Delaware Health Sciences Alliance

Mentorship for Successful Clinical and Translational Research
Institutional Culture & Q&A

Dr. Margaret Anderson
Director, President’s Diversity Initiative, Office of the President, UD

Dr. Scott Waldman
Associate Dean, Clinical and Translational Research, TJU

Dr. Sharon Lehman
Division Chief Ophthalmology, NAIDHC

Dr. Eric Jackson
Director, Center for Health Care Delivery, Christiana Care
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Mentorship for Successful Clinical and Translational Research
Building an Inclusive Community

Dr. Margaret L. Andersen
Edward F. and Elizabeth Goodman Rosenberg
Professor of Sociology and Executive Director, President’s Diversity Initiative
University of Delaware
Margaret L. Andersen is currently Executive Director of the President’s Diversity Initiative at the University of Delaware. She is the author of several books, including *Thinking about Women: Sociological Perspectives on Sex and Gender*; *Race, Class and Gender* (with Patricia Hill Collins); *Race and Ethnicity in Society: The Changing Landscape* (with Elizabeth Higginbotham); *On Land and On Sea: A Century of Women in the Rosenfeld Collection; Living Art: The Life of Paul R. Jones, African American Art Collector*; and, *Sociology: The Essentials*.

She currently chairs the National Advisory Board for Stanford University’s Center for Comparative Studies in Race and Ethnicity. She is a recipient of the Eastern Sociological Society’s Merit Award, the American Sociological Association’s Jessie Bernard Award, and Sociologists for Women in Society’s Feminist Lecturer Award. She is the former Vice President of the American Sociological Association, former president of the Eastern Sociological Society and a recipient of two teaching awards from the University of Delaware.
MENTORING:

- Collective endeavor
- Multi-dimensional needs
- Integration into Community of Scholars
- Investment better than loss
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Mentorship for Successful Clinical and Translational Research
Mentoring in the Biomedical Sciences

Scott A. Waldman, MD, PhD
Chair, Pharmacology and Experimental Therapeutics
Thomas Jefferson University
Scott Waldman, MD, PhD
• Basic, translational, and clinical research in cancer

Individual experience
• Mentored ~40 fellows, 20 doctoral students, and 30 Masters students

Institutional Experience
• Former Director of the NIH-sponsored K30 Training Program in Human Investigation
• Former Director of NIH-sponsored R25 summer research training program for medical students
• Director, MD-PhD Program
• Director, summer training program for under-represented minority undergraduate students
• Director, NIH-sponsored Clinical Pharmacology Postdoctoral Training Program

National Experience
• Third “tour of duty” on NCI Subcommittee J Manpower and Workforce Study Section (K awards)
Routine Challenges in Mentoring in the Biomedical Sciences

- Guiding trainees into successful careers that are tailored to their goals and objectives
- Creating an environment of success for trainees and junior faculty
- Employing the best structure and process for effective mentoring
- Creating an institutional environment that rewards mentoring
- Mentoring to produce multidisciplinary and “team” science
- Creating an institutional environment that rewards team science rather than individual achievement
- Mentoring the mentors-how do we establish institutional programs for effective mentoring
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Challenges In Developing A Mentoring and Faculty Development Program In An Academic Health System

Sharon S. Lehman, MD FAAP FAAO
Chief of Ophthalmology, Nemours/AIDHC
Assistant Dean of Faculty Affairs for Nemours Jefferson Medical College
Biography

Chief Ophthalmology, Nemours/Al DuPont Hospital for Children
Robison D. Harley MD Endowed Chair in Pediatric Ophthalmology
Clinical Professor of Pediatrics and Ophthalmology
Assistant Dean of Faculty Affairs for Nemours
Jefferson Medical College
Assistant Surgeon
Wills Eye Hospital

Co-chair Nemours Physician Satisfaction Committee

Mentoring Experience
Informal: Colleagues, Fellows, Residents, Medical Students
Formal: High School Students Interested in Medical Profession

National Experience
Chair-Elect of AAP Section of Ophthalmology
Challenges:

• Resources
• Resources
• Resources
• Resources
Challenges:

- Resources for program administration, operations and maintenance
- Limited time
- Clinical duty requirements
- Work life balance
- Multiple campuses
- Culture: “I didn’t sign up for this.”
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Mentorship for Successful Clinical and Translational Research
The Value Institute: Establishing Effective Collaborations

