



**Training Proposal for:  
Accuray Incorporated  
Agreement Number: ET10-0253**

Panel Meeting of: **October 23, 2009**

ETP Regional Office: **San Francisco Bay Area**

Analyst: T. Teles

**PROJECT PROFILE**

Contract Type: Priority/Retrainee

Industry Sector(s): Manufacturing

Counties Served: Santa Clara

Repeat Contractor:  Yes  No

Union(s):  Yes  No

Priority Industry:  Yes  No

No. Employees in CA: 352

No. Employees Worldwide: 470

Turnover Rate	Manager/Supervisor
18%	16%

**FUNDING DETAIL**

Program Costs	Substantial Contribution	Total ETP Funding
\$304,200	\$0	\$304,200

In-Kind Contribution
\$495,418

**TRAINING PLAN TABLE**

Job No.	Job Description (by Contract Type)	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	Priority/Retrainee	Advanced Technology, Business Skills, Computer Skills, Continuous Improvement, Manufacturing Skills	325	24-200	0	\$936	\$14.18
				Weighted Avg: 52			

**Minimum Wage by County:** \$14.18 for Santa Clara County

**Health Benefits:**  Yes  No This is employer share of cost for healthcare premiums – medical, dental, vision.

**Used to meet the Post-Retention Wage?:**  Yes  No

Although employer provides health benefits, they are not being used to meet Post-Retention Wage.

Wage Range by Occupation	
Occupation Title	Wage Range
Administration/Business/Finance Specialist	
Engineer, Scientist, Technician	
Project/Program/Account Manager, Project Director	
Production Staff	
Director	
Manager/Supervisor	

**INTRODUCTION**

In this proposal, Accuray Incorporated (Accuray) seeks funding for retraining as outlined below:

Accuray began when a professor of neurosurgery and radiation oncology at Stanford University Medical Center developed the CyberKnife® System in 1987. The CyberKnife System is a radiosurgery system that combines image guidance and computer controlled robotics used in the treatment of tumors. Accuray was incorporated in 1990 and the Federal Drug Administration (FDA) approved the CyberKnife System in 1999 to treat head, neck, and upper spine tumors. Since 1999, the FDA has approved another version of the CyberKnife System that allows clinicians to continuously track, detect, and correct for tumors that are affected by respiration, such as those in the lung, liver, and pancreas. The newest system, the Xsight® Spine Tracking System, introduced in 2005, makes it possible to automatically track, detect, and correct for tumor movement throughout the treatment. To date, Accuray has 176 CyberKnife

Systems installed worldwide that have been used to treat more than 70,000 patients. The company is headquartered in Sunnyvale with 352 employees in California.

The company qualifies for priority ETP funding as a manufacturing company facing out-of-state competition under Title 22, California Code of Regulations, Section 4416(b).

## **PROJECT DETAILS**

Accuray representatives state that company expansion is being driven by favorable demographic trends as the baby-boom generation comes into the prime age for medical procedures. Accuray will be upgrading its research and development laboratories and test equipment in order to produce next generation CyberKnife equipment. Further, regulatory compliance is a key issue for the medical device manufacturers which must meet rigid compliance and quality standards set out by the FDA. Accuray must also continue to meet ISO 13485 Standards and FDA Process Controls. These quality standards include corrective and preventative action systems for product design, materials, production facilities, equipment, records, and documentation. Meeting these rigorous quality requirements can impact time to market, costs, and competitiveness.

The company will provide the following training:

**Advanced Technology** training will include Robotics & Design Tools Software used in the CyberKnife system. The system's Advanced imaging, 6D technology, robotic mobility combined with highly intelligent automation, allows even the most complex treatments to be delivered more simply by doctors. Products such as this require developers to possess advanced skills in engineering and design to incorporate video, camera, wireless, power cables, imaging technology, and advanced radiation sources. In order to continue this line of product and features, engineering and technical staff must stay current on the latest technologies and be prepared to provide sophisticated new business solutions to customers. MicroSoft Dynamics ERP Tools will be used to integrate additional tools and applications throughout the company. The company will train key engineers in these skills and they will then provide training to the remaining population.

**Business Skills** training will be provided to sales staff, engineers, program managers, and other customer support staff. These employees must be knowledgeable of Accuray products and services to be able to market the products and to assist customers with technical inquiries. Employees will be able to develop marketing plans and manage projects more effectively which will improve communication within the organization and with customers.

**Computer Skills** training identified in this ETP project will focus on design applications for sales engineers as well as training engineers and technical workers in all aspects of hardware and software tools. Further, employees need to learn a wide range of new computer applications to streamline processes that will enhance productivity.

**Continuous Improvement** training will be conducted throughout the organization. Accuray is implementing a Statistical Process Control (SPC) process in an FDA environment. By collecting data at various points within the processes, variations that may affect the quality of the end product or service can be detected and corrected. SPC will ensure that problems are not passed on to the customer which will reduce waste and rework and reduce the time to market. This training will also provide team leaders who will be able to coach and lead high performance work teams in a highly technical and regulated environment.

**Manufacturing Skills** Accuray's robotic surgical equipment manufacturing process must meet strict medical standards which require constant updates on products, processes, and documentation. Production workers will receive training to maintain their skill level per FDA requirements and to be able to work on the next generation equipment. Engineering staff must be able to respond to changes in the manufacturing process as well as new project designs. Sales and marketing associates will also need training on new products in order to promote the benefits of the technology to the medical professionals.

