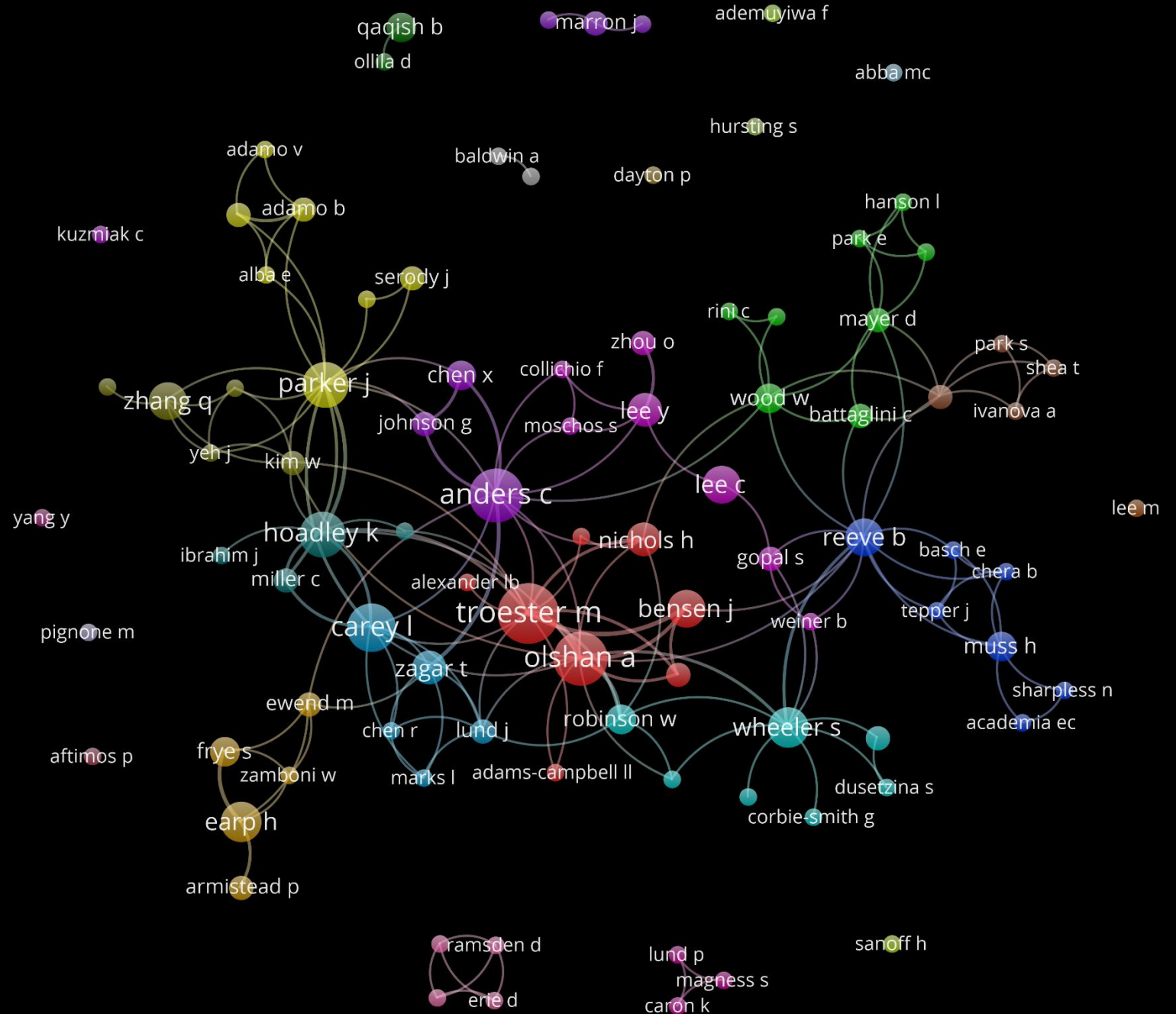


# Tweets analysis & visualization: Outcome@Lineberger

Zhaopeng Xing

Visualization & Impact Measurement Group

- Academic Collaborations within Lineberger
- PubMed, Scopus, Web of Science
- **Social Network (SN)**



To figure out:

What SN data can be used in twitter for research impact analysis

How to integrate them with exiting citation data resource and workflow

# Outcomes@Lineberger

- The Cancer Outcomes Research Program

*A collegial community of oncology clinician scientists, researchers and advocates*

- 3,232 tweets (12/2015 – 5/2018)

- 1357 tweets/1875 retweets

- 804 followers
- Api: Tweepy

- Tweets

- Hashtags
- Mentions

- Followers

- User's bio
- User's location

What were tweeted?

