Research Strategic Plan: Executive Summary, Objectives, Key Strategies, and Key Tactics

May 16, 2017

HSC RESEARCH STRATEGIC PLAN: 2015-2020
EXECUTIVE SUMMARY

1. **Provide an environment to advance excellence in discovery, creativity, and technology development**

    1.1 Enhance campus-wide communication about research and research opportunities by providing institutional networking tools, spaces, and forum
    1.2 Attract, develop, and retain outstanding faculty researchers
    1.3 Optimize management and maximize utilization of research infrastructure, as well as effectively facilitate pre- and post-award management
    1.4 Enhance the research training environment for students, residents, and fellow
    1.5 Support a Sooner-to-Market pipeline for assisting faculty with intellectual property development and commercialization

2. **Advance team-based research**

    2.1 Incentivize team-based research through targeted funding and other methods
    2.2 Recognize team-based research through promotion/tenure and awards
    2.3 Partner with peer institutions through faculty recruitment, capital investment, joint funding opportunities, and trans-institutional collaboration

3. **Accelerate translational research**

    3.1 Facilitate campus-wide involvement in the Oklahoma Clinical and Translational Science Institute
    3.2 Apply medical informatics and associated analytics to enhance translational research
    3.3 Promote translational research that improves the health of Oklahomans

4. **Expand research in thematic areas**

    4.1 Grow research in Cancer/Tobacco Use and Prevention and Diabetes/Metabolic and Vascular Disease across all colleges at the Health Sciences Center
    4.2 Continue to advance research in Vision/Neuroscience, Geroscience, and Immunology/Infectious Disease
    4.3 Leverage research funds for the thematic areas

Research Enterprise Leadership and Management

- Integrate the Research Strategic Plan into campus-wide organizational roles and culture, financial management, and strategic planning
- Regularly track and evaluate performance measures
- Modify tactics as needed
- Ensure ongoing enterprise risk management

GOAL 1: PROVIDE AN ENVIRONMENT TO ADVANCE EXCELLENCE IN DISCOVERY, CREATIVITY, AND TECHNOLOGY DEVELOPMENT

Subgoal 1.1: Enhance Campus-Wide Communication About Research And Research Opportunities By Providing Institutional Networking Tools, Spaces, And Forum

Objectives
1. Develop interactive and robust mechanisms to simplify the process of sharing and finding information related to research activities on campus.
2. Increase the availability and dissemination of information regarding funding opportunities and assistance with proposal submission and regulatory compliance.
3. Increase the utilization of research networking tools to promote collaborative research efforts on campus.
4. Develop a robust infrastructure for engaging external stakeholders.

Key Strategies/Tactics
- Develop a **Research Navigator Portal**
- Develop a **Research Navigator Service**
- Implement the research networking software **Profiles**
- Enhance **public relations** and marketing efforts
- Office of VPR **Newsletter**

Subgoal 1.2: Attract, Develop, And Retain Outstanding Faculty Researchers

Objectives
1. Increase the number of nationally competitive clinician scientists and research faculty.
2. Develop outstanding faculty researchers.
3. Increase the retention of successful researchers.
4. Increase development efforts to support the attraction, development, and retention of outstanding faculty researchers.

Key Strategies/Tactics
- Create an **environment** where research and researchers are highly valued
- Promote **joint recruitment** of faculty members
- Ensure **protected research time and support** for clinician scientists
- **Expand faculty development program** to include senior and scientific mentors to develop outstanding research scientists
- **Increase the leadership and career development opportunities** for faculty researchers
- Implement **retention packages** for successful researchers
- Engage the administration and faculty in **development efforts** to support research

Subgoal 1.3: Optimize Management And Maximize Utilization Of Research Infrastructure, As Well As Effectively Facilitate Pre- And Post-Award Management

Objectives
1. Increase the effectiveness of University research core facilities, resources, and services.
2. Increase assistance provided to researchers for preparation of research proposals and regulatory application and progress forms.

3. Improve post-award processing and management.
4. Increase the competitiveness of submitted research proposals.
5. Improve services, availability, and use of central clinical research resources.

Key Strategies/Tactics
- Implement annual **quality and needs assessment for HSC core facilities**
- Develop a **Research Navigator Service** (See Subgoal 1.1)
- Develop a **framework for a grant review program**
- Implement annual **quality and needs assessment for HSC internal funding mechanisms and PHF funding**
- **Continue development of the Oklahoma Clinical and Translational Science Institute** clinical research services and disseminate information about core service offerings.

