



**NC STATE**

THINK AND DO  
THE EXTRAORDINARY

# Administrative Leadership Meeting

Randy Woodson

Chancellor

Tuesday, March 12, 2019

# Upcoming ALMs

May 7, 2019

DASA Strategic Initiatives

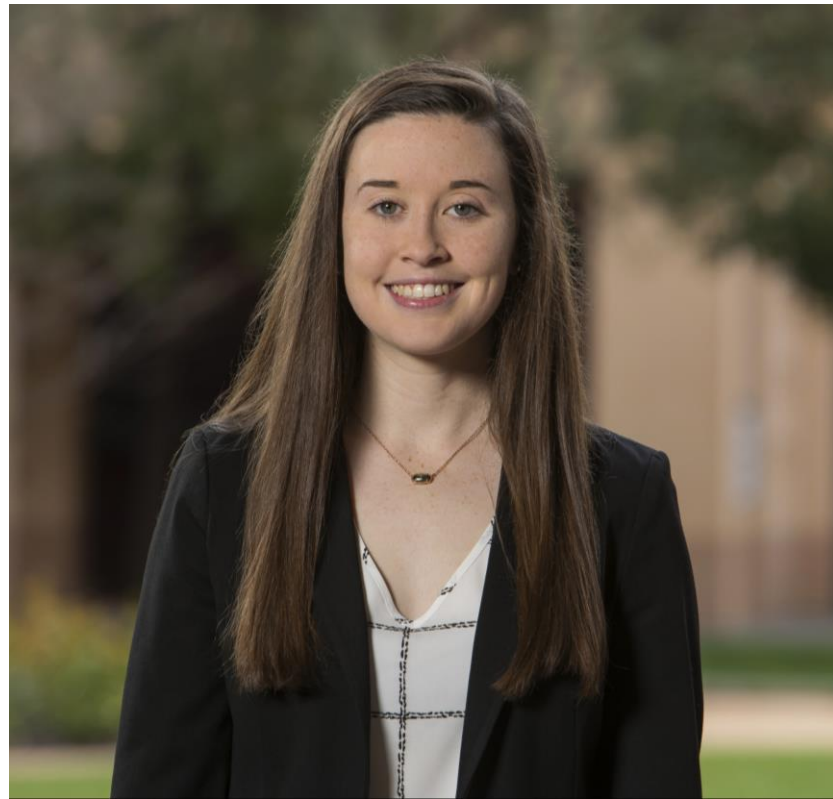
Titmus

# Knight-Hennessy Scholars

Ziad Ali



Madison Maloney





# National Academy of Engineering

- Rodolphe Barrangou



# Questions?





# The Experiential Library

A Platform for Teaching, Learning, & Research

Greg Raschke, Senior Vice Provost & Director of Libraries

## **Our Vision**

**To be NC State's  
competitive advantage**

# Strategic Priorities

- To enhance student success and promote affordability



# Strategic Priorities

- To enhance student success and promote affordability
- To provide a platform for research infrastructure

# Strategic Priorities

- To enhance student success and promote affordability
- To provide a platform for research infrastructure
- To be a gateway to the community

# Strategic Priorities

- To enhance student success and promote affordability
- To provide a platform for research infrastructure
- To be a gateway to the community
- To raise the profile of the university



## A Culture of Excellence

- 2016 IMLS National Medal for Library Service
- 2017 *Library Journal's* “New Landmark Libraries”
- 2018 ALA “Library of the Future Award”
- 10 *Library Journal* Mover & Shaker Awards—most of any academic library
- Stanford Prize for Innovation in Research Libraries
- 3 ALA Cutting-Edge Library Service Awards



# Sustaining Principles

- To have the best staff in North America

# Sustaining Principles

- To have the best staff in North America
- To be an incubator for emerging technologies

# Sustaining Principles

- To have the best staff in North America
- To be an incubator for emerging technologies
- To design premier spaces

# Sustaining Principles

- To have the best staff in North America
- To be an incubator for emerging technologies
- To design premier spaces
- To nurture a culture of experimentation and creativity



# Sustaining Principles

- To have the best staff in North America
- To be an incubator for emerging technologies
- To design premier spaces
- To nurture a culture of experimentation and creativity
- To always be aspirational and ambitious

## **New Areas of Emphasis**

- **Deepening Partnerships and Alignment**

## **New Areas of Emphasis**

- **Deepening Partnerships and Alignment**
- **Collaborative approach to space planning and use, holistically meeting student and faculty needs**

## **New Areas of Emphasis**

- **Deepening Partnerships and Alignment**
- **Collaborative approach to space planning and use, holistically meeting student and faculty needs**
- **Technology refresh, focused on accessibility and maximizing use**



