Enhancing Career Development One Pair at a Time: How to Start (and Sustain) a Mentoring Program at Your Institution

SGIM ANNUAL MEETING
APRIL 12, 2008
Workshop Faculty

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University of Toronto

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The Johns Hopkins University
Roadmap

- 10:30-10:40  Introductions and Defining Mentorship
- 10:40-10:50  Making the Case for Mentorship in Academic Medicine
- 10:50-11:10  Getting Started: Barriers and Innovations — Three case examples:
  - The UCSF Faculty Mentoring Program
  - The Johns Hopkins Faculty Development and Mentorship Program
  - Mentorship Program for Tobacco Control Researchers
- 11:10-11:40  Small Group Discussion and Development of Mentoring Program Plans
- 11:40-11:55  Small Group Reports and Discussion
- 11:55-Noon  Evaluations
What is Mentoring?
"There—now I’ve taught you everything I know about splitting rocks."
What is Mentoring?

Levinson DJ, et al: “The Seasons of a Man’s Life”.
New York, Alfred A Knopf, 1978

• The mentoring relationship is “one of the most complex and developmentally important” in a person's life.

• The mentor will act as teacher, sponsor, guide, exemplar, counselor, moral support—but most important is to “assist and facilitate the realization of the dream.”
Mentoring is

“A dynamic, reciprocal relationship in a work environment between an advanced career incumbent and a beginner aimed at promoting the development of both.”

Mentor as Teacher

- Educate mentee about research content and methods
- Clinical and teaching skills
- Grant and manuscript preparation
Mentor as Protector

- Mentor as Superhero
- Powerful Advocate and Protector
- Advancement, Promotion and Recognition
Mentor as Role Model

- A person considered as a standard of excellence to be imitated (Wright, et al)
Mentor as Advisor and Guide

- ‘a trusted counselor or guide’
- Work-Life balance
- Self reflection and value clarification
- Well-being
The University of California, San Francisco

Faculty Mentoring Program
## 2007-08 Target Mentees (N=826)

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Faculty Mentoring Program
Core Components

- **Director of Faculty Mentoring**
  - Establish and oversee program
  - Develop training
  - Lead evaluation

- **Mentoring Facilitators**
  - Responsible for setting up and overseeing mentoring program in Dept/ORU/Division
  - “Train the trainer” faculty development model
Faculty Mentoring Program
Core Components

• One on One mentoring program
  ✓ All junior/new faculty paired with senior “career” mentor responsible for providing career guidance and support.
  ✓ Most successful faculty will have multiple mentors in addition to the career mentor
  ✓ Career Mentoring meetings should take place at least 2x yearly; the mentee is expected to send their mentor an updated CV and Individual Development Plan prior to each meeting.
Faculty Mentoring Program: Recognition of Mentoring

• Mentoring Awards
  ✓ “Lifetime Achievement in Mentoring”, Distinction in Mentoring Award; “Who mentored you?”

“I strive to provide to my own mentees the same depth of commitment and selfless attention that Steve has always offered me. When I consider how to help my mentees, I find myself considering what Steve would do. More often than not, I know exactly what he would do. I can hear his words in my head, as they have become an integral part of me.”
Facility Mentoring Program: Recognition of Mentoring

- Advancement and Promotion

  ✓ Achievement in mentoring must now be documented on the CV and is evaluated along with teaching when faculty are reviewed for promotion.

<table>
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<tr>
<th>Dates</th>
<th>Name</th>
<th>Position while Mentored</th>
<th>Mentoring Role</th>
<th>Current Position</th>
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<td>Jane Doe PhD</td>
<td>Asst. Prof.</td>
<td>Academic and Research Collaborator/Advisor</td>
<td>Assoc. Prof., Bioch., UCSF</td>
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<td>1999-2001</td>
<td>James Jones MD</td>
<td>Assoc. Prof.</td>
<td>Reviewed grant application</td>
<td>Assoc. Prof., Surg, UCSF</td>
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“Mentoring has the capacity to . . . link the young to their intellectual and professional heritage, to make the pursuit of excellence an enduring preoccupation of future faculty.”

JA Barondess
1. Assess the mentee
   - Check in
   - Assess for any urgent issues
   - Use active listening skills

2. Set an agenda
   - Review pending items
   - Assess time available
   - Prioritize

3. Assist with ongoing projects
   - Ask clarifying questions
   - Set clear and measurable goals
   - Give advice and suggest resources
   - Agree on timeline for deliverables

4. Provide career guidance
   - Review Individual Development Plan and CV
   - Inquire about professional / personal balance

5. Wrap up
   - Clarify expectations of mentor and mentee
   - Schedule future meeting

Developed by Mitchell D. Feldman, MD, MPhil
Mentoring Tip:

Individual Development Plans (IDPs) are used widely by organizations – from the National Institutes of Health (NIH) to the U.S. Coast Guard – to help individuals develop and achieve career goals. We think it’s a great tool to guide successful mentoring relationships. An IDP helps the mentor understand the mentee’s needs and the mentee identify professional goals. Mentees can send their completed IDP to their mentor prior to their meeting to make the most of their meeting time.

For more information about faculty mentoring at UCSF go to http://acpers.ucsf.edu/mentoring
Individual Development Plan (IDP)

Instructions to Mentees:
Please complete this form yearly and give a copy to your mentor before your mentoring session. Attach an updated CV in the recommended UCSF format (http://academicaffairs.ucsf.edu/acapers/downloads/cvguidelines2005.pdf).

Instructions to Mentors:
Please review the mentee’s CV and this form prior to meeting your mentee.

Date:

Mentee Name:

Mentor Name:
Time Allocation as Estimated by Mentee:

___ % Teaching/Training/Providing Mentoring
___ % Research
___ % Patient Care
___ % Administration/Other Services

How (if at all) would you like to change this time distribution?

Academic Appointment
Do you understand the series to which you are appointed and the expectations for advancement in this series?

___ Yes
___ No

Explain:

Current Professional Responsibilities
List your major professional responsibilities and if you anticipate significant changes in the coming year:

1.

2.

3.

4.

5.
**Future Professional Goals**

**Short Term Goals**
List your professional goals for the coming year. Be as specific as possible, and indicate how you will assess if the goal was accomplished (expected outcome).

1. Goal:
   
   Expected outcome:

2. Goal:
   
   Expected outcome:

3. Goal:
   
   Expected outcome:

**Long Term Goals**
List your professional goals for the next 3-5 years. Again, be specific, and indicate how you will assess if the goal was accomplished.

1. Goal:
   
   Expected outcome:

2. Goal:
   
   Expected outcome:

3. Goal:
   
   Expected outcome:
Module Six: Special Module on Mentorship for Tobacco Control: Perspectives from Latin America and the Caribbean

July 2007

CANADIAN COALITION FOR GLOBAL HEALTH RESEARCH
Promoting More Equity in Global Health Research and Better Health Worldwide

J. Drope, & J. Barnoya, R. Mejia, D. Rampersad-Rattan

Document produced in conjunction with the IDRC/RITC Mentorship Program for Tobacco Control Researchers
Preface

With the generous support of Health Canada, the International Development Research Centre’s Research for International Tobacco Control program (IDRC-RITC) initiated a partnership with the Canadian Coalition for Global Health Research (CCGHR) in 2006 to foster mentorship opportunities for tobacco control researchers in low- and middle-income countries.

The genesis of this mentorship program stems directly from needs expressed by researchers in these countries to have access to a network of mentors to assist them in developing and implementing tobacco control research projects and in translating their findings into action. These researchers are recipients of a Small Grants Research Competition to Support and Inform Ratification, Implementation and/or Enforcement of the Framework Convention on Tobacco Control. That competition has been supported since 2004 by IDRC/RITC, the Canadian Tobacco Control Research Initiative (CTCRI), the American Cancer Society, Cancer Research UK, Health Canada, the Department for International Development in the UK, and the Institut National du Cancer in France.

A significant outcome of the parallel mentorship program is this learning module. This Special Module will supplement CCGHR's Mentorship Module Series by extending the exploration of mentorship to a Southern regional perspective. Three participants in the mentorship program from Latin America and the Caribbean were invited to provide their own perspectives on the opportunities and challenges of mentorship. At the same time, the authors illustrate how mentorship can be used as a tool for advancing tobacco control research in low- and middle-income countries, and by extension, address a significant global health challenge.

