



The University of Utah
College of Nursing

Models Addressing Oncology Workforce Needs: Nursing Education

Kathi Mooney, PhD, RN, FAAN
University of Utah

Institute of Medicine
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University of Utah Health Sciences Center



AACN 2007-2008 Enrollment and Graduation in Baccalaureate and Graduate Programs in Nursing

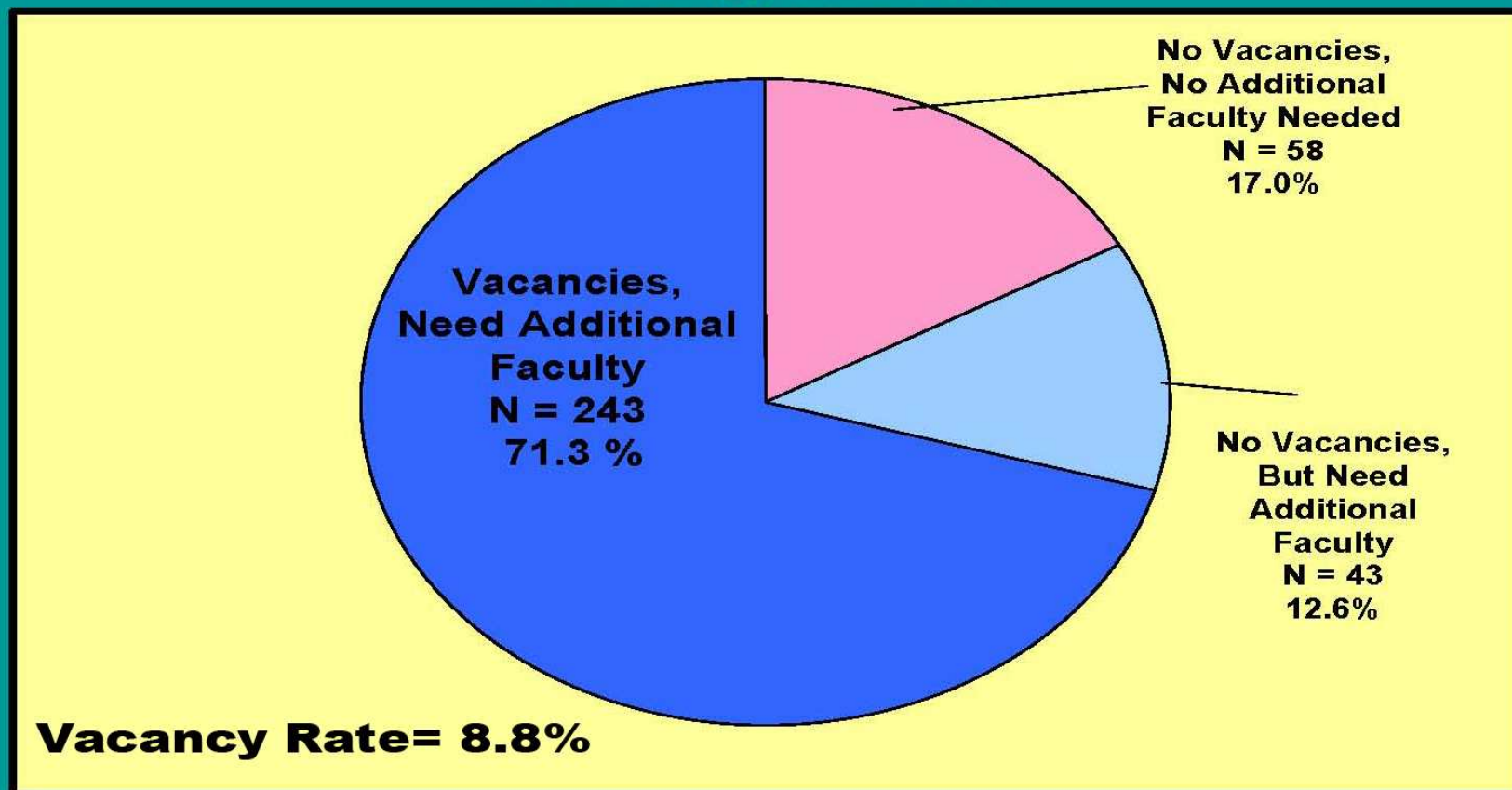
40,285 qualified applicants
denied admission (2007)