# The Intersection of Student Success and Affordability



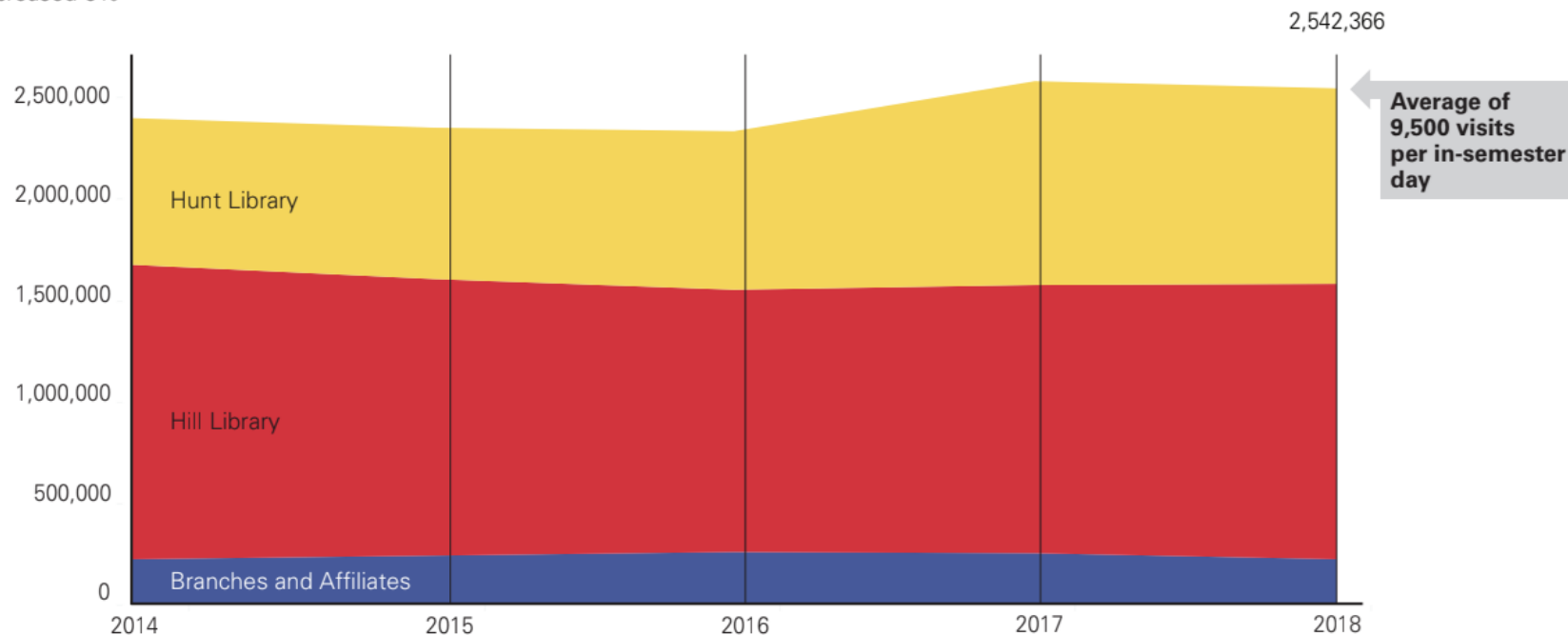
# Hill Library Renovation

- Creating pathways for sharing and celebrating student work
- Fostering discovery and creativity for students
- Providing a platform for deeper learning, creative exploration, peer-to-peer interaction, and skill development
- Enriching the educational experience and student life at NC State

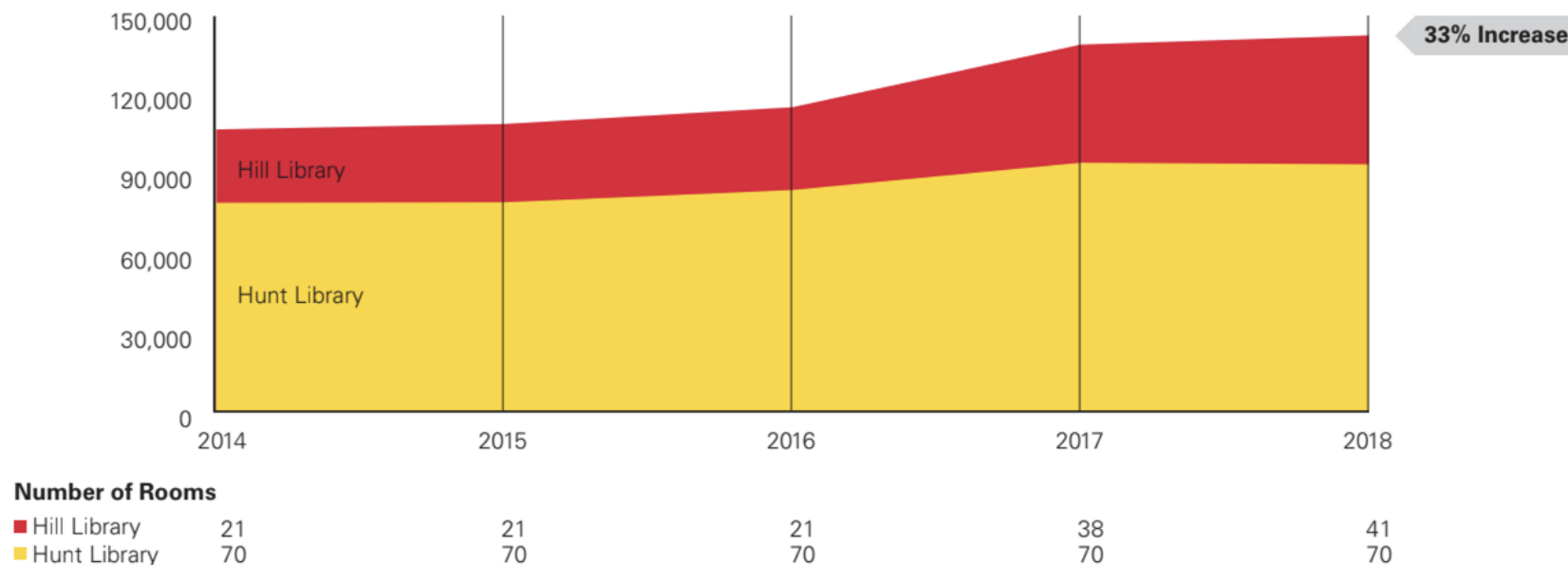


## Gate Count Five-Year Trend

Increased 6%



## Group Study Room Reservations, Five-Year Trend





## Active and Experiential Learning

- College of Textiles alumnus Jazselyn McNeil created her “Pulse Dress,” which incorporates LEDs that blink with the wearer’s heartbeat, in our Makerspace.
- Making Space speaker Meghan McCarthy guides attendee through a “molecular spelunking” journey using UCSF ChimeraX.