# Which are the most discussed topics

FinancialToxicity	17
asco16	16
Geriatric	15
asco17	12
ASCOQLTY	10
ISPOR	7
HealthIT	6
CancerMoonshot	6



# Who are frequently mentioned

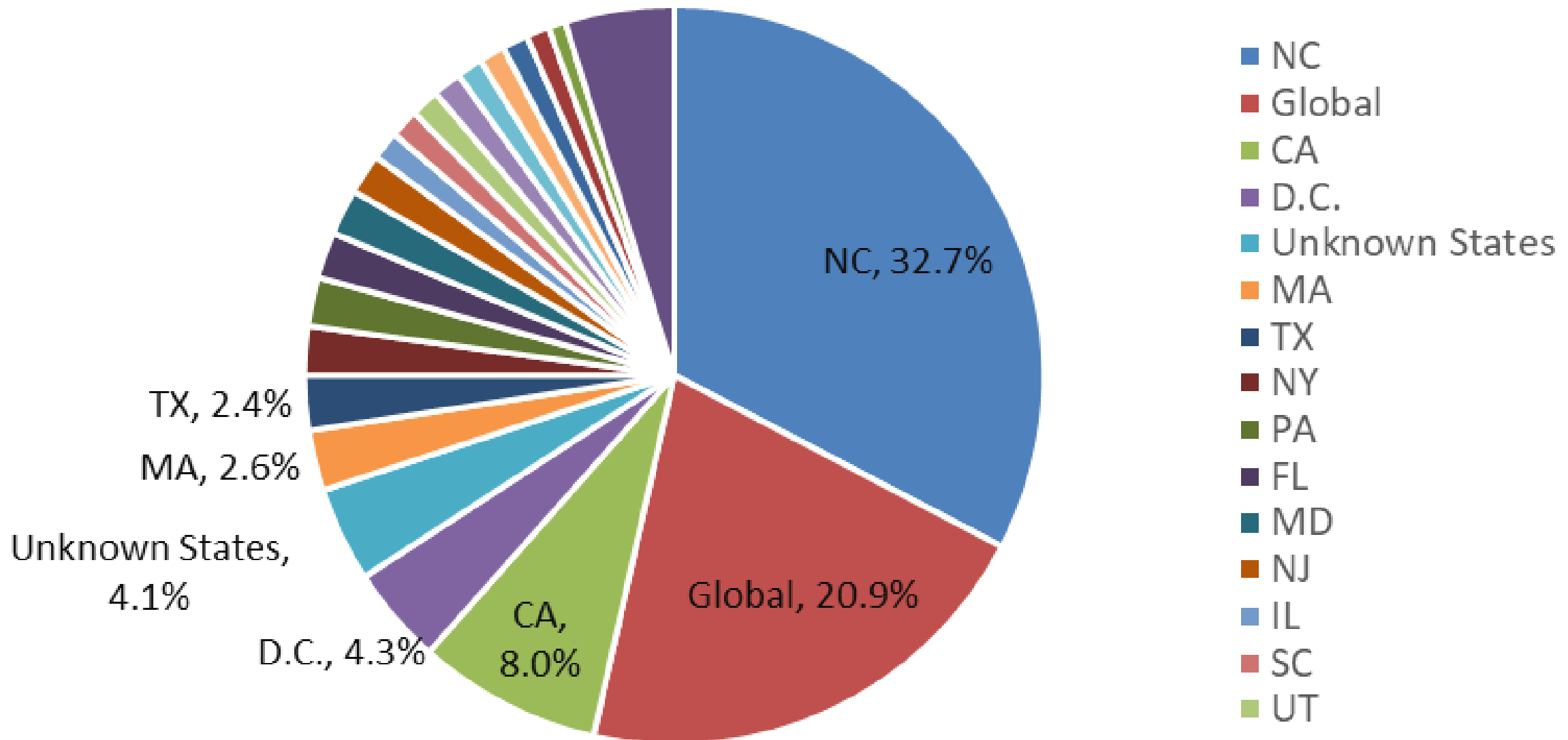
theNCI	79
ASCO	74
UNC_Lineberger	58
EthanBasch1	36
mattias_jonsson	34
uncproc core	33
JAMA Onc	29
unchpm	29
Odum_Institute	27
DusetzinaS	25
bennettphd	23
JournalCancer	21
OutcomesLineberger	20



Who is the audience?



