

L^3 (Lifelong learning): Astronomy, astrophysics, and other science for Chicago's older adults

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Chicago
Public
Library



*Forward*Chicago
Activate * Engage * Influence



Kavli Institute
for Cosmological Physics
AT THE UNIVERSITY OF CHICAGO

- What?
- Why?
- Where?
- Who?
- How?
- Accomplishments
- Future

What?

- Hurlong talks (6/audience/season) on basic/current topics in astrophysics for older adult (aged 55+) audiences
- Wide subject range:
 - Relativity/LIGO
 - Dark universe (DM/DE)
 - Supernovae
 - Exo-planets/Astrobiology
 - CMB/SPT/Early universe
 - Stellar evolution
- Other topics:
 - Immunology
 - Evolution
 - Neuroscience
 - Epidemiology
 - Cancer
 - Ancient China
- Free Adler planetarium trip at end of series

Why older adults/lifelong learning?

- By 2030, 20% of US pop. > 65 years old (US Census Bureau). Majority will not be working, struggle with social isolation/cognitive decline.
- Cognitive engagement halves dementia rate (Sachdev 2006).
- Free learning, study, and exploration were identified by MacArthur Foundation as essential components of 'successful aging' (1998).

Why astronomy for older adults?

For older adults:

- Social interaction
- Cognitive engagement
- Engage sense of wonder
- Intergenerational connections
- Underserved by current efforts in Chicago
 - \$
 - Limited science offerings (particularly on South Side)



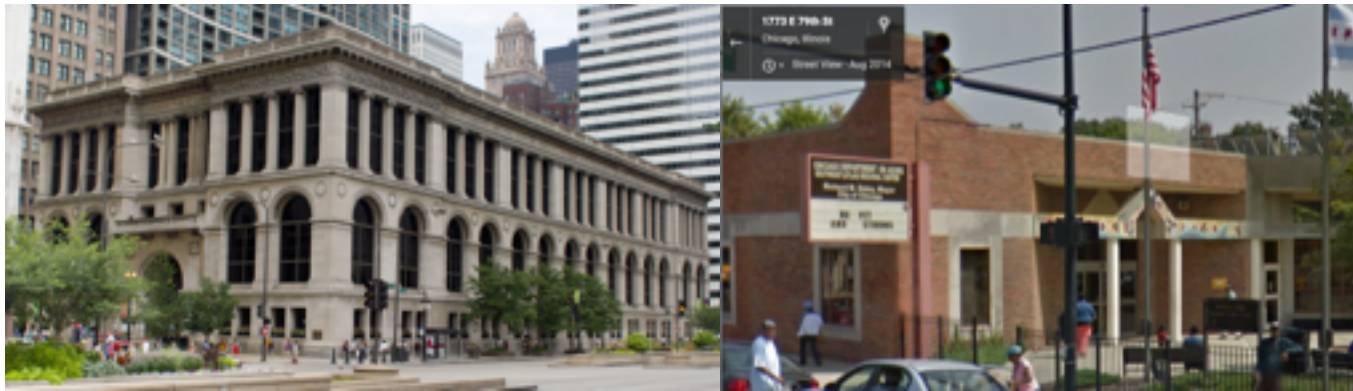
Why astronomy for older adults?

For scientists and institutions

- New audiences/partners
- Communication skills
- Valuable life experiences of older adults
- Donors and voters:
Funding, proliferation, climate, energy

Where?

City of Chicago Senior Centers



Renaissance Court
(Chicago Cultural Center)

Atlas Senior Center
(79th and Cregier)

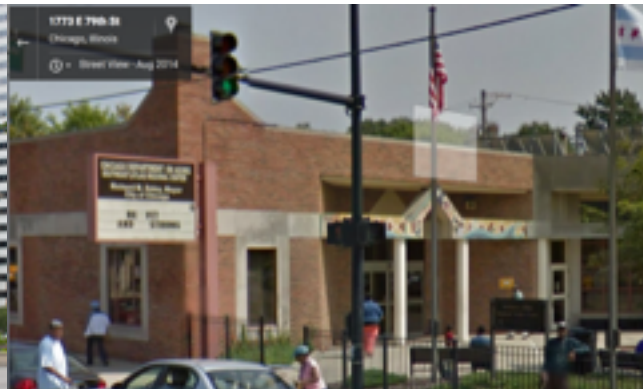
- Population: Older adults 65+, 50% from under-represented groups
- Classes until now: Art, exercise, literature....
- Services: Meals, legal aid, benefits

Where?

