# US SCIENCE ENVOY PROGRAM LESSONS LEARNED AND RECOMMENDATIONS

ELIAS A. ZERHOUNI, MD Johns Hopkins University

# PERCEPTION AND RECEPTION in the Gulf and North Africa regions

- All governments and institutions in the region see progress in S&T as essential to their future.
- The US is uniformly seen as the example to follow and the preferred country to partner with for Science and Technology
- Since 9/11 due to visa and security issues most of these countries have sought to diversify their S&T relationships and collaborations towards Europe and Asia

# The Science Envoy Program

- Extremely well received from grassroots contacts with to high level meetings and from students to heads of state.
- A statement from the Obama administration for positive re-engagement
- Personal credibility and contacts of the Envoy was key!
- Skepticism as to "reality" of the effort.
- Public Diplomacy vs Tangible new era in S&T diplomacy
- High positives but will we follow through?

# The common themes

- Greater connectivity and direct interactions with US educational system
  - Sustained pairing from scientists to scientists
  - Easier exchanges- students and faculty
  - Partnering for centers of excellence in relevant priority areas
    - Water, food and energy security
    - Health environment
    - Science policy training and know how to establish evidence based and MERIT based systems

# The common needs

- English education
- More user-friendly Knowledge and Know-How sharing mechanisms
- STEM education programs from primary schools onward
- Lack of qualified teachers
- Young Population and demographic pressures tax educational system
- How to establish a stronger scientific culture of inquiry as opposed to rote learning
- Creating synergies across countries in the region is difficult

#### **Observations and Recommendations**

- The science envoy program should be maintained if we can show tangible progress in execution.
- It is an inexpensive diplomatic tool to enhance relationships across the board
- It should be extended to other regions
- It cannot work unless it builds on greater scientists to scientists and Institution to Institution interactions
- Should be based on Merit and Competitive Funding not just "diplomatic" consideration
- Partnering and co-funding with states in the region is possible

# Specific Recommendations

- Find ways to create sustainable exchange programs
- Centers of Excellence
- Lead a Global Knowledge Sharing Initiative in Science and Technology
  - Electronic libraries
  - Broadband access
  - A Platform for education- a global e-Learning resource for high quality programs
  - A teach the teacher platform

### Issues to Address

- The Perception (and reality) that US efforts are often fragmented and not predictable
  - Many visits and MOU "fatigue"
  - S and T agreements without funding
  - Complex interactions and lack of coordination across our own agencies
  - Difficulty in having a single point of empowered contact for US-Country interactions

## The issue of Information and Communication Technologies Focus in the US

- A Core recommendation of the current envoys is to create a US led initiative to create a platform for a global Virtual Community for Knowledge Sharing in S&T.
- The US has the expertise, talent and global companies that are leaders in the field
- Yet, there is no single point for policy and coordination across the USG.
- SHOULD PCAST lead an effort to better understand our posture in that regard.
- Should this be considered as core US initiative in the domain of S&T diplomacy and cooperation?

#### THE OSTP CHALLENGE

**US Science Agencies** 

OSTP

# Recommendations to PCAST

- How do we build trust?...Greater predictability
- How to coordinate better our international S&T activities
  - Comparative analysis from our own and other countries
- Evaluate and advise on building a US coherent ICT Strategy
- How to identify sustained budget streams to underlie long term S&T relationships- grant mechanisms
- An underused unique asset the "scientific" Diaspora in the US. What is it, how can we leverage it.

### HOLDREN'S DREAM

