April 23, 2013

- UI policies impacting sponsored projects, Grainne Martin (30 minutes)
- PI portal updates, Jose Jimenez (15 minutes)
- Public Access, Oliva Smith (15 minutes)
- Universal Workflow Project – Demo of Inbox, Mike Kaplan and Sam Schrup (20 minutes)
- Lean Process, Richard See (20 minutes)
UNIVERSITY OF IOWA
RESEARCH POLICIES

GRAINNE MARTIN
DEPUTY GENERAL COUNSEL
OFFICE OF GENERAL COUNSEL
UI Research-Related Policies

- Suitability of research conducted in University (II-27.1)
- Access to research information
  - Principles governing access (II-27.2)
  - Process for access (II-27.3)
- Human subjects (II-27.4)
- Administrative surveys and questionnaires (II-27.5)
- Research misconduct (II-27.6)
- Corporate- and industry-sponsored research (II-27.7)
- Anti-retaliation for reporting research misconduct in (II-27.8)
- Animal subjects, review of projects involving (II-27.9)
- Authorship (II-27.10)
- Conflict of interest in research (II-18.6)
- Intellectual property (V-30)
- Assistant dismissal procedure (III-12.4)
- Grants and contracts (V-5; V-1.3)
- Research Council (I-2.8(19); II-27.1(c))
- Staff employment guidelines, P&S (III-3.3)
- Tenure (III-10.2)
Basic Tenets of UI Research Policies

- All research conducted by the UI is expected to be consistent with one or more of the following objectives:
  - The education of undergraduate, graduate, and postdoctoral students
  - The advancement of knowledge through research and scholarship
  - The preservation and dissemination of knowledge
  - Public service
- The “mere availability” of funding is not a sufficient reason for accepting a project
- Research with publication restrictions should not be conducted in the UI
  - Reasonable delays to review for proprietary information and patent protection
  - Exceptions for delays in multi-site projects to ensure scientific rigor
  - VPR may accept “excessive publication delays/other restrictions” where “legitimate considerations related to the research” justify
- No UI facilities may be used for secret research (classified research is secret research; export controlled research is not)
Research with publication restrictions should not be conducted in the UI (II-27.1 and II-27.2)

- Consistent principle across academic research institutions
- Seen as fundamental to tax-exempt mission and academic freedom
- Some university policies allow for exceptions in compelling cases, as we do
WAIVER OF PUBLICATION POLICY

- UI process: DSP works with PI to submit request for waiver of policy to VPR; VPR asks for recommendation from Research Council
- Considerations for waiver request
  - Rationale for request
  - Description of who will have authority over publication decision and justification for that authority
  - Provision in contract or grant that will allow publication within a defined period of time
  - Measures to provide timely medical information if suppression of publication could affect health/safety of subjects
  - List of funded projects that could be affected by publication restriction and how they could be affected
II-27.1(c) is explicit on this point

- Under no circumstances should a faculty member engage a student in a project governed by an extended publication delay agreement or other contractual arrangement that could present a barrier to the timely submission of the student’s thesis or dissertation to the institution or materials therein for publication.
UI Policy on Grants/Contracts

- Requirements for the terms/conditions of any grant or contract
  - Reimbursement of both direct and indirect costs
  - Conform to the UI IP policy as it relates to ownership of inventions created with UI resources
  - Conform to the UI’s policy on no publication restrictions
  - Clinical trial agreements involving investigational drugs or devices should include indemnification for the UI; waiver allowed under limited circumstances
UI Policy on Industry-Sponsored Research

- Must be consistent with UI’s nonprofit tax-exempt status
- Issues if project is unrelated to UI’s exempt mission
  - Unrelated business income tax assessed on project proceeds
- Criteria for “substantially related to tax-exempt mission”
  - Project designed to solve problem using scientific method; or
  - Project furthers an educational purpose; or
  - Project conducted in the public interest
UI Policy on Fee-for-Service Work

- Provision of professional services without the elements of research
- UI recognizes that its employees may engage in such work
- Final product may contain proprietary restrictions
- May be subject to UBIT
- Implications for Iowa statute on competition with private enterprise (Iowa Code 23A)
UI Policy on Human Subjects Research

