competition: Is D-Dimer useful as a stand-alone test to rule out DVT: a comparison of six D-Dimer assays

C. Selected peer-reviewed publications (In chronological order. Selected from 14 peer-reviewed publications.)

- 1. Stevens SM, Elliott CG, **Woller SC**, Li L, Bennett ST, Egger MJ, Snow GL. (2005). The use of a fixed high sensitivity to evaluate five D-dimer assays' ability to rule out deep venous thrombosis: a novel apprach. *Br J Haematol*, *131*(3), 341-347.
- 2. Woller SC, Stevens SM, Elliott CG. (2008). Extended prophylaxis with idraparinux prevented recurrence of venous thromboembolism but increased risk for bleeding. ACP Journal Club, 148(1), 19-20.
- 3. **Woller SC**, Stevens SM, Elliott CG. (2008). Idraparinux was noninferior to standard therapy for deep venous thrombosis but inferior for pulmonary embolism. *ACP J Club*, *148*(1), 19-20.
- 4. Stevens SM, **Woller SC**. (2008). Multidetector CT was noninferior to multidetector CT plus venous ultrasonography of the leg for excluding PE. *ACP Journal Club*, *149*(JC3), 13.
- Johnson SA, Stevens SM, Woller SC, Lake E, Donadini M, Cheng, J, Labarère J, Douketis JD. (2010). Risk of Deep Vein Thrombosis Following a SingleNegative Whole-Leg Compression Ultrasound: A Systematic Review and Meta-analysis. *JAMA*, 303(5), 438-445.
- 6. Banerjee C, **Woller SC**, Holm JR, Stevens SM, Lahey MJ. (12/16/2009). Atypical Calciphylaxis in a Patient Receiving Warfarin Then Resolving With Cessation of Warfarin and Application of Hyperbaric Oxygen Therapy. *Clin Appl Thromb Hemost, 2009 Dec16*([Epub]), ahead of print.
- 7. Evans, R. Scott, Sharp, Jamie, Linford, Lorraine, Lloyd, James, Tripp, Jacob, Jones, Jason, Woller, Scott, Stevens, Scott, Elliott, C., Weaver, Lindell. (2010). Risk of Symptomatic Deep Venous Thrombosis Associated with Peripherally Inserted Central Catheters. *Chest*, *138*, 803-810.
- 8. **Woller SC**, Bertin KC, Stevens SM, Hanseen RB, Hickman JM, Samuelson KM, Barton S, Lloyd JF, Evans RS, Jones JP, Elliott CG. (Under review). A comparison of ACCP Guidelines to AAOS Guidelines for the prevention of pulmonary embolism among patients undergoing total hip or knee joint replacement surgery: A prospective observational study. *J Arthroplasty*.

D. Research Support

Current Support

Stevens (PI)

Bristol-Meyers Squibb/Imclone

ADOPT: Apixaban Dosing to Optimize Protection from Thrombosis

A Phase 3 Randomized, Double-blind, Parallel-group, Multi-center Study of the Safety and Efficacy of Apixaban for Prophylaxis of Venous Thromboembolism in Acutely III Medical Subjects During and Following Hospitalization

Randomized, double-blind, double-dummy, 2-arm, multi-center trial in subjects during and after hospitalization for acute medical illness who have additional risk factors for VTE to determine if oral administration of apixaban 2.5 mg BID to acutely ill medical subjects for 1 month will reduce the incidence of VTE as compared with prophylaxis with subcutaneous enoxaparin 40 mg daily. Role: Co-Investigator

Anderson; Stevens (PIs)

Deseret Foundation Research Grant

A quality improvement study applying clinical pharmacogenetic algorithms to individualize dosing of warfarin in patients being initiated on oral anticoagulation. protocol 154-001 (CoumaGen II)

We will apply routine pharmacogenetic (PG)-guided dosing of warfarin in clinical practice at IHC facilities in the Urban Central Region (i.e., IMC, LDS, AVH), in a major new quality improvement and clinical research initiative. We will compare the percentage out-of-range (%OOR) INRs during the first month (and secondarily, 3 months) of warfarin therapy using PG-guided dosing with parallel or historical standard (STD), empiric dosed controls. We will ompare a modified PG-guided dosing algorithm with a previously tested, multicenter PG-guided algorithm.

