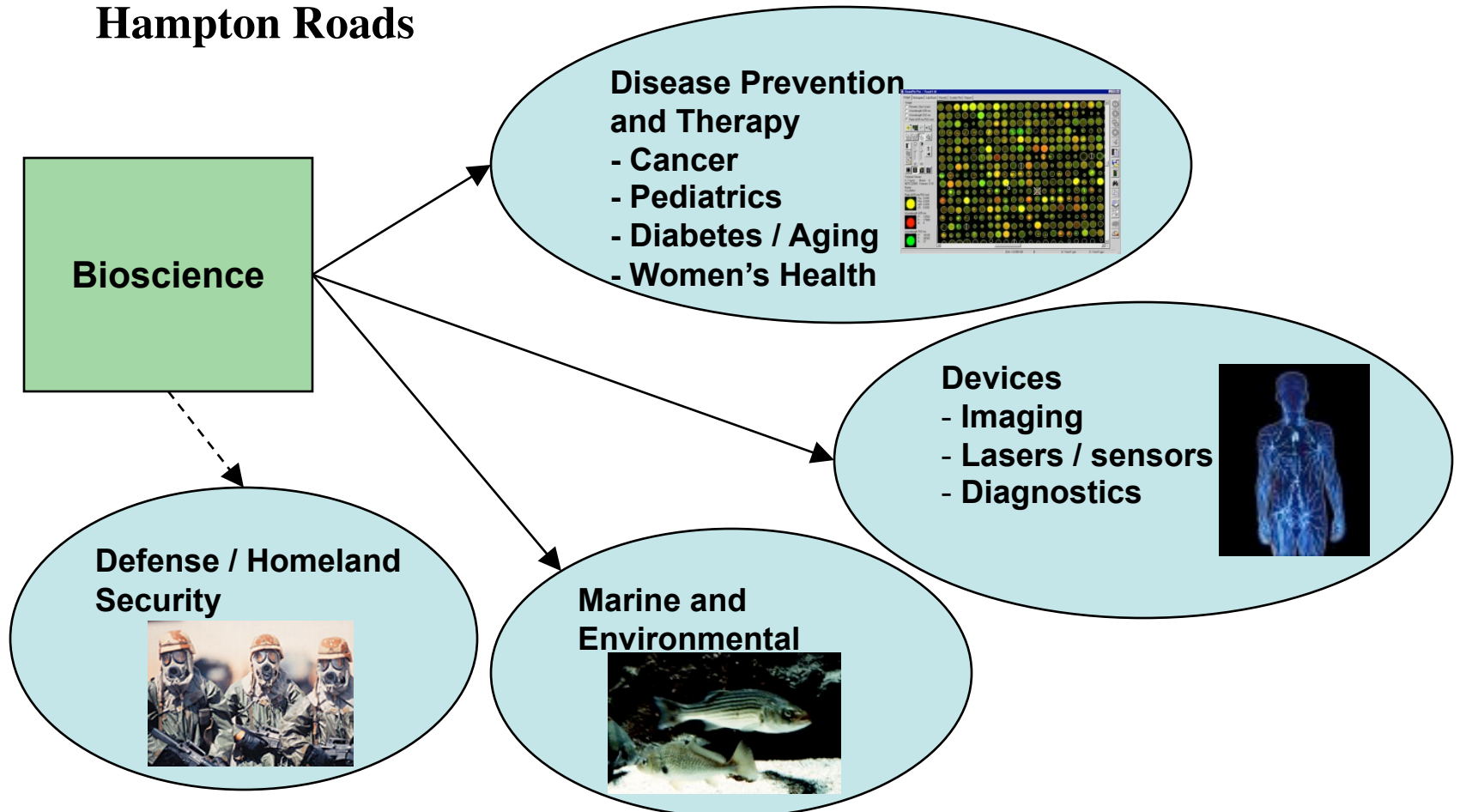


# Global Biosensor Sales over \$4billion in '09

## Numerous Biosensor Opportunities in Hampton Roads






**Unique Potential:** Convergence with other local  
Technology areas in sensors, modeling/simulation and  
information technology.


# HRRP Bioscience Cluster

## A growing Bioscience Research and Development Base



Over \$100 million per year in funding

**National Research Centers**  
 Bioelectronics   
 Marine   
 Proteomics 

**Unique Research Resources**  
 Free Electron Laser   
 Proton Beam Center 

**Research Parks and Incubators**  
 Hampton  
 James City County  
 Innovation Park   
 McDemmond RISE 

**Workforce Training Programs**  
 EVMS   
 Hampton University   
 NSU 



# Core Technologies for Medical Bio-Sensors

## Potential Collaborators

- **MATERIALS SCIENCE**
- **MICROELECTRONICS/PIEZOELEC.**
- **LASERS/PHOTONICS/PLASMAS**
- **MASS SPECTROMETRY**
- **ULTRASOUND**
- **DNA ARRAYS**
- **ROBOTICS**
- **CELL/ORGANISMAL MODELS**
- **HUMAN FACTORS**
- **COMP. ANALYSIS/BIOINFORMATICS**

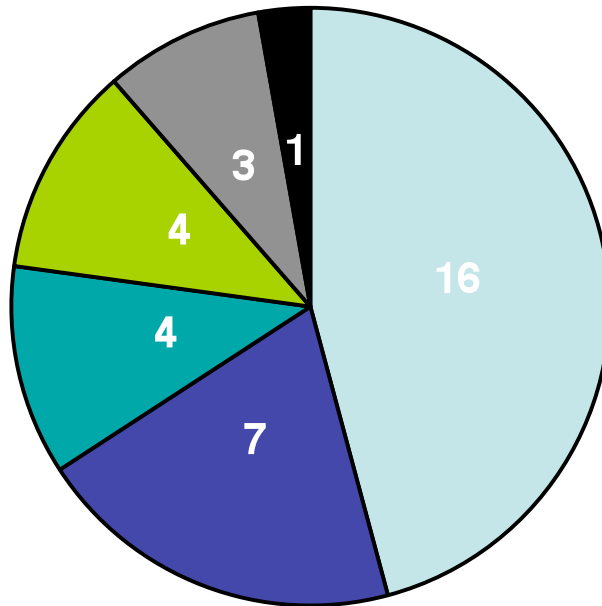
- **CNU, NSU, ODU, W&M, JLab, NASA**
- **NSU, ODU, NASA**
- **CNU, HU, NSU, ODU, W&M, JLab, NASA**
- **EVMS, ODU, W&M, NASA**
- **NASA, JLab, NASA, NIA**
- **W&M, EVMS**
- **ODU, CNU, NASA, NIA**
- **EVMS, ODU, W&M, VIMS**
- **CNU, NSU, ODU, VWC, W&M**
- **ODU, W&M, EVMS, NSU, NASA, JLAB**



HAMPTON ROADS  
Research Partnership

# HRRP Bioscience Cluster

Over 35 regional Bioscience companies and a growing list of products in the market place.



- Bioscience Devices
- Food
- Consultation
- Pharma/Nutraceuticals
- CROs
- Software



# HRRRP Bioscience Cluster

**Value Proposition: Innovation and Economic Development**