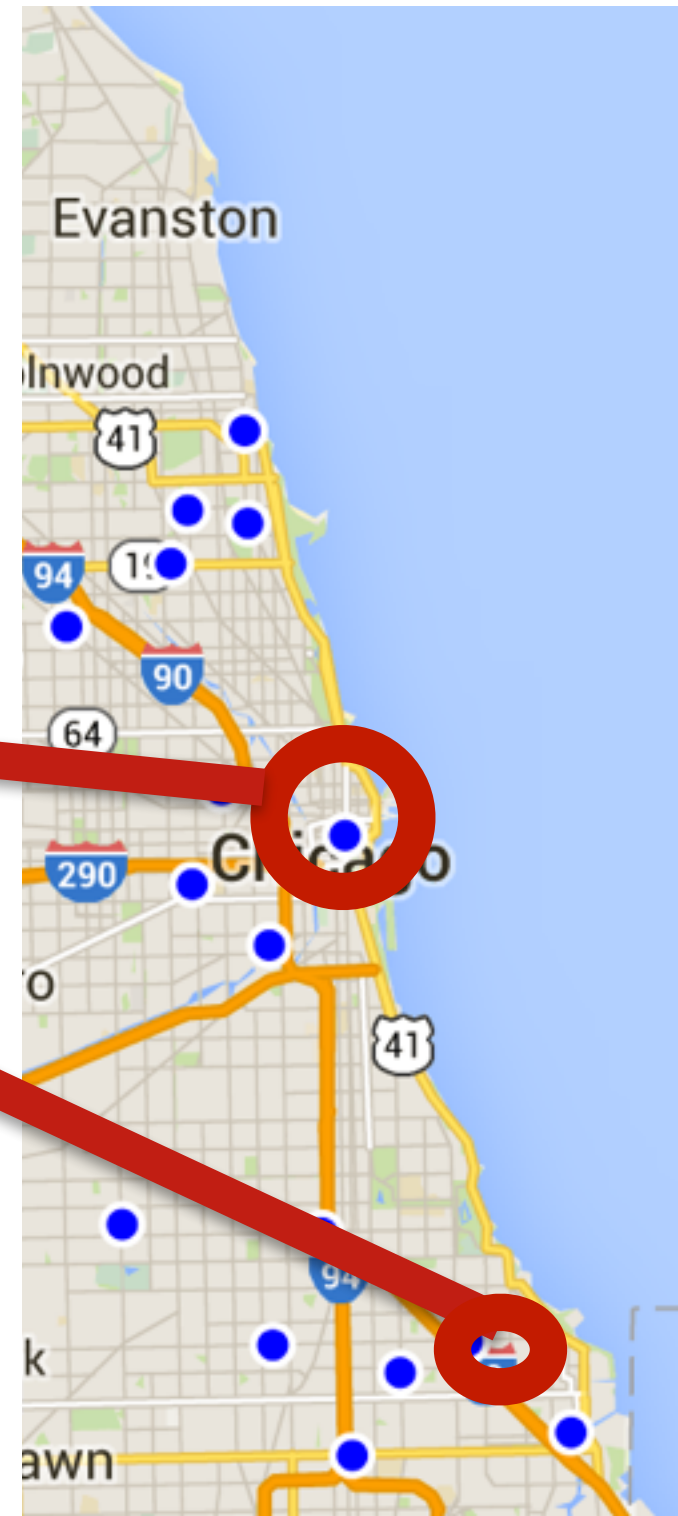
City of Chicago Senior Centers



Renaissance Court
(Chicago Cultural Center)



Atlas Senior Center
(75th and Cass)



Where?

