Fellowship Goals and Objectives

Goals
To prepare the participant to become an independent researcher through a directed, highly individualized post-graduate training.

Objectives
- Understanding of the PEOR concepts/methodological approaches
- Study design and analytical skills
- Communication skills (oral, written, e-mail)
- Proficiency in effective resource allocation to successfully complete a research project
- Proficiency in disseminating research findings
- Software applications skills necessary to conduct PEOR studies

Fellowship Characteristics

Setting: Consulting
Number of sites: Single-site
Program duration: 2 years
Didactic coursework availability: Through tuition assistance
Applicant qualifications: Masters/doctorate degree and 1-2 years of experience

Abt Bio-Pharma Solutions: Overview of Services

Health Economic and Outcomes Research Services

Preceptor and Fellow: Work Experience/Training

Prabashni Reddy, MS, PharmD
- PEOR Fellowship -Hartford Hospital/Hartford, CT
- Assistant Professor -Department of Pharmacy Practice, University of Connecticut/Hartford, CT
- Director* -HERQuLES, Abt Associates Inc., Lexington, MA

Svetlana Denevich, BS, PharmD
- Research Assistant -Research Institute for Physiology & Biophysical Oceanology
- UCLA Los Angeles, CA
- Boston Medical Center/Boston, MA
- Pharmacy Intern -VA Hospital/West Roxbury, MA
- Boston Medical Center/Boston, MA
Fellowship Experience – Type of Projects

<table>
<thead>
<tr>
<th>Project type</th>
<th>N</th>
<th>Tasks have been/will be accomplished (n of proj.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature search/review (including systematic assessments)</td>
<td>7</td>
<td>Literature search/review (6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of data extraction table shells (5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data extraction (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Summary/reporting (5)</td>
</tr>
<tr>
<td>Economic modeling</td>
<td>3</td>
<td>Literature search/review/summary (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expert interviews (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of data collection questionnaire (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Model design/programming (3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Results reporting/dissemination (3)</td>
</tr>
</tbody>
</table>

Fellowship Experience – Outcomes Measures

- Clinical disease markers
  - e.g., HbA1c and other glycemic control variables, BMI, cardiac function variables
- Efficacy/safety
  - e.g., efficacy/safety of drug treatment, cardiac imaging, surgical interventions
- Patient-reported
  - e.g., HRQL, disease burden, adherence/compliance, satisfaction
- Caregiver- and Clinician-Reported
  - e.g., caregiver burden, patient’s adherence, patient’s disease representation/severity
- Economic
  - e.g., cost of treatment, cost of illness, patient throughput/lab efficiency

HRQL = health-related quality of life

Fellowship Experience – Therapeutic Areas

- Cardiology
  - Cardiac surgery, cardiac testing
- Endocrinology and metabolic disorders
  - Diabetes, metabolic syndrome, obesity
- Hematology
- Oncology
  - Renal cell carcinoma, prostate cancer
- Ophthalmology
  - Cataract
- Neurology
  - Alzheimer disease
- Psychiatry
  - Schizophrenia
- Women’s health

Completed Coursework and Other Training

**Academic coursework**
- Biostatistics
- Epidemiology

**In-house training**
- Introduction to SAS
- Introduction to the use of Visual Basic for Excel Models

**Self-study**
- Pharmacoeconomics and Outcomes: Application for Patient Care, 2nd ed., ACCP 2003 (selected sections)

**Other training – ISPOR short courses**
- Elements of Pharmaceutical/Biotech Pricing I
- Case Studies in Pharmaceutical/Biotech Pricing II

Publications

**Manuscripts**

**Abstracts**
- Gao X, Spalding JR, Denevich S, Reddy P. Gender disparities in the utilization of myocardial perfusion imaging. Accepted to International Society of Pharmacoeconomics and Outcomes Research, Toronto, Canada
Strengths of the Program