This learning module is an excellent resource for current trainees in the IDRC-RITC mentorship program who will meet again in Trinidad in early 2008, as well as future trainees and the broader global health research community. We hope that you will enjoy reading it and reflecting upon the important issues raised.

Rosemary Kennedy
Research Officer, IDRC-RITC
July 2007
Acknowledgements

IDRC-RITC and CCGHR gratefully acknowledge the funding support of Health Canada for the production of this learning module, and for its broader support to the mentorship program and the FCTC small grants research competition.

We also extend our profound thanks to Joaquin Barnoya, Raul Mejia, and Daisy Rampersad-Rattan for their insightful and thoughtful contributions to this learning module, and to Jacqui Drope for her seamless coordination, writing and editing, without which this module would not have been possible.
Special Module on Mentorship for Tobacco Control: Perspectives from Latin America and the Caribbean

This module will provide unique insight into the concept of mentoring from the perspective of researchers from Latin America and the Caribbean (LAC), using mentorship in tobacco control research as an entry point. In this module, the authors aim to challenge researchers in other lower- and middle-income countries to determine what type of mentoring culture exists in their countries, how mentoring benefits, or might benefit, their country, and what lessons they can take from the experience in the LAC region.

Key Messages

a) Mentorship in the LAC region is particularly difficult because it is generally a new concept but, as illustrated by three separate stories in this module, it represents an amazing opportunity to build research capacity for tobacco control.

b) Tobacco control researchers from the LAC region face unique challenges in mentorship, which are compounded by the lack of a research culture in these countries.

c) Developing a tobacco control research culture in Latin America and the Caribbean also means creating a mentoring culture that will involve the coordination of tobacco control research efforts across a variety of disciplines.

Learning Objectives

a) To provide insight into the need and importance of mentorship for advancing tobacco control research efforts.

b) To highlight how the international concept of mentorship can be adapted to a region where mentoring has not been traditionally used as an educational tool.

c) To assist mentors/mentees in establishing successful mentorship relationships.

d) To share the experiences and strategies the authors used, as mentors, to meet the challenges encountered in mentoring in tobacco control research in their countries.

e) To use the LAC case studies highlighted in this module to inspire further reflection on the challenges and opportunities of mentorship for advancing health research priorities in other low- and middle-income countries and regions.

Defining Terms

The terms defined below are relevant to the information presented in this module. For a full introduction to the ideas and theory of mentorship please see Module 1 in the Mentorship Module Series.

**Formal Mentoring**

Formal mentoring relationships are arranged or facilitated by parties other than the mentor. Formal mentoring is a structured approach to formalizing a relationship between a mentor and a mentee to enhance the mentee’s career by building knowledge and skills. It emphasizes measuring and evaluating results.[1]

**Informal Mentoring**

Informal mentoring relationships evolve naturally between two people.[2] This is the most common form of mentoring and may last from a few weeks to a lifetime.

**Distance Mentoring**

While traditionally mentorship is considered a face to face relationship, technology has introduced the ability to relate to people online through tools such as email, instant messaging, video conferencing and whiteboards. This opens up opportunities for mentees to seek out people with similar interests who might not live in close geographic proximity. These relationships might also involve infrequent face-to-face interactions.
opportunities through workshops, meetings and conferences. These relationships might start face-to-face and then continue as distance relationships if one moves.

**Mentorship Network**

The concept of mentoring often focuses on a single relationship with a more senior individual in a mentee’s organization. An emerging perspective is the mentorship network where individuals can be mentored by many people at the same time, including senior colleagues, peers, family, and community members. This network can provide the mentee with a variety of forms of career and psychosocial assistance.[3]

**Introduction**

Tobacco use kills 5 million people every year. Half of all long-term smokers will die from a tobacco-caused disease. If current trends continue, the number of annual tobacco-related deaths is predicted to increase to 10 million by the year 2020, with 70% of those deaths occurring in low- and middle-income countries. This shift in disease burden to LMICs is globally significant in light of weak and over stretched health systems, poor governance and a strong tobacco industry in many of these countries. Tobacco control aims to reduce the harm caused by tobacco use through preventing initiation, increasing quitting, reducing consumption by smokers who continue to smoke and protecting nonsmokers from exposure to secondhand tobacco smoke.[4]

The Framework Convention on Tobacco Control (FCTC) is a landmark public health treaty negotiated through the World Health Organization. The FCTC addresses ways to respond to the globalized trends that increase tobacco use. The treaty is designed to help countries develop national legislation and policies addressing a wide range of issues (like advertising bans, smokefree spaces, health warnings, contraband etc). However, local decision-makers need country-specific research to appreciate the need for ratification of the FCTC and implementation and/or enforcement of its provisions, particularly in low- and middle-income countries where existing data on tobacco use and tobacco control legislation and programs are limited.

Within the Latin American and Caribbean (LAC) region, tobacco use currently kills 1 million people each year.[5]

Rigorous tobacco control research is needed to:

- Minimize the tobacco epidemic in the region and the concomitant social, economic and health burdens
- Counter the strong influence of the tobacco industry
- Strengthen traditionally weak or ineffective tobacco control laws
- Involve and educate civil society on the importance of tobacco control
- Build an evidence base for developing effective tobacco control policies and programs
- Encourage long-term funding and resources for sustained research

To address the ambitious goals of tobacco control and the FCTC, strategies are needed to develop a critical mass of tobacco control researchers in regions like LAC. Mentorship can play an important role in building this critical mass.

In selecting mentees, I looked for those who were concerned about the welfare of others and broader society, and I hoped my investment of time in mentoring these individuals would have a multiplier effect. I see evidence of this multiplier effect in action, as I watch my former mentee, Raul Mejia, working with this international group of researchers to enhance his own mentorship skills in order to use those skills to assist others.

**Dr. Samuel Bosch**

Professor Emeritus and former Chair of International Community Medicine at Mount Sinai School of Medicine

Invited Speaker, IDRC–RITC Mentorship Workshop in partnership with CCGHR
Argentina, March 2007
Mentoring in Tobacco Control in LAC

Cultures Fostering a “Research Culture” and “Mentoring Culture”

Health research is poorly recognized in the LAC region. Multiple factors influence the research environment including, among others, lack of economic and human resources, non-existent academic careers, and a fragmented healthcare system. Mentorship is not formally recognized and the unusual cases that happen are mostly a matter of chance rather than an organized planned process. While the concept of mentoring is new to LAC researchers, the idea of a “role model” is familiar and has the potential to be used in the region to grow a mentoring culture.

Creating a “research culture” and a “mentoring culture” are not mutually exclusive. Fostering a mentoring culture has a multiplying effect by contributing to the creation of a “critical mass” of researchers, which would build capacity and enhance the research culture. This increased research capacity and connectivity between researchers through mentoring relationships will mean more rigorous, evidence based research that will support the design of effective policies at the national and regional level.

A strong tobacco control research culture requires researchers who have both the knowledge and the skills to develop, coordinate, and sustain research efforts. Mentoring is an effective way to pass along the necessary skills and knowledge from researcher to researcher and generation to generation. As well, researchers need to build an environment in which to disseminate knowledge to practitioners and decision makers. Mentoring links people and ideas, and enables those critical knowledge exchange networks to evolve. Tobacco control research is a complex, multidisciplinary field that requires integration of expertise from a large variety of disciplines including medicine, health sciences, social sciences, environmental sciences, nursing, communications, journalism, and law. It is also a field that has to deal with an industry that produces and markets a product that is known to cause death when used as intended and an industry that knowingly deceives the public in order to meet their bottom line. These complexities underline the necessity for a coordinated tobacco control research effort. Strong ties formed through mentorship will provide strength to the tobacco control research network in Latin America and the Caribbean.

Elements of Mentorship

Capacity: A capable mentor understands and supports the full research process, supports the personal and professional development of the mentee-researcher, and contributes to building and strengthening the research environment.

North-South Mentorship

North-south mentorship in tobacco control is important because it enables northern and southern researchers to share their experience and knowledge and exchange ideas. Northern researchers have a longer history of building evidence-based program and policy interventions and strategies to counter the tobacco industry.

