Panelists:
Emma Flores and David Fruman, University of California, Irvine
Tamara Hutto and Nael McCarty, Emory University and Georgia Institute of Technology
Kim Petrie, Vanderbilt University

Moderator:
Roger Chalkley, Vanderbilt University

Program Staffing at BEST Institutions
Program sizes

• The cohort model (usually small in number)
• All welcome and smaller in size
• All welcome and larger in size
• In all cases, not just directed at a single department
Staffing for BEST Programs

- 17 BEST Programs
- Multiple programs led by Co-PIs
- Only one single-PI program
- There are 42 Co-PIs, of whom 37 are faculty, and all but two have PhD or equivalent degrees.
- There are 34 major support role individuals, such as Associate Director, Program Manager, or Program Administrator, of which 27 have a PhD degree, and all have broad experience in this area.
- 7 of these programs were already invested in a significant degree of career support at the time of the award
## Staffing Structures at Three Presenting Schools

<table>
<thead>
<tr>
<th>Category</th>
<th>Vanderbilt</th>
<th>Atlanta</th>
<th>UC-Irvine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Planning &amp; Outreach</td>
<td>12.0%</td>
<td>10.0%</td>
<td>32.0%</td>
</tr>
<tr>
<td>Programs</td>
<td>40.0%</td>
<td>55.0%</td>
<td>28%</td>
</tr>
<tr>
<td>Marketing &amp; Communication</td>
<td>6.0%</td>
<td>5.0%</td>
<td>15%</td>
</tr>
<tr>
<td>Mentoring/Advising</td>
<td>7.0%</td>
<td>15.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Employer/Alumni Engagement</td>
<td>11.0%</td>
<td>5.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Research &amp; Evaluation</td>
<td>12.0%</td>
<td>5.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Outcomes</td>
<td>6.0%</td>
<td>3.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Dissemination</td>
<td>6.0%</td>
<td>2.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>
What do we spend the BEST $$ on?

• On average, we employ approximately 2.2 FTEs per program.
• Each program has approximately $250K per year.
• The math is easy—The bulk of the incoming BEST support goes for salary plus fringe benefits.
• So clearly the major financial commitment is for staff salary.
Could we do more with current resources?

- If we assume that we are focused and hard working, then without impressive increases in efficiency, we are going about as fast as we can.

What could we do with fewer resources?

- Again, using the argument above, we would have to cut some services and each individual staffer would be prioritizing in terms of efficiency and need.
Learning on the Job

So what do staff do?
• Contribute to the design of programs in responding to a need
• Design the material (possibly in concert with an expert that staff identify)
• Implement the exercise, experience, or program
• Evaluate and report to various advisory committees (at local level, BEST schools, and NIH)
• Complete paperwork and data reporting to Windrose, the data analytics group chosen by the NIH to work on overall data collection and analysis for the consortium
• Disseminate and communicate findings (website and publications)
• They do a lot! Staff are the mainstay of all the programs, and hence their selection is a very important part of the BEST process.

Staff Continuing Education-Where do they pick up new ideas?
• National Postdoctoral Association
• Graduate Career Consortium
• BEST Teleconferences
• Other Career or Graduate Education National Meetings.
• Annual BEST meeting in Washington, DC.
• Many big meetings especially from important societies now invite BEST team members to talk and provide updates
Professional Development Staff
Background and Skills

• Relevant experience in academic research setting, working with graduate students and faculty
• Familiar with adult learning principles
• Working knowledge of career and professional development processes, literature, resources, and communities
• Relationship building skills—group and 1:1 interactions, trust is key
• Facilitation and coaching skills
UC Irvine
Graduate Professional Success
in the Biomedical Sciences
GPS-BIOMED

Staffing Panel Session
BEST Practices Workshop
September 6-7th

Funded by the BEST Award within the NIH Common Fund
GPS-BIOMED
(800 PhD students, 300 Postdocs)
1.5 FTE: Assoc. Director, Evaluator & Alumni Relations