- Prior IRB approval required to ensure:
  - Individual subject rights and welfare are protected adequately
  - Subject participation is based on voluntary, legally effective informed consent
  - Risks to subjects reasonable in relation to sum of benefit to subject and importance of knowledge to be gained

- PIs are primarily responsible for ensuring protection of subjects

- Faculty who assign or supervise human subjects research conducted by students are obligated to consider whether those students are qualified to adequately protect subjects
UI Policy on Animal Research

- UI research must comply with applicable law
- Prior review and approval by IACUC required
- Training required for those using animals in research
- PI responsible to ensure those on project are trained
UI Policy on Conflict of Interest in Research

- Policy applies to all UI investigators; applies to all research that is funded, but not to unfunded research unless it involves human subjects
- Requires investigators to disclose anything of monetary value that the investigator determines to be reasonably related to his/her institutional responsibilities (no dollar threshold) and to update the disclosure annually
- Conflict of Interest in Research Committee reviews those disclosures that meet the policy definition of “significant financial interest” and recommends a management plan for those found to constitute a “financial conflict of interest” related to a research project
- All investigators required to complete training on obligations under the policy, to be repeated at least every four years
- Certain provisions of the policy (those required by the recently-revised PHS regulations) apply only to investigators with PHS-funded research (monitoring; subrecipient compliance and reporting; retrospective review; mitigation plans; public access to disclosures)
UI Policy on Intellectual Property/Patents

- Policy applies to patentable inventions and copyrighted works
- Ownership of inventions—UI will own in 2 cases (“qualifying invention”)
  - Inventions made by UI employees (including student employees) or postdocs in course of employment/appointment or in field/discipline reasonably related
  - Inventions enabled by significant use of UI resources (employees, postdocs, students when invention did not arise from employment, institutional visitors not employed by UI)
- Outside consulting
  - No inventor of a qualifying invention has the authority to assign the invention to an outside party
Ownership of copyright

- Individual creator of work of scholarship (including student as part of academic pursuit), unless there is a contrary contractual or statutory obligation that would necessitate UI ownership

- University in these cases:
  - Work created by agreement
  - Work created in context of performing admin duties for UI
  - Work for which authorship determination is not possible, practical
  - Work created under terms of contract that requires UI ownership
  - Work created with significant use of UI resources
  - Work created by UI employees (including student employees) when product of assigned job duties/reasonably expected outcome of employment
https://myportal.research.uiowa.edu
NIH Public Access: How to Help Researchers Comply

RAMS meeting
Oliva Smith, Division of Sponsored Programs
April 23, 2013
Today’s Discussion

• Public Access Policy Overview
• Common Questions
• Tool: Public Access Compliance Monitor
• Tool: NIH RePORT Database
• The Bottom Line
The NIH Public Access Policy

The Policy . . . . states: The Director of the National Institutes of Health shall require that all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine’s PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication . . . consistent with copyright law.


* Investigators: Any author may submit the final peer-reviewed manuscript (or request the publisher to do so) to NIHMS-PMC system [NIH Manuscript Submission-PubMed Central].

**The PI and Institution are responsible/obligated, even if the PI of the NIH grant is not listed as an author.
The NIH Public Access Policy

The Policy . . . . states: The Director of the National Institutes of Health shall require that all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine’s an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication . . . consistent with copyright law.


* Peer reviewed—if an editorial, review, book chapter, dissertation → does not apply; denote “not applicable” in MyNCBI.
** Manuscript: not article as appears in journal, unless ok with journal.
*** Only papers written in Latin script.
The NIH Public Access Policy

The Policy . . . . states: *The Director of the National Institutes of Health shall require that all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine’s PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication . . . consistent with copyright law.*


*Must be NIH’s PubMed Central PMC database; an open access journal, other websites do not work.*

** An article in PubMed Central is assigned a PMCID.

***MUST include this PMCID when citing (as in progress reports) to indicate the article is in PubMed Central (or the NIHMS ID if it is in the NIHMS-PMC system).
The NIH Public Access Policy

The Policy states: The Director of the National Institutes of Health shall require that all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine’s PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication . . . consistent with copyright law.


