Setting up and managing your science laboratory and team

Mansoor Husain, MD
Director, TGRI
Executive Director, TRCHR
Professor of Medicine, UofT

KNOW your institution, network and staff
FOCUS on your plan, implement it, and repeat
Toronto General Hospital
Research Institute
TGHRI Faculty: N=495

142 TGHRI-appointed scientists + 353 TGH-based clinical researchers

- 75% Clinicians
- 25% Non-clinicians

- Senior Scientists (61)
- Scientists (34)
- Assistant Scientists (1)
- Affiliate Scientists (46)
TGHRI faculty demographics: 2011 vs. 2016

TGHRI-appointed Senior Scientists, Scientists, and Assistant Scientists
TGHRI faculty: online profiles (N=142)

Online Profiles Searched:
- Google Scholar
- LinkedIn
- Research Gate
- UHN Research

Bar chart showing the percentage of TGHRI scientists with different numbers of online profiles:
- No Online Profiles: 0.7%
- 1 Online Profile: 31.4%
- 2 Online Profiles: 35.7%
- 3 Online Profiles: 28.6%
- 4 Online Profiles: 3.6%
- Formal Bio Available: 55%
TGHRI criteria for appointment & promotion

- High quality training environment
- Strong letters of recommendation
- High impact publication record
- Strong research proposal
- Strong communication & collaboration skills
- Alignment with TGHRI priorities

- Potential (and track record) for external funding
- Potential (and track record) for commercialization
- Potential (and track record) for leadership in field
- Participation and contributions to TGHRI activities
TGHRI funding sources and stability

Data for TGHRI-appointed Senior Scientists, Scientists, and Assistant Scientists
FOUNDATION SCHEME:
- Overall success rate: 13%
- UHN success rate: 17%
- TGHRI success rate: 19%
  - Total funds received: ~ $6.5M

PROJECT SCHEME:
- Overall success rate: 16%
- UHN success rate: 18%
- TGHRI success rate: 23%
  - Total funds received: > $4.5M
Know your network

• People:
  – Supervisors: current, former, their peers
  – Colleagues: trainee peers

• Forums:
  – Journals: reviewers, editors
  – Conferences: smaller > larger, social = scientific

• Advocacy:
  – Funding: agencies, panels, NGO
  – Propagate: industry, hospital, university, foundations
Know your staff

- **DO YOUR HOMEWORK** – learn your institution and as much as you can about decision makers and technical experts. *Reuse, recycle, repurpose.*

- **COMMUNICATE YOUR NEEDS:**
  - ALWAYS be ready for a spontaneous chalk talk, or formal slide presentation to profile your science and needs
  - Polished, professional, Do **NOT** oversell your work, **know and discuss its weaknesses** as much as its potential.
  - Carefully consider its alignment and future directions with your colleagues; **their resources become yours**

- Carefully interview your trainees & staff:
  - The A’s – avoid people who do not demonstrate themselves as **Affable, Authentic, Available, Accessible, Aligned and Able** – without **Arrogance**.
Communications

• Oral:
  – Be clear, concise, considered in your conversations. Take and use notes. Pause, take a breath, formulate your response in your head, before answering.

• Written:
  – Read every email at least twice before answering.
  – Read your responses three times before sending.
FOCUS on your plan, implement it and repeat.

• Follow what your grant proposed
• Use the funds you were provided as intended
• Hire people who can LEARN and adopt new skills and technologies as your science evolves
• Write up and publish in advance (or at worst concurrent) with your next grant application
The problem

The causes:

• Inadequate Trainees
• Inadequate early career development Especially Pillars 2, 3, and 4.
• A relative weakness in multidisciplinary, team, Network and KT research (especially pillars 3 and 4)

Realities of the Canadian Landscape

Elements of solution:

• Improved training and mentoring conditions
• Improved Early Career Development
Setting up and managing your science laboratory and team

Mansoor Husain, MD
Director, TGRI
Executive Director, TRCHR
Professor of Medicine, UofT

KNOW your institution, network and staff
FOCUS on your plan, implement it, and repeat