Tobacco control mentoring has just started to grow among northern mentors and southern mentees. However, the complexity of tobacco control leaves room for innovation. Northern researchers have much to gain from the fresh perspective of their southern counterparts and as such, would benefit from the development of mentoring from south to north.
The north-south relationship needs to be fostered in a collaborative, rather than a paternalistic way. Researchers from the north need to recognize some of the challenges their southern colleagues face with funding and human resource constraints. In turn, southern researchers need to recognize that a mentorship relationship extends beyond financial assistance. The end goal of the mentor, mentee relationship should be the mutual commitment to work together and learn from one another in an effort to further tobacco control.

Another growing mentoring relationship is between southern tobacco control researchers who work or study in the north but mentor people in the south. This often involves long distance mentoring where the mentor and mentee continue to collaborate on projects from afar throughout their careers. It is also opening up mentoring networks for mentees to receive guidance and assistance from more than one mentor.

Training and educational opportunities in other countries, international conferences and workshops, and email exchanges between colleagues who work on similar research have formed the basis for an increasing number of north-south informal mentoring relationships. As well, programs based on the concept of mentoring are also starting to create more formal mentoring opportunities.

South-South Mentorship

South-south mentorship in tobacco control research is particularly important as it enables tobacco control researchers working within similar stages of the tobacco epidemic to exchange research and ideas with one another. It is unknown at this time what the mentoring culture is for the many different countries in the south but anecdotal evidence from Latin America and the Caribbean suggests that while the idea of “role modeling” is familiar, the concept of mentoring is not.

Despite language barriers, the tobacco control research culture in Latin America and the Caribbean is presently becoming stronger. Tobacco control conferences and workshops hosted in the LAC region bring together researchers and activists across the region and provide environments in which mentoring relationships can be initiated. Collaboration among tobacco control researchers is occurring among Latin American countries more than among the Caribbean countries. It is hoped that working toward the growth of a more formal research culture in the Caribbean will create an environment in which a mentoring culture can grow simultaneously.

New programs, initiated by organizations in the north, are working toward developing mentoring relationships in LAC through more formal mechanisms that set up mentee and mentor relationships. These programs aim to help coordinate and facilitate south–south mentor/mentee matches. It is hoped that these programs will contribute to expanding and strengthening both the “research culture” in individual countries as well as the “mentoring culture”. The idea is not to impose the northern concept of mentoring or northern research models but to have researchers nurture the kind of mentoring and research culture that suits their needs and culture.

Exercise 1: Opportunities and Challenges

Read the following case studies and note the similar opportunities and challenges that Latin American and Caribbean countries face in developing a mentorship culture. Were there other challenges and opportunities that were unique to each country? How do these challenges and opportunities for mentorship mirror (or not) the situation in your own country or region?

Mentorship in Tobacco Control – Case Studies from LAC

Argentina - Raúl Mejia, MD

Background

In 2006, the Argentinean Ministry of Health reported that 33.4% (men: 38.4%, women: 28.6%) of the population 18 to 64 years of age had smoked cigarettes in the previous twelve months.[6] As of July 2007, strong pressure from the tobacco industry has prevented Argentina from ratifying the FCTC.
Analyses of demographic predictors of smoking behavior indicate that Argentina’s smoking pattern is progressing towards the third stage of the smoking epidemic. This stage is characterized by converging smoking rates between men and women, as male rates start to decline and female rates hold steady or even continue to rise. Countries in this stage would benefit from proven interventions that would accelerate the transition to a lower prevalence of smoking and ultimately lead to lower death rates from smoking related diseases. To develop the proof or evidence needed for these interventions, local research is needed. In Argentina there is an increasing interest in tobacco control research as well as a growing number of researchers in the area. Researchers from academia, NGOs and governmental agencies are interested in information related to initiation of tobacco consumption, the social and demographic characteristics of smokers, and the effectiveness of individual and community interventions for decreasing tobacco use. Occasional informal mentoring occurs in Argentina but this is sustained more by personal relationships than by a formal institutional structure.

**Challenges**

Some of the needs faced by tobacco control researchers in Argentina in building a mentoring culture include:

- Introducing mentoring as an educational tool in tobacco control research
- Creating a research culture and a mentoring culture that will foster an environment where training in research and advocacy is seen as equally important as clinical work
- Identifying those colleagues with the appropriate knowledge and skills in tobacco control to participate as mentors in a mentoring program
- Developing a culture in which junior researchers see mentoring as an integral part of tobacco control research career development
- Creating an education system that has formal mentoring programs to help nurture the professional development of students or junior faculty in research or clinical careers
- Countering tobacco industry interference in tobacco control

**Opportunities for the Future**

The goal for tobacco control research in Argentina is to create a “critical mass” of researchers that will enhance the research capacity of local institutions, as well as create a coordinated network of mentors from a variety of disciplines. There are various opportunities to build on for the future:

*Political Climate*: The national government has signed but not yet ratified the FCTC, however, some tobacco control laws are being passed in several provinces and counties across the country. The Ministry of Health has started funding projects related to research in tobacco control.

*Building on Existing Experience*: Working with existing investigators who have been trained in Canada and the US and have experienced and observed mentorship relationships is an important starting point. International liaisons with universities and NGOs from Canada and the US could also be beneficial and provide assistance with technical and financial support. This will support Argentinean researchers to establish formal mechanisms for north-south and south-south collaboration between mentors. This, in turn, will produce more knowledge and evidence which can be used to influence and design policies at the national and regional level. Argentina has the opportunity to become a strong leader in LAC.

*Evaluating Mentorship*: Developing criteria for evaluating the success of the mentorship process at all stages will create an evidence base, from which to build further support, understanding, and structures for mentorship.

**Illustrative Story**

PT was a junior physician who joined the Internal Medicine Department of the University of Buenos Aires Hospital after finishing her residency in internal medicine in a county hospital. She worked three mornings a week without receiving a salary in the inpatient area. Her goal was to do research but nobody was interested in developing research projects in the division.

Three years later PT met a physician in the ambulatory area who was interested in research in tobacco control. She asked for a
meeting which started the beginning of a mentor/mentee relationship. The meeting resulted in an agreement to work together to prepare an application for a small research grant to study tobacco industry marketing strategies to youth. She was awarded the grant which funded a small portion of her time. Before starting, the Division Chief informed her that she must continue with her clinical assignments —without salary—because teaching and caring for patients were more important than research. PT was concerned that these activities would detract her from her research project and was worried that her project would have to be done in her own time.

A meeting between PT and her mentor raised the following four difficult challenges for the mentor:

1. How to improve the “research environment”
2. Where to find the resources to help mentees in these situations
3. What role the mentor should take in advocating for the mentee
4. What strategies to use to teach mentees to be their own advocate, articulate their needs and negotiate on their own behalf to ensure success

Exercise 2: Recommendations

What recommendations would you make to the mentor to assist the mentee in pursuing a research career in an environment that does not see research as a priority?

Guatemala - Joaquin Barnoya, MD, MPH

Background

Guatemala is a low-income country undergoing an epidemiological transition*. On the one hand, rural Guatemala is in the first stage of the transition where cardiovascular diseases account for only 5-10% of all deaths while nutritional deficiencies and infectious diseases account for the largest percentage of the country’s mortality. On the other hand, urban Guatemala is in the third stage of the epidemiologic transition, where cardiovascular diseases account for 35-65% of all deaths while nutritional deficiencies and infectious diseases have largely decreased.[7] Differences in cardiovascular disease risk factors (mainly smoking and obesity) largely account for this “double-burden” of disease. Despite this fact, governmental and academic interest in documenting the cardiovascular disease epidemic is scant. As of June 2007, there is no national survey on tobacco use or other cardiovascular risk factors. The only data available on smoking prevalence comes from isolated epidemiological studies. A study published in 2002 found a 41% smoking prevalence among urban males.[8] Another survey among medical residents found an 18% smoking prevalence (26% males and 7% females) and an unpublished survey on college students found the smoking prevalence to be 69%.[9]

In order to halt the spreading cardiovascular disease epidemic in Guatemala, there is urgent need for sound, evidence based, tobacco control legislation. However, there is little interest in general health research in Guatemala and almost non-existent interest in tobacco control research. Mentorship is not generally practiced and the unusual cases that develop are mostly a matter of chance rather than a formal process.

