

# Benefiting from a K30 Program: Opportunities for Sponsored Research and Career Advancement

Yellowlees Douglas, PhD

Faculty, Clinical and Translational Science Institute,  
Associate Professor, Warrington College of Business  
University of Florida

# Careers in Academic Medicine

- Requirement for significant patient-oriented research
- Demand for publications, even as journals decrease acceptance rates (>16%), with increasing submissions from outside US (tripling over 20 years)
- Extramural funding a must for promotion.
- K30 programs can provide significant support for faculty in research, publications, mentoring, and securing funded research.

# K30 History

- NIH began K30 awards in 1999, funding 35, rather than its initial target of 20.
- Most K30 programs award program certificates, MS-CI (MS in Clinical Investigation) and MPH degrees.
- Award supports development of courses to provide in-depth instruction in the fundamental skills, methodologies, and theories necessary for the well-trained, independent, researchers.
- The program's long-term goal is to produce researchers who can successfully compete for research support and are well-versed in the complex issues associated with conducting sound basic, clinical, and translational research.

# What K30 Programs Do

- Fosters integration of basic, translational and clinical research.
- Can help faculty collaborate, create informal networks.
- Trains faculty in how to conduct research, which few MDs have exposure to in medical school or residency, including
  - identifying RFPs
  - securing regulatory approvals (IRB, budgeting)
  - research design
  - statistical methods
  - informatics (RedCap).

# Assistance with Securing Funded Research

- Graduates of K30 awards demonstrate success at securing both intra- and extra-mural awards, including
  - K23 awards
  - R01 awards
  - U01 awards
  - Industry-sponsored research
  - Foundation-sponsored awards.

# Fostering Career Training

- Curriculum can provide coursework in
  - Biostatistics
  - Research design
  - Ethics
  - Grant writing
  - Writing for conferences and publications
  - Informed consents

# K30 Graduates and Career Advancement

- K30 awards can play a significant role in helping fellows and junior faculty advance in their careers through
  - Publications
  - Sponsored research
  - Mentoring
  - Connections forged through program
  - Increases in protected time for research and grant applications
  - Promotion.

# Who Benefits?

- Greatest benefits accrue to
  - Fellows
  - Post-docs
  - Research Assistants
  - Assistant Professors
  - Associate Professors (2-4 years post-tenure)
    - Most faculty who are currently associate professors may not have had exposure to evidence-based medicine (EBM) during their training and thus lack the knowledge of requisite research and analytical tools.



# Why?

- Residents may be too early in their training to significantly benefit and may forget some of their K30 training by the time they complete fellowship.
- K30 can enable fellows and assistant professors to establish a mentorship network.
- K30 courses can help fellows and faculty with research design, statistics, and writing for grants and publications.
- Faculty in mid- to late-career, even if they already have grants and publications, still need help with writing grants and publications.

# Outcomes from Florida's K30

- One of original NIH 35 K30 awardees
- First class begins in Fall 1999
- Program concludes in May 2010, overtaken by CTSI
- 84 participants
- 49 specializations

# Florida K30 Program: Program in Advanced Clinical Investigation (APPCI)

- Year 1

- *Summer*
- **GMS 7093: Introduction to Clinical and Translational Research (2 credits)**
- *Fall*
- **GMS 6861: Biostatistics I (3 credits)**
- **GMS 6903: Manuscript/Abstract Writing for the Clinician/Scientist (2 credits)**
- Electives/Research hours (master's students only)
- *Spring*
- **GMS 6862: Biostatistics II (3 credits)**
- **GMS 6931: Ethical/Policy Issues in Clinical Research (2 credits)**
- Electives/Research hours (master's students only)

# Florida K30 Program: Program in Advanced Clinical Investigation (APPCI)

- **Year 2**

- ***Fall***
- **PHC 6001: Principles of Epidemiology** (3 credits; required for master's, recommended for certificate)
- Electives/Research hours (master's students only)
- ***Spring***
- **GMS 6190: APPCI Seminar** (1 credit)
- **PET 5936: Grant Writing** (3 credits)
- Electives/Research hours (master's students only)
- **Offered each semester**
- **PHC 6001: Principles of Epidemiology** (3 credits; required for master's, recommended for certificate)
- **Final semester of study (for master's students only)**
- **GMS 6971: Master's Thesis**

