Building Infrastructure for Cancer and Aging Research: Cancer and Aging Research Group

Supriya Mohile, MD, MS
William Dale, MD, PhD
Cancer & Aging Research Group
Average Annual Incidence Rates and Case Distribution by Age

DeSantis et al, CA Cancer J, 2019
Under-representation of Older Adults on FDA Registration Trials (ASCO 2017)

- 10-yr perspective
  - 2005-2015
- 105 FDA registration trials
- 224,766 patients

Disparity is Greatest for Patients Age ≥ 75

Singh et al, ASCO Annual Meeting, 2017
• **Mission:** to join geriatric oncology researchers across the nation in a collaborative effort of designing and implementing clinical trials to improve the care of older adults with cancer.

• **Bi-monthly CARG Calls:** where members can present current projects and grant proposals for feedback.
Mentoring Junior Faculty in Geriatric Oncology: Report From the Cancer and Aging Research Group

Arti Hurria, City of Hope, Duarte, CA
Lodovico Balducci, H. Lee Moffitt Cancer and Research Institute, Tampa, FL
Arash Naeim, University of California, Los Angeles, Los Angeles, CA
Cary Gross, Yale University, New Haven, CT
Supriya Mohile, University of Rochester, Rochester, NY
Heidi Klepin, Wake Forest University, Winston-Salem, NC
William Tew, Memorial Sloan-Kettering Cancer Center, New York, NY
Leona Downey, University of Arizona, Tucson, AZ
Ajeet Gajra, University of New York Upstate Medical University, Syracuse, NY
Cynthia Owusu, Case Western Reserve University, Cleveland, OH
Homayoon Sanati, University of California at Irvine, Irvine, CA
Theodore Suh, The Cleveland Clinic, Cleveland, OH
Robert Figlin, City of Hope, Duarte, CA
Can We Identify Older Adults at Risk for Chemotherapy Side Effects?

- Melding Geriatrics and Oncology
- Multicenter study
  - 10 participating institutions
  - Cancer and Aging Research Group
- Over 750 patients enrolled
- Publication: *Journal of Clinical Oncology* 2011 & 2016
- Research named a key Clinical Cancer Advances in 2012 by the American Society of Clinical Oncology
Real World Usage of the Geriatric Assessment

Website Usage:
- ~6,000 hits/month on the GA Tools Page
- ~16,000 hits/month overall for the website
- Visitors from 24 countries
- 45% international visitors
Recommendation:

- In patients age 65 and older receiving chemotherapy, geriatric assessment should be used to identify vulnerabilities or geriatric impairments that are not routinely captured in oncology assessments.

Evidence-based, benefits outweigh harms
Evidence Quality: High
Strength of Recommendation: Strong
U13 AG048721 Grant
Collaboration Between CARG, NCI, & NIA

**Gap:**
- Clinical Measures Most Relevant to Older Adults Are Rarely Incorporated Into Oncology Clinical Trials

**Recommendation:**
- Consistently Incorporate Validated Geriatric Assessment Measures Into Oncology Research

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Over 20 Participating Institutions and 310 Members

MISSION STATEMENT

The mission of the Cancer and Aging Research Group is to join geriatric oncology researchers across the nation in a collaborative effort of designing and implementing clinical trials to improve the care of older adults with cancer. The only requirement for membership is the desire to help older adults with cancer.

CARG Website: myCARG.org
CARG Infrastructure Grant
(CARinG; NIA: R21/33)

MPIs: William Dale, Supriya Mohile,
(Arti Hurria), Heidi Klepin
CARG Infrastructure Grant (CARinG) Goals

The **overall goal** is to develop a sustainable national research infrastructure to create and support significant and innovative projects addressing key interdisciplinary research questions at the aging and cancer interface.

- **Increase high-impact research** to reliably identify older patients at highest risk for adverse outcomes from cancer and its treatments;

- **Develop effective interventions** to improve outcomes for vulnerable older adults and their caregivers;

- **Mentor the next generation** of aging and cancer researchers;

- **Disseminate the findings** widely to inform clinical practice;
# Schema of Events: Setting the Foundation

Figure 1: Schema of Events for “Geriatric Oncology Research Infrastructure to Improve Clinical Care”

<table>
<thead>
<tr>
<th>R21 Phase (Years 1-2)</th>
<th>R33 Phase (Years 3-5)</th>
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<tbody>
<tr>
<td>Year 1</td>
<td>Year 2</td>
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<tr>
<td>Conference 1</td>
<td>Delphi</td>
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<td>Pilot 1</td>
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<td>Pilots 4, 5, 6, 7</td>
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<td>Pilots 8, 9</td>
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**CARG Teleconferences – Every Two Weeks**