Challenges

Efforts to develop and build a mentoring culture in tobacco control in Guatemala need to include how to:

• Introduce mentoring as an educational tool in tobacco control research
• Foster a health research environment in general and tobacco control research in particular
• Find the economic and human resources required to establish formal mentor-mentee relationships
• Find a pool of possible mentees from which to draw candidates
• Identify institutions that will foster a mentor-mentee relationship (in an environment that lacks the option of an academic research career)
Develop research career paths in tobacco control based on mentoring

Opportunities for the Future

The challenges to mentorship and tobacco control in Guatemala presented may be mitigated and lessened by the following opportunities for the future:

Partnerships: In Guatemala, there are ongoing efforts to train researchers and build research capacity in collaboration with organizations in developed nations such as the Canadian Coalition for Global Health Research, the International Development Research Centre (IDRC), and some U.S. academic institutions. These efforts are a good foundation on which to build north-south and south-south mentoring opportunities.

Building Institutional Mechanisms: An important step for the future is to establish a research centre within an existing recognized institution in Guatemala (e.g. Aldo Castañeda Foundation) where research is coordinated and highly regarded. This would create an environment in which mentoring can be formally organized and nurtured; where researchers can engage in mentorship relationships that have a clear path of fostering both the mentors’ and mentees’ research careers.

Political Accountability: Guatemala has signed and ratified the FCTC, which obligates the government to engage in tobacco control. It is hoped that this will push tobacco control higher on the list of government priorities and strengthen the tobacco control research environment.

Illustrative Story

After five years of research training in academic institutions in the United States, DJ returned to Guatemala to continue doing health research in general, and tobacco control research as his expertise. DJ returned home with an appointment at the University of California, San Francisco, as an Assistant Adjunct Professor of Epidemiology and also became the Research Director of the Cardiovascular Unit of Guatemala.

After DJ returned, he believed obtaining funding for tobacco control research would be his greatest challenge. However, after succeeding in raising grant funds from the north, he realized that obtaining human resources was a far more difficult challenge to overcome. After hiring two “mentees” who where not very successful in dedicating their time to his project, he found Carlos.

Carlos, a recent graduate from medical school, met DJ after a lecture at the Guatemalan Congress of Cardiology. Carlos told DJ that he was interested in doing research. Coincidentally, DJ had an ongoing tobacco control research project in which Carlos could collaborate and be compensated for his time.

After the project was completed, Carlos asked DJ for some career advice at which point their relationship turned into one of an informal mentorship. Carlos’s short-term goal was to do an internal medicine residency in the United States. DJ wanted to guide his mentee and wondered what he could do and what resources he could draw upon to facilitate Carlos’s entrance to an academic residency program abroad. His own experience abroad had shown him that there was great benefit to learning how things are done in different settings and how to create positive change. He also hoped his own experience of returning to his home country would set an example for his mentee. While he recognized the value of training abroad, his greater goal was to create a research environment in Guatemala where his mentees would want to return. While DJ contemplated how best to assist his mentee with training related matters, he and his mentee also explored ways that Carlos could continue to engage in DJ’s research without losing sight of his other goal and looked at ways Carlos could help DJ attract new young fellows to pursue health and tobacco control research careers.

Exercise 3: Mentorship Relationship

Describe the elements that make the relationship between DJ and Carlos one of a mentor and mentee. Consider what steps need to be taken for DJ and Carlos to foster this growing mentor/mentee relationship and sustain Carlos’ dedication to furthering tobacco control efforts in his country.
Trinidad & Tobago – Daisy Rattan R/N, L/M, M.Phil. Ed.

Background

Trinidad & Tobago is a twin island republic and is the last of the chain of Caribbean islands situated to the north of Venezuela in South America. With a diverse population of 1.3 million, and a legacy of British rule, efforts to reform the health system have not brought about significant changes. Health research has been given low priority within the health system with poor research capacity building, a weak or practically non-existent research system, and the tendency to perpetuate the apprenticeship model of training for health professionals rather than formal mentoring.

While a number of professional, national and regional health research organizations exist, their efforts are uncoordinated and a lack of interest remains among the majority of health professionals. Most of the research studies conducted are mainly to satisfy the requirements of a course of academic study and those clinical studies done, whether funded or not, very rarely influence policy or practice. This indicates poor recognition of research findings and recommendations, not to mention the absence of a career in health research associated with low or no remuneration. In addition, the focus of research is mainly on the high priority areas i.e. HIV/AIDS; chronic non-communicable diseases; cancer, cardiac diseases, trauma and surgical improvements/interventions. However, specific focus on tobacco control research is not on the priority agenda, although data on smoking habits of the participants in most studies are often collected.

T&T has a smoking prevalence rate of 25% - 42% males; 8% females; 14% youth.[10] Despite tobacco control being a low priority, in 2004 Trinidad & Tobago ratified the FCTC and significant tobacco control policies have been instituted including: smokefree government buildings, health messages on cigarette packaging, and a ban on tobacco advertising and sponsorship. Discussions on draft legislation also continue. In order to determine the impact of such measures, baseline data needs to be collected and followed up with continuous monitoring and evaluation. This would require strengthening the tobacco control research environment and providing careers in research so that researchers can devote their time fully to research and mentoring.

Challenges

Some of the challenges researchers in Trinidad & Tobago face in trying to foster a mentoring culture include:

- Eliciting support, co-operation and participation in research activities resulting from the lack of a research culture within the health system.

- Instituting mentorship programs in the formal training of health professionals since historically the trend lends itself to apprenticeship.

- Placing tobacco control research on the priority list of the Essential National Health Research Council (ENHRC), and Caribbean Health Research Council (CHRC).

- Attracting funding for research in tobacco control and tobacco related issues.

- Attracting mentors and mentees through incentives to participate in tobacco control research towards building capacity in this field.

Opportunities for the Future

In order to confront the challenges, T&T has a number of opportunities to build on for the future:

Institutional Capacity: There are a number of active and committed national research organizations in Trinidad & Tobago (Midwifery and Nursing Research Society of T&T (MNRSTT), T&T Medical Association, ENHRC, CHRC, and the Coalition for a Tobacco Free T&T, among others). These institutions can help foster the development of a national research culture, which includes nurturing, supporting and coordinating mentoring relationships. In addition, relationships with international research organizations such as PAHO, IDRC/RITC, and WHO can contribute international perspectives to research and mentoring.

National Framework for Research: Together with other health...
researchers and health research organizations, the ENHRC is in the process of establishing a National Health Research Institute/Centre to coordinate health research in T&T and provide support to researchers and source funding for projects. These establishments will go a long way toward strengthening the research environment and providing careers in research which may be used to further strengthen mentorship structures and systems.

*Increasing Tobacco Control Leadership:* The Midwifery and Nursing Research Society of T&T (MNRSTT) is taking a leadership role on a number of international tobacco control research projects and is in the process of constituting a multidisciplinary team of mentees. This will be further strengthened through work on mentorship training together with CCGHR and IDRC.

**Illustrative Story**

Eva, a senior nurse educator/researcher, selected Issa as a mentee for tobacco control research from among the members of a research society. His selection was based on his interest in research (including tobacco control research), self-directed learning, commitment, responsibility and accountability to the profession, respectfulness of authority, and ability to receive criticism in a professional manner. However, Eva recognized that Issa lacked the experience to make a decision unassisted but could handle a situation if properly instructed. Therefore, she embarked on a coaching style of mentoring.

After initial discussions, it was agreed that a semi-structured approach would be used to develop the mentoring relationship and expectations and joint commitment were established, meetings and discussions were held, and reviews took place. In planning and reviewing the process, Eva introduced a Model of Improvement which is used extensively in managing change. This model prompted three questions with respect to the aim of the mentoring program – what are we trying to accomplish; how will we know that a change is an improvement; and what changes can we make that will result in improvement? The reviews on these questions are tested by a series of improvement cycles which is a repeated cycle of four stages – PLAN, DO, STUDY, ACT.

Each cycle is short but as each is accomplished, it builds on the previous, resulting in a steady improvement over time. Eva believes that the philosophy of this model is applicable to mentorship as it relates to change as a normal continuous process. Issa is enthusiastic about experimenting with this model although it requires him to critically analyze his aspirations and statements and to be precise with measuring change.

To support this process both Eva and Issa keep a personal reflexive journal which captures and describes the feelings of the experiences throughout the process. This journey in collaborative learning/mentorship allows both mentor and mentee flexibility, creativity and a world of possibilities.