# Active and Experiential Learning



- Hands-on access to the emerging technologies of making.
- Enable students and faculty to work with 3D printing, 3D scanning, electronics prototyping, and other Maker tools.
- Maker tools are available through our Technology Lending Service.



# Active and Experiential Learning

- Virtual reality (VR) provides new ways for people to interact with information and media.
- The VR Studio at the D. H. Hill Jr. Library is a space for experimenting with and creating immersive content.
- Eight workstations representing the two major VR platforms, the Oculus Rift and the HTC Vive, and other equipment.

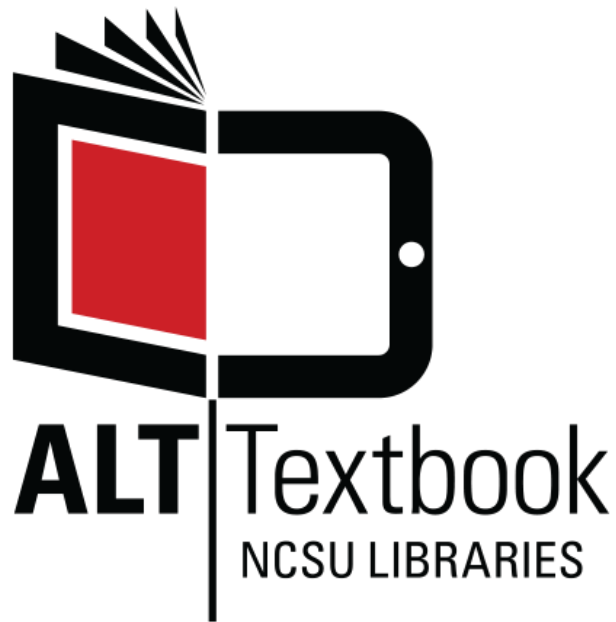


# Active and Experiential Learning

- **Future Innovation Studio, Hill Renovation**
- **Impactful teaching and learning space**
- **Emerging technology instruction**
- **Digital and physical storytelling**
- **Interactive exhibits**
- **Office of Undergraduate Research partnership**
- **Full-space utilization by classes**







**The Libraries' Textbook and Alt-Textbook programs save students over \$400,000 every year.**

## **Textbook Affordability**

- **Addressing the problems of high textbook costs and access code lock-in**
- **Textbook Lending and Course Reserves services**
- **OER courses saved UNC system students more than \$1.8 million in 2017-18.**
- **Open Education North Carolina has saved NC students more than \$3.6 million.**



**Digital Cameras and Camcorders**  
Devices for capturing video and still images.



**Citizen Science Equipment**  
Technology provided by NCSU Libraries in support of the NCSU Citizen Science Program



**Laptops & Netbooks**  
Mac OSX, Windows or Google Chrome operating systems available.



**Tablets and E-Readers**  
Tablets, iPods, and E-Readers.



**Cables and Accessories**  
Many cables and small peripherals



**Makerspace**  
Devices for tinkering and prototyping.



**Gaming**  
D. H. Hill and Hunt Libraries have game consoles, controllers, and games for checkout.



**Audio Production Equipment**  
Devices for creating and recording audio.



# Technology Affordability

- User-driven technology lending
- Scaffolding support: workshops, peer consultations, Lynda.com tutorials, etc.
- Democratic access to tools and resources that levels the playing field for all students



## Student Employment

- 250 Student Employees
- Providing a positive, meaningful work experience for a diverse group of students drawn from all disciplines and backgrounds
- First Student Scholarships and Fellowships within Last 18 Months
- Graduate Student Support Plan (GSSP)
- Peer-to-peer student management program
- Opportunities for professional development

NC STATE UNIVERSITY LIBRARIES

# PEER SCHOLARS

PROGRAM



## Peer Scholars Feedback

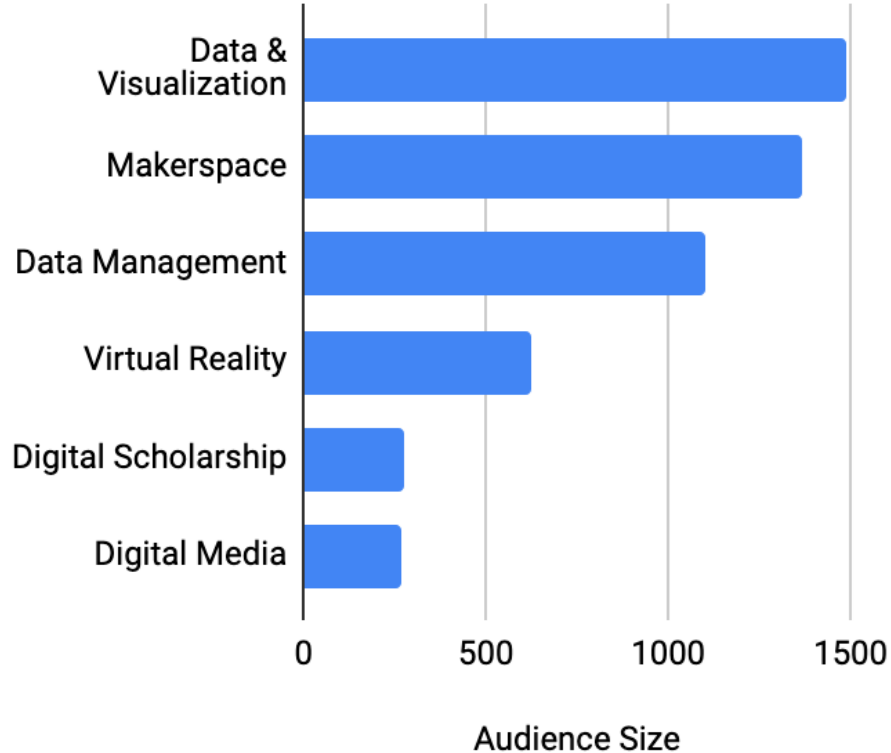
- “Participation in the Peer Scholars Program led directly to being offered a Graduate Research Assistantship in my department. I am thankful to the Libraries for the opportunity and support in organizing these efforts!” - **Amrutha Raghu, MS Candidate, Chemical Engineering**
- “The Peer Scholars Program is a great transition into teaching at the professional level where I can develop and teach my own materials. Because I am teaching peers, it is a friendly environment and has allowed me to practice more advanced communication and teaching techniques compared to techniques I use with my freshman students. I've gained confidence in my teaching skills and have enjoyed helping other graduate students and postdocs develop their professional portfolios.” — **Dianna Francisco, PhD Candidate, Atmospheric Science**





