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## BIOGRAPHICAL SKETCH

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NAME Heidi Diana Klepin	POSITION TITLE Assistant Professor of Internal Medicine, Section on Hematology and Oncology		
eRA COMMONS USER NAME (credential, e.g., agency login) HKLEPIN			
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)	MM/YY	FIELD OF STUDY
University of North Carolina, Chapel Hill, NC	BS	5/94	Biology with honors
Medical Univ of South Carolina, Charleston, SC	MD	5/98	Medicine
Wake Forest University, Winston-Salem, NC	Residency	7/98-6/01	Internal Medicine
Wake Forest University, Winston-Salem, NC	Fellowship	7/01-6/02	Geriatric Medicine
Wake Forest University, Winston-Salem, NC	Fellowship	7/03-6/06	Hematology/Oncology
Wake Forest University Graduate School of the Arts and Sciences, Winston-Salem, NC	MS	5/08	Health Sci. Research

### A. Personal Statement

I am a dually trained geriatrician and oncologist with a clinical and research focus on geriatric oncology. I have received formal training in research methodology and informal training through the Wake Forest Pepper Center on evaluation and prevention of physical disability among older cancer patients. I have investigated the prognostic value of pre-cancer physical performance among older cancer patients in the Health Aging and Body Composition (Health ABC) Cohort Study, and used this as preliminary data to develop patient-oriented research protocols. Using acute myelogenous leukemia (AML) as the model, I have designed research studies to begin to investigate the following themes among older cancer patients: 1) physical function as a predictor of treatment outcomes; 2) the impact of chemotherapy on physical function; and 3) interventions to minimize treatment-associated physical disability. I have a T. Franklin Williams funded grant investigating geriatric assessment pre- and post-chemotherapy, with a focus on physical performance, among older adults receiving chemotherapy for AML which has exceeded initial recruitment goals. I have served as Co-PI for a completed pilot study investigating the feasibility of utilizing an exercise intervention to improve physical function and quality of life among older adults receiving chemotherapy for AML. These projects, in conjunction with my unique training background, have provided a solid foundation of preliminary data and experience to successfully pursue the research and career development activities proposed in this application. Completion of the proposed research and training will launch my career as an independent investigator dedicated to the development and dissemination of tailored behavioral interventions to minimize treatment-associated disability among older adults with cancer.

### B. Positions and Honors

#### Employment

2002-2003 Instructor, Internal Medicine, Section on Gerontology and Geriatric Medicine, Department of Internal Medicine, Wake Forest University School of Medicine  
2006- Assistant Professor, Internal Medicine, Section on Hematology and Oncology, Department of Internal Medicine, Wake Forest University School of Medicine

#### Other Experience and Professional Memberships

2001-present American Geriatrics Society  
2004-present Gerontological Society of America  
2003-present American Society of Hematology  
2003-present American Society of Clinical Oncology  
2006-present International Society of Geriatric Oncology  
2008-present Member, Cancer in the Elderly Subcommittee of the Cancer and Leukemia Group B

(CALGB)

2009-present Contributing Faculty Member, Cancer in the Elderly Section, Faculty of 1000 Medicine

2010-present Member, Editorial Board for Journal of Geriatric Oncology

2010-present Quality of Life Liaison, NCI Leukemia Steering Committee

### **Honors**

1994 MUSC Alumni Scholarship

1997 Honors, Family Medicine Core Clerkship

2002 American Medical Directors Futures Fellow

2006-2009 Scholar, Claude D. Pepper Older Americans Independence Center Research Career Development Core

2008 American Society of Hematology (ASH) ASP-ASH Junior Faculty Scholar Award in Clinical/Translational Research

### **C. Selected Peer-reviewed Publications (in chronological order)**

#### **Most relevant to the current application**

1. Hurria A, Balducci L, Naeim A, Gross C, Mohile S, **Klepin H**, Tew W, Downey L, Gajra A, Owusu C, Sanati H, Suh T, Figlin R. Mentoring Junior Faculty in Geriatric Oncology: Report from the Cancer and Aging Research Group. *Journal of Clinical Oncology*. 2008 July 1; 26(19): 3125-3127.

2. **Klepin H**, Mohile S, Hurria A. Geriatric Assessment in Older Patients with Breast Cancer. *The Journal of the National Comprehensive Cancer Network*. 2009 Feb; 7(2): 226-236.

3. **Klepin HD**, Balducci L. Acute Myelogenous Leukemia in Older Adults. *The Oncologist*. 2009 Mar; 14(3): 222-232.

4. **Klepin HD**, Geiger AM, Tooze JA, Newman AB, Colbert LH, Bauer DC, Satterfield S, Pavon J, Kritchevsky SB. Physical performance and subsequent disability and survival in older adults with malignancy: Results from the Health Aging and Body Composition Study. *Journal of the American Geriatrics Society*. 2010 Jan; 58: 76-82.

5. **Klepin HD**, Danhauer SC, Tooze JA, Stott K, Daley K, Vishnevsky V, Powell BL, Mihalko SL. Exercise for older adult inpatients with acute myelogenous leukemia: A pilot study. In press, *J Geriatric Oncology* 2010.