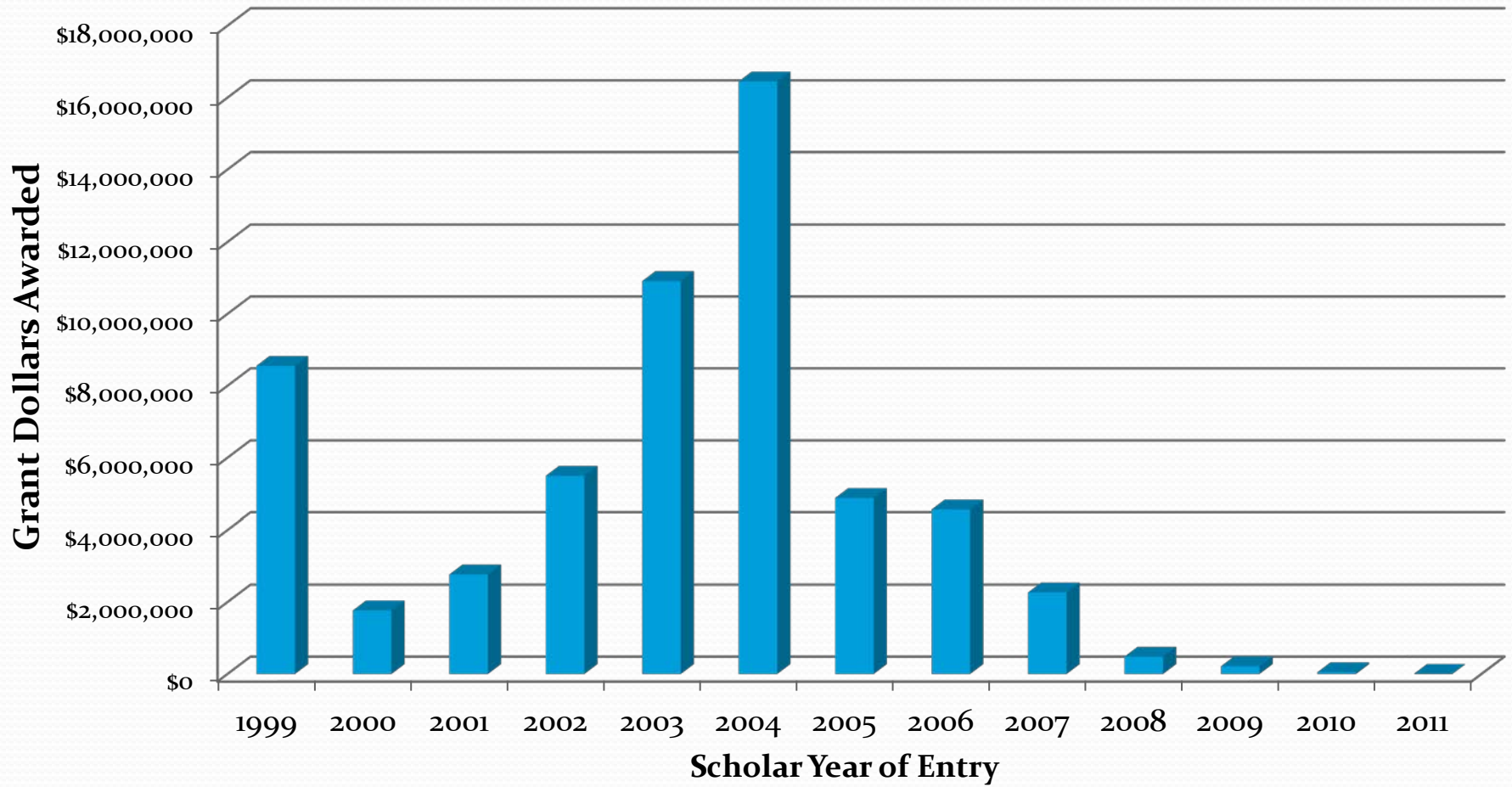
# UF APPCI Program Outcomes: Sample

- Data compiled from survey of all APPCI scholars
- Participants queried about program's impact on their career progress, grant funding (intra- and extra-mural)
- Data collected included position at initiation of program and at conclusion, plus changes in time protected for research.

