### HUMAN GENOME SCIENCES





National Symposium on 21<sup>st</sup> Century Community Colleges March 15, 2011

### **CASE STUDY OVERVIEW**

### **PART 1:**

Human Genome Sciences (HGS) Company Background
HGS' Biotech Workforce & Hiring Strategy
HGS & Montgomery College Partnership: HGS' perspective

- Local Level
- National Level

### **PART 2:**

**Montgomery College perspective** 



#### **HGS COMPANY BACKGROUND**

Human Genome Sciences exists to place new therapies into the hands of those battling serious disease

Founded in 1992

Over 1000 employees

**Publicly traded on NASDAQ** 

Mid Stage & Late stage biopharmaceutical company

Cash and investments at Sept 30, 2010: \$1.0 billion

### **HGS MID-STAGE & LATE-STAGE DRUG PIPELINE**

Name Indication Phase 1 Phase 2 Phase 3 BLA Filed Systemic Lupus **BENLYSTA®** Raxibacumab Inhalation Anthrax Mapatumumab Cancer HGS-1029 Cancer **BENLYSTA** Vasculitis **BENLYSTA** Post-Renal Transplant<sup>3</sup> Additional Autoimmune **BENLYSTA** Anti-CCR5 mAb **Ulcerative Colitis** Darapladib Cardiovascular Disease Albiglutide Type 2 Diabetes



LEAD

EMERGING

GSK

### **HGS BIOTECH WORKFORCE**



#### **HGS BIOTECH WORKFORCE**

#### **Workforce Skill set:**

- Technical/ complex equipment operations
- High level of automation/ computer interaction
- GMP Procedures & Documentation (SOPs, Batch Records)
- Regulatory Agency Oversight
- Avoid Errors: Very High Batch Costs

### **Targeted Workforce: Manufacturing**

- Approximately 20% of the company work in Manufacturing
- Close to 100 people hired in past 15 months
- Spans HGS' 4 GMP Manufacturing Facilities



### **HGS HIRING STRATEGY**

Education Level	Details	HGS Preference?
4 Year Degree	University	Yes
2 Year Associates Degree	Community College (Montgomery College)	Yes
High School Education	No biotech knowledge or job experience	No

Important! Need alignment between community college programs and local industry hiring strategy. Market Driven workforce.



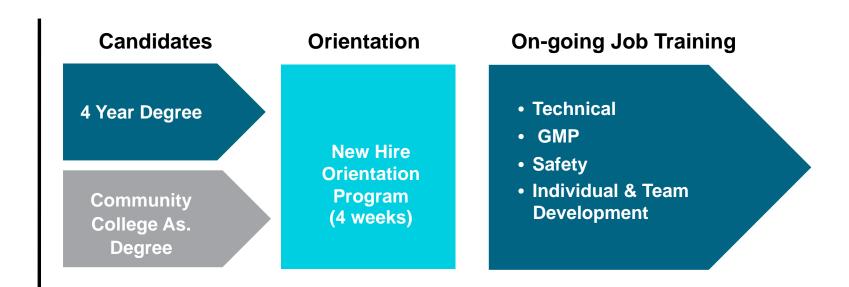


## HGS HIRING STRATEGY: SHIFT TOWARDS COMMUNITY COLLEGES

Category	HGS 2005	HGS Now
Target Candidate	Targeted: 4 yr degrees & 2-4 yr experience	Preferred: community college (Blend)
Education Preference	• 4 Year Degree: "Theoretical Knowledge"	Community College: More hands-on practical training
Hiring Approach	<ul> <li>Opportunistic: From other Biotech Companies not sustainable</li> <li>Longer time to fill positions</li> </ul>	<ul> <li>HGS provides additional new hire training</li> <li>Bigger pipeline: quicker to fill positions</li> </ul>
Retention	•After 2 yrs bored.	Better Retention: The job is above what's expected



### TRANSITION OF BIOTECH NEW HIRES



# VIDEO: COMMUNITY COLLEGE SUCCESS STORIES

### **Professor Collins Jones & Ritchie Vehemente**



### HGS & MONTGOMERY COLLEGE PARTNERSHIP: 'LOCAL' LEVEL

### 1. Biotech Program Support

- HGS participates on Biotech Program Advisory Board
- Equipment donations
- Curriculum review / Curriculum sharing
- Student Tours @ HGS
- Teaching Assistance: 1 HGS adjunct professor & Guest lectures

### 2. Recruitment Assistance into the Community College

- Present/ Participate at Teachers Workshops
- HGS Scholarships to Montgomery College per successful hire
- HGS take on Part Time contractors/ Internships
- HGS Open House for Hiring Ramp ups



### HGS & MONTGOMERY COLLEGE PARTNERSHIP: 'NATIONAL' LEVEL

Driving a nationwide approach to improving the Biotech workforce

Since 2006, both are partners in NBC2 Biotech Industry & Colleges Nationwide Collaboration (NSF funded)

### **NBC2 Board: 20 Industry & 14 Education Partners**

HGS & Montgomery College plus: Lonza, GSK, Pfizer, Biogen,...

### **Developed Skill Standards and a Global Biotech Curriculum**

- Textbook
- Lab Manuals & Instructor Guides
- Computer Simulation Training