# Non Curricular Instruction

FY 2017/18



## Non-curricular Instruction

- Total number of instruction sessions up 60% over last five years
- 35% of 2017/18 sessions focused on new tools and skills: Data Science, Visualization, Digital Media, Making, Virtual Reality, Digital Scholarship, etc.
- Student demand and workshop offerings continue to increase

# Platform for Research Infrastructure



# Collections as Core Infrastructure

**5.3+ million**

physical and online  
volumes

**1.2 million+**

ebooks

**128,000+**

journals (99% online)

**Over 635 databases**



## Measurable Uses of the Collection: Five-Year Trend Index

Sorted by usage trends

■ Increase ■ Decrease

	2014	2015	2016	2017	2018	2018 Actual
E-book uses	1.00	1.30	1.76	1.73	1.94	2,754,933
Database searches	1.00	1.19	1.70	1.45	1.55	6,430,770
Use of Nondigital Special Collections	1.00	0.88	1.30	1.27	1.30	2,482
Journal downloads	1.00	0.96	1.05	1.08	1.22	4,174,440
Downloads Open Content Alliance Books	1.00	1.46	0.88	1.04	0.90	454,524
Institutional Repository Page Views	1.00	1.00	0.97	1.01	0.89	164,872
Summon Federated Searches	1.00	0.92	0.82	0.66	0.75	1,094,341
Page Views for Local Digital Collections	1.00	1.02	1.00	0.83	0.74	949,905
Print circulation (includes renewals)	1.00	0.89	0.81	0.75	0.69	234,922
Textbooks	1.00	1.01	0.87	0.70	0.69	31,470
E reserves	1.00	0.86	0.82	0.73	0.49	191,402
Reserves Print	1.00	0.52	0.56	0.47	0.45	8,658
<b>Overall Increase</b>	<b>1.00</b>	<b>1.10</b>	<b>1.30</b>	<b>1.19</b>	<b>1.27</b>	<b>16,492,719</b>