| Year Enrolled | Career at Initiation            | Career at Completion    |
|---------------|---------------------------------|-------------------------|
| 2000          | Associate Prof, UF              | Professor, Duke         |
| 2001          | Post-doc Fellow, UF             | Assoc Prof, U-Wash      |
| 2002          | Assist Prof, UF                 | Assoc Prof, Duke        |
| 2002          | Post-doc, UF                    | Assoc Prof, UF          |
| 2003          | Fellow, UF                      | Assoc Prof, UF          |
| 2004          | Fellow, UF                      | Assoc Prof, UF          |
| 2005          | Assist Prof, UF                 | Assoc Prof & Chief, UF  |
| 2005          | Assist Prof, UF                 | Assoc Prof, UF          |
| 2006          | Fellow, UF                      | Assist Prof, Boston U   |
| 2006          | Fellow, UF                      | Instructor, Penn        |
| 2007          | Assistant Prof, UF              | Assoc Prof, Miami       |
| 2008          | Fellow, UF                      | Assist Prof, UF         |
| 2008          | Assist Prof, UF                 | Assoc Prof, UF          |
| 2008          | Assist Prof, UF                 | Assoc Prof, UF          |
| 2009          | Fellow, UF                      | Assist Prof, UF         |
| 2009          | Fellow, UF                      | Assist Prof, UF         |
| 2009          | Post-doc (1 <sup>st</sup> year) | Assist Prof, U Colorado |

| Program Efficacy<br>1=did not affect career<br>5 = strongly affected career | Funded Research                       | Change in Protected Time |
|---|---------------------------------------|--------------------------|
| 5   | KL2 award, 1 extramural, 4 intramural | +40%                     |
| 5   | Kl2, 3 extra, 3 intra                 | 25%                      |
| 1   | 5 extra, 2 intra                      | 10%                      |
| 4   | 2 extramural                          | 2%                       |
| 5   | 10 extra, 3 intra                     | N/A                      |
| 4   | 3 extramural                          | 85%                      |
| 4   | 1 extramural, U01                     | N/A                      |
| 5   | R01, U01                              | 50%                      |
| 4   | 3 extra, 3 intra                      | 75%                      |
| 4   | 2 extra, 2 intra                      | 25%                      |
| 4   | 15 extra, 5 intra                     | N/A                      |
| 4   | 6 extra, 2 intra                      | 25%                      |
| 4   | 7 extramural                          | N/A                      |

## Total Grant Dollars Awarded to APPCI Scholars Remaining in Academics





# UF APCCI Program

- Data on funded research collected by program from 1999-2011
- Flattening of sponsored research dollars in APPCI from 2010-11 reflects transition to CTSI
- Some APPCI scholars' data is subsumed under CTSI reporting due to KL2 fellowships.
- >10% of APPCI scholars entered private practice or relocated abroad.

# APPCI Sponsored Research

- APPCI slowly begins yielding research awards, requiring 4 years to reach \$2MM.
- However, program continues producing sponsored research even after APPCI officially ends in May 2010.



# The Sponsored Research Bottom Line

| Year Entered | Starting Rank                       | Grants Received from Initiation through 2011 | Current Rank              |
|--------------|-------------------------------------|--|---------------------------|
| 2002         | Post-doc, UF                        | \$1.8MM                                      | Associate Professor       |
| 2002         | Assistant Professor of Medicine, UF | \$2.5MM                                      | Associate Professor, Duke |
| 2003         | Fellow, UF                          | \$3.4MM                                      | Associate Professor, UF   |
| 2004         | Fellow, UF                          | \$26.8MM                                     | Associate Professor, UF   |



Questions?