Do you believe that mentor initiated relationships can significantly influence capacity building in tobacco control research and effect meaningful and lasting mentoring relationships? How so?

**Reflections on the Stories**

**Exercise 4: Mentee and Mentor**

What characteristics in a mentee does a mentor look for in order to establish an effective mentoring relationship?
What do you think are the advantages and disadvantages of the innovative approach used in this mentoring relationship?

The three illustrative stories on mentoring in tobacco control
research in Argentina, Guatemala, and Trinidad and Tobago raise many similarities as the authors explore their challenges and opportunities.

Those interested in mentoring the next generation of researchers often find it difficult to find mentees who are interested in establishing a mentorship relationship. Without a research culture in the country or an obvious career path in either tobacco control or research, it is difficult to find and encourage potential mentees.

All three stories reflect that new mentors are not always sure themselves as to the best way to guide and represent the interest of their mentees. They also have lots of questions.

All the countries face funding constraints. In Argentina, not only is there a lack of funding for the time mentees devote to their research, they also must pay for their own training and they do not have protected time for their studies. Trinidad & Tobago relies mainly on external funding for research but appears to have the most potential for developing internal funding mechanisms through a coordinated research effort while Guatemala relies heavily on the north for funding.

All three countries are confronted by an environment in which research is not seen as a valuable activity. Trinidad and Tobago is taking steps toward coordinating its research efforts but tobacco control remains a low priority. Young Argentinean physicians are expected to work in the clinical setting without pay and are provided no dedicated time for research. Tobacco control research in Guatemala is almost non-existent and finding a pool of potential researchers is a real challenge.

Despite the challenges for mentorship in tobacco control research in LAC, it is clear all three mentors are developing mentorship relationships on their own terms. The mentor from Trinidad and Tobago formed a formal mentoring model based on carefully selecting her mentee from an existing research pool. She analyzed the mentee's attributes and skills and matched them to her research needs. She used the PDSA cycle to guide their mentorship. The mentor from Argentina has learned that one invaluable part of his role is to help his mentees learn how to communicate to their superiors that research is valuable and could bring non-monetary benefits to the hospital like recognition and prestige. The mentor from Guatemala is contemplating how to create a tobacco control research institute where a pool of mentors/mentees can be nurtured.

Even though economic resources are scarce and sometimes not well prioritized, in the case of tobacco control research the current international interest in global tobacco control has created a pool of economic resources where mentors in LAC can find small amounts of money that can help initiate mentorship relationships.

While it is a challenge to find mentees interested in establishing a mentorship relationship, the mentors in Argentina and Guatemala have experienced firsthand that if they are open and approachable, informal opportunities for these relationships do develop. A more formal structured approach, like that of Trinidad and Tobago, where the mentor chooses a mentee may not be as organic but has potential for positive growth. The challenge for all is finding the appropriate pool of potential researchers.

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Final Reflective Exercise

The case studies in this module asked you to consider the role of a research culture and research system as well as the importance of relationships in mentorship for tobacco control. The case studies are presented from the viewpoint of three researchers working within the health discipline.

As part of final reflection on the ideas presented in this module, consider these questions:

- What role do disciplines other than health play in tobacco control? What role do they play or could they play in the case studies presented?
- Is the development of a research culture and culture for mentorship appropriate in all settings (e.g., such as hospital settings)? Are there limits or boundaries in striving to create these cultures?
So What Happened?

Argentina

The mentor, who was a respected physician, met with the Division Chief and negotiated for part of PT’s time. He argued that her work could benefit the Division because the papers produced after the research would acknowledge the Division and give it a higher profile.

He also gave PT a bibliography of resources on negotiation, which provided her with the basic skills needed to negotiate effectively with her Division Chief. PT and her mentor looked for other financial resources and found an NGO interested in funding part of the research.

PT finished her project successfully and applied for a new grant and now is working on a bigger project devoting 50% of her time to research and attending courses for improving her research capacities. This project involves teaching physicians how to use non-conventional methods (web based or quit lines) to help patients quit smoking.

Guatemala

In the following months DJ has been working with Carlos and has managed to arrange a one month elective with DJ’s mentor at the same University he had studied at in the United States. His mentee now has the opportunity to be able to extend his mentoring network by having the opportunity to work with his mentor’s mentor.

Carlos finished his medical board exams and is hoping to enter residency in the United States next year. In discussions with DJ, Carlos has expressed hopes that this mentorship experience will make him a more desirable candidate for an academic program in the U.S. In October, Carlos is expected to present a preliminary analysis of the tobacco control research he has been conducting with DJ since the beginning of their mentorship relationship at the Guatemalan Congress of Cardiology. In addition, Carlos has become a teaching assistant for the Biostatistics course that DJ is teaching at a medical school in Guatemala City. Through Carlos, DJ has received several requests from other students to collaborate in research. Currently DJ is waiting for more tobacco control research funds to arrive from Canada. Once he receives the funds, he will start a selection process interviewing mentorship applicants with the help of Carlos and someone from the Aldo Castañeda Foundation. Through this experience Carlos’s interest in tobacco control has increased.

Trinidad & Tobago

For Eva, the benefits of using the PDSA cycle in guiding the mentoring process have been the ability to: be specific about aims, take one task at a time, and celebrate small accomplishments. Each cycle takes the mentor and mentee closer to the goal. The major disadvantage is the demand it requires in order to meet timelines. This is due to the connection of each cycle and how each one feeds into the other, so that if one cycle is affected, the whole project is inadvertently affected.

Issa feels the pressure in this mentoring situation since it is happening for both the mentor and the mentee outside of normal work hours. This was evident from his personal journal entries. He believes that such a tight schedule may be better suited for formal mentoring among persons with research careers. Despite logistical growing pains Issa’s interest in tobacco control is being cultivated though this mentoring experience. His commitment to complete the present project and the professionalism with which he receives feedback are positive notes to move ahead.
Key Literature and Resources

Resources

Johns Hopkins School of Public Heath Center for Mind-Body Research
www.jhsph.edu/mindbodyresearch/mentoring_program/

A Guide to Training and Mentoring in the Intramural Research Program at NIH
www1.od.nih.gov/oir/sourcebook/ethic-conduct/mentor-guide.htm

Advisor, Teacher, Role Model, Friend
www.nap.edu/readingroom/books/mentor/#committee

American Heart Association Mentoring Handbook
www.americanheart.org/presenter.jhtml?identifier=3016094

NHS Modernization Agency, Series 3 – Building and nurturing an improvement Culture.
www.nhs.uk/improvementguides (Source of PDSA ).

Key Literature


UCSF Academic Affairs. UCSF Faculty Mentoring Program, Mentoring Facilitator Toolkit. San Francisco, CA 2005.

Hezlett SA, Gibson SK. Mentoring and Human Resource Development: Where We Are and Where We Need to Go. Advances in Developing Human Resources. 2005 November 1, 2005;7(4):446-69.


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[2]Hezlett S, Gibson S. Mentoring and Human Resource Development: Where We Are and
Where We Need to Go. Advances in Developing Human Resources 2005;7(4): 446-686


For the complete Mentorship Module Series, visit www.ccghr.ca

For further Information, please contact:

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“To become a professor of medicine or surgery now you have to be young, impossibly specialised to the point of non-functionality in any clinical reality zone, and skilled either in the treatment of rats and cats or in plagiarising other people’s research through meta-analysis.”

I wrote this section with both mentors and the mentored in mind. However, my primary target is the reader who is being mentored, whom I will call “you.” I hope it also will help mentors (whom I will call “they”) identify their duties and evaluate their effectiveness.

I think that the determinants of your “academic success” as a clinician-investigator (defined in terms of principal investigatorship, lead authorship, promotion, tenure, career awards, honours, power, and reputation) are not “academic” (defined in terms of intelligence, theoretical understanding, mastery of a body of knowledge, and teaching skills). Some clinician-investigators fail because they are crazy. Others fail because they lack minds that are “prepared” to generate important questions based on their clinical observations. However, the range of their intelligence is so compressed at the top of the scale that even if it were an important determinant, attempts to correlate it with success are doomed. Furthermore, academic failure is common among those who do and don’t understand the theory and know the facts, and are and aren’t excellent teachers. The ability to generate novel, imaginative hypotheses does play a role in the academic success of basic researchers. However, this rarely applies in patient-based and clinical-practice research (where the hypotheses usually are common knowledge and often originate with patients). Finally, I’m confident that none of you will seriously argue that being a nice person is a prerequisite for academic success.