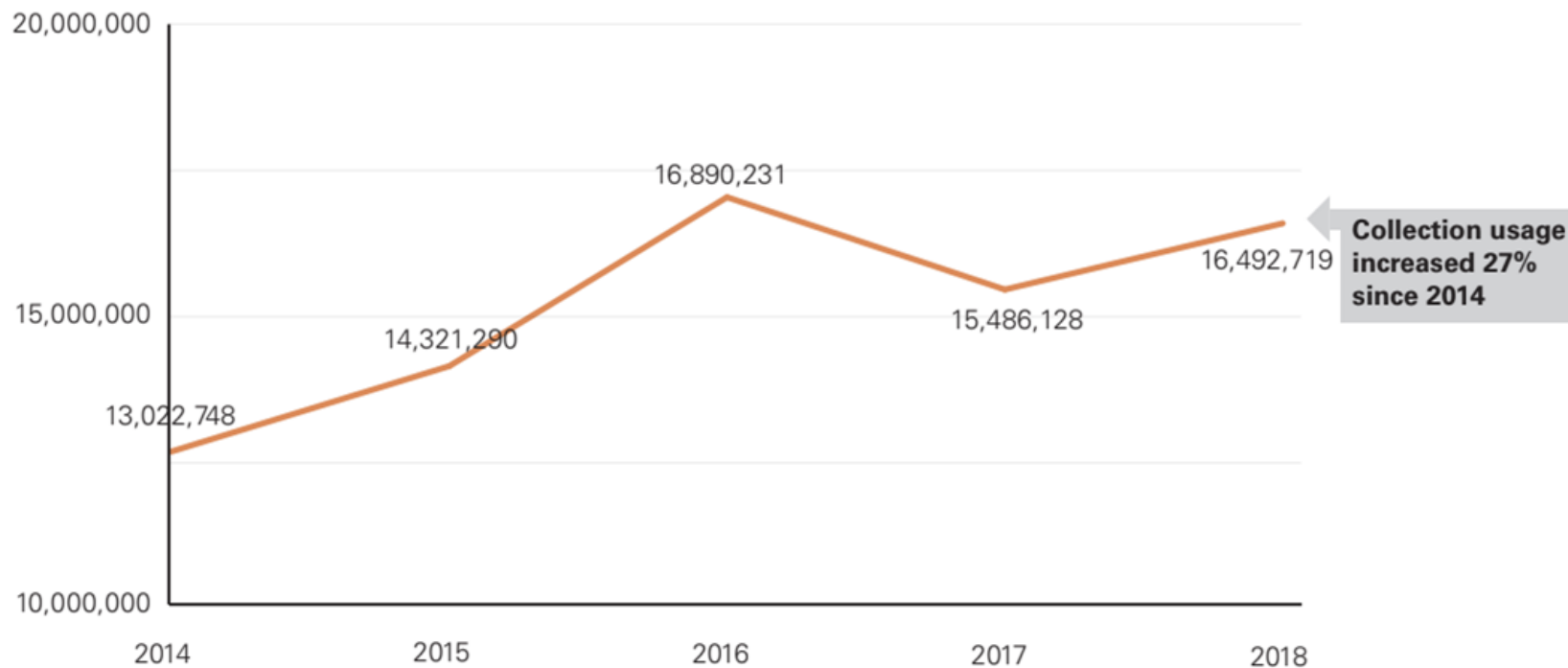
Overall  
collection  
use up 27%

**16.5 million**  
uses of our collection in  
2017/18 (up 7%)

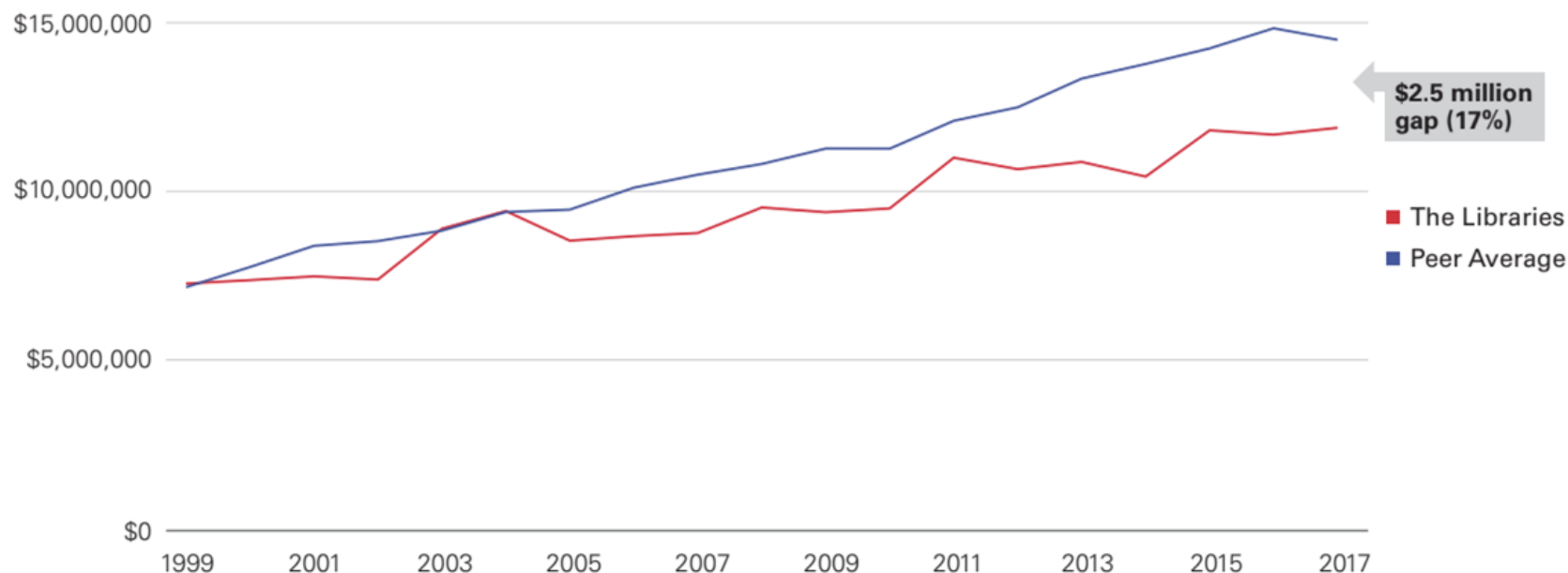
**4.1 million**  
full-text journal downloads  
in 2017 (up 13%)