- Diverse project portfolio
- Diverse staff background/experience
- Opportunity to simultaneously work on various components of multiple projects
- Development of good resource planning and time management skills

Areas for Future Development

- Greater emphasis on training
- More opportunities for taking courses or earning advanced degree/certificate in related disciplines
- Opportunities to network with other fellows
- Affiliation with an academic site

University of Illinois at Chicago (UIC)/TAP Pharmaceutical Products, Inc. Health Economics & Outcomes Research (HEOR) Fellowship

Robert Wittenberg, PharmD
- 2 Year Fellowship
- Degree-granting fellowship: MS in Pharmacy Administration

Program

- Curriculum
  - Biostatistics
  - Epidemiology
  - Pharmacoeconomics
  - Research Methods
  - Grant Writing
  - Psychometrics
  - Thesis-based Masters

Projects/Training

- UIC
  - Article Reviews
  - Retrospective Analyses
    (Pediatric GERD, Stroke PROs, Dietary Supplement Usage)
  - RFP

- TAP
  - Workshops: PRO
  - Medstat Marketscan

Bonuses

- Academic Setting
  - Other Grad Students/Fellows
  - Teaching Opportunities
  - Resources: Faculty, Hospital
  - CPR, DeCIDE Network
  - Guest Speakers/Lecturers

- Chicago
  - Local ISPOR Chapter
  - Multiple Industries, MCOs, Academic/Health Institutions

- Industry
**Challenges**

- $ 
- Back to school! 
- Learning to rethink things, methodologies 
  - From a clinical pharmacist training 
- Corporate Uncertainty 
  - Abbott and Takeda buyout of TAP 
- Expect the UNEXPECTED 
  - Fire at the College of Pharmacy 😈

**Objectives**

- To discuss UIC fellowships and how they relate to the ISPOR/ACCP guidelines 
- To share my experience as a fellowship advisor

**My Goal**

- Maximize the fellow’s experience given their background, interests, and the resources / environment available

**Advising Fellowships using the ISPOR/ACCP Guidelines**

A. Simon Pickard, PhD 
Asst Director, Center for Pharmacoeconomic Research 
Presented at the annual ISPOR conference 
Toronto, Ontario, Canada 
May 6th, 2008

**Fellowship Guidelines**

- Important to have clearly defined goals and criteria to be fulfilled during fellowship 
- Guidelines are a tremendous help to:  
  - Advisors: guide program structure 
    - Coursework 
    - Research experiences 
    - Evaluation of fellow and advisor 
  - Advisees: guide program expectations and experiences

**Fellows and Fellowships**

- Each fellowship at UIC is different 
  - Currently 4 fellows + 1 incoming 
  - Industry, Government, Academia (internal) 
- Every fellow is unique 
  - Clinical training 
  - Research training 
  - Experience 
  - Interests 
  - Intangibles 
- Guidelines: provide common template
**Effective Health Care Program: Structure**

- **DEcIDE**
  - Network: Developing Evidence to Inform Decisions about Effectiveness
  - EPCs: Evidence-based Practice Centers
- **Evidence Translation**
  - Eisenberg Center: Clinical Decisions & Communications Science
- **Academic Research Center**
  - Center for the Evaluation of Health Care and Technology

**Fellowship guidelines**

- Fellow completes the list as criteria are fulfilled
- Reviewed every 6 months
- Helps to guide priority setting for the coming year

**Successful advising**

- Understand fellow’s career goals/reason for doing fellowship
  - Industry
  - Managed care
  - Academia
- Use guidelines
  - To establish baseline knowledge/experience
  - To evaluate progress
  - To identify future areas of focus
- Act up feedback from sponsor on structure of fellowship
  - E.g., MS in Pharm Admin specializing in PEOR

**Other elements**

- Fellows and graduate students meet weekly as a research team
- Share research ideas, experiences, frustrations, successes
- Research, literature, statistics, philosophy
- Regularly interact with co-advisors
- Flexibility