Hybrid Cohort Model
- Registered Trainees: 180 PhD students, 60 postdocs
- Trainee Council: 12-15 trainees from biomedical departments
- BEST Intern (1/yr)

New Programs:
- Career Exploration: Career & Networking Nights, Life Beyond the PhD
- Profession Skill Training: Communication, Business & Industry-focused
- Internship Preparation: Guided searches, resume & interview coaching
- Networking & Mentorship: Alumni Mentor Program, Networking mixers
GPS-BIOMED
(800 PhD students, 300 Postdocs)
1.5 FTE: Assoc. Director, Evaluator & Alumni Relations

GPS-BIOMED Leadership Team

David Fruman, Ph.D.
Professor of Molecular Biology & Biochemistry
GPS-BIOMED Director

Emma Flores-Kim, Ph.D.
GPS-BIOMED Associate Director

Casey Lough, MLA
Professional Development Project Specialist
UC Irvine Percent Effort
Career Development Categories

- Strategic Planning & Outreach: 32%
- Programs: 28%
- Research & Evaluation: 15%
- Marketing & Communication: 15%
- Mentoring/Advising: 5%
- Employer/Alumni Engagement: 4%
- Outcomes: 1%
Spotlight: Science Communication Training

Activate to Captivate
Elevator Pitch Series
Interview Coach
Spotlight: Career & Networking Nights

Erica Smith, Ph.D.
Genomic Scientist
Ambry Genetics

Hiromi Arai, Ph.D.
Research & Regulatory Scientist
ResearchDx

Julie Dela Cruz, Ph.D.
Publications Specialist
Allergan

Kaitlin Pugliese, Ph.D.
Associate Scientist
Illumina

Robert Lin, Ph.D.
Publications Planning Specialist
Allergan

Robert Morse, Ph.D.
Scientist
AnaptysBio
Spotlights: SciPhD The Business of Science

- Learn core business concepts
- Project management & financial literacy
- Network with colleagues & professionals
Spotlight: Alumni Mentor Program
Staffing: BWF BEST Practices Workshop

Nael McCarty and Tami Hutto

September 6-7, 2017
• Housed in Emory Laney Graduate School and subcontract with Georgia Tech
• Years 1-4 have been run as a cohort model, with additional activities for the whole community
  ➢ Cohorts = About 25 trainees each year go through a sequence of the same activities together and are made up of both Emory and GT trainees (PhD students and postdocs)
  ➢ Year 5 will be different
• Current Career Services Infrastructure is Limited
  ➢ Emory Career Center primarily serves Undergrad Students
  ➢ GT Career Center has 3 staff dedicated to Graduate Students – Engineering focused
Atlanta BEST Program

Dr. Lisa Tedesco – Emory
Vice Provost, Academic Affairs – Grad
Dean, Laney School of Graduate Studies

Dr. Keith Wilkinson- Emory
Co-PI IMSD grant

Dr. Lou Ann Brown- Emory
Director, Office of Postdoctoral Education

Dr. Wendy Newstetter - GT
Assist. Dean, Edu Research & Innovation
College of Engineering

Dr. Nael McCarty
Director, Atlanta BEST
Director, Grad Div Bio & Biomed Sci

Tami Hutto
Career Coach and Program Manager
Atlanta BEST, Emory and GT
24 Biomed related PhD Programs
35 Departments (postdocs)

⇒ EMORY

Grad Division of Biological and Biomedical Sciences (GDBBS)
- Biochemistry, Cell and Dev Biology (BCDB)
- Cancer Biology (CB)
- Genetics and Molecular Biology (GMB)
- Immunology and Molecular Pathogenesis (IMP)
- Microbiology and Molecular Genetics (MMG)
- Molecular and Systems Pharmacology (MSP)
- Neuroscience (NS)
- Population Biology, Ecology and Evolution (PBEE)

⇒ GEORGIA TECH
- Applied Physiology
- Biology
- Biomedical Engineering (joint)
- Chemical and Biomolecular Eng
- Chemistry & Biochemistry
- Computational Science & Eng
- Mechanical Engineering
- Physics

