

# Mason Research Strategy & Development Elements: Status

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# Background & Recent Performance

## Mason research performing reasonably well

- Nearly breaking top 150 with its \$100 million research expenditure budget FY 2009
- A 27% increase in sponsored research/programs
- U.S. News & World Report ranks Mason as the top “up and coming university” in the U.S.
- Deans take research as a serious goal; faculty & administration responding energetically
- Mason is engaged in building its research corpus!

# Questions

Is Mason organized as well as it could be to move from 150<sup>th</sup> to top 50 university ranking?

Are we presenting our research capability & potential to top advantage?

How much can research grants & contracts be increased without huge new investments?

Attracting increased support to the research mission?

How to manage new resources for research?

# Strategic Approach

A simple goal to focus motivation: become top 50 research university by 2015

Create a structure to clearly illustrate Mason's strengths & development path

Create several large & sustainable research centers or areas of concentration: provide assistance for preparation of large proposals

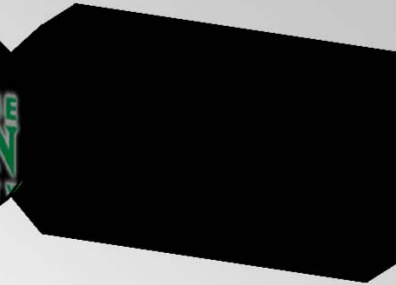
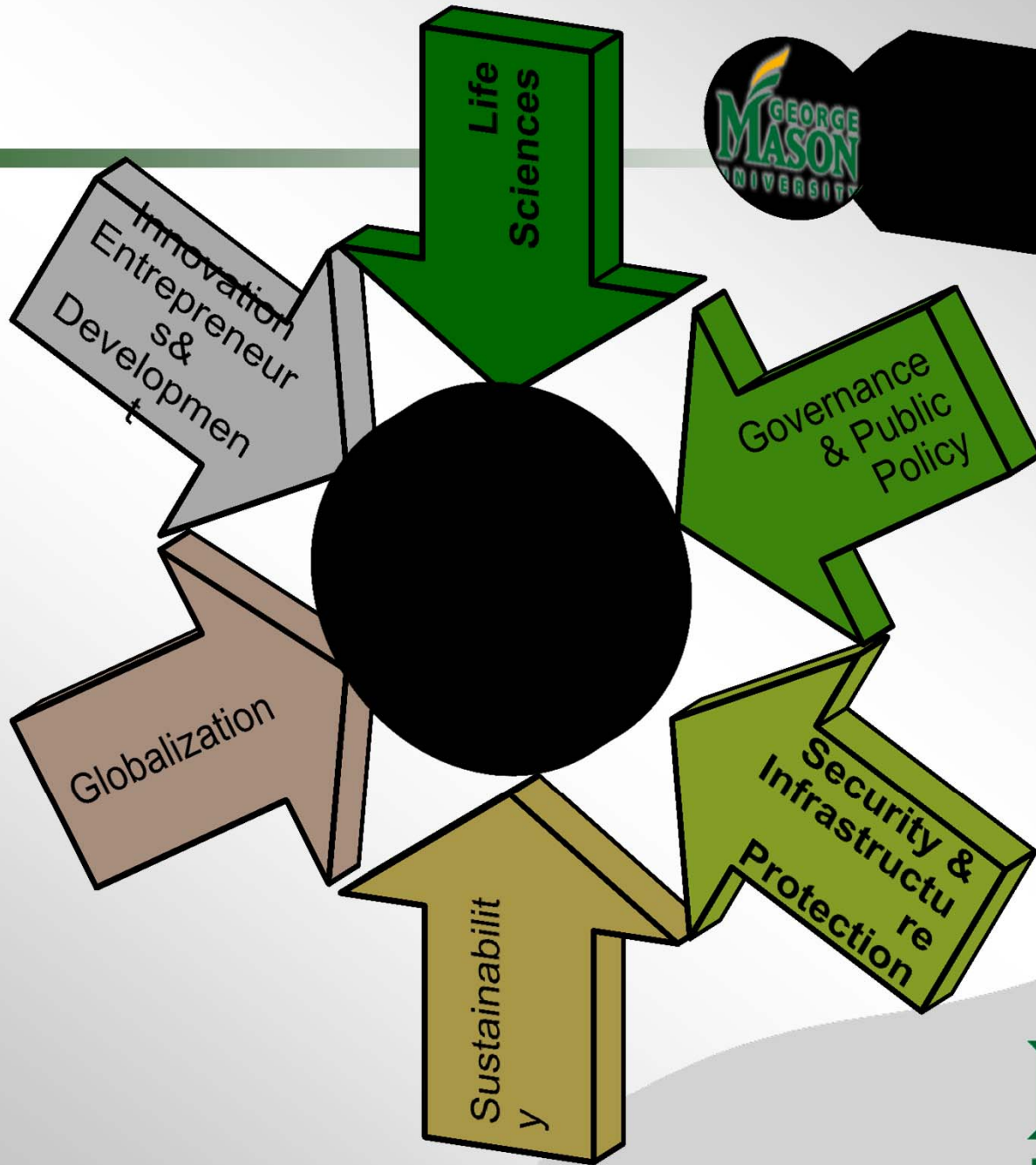
Provide seed grants for junior faculty with grant writing assistance & for senior faculty with new break through research ideas



