

# TTWG SUBCOMMITTEE

June 17, 2015
Pete Atherton, PhD
Sandia National Labs



### **OUR TEAM**

Karen A	\de	Department	Of Energy

- Peter Atherton, Chair......Sandia National Laboratories
- Mostafa Beik......Argonne National Laboratory
- Connie Cleary.....Brookhaven National Laboratory
- Tim Jones......Department Of Energy
- Daniel Krueger.....Kansas City Plant
- Genaro Montoya......Sandia National Laboratories
- Michael Paulus ......Oak Ridge National Laboratory
- Elsie Quaite-Randall.....Lawrence Berkeley National Laboratory
- Michele Weigand ......Kansas City Plant

### **OUR OBJECTIVES**

#### Goal

 Sub Committee will report on the most critical obstacles in an Entrepreneurial Leaver Program (ELP)

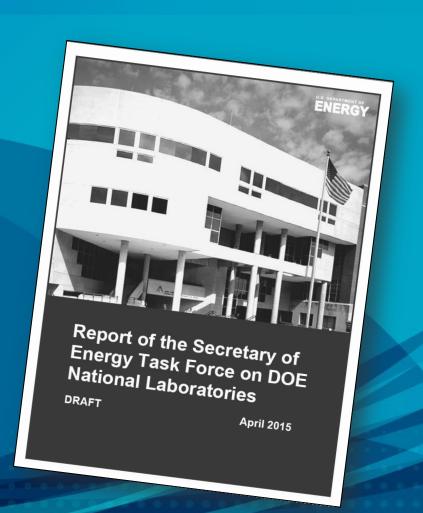
#### Follow up activity

 The subcommittee shall create a white paper with guidelines that may be utilized in forming/refining a program

# SECRETARY OF ENERGY ADVISORY BOARD (SEAB)

#### **Recommendation 3.4:**

Each DOE National Laboratory should adopt a personnel pathway that permits a limited number of staff to take entrepreneurial leave for a designated period with the assurance of appropriate resources upon return to restart a research program



#### **OPPORTUNITY**

Timing for an ELP at the national labs may be opportune, as suggested by recent New York Times articles

- "Venture Capitalists Return to Backing Science Start-Ups"
  - October 12, 2014
- "Lux Capital Raises \$350 Million Fund to Back Science Start-Ups."
  - April 2, 2015

### **TOP BARRIERS**

- Lack of management support, policy and procedures
- Lab manager concerns including loss of funding, hiring replacement talent, funding if person returns
- Entrepreneur concerns over loss of income and benefits
- Entrepreneur concern about job availability on return
- Entrepreneur concerns over getting IP licenses and funding
- Entrepreneurs' lack of business expertise
- Lack of available investment
- ROI to lab versus other opportunities

### **ACTIVE INDUSTRY PARTNERS**













Government Use Notices







Solving New Mexico's Small Business Challenges



### **BENEFITS OF AN ELP**

- Increase tech transfer
- Grow businesses/economy
- Improve perception of lab
- Attract/retain talent

#### What if...

Spin out the next Google





### SUMMARY OF ELP PROCEDURE

- Inquiry and declaration of desire to pursue ELP
- Line management assessment
- Conflict of interest mitigation
- ELP request package preparation, submission, approval
- License negotiation
- Leave/termination from lab
- Return to the lab
- Termination of ELP participation



#### LAB RESPONSES

#### Have an ELP

- Idaho National Laboratory
- Lawrence Livermore National Lab
- Oak Ridge National Laboratory
- Sandia National Laboratory
- Thomas Jefferson National Accelerator Facility M&O

#### Do not have an ELP

- Ames Laboratory
- SLAC National Accelerator Laboratory

#### Considering an ELP

- Brookhaven National Laboratory
- National Security Campus
- National Energy Technology Laboratory
- National Renewable Energy Lab
- Pacific Northwest National Laboratory

### IDEAS TO IMPROVE AN ELP

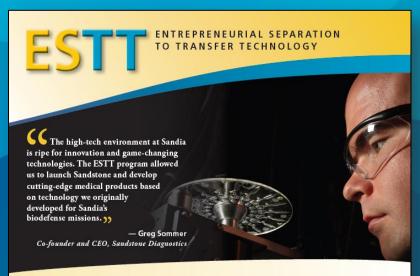
- Entrepreneur training and support
- IP license before leave begins
- PI consulting
- Seed money
- Access to lab equipment
- Part-time lab employment
- Retain benefits while on leave
- Recognition of skills after employee returns
- Funding to provide short-term support upon return
- Incubator near lab... in lab



# SANDIA EXPERIENCE







#### **OVERVIEW**

Entrepreneurial Separation to Transfer Technology (ESTT) is a valuable tool which allows Sandia National Laboratories to transfer technology to the private sector and Sandia employees to leave the Labs in order to start up new technology companies or help expand existing companies. Entrepreneurs are guaranteed reinstatement by Sandia if they choose to return to the Labs.

RESULTS*			Outside NM
Companies affected by ESTT	99		
- Start-up companies	49	42	7
- Expansion companies	50	23	27

Sandians who left on ESTT	145	
- To start up a business	62	43%
- To expand a business	83	57%
- Returned from ESTT	41	28%
- Terminated employment	98	68%
- Currently on ESTT	6	4%

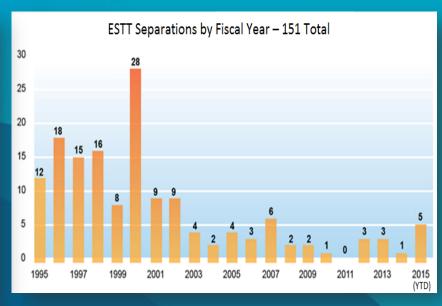
\*Since ESTT began in 1994

#### **ECONOMIC IMPACT\***

Jobs created (since 1994)	379
Number of employees (2012)	1550
Average salary (2012)	\$80K
Sales revenue (2012)	\$212M
Investment (2008-2012)	
- Equipment	\$40M
- Goods and services	\$277M

Two-thirds of the companies commercialized a technology as a result of ESTT.

\*Based on 33 Survey Respondents





#### **VIDEO**

