Strategic Initiatives 2014: Research Mission
Outcomes Documented by:
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Strategic Priority 1: Focus on and leverage strengths

SP1. Organizational Goal 2

Research Goal: Recommit to existing high impact, top funded scientific areas
Focus Institutional support on high impact research that leverages our key scientific areas
- We have developed collaboration between our top funded areas: HIV/AIDS, Substance Abuse, Genetics, Cancer, Diabetes, Aging, Neurology/Neurological Surgery, Heart Disease, Mental Health, Stem Cells and Vision. This is reflected in our increase NIH ranking over the last 3 years. It improved from 2014 – Ranked 42 ($96.3M), 2015 ranked 41 ($97.4M), 2016 ranked 39 ($111.2M).

SP1. Organizational Goal 3

Research Goal: Promote team science and meaningful collaborations while leveraging existing top funded scientific areas
- Promote collaborations, especially among top 10 diseases-focused areas. Same as above.
- We have established internal award mechanism for research funds. This includes a multimillion-dollar annual budget across several areas for the MSOM.
- We implemented a shared IDC distribution model.
- We have established track-specific mentorship models for faculty to advance team science with CTSA, CFAR and Cancer Center.

Strategic Priority 2:
Promote innovation and sustainable growth

SP2. Organizational Goal 2

Research Goal: Foster a culture of translation by emphasizing and supporting the commercialization of intellectual property
- Develop support for the commercialization of IP and development of new products
  - Since 2014 added two licensing associates and increased, hired new Coulter Project Director (technology center). Engaged first Entrepreneur in Residence (EIR) to grow business contacts for support of early stage technology.
  - Licensing, startups and intellectual property revenue (IPR) all have increased annually since 2014.
  - We had continued increases in licensing, startup activity and IPR in each successive FY.
- Review, reorganize and enhance our technology advancement enterprise.
  - FY14: Completely reorganized the tech transfer office in FY14 – new director – continued focus on commercialization that was initiated in FY13; continued engagement with CTSI and other units.
  - FY14-16: Clean up and revision of IP database; generation of metrics for discussion with leadership.
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- Create and sustain an environment that fosters entrepreneurship, educates and incentivizes our faculty, staff and students to innovate.
  - Have Leveraged core grants to expand mentorship and developmental grants
  - Continue to provide bridge funding

- Connect university and regional resources to support innovation, job creation and business
  - FY14-16: Continued to successfully engage with the Florida Institute for the Commercialization of Public Research to support our startups; brought additional EIRs on board to support more faculty. Engaged with all schools and colleges, School of Business Entrepreneurship Advisory Board, etc.
  - FY16: Initiated master planning process around the Life Science and Technology Park (now known as Converge Miami); working closely with Wexford, Cambridge Innovation Center and others to expand innovation ecosystem in Miami.

- Review and revise intellectual property policies
  - Initiated in FY15 and completed in FY16 with 100% approval by the Faculty Senate.

- Develop conflict of interest management strategies that support entrepreneurship
  - FY14-16 – continued engagement with Office of the Vice Provost for Research, Office of Research Administration and Office of Compliance to review approaches to management of newly emerging startups and other business activities. Group is developing policies to support the activities

- Identify and prioritize the protection of the School’s most promising research
  - Work with the State of FL to support priority areas (e.g. secured support for Institute for AIDS and Emerging Infectious Diseases, and continued funding for Cancer Center)

- Educate the research community about all aspects of technology advancement
  - In planning

- Expand international business research/technology efforts
  - Leverage current research efforts, and expansion of medical school activities to build international linkages

Strategic Priority 2: Organizational Goal 3

Research Goal: Enhance and innovate the research education curriculum while improving the student and trainee experience

- Promote innovation in research education
  - Introduction of Panopto online lectures for PIBS and Executive PhD program
  - Masters in Biomedical Sciences is currently moving through the approval process.
  - Establishment of the PhD/MBA program.

- Change the postdoc classification—move to trainee status with specified improved benefits – Early stages of development

- Further develop mentorship model
  - A professional development committee comprised of faculty, students, and postdocs was created.
  - OGPS arranges small-group mentoring sessions for graduate students when prominent scientists visit UM.
  - Collaborations are underway with Toppel Career Center and the Graduate School to offer specialized mentorship and career development opportunities.

- Implemented new graduate level programs based on student requests, market trends and apparent need
  - New programs such as PhD/MBA and Executive PhD have been introduced; new Masters in Biomedical Sciences is moving through the approval process.

- Reorganize graduate student education to shorten the average time students spend in degree programs
  - Between 2014 and 2016, time to degree was shortened across all programs by 3.6%.

- Develop retention and recruitment strategies for students
  - Further introduction of modified curriculum presentation molded to establish novel degree options such as Translational Track PhD and PhD/MBA.
  - Updated and revised program websites to enhance information transfer

- Continue to address/provide research graduate education space
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Strategic Priority 3: Organizational Goal 1

Reinforce a culture of excellence, efficiency & accountability
Goal: Build an extraordinary work environment and a fully engaged work force.