# Mission & Goals

Create a safer more sustained world with extended quality of life

- Why the **safety**: rationale & capability
  - War on terror era, secure, safety & privacy issues
  - Research strengths at Mason – as below
- Why **sustainability**: rationale & capability
  - Environment, economy, society and quality of life issues
  - Research strengths at Mason – as below
- Why **extended life quality**: rational & capability
  - All wish to extend life with quality; available technology
  - Research strengths at Mason – as below







**Security and Infrastructure Protection**

- Cyber defense
- Admin of Justice
- Terrain Modeling
- C4

**Life Sciences**

- Bio Engineering
- Proteomics
- Immunology
- BRL
- Medical education
- Aging
- Public Health
- Special Education
- STEM

**Innovation, Entrepreneurship & Development**

- Economic Development
- Regional Economic modeling and analysis
- MEC
- OTT
- Economics program mgmt.
- STEM

**Governance**

- Conflict Magnet.
- Intl. Development
- Procurement
- Scientific Ethics
- Public Mgmt. & Admin.
- Social Capacity
- Public Policy

**Globalization**

- Intl. Dev
- Global Statistics
- Islamic Center
- Exchange Progs
- Social Capacity



# Full Structure of Research Program & Initiative at Mason

Mission

Macro level - large centers or initiative areas

Meso-level clusters of capability: tactical tools for achieving mission & large centers

Micro level elements: the faculty & their skill levels

Envelop all of this in an **integrated web presence** model: individual faculty web pages up to mission page & *vice versa*



# Sources of Research Funding

Federal & state

Foundations (NGOs & other non-profits)

Corporate community

Research funded by foreign national  
governments & development agencies

Donors

Intellectual property: technology transfer

Infrastructure development – non-Mason

# Federal & State Funded Research: Sources

## Legislative (congress)

- Appropriations & Authorization
- Unobligated funds – a hybrid model

## Executive

- Competitive grants
- Discretionary grants

# Federal & State: Continued

What is Mason doing to expand this source

- **Earmarks**: well honed process but this source is decreasing in importance
- **Competitive grants** funding - growing importance
  - Research office tracks all federal RFPs with assistance of Patton Boggs and others & disseminates to targeted faculty
  - Preparing research deans/faculty to establish lasting links to administrative funding agencies & congressional staffers

# Foundations & NGOs

What is Mason doing to expand this source

- Tracking RFPs & disseminating information to targeted faculty
- Need a more systematic approach like that which is now evolving in approach to federal funding
- Need to build stronger network between these sources, research deans and faculty

# Corporate Funding for Research

What is Mason doing to expand this source?

- Corporate engagement office to help build increased linkages where existing links do not exist
- Possible model: engage first in terms of need which is often training and retraining;
- Ultimately establish formal partnerships for ongoing research relationships (move to campus)

# Foreign Governments & Development Agencies

What is Mason doing to expand this source

- Contracting problem regarding indemnification & liability clauses under Commonwealth Law
- Other Virginia universities have established non-profit organizations to facilitate contracting in these cases
- Proposing new organization to manage the problem; for now expand George Mason Intellectual Property Fund (GMIP) responsibilities to cover this
- Will invest more in developing this market as soon as we have a vehicle to manage the contracting issue



# Donor Revenue

What is Mason doing to expand this source?

- Developing the integrated research structure & associated integrated web page so we can better explain what Mason's research is & related outcomes to our mission & thus society
- Plan to form a Research Advisory Board in 2010 that will be used to raise large funds (\$100 million) to support the Mason research program
  - Provide capital to support junior faculty research

# Intellectual Property

What is Mason doing to expand this source?

- Mason formed an Office of Technology Transfer – OTT five years ago
- Patents, licensing & some company formation based on faculty scientific innovations
- OTT is beginning to generate revenue at about \$200K per year
- Conducted external evaluation of OTT December 3-4, 2009