Subgoal 1.4: Enhance The Research Training Environment For Students, Residents, And Fellow

Objectives
1. Increase graduate student training grants (e.g. T32, DOE, HRSAs).
2. Increase Individual student or Postdoc awards (e.g. F32 and NRSAs).
3. Increase mentored faculty awards.
4. Maximize the acquisition of funding for supplements (loan repayment, RO1 supplements).
5. Increase funding supplements for underrepresented populations of students/fellows.

Key Strategies/Tactics
- Develop an **infrastructure to support the submission of training grants**.
- Provide **incentive to faculty** to serve as PIs on training grants.
- **Attract and retain highly qualified faculty in designated programmatic areas**.
- **Train qualified faculty candidates** on how to serve as **mentors** on mentored awards.
- Create awareness of the various **funding supplements and mechanisms and agencies**.

Subgoal 1.5: Support A Sooner-To-Market Pipeline For Assisting Faculty With Intellectual Property Development And Commercialization

Objectives
1. Increase and promote entrepreneurship.
2. Facilitate business/university transactions and partnerships to transform discoveries into innovative solutions.

Key Strategies/Tactics
- **Educate faculty/postdocs/ students** with goal of being cognizant of IP.
- **Incentivize to commercialize** (not treat as another chore that distracts from grant writing, patient time, teaching).
- Potential "**Grants/Awards**" from the OTD Growth Fund or the PHF.
- Build/strengthen networks that facilitate **IP development and pipeline** by unifying existing capabilities.
- **Recruiting for IP success**.

GOAL 2: ADVANCE TEAM-BASED RESEARCH

Subgoal 2.1: Incentivize Team-Based Research Through Targeted Funding And Other Methods

<u>Objectives</u>
1. Increase number of collaborative projects and grant submissions across disciplines/colleges.
2. Increase number of multi-PI grants [e.g., NIH grants [e.g., R01 grants, program project grants, P30 grants, P20 grants, U grants, clinical trials, and training grants) and grants from Patient-Centered Outcome Research Institute, Health Resources and Services Administration, and Agency for Healthcare Research & Quality].

<u>Key Strategies/Tactics</u>
- Create **opportunities for researchers to interact**.
- Implement programs that **bring researchers from different disciplines and Colleges with similar interests together**.
- Host **thematic retreats that highlight multi-PI projects** by investigators.
- Identify **funds specifically to support cross-discipline projects and projects involving collaboration between colleges**.
- Provide **support with administrative functions after the award is funded**.
- Provide **financial incentive/support to large multi-PI grants**.

Subgoal 2.2: Recognize Team-Based ResearchThrough Promotion/Tenure And Awards

<u>Objectives</u>
1. Develop, implement, and maintain ongoing communication, education, and information concerning 'team science' among faculty and administrators.
2. Include team-based science within promotion and tenure guidelines.
3. Recognize team science within faculty awards.
4. Recruit and develop faculty with goal of being part of a team.

<u>Key Strategies/Tactics</u>
- Form an **advisory committee comprised of exemplary team-science faculty** to establish best practices and implementation.
- **Update P&T guidelines to include team science**.
- Repurpose existing awards and/or develop new **awards for team science**.
- **Increase joint recruitment and coordination** to enhance building of teams.

Subgoal 2.3: Partner With Peer Institutions Through Faculty Recruitment, Capital Investment, Joint Funding Opportunities, And Trans-Institutional Collaboration

Objectives
1. Increase campus-level coordination for recruitment, mentoring, and development.
2. Identify and allocate funding for shared resources to expand a team science infrastructure
3. Enhance regional, national, and international partnerships to collaborate with research, teaching, and service.
4.

Key Strategies/Tactics
- Increase **faculty joint appointments and adjunct roles** with Norman campus and peer institutions.
- Establish a **task force to include peer institutions** (e.g., OMRF, Tulsa, VA, Norman campus) to identify, share, and develop resources for collaboration.
- **Identify funding sources** that support team science between institutions.
- Identify opportunities for **shared resources to enhance a team science infrastructure** (e.g., shared equipment and instrumentation, central IRB, telecommunications).

