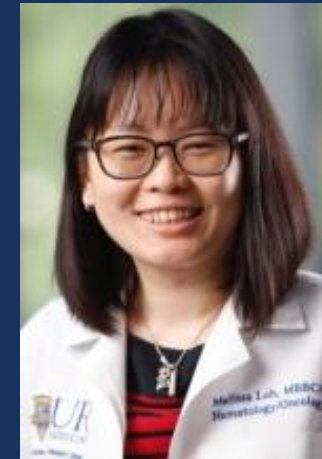# ANALYTICS CORE

Can-Lan Sun, PhD
Core Co-Chair

Mina Sedrak, MD, MS
Core Co-Chair

Melissa (Kah Poh) Loh, MBBCh BAO, MS
Junior Investigator Lead

ANALYTICS CORE MEMBERS

- *Supriya Mohile, MD, MS*
  PI liaison

- *Mina Sedrak, MD, MS*
  Core Co-Chair

- *Can-Lan Sun, PhD*
  Core Co-Chair

- *Melissa (Kah Poh) Loh,*
  MBBCh BAO, MS
  Junior Investigator Lead

- *Beverly Canin*
  Patient Advocate Board:
  SCOREboard Co-Chair

- *Eva Culakova, PhD*

- *Vani Katheria, MS*

- *Dan Li, MD*

- *Melody Schiaffino, PhD, MPH*

- *Louise Walter, MD*

- *Huiwen Xu, PhD*

ANALYTICS CORE

CORE MISSION

- Serve as central resource of expertise and counselling in biostatistics and epidemiology to advance cancer and aging research

- Provide study design support at any stage to accelerate high-quality research at aging and cancer interface for investigators
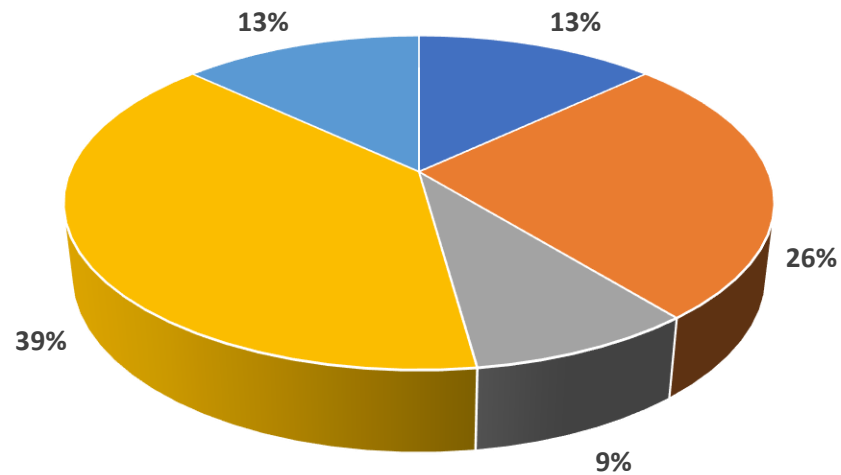
CORE FUNCTION

- Provision of expert consultations through making aging-specific recommendations on study design, data selection, sample size/power calculations, and statistical analysis plans

- Help investigators generate scientifically sound hypotheses, identify right datasets or alternatives, use appropriate research methods, collect accurate exposure and outcome data, and analyze data and interpret results

- Link investigators with datasets for secondary data analysis and pilot data, toolbox of methods and analytical plans for utilizing data, and informatics guide to best use data

- Foster opportunity for collaborations with other Cores to coordinate study design

