

# A Few Housekeeping Notes

- Q&A time will follow presentation
- During the presentation, use the chat box in WebEx to ask questions
- Please remain muted unless you need to speak. This minimizes background noise.
- When you speak, please identify yourself by name and work area to help others recognize you.
- This WebEx is being recorded and will be posted on the CTSI website

# Welcome to Duke CTSI Grand Rounds

January 17, 2019

Moderated by L. Ebony Boulware, MPH, MD  
Director, Duke CTSI

Please note that you have been muted upon entry to this WebEx.  
Click the microphone by your name in the participant list to unmute as needed.

**This presentation is being recorded.**



**Duke** Clinical & Translational  
Science Institute

[ctsi.duke.edu](http://ctsi.duke.edu)

CTSI Grand Rounds | January 17, 2019

# Highlights of Career Development Support:

TL1 Scholar Update & Duke's Community of Scholars

*David Edelman, MD | Program Director, Duke CTSA TL1 Program*

*Friederike Jayes, PhD, DVM | Co-Director, Community of Scholars*

# ***CTSA TL1 Training Programs***

**David Edelman, MD**

Professor, Division of General and Internal Medicine  
Director, TL1 Training Program



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# CTSA Research Training

## History: 2002

- First exploration of didactic clinical research training program for medical students
  - One-year certificate program
  - 6-person cohort
  - 5 of the 6 with careers in research after residency
  - > 400 publications total, including at least 15 in JAMA

# History: 2005-2012

- Certificate program finds broader funding through CTSA 1.0 and institutional funds
- Leadership: Lori Bastian, MD
- 60 students: 55 certificate, 5 master's
  - Through May 2017, 43 of 60 active in research or still in clinical training
  - 654 publications

# History: 2013-2018

- CTSA 2.0 funds 2-year master's program only
  - Clinical Research Training Program (CRTP)
- Leadership: David Edelman, MD, and Kevin Thomas, MD
- 13 graduates
  - All 13 still in clinical training
  - 11 of 13 describe themselves as active in research



# Current Program: 2018-2023

- Post-doctoral training program added
- Leadership: Edelman and Thomas joined by Sallie Permar, MD, PhD
- 7 medical students and 3 post-docs to date



# Current Program: MD/Master's

- Duke medical students currently do a year of research
- Thus, MD/master's is a total of 5 years
- Program admits 3-4 students per year from an applicant pool of 8-11

# MD/Master's: Program Description

- Master's classwork: 15-20% of time
- Professional development
- Mentored clinical research
- Historically, a master's in clinical research
  - Going forward, open to other master's programs (e.g., bioengineering, interdisciplinary data science)
  - Grant only provides ~\$30K tuition total

# MD/Master's: Professional Development

- Formal program: Twenty-four 1.5-hour sessions
  - Each student presents her/his work annually
  - Other topics include mentorship, writing, networking, etc.
  - Faculty describe their career arc for role modeling
- Informal: 5 meetings over 2 years with director(s)
  - Guidance, focus, troubleshooting

# MD/Master's: Mentored Research

- All research must be translational or clinical
- At least one project must be clinical
- Admissions process emphasizes established, outstanding mentors
- Average productivity is about 6-7 manuscripts
  - 2-3 first-author

# Post-doc: Program Description

- Can be MDs or PhDs
  - Current enrollees are PhDs
- Master's classwork: 15-20 % of time
  - For MDs only
- Professional development
- Mentored clinical research

# Post-doc: Coursework

- For MDs, same master's options as med student program
- For post-docs, targeted coursework to enhance their personal learning objectives
  - Typically 1-4 courses over 2 years
  - Can be short courses, intensive courses, etc.

