

# Group 2 Outbrief

# Organizational Questions

How would you wish to contribute to the national success of EPIC (and the UFS)?

- Overall Objectives
  - Partner with EMC in development
- Industry
  - Contribute best practices for computing (vendors and service providers engaged from beginning)
- Academia
  - Encourage staff/students to use the UFS community code
  - Grad fellowships are a potential contributor
  - Tie to NSF XSEDE program
  - Getting involved in leadership, consulting, and science/research
- NOAA & Other Federal Partners:
  - Keep focus on end to end service for American public benefit (e.g., Congress/NOAA requirements)
  - Address security concerns (e.g., from DoD) to enable more participants

# Organizational Questions

In your experience, which funding opportunities have been most productive? Why? Which criteria are you using?

- Contracts, for specifying deliverables--multi-year funding is preferable with larger efforts
- Grants
- CI agreements
- Calls for external proposals (e.g., MAPP)
- Flexible opportunities such as OTA opportunities; expedient for achieving innovation (within specified cost threshold)
- Links between university and industry (private sector funding of university students)
- Base funding continue; participants engaged at all parts of funding process
- Limiting reporting requirements; no fear of failure

# Organizational Questions

EPIC has \$15M in President's Budget for FY20, what are the top three priority areas for financial investment?

- Comm coding platform (benchmarking and coding opportunities with documentation)
  - Develop workshops with tutorials
- Substantial portion towards software engineering (hardware agnostic)
  - Bring in visiting scientists from industry (outside gov't)
- Achieve short-term win
  - Build on current progress (FV3-GDAS, JEDI) and focus further on DAEfforts
  - Demonstrate external partner buy-in

# Management Questions

In your experience, which organizational structures have best-supported innovation? Communication? Engagement? What criteria are you using?

- DTC (which has SAB, Management Board, Executive Committee of sponsor reps) worked successfully to leverage HFIP funding to improve operational HWRF
- Co-located experts for short-duration initiatives (e.g., JCSDA hack-a-thons)
- NASA satellite science teams and applied science teams that grew from those
- Empower director, but be agile and allow for rapid transitions
- Industry best practices using Tiger Teams
  
- Key desirable attributes: LEAN, multi-disciplinary, no fear of failure, ruthless focus on short-term results and code sprints

# Governance

What are the responsibilities of the governing body?

- Define the problem and ID measurable outcomes (with KPIs)
- Gain consensus and motivate
- Ensure accountability
- Promote innovation
- Respect partner values
- ID near term goals and long term growth strategies
- Ensure adherence to NOAA-NCAR MoA
- Ensure resourcing

# Governance

What is the balance of governance between institutions and government? How do they share this role?

- Should be comprised of organizations making resource commitments, but with final decision authority in hands of primary owning program manager (e.g., NOAA for UFS)
- Leadership of focus teams (addressing a specific problem) should be determined by what problem is being solved--keep it flexible
- Consider who is responsible for cultural direction, with broad Advisory Board addressing implementation concerns
- Resource owners create the challenge/goal statement and identify how money is spent
- Guidance components: Science (ensuring innovations move through the funnel), management, and security (for partners with IT/clearance issues)