- Create a stellar work environment
  - Incorporating culture transformation throughout research mission (Culture Transformation Project initiated through the new President’s office as a University priority).
- Build employee depth and expertise
  - Provide training support and developing new educational programs to ensure our staff is highly knowledgeable and cross trained in areas of research operation/administration.
- Enhance and further develop a culture of accountability, flexibility, teamwork, efficiency, and receptiveness to change
  - Exploring the implementation of more flexible work schedules and working from home for staff
  - Encouraging teamwork and collaborations
  - Supporting a positive work-life balance
- Empower office of postdoctoral studies to recruit, hire, orient, postdocs.
  - This has been partially accomplished through improved the communication between OGPS and HR.
  - Created a better tracking of postdocs; HR sends a monthly report of all new hires and terminations as well as their permanent contact information.

SP3. Organizational Goal 4

Research Goal: Develop a culture of efficiency and accountability for the sustainability of research

- Promote culture of accountability and sustainability
- Regroup administrative assistance for researchers into more operationally efficient units to reduce redundancy of effort and time to task completion
- Redesign HR workflow and structure for research.
  - Research retreat in 2017 - Faculty feedback on HR challenges were collected and will be addressed.
- Improve Pre-and Post-award administration
  - Decentralized to departments
  - Timelines and metrics were initiated in 2016 to find areas for improvement.
  - Research retreat in 2017 - Faculty feedback on research administration challenges were collected and will be addressed.
- Streamline Contracting Process
  - Taskforce recommendations began implementation in 2017.
- Improve Disclosure Profile System and disclosure of COI issues
  - New software program was acquired and implemented
- Enhance the quality and diversification of grant proposals in order to capitalize on varied and new funding opportunities.
  - Current data over the past two years demonstrates an increase in federal funding as well as a higher percentage of UMMSM total research funding from other funding sources.
- Have developed programs/systems to improve quality and quantity of grants proposals.
  - Increased researcher mentoring
  - Increased Biostatistics support
  - Enhanced assistance for grant writing and editing
- Have increased seed and bridge grant funding through the Research Office
  - administered by Scientific Awards and Review Committee
- Provide internal funding for scientific working groups to plan and execute multicenter, multi-investigator efforts
  - Neuroengineering Institute, CFAR, CTSA, Matching funds for P30 Grants
- Leveraged centers and Dean’s office to enhance awareness and completion of proposals for new funding opportunities
  - CTSA, CFAR and MSOM Research Dean Office
  - Invested $1M in supporting efforts for the first time in FY16
- Establish, track and stage-specific mentorship programs for investigators by grant success and high impact publications
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- Explore collaborations/partnerships with external institutions: international/Latin America, county, state, federal, industry, pharmaceutical companies, other academic and non-academic institutions
  - President’s initiative to become a Hemispheric University
- Build internal partnerships with other UM Schools and Colleges (i.e. nursing, engineering, business)
  - This is being done both through research collaborations, and educational dual degree programs
- Enhance T32 and other training grants portfolio
  - FY2012 – FY2015 MSOM had one T32, FY2017 MSOM received its 2nd and is expected to receive #3 in FY2018 with five additional applications submitted/planned

SP4. Organizational Goal 2
Research Goal: Develop an integrated administrative infrastructure to enrich discovery science

- Begun to reformat administrative structure to serve multidisciplinary research faculty
- Have initiated the build-out of new reporting tools initiated to report multi-PI data; entering production phase.
- Have created tools to monitor ongoing research opportunities and anticipate funding areas and topics to align research programs accordingly
- Have recruited and continue to recruit faculty to bridge research interests and create synergies
  - Cancer Center recruits including Pancreatic Cancer Center
  - Dermatology recruits
  - Rehabilitation Medicine recruits
  - Surgery recruits
- In planning stages:
  - Create reporting hierarchy and incentive model that encourages interdisciplinary work
  - Developing a “cluster” model for areas of research to promote interdisciplinary collaboration.

SP4. Organizational Goal 3
Research Goal: Address the research infrastructure to reduce overall subsidy while better positioning our investigators to obtain funding

- Have improved efficiencies of core facilities and shared resources through consolidations, relocations, and shared infrastructure in order to reduce overall subsidy.
  - Created an active Core Advisory Committee
    - Plan for application to large equipment/facility grant mechanisms
    - Proactive maintenance and upgrades of our research facilities
  - Implemented iLab Solutions software for financial and scheduling of core facilities and shared resources
- Developed the plan for a Comprehensive Center for Regenerative Medicine
- Develop report that identifies:
  - Major gaps in facilities/infrastructure that currently are critically rate-limiting to growth in team science and limit expansion of extramural Portfolio - In Progress
  - Gaps in scientific connections and critical expertise (i.e. areas of medicinal chemistry, cancer genetics, imaging, metabolomics, and disruptive/transformational emerging technologies) - In Progress
- Develop new capabilities to support clinical and translational research and provide new funding opportunities.
  - Enhanced Patient registry/data mining of EMR - (ongoing within CTSI)
  - Enhanced tissue banking capabilities - (ongoing within CTSI)
  - Research Retreat in January 2017 focusing on translational research and closing gaps on current and potential issues
- Examining existing Centers and Institutes
  - Match mission and goals to current institution mission and goals
  - Compute annual financial subsidy
  - Examine long-term sustainability of each