**7.5 million**  
database searches in 2017  
(up 18%)

## Measurable Uses of the Collection



## Amount Needed to Bring The Libraries Collections Expenditures to Peer Average

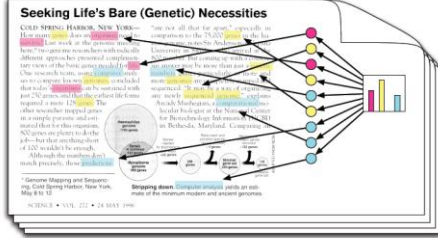




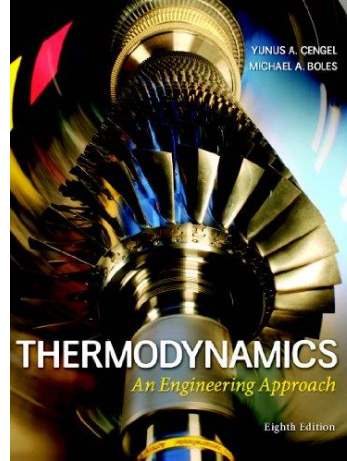
Topics



Documents



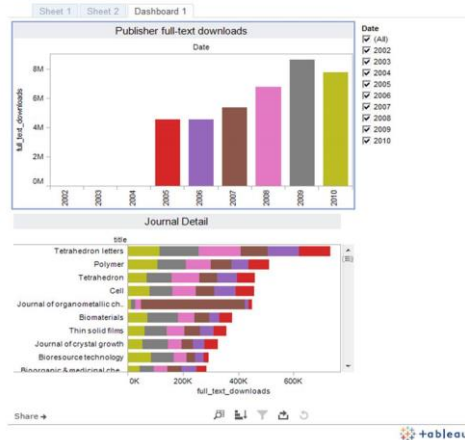
Topic proportions and assignments

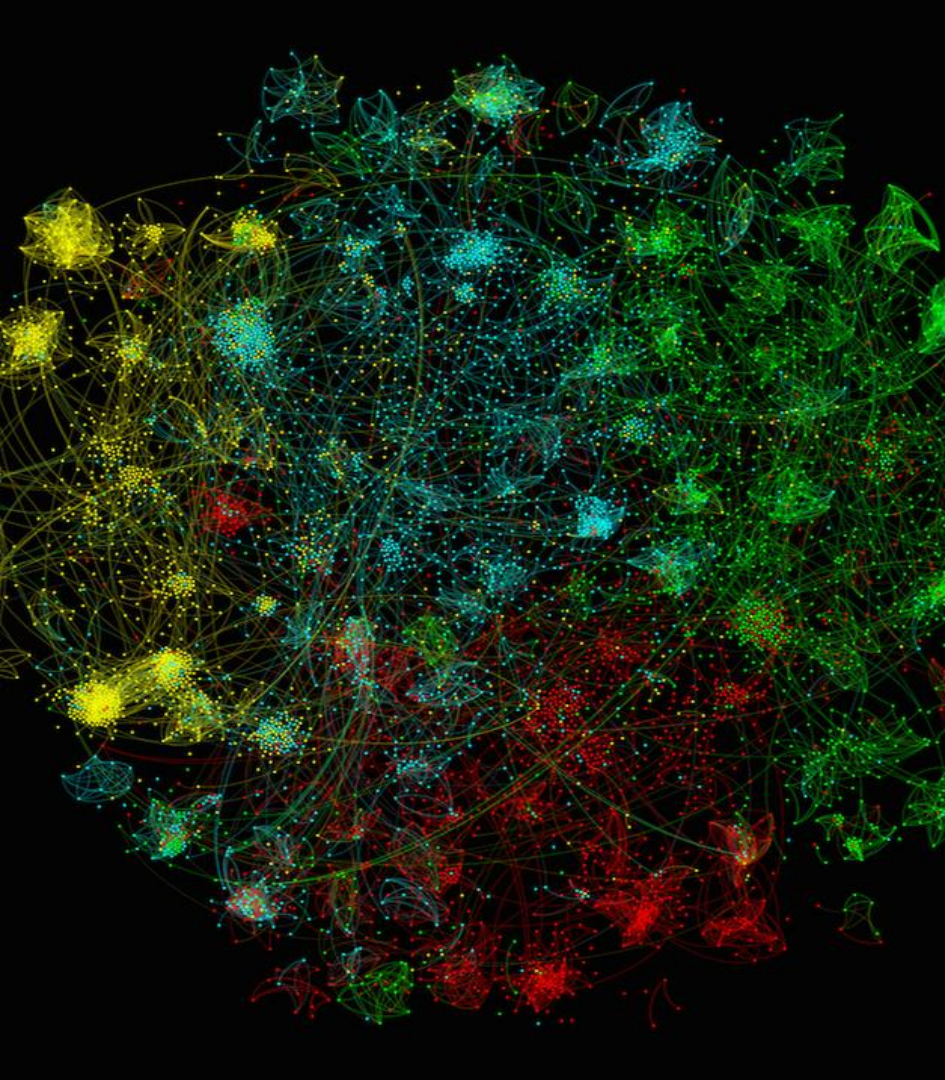


# Collections as a Service

- Textbooks and textbook alternatives
- Text-mining tools
- Demand-driven solutions
- Data-informed collection strategies

Preview





# Amplifying Research & Scholarly Impact

- Scholarly profiles
- Data & software publication
- Impact metrics, altmetrics, & citation analyses
- Data Science & visualization tools
- Public Science





## Broader Impacts Support

- Writing stronger Broader Impacts statements
- Assessing Broader Impacts
- Budgeting for Broader Impacts
- Campus Resources
- <https://www.lib.ncsu.edu/broader-impacts>

## Research Data Services and Support

- As of Dec. 2018, \$8.1 million in awarded grants were supported by the Data Management Plan Review service.
- 37 different departments have used the DMP Review service.
- At least 4 of these projects were DOE or NSF CAREER Award winners.