**Faculty shortage cited as a
primary reason**





Special AACN Survey on Vacant Full-Time Faculty Positions for Academic Year 2007-2008: Number and Percent of Schools With and Without Vacant Positions, N=341 AACN Member Respondents (Response Rate = 55.5% of Membership), June 2007



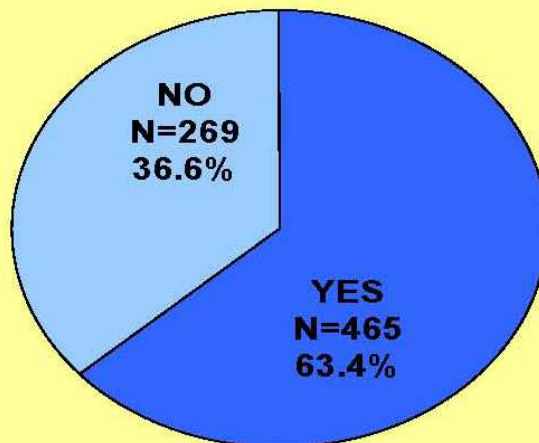
Source: 2007 Survey on Faculty Vacancies. Washington, DC: AACN.
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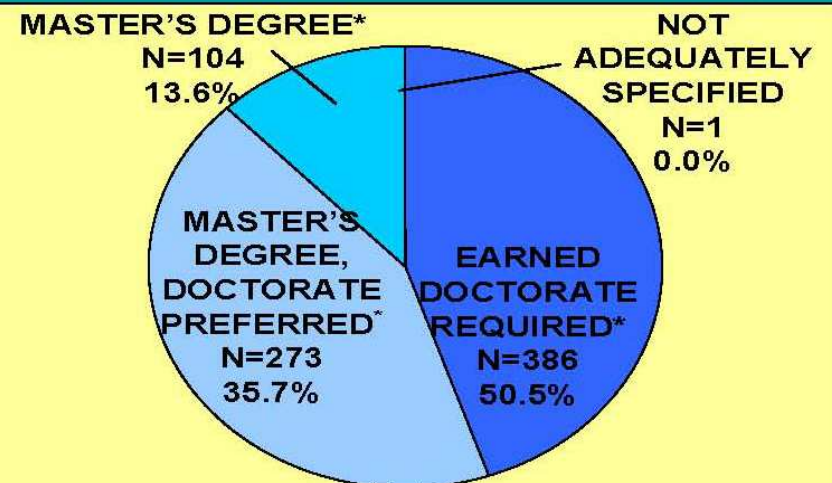


Selected Characteristics of Vacant Faculty Positions for Academic Year 2007-2008, June 2007

Tenure Track (Valid N=734)



Degree Requirements (Valid N=764)



* In nursing or related field.

Source: 2007 Survey on Faculty Vacancies. Washington, DC: AACN.
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**Most Critical Issues (in Rank Order) Faced by Schools of Nursing
for Academic Year 2007-2008**

**RE: Faculty Recruitment and Retention, June 2007
(N=344 Schools; 55.9% of AACN Membership)**

Noncompetitive salaries

Limited pool of doctorally prepared faculty

Lack of qualified applicants

Finding faculty with the right specialty mix

**Finding faculty willing/able to teach clinical courses and
finding faculty willing/able to conduct research**

High faculty workload



Source: 2007 Survey on Faculty Vacancies. Washington, DC: AACN.
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**Most Critical Qualification Noted by Respondents Who Cited a
Lack of Qualified Applicants for Faculty Positions, June 2007
(Valid N=141 Schools; 41.0%)**

Doctoral Degree Preparation

Lack of Educational Experience



Source: *2007 Survey on Faculty Vacancies*. Washington, DC: AACN.
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Essentially Flat Enrollment in PhD Programs in Nursing