Eric V. Jackson, Jr., MD, MBA
Associate Director, Value Institute
Director, Health Care Delivery Science
Christiana Care Health System
Adjunct Faculty, Johns Hopkins University School of Medicine
Selected Biography

• Assistant Professor, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Medical Institutions, Baltimore, MD
• 2002 – 2006 Chair, Fellowship Advisory Committee – Multidisciplinary Pediatric Pulmonary T32 Training Grant Eudowood Division of Pediatric Respiratory Sciences, Johns Hopkins Medical Institutions, Baltimore, MD
• 2005 – 2008 Associate Fellowship Director, Pediatric Anesthesiology, Division of Pediatric Anesthesiology and Critical Care Medicine, Johns Hopkins Medical institutions, Baltimore, MD
• 2006 – 2012 Director, Center for Immersive Simulation and Telemedicine, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins Medical Institutions, Baltimore, MD
• 2010 – 2012 Chair, Data Safety and Monitoring Board, (R-21 NIH Grant) Randomized Controlled, Double-Blind Clinical Trial, Efficacy of Clonidine in Reducing Iatrogenic-Induced Opioid Dependence in Infants, Johns Hopkins, Baltimore, MD
• 2011 – 2012 Co-Chair, Perioperative Data and Analytics Committee, Johns Hopkins, Baltimore, MD
• 2011 – 2012 Co-Chair, Austere Anesthesia Health Outcomes Group, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins, Baltimore, MD
• 2012 – Present Adjunct-Assistant Professor, Department of Anesthesiology and Critical Care Medicine Johns Hopkins Medical Institutions, Baltimore, MD
• 2012 – Present Associate Director, Value Institute, Christiana Care Health System, Newark, DE
• 2012 – Present Director, Center for Health Care Delivery Science, Christiana Care Health System, Newark, DE
Draft Vision & Mission Statements

Vision

• To achieve recognition in the delivery and evaluation of evidence-based health care

Mission

• To improve our patient outcomes via application of rigorous, scientific methodologies in research, leading to innovative systems of care in real-world clinical practice that enhance the quality, safety and value of health care.
Defining the Triple Aim

- Improving the individual (patient) experience
- Improving the health of populations
- Reducing the per capita costs of care for populations

Donald Berwick MD
Senior Fellow
Center for American Progress

Health Affairs May/June 2008
Work Stream Optimization
(User-Friendly Consultation)

web

Resource Allocation
Guideline Development for Project Prioritization

- Aligned with CCHS Strategic Vision
- Aligned with Value Institute Strategic Vision
- Funded
- Publishable
- Identified attending/faculty champion responsibility
- Project embedded within a broader departmental or center research program/theme
- Value Institute capacity constraints
How we might work with the mentee

• Connecting mentee internally or with external partners to facilitate collaboration
• Identifying external funding sources relevant to collaborative projects
• Assisting with research design and analysis
• Providing input to the publication planning process
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Breakout Sessions

• **Creating Connections: Multicultural Mentoring** (approach and global lessons learned on how to leverage differences and strengths to foster different disciplines and cultures in successfully work together): **Rosa Colon-Kolacko, PhD** – Senior Vice President & Executive Director, Learning Institute and Chief Diversity Officer, Christiana Care & **Richard Derman, MD**, Marie E Pinizzotto, MD Endowed Chair of Obstetrics & Gynecology and Director, Center for Women & Children’s Health Research, Christiana Care

• **Mentoring and Networks for Women and Underrepresented Minority Researchers in STEM**: **Pam Cook, PhD** – Associate Dean of Engineering, UD

• **Mentoring Towards Translational Research: Basic Sciences** (key obstacles and how to overcome them): **Randall Duncan, PhD** – Chair, Biological Science, UD

• **Mentoring Towards Translational Research: Clinicians** (key obstacles and how to overcome them): **Mike Rosenthal, MD** – Chair, Department of Family & Community Medicine, Christiana Care

• **Building Teams for Mentoring and Collaboration** (understanding the many roles of mentors and the value of multiple mentors in improving and integrating research into clinical, academic, and family life): **Seema Sonnad, PhD** – Director Health Services Research Christiana Care Value Institute

• **Developing, Monitoring and Evaluating Mentorship Processes**: **Rob Akins, PhD** – Co-Director, Center for Pediatric Clinical Research and Development, NAIDHC
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Mentorship for Successful Clinical and Translational Research
Creating Connections: Multicultural Mentoring

Rosa Colon-Kolacko, PhD
Senior Vice President & Executive Director, Learning Institute and
Chief Diversity Officer, Christiana Care

Richard Derman, MD
Marie E. Pinizzotto, MD Endowed Chair of Obstetrics & Gynecology and
Director, Center for Women & Children’s Health Research, Christiana Care

Mentoring and Networks for Women and
Underrepresented Minority Researchers in STEM

Pam Cook, PhD
Associate Dean of Engineering, UD
Did you know your chance of getting an award increases 2.5 times if you know someone on the committee?