What, then, are the determinants of your academic success for the clinician-investigator? I’ve concluded that they are three: mentoring, creating periodic priority-lists, and time-management. However, the evidence supporting my conclusions is of shaky validity. Most of it is based on a Level 4 case-series of young academics I’ve mentored and to whom I’ve taught priority-lists and time-management. I’ve also repeated Level 2b cohort observations of individuals who did and didn’t receive mentoring or employ time-management. In addition, I’ve made several Level 3b case-control observations of academics who clearly were and were not successful.

A literature search provided some confirmation for my conclusions, but no higher levels of evidence. Applying the MeSH terms MENTORS (510 hits) and TIME MANAGEMENT (901 hits) didn’t turn up any Level 1 evidence, but the Level 2-4 evidence I encountered there supports my thesis. I also found important evidence on the experiences and perceptions of women in medicine. A final note of caution: most of the clinician scientists I’ve mentored and observed in the USA, Canada, and the UK have been hospital-based internists. If you and your mentor are from another health discipline, you will have to decide whether and where the conclusions and recommendations I make in this section apply to you.

Mentoring

Mentoring is vital to your success as an academic clinician. For example, graduates of US-style primary care internal medicine research fellowship programmes were 5 times as likely to publish at least one paper and 3 times as likely to be PIs on a funded research grant if they had an “influential mentor” during their fellowship. Effective mentoring is of two sorts, depending on whether you are a newcomer or an established academic. For newcomers (such as graduate students or new faculty), mentoring provides three things. First, it provides resources without obligations. Second, it provides opportunities without demands. Third, it provides protection. I hope it’s already obvious (and I’ll reinforce this point later) that it requires an already successful and secure academic to provide this sort of mentoring.
By resources, I mean that a really good mentor would provide you with:

- space to work;
- productivity-enhancing equipment;
- free photocopy, email and internet;
- occasional secretarial support;
- money to go to courses and meetings;
- salary supplements if your fellowship doesn't provide for necessities and simple graces; and
- bridge-funding of your research until you get your first grant.

In some departments, all or most of these resources are provided by the chair, and in others, none. In either setting, your mentor should “wheel and deal” until the resources are in place. You should be spared both the time and the humiliation of begging for these resources on your own.

By opportunities at the beginner’s level, I mean the systematic examination of everything that crosses your mentor’s desk for its potential contribution to your scientific development and academic advancement:

1. The opportunity to join one of your mentor’s ongoing research projects. This can provide more than just “hands-on” practical experience in the application of your graduate course content. You can also learn how to create and function as a member of a collaborative team, and to develop skills in research management.

Taking on a piece of your mentor’s project to run, analyze, present and publish is a two-edged sword. On the one hand, it provides an excellent opportunity to go beyond the classroom and develop your practical skills in data management and analysis. Moreover, it gives you the opportunity to start to learn how to combine “science and showbiz” in presenting your results and writing for publication. Finally, your CV will benefit.

On the other hand, being given a project by your mentor can be harmful. The greatest risk here is that your mentor might “give” you a pre-designed sub-study or research project and encourage you to use it as your major (e.g., thesis) learning focus. Although often done with the best intention, accepting this “gift” is bad for you. This is because taking on a pre-designed project robs you of the opportunity to develop your most important research skills. First, you’ll lose the opportunity to learn how to recognize and define a problem in human biology or clinical care. Second, you’ll lose the opportunity of learning how to convert that problem-recognition into a question that is both important and answerable. Third, you’ll lose the opportunity to learn how to select the most appropriate study architecture to answer your question. Fourth, you’ll lose the opportunity to identify and overcome the dozens of “threats to validity” that occur in any study. These four skills are central to your development as an independent investigator. Without them, you will master only the methods that are required for your “given” project. Like the kid who received a shiny new birthday hammer, you’ll risk spending the rest of your career looking at ever less important nails to pound with your same old limited set of skills.

2. The opportunity to carry out duplicate, blind (and, of course, confidential) refereeing of manuscripts and grants. The comparison of these critiques not only sharpens your critical appraisal skills. It also permits you to see your mentor’s refereeing style and forces you to develop your own.

3. The opportunity to accompany your mentor to meetings of ethics and grant review committees to learn firsthand how these groups function.

4. The opportunity, as soon as your competency permits, to join your mentor in responding to their invitations from prominent, refereed journals to write editorials, commentaries, or
essays. Not only will the joint review and synthesis of the relevant evidence be highly educational. It also provides you the opportunity to learn how to write with clarity and style (see the section on writing). Finally, it adds an important publication to your CV. As soon as your contribution warrants, you should become the lead author of such pieces. The ultimate objective is for you to become the sole author (all the sooner if your mentor casts a wide shadow).

One note of caution about invited chapters for books: unless the book is a very prestigious one, its authorship adds little or no weight to your CV.

5. The opportunity to take over some of your mentor’s invitations and learn how to give “boilerplate” lectures (especially at nice venues and for generous honoraria).

6. Your inclusion in the social as well as academic events that comprise the visit of colleagues from other institutions should become automatic.

7. The opportunity to go as part of a group to scientific meetings, especially annual gatherings of the research clan. This has several advantages. First, it gives you the chance to meet and hear the old farts in your field. Second, it allows you to meet and debate with the other newcomers who will become your future colleagues. Third, you can compare your impressions and new ideas with your mentor while they are fresh, in a relaxed and congenial atmosphere.

Another note of caution: spending time going to meetings carries risks as well as benefits, as I’ll describe under time-management at the end of this section.

8. The opportunity to observe, model and discuss teaching strategies and tactics in both clinical and classroom situations. When you are invited to join your mentor’s clinical team, you can study how they employ different teaching strategies and tactics as they move from the post-take/morning report, to the daily review round, to the clinical skills session, to grand rounds. With time, you should take over these sessions and receive feedback about your performance. The same sequence should be followed in teaching courses and leading seminars in research methods.

As you become an independent investigator, your opportunities mature and incorporate two additional areas. First, your mentor should start nominating you to more advanced opportunities for increasing your academic experience, networking, and recognition. Examples here include scientific committees (e.g., grant review committees), task forces (e.g., for the development of methodological standards or evidence-based guidelines), and symposia (especially those that can result in first-authored publications). Second, your mentor should start nominating you for academic posts, writing letters of support and counselling you as you negotiate space, support staff, rank, and salary. Finally, your mentor should continue to be available for discussions of your triumphs and troubles and for letters of support as you proceed through the various stages of academic development, promotion, and tenure.

It is important that these opportunities are offered without coercion and accepted without resentment. Crucially, they must never involve the off-loading of odious tasks with little or no academic content from overburdened mentors to the beholden mentored.

By advice, I mean providing frequent, unhurried, and safe opportunities for you to think your way through both your academic and social development. Topics here include your choices of graduate courses, the methodological challenges in your research projects, the pros and cons of working with a particular set of collaborators, and how to balance your career with the rest of your life. For example, some mentors refuse to discuss academic issues at such sessions until they have gone through a check-list of items encompassing personal and family health, relationships, finances, and the like. Their advice should take the form of “active listening,” should focus on
your development as an independent thinker, and should eschew commands and authoritarian
pronouncements.

As long as gender-based inequalities exist in running households and raising children, mentors
must be knowledgeable and effective in addressing and advising around the special problems
that face women in academic careers. Although only 20% of female academics in one study
stated that it was important to have a mentor of the same gender\(^{12}\), it is imperative that all women
pursuing academic careers have easy access to discussing and receiving informed, empathic
advice about issues such as timing their pregnancies, parental leave, time-out, part-time
appointments, sharing and delegating household tasks, and the like. When the principal mentor
is a man, these needs are often best met by specific additional mentoring around these issues
from a woman.

I’ll discuss your mentor’s role in helping you evaluate your “priority list” and time-management
strategies later in this section.

When listening to you sort through a job offer, it is important for your mentor to help you
recognise the crucial difference between “wanting to be wanted for” and “wanting to do” a
prestigious academic post. You’d be crazy not to feel elated at “being wanted for” any prestigious
job, regardless of whether it matched your career objectives and academic strengths. However,
an “actively listening” mentor can help you decide whether you really “want to do” the work
involved in that post. It is here that they may help you realize that the post is ill-matched to your
interests, priorities, career stage, competencies, or temperament.