# Post-doc: Professional Development

- Formal program: Twelve 1-hour sessions
  - Provided by Department of Pediatrics
  - More advanced topics such as grant-writing
- Informal: 4 meetings over 2 years with director(s)
  - Includes the trainee's mentorship committee
  - Guidance, focus, troubleshooting
- Post-docs also talk to med students
  - Experience in talking to naïve audience



# Post-doc: Mentored Research

- All research must be translational or clinical
- Admissions process emphasizes established, outstanding mentors
- We also emphasize something we call “cross-training”

# Research Cross-Training

- For trainees who are well-trained in research on one part of the translational spectrum, and want training and mentorship in research on another part of the spectrum
  - E.g., bench scientists looking to find clinical research training/application
- Didactic coursework often focused in this way as well

# Application Info: Med Students

- Due April 1
- Open to Duke medical students only
- Requires project description and a brief personal statement

# Application Info: Post-docs

- Due February 15
- Anyone with 2 years of NRSA post-doc eligibility remaining
  - Typically early post-docs looking to extend the experience
- Requires a fairly extensive project description, similar to F32 grant

# Future Directions

- Different options for the master's, as already described
- Expansion of the post-doc outside the Medical School to other Duke schools
- Training in team science
- Leveraging the Community of Scholars to integrate fellows into larger Duke and regional research communities

# *Community of Scholars (CoS)*

**Friederike L. Jayes, DVM, PhD**

Director, Community of Scholars, Duke CTSI

# Research Career Development

- Need for a diverse, independent, multidisciplinary workforce in basic, translational, and clinical research to improve human health.
- Funding/Support
  - ❖ Much support from Duke schools and departments.
  - ❖ NIH, foundations, and professional societies,
    - Individual awards (F-series, K01, K08, K23, K25, K99)
    - Institutional awards (e.g., T32, TL1, K12, KL2)





# Career Development: Elements



# Mentored Research Career Development at Duke

Institutional awards currently active at Duke not including F-series (NRSA fellowship programs)

- **T32** programs (29) (pre-doctoral and/or postdoctoral research training)
- **TL1** and **KL2** programs (CTSI-supported)
- **K12-like** programs
  - REACH Equity
  - Pepper Center Research Scholars
- **K12** programs (4) (postdoctoral and early-career levels)
  - BIRCWH – Women’s Health
  - KURe – Benign Urology
  - Duke-UNC HTM K12 – Hematology
  - DISCO – Population Health

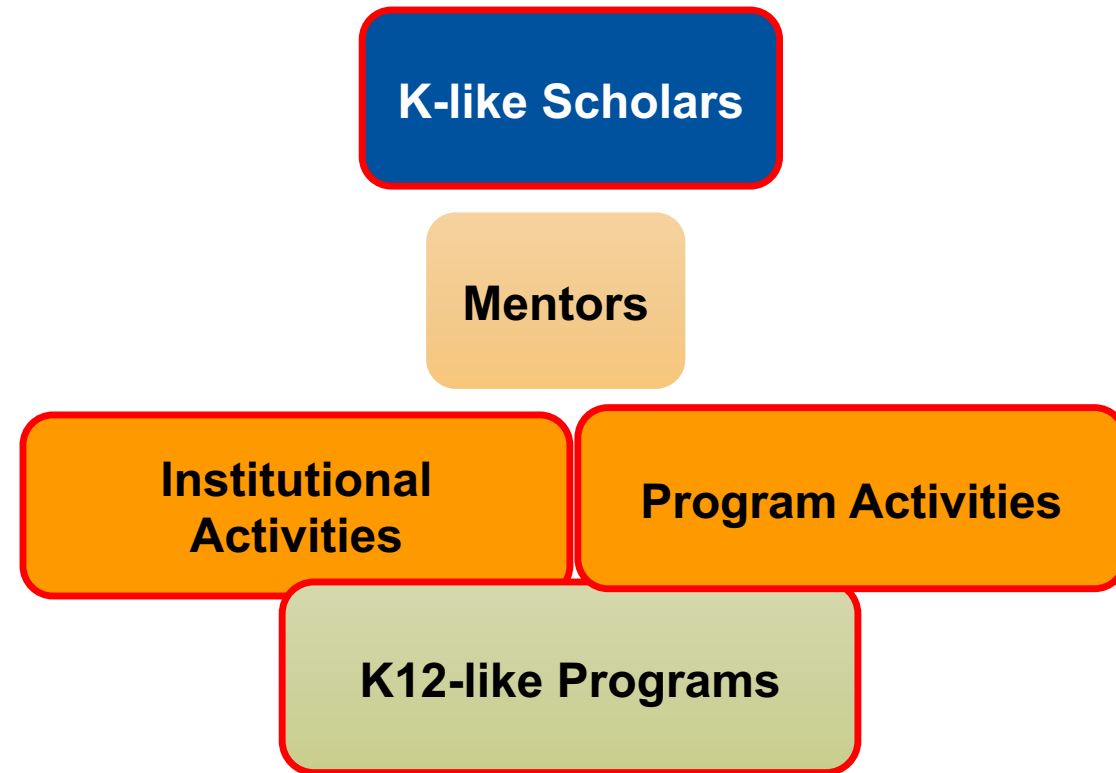
*These programs have historically NOT substantially interacted, each creating its own infrastructure resulting in duplicate systems and processes*