2007 PhD enrollment -up only **0.9%**





Aging Faculty

- **53.5 years¹**
Average age of doctorally prepared faculty in Nursing
- **59 years¹**
Average age of doctorally prepared faculty holding the rank of professor
- **62.5 years²**
Average age of nursing faculty retirement

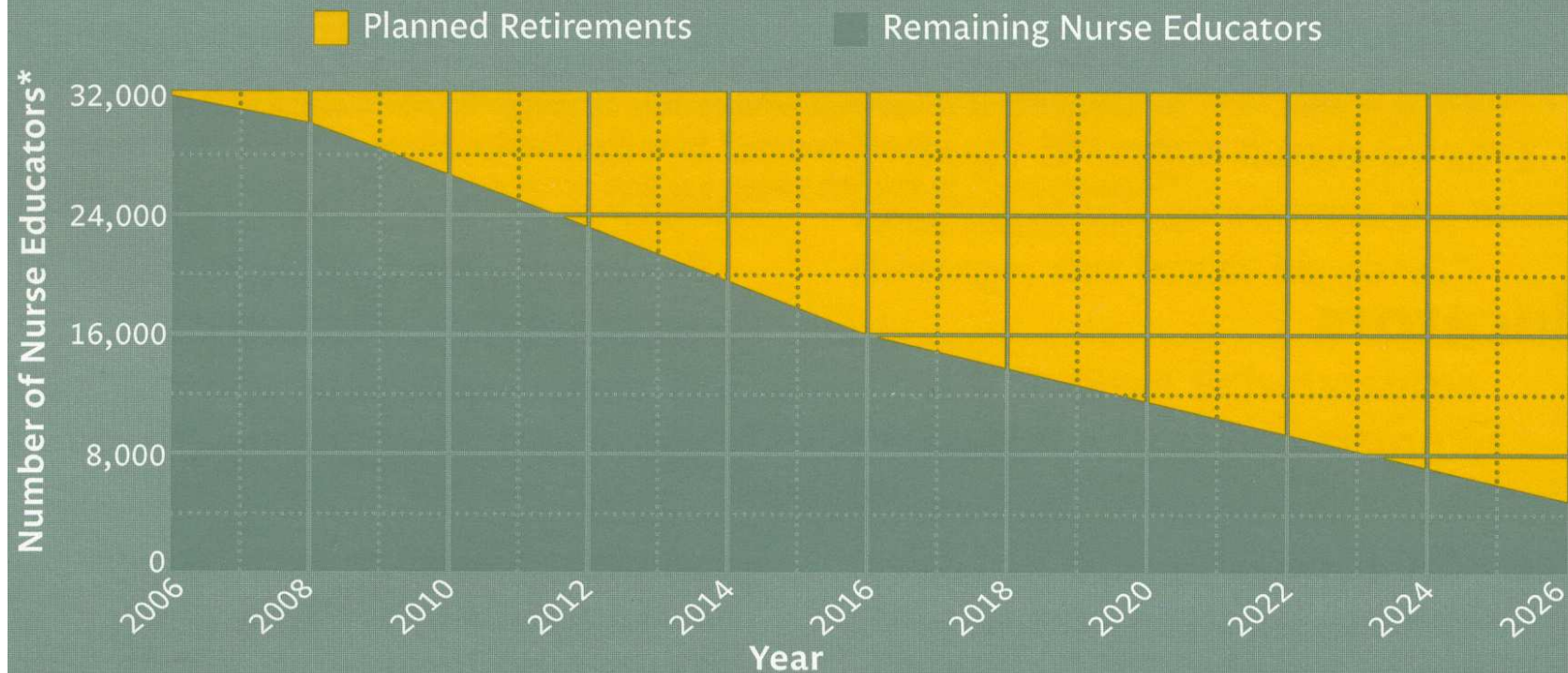
1. AACN report on 2007-2008 salaries of Instructional and Administrative Nursing Faculty
2. The Shortage of Doctorally Prepared Nursing Faculty Nursing Outlook Mar/Apr 2002





Figure 1

The Shrinking Ranks of Current Nurse Educators



* A 2006 survey by the National League for Nursing estimated the number of nurse educators at 32,379 full-time equivalents. This number is based on an estimated 22,951 full-time educators and 18,654 part-time educators counted at 50%. There were 1,390 unfilled full-time faculty positions for a vacancy rate of 6.2%.