# The Dataspace at the Hunt Library

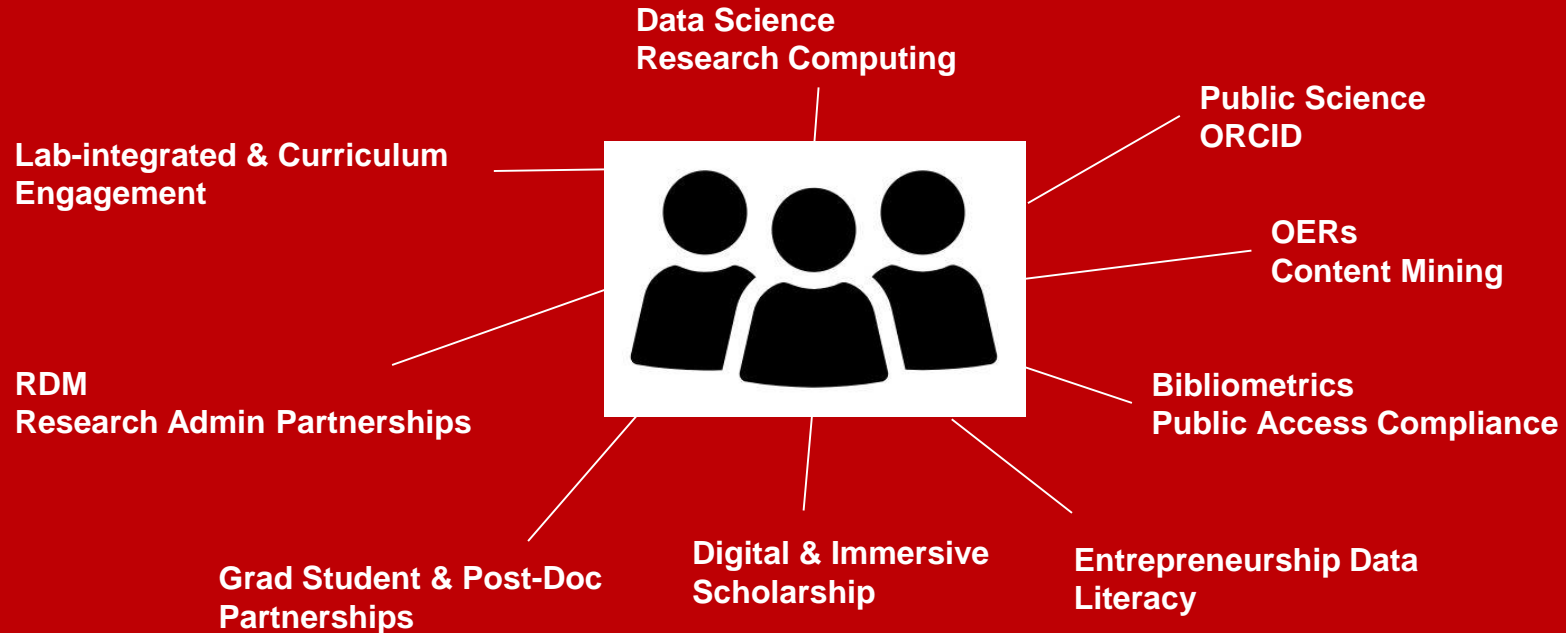
- A centralized space where students and researchers across disciplines can access specialized tools and technology, participate in workshops, and engage with experts
- Staffed by graduate student Data Science Consultants with expertise in data topics and tools
- Undergraduates make up 46% of user interactions, up 1300% compared to before the space opened.



# Refreshed Hunt Library Game Lab

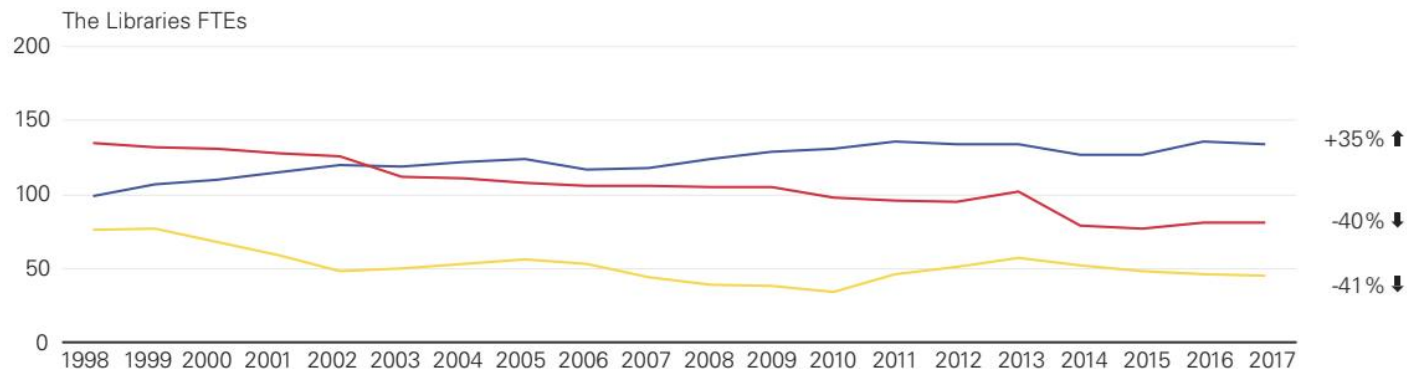


# Librarians as Catalysts in the Research Process



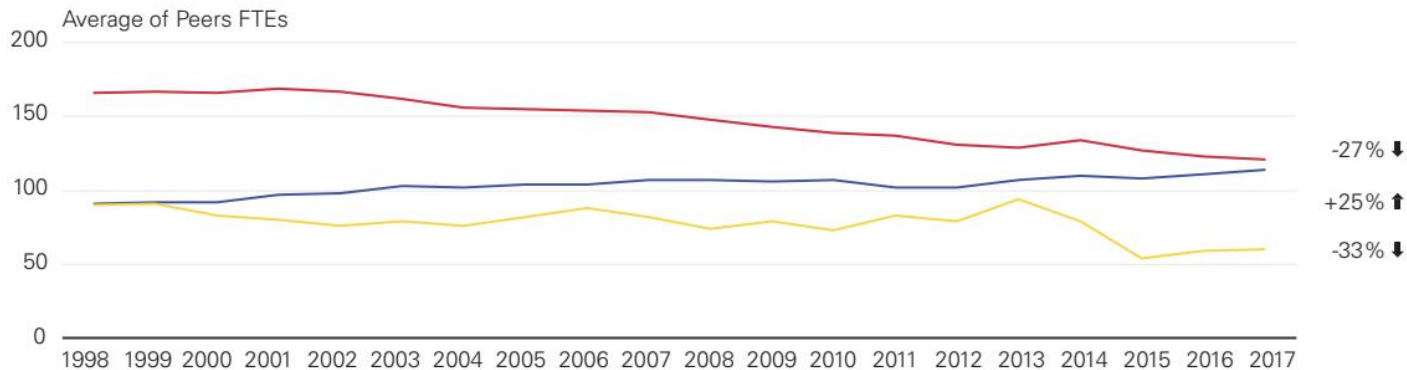


## Full-Time Employment (FTE) 20-Year Trend



### Compared to Peers

Professional Staff	+10%
Support Staff	-13%
Student Assistants	-8%



# A Gateway to the Community







## Programming and Outreach

- ~9,000 attendees in 2018
- 97 programs in 2018
- Up 424% over the last five years