By protection, I mean insulating you from needless academic buffeting and from the bad
behaviour of other academics. Because science advances though the vigorous debate of ideas,
designs, data, and conclusions, you should get used to having yours subjected to keen and
critical scrutiny. For the same reason, you needn’t be tossed in at the deep end. Thus, for
example, you should rehearse formal presentations of your research in front of your mentor (and
whoever else is around). They can challenge your every statement and slide in a relaxed and
supportive setting. As a result (especially in these days of PowerPoint), you can revise your
presentation and rehearse your responses to the likely questions that will be asked about it. The
objective here is to face toughest, most critical questions about your work for the first time at a
rehearsal among friends, not following its formal presentation among rivals and strangers.

Similarly, your mentor can help you recognize the real objectives of the critical letters to the editor
that follow your first publication of your work. Most of them are attempts to show off (the
“peacock phenomenon”), to protect turf, and to win at rhetoric, rather than to promote
understanding. When serious scientists have questions about a paper, they write to its authors,
not to the editor. Your mentors also can help you learn how to write responses that repeat your
main message, answer substantive questions (if any), and ignore the tawdry slurs that your
detractors attempt to pass off as harmless wit.

Finally, disputes between senior investigators often are fought over the corpses of their graduate
students. This means you. Your mentor must intervene swiftly and decisively whenever they
detect such attacks on you, including especially those related to your sex, gender, race, or
orientation. The intention of your tutor’s rapid retaliation needn’t be to overcome your attacker’s
underlying prejudice or jealousy. It should merely make the repercussions of picking on you so
unpleasant for him that he never tries it again. If it wasn’t already part of your core training, a
study of the classic paper on “how to swim with sharks” should be part of this exercise\(^{17}\).

I don’t believe that academics ever outgrow their need for mentoring. As you become an
established investigator, you’ll require gentle confrontation about whether you are becoming a
recognised “expert” and taking on the bad habits that inevitably accompany that state\(^{18}\).

Moreover, given the huge number of highly prestigious but simply awful chairs and deanships that
are pressed upon even unsuccessful academics, these offers need the dispassionate (even
cynical) eye of a mentor who can help you distinguish the golden opportunities from the black holes. Finally, mentors can help senior academics find the courage to seize opportunities for radical but fulfilling and even useful changes in the directions of their careers. For example, I am ever indebted to my then-mentor Bill Spaulding, who helped me confirm the sense, and then find the courage, to repeat my internal medicine residency shortly before my 50th birthday.

What should you look for when picking a mentor (or in sizing up the one to whom you’ve been assigned)? I think your mentor should possess five crucial prerequisites:

1. Your mentor has to be a competent investigator. Although most will be clinicians, this needn’t be the case. Some of the most successful academic clinicians I know (including me) were mentored by biostatisticians.

2. Your mentor must not only have achieved academic success themselves, but must treat you accordingly. That is, your mentor must feel secure enough that they are not only comfortable taking a back seat to you in matters of authorship and recognition. They must actively pursue this secondary role. Everything fails if your mentor competes with you for recognition. Unfortunately, such competition is common, and you should seek help from your chair or program director if this happens to you (I devote lots of time to trying to resolve such conflicts before they destroy friendships and damage careers).

3. Your mentor should not directly control your academic appointment or base salary. Such controls interfere with the free and open exchange of ideas, priorities, aspirations, and criticisms. For example, you may find it difficult to turn down an irrelevant, time-consuming task offered by your mentor when they also control your salary.

4. Your mentor must like mentoring and be willing to devote the time and energy required to do it well. This includes a willingness to explore and solve both the routine and the extraordinary scientific and personal challenges that arise when they take on this responsibility.

5. Finally, your mentor must periodically seek feedback from you about how well they are performing. They must periodically evaluate their own performance, decide whether they remain the best person to mentor you, and identify ways to improve their mentoring skills.

Do the benefits of mentoring flow just one way, or do mentors benefit as well? A qualitative study of Faculty Advisors in Maryland identified several benefits of being a mentor:

- An enhanced academic reputation from spotting and developing highly talented young people.
- The development of a dependable junior colleague.
- The satisfaction of repaying a past debt owed their own mentors.
- The thrill and pride resulting from seeing a protégé succeed.
- The enjoyment and excitement of taking partial credit for their protégé’s success.

Making and updating your “priority-list”

You should start making and updating your “priority list” as soon as you gain the smallest degree of control over your day-to-day activities and destiny. This control might start the day you take up your first faculty appointment, or maybe after your successful thesis-defence. Updating, discussing, and acting on this list will be central to your academic success throughout the rest of your career. You should review and update this list at least every 6 months, and more often if needed. Its discussion is a key element of the mentoring process. For established academics, your mentor need no longer be a senior colleague; indeed, the most effective mentoring I’m receiving in the twilight of my career comes from younger colleagues.
Making, updating, and following your priority list is trivially simple in format, dreadfully difficult in execution, and vital to both your academic success and happiness. It has 4 elements:

List 1: Things you’re doing now that you want to quit.
List 1a: Things you’ve just been asked to do that you want to refuse to do.
List 2: Things you’re not doing that you want to start doing.
List 3: Things you’re doing that you want to keep doing.
List 4: Strategies for improving the balance within your lists by shortening List #1 (want to quit) and lengthening List #2 (want to start) over the next 6 months.

Note that the entries on this list are about doing (things like research, clinical practice, teaching, writing, and the like). They are not about having (things like space, titles, rank, or income). Note, too, that there are no “cop-out” entries for “things you have to do.” These “have-to-do” entries must be thought through until they can be allocated to either List 1 (want to quit) or List 3 (want to keep doing).

You can generate Lists #1 (want to quit) & #3 (want to keep doing) by reviewing your diary for the period since your last update. List #1a (want to refuse) comes from your mail and from recalled conversations with bosses or colleagues who were attempting to transform their problems into your problems.

List #2 (want to start) is more exciting. It comes from multiple sources:
- the next research question that logically follows the answer to your last one;
- ideas that arise from successes and failures with your patients;
- brain storms that occur while reading, or during conversations with colleagues;
- ideas that are formed during trips to meetings or other research centres;
- inspirations that arise in reading other people’s research in depth and with a critical eye;
- long-held aspirations that are now within reach;
- job offers;
- changes in life goals or personal relationships;
- etc.

Contemplating the length and content of List #3 (want to keep doing) enables self-diagnosis and insight. If it’s long, is it comfortable but complacent, stifling further growth? Worse yet, is it the list of an expert, comprising the tasks required to protect and extend your personal “turf” in ways that are leading you to commit the “sins of expertness”?"

The next, crucial step is to titrate Lists #2 (want to start) & #3 (want to keep doing) against List #1 (want to quit or refuse). Academic and personal disaster results from a dislocation between what you are doing and what is expected of you. This dislocation is inevitable when you fail to stop doing enough old things on List #1 (want to quit or refuse) to make it possible to pursue List #2 (want to start) while keeping up with List #3 (want to continue).

Dislocation and its sequelae are not new, and their causes have been acknowledged for decades. The special vulnerability of clinicians was reported over 20 years ago as they were already experiencing the constant pressure of trying to provide more and better patient care with resources that had already begun to diminish.

For “time-imbalanced” clinician-scientists, there are two outcomes. First, you can work day and night, keep up, and trade your family, friends, and emotional well-being for a reputation as a “world-class” academician. Second, regardless of whether you work day and night, you can fall behind and gain a reputation as a “non-finisher.” Either way, you increase your risk of slipping into emotional exhaustion, cynicism, feeling clinically ineffective, and developing a sense of depersonalization in dealing with patients, colleagues, and family. The term “burnout” has been applied to the resulting deterioration of values, dignity, spirit, and will. This process can start...
early in your career (even during your training), can take years to become full-blown, but by then
has a poor prognosis in terms of ever gaining career satisfaction or personal well-being.

Making and up-dating lists has two goals, then. One is the prevention of burn-out. The other is
the realization of a set of research, teaching, and clinical activities that would make it fun to go to
work.

