Project Summary

- UT Austin’s Research Management System (RMS) will be retired as part of the transition of legacy applications off the mainframe.
- The Office of the Vice President for Research is overseeing the replacement of RMS with an enhanced electronic Research Administration (eRA) system for managing the components of the academic and research enterprise at UT.
- In addition to RMS, the project scope includes replacing the research support applications for managing Electronic Submissions, IRB, IACUC, and FCOI records with an integrated suite of pre-award and compliance software tools.
- Post-award scope is being deferred until the implementation of Workday financials, and will continue to integrate with existing financial systems.
- A competitive procurement will result in a vendor selection and phased implementation starting in the Fall of 2019.

Compliance Scope: IRB, IACUC, FCOI only
- IBC and Animal Ordering/LARS to remain on eProtocol and will be reassessed for inclusion after the initial implementation
Agenda

• Project Overview
• What's Next
• Q&A
Introduction

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• Started with the University in 2018
• Previously 20 years in the private sector developing commercial software for the federal government
• UT Austin alum BS ’96, BA ’97, MS ’08
Structure of the UT Research Enterprise*

• All research at UT Austin is principal investigator (PI)-driven
• The University research enterprise is overseen by Vice President for Research Dr. Daniel Jaffe
• Multiple offices that report to, or work closely with, the Office of the Vice President for Research support PIs as they propose and execute research:
  – VPR and Reporting Units: These offices report to the VPR and support various aspects of the research enterprise.
  – Other Campus Offices that Support the Research Enterprise: These offices do not report to the Vice President for Research and have scopes that expand beyond the research enterprise, but do support research and PIs in some capacity.

*2018 PI Handbook
VPR and Reporting Units

**Office of the Vice President for Research (VPR)**
- Oversees supportive research infrastructure on campus
- Provides support services to increase Principle Investigator’s competitiveness for securing external research funding

**Office of Sponsored Projects (OSP)**
- Proposal submission and funded award oversight for federal, state and foundation-sponsored research

**Office of Industry Engagement (OIE)**
- Review and negotiation of research contracts sponsored by industry

**Office of Technology Commercialization (OTC)**
- Technology transfer support (invention disclosures, patent filing, start-up assistance) for inventions generated by UT research

**Research Support and Compliance (RSC)**
- Review and approval of human/animal subjects and biosafety protocols
- Financial Conflict of Interest management

**Animal Resources Center (ARC)**
- Oversight of care and use of vertebrate animals in UT research
## Campus Offices that Support the Research Enterprise

### Vice President and CFO (Business Office)
- Service Center agreements and other Service Agreements such as licensing, facility use, equipment rental
- Works with VPR to establish Core Facilities policies

### University Development
- Processing of research gifts
- Liaise with selected foundation sponsors of research

### Office of Legal Affairs
- Consultation and authorized signatures for confidentiality, intellectual property, ethics or other agreements
- Works with VPR on Research Misconduct cases

### Environmental Health and Safety
- Ensures safe research environments
Additional Support

• Colleges, schools and units offer unit-level research and proposal development, proposal submission and/or grant administration support:
  – Dell Medical School Research Support Services
  – School of Architecture Center for Sustainable Development
  – College of Education Office of Educational Research Support (OERS)
  – College of Liberal Arts Grants Services
  – College of Natural Sciences Strategic Research Initiatives
  – School of Nursing Cain Center for Nursing Research
  – College of Pharmacy Research Support
  – School of Social Work Services to Researchers
Project Structure

Executive Sponsorship
Daniel Jaffe, VPR (Managing Executive Sponsor)

Executive Committee
Functional Area Owners
VPR Leadership

Advisory Groups
Associate Deans for Research Faculty

Project Director
Marc Bruner

Workday/ASMP

Working Groups
OSP/OIE
Department Research Admin
Research Compliance
Development Office
PI/End User

Technical Project Manager
Vendor Project Manager

Business Analysts
Development
QA
Training
Security

Implementation Phase
Business Case

- In-house developed RMS system is outdated and does not meet functional or usability needs
- Mainframe application reaching “end-of-life” and will cease to exist when the University officially retires the mainframe
- Lack of integration with other systems, including compliance applications
- Not designed to harvest data and meet research administration and executive leadership reporting needs
- Limited search capabilities
- Cannot provide real-time tracking and status views (e.g. dashboards)
- Workflow inefficiencies delay reviews/approvals
- Electronic files (no more paper)
### How will it help me as a researcher?