### **Advanced Technology**

Advanced Technology skills will be provided to 115 engineers and technical staff who are involved with the software used in the technology and design of the CyberKnife. Training is essential for the use of the upgraded engineering software; integration of new software; network installation, maintenance and security; and highly sophisticated technological topics required for the research and development of the company's advanced products. These courses involve the use of sophisticated technology, equipment, and software in the delivery of training, and the curriculum is highly technical in nature. The identified trainees are required to have an advanced level of knowledge, skills, and competencies to be able to provide advanced solutions for the company. Accuray has researched several vendors and the cost to deliver AT training is estimated to cost between \$1,500 to \$2,500 per person which will exceed the \$26.00 per hour ETP rate. The trainer-to-trainee ratio is 1:10 for AT to allow in-depth coverage and personal attention from the instructor.

### **Commitment to Training**

Accuray ongoing training efforts include new hire training and orientation, compliance training, tuition reimbursement, degree programs, health and safety, basic computer skills, and special training requests. The annual training budget is \$378,000 in California.

Accuray represents that ETP funds will not displace its existing financial commitment to training. Indeed, Accuray anticipates that the opportunity for enhanced training made possible by ETP funds will encourage an ongoing financial commitment in this area.

Accuray represents that safety training is, and will continue to be, provided in accordance with all pertinent requirements under state and federal law.

### **Temporary to Permanent Hiring**

Some trainees come under Panel guidelines for "temporary to permanent" employment. The company has retained these employees through a temporary agency, with the intention of hiring them into full-time, permanent positions after training.

These trainees must be determined eligible to participate in ETP-funded training before the start of training, while on payroll with the temporary agency. (Unemployment Insurance Code Section 10201(c).) However, the retention and post-retention wage requirements cannot be satisfied until after they have been hired by the company. Until then, the company will not receive progress payments.

**RECOMMENDATION**

For the reasons set forth above, staff recommends approval of this proposal.

**DEVELOPMENT SERVICES**

The company retained California Training Administration (CTA) in San Jose to assist with development of this proposal at no cost to the company.

**ADMINISTRATIVE SERVICES**

The company also retained CTA to perform administrative services in connection with this proposal for a fee not to exceed 13% of payment earned.

**TRAINING VENDORS**

Mentor Training of San Jose has been retained to provide training for a fee of \$25,000. Other trainers will be identified for ETP record-keeping purposes as they are retained by Accuray.

**Exhibit B: Menu Curriculum****Class/Lab Hours**  
**24-200**

Trainees will receive any of the following:

**ADVANCED TECHNOLOGY**

- Clinical Development Research
- CyberKnife System Next Generation
- Data Management Systems
- Design Technology
- Document Control System (DCS)
- Product Specialist Skills
- Robotic Technology
- Tracking Systems
- Treatment Delivery Systems
- Treatment Planning
- (ERP)/Microsoft Dynamics 2009
  - - Customization/Security
  - - Database Management
  - - Implementation Strategies
  - - Material Management
  - - Navigation Techniques
  - - Operation/Queries
  - - Programming/Software Design
  - - Reporting Capabilities/Forecaster
  - - SharePoint Design
  - - System Administration
  - - System Configuration

**MANUFACTURING SKILLS**

- Accuray Product Updates
- Clean Room (Titanium, Stainless Steel, Mercury, Lead)
- CyberKnife System Assembly
- Device Handling/Storage
- Document Revision/Digital Documents
- Engineering for Manufacturing
- High Definition Imaging
- Manufacturing Equipment (maintenance/operation)
- Manufacturing Skills (medical devices)
- Materials Transfer/Packaging/Shipping
- Micro Powered Instruments
- Power Vehicle Training (forklift)
- Production Training (on floor training)
- Refurbishing/Repair/Testing
- Robotic Assembly
- ROHOS - Restricting of Hazardous Substances
- Scopes, Monitors, LightSource, Drills, Carts, Printers
- Wireless Transmission

**BUSINESS SKILLS**

- Accuray Business Flow (Zodiak)
- Accuray Partner Training
- Accuray Product Training
- Customer Support
- Global Marketing
- Managing Projects or Programs
- Material Management/Supply Chain
- Risk Management
- Sales Support
- Service Contract Process
- Strategic Planning
- Supplier Support
- Technical Business Writing
- Technical Presentation Skills
- Technical Product Support

**COMPUTER SKILLS**

- Microsoft Dynamics ERP Tools
- Computer Programming
- Computer-aided Finance/Accounting tools
- Database Tools
- IT Solutions/Technology Advances
- Managing Materials & Services
- Manufacturing Computers System
- MicroSoft Office Tools (Intermediate/Advanced)
- Simulation Tools
- Software Development
- System Configuration

**CONTINUOUS IMPROVEMENT**

- APICS - Basics of Supply Chain Management
- Audit Prep & Quality
- Blood-borne Pathogens, Safety
- Certified Assessor Course
- CGMP - Clinical Good Manufacturing Practices
- Change Control Procedure
- Conflict Management
- Efficiency & Workflow
- High Performance Work Teams (HPWT)
- Interview Gallup SSP Training
- ISO 13485 Medical Standards
- Leadership/Coaching Skills
- Lean Enterprise
- Mentor Training/Working Smarter
- Performance Management

- Power Vehicle Training (forklift)
- Productivity Improvement
- QSIP (Quality System Improvement Plan)
- Statistical Process Control Techniques (SPC)
- Effective Meetings/Problem Solving
- Validation/Verification
- Workmanship Standards
- Workplace Communications
- Zero Defect/Kaizen/Six Sigma

Note: Reimbursement for retraining is capped at 200 total training hours per trainee, regardless of delivery method.