Rollins School of Public Health
- Behavioral Sciences and Health Education
- Biostatistics
- Environmental Health Sciences
- Epidemiology
- Health Services Research and Health Policy
Overall Staff Effort

- Strategic planning
- Liaise w/ program/university administrators/leaders
- Faculty outreach
- Manage program logistics
- Design and deliver workshops, seminars, courses

**Strategic Planning, Outreach, and Programs**

- **Research & Evaluation, Outcomes, Dissemination**: 13%
- **Employer/Alumni Engagement**: 5%
- **Mentoring/Advising**: 14%
- **Marketing & Communication**: 5%
- **Overall Staff Effort**: 65%
## “Must Haves” to Support PD

<table>
<thead>
<tr>
<th>Functions</th>
<th>Description of Job Responsibilities – can be done by shared or individual roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>→ Strategize</td>
<td>Be part of institutional and national level initiatives to create, integrate, and support opportunities/collaborations</td>
</tr>
<tr>
<td>→ Design</td>
<td>Creating and adjusting content, resources, and programming based on population, training, and reporting needs</td>
</tr>
<tr>
<td>→ Deliver</td>
<td>Bring content and resources to audiences though the classroom, online, and one-on-one appointments</td>
</tr>
<tr>
<td>→ Evaluate</td>
<td>Measure impacts of content and resource delivery to make recommendations for adjustments and to disseminate impacts</td>
</tr>
<tr>
<td>→ Organize</td>
<td>Schedule, communicate/market, and manage aspects of services and access to resources</td>
</tr>
<tr>
<td>→ Coach</td>
<td>Meeting one-on-one with students and faculty for PD related topics</td>
</tr>
<tr>
<td>→ Engage</td>
<td>Meet with internal campus stakeholders and relevant external communities to advise and leverage relevant initiatives and relationships</td>
</tr>
</tbody>
</table>
- **Career Exploration:** “Who am I?” and “What do I like doing?”
- **Professional Development:** Strengths, weaknesses, resilience, skill development
- **Career Development:** Job search documents and conversations

---

### Career Exploration
- Self Assessments
- Career Info
- Individual Development Plans
- Experiential Experiences
- Alumni/Peer Mentors
- Networking
- Career Planning

### Professional Development
- Communication (written/oral)
- Time/Conflict Mgmt
- Leadership
- Team Work
- Mentorship
- Resilience

### Career Development
- Employer Relations
- Job Boards
- Career Fair
- Resume/CV
- Interview
- Negotiation
- Career Fair

---

A lot of effort spent on the development of these areas, Years 1-3+

Years 3+
- *i.e.* Leadership Series + Team Projects
- *i.e.* Mentorship Series Faculty + Trainee

Years 5+
- *i.e.* Regional PhD Career Fair with multiple research institutions in Georgia
## Most Impactful Resources Provided

### Reflective Processes
- **Self-assessments**
  - Helped narrow down or confirm career interests.
  - Provided a greater sense of self-awareness/knowledge.
  - Identified strengths and weaknesses (behaviors).

### Psychosocial Support
- **BEST administration**
  - Provided direction and were used as a resource.
  - Gave individual attention and support.
  - Were accessible.
- **Cohort Community**
  - Offered opportunities for sharing experiences and making connections with others.
  - Provided peer support, motivation, and accountability.
  - Helped build trainees' peer network.
- **BEST Structure**
  - Promoted accountability.
  - Created dedicated time and space to think about careers.
  - Initiated team-building and bonding experiences.

### Informational Resources
- **Career labs and panels**
  - Provided career-relevant information.
  - Increased awareness of career types and understanding of day-to-day activities of specific jobs.
  - Offered opportunities for informational interviews.
- **Internships**
  - Helped improve confidence by understanding day-to-day activities and developing specific skills and knowledge.
  - Expanded professional network.