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GOAL 3:   ACCELERATE TRANSLATIONAL RESEARCH

Subgoal 3.1: Facilitate Campus-Wide Involvement In The Oklahoma Clinical And Translational Science Institute

Objectives
1. Create mechanisms for engagement in OCTSI program development and delivery across disciplines and key stakeholders and identify key resources that foster translational research.
2. Increase the availability and utilization of the key resources provided by the OCTSI across OUHSC departments and colleges.
3. Increase the availability and participation in OCTSI training and educational activities among researchers across OUHSC departments and colleges.
4. Increase utilization of the OCTSI as a coordinating entity to provide shared leadership and administrative support for collaborative research projects across university colleges, departments, and external partners.

Key Strategies/Tactics
- Develop **faculty/staff champions** within major research units to increase information dissemination of OCTSI resources.
- Reduce the barriers to clinical research on campus by effective utilization of the **Clinical Resources Core** of the OCTSI
- Advance dissemination and implementation research using the **Oklahoma Primary Healthcare Improvement Cooperative**.
- Foster increased research with underserved and underrepresented populations of the **OCTSI Special Populations Unit.**
- Continue to further refine and support **OUHSC CTR training programs**.

Subgoal 3.2: Apply Medical Informatics And Associated Analytics To Enhance Translational Research

Objectives
1. Develop a strategy for unified application of data science with shared governance and focus.
2. Develop the infrastructure to facilitate the application of health informatics and analytics in translational research.
3. Develop health informatics and analytics training programs that advance the capabilities of the Oklahoma research community.

Key Strategies/Tactics
- Establish a **governance structure** for implementation of data science strategy.
- Construct **overarching policies and procedures** for data access and associated cost, use, and security for health informatics research.
- Establish **processes, practices, and tools for data use and analytics**.
- Construct and maintain **centralized, high-quality internal and external data assets** for the OUHSC research community.
- **Leverage health informatics and analytics resources** to facilitate research development and participant recruitment in research studies.
- **Create programs for training** faculty/students/staff in using health informatics for research activities

Subgoal 3.3: Promote Translational Research That Improves The Health Of Oklahomans

<u>Objectives</u>
1. Enact institutional 'best practices' policies that facilitate translational research with underserved and underrepresented populations.
2. Increase translational research with communities in Oklahoma with an emphasis on underserved and underrepresented population.

<u>Key Strategies/Tactics</u>
- **Develop "best practice" institutional policies** for performing translational research with underserved and underrepresented populations and **implement these "best practices" across the institution** to assist researchers.
- **Evaluate, modify, and/or expand current organizational unit(s) and resources** to increase translational research collaborations with communities in Oklahoma with an emphasis on underserved and underrepresented.
- **Prioritize health needs** for translational research with key community stakeholders.
- **Facilitate bidirectional collaborative processes** between community partners and researchers.
- **Analyze existing data** to identify community health needs.

GOAL 4:   EXPAND RESEARCH IN THEMATIC AREAS

Subgoal 4.1: Grow Research In Cancer/Tobacco Use And Prevention And Diabetes/Metabolic And Vascular Disease Across All Colleges At The Health Sciences Center

Subgoal 4.2: Continue To Advance Research In Vision/Neuroscience, Geroscience, And Immunology/Infectious Disease

Objectives
1. Develop and sustain centers as a focus for integrated basic and translational research activities.
2. Use centers and organizations above to establish broad multi-disciplinary approaches to conduct programmatic research.
3. Increase number of basic, behavioral, and clinician scientists who are doing research/ investigator initiated studies.
4. Expand funding portfolio.

Key Strategies/Tactics
- Establish a **campus-wide Research Strategic Plan Oversight Committee**
- Review mechanism for **formally recognizing Centers and infrastructure for managing and supporting Centers**.
- Develop and implement plan for **joint recruitment** of research and clinician scientist faculty in thematic areas.
- Utilize Research Navigator Portal to **disseminate campus-wide information of core resources and specialized equipment** supported by collaborative and core grants (e.g., P20, P30, U grants).
- **Increase non-government sources** for research funding, including philanthropy and foundations, industry sponsored activities, public/private partnerships.

Subgoal 4.3: Leverage Research Funds For The Thematic Areas

Objectives
1. Establish a business plan for evaluating financial benefit of implementing projects under the strategic plan.
2. Initial investment for establishment of new but complementary centers.

Key Strategies/Tactics
- Charge the Research Strategic Plan Oversight Committee with **evaluating financial costs of implementing projects under the research strategic plan and doing research at OUHSC**.