- **Aim 1:** Solidify the Infrastructure
  - **Aim 2:** Use the Sustainable Infrastructure
  - **Aim 3:** Support and Guide Research Projects
- **Aim 4:** Identify, Cultivate, and Mentor Investigators in Aging and Cancer Research
- **Aim 5:** Disseminate Research Findings and Data Sharing Opportunities
CARinG Cores

LEADERSHIP CORE

Co-Chairs: Supriya Mohile, MD, MS; William Dale, MD, PhD; Heidi Klepin, MD
PI Liaison: Supriya Mohile, MD, MS; William Dale, MD, PhD; Heidi Klepin, MD

MEASURES CORE

Chair: Hyman Muss, MD
Junior Faculty Lead: Thuy Koll, MD
PI Liaison: Supriya Mohile, MD, MS; William Dale, MD, PhD

SUPPORTIVE CARE CORE

Chair: Matthew Loscalzo, LCSW
Junior Faculty Lead: Rawad Elias, MD
PI Liaison: Supriya Mohile, MD, MS; William Dale, MD, PhD

HEALTH SERVICES RESEARCH CORE

Chair: Harvey Cohen, MD
Junior Faculty Lead: Melisa Wong, MD, MS
PI Liaison: Supriya Mohile, MD, MS

ANALYTICS CORE

Chair: Canlan Sun, MD, PhD
Junior Faculty Lead: Mina Sedrak, MD, MS
PI Liaison: Supriya Mohile, MD, MS

COMMUNICATION CORE

Chair: John Beilenson, MA
Junior Faculty Lead: Ishwaria Subbiah, MD, MS
PI Liaison: William Dale, MD, PhD
Core Papers

• Special Issue to Honor and Remember Dr. Arti Hurria through the *Journal of Geriatric Oncology*
• Junior Investigators who attend Conference 1 lead their respective paper and review the need for this particular Core for the infrastructure, and review of the process for next steps.

Allison Magnuson, DO
Measures Core

Thuy Kell, MD
Measures Core

Rawad Elias, MD
Supportive Care Core

Melisa Wong, MD
Health Services Core

Dan Li, MD
Analytics Core

Mina Sedrak, MD, MS
Analytics Core

Ishwaria Subbiah, MD
Communication Core
## CARinG Pilot Grants

<table>
<thead>
<tr>
<th>Pilot Grant</th>
<th>Year</th>
<th>Grant Support</th>
<th>Matching Funds</th>
<th>Timeframe</th>
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Pilot Grant 1

• **Title:** Development of a Personalized Discussion Priorization Tool for Older Adults Considering Adjuvant Chemotherapy for Breast Cancer
• **Co-PIs:** Allison Magnuson, DO and Mina Sedrak, MD, MS
• **Grant Period:** September 1, 2019 – August 31, 2020

• **Overall Objective:** Develop and test a technology-mediated DPT, which integrates personalized information on risk factors for adjuvant chemotherapy-related toxicity in older women with breast cancer

• **Specific Aims**
  - **Aim 1:** Conduct a secondary analysis of patients enrolled on NCT01472094 to determine the association between clinical factors and reduced RDI of a prescribed chemotherapy regimen.
  - **Aim 2:** Adapt a DPT to include personalized information regarding risk of chemotherapy toxicity and risk of reduced RDI, and evaluate the usability of the DPT in ten older adults considering adjuvant chemotherapy for breast cancer.
Patient Advocate Board: SCOREboard

• **Co-Chairs:** Beverly Canin and Margaret Sedenquist

• **Mission:** to improve aging and cancer research and care delivery by infusing the knowledge and experience of older patients with cancer and their caregivers in all stages of the research process.

• **Current membership:** 10 – 5 original members; 5 new – 3 CA; 1 NC; 2 NY; 1 CT; 2 AA; 6 cancer types

• **Procedures:** Monthly webinar meetings (1.5H) including the liaison PI One or two SCOREboard members work with each Core
Mentorship (Sustainability)

• Our mentees are our future:
  • Leadership training
  • Leveraging junior investigators: “teaching moments”
  • “Pay it forward”

• Define what we mean
  – “M” vs. “m”
  – Advisor
  – Sponsor
THANK YOU FROM ALL OF US!
To the Future

Geriatrics

Geriatric Oncology

Oncology