Source: NLN/Carnegie National Survey of Nurse Educators: Compensation, Workload, and Teaching Practice, 2006, Preliminary Findings, National League for Nursing, New York, N.Y.





Implications for Specialty Preparation in Oncology

- In a shortage the emphasis is on the pipeline: accelerated programs and graduations
- Emphasis naturally falls to the essentials not specialization; electives fall away
- Faculty have higher workloads and less time for individual student enrichment
- At all levels, there is limited opportunity to interest/recruit students to oncology and to prepare them for oncology focused practice, teaching and research





- There is a basic core of cancer nurse researchers and academicians. Nearly 200 PhD prepared members of the ONS research special interest group (SIG).
- Demographics likely mirror nursing faculty in general. Average age of the 200 PhD SIG members estimated around 54.
- Many located in academic cancer centers and hold faculty roles.
- They are making contributions to science through research in cancer screening/risk reduction, communication, symptom management, palliative and end of life care, quality of life, survivorship, psychosocial care, family caregiving and include a focus in underserved populations.





Educational and Scientific Workforce Implications for Cancer

- There is a need to replenish and increase the number of PhD prepared nursing faculty with teaching and research expertise in cancer.
- There is also an opportunity to develop the role of the cancer nurse clinician-scientist in cancer centers. This includes the opportunity to partner with physician scientists to broaden the clinical research being conducted in cancer.





What limits cancer nurses from seeking PhD degrees and research/faculty careers?

- Ph.D. Program Barriers
- Life Situation Barriers





Ph.D. Program Barriers

- Limited number of programs have depth in cancer faculty. Students seek a match.
- Relocation or long commute required for most students to attend a program with faculty expertise in cancer.
- Cost of obtaining the doctorate and lack of significant stipend monies. Salary may not increase with the Ph.D. or faculty position.
- Requirement of full time study in many programs or to obtain stipends.





Life Situation Barriers

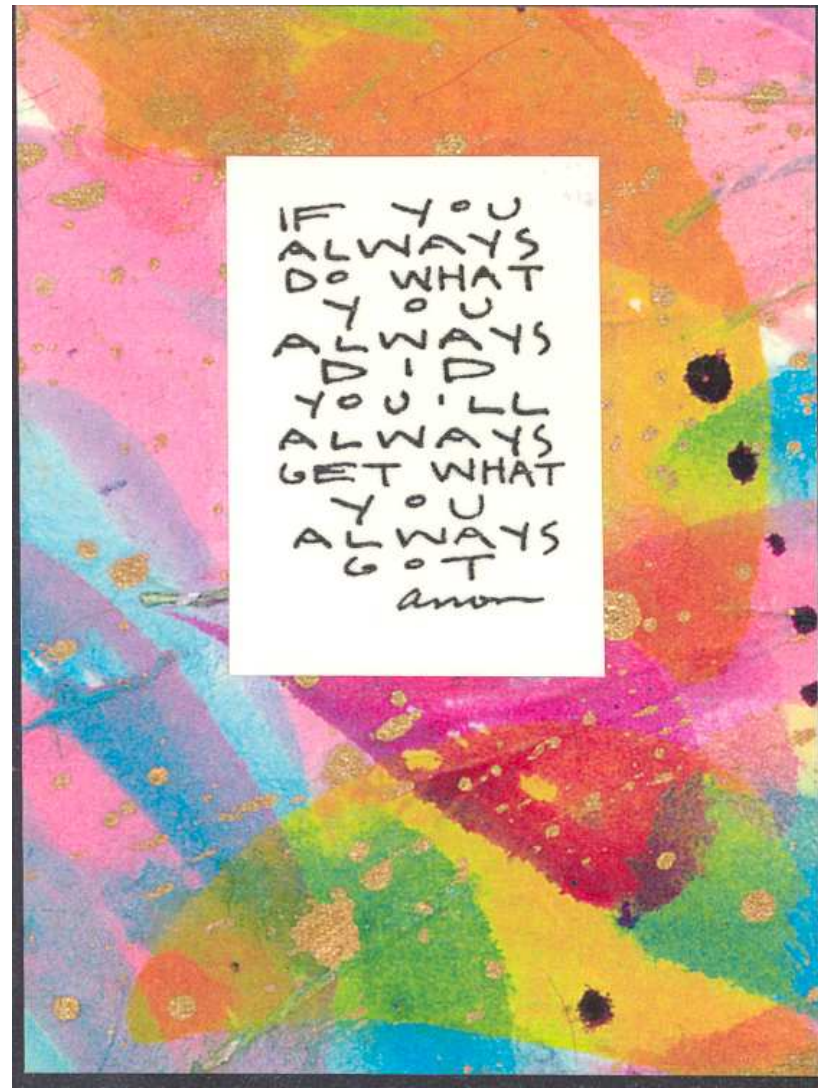
- Older age, commitments in community and career
- Career established as a master's prepared clinical expert- would require career interruption to relocate or attend full time
- Wish to stay at present cancer center/academic setting after doctorate and don't want to loose connection
- Significant loss of income and added cost of the PhD
- Family obligations/ two career or single household





