Role and Mission

- Promote and support the growth of Mines' sponsored research and scholarship. Promote growth of Mines’ intellectual property portfolio.

- Research awards 10 year trend (in millions)

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Overview of RTT Office

- Promote research activity
  - Help identify and support faculty in securing large scale funding opportunities
  - Lead a campus-wide effort to identify future research directions
  - Facilitate interdisciplinary faculty involvement (porous materials, separations, computational materials, . . .)
  - Provide data management services
  - Coordinate research center activities

- Interact with universities, federal and state agencies to promote Mines’ research agenda

- Promote growth of Mines’ IP portfolio
  - Support patent filing and licensing activities

- Staffing
  - Research: 2.79 FTE (2 full-time, 2 part-time)
  - Tech Transfer: 1.0
  - Data Curation: 1.0 (2 half-time)
Goal 1 *Enhance Major Research Thrust Areas*

Increase Mines’ reputation both nationally and internationally [*Reputation and revenue*]

- **Key Strategies**
  - Build on current strengths (water, energy, materials, ...)
  - Expand into growth areas (geothermal, biomaterials, ...)
- **Priorities (tactics)**
  - Convene senior faculty to help identify promising growth areas
  - Create Institutes or Centers to develop critical mass needed to tackle more challenging projects
- **Key Hires/Reorganization/Realignment**
  - Identify Institute Directors (internal and/or strategic hires)
- **Major Capital needs**
  - Lab equipment, HPC [GRL annex and CoorsTek will provide lab space]
- **Measurable Outcomes**
  - Increased research funding and visibility increase for Mines
Goal 2 Enhance Mines’ National Presence

More visible presence of faculty on national stage [Reputation]

- Key strategies
  - Promote active outreach to national programs and partner institutions
  - Promote “thinking big” culture
- Priorities (tactics)
  - Concerted institutional effort to place faculty in workshops, on national boards, congressional testimony, and in scientific society governance positions, etc.
- Key Hires/Reorganization
  - Identify suitable faculty for such positions and aggressively push for their appointments
- Major Capital needs
  - None
- Measurable Outcomes
  - Increased exposure in terms of national media, stimulus for additional funding of major projects
Goal 3 Expand Research Support Services

Expand support for data-driven science [Infrastructure]

- **Key strategies**
  - Work with CCIT to support their development of Research Support Services
  - Address data management issues (storage and backup) for active projects
  - Develop Mines’ Data Inventory
- **Priorities (tactics)**
  - Close interactions with CCIT
- **Key Hires/Reorganization**
  - Work with CCIT to develop NSF proposal for cyberinfrastructure engineer
- **Major Capital needs**
  - Improved data storage and data transfer capabilities
- **Measurable Outcomes**
  - Active and archival data storage available for researchers
  - Research Support Services regularly consulted by researchers for help with storage and HPC usage
Goal 4 Expand Research Support Services (2)

Improve web presence for research activities [Reputation and infrastructure]

Key strategies

- Refocus RTT website to emphasize ongoing research
- Target other institutions, prospective students and industry

Priorities (tactics)

- Improve web design and emphasize impactful research; coordinate with PR and college webmasters

Key Hires/Reorganization

- RTT web specialist coming on board

Major Capital needs

- Improved Content Management System

Measurable Outcomes

- Greater web traffic; more inquires regarding research activities and patent portfolio
Goal 5 Improve Bottom Line in Technology Transfer

Broaden reach with improved networking and practice strategic patenting [Revenue]

Key strategies
- Prioritize attendance at conferences and trade shows
- More strategic approach to patent filings

Priorities (tactics)
- Conserve resources
- More attention to potential winners
- More marketing of portfolio to potential licensees

Key Hires/Reorganization
- Develop in-house support to minimize costly external legal expenses

Major Capital needs
- None

Measurable Outcomes
- Reduction in capital outlay
- More licenses and options on Mines’ inventions
Conclusions

- RTT plans
  - Address enhanced distinctiveness and reputation of Mines
  - Provide enhanced revenue streams
  - Help support Research Support Services

- Continued increases in research funding requires coordination at many levels
  - Starts with the substantial increase in talented faculty and the role of faculty in identifying research opportunities
  - RTT office aids in identifying potential synergies that allow submission of stronger proposals addressing big-ticket projects
  - Improved research support services require close coordination with CCIT Data storage and transfer, HPC, and improved web presence
  - Increasing research volume provides additional opportunities for Tech Transfer
    - Shift toward more internal support might reduce costs