Public Libraries

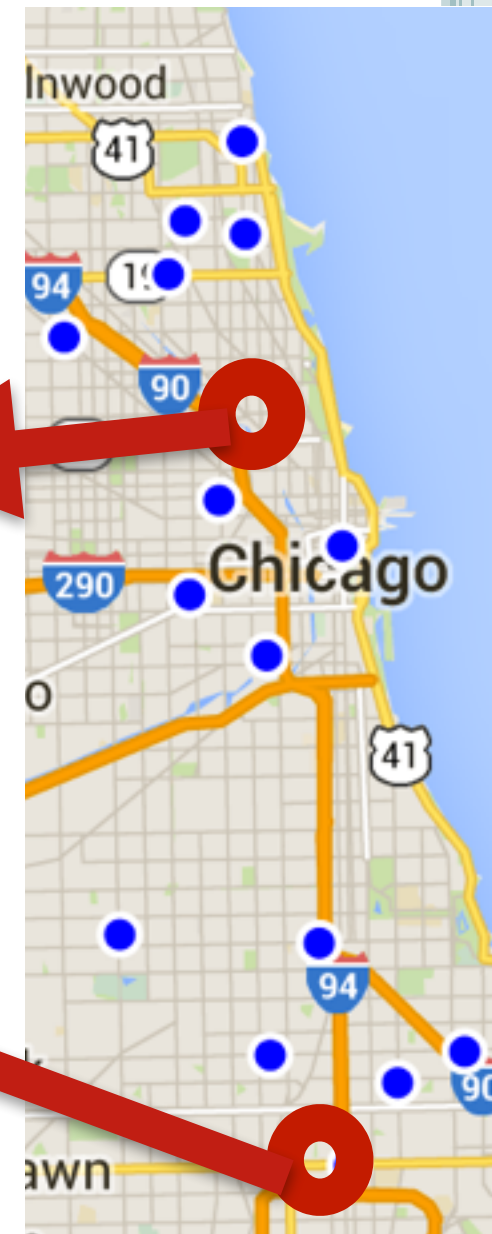
- Stigma free (“Senior”)
- Community driven
- Multi-generational