The University of Utah
College of Nursing

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University of Utah Health Sciences Center



University of Utah

- Research I University (Carnegie classification: Doctoral/Research Extensive University)
- Research-focused PhD program in the College of Nursing since 1977
- Take seriously the responsibility to advance the science and knowledge base of nursing
- Committed to developing the next generation of nurse researchers and faculty
- A strong cadre of cancer nurse faculty with active programs of NIH funded research
- The Huntsman Cancer Institute





The Challenge

- A program that provides a strong PhD curriculum with rich faculty cancer prevention and control resources
- A program that doesn't require relocation
- A program that doesn't require traditional full time study
- A program that emphasizes role development and socialization for academic and research roles in cancer
- A program that capitalizes on the student's work setting as a "laboratory" for scientific and research development
- Financial resources to assist students with costs and to support the development, implementation and evaluation of the program





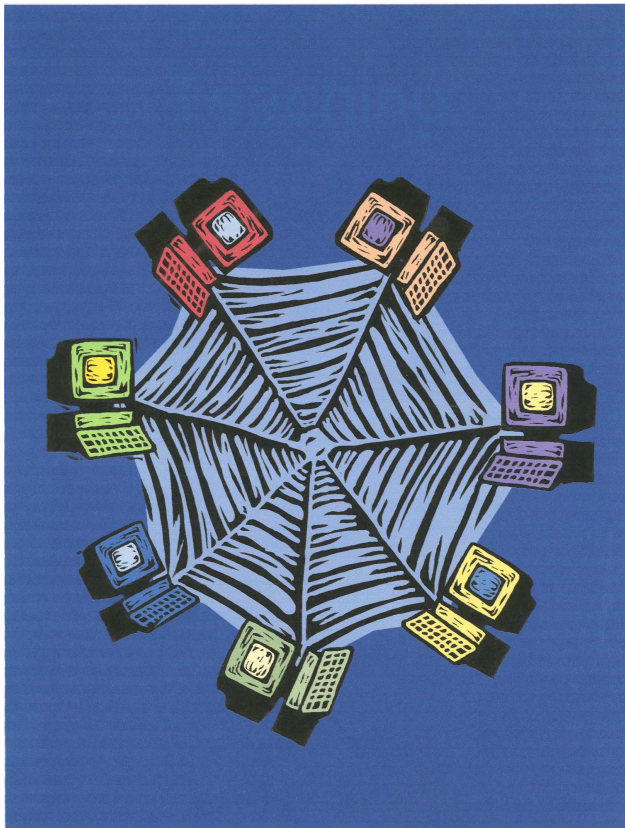
The Utah Model

- Offer our existing PhD program in nursing customized to cancer prevention and control research
- Take it to the students- offer it through live, interactive distance education
- Supplement with intensive week-long campus sessions and national conference attendance with faculty
- Utilize students' work settings and resources to supplement course work, practicums and dissertation
- Financial support through a National Cancer Institute, 5 year, R25 grant (R25CA093831) - providing both program funding and partial student support
- Additional private donor support for conference travel