Swedish Medical Research Council Postdoc:
Authors noticed:
46% of applicants were women (114 total).
20% of awardees were female.

Took the case to court, acquired access to applications. Assigned applicants “Impact Score” based upon publication record.

Results
Males: linear relationship (suggests original review panel used objective criteria).
Females: nonlinear relationship, and lower original score.

Summary
Women had to be 2.5 times as productive as men to be ranked the same.
Affiliation with a member of the review panel gave a comparable advantage.
As a mentor you should help your mentee network

NIH Awards: Race and Ethnicity

~83,000 proposals (’00-’06)

Study controlled for:
- demographics
- education and training
- employer characteristics
- NIH experience
- research productivity

Black faculty less likely than white faculty to resubmit—mentoring could make a difference.
Pushing to resubmit and expect to resubmit. Telling them how often things don’t get funded.

DK Ginther et al. Science 2011; 333: 1015-1019
NIH Awards: Race and Ethnicity

Authors noticed that black faculty members were less likely than white faculty members to resubmit grant proposals after receiving a rejection, which decreased their overall success rate.

Mentoring could help
Letters of Recommendation

Successful Medical School Faculty Applicants

Letters for women:
- Shorter
- “Mary” instead of “Dr. Smith”
- Greater focus on teaching, personal life
- More “doubt raisers,” such as: “It’s amazing how much she’s accomplished” and “It appears her health is stable.”

Letters for men:
- Longer
- “Dr. Smith” instead of “Larry”
- More references to publications and research


Don’t forget to do your homework!
Changing Demographics in the USA

• Between now and the year 2050, almost 90% of U.S. population growth will come from Asian Americans, African-Americans and Hispanic-Americans.

• Today, people of color are already a majority in 48 of the nation’s 100 largest cities.

• Today, five states have “minority majorities.” They include: California, Hawaii, New Mexico, Texas and Florida.

• Five other states: Maryland, Mississippi, Georgia, New York and Arizona have non-white populations around 40%.
Culturally Appropriate Behavior
Meaningful Mentoring Relationships
Specific Mentoring Outcomes

Conceptual Model of the Relationship between Cultural Awareness and Intercultural Mentoring Relationships

General Cultural Awareness
Cultural Self-Awareness
Situation Specific Awareness

Mentor
Mentee

Osula & Irvin 2009
Mentoring and Networks for Women and Multi-cultural Mentoring

• How are we measuring successful mentoring relationships and outcomes?

• Academic institutions challenges to increase representation and status of underrepresented minorities and women in academic positions.

• Unequal treatment of women vs. men in grant submissions, reviews and evaluation

• Generic Mentoring models and processes where multi-cultural dimensions are not included or addressed
Mentoring and Networks for Women and Multi-cultural Mentoring

• There is a need to formalize a multi-cultural mentoring model to support and set up for success researchers due to the shift in demographics.

• Explore multi-cultural mentoring as a research funding opportunity since there is expertise among our institutions this may be one area to incorporate in the CTSA grant submission.
Mentoring Towards Translational Research: Basic Sciences

Randall Duncan, PhD
Chair, Biological Science, UD
Challenges:
Two different groups: Mentors and Mentees
What are they looking for?
- Resources – bridge the gap of collaboration with AI – effective collaboration
- Network
- Different definition of translational/clinical work –
- No training in mentoring
- Effective at mentoring and building teams.
- Identify people that would collaborate and training in research when mentor is clinical

Mentors: Continue emphasis on focus.
- Never lose the need for a mentor, no matter what level you are. Need to get inserted into group.
- Busy – time
- How forceful do you mentor.
- Making sure that the mentee hits tenure in stride.

Communication – different language
Time: Different work schedules
Distance – different centers
Solutions
How to set up collaborators: Networking

Distance – teleconference, drive – car pool
Time – make yourself available
Communication – the more you talk, the more that interaction occurs
Impact!!!
Work backwards from clinic
Mentoring Towards Translational Research: Clinicians

Mike Rosenthal, MD
Chair, Department of Family & Community Medicine, Christiana Care
Definitions?