Conrad Sulzer Library



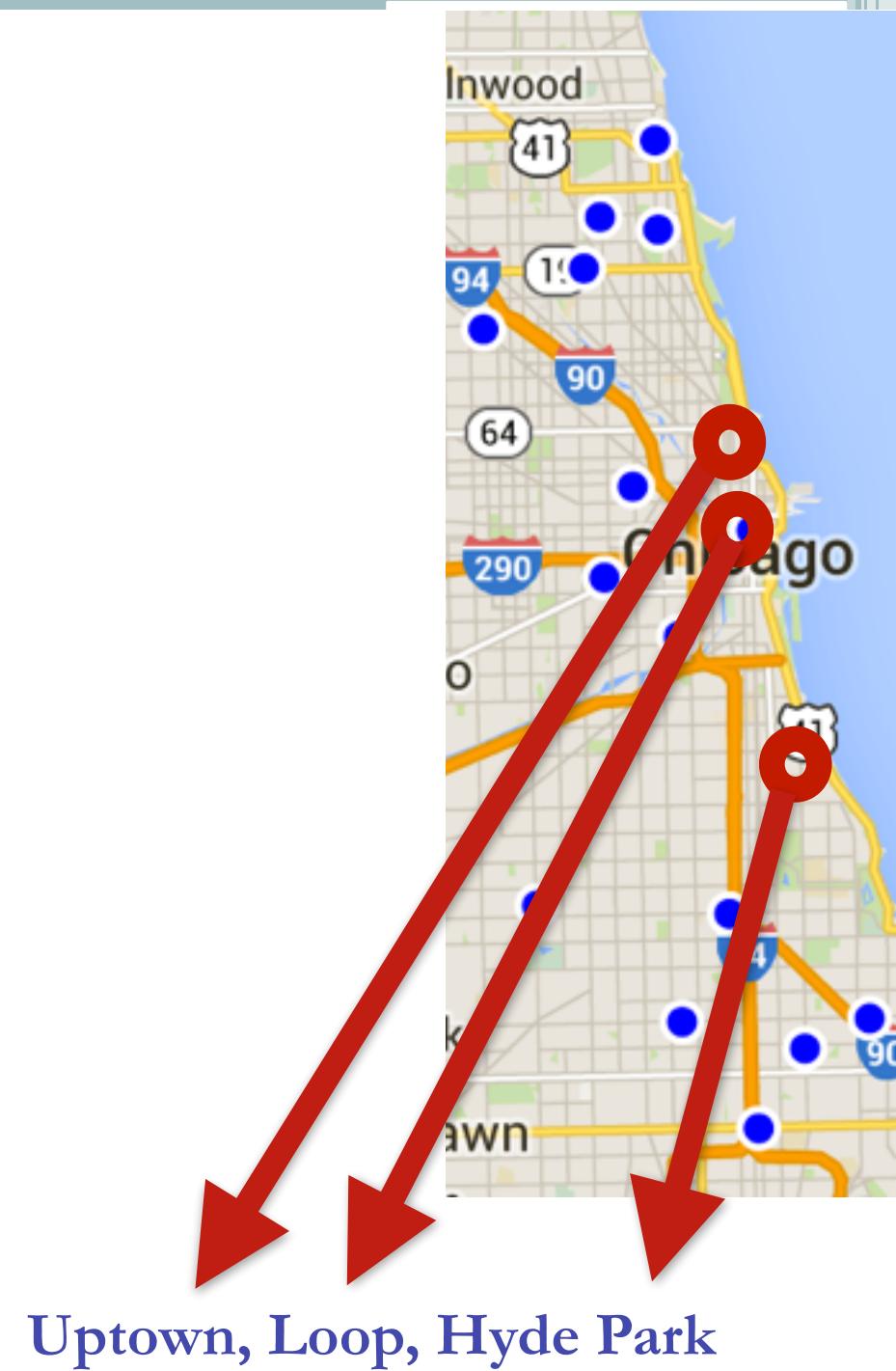
Carter Woodson Library
(Hub for African-American community)



Where?