# Research Career Development Scholars at Duke

## Currently active:

- 24 scholars supported by K-12 like programs

*These Scholars have different opportunities and experiences depending on the program to which they belong*



# Research Career Development Scholars at Duke

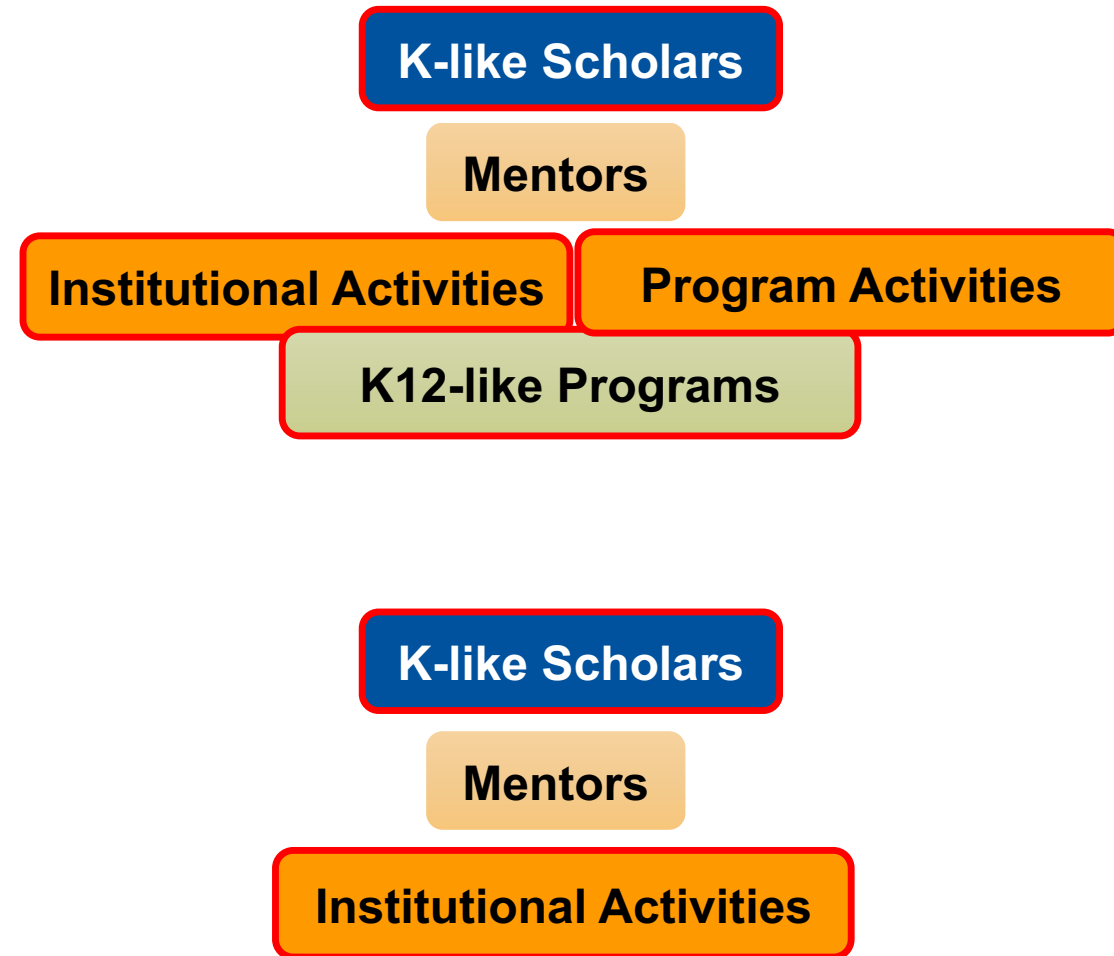
## Currently active:

- 24 scholars supported by K-12 like programs

*These Scholars have different opportunities and experiences depending on the program to which they belong*

- 56 individual K-awards (K01, K08, K23, K99);  
3 foundation-supported scholars

*These individual K awardees have no structured program to which they belong*



# Community of Scholars: Mission Statement

Connect trainees, share educational resources,  
and increase program efficiencies  
to enhance the career development of diverse scholars  
across Duke, enabling them to become successful  
researchers, mentors, and leaders.

# CoS Advisory Committee

## CTSI

- **Becky Moen**, CTSI Chief Administrative Officer
- **Steven Grambow**, PhD, CTSI Workforce Development Co-Director
- **Kevin Weinfurt**, PhD, CTSI Workforce Development Co-Director

## Pratt School of Engineering

- **Adam Wax**, PhD, Professor of Biomedical Engineering

## School of Medicine

- **Cathleen Colon-Emeric**, MD, Associate Dean for Research Mentoring
- **Sallie Permar**, MD, BWF, Associate Dean for Physician-Scientist Development
- **Kevin Thomas**, MD, Assistant Dean for Underrepresented Faculty Development

## School of Nursing

- **Eun-Ok Im**, PhD, Associate Dean, Research Dev & Regulatory Affairs, SON

# CoS Advisory Committee *(cont'd)*

## CTSA KL2

- **Laura Svetkey**, MD, KL2 Program Director
- **Kimberly Johnson**, MD, KL2 Program Director
- **Rasheed Gbadegesin**, MD, KL2 Program Director

## CTSA TL1

- **David Edelman**, MD, Professor of Medicine, General Internal Medicine; TL1 Program Director

## K scholars

- **Xi Chen**, MD, PhD, Assistant Professor, Ophthalmology, K23 2017–2022
- **Giny Fouda**, MD, PhD, Assistant Professor, Pediatrics, Infectious Diseases; first cohort KL2 scholar



# What Does Community Mean?

- **Community of Scholars:**

Common experiences,  
shared opportunities,  
similar access to educational resources

- **Community of Scholars:**

Connections and  
meaningful interactions with peers  
to build a robust and diverse support  
network

Individual Ks, Foundations,  
Institutional Awards

K-like Scholars

Mentors

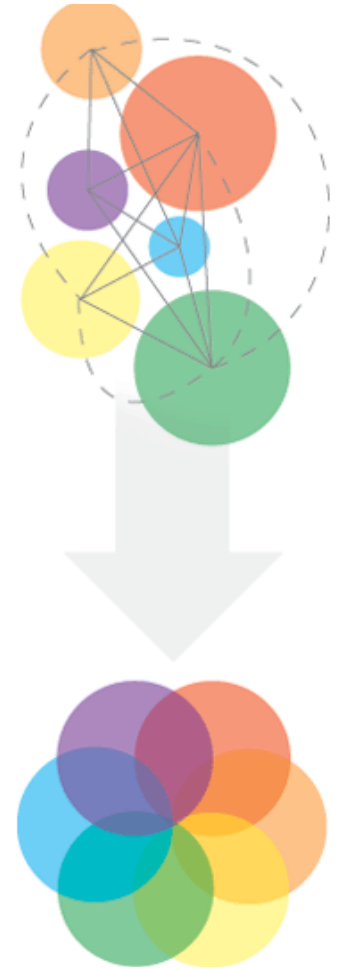
Program Activities

Institutional Activities

K12-like Programs

# CoS Goals

- CONNECT scholars with resources, opportunities, and each other to build a robust and diverse support network
- CREATE synergy and strengthen connections among career development programs at Duke
- SHARE best practices and resources for program leadership, mentors, and scholars
- COORDINATE efforts to facilitate and increase diversity among scholars, mentors, and programs