All the foregoing leads to List #4, a tactical plan for improving the balance within your lists by
terminating entries in Lists #1 (want to quit or refuse) and having more time for Lists #2 (want to
start) and #3 (want to continue). You will add greatly to your academic reputation when your List
#4 (improving the balance) advocates gradual and orderly change through evolution, such as
giving 6-months notice on List #1 (want to quit) entries and helping find and train your successor.
Along the way, you can gain administrative skills by sorting out which of the List #1 (want to quit)
tasks can be delegated to your assistants, with what degrees of supervision and independence.
By the same token, it will greatly damage your academic reputation if your List #4 (improving the
balance) calls for revolution, resignation, or running away.

My psychiatric colleagues taught me that troubled families achieve about 80% of the benefits of
family therapy before they ever sit down with a therapist. The explanation is that they have
already acknowledged their problem and resolved to seek help in solving it. I likewise suggest
that most of your benefit from the periodic priority-list will occur before it is presented and
discussed with your mentor. Nonetheless, additional insights can come with presenting your lists
to someone else. Moreover, additional List #4 strategies for improving the balance, such as
learning how to say "no" constructively, can arise in these discussions.

Aspiring clinician-investigators, especially women, often face their greatest academic demands
during the period of greatest physical and emotional dependency of their children and partners.
The ability to discuss gender-specific conflicts in balancing priorities with an informed, empathic
mentor is essential.

The List #4 strategies for improving the balance that emerge from these discussions often focus
on the effective and efficient use of time, which leads us to the third determinant of academic
success: time-management.

Time-Management

The most important element of time-management for academic success is setting aside and
ruthlessly protecting time that is spent writing for publication. I’ve encountered several successful
academics whose only control over their schedule has been protected writing time. Conversely,
I’ve met very few academics who succeeded without protecting their writing time, regardless of
how well they controlled the other elements of their schedules. For some academics, this
protected writing time occurs outside “normal” working hours, but the price of such nocturnal and
week-end toil is often paid for by family and friends, and is a set-up for burn-out. The
prototypically successful academic sets aside one day per week (except during periods of
intensive clinical responsibilities; vide infra) for this activity, and clearly means it by telling
everyone that they aren’t available for chats, phone calls, committees, classes, or departmental
meetings that day.

I’ve never admired the publications of any academic who told me writing was easy for them;
those whose work I admire tell me they find it very difficult to write (although many find it
nonetheless enormously enjoyable and gratifying). Given the difficulty of writing well, no wonder
so many academics find other things to do when they should be writing for publication. The great
enemy here is procrastination, and rigorous self-imposed rules are needed for this protected
writing time:
- it is not for writing grants,
not for refereeing manuscripts from other academics (aren’t they already ahead of you with their writing?),
not for answering electronic or snail mail,
not for keeping up with the literature,
not for responding to non-emergencies that can wait until day’s end,
not for making lists of what should be written about in the future,
not for merely outlining a paper, and
not for coffee-breaks with colleagues.

Early on, self-imposed daily quotas of intelligible prose may be necessary, and these should be set at realistic and achievable levels (as small as 300 coherent words for beginners).

It is imperative that no interruptions occur on writing days. Unless you are protected by a ruthless secretary and respected by garrulous colleagues, this often can best be achieved by creating a “writing room” away from the office; whether this is elsewhere in the building or at home depends on distractions (and family obligations) at these other sites (for a time, I simply traded offices with a colleague who wrote the same day as I). Writing in a separate, designated room permits you to create stacks of drafts, references and the other organized litter that accompanies writing for publication. It also avoids your unanswerered mail, un refereed manuscripts, undictated patient charts and the other distracting, disorganized litter of a principal office. Moreover, if email is disabled in the computer in your writing office, a major cause for procrastination is avoided.

Mondays hold three distinct advantages as writing days. First, the things that “can’t wait” are much more likely to arise on Fridays, and very few things that arise over the week-end can’t wait until Monday night or Tuesday. Second, a draft that gets off to a good start on Monday often can be completed during brief bits of free time over the next 4 days and sent out for comments by week’s end. Third, the comforting knowledge on a Sunday night that Monday will be protected for writing can go far to improving and maintaining your mental health, family function, and satisfaction as an aspiring academic. And, of course, the more of your colleagues who write on the same day each week, the greater the opportunity for trading offices and the lesser the conflicts in scheduling meetings on other days in the week.

The second important element of time-management requires you to schedule clinical activities with great care. On the one hand, you want to maximize the delivery of high-quality care and high-quality clinical teaching. On the other hand, you want to avoid, or at least minimize, conflicts with the other elements of your academic career. Of course, your clinical work should complement your research. Indeed, your clinical observations, frustrations and failures should be a major source of the questions you pose in your research. But both of them require your full attention. Having to switch back and forth between them several times a week is a recipe for frustration and failure.

I reckon this conflict is best resolved in in-patient disciplines by devoting specific blocks (of, say, one month) of “on-service” time to nothing but clinical service and teaching. When on-service, your total attention is paid to the needs of patients and clinical learners. No time is spent writing, travelling, attending meetings, or teaching non-clinical topics. This total devotion to clinical activities often will permit you to take on more night call and a greater number of patients and clinical learners (on my medical in-patient service at Oxford I was on call every 3rd day, my clinical team of up to 16 learners and visitors, and admitted 230 patients per month, and in addition to our individual daily bedside rounds my Fellows and I provided 13 hours of extra clinical teaching each week).

When “off-service” your time and attention should shift as completely as possible to research and non-clinical teaching. Ideally, you should have no night-call when you are off-service. Moreover, you should not routinely see every admitted patient at a post-hospital out-patient follow-up visit
(again on my service, post-admission and pre-discharge telephone conversations with the patients’ GPs reduced out-patient follow-up to <5% of my admissions).

If you are worried about getting rusty or out of date between your months on service, precede them by shadowing a colleague for a week just before reassuming command (I alternated between the coronary care and intensive care units for my “warm-up” weeks). Like so many other elements of your academic success, this sort of time-management is fostered by the development of a team of like-minded individuals who spell one another in providing excellent clinical care.

Clinicians in other fields (e.g., intensive care and many of the surgical specialties) sometimes find it preferable to allocate time to clinical practice in units of one week. Another variant of scheduling is practiced by two of my former residents whose current incomes are derived solely from private practice. They devote 3 weeks each month to intensive clinical practice in order to free up the fourth for their highly successful applied research programmes.

This still leaves you with the out-patient dilemma. Academic clinicians usually accept ambulatory referrals to their general or sub-specialty clinics 1 or 2 half-days every week. In addition to the time you spend during the clinic session itself, you have to spend several hours during the following 2-3 days chasing down lab results, talking with referring clinicians, and dictating notes. This additional time conflicts with your research, teaching, and travel to meetings and other centres, diminishing your research and writing productivity, peace-of-mind, and fun.

Moreover, I think that this pattern of weekly clinics lowers the quality of patient care. What happens when you are 1000 Km away when one of your out-patients gets sick during the diagnostic tests you’ve ordered or has an adverse reaction after starting a new treatment regimen?

A solution you should at least consider is to stop holding your out-patient sessions every week and concentrate them into back-to-back-to-back clinics just once a month. By staying in town for the few days following this out-patient “blitz,” you can tie up four clinics’ loose ends all at once (especially if you can delegate chasing down lab results) and the rest of your month is free for academic activities.

My final advice concerns taking time to go to annual scientific and clinical meetings. Such meetings usually are fun and relaxing. They also can be highly educational (especially, as noted above, when you attend with your mentor), and sometimes offer the chance to meet or at least observe the ephemeral experts in the field. However, you have to pay the opportunity costs of attending meetings. You have taken time away from your teaching and patients, and especially from your writing. I know lots of world-renowned clinician scientists who seldom or never go to annual meetings (which should show you that attending them is not a prerequisite for academic success).

You might want to set up and follow some rules about annual meetings. I close with the set I give my fellows:

1. Never go to an annual meeting for the first time unless you have submitted an abstract that will get published in a journal (thus inaugurating your curriculum vitae).
2. Never go to that meeting a second time until you have a full paper based on that earlier abstract in print or in press (thus making a major contribution to your curriculum vitae and academic recognition).
3. Thereafter, only go to that meeting if both Rule #2 has been met and this year’s abstract has been selected for oral presentation (or you have been invited to give the keynote lecture).

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