Retirement homes

- More accessible (mobility)
- Can reach otherwise unengaged

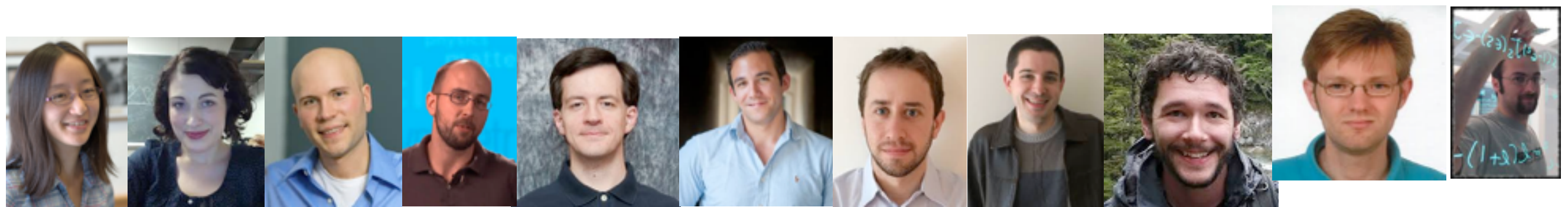


Who? Volunteer presenters

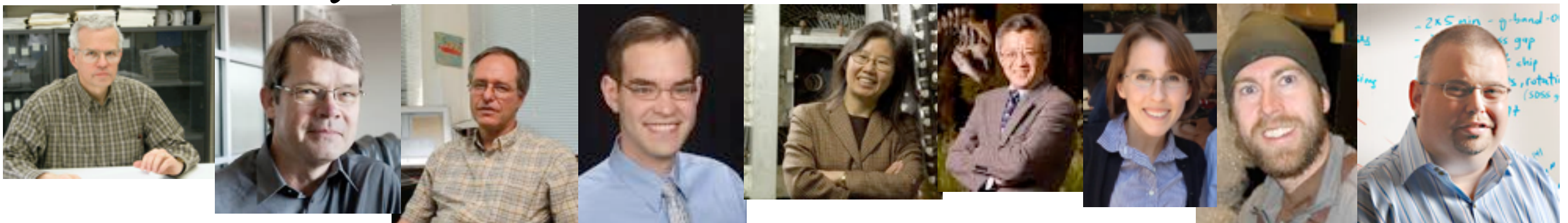
- Graduate students



- Postdocs



- UofC faculty

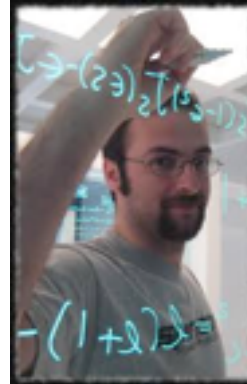


- Adler planetarium staff



Who?

- KICP outreach director/AAPF Fellow (DG)



- Area Agency on Aging



Center Director:
Crystal Warren



Director:
Joyce Gallagher



Center Director:
Robin Tillotson



Program Director
Kalyna Pomirko

- Forward Chicago/gerontologist K. Flude
- Woodson Library Ref. Librarian M. Carnes



How?

Presenter training

- Led by gerontologist (K. Flude)
- Content
 - Motivation
 - Audiences' challenges (**sensory/mobility/cognitive ...**)
 - Engaging audience (**stories + demos**)
 - Slide workshop
 - **Pacing/speaking** style [no jargon or assumptions!]
- ~60 attended 4 trainings over 3 years
 - Communications training for KICP/UofC Astro/other faculty, postdocs, students

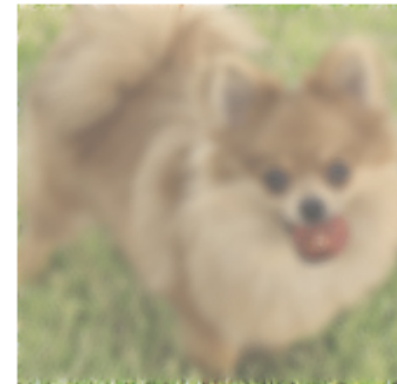


How?

Presenter training



normal vision



cataracts

Accomplishments

By the numbers....