• Clinician
• Clinical Setting(s)
• Translational Research
Mentoring?

Someone who imparts wisdom to and shares knowledge with a less experienced colleague

• Value
• Obstacles
• Opportunities
• Success
Barriers to Successful mentoring of clinician-translational scientists

• Lack of Time – “protected” vs “contracted” – to pursue mentorship, to provide mentorship, to pursue research
• Lack of understanding of what constitutes translational science among clinicians
  – Value proposition/ innovation in healthcare delivery
  – Implementation science
  – T2, T3 or T4 translational research
• Traditional mentorship relationship has been too paternal – which hampers innovation
• Lack of seasoned clinician researchers to provide mentorship around translational science – and they are hard to find, esp. for junior investigators
• Institutional & departmental/ center/ etc. leadership may not have prioritized facilitation of mentor-mentee linkages
• Difficult to find linkages among scientists with similar/ related interests within and across our institutions to populate research teams AND mentorship teams – esp in very specialized areas
• Team science requires mentorship TEAMS – need to get beyond the “traditional” mindset of one mentee- one mentor
Barriers to Successful mentoring of clinician-translational scientists

• How do we support clinicians to develop skills, track record and support (i.e. grant funding) to pursue translational science
• How do we support young clinicians who have some interest in research but don’t even know where to begin?
• The lack of time for reflection about practice hinders the capacity of the SYSTEM and INDIVIDUALS to work towards improving clinical care even at the QI level, much less with rigorous research
• Lack of mechanism to give credit for promotion and/ or funding for “small” team roles that would inform but not take a significant role in needed research (T2)
• Limited cadre of clinicians that are engaging in implementation science (T3, T4 level) and limited mechanisms to fund the research or reward it – current research and clinical funding mechanisms largely do not reward this work
Opportunities for Successful mentoring of clinician-translational scientists

- DHSA provides an opportunity to develop a catalogue of potential mentors around various issues, across institutions
- Development of peer mentorship teams
- Opportunity to develop research and mentorship teams across the DHSA institutions
- Opportunities to pair PhD and clinical scientists to identify/inform clinical questions that the PhD leads finding answers (T2)
- Mechanisms like CTR, CTSA can foster development of teams that span T2 – T3 – T4 to capitalize on evolving issues within the healthcare system, Innovation/PCORI funds, Value science and implementation science to improve healthcare AND maximize reimbursement for care
- Partnering across research and academic institutions can create opportunities to support development of clinician researchers – we need to think creatively
- DHSA institutions can invest in infrastructure to support team science including clinicians based on institutional and community needs
Building Teams for Mentoring and Collaboration

Seema Sonnad, PhD
Director Health Services Research Christiana Care Value Institute
• Barriers / challenges
  – Silos (lack of communication, variation in rules and goals, lack of understanding, fear of uncharted land, tradition, processes)
    • Departmental
    • Institutional
    • Discipline
    • Cultural
• Barriers continued
  – time
    • Mentor time
    • Mentee time
    • Training time for mentoring by both mentor and the mentee
  – Lack of personalization
    • Easier to have template for a program rather than individualizing it
    • More and more people in non-traditional roles
    • Point system being unconnected to reality
• How team mentoring helps
  – Connecting mentors through their mentees
  – Building infrastructure that allows individual success
  – Connecting people to new networks, some non-traditional
    • Societies
    • Peer mentoring
    • Outside the silo
• What helps team mentoring
  – Generational difference
  – New institutional needs
  – Availability of infrastructure/multidiscipline grant support at the national level
  – Technology to improve communication
Developing, Monitoring and Evaluating Mentorship Processes

Rob Akins, PhD
Co-Director, Center for Pediatric Clinical Research and Development, NAIDHC
Barriers:
- Resources!!!
- Identify/vetting mentors
- Confidentiality – negative comments should not be punitive; positive results should benefit mentee and mentor
- Incentives for mentors to participate
- How will data be used / interpreted – who looks at what (divisions, institutions, CTR/CTSA grant administrators)

Opportunities:
- CTR/CTSA and other external sources of resources for support
- Leverage internal commitments from institutions
- Online systems and system’s analysis

Needs:
- Buy in from administrative components to maintain support (Division & Chairs)
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