# CoS Actions: Scholars

- Mailing list currently includes active K-like scholars and recent graduates
- Scholar survey (58% response rate; N=68)
  - 94% are interested in more opportunities to **interact with other scholars**
  - 46% are interested to connect and interact using a digital platform
  - Greatest interest for:
    - **Formal topic-oriented workshops/discussions/lectures**
    - **Works-in-progress discussions/ presentations**
    - **Lunch with speakers on career development topics**



# CoS Actions: Scholars

- Scholar survey results (cont'd)
  - 83% prefer quarterly or monthly events
  - 94% prefer to be **informed** about events and resources **via e-mail**
  - 20% provided **suggestions for success and retention of diverse scholars and mentors**
  - 95% are interested in **grant concept reviews and full grant reviews** by outside reviewers



# CoS Actions: Scholars

For scholars from different programs and individual scholars

- Promote career development opportunities, provide information
  - Office of Scientific Integrity; Office for Faculty Development and Mentoring, etc.
- Provide access to events organized by other programs
  - KL2 Lunch Forums; BIRCWH Webinar Series, Scholar Meetings, Symposium
- Curate, develop, promote additional/new opportunities and activities
  - Pre-submission grant review opportunities
- Respond to suggestions and feedback to create events that are tailored to the interests and needs of the scholars.
  - Meaningful interactions with other Scholars

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# CoS Actions: Programs

- Leadership survey (100% response rate)
  - 93% are interested in **learning** administrative best practices **from other career development programs**
  - Greatest interest in learning/sharing **tracking** of scholar accomplishments, **recruiting** diverse scholars, program **evaluations**, and **coordination of programming**
- Facilitate meetings and interactions of multiple programs leadership and administrators
- Work with Office of Physician-Scientist Development (OPSD) on common curriculum development
- Develop test tracking system with CTSA KL2
- CoS program is a strength in future grant applications



# CoS Operational Team

- Friederike Jayes, DVM, PhD, Program Director, Community of Scholars
- Amanda McMillan, CTSI, Senior Staff Director, Workforce Development
- Stephanie Molner, CTSI, Administrative Manager, Workforce Development
- Jessica Almy-Pagan, CTSI, Program Coordinator, Workforce Development
- Deborah Jackson, CTSI, Program Coordinator, CTSA KL2
- Doug Chartrand, CTSI, Associate Director of Planning, Tracking, and Evaluation
- Julie McKeel, CTSI, Director of Communications

# Make it YOUR Community

- Meet other K scholars to network, share lessons learned, and form peer writing and discussion groups
- Receive relevant information about educational and career development opportunities and resources
- Share your ideas and needs for the learning environment and influence what is offered
- Get help accessing resources and activities at Duke
- Become a better mentor to your peers and trainees
- Improve your program's efficiency and effectiveness by streamlining and sharing of resources and best practices with other CDA programs



*Contact Stephanie Molner at [stephanie.molner@duke.edu](mailto:stephanie.molner@duke.edu) to join our mailing list*

# CoS: More Information

- CoS website: <https://www.ctsi.duke.edu/cos>  
Join the mailing list  
Resources for scholars and program leaders
- Contact: **Friederike Jayes** [friederike.jayes@duke.edu](mailto:friederike.jayes@duke.edu)  
**Stephanie Molner** [stephanie.molner@duke.edu](mailto:stephanie.molner@duke.edu)

CTSI Grand Rounds | January 17, 2019

***Thank you!***

Please join us for our next Grand Rounds:

**Biostatistics, Epidemiology, & Research Design (BERD) Core**

March 14, 2019 | 12:00 p.m.