- Develop and disseminate standardized data management and analytic procedures to support CARG-affiliated research
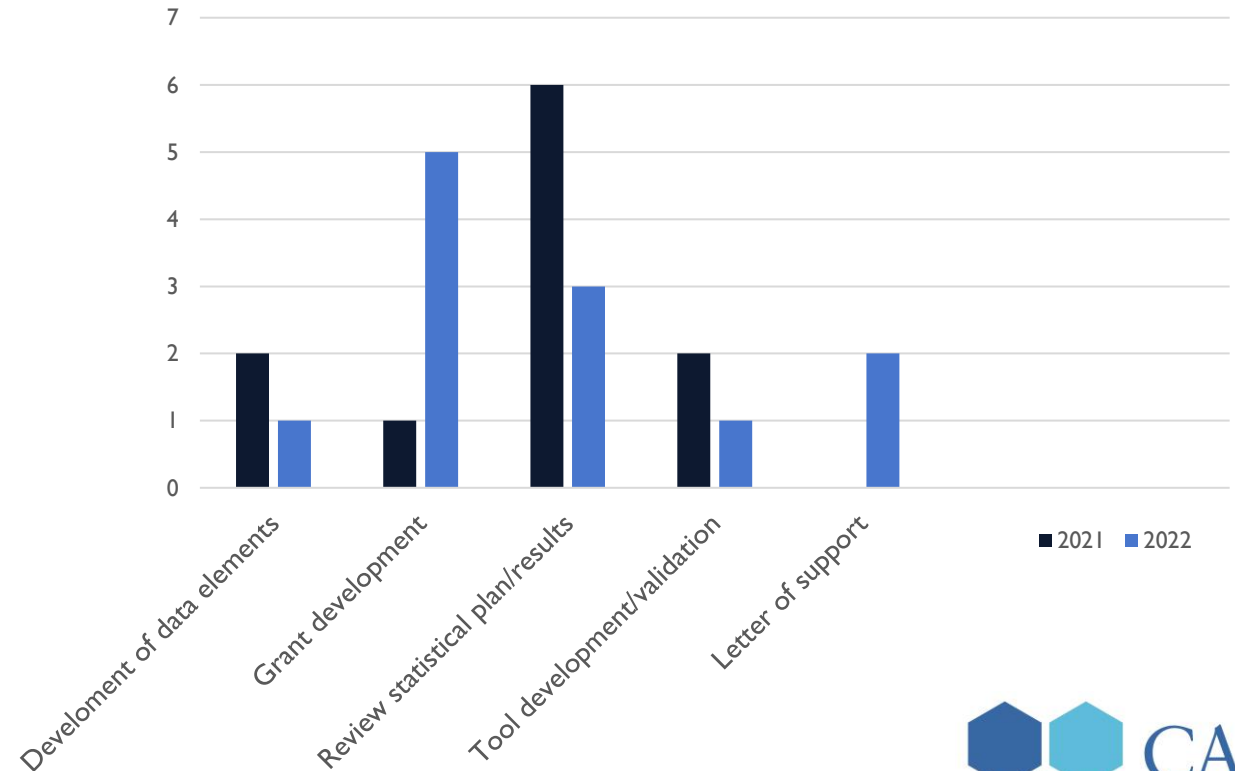
CARG
CANCER & AGING RESEARCH GROUP
Infrastructure Grant

ACCOMPLISHMENTS
23 Research Inquiries since January 2021

Analytics Core Research Inquiry Topics

- 13% (Development of data elements)
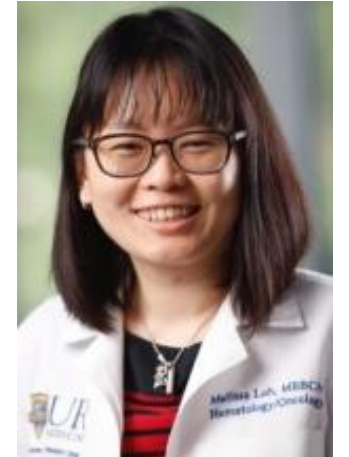- 13% (Grant development)
- 26%
- 9%
- 39%

Legend:
- Development of data elements
- Grant development
- Letters of support
- Review statistical plan/results
- Tool development/validation

Analytics Core Inquiries 2021-2022

Categories: Development of data elements, Grant development, Review statistical plan/results, Tool development/validation, Letter of support

■ 2021 ■ 2022

INVESTIGATOR SPOTLIGHT

- *In July 2022, Dr. Melissa Loh presented her specific aims for an R01 proposal*

- *At that time, she was struggling with 1) justification for her sample size without preliminary data from a pilot RCT; 2) study design (individual vs. cluster-level randomization)*

- *To address this problem, the Analytics Core provided insight and recommendations re statistical justification for sample size and randomization*

- *These changes subsequently informed an R01 and PCORI LOI (in process)*
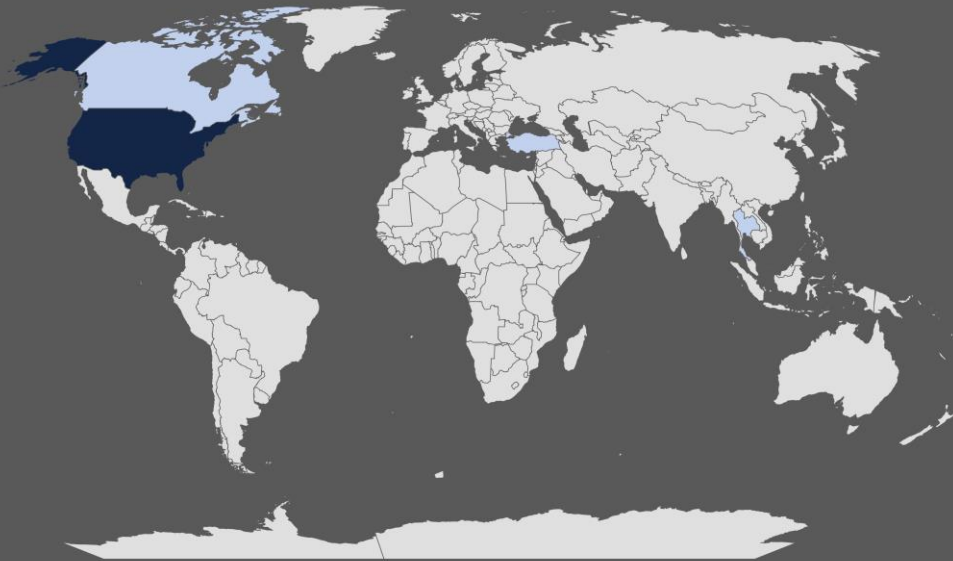
INVESTIGATOR SPOTLIGHT