---

2017 Trainee Interviews and Surveys
“Results emphasize the role of the institution in driving career search efficacy and in affecting the career development activities of individuals. Institutional cultures are important in providing contextual support, as described by Lent and Brown [14]. However, given these findings, a lack of advisor support may not be as problematic as assumed given the relatively stronger findings specific to perceived program support as important for trainee career search efficacy...” (p.15)
Career Labs: Experiential Workshops

→ Hands-on workshops in between an informational interview and an internship

→ Simulate a typical job assignment or activity which is representative of job responsibilities involved in a particular career path – illuminating what a “day in the life” feels like

→ Facilitated by practicing professionals in their field- typically alumni, active in the design and execution of the career lab

→ 2-hours long, and run by 1-2 facilitators
  • Overview – Career path info and skills needed, as well as lessons learned
  • Hands on activity – Engage the participant in active assignments
  • Reflection – Debrief and relate it back to making informed career choices
Career Lab Examples:

- **Editing Careers** – Review and discuss manuscripts
- **Patent Law Careers** – Review a patent application and draft claims
- **Medical Science Liaison** – Read publications and summarize for different audiences
- **Consulting Careers** – Review a technology disclosure and perform a due diligence

**Staff Effort Includes**

- Identifying alumni or facilitator who has
  - Relevant experience to speak to the career of interest
  - Time to plan/design workshop (~2-3 hours of pre-work)
  - Ideally local so they can continue to deliver the workshop
- Work with the facilitator to design and execute the workshop
- Market and recruit participants
- Reserve rooms, set up and take down off workshop
- Evaluate and make any adjustments for next time

**Spring 2017:** 9 Career Labs
~150 participants
Career Lab Evaluations:

Did your participation in a career lab leave you with a better understanding about the job duties and activities for the career presented?

38 responses

“After the career lab, I learned I do not want to be a consultant!”
“I realized that I did not want to become an attorney, but became much more interested in MSL careers and other careers like those. I have done some research to determine what companies in my field recruit for these positions.”

- Trainee (1+ month after participation in the Patent Law and MSL Career Labs)
## Atlanta Society of Mentors

- **Faculty Mentoring Fall Series**  
  - Focus on mentoring PhD students and postdocs  
  - 8 consecutive sessions, Fridays from 1:00-2:00  
  - Inspired by the National Research Mentoring Network (NRMN)

<table>
<thead>
<tr>
<th>Date</th>
<th>Title of session</th>
<th>Facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 5</td>
<td>Introduction to Series</td>
<td>Bill Kelly and Dawn Comeau</td>
</tr>
<tr>
<td>August 12</td>
<td>Communications and Setting Expectations</td>
<td>Rick Kahn and Anita Corbett</td>
</tr>
<tr>
<td>August 1</td>
<td>Diversity and Cultural Issues</td>
<td>Pat Marsteller and Eddie Morgan</td>
</tr>
<tr>
<td>August 26</td>
<td>Conflict Management and Crucial Conversations</td>
<td>Ned Becker and Malu Tansey</td>
</tr>
<tr>
<td>Sept 9</td>
<td>Keeping Students on Track</td>
<td>Keith Wilkinson and David Weinshenker</td>
</tr>
<tr>
<td>Sept 16</td>
<td>Promoting Professional Development</td>
<td>Nael McCarty and Cora MacBeth</td>
</tr>
<tr>
<td>Sept 21</td>
<td>Mentoring and Diversity (optional)</td>
<td>Theatre Delta Group (external to Emory)</td>
</tr>
<tr>
<td>Oct 21</td>
<td>Self-Awareness and Self-Management (optional)</td>
<td>Tami Hutto</td>
</tr>
</tbody>
</table>

http://best.emory.edu/faculty/atlanta-society-of-mentors
ASOM Series Evaluation

• 43 total participants
• Main audience were faculty, some postdocs were invited
  • 44% Assistant Professor, 19
  • 23% Professor, 10
  • 14% Associate Professor, 6
  • 14% Postdoc, 6
  • 2% Instructor, 1
  • 2% Research Professor, 1
• 16 people received a certificate (37%)
  • Attended 6 of the 8 possible sessions
  • Letters also sent to Chairs