Role: Co-Investigator

09/01/2007 - Present

09/01/2008 - Present

Elliott (PI)

Deseret Foundation Research Grant

More intense PROphylACTIc care for patients at risk for prophylaxis-resistant VEnous thromboembolism (the PROACTIVE trial).

This randomized, double-blind, placebo-controlled trial at Intermountain Medical Center and LDS Hospital will use the computer information system to identify patients at high risk for prophylaxis-resistant VTE. Eligible patients will be randomized to receive either the conventional ACCP recommended VTE prophylaxis or a more intense regimen of prophylaxis. The primary outcome will be clinically diagnosed and objectively confirmed DVT or PE within 90 days of hospital admission. Safety outcomes will include death or major bleeding within 90 days of hospital admission.

Role: Co-Investigator

Woller (PI)

Bayer

Once daily oral direct factor Xa inhibitor rivaroxaban in the long-term prevention of recurrent symptomatic venous thromboembolism in patients with symptomatic deep-vein thrombosis and pulmonay embolism The Einstein Extention study IMP 11899

This is a multicenter, randomized, double-blind, placebo-controlled, event-driven, superiority study for efficacy. Patients with confirmed symptomatic DVT or PE who completed 6 or 12 months of treatment with rivaroxaban or VKA are eligible for this investigation into whether rivaroxaban is superior to placebo in the long-term prevention of recurrent symptomatic VTE.

Role: Principal Investigator

Woller (PI)

Bayer

Oral direct factor Xa inhibitor rivaroxaban in patients with acute symptomatic deep-vein thrombosis and/or pulmonay embolism. The Einstein-VTE treatment studies A Phase III evaluation IMP 11702 This is a multicenter, randomized, open-label, assessor-blind, event-driven, non-inferiority trial for efficacy with a study treatment duration of 3, 6, or 12 months. The program consists of two independent evaluations: 1) one in patients with confirmed acute symptomatic DVT without symptomatic DVT. The primary efficacy objective is to evaluate whether rivaroxaban is at least as effective as enoxaparin/VKA in the treatment of patients with acute symptomatic DVT or patients with acute symptomatic PE with or without Symptomatic DVT for the prevention of recurrent venous thromboembolic events. Role: Principal Investigator

Woller (PI)

Deseret Foundation Research Grant

Risk Score Evaluation to Reduce Venous Thromboembolism Risk Among Medical Patients. Project #526 Retrospective cohort study with utilization of data from the electronic medical record of multiple IHC hospitals electronically interrogating the EMR to identify all patients (~180,000) admitted to a medicine service from January 1, 2000 until December 31, 2006. The risk factors of patients with the outcome of venous thromboembolism (VTE) will be reported and the weight of individual risk factors for the outcome of VTE will be described.

Role: Principal Investigator

Twine LLC Woller (PI)

North American Thrombosis Forum (NATF)

Enhancement of thromboprophylaxis among Intermountain Healthcare medical patients through measurement, education, and iterative feedback "VTE Reduction Initiative"

Venous Thromboembolism (VTE--including deep vein thrombosis DVT and pulmonary embolism PE) is a frequent complication of hospitalization and affects morbidity, mortality, length of stay and increased cost. The specific aims of this prospective observational cohort study are to 1. Measure the baseline rate of appropriate

02/28/2008 - Present

09/01/2009 - Present

07/31/2008 - Present

07/31/2008 - Present

08/01/2008 - Present

VTE prophylaxis among hospitalists at participating hospitals 2. Provide a daily alert notifying the hospitalist of record of patients identified as being at elevated risk for VTE that are not receiving appropriate thromboprophylaxis. 3. Report the pre and post study rate of clinically overt VTE within 90 days of hospitalization Role: Principal Investigator

Woller (PI)

Deseret Foundation Research Grant Enhancement of thromboprophylaxis among Intermountain Healthcare medical patients through measurement, education, and iterative feedback "VTE Reduction Initiative"

Venous Thromboembolism (VTE--including deep vein thrombosis DVT and pulmonary embolism PE) is a frequent complication of hospitalization and affects morbidity, mortality, length of stay and increased cost. The specific aims of this prospective observational cohort study are to 1. Measure the baseline rate of appropriate VTE prophylaxis among hospitalists at participating hospitals 2. Provide a daily alert notifying the hospitalist of record of patients identified as being at elevated risk for VTE that are not receiving appropriate thromboprophylaxis. 3. Report the pre and post study rate of clinically overt VTE within 90 days of hospitalization.