- In early 2021, Dr. Carolyn Presley presented the aims for her Beeson K76 award for the National Institute of Aging

- At that time, she was considering expanding her NIA-funded R03 GEMSSTAR feasibility study but was considering multiple designs.

- The Analytics Core provided her with constructive feedback and encouraged her to pursue a randomized design

- In 2021, Dr. Presley was awarded her K76, one of the first two women ever to receive it at The Ohio Statue University! She is now leading this phase II randomized supportive care clinical trial.

  - *Supportive Care Intervention (ROAR-LCT) for Patients With Stage IIIA, IIIB, and IV Lung Cancer, ROAR-LCT Trial*

She is incredibly grateful for all the support and feedback from the CARG leadership, the supportive care core, and the analytics core.
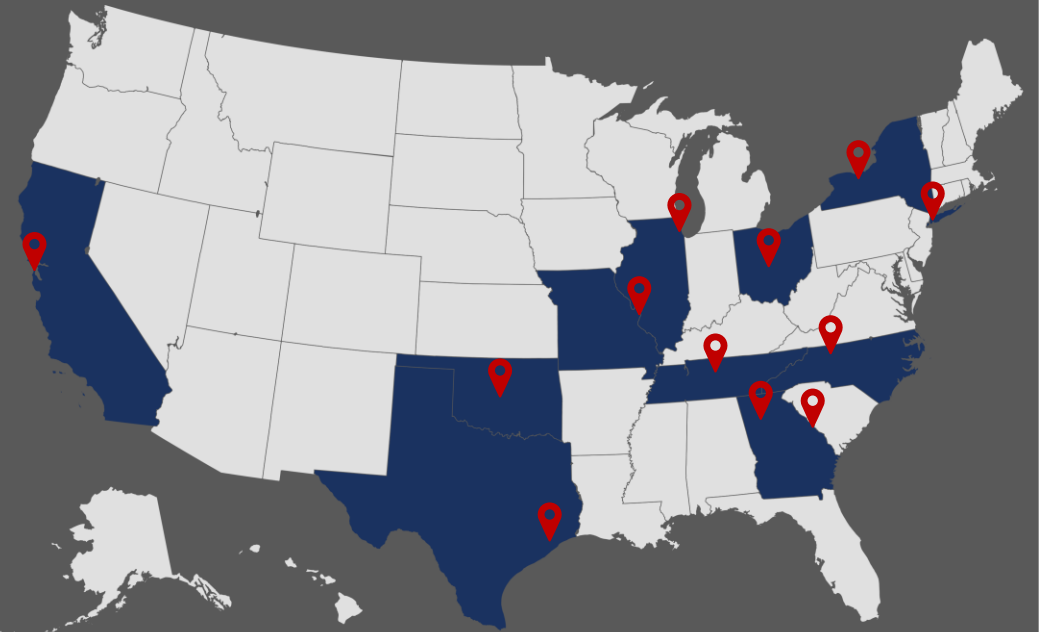
SUMMARY OF IMPACT

Inquiries from 5 Countries

Inquiries from 10 States, 12 Institutions

Canada, Singapore, Thailand, Turkey, United States

WHAT'S WORKING/WHAT'S NOT?

- We need to solicit feedback from investigators who come to the Core
  - Short post hoc survey

- How can we grow and optimize our function?
  - Expand our membership – qualitative research expertise
  - Supportive and flexible environment for investigator
  - Disseminate opportunities for engagement with Cores

- Opportunities for cross-Core meetings

FUTURE DIRECTION

- *Top 3 goals/priorities for next year*
    - *To create an infrastructure/process that facilitates data sharing*
    - *To develop a REDcap template repository for data collection*
    - *To fill gaps in expertise (e.g., qualitative, implementation science)*

CARG
CANCER & AGING RESEARCH GROUP
Infrastructure Grant
Funded by NIH/NIA
Grant No. 1R21AG059206

Thank You to Our Team!