**Integrated Research Information**
- Reduced workflow (e.g. combined PRF and sponsor submission, linked protocols)
- Related project information can be viewed within the same application

**Research Portal or ‘Dashboard’**
- Single gateway for sponsored research at UT Austin

**Increased Transparency**
- Workflow and status visualization
- Emails, actions, comments, and approvals captured as a record of what has happened with a project

**Ease of Use**
- Common UI/UX across modules
- Built-in support and help
- Mobile
- Reporting tools
Grants.Gov Proposal Submission (Objective)

Grants.Gov
- Find Funding Opportunity
- Create Proposal
- Review SOW
- Review Guidelines

UT Austin eRA System
- Create Budget
- Review Budget
- Review Budget Justification
- Assign Proposal
- Finalize Proposal
- Submit Proposal
- Submit to OSP
- Review FCOI Status
- Review Guidelines
User Dashboards/Portals

- Summarized actions by activity type
- Role/user-based Filtering
- Direct links to projects and records
- Common UI/UX
- Integrated Deadline/Meeting Calendars
Workflow Visualization

Evaluation of the efficacy of different treatments for Glioblastomas

Principal investigator: Rebecca Simms (pi)
Submission type: New Protocol Application
Primary contact: Jim Markosi (iacuc)
IACUC coordinator: Jim Markosi (iacuc)
Consulted vet: PI proxies:

Workflow diagram to increase process transparency/self-service

Highlighted visualization of status
Built-in Reports

Support for standard, ad hoc, and advanced reports

Ability to create and schedule reports to run at specific times

Visualization tools
Approach
### CONSIDERATIONS

- On premise hosting vs. Software as a Service (SaaS)
- Support for System to System (S2S) submissions / integration with Cayuse 424
- Continuous delivery of updates/federal compliance
- Built in reporting tools vs. data warehouse (e.g. Tableau)
- User adoption/barriers to entry
- Customization vs. configuration
- “Best in Breed” as opposed to Single Vendor Solution
- Integration with other University systems, including Workday HR and *DEFINE

### Project Approach

**PHASE ONE – PLANNING**
- Identify available software solutions (preliminary discovery)
- Evaluate business practices for research administration
- Budget planning and modelling development
- Determine project scope
- Identify and engage stakeholders
- Procurement

**PHASE TWO – PHASED IMPLEMENTATION**

- **Pre-Award**
  - Validation and prototyping
  - Data migration
  - Training

- **IRB**
  - Validation and prototyping
  - Data migration
  - Training

- **COI**
  - Validation and prototyping
  - Data migration
  - Training

- **IACUC**
  - Validation and prototyping
  - Data migration
  - Training

**PHASE THREE – SUPPORT**
- Ongoing maintenance
- Ongoing training
- Roadmap updates and planning
Survey Results

- Survey of 100 higher education institutions (HEIs) based on total R&D expenditures as identified by 2016 NSF Higher Education R&D (HERD) survey:
  - 14 peer institutions
  - 81 non-peer
  - 5 UT System
- Used institutional websites and firsthand knowledge/outreach to identify the pre- and post-award administrative systems used by each
- Follow-up interviews with 27 HEIs based on identification as a peer institution or relevant eRA use case:
  - 14 peer institutions
  - 10 non-peer
  - 3 UT System
## eRA Distribution – Peer Institutions (Pre-Award + Compliance)

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<th>Institution</th>
<th>Home-Grown</th>
<th>Kuali/Coeus</th>
<th>Cayuse 424</th>
<th>Huron/Click</th>
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**RFP Process**