## Followers by Geo Area (796)



# Classification:

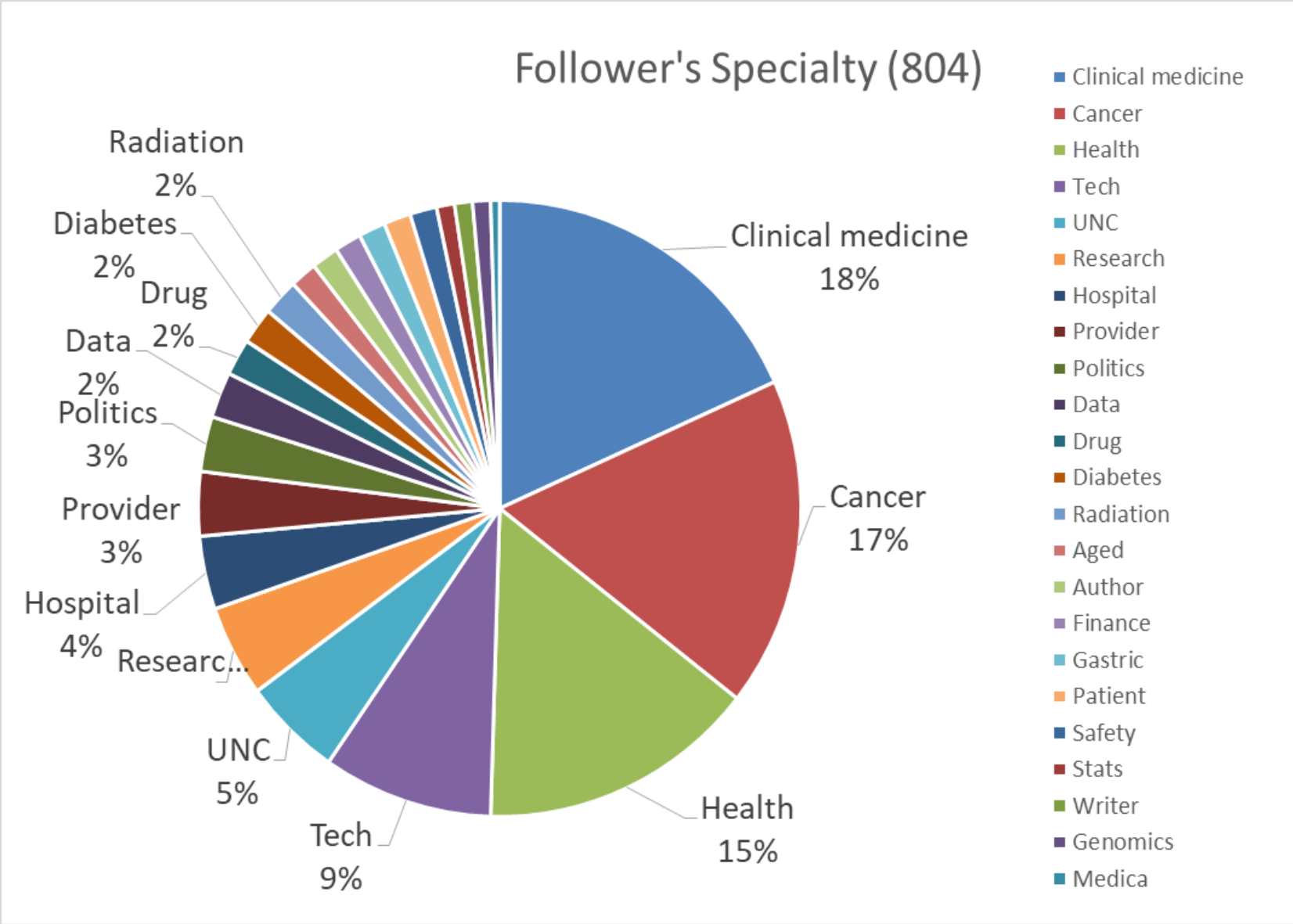
User description (Hashtags) associated with redefined categories or explicitly shown in the user description

**Clinical Medicine:**  
 Terms like Surgery, icu, vaccine, transplant, respiratory

**Cancer:**  
 "Cancer", or "oncology", or "tumor"

**Health:**  
 Texts containing "health" and also specific terms, such as "tobacco", "highfat", "nicotine", "suicide"

**Tech:**  
 Texts containing stem "tech" and terms like "AI", "wearable", "deeplearning", "EMR", "telemedicine"



- Clinical medicine
- Cancer
- Health
- Tech
- UNC
- Research
- Hospital
- Provider
- Politics
- Data
- Drug
- Diabetes
- Radiation
- Aged
- Author
- Finance
- Gastric
- Patient
- Safety
- Stats
- Writer
- Genomics
- Medica

# Wrap-up

- Hashtags
- Mentions
- User's bio
- User's location

Thank You!