## Coffee & Viz

- Forum for NC State researchers to share their visualization work and discuss topics of interest
- Presented by the Libraries in one of our state-of-the-art high-tech spaces like the Teaching & Visualization Lab
- Coffee & Viz programs are free and open to the public
- NC State Visualization Interest Group



# State of the Sciences LIVE at the Library

- A collaboration with the College of Sciences
- 800+ community attendees
- Attendees engaged with research principles, methods, and tools, such as virtual reality technology.







## Experiencing King

- Dr. Martin Luther King's impact was experienced and understood anew at NC State University through a series of public events.
- A performance by renowned actors Danny Glover and Felix Justice—as Dr. King and Harlem Renaissance poet Langston Hughes
- An immersive experience at the James B. Hunt Jr. Library showcasing three innovative projects by Dr. Jason Miller and Dr. Victoria Gallagher
- Conversation with Pulitzer Prize-winner David Garrow and art work by Synthia SAINT JAMES

# Exhibits: Showcasing Student and Faculty Work

- Physical and digital platforms
- Hill Library Gallery and Hunt Library video walls
- Hunt Library Tech Showcase and Hill Library Innovation Studio
- Providing a platform for students and faculty to engage public and academic audiences
- Enhancing competitiveness of grant proposals
- Demonstrating value of research and higher education to the public

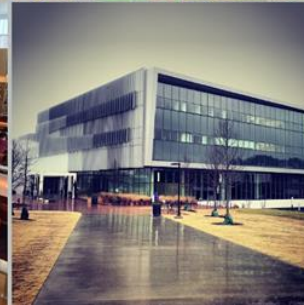


# Raising the Profile of NC State

**My  
#HuntLibrary**

Battle  
About

Recent  
Popular  
Staff Picks





# Bringing the World to NC State

NC STATE  
University Libraries

## Total Tours & Visitors by Location



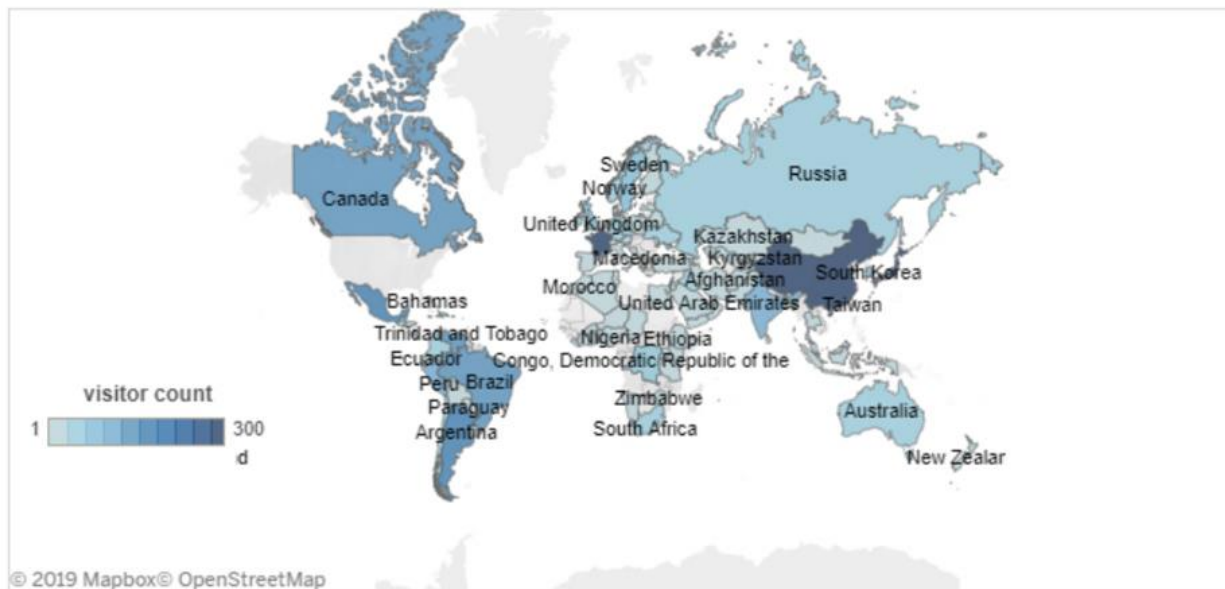
- International
- North Carolina
- United States
- Walk-In

Total  
Tours  
**3,233**

Total  
Visitors  
**73,157**

Demographic information is not captured for guests that attend our walk-in tours, as they are open to the public and don't require a reservation.

## International Visitors



## Visitor Count by Fiscal Year

July 2012 to June 2013	8,294
July 2013 to June 2014	12,324
July 2014 to June 2015	11,371
July 2015 to June 2016	11,695
July 2016 to June 2017	14,931

## Visitor Count by Calendar Year

Calendar year	
2012	4
2013	16,041
2014	11,343
2015	8,362
2016	16,674
2017	16,225



**NC STATE**  
University Libraries

**The Washington Post**

***“The bookBot at N.C. State’s  
Hunt Library is hands down the  
coolest thing I saw during my  
visit.”***

— Melanie D.G. Kaplan, Jan. 16, 2019  
*“You’re going where? Raleigh.”*