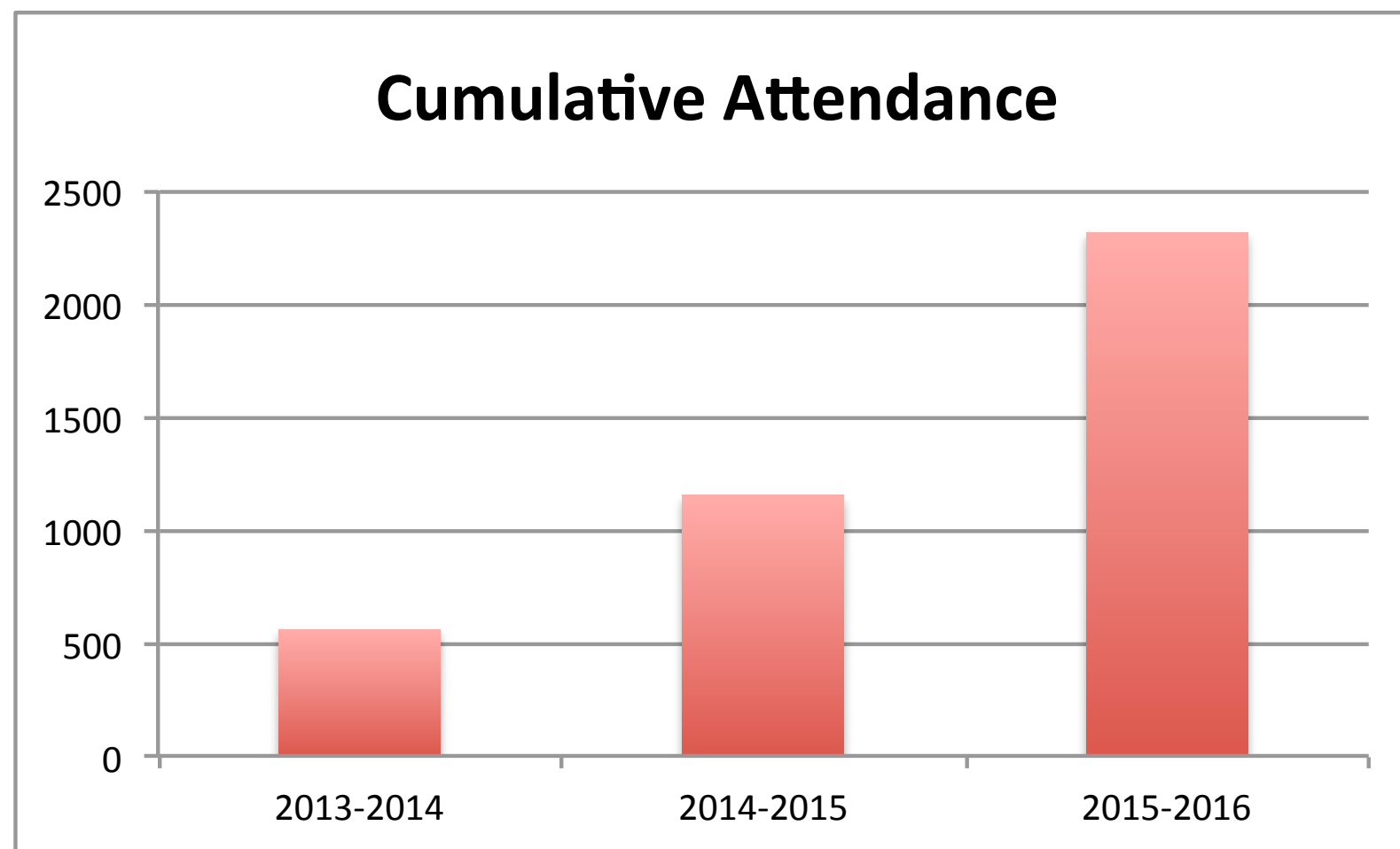
2315 (231 unique) audience members / 100 presentations
(by Aug 2016)

Average presentation enjoyment rating of 9/10

Accomplishments

By the numbers....

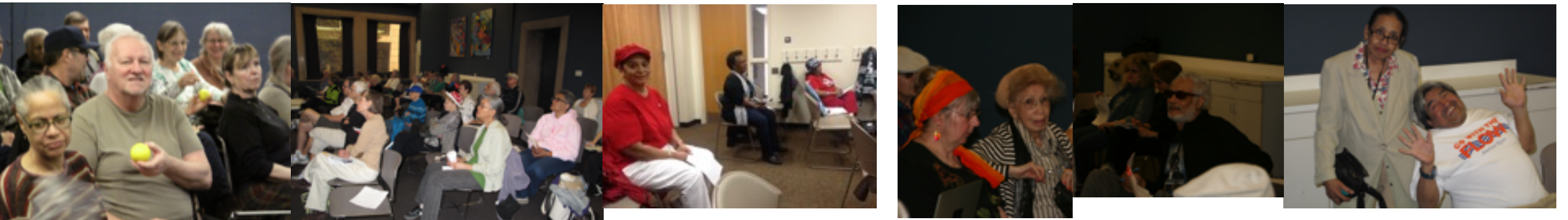
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Accomplishments

Engaged participants!



Engaged presenters!



Returns to all venues!

Rave Reviews!

- “You were wonderful. Small, succinct, bites of info.”
- “Masterful storyteller. Better than any science fiction.”

Accomplishments:

8 Adler planetarium field trips

- New modes of learning:
 - Space Visualization Lab
 - Time to wander
- Social experience
- 185 served!
- Bus/volunteers



Future efforts

- Sustained signature effort at KICP (team of coordinators)
- New venues: Apostolic Church, Auburn Gresham, Chatham
- Novel presentation strategies: pop-ups?

Key elements needed to succeed

- Get to know audience challenges: empathy/attention/expertise
- Train presenters
- Cultivate maintain relationships with venue staff
- Follow audience cues for future topics