**Preliminary Discovery**
- Contact vendors
- Peer surveys
- Stakeholder engagement

**Define Requirements**
- Start of implementation plan
- Structure based on general/specific requirements

**Establish Evaluation Team**
- Non-Disclosure/Conflict of Interest Statement agreements for all team members
- Pre-RFP working session

**Compile and Publish**
- RFP Intake Form
- Selection criteria and order of importance
- Detailed scope of work
- Open a minimum of four weeks

**Review Proposals**
- Submitted
- Demos
- Implementation Services
- Cost

**Vendor Selection**
- Evaluation
- Procurement guidelines
- Final executive approval
- Award

**Multiple Vendors - HBP Part 7.5.6 Request for Proposal (RFP)**

**Single Vendor – HBP 7.5.3 Exclusive Acquisition**

**Exclusive Acquisition Justification (EAJ)**
- EAJ Form
- Department/executive approval

**Vendor Selection**
- Cost
- Implementation Services
- Award
Procurement - RFQ

• RFQ issued 9/6; responses were due by 9/21
• Five respondents
  – Tech Software
  – InfoEd
  – Kuali
  – Huron
  – Cayuse
• Pass/Fail criteria to be invited to RFP
• Two of the five responses scored above the minimum score requirement: Kuali Research and Huron Research Suite
Kuali Research

- Open source development model originally based on Coeus software developed at MIT in 1998
- The 40+ Kuali Foundation members devote resources to shared development and management
- In 2014 Kuali Foundation announced transition to Kuali, Inc.
  - Acquired portions of rSmart, a former Kuali Commercial Affiliate
  - Still open source, but Kuali, Inc. is the foundation’s commercial arm for development and implementation
  - Offers Software as a Service (SaaS) using a subscription model, or source can be freely downloaded and managed on-site
  - Releases monthly patches to Kuali Research baseline (v6.x)

- Modules
  - Proposal Development, Award, COI, Protocols (IRB/IACUC)
- In use by
  - Coeus – Purdue University
  - Kuali Coeus (v5.2.1) – Indiana University, Michigan State, UC Berkeley, etc. (and many others)
  - Kuali Research (v6.x) – UC San Diego, UC Irvine, Colorado State University, University of Maryland

Highlights: Open Source, Form Builder, User Dashboard (late 2018), Active User Community, Real-time Data Export/Access
Huron Research Suite

• Formerly Click Grants
  – In 2010 Huron Consulting acquired Click Commerce, Inc. to offer as a competitive eRA solution
• Offer on-site hosting or SaaS implementations
  – In last two years started transitioning to a more solutions-based product (configured vs. customized)
  – Now offer both Product and SaaS based implementations, depending on institutional needs
• Modules
  – Agreements, Animal Operations, Clinical Trials, Conflict of Interest, Effort Tracking, Grants, IACUC, IRB, Safety (all product modules run on a common framework called Portal)
• In use by
  – University of Washington, UCLA, University of Michigan, Virginia Commonwealth University, and many others including UT MD Anderson and UT Southwestern

Highlights: Dashboard, Workflow Visualization, Reviewer Support, CTMS module, Active User Community, Implementation Management
Launch Approach

- **Multi-Phase Implementation by Module/Function**
  - Initial deployment will be to a subset of users to validate approach and training
  - Parallel systems until transition is complete; thereafter existing applications will continue to be accessible as read-only
  - Legacy data will be available in the new system for all active projects
  - Launch will take into consideration peak deadlines and academic calendar

- **Each Phase**
  - Production system testing
  - Training
  - Data load/migration
  - System live
  - Support
Upcoming Events

- **RFP**: November
- **Award**: January
- **Start of Implementation**: Spring 2019
- **Initial Go-Live Date**: Fall 2019

The University of Texas-Austin 2018
Office of the Vice President for Research
Project Updates, Questions, Feedback

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NEWSLETTER
November 2018