The Program



- 9 contiguous semesters plus dissertation
- Lock-step course work progression
- Generally 2, occasionally 3 courses/term
- Electives/cognates may be taken locally with approval of supervisory committee





Distance Education with extras

- Every class is taught through live, interactive internet-based (IP) video conferencing to each individual student site.
 - Polycom PVX Desktop Video
 - Bridge used to bring everyone into conference for classes
 - Students: office or home connection
 - Larger unit for faculty during instruction
 - Each faculty also has desktop video for their office computer; allows point to point for student advisement and office hours





- Also thought carefully about how to create opportunities for faculty mentoring and advisement, hands on research experience, socialization, role development, and student interaction





Faculty Advisement and Mentorship

- Faculty office hours and dissertation advisement are accomplished through point to point live, internet IP videoconferencing. Also use telephone, conference call and e-mail.





Socialization and Career Development



- Annual one week immersion: work with faculty, meet with students and faculty outside of the program, course time, plan progression and annual goals, specialty workshops and group social activities.
- Guidance for scholarships, fellowships and small grants applications, conference abstracts and publication development and submission.





Attendance at National Meetings



- Opportunity to meet and network with researchers conducting research in the student's research area
- Opportunity to watch faculty prepare and present their work
- Opportunity for course enrichment through linked assignments between conference and course
- In subsequent years students are encouraged to submit abstracts, present their work, and receive feedback









Guided Research Experiences

- Research Practicum, Independent Study and Research Assistant Experiences
 - Local Mentor- University and Cancer Center
 - University of Utah Faculty Mentor- at a distance
 - work that does not require on site: grant writing, data analysis, publications
 - open clinical site at student location: IRB review, participant recruitment, study implementation





Student Interaction

- Specialty focus enhances group cohesiveness
- Immersion week tightly bonds group
- Reinforced with group attendance at conferences
- Sense of being pioneers-outreach to next class
- Lock-step curriculum keeps them moving together
- Course related group projects work very well with the technology
- Virtual student lounge





Utah Oncology Distance PhD

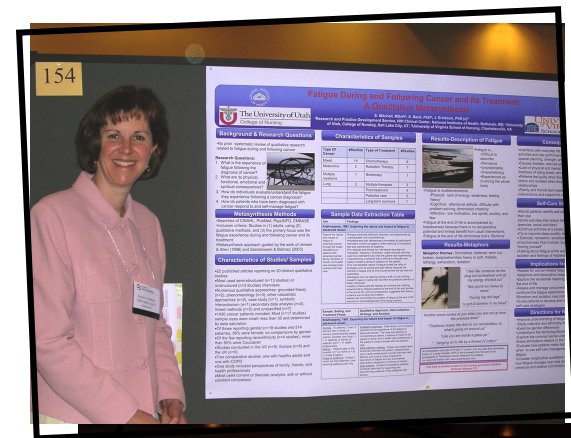
- 29 Students admitted
in
- 3 cohorts
 - 11 students admitted
Spring 2003
 - 9 students admitted
Summer 2004
 - 9 students admitted
Fall 2006





National Scholarships and Awards

- 24 American Cancer Society Doctoral Scholarships
- 6 Oncology Nursing Society Scholarships
- 2 NRSA awards
- 1 Hartford Foundation Scholar





Course Evaluation and Progression Data

- Course evaluations very favorable and higher for distance courses than identical on-campus course
- Faculty evaluations very favorable and higher than on-campus evaluations
- Time to graduation: 3.7 years (distance) vs. 5.8 years (on-campus)





To Date

- 15 graduates
- 4 at dissertation final approvals
- 10 at dissertation proposal





Outcomes

- 78 peer reviewed journal articles
- 65 national and international presentations
- 1 ACS Mentored Grant
- NIH grants-1R01,1RO3, 1R21





Summary and Recommendations



- Effective solutions exist if innovative ideas can be piloted
- Solutions may need to challenge conventional wisdom
- Innovative ideas require new funds, a willingness to suspend some rules, careful evaluation and tailored to address existing barriers