#### **Additional publications of relevance to the field**

1. Mendonca, VM, **Klepin HD**, Matson S. DNA Helicases in Recombination and Repair: Construction of a *uvrDhelDrecQ* Mutant Deficient in Recombination and Repair. *J Bacteriol* 1995;177:1326-1335. PMID: PMC176740.

2. **Klepin HD**, McMullen KP, Lesser GL. Esthesioneuroblastoma. *Curr Treat Options Oncol* 2005;6:509-518.

3. **Klepin HD**, Hurd DD. Autologous Transplantation in Elderly Patients with Multiple Myeloma: Are we asking the right questions? *Bone Marrow Transplantation*. 2006 Nov; 38(9): 585-92.

4. Hartmann EL, Kitzman D, Rocco M, Leng X, **Klepin H**, Gordon M, Rejeski J, Berry M, Kritchevsky S. Physical Function in Older Candidates for Renal Transplantation: An Impaired Population. *Clinical Journal of the American Society of Nephrology*. 2009 Mar; 4: 588-594.

5. Foley KL, Tooze JA, **Klepin HD**, Song EY, Geiger, AM. Adjuvant Chemotherapy among Medicaid-Enrolled Patients Diagnosed with Non-Metastatic Colon Cancer. In press, *American Journal of Clinical Oncology*.

### **D. Research Support**

#### **Ongoing Research Support**

Klepin (PI)

7/1/08-6/30/11

American Society of Hematology (ASH)

ASP-ASH Junior Faculty Scholar Award in Clinical/Translational Research

Investigating the Relationship between Physical Function, Comorbidity, Cytogenetic Risk Group and Prognosis in Older Adults with Acute Myelogenous Leukemia

This career development grant provides salary support and funds for implementation of a 3-year project. The goal of this project is to investigate the predictive value of pretreatment self-report physical function and objective performance assessment on treatment related mortality in older adults with acute leukemia and to evaluate interactions between cytogenetic risk groups and physical function.

Klepin (PI) 7/1/10-6/30/2011  
Comprehensive Cancer Center of Wake Forest University/ Pepper Center Joint Pilot Grant  
Systemic inflammation, functional decline and treatment outcomes among older adults receiving chemotherapy for acute myelogenous leukemia (AML)  
The purpose of this study is to investigate the relationship between systemic biomarkers of inflammation, treatment-associated physical disability, and response to therapy for older adults receiving induction chemotherapy for AML.

Williamson (PI) 1/1/09-12/31/12  
Donald W. Reynolds Foundation Grant  
There are three major aims: to develop geriatrics education leaders and teaching programs with programs for primary care, hospitalist and specialist faculty outside of their geriatrics section; to strengthen and expand geriatrics education to all medical students, internal medicine and family medicine residents; and to develop new education programs such as a Senior Mentors program and telemedicine technology consultations to enhance existing geriatrics initiatives.  
Role: Co-Investigator, Geriatric Oncology Faculty Development Leader

### **Completed Research Support**

Klepin (PI) 6/13/07-6/30/08  
Wake Forest University Intramural Grant  
Inpatient Functional and Cognitive Assessment in Older Adults with Acute Myelogenous Leukemia  
Purpose: This intramural grant provides pilot funds to support future external grant applications. The goal of this study is to demonstrate feasibility of conducting bedside assessment of cognition and physical function (self report and objective physical performance) on older adults with newly diagnosed acute myelogenous leukemia prior to induction chemotherapy.

Danhauer, Klepin, Mihalko (Co-PI) 4/11/07-12/31/08  
Wake Forest University Cross Campus Pilot Grant  
A Feasibility Study of a Physical Activity Intervention in Older Adult Inpatients with Acute Leukemia  
Purpose: The Cross Campus Pilot Grant mechanism fosters interdisciplinary research collaboration between multiple principal investigators, to support future external grant applications. The goal of this study is to demonstrate the feasibility of conducting a randomized clinical trial to test the effectiveness of a physical activity intervention for older adult patients with acute leukemia who are undergoing induction or reinduction chemotherapy on physical and psychological health.

Foley (PI) 3/1/08-12/31/08  
American Cancer Society Grant  
Colon Cancer Treatment, Surveillance, and Survival among the Poor  
Purpose: In this study we aim to describe patient, health services, and community characteristics associated with treatment and recurrence surveillance in poor individuals diagnosed with colon cancer, and to describe the impact of treatment and recurrence on survival in the same population.  
Role: Co-Investigator

P30 AG21332 Kritchevsky (PI) 11/1/06-10/31/09  
Wake Forest School of Medicine Claude D. Pepper Older Americans Independence Center  
The major goals of this project are the developing, testing, and dissemination of effective therapies for the treatment and prevention of physical disability from chronic diseases in later life. Dr. Klepin's research interest in the relationship between physical function and cancer therapy in older adults has been supported since November 2006 and a formal mentoring team fosters her development as an independent investigator.  
Role: Research Career Development Core Fellow