Role: Principal Investigator

National Heart, Lung, and Blood Institute (NHLBI) Genetics Informatics Trial of warfarin therapy (GIFT)

The trial will enroll 1600 orthopedic patients over the course of 4 years from Washington U., Intermountain Health Care, University of Utah Hospital, or the Hospital for Special Surgery (Weill-Cornell). Participants will be 65 years or older and scheduled for warfarin therapy for VTE prophylaxis after hip or knee arthroplasty. Patients will be randomized to: (Aim 1) pharmacogenetic vs. clinical dosing of warfarin; and (Aim 2) a target INR of 2.5 vs. 1.8. Role: Co-Investigator

Anderson; Stevens (PIs)

National Institutes of Health (NIH) Clarification of Optimal Anticoagulation through Genetics (COAG) trial

Goal: multicenter, double-blind, randomized trial comparing two approaches to guiding warfarin therapy initiation: 1) initiation of warfarin therapy based on algorithms using clinical information and an individual's genotype using genes known to influence warfarin response ("genotype-guided dosing"), and 2) initiation of warfarin therapy based on algorithms using only clinical information ("clinical-guided dosing"). Role: Co-Investigator

Woller (PI)

Deseret Foundation Research Grant

Aspirin Versus Warfarin for Venous Thromboembolism Prophylaxis Among Patients Receiving Elective Total Hip or Knee Joint Replacement: An Observational Study. Project #554

The American Academy of Orthopedic Surgeons has recently released guidelines for VTE prophylaxis among patients undergoing total hip or knee replacement that are not consistent with previous guidelines published by the American College of Chest Physicians. Currently there orthopedists in Intermountain Healthcare implement VTE prophylaxis based upon both sets of recommendations. In this prospective observational study we will report the outcomes of clinically significant deep venous thrombosis, pulmonary embolism, bleeding, rehospitalization and death among these two groups. Role: Principal Investigator

Canadian Institutes of Health Research

D-dimer to select patients with a first unprovoked venous thromboembolism who can have anticoagulants stopped at 3 months

01/01/2009 - Present

01/01/2009 - Present

08/03/2009 - Present

04/01/2009 - Present

08/31/2009 - Present

D-dimer Optimal Duration Study (DODS)

DODS is a multicenter prospective clinical management study with the primary goal of showing that the absolute risk of recurrent VTE is low enough that the burden and risk of long-term anticoagulant therapy is not justified. Patients with negative D-dimer tests on treatment and 1 month after stopping treatment will remain off anticoagulant therapy. Those with a positive D-dimer test on either occasion will stay on, or restart, long-term anticoagulant therapy. Both groups will be followed for up to 4 years (average of 2.5 years). Role: Co-Investigator

Stevens (PI) 09/01/2010 - Present Deseret Foundation Research Grant Use of whole-leg ultrasound for diagnosis of deep vein thrombosis in pregnant patients (CLOT-3)

The aim of CLOT-3 is to determine the rate of thromboembolic complications (including death attributed to thromboembolic disease) in pregnant patients suspected of deep vein thrombosis (DVT) when anticoagulation therapy is withheld on the basis of a negative whole-leg compression ultrasound examination (whole-leg CUS). Role: Co-Investigator

Deseret Foundation Research Grant

Investigation of Suspected Acute Pulmonary Embolism

07/01/2010 - Present Quality Improvement Measurements and Intervention for Computed Tomography Pulmonary Angiography for

The purpose of this study is (1) to measure the rates of appropriate and inappropriate use of computed tomography pulmonary angiography, (2) to measure the rates of complications associated with appropriate and inappropriate use of computed tomography pulmonary angiography (3) and to develop and test a quality improvement intervention which increases the rate of appropriate use of computed tomography pulmonary angiography and reduces the rate of inappropriate use of computed tomography pulmonary angiography (and

the complications associated with inappropriate use). Role: Co-Investigator