→ 100% of respondents said they have made or plan to make a change in their mentoring as a result of this training

Examples of changes from respondents:
• Use IDP more effectively
• Set expectations and regular communications
• Updated lab expectations/contract based on materials provided

“I will start providing mentees with IDPs, I will be more explicit in discussing expectations, and I will be (even more) mindful of how my words might be interpreted differently by my mentee depending on their potentially different background and lived experiences.” - Faculty Participant
Vanderbilt University (VU)

- Graduate School and GS Office of Postdoctoral Affairs
- School of Medicine
- Graduate School
- GS Office of Postdoctoral Affairs
- Office of Career Development (OCD, est. 2005)

Vanderbilt University Medical Center (VUMC)

- Biomedical Research Education & Training (BRET)
  - Training grants
  - SSA
  - Diversity initiatives
  - 1st year PhD programs
  - Postdoc affairs

VU’s BEST

Outcomes

ASPIRE

IMPACT • EXPLORE • ENHANCE
Who we serve

BRET OCD and ASPIRE serve ALL biomedical trainees

<table>
<thead>
<tr>
<th>Graduate students</th>
<th>Postdoctoral fellows</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 650 PhD students</td>
<td>• 450 postdocs</td>
</tr>
<tr>
<td>• 15 PhD programs</td>
<td>• 25 basic science or clinical departments in VU and VUMC</td>
</tr>
<tr>
<td>• 3 admissions programs (IGP, QCB, MSTP)</td>
<td>• 65% US citizens or permanent residents</td>
</tr>
<tr>
<td>• 90% US citizens or permanent residents</td>
<td></td>
</tr>
</tbody>
</table>

In Year 3 of BEST

63% students 76% postdocs participated in one or more programs.
Who we are – BRET OCD/ASPIRE

Roger Chalkley
Senior Associate Dean
BRET
BEST PI
0.15 FTE BEST

Kathy Gould
Assoc. Dean for Biomed Sci
BEST PI
0.2 FTE BEST

Kim Petrie
Assistant Dean
BRET OCD
BEST PI
0.5 FTE BEST

Ashley Brady
Dir. of Career Engagement & Strategic Partnerships
0.98 FTE BEST

Kate Stuart
Assistant Dir.
BRET OCD
0.5 FTE BEST

Angela Zito
Program Mgr.
BRET OCD
---- FTE BEST

Abby Brown
Director
Outcomes Research
0.1 FTE BEST

5.75 FTEs
(2.43 supported by BEST)

5 bioscience doctoral
1 MS HigherEd, 1 BA HOD
What we do

- Website, blog, e-newsletter, Twitter, LinkedIn group
- Weekly CV/resume clinic
- Individual advising
- Beyond the Lab videos

RESOURCES/SERVICES

- Ad hoc programs
- Annual Career Symposium & Monthly PhD Career Connections
- ASPIRE Program
  - ASPIRE Postdoc Café
  - ASPIRE to Connect
  - ASPIRE modules
  - ASPIRE internships/externships
  - ASPIRE on the Road

PROGRAMS
Three types of activities

**Professional skills**
Training in fundamental professional skills

- IMPACT course
- ASPIRE Postdoc Café
- ASPIRE to Connect
- Ready, Set, Goal!

**Exploration**
Facilitate exploration of range of career paths

- *Beyond the Lab* videos
- Externships
- ASPIRE on the Road
- PhD Career Connections
- Career Symposium

**Enhancement**
Gain experience for specific careers

- Modules
- Internships
BRET OCD behind-the-scenes

- Strategic planning
- Faculty outreach
- Employer & alumni relations
- Evaluation & outcomes

- 54 partner meetings in 2016-17
- 2017 Reunion
Overall staff effort

- Programs: 41%
- Research, Evaluation, Outcomes: 23%
- Employer/Alumni Engagement: 11%
- Strategic Planning & Outreach: 12%
- Mentoring & Advising: 7%
- Marketing & Communication: 6%