Four ways for a publication to get into PubMed Central

→ depends on the journal (see next two slides).

Method ‘A’ & ‘B’: publisher sends final article directly to PMC.

‘A’ publishers have agreement with NIH= they do it for you;

‘B’ publishers charge authors fee for open access.

Method ‘C’ & ‘D’: manuscript to PMC via NIHMS.

‘C’ authors submit to NIHMS-PMC themselves.

‘D’ publishers submit per author request. Once in NIHMS, both ‘C’ & ‘D’ require authors to approve manuscripts TWICE before PMC.
<table>
<thead>
<tr>
<th>Participating journal/publisher</th>
<th>Method A</th>
<th>Method B</th>
<th>Method C</th>
<th>Method D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version of Paper Submitted</td>
<td>Final Published Article</td>
<td>Final Published Article</td>
<td>Final Peer-Reviewed Manuscript</td>
<td>Final Peer-Reviewed Manuscript</td>
</tr>
<tr>
<td>Task 1: Who deposits the paper?</td>
<td>Publisher direct to PMC</td>
<td>Publisher direct to PMC</td>
<td>Author or designee, via NIHMS</td>
<td>Publisher, via NIHMS</td>
</tr>
<tr>
<td>Task 2: Who approves paper for processing?</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Author, via NIHMS</td>
<td>Author, via NIHMS</td>
</tr>
<tr>
<td>Task 3: Who approves paper for PubMed Central upload?</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Author, via NIHMS</td>
<td>Author, via NIHMS</td>
</tr>
<tr>
<td></td>
<td>Method A Journals have agreement with NIH</td>
<td>Make arrangements with these publishers charge $$</td>
<td>Check publishing agreement</td>
<td>Make arrangements with these publishers</td>
</tr>
</tbody>
</table>
Let’s be clear

- PMCID – PMID: what is the difference?
- Is the paper under this policy?
- How do I know how if the journal submits to PMC?
- How do I find out if an article is in PMC, has a PMCID?
- What if article not in PMC and should be?
- How do I cite articles in press?
**PMCID – PMID: what’s the dif?**

- **PubMed Central PMC** (since 2000) *full-text biomedical journal articles, assigned the PMCID;* articles freely accessible to the public (w/o going through publisher’s site). PMCID indicates the article is in PubMed Central PMC, and therefore complies with NIH Public Access.
  
  PMCID: PMC7654321  PMC + 7 numerals (so far)

- **PubMed assigns PMID to citations & abstracts from MedLine, life science journals, books, etc.** PubMed does not contain FULL TEXT – unless library links $\$$. PubMed has *nothing to do* with NIH Public Access.
  
  PMID: 23314567  eight numerals
For us in academia, PubMed works great because our libraries link citation record to the full text; if use PubMed from home you are not linked to the full text.

Article not available in PMC yet, i.e. honoring the publisher’s one year delay/embargo.

Hardin Library’s PubMed url to take advantage of this service.


Costs $4 million for UI Libraries to provide links to journals for full text from PubMed.
Is the paper under this policy?

- **Peer-reviewed;** reviews, editorials, commentaries are not applicable. Must be Latin script.

- **Accepted for publication in a journal on/after April 7, 2008;** find acceptance date on title page of full text article.

- **And, arises from:**
  - Any direct funding from an NIH grant or cooperative agreement active in Fiscal Year 2008 or beyond, or;
  - Any direct funding from an NIH contract signed on or after April 7, 2008, or;
  - Any direct funding from the NIH Intramural Program, or;
  - An NIH employee.
How do I know if a journal submits to PMC?

• First check if it is Submission Method ‘A’ (slides 7, 8). (Use google.com)  
  http://publicaccess.nih.gov/submit_process_journals.htm
  * If yes, [horray] no author involvement.
  * Cite with PMCID or “PMC Journal in process.”

• If No: need to find out journal’s author info.
  * Find journal’s webpage “author information.”
  * [google.com] Sherpa-Romeo –db of publisher info 
    http://www.sherpa.ac.uk/romeo/.
  * U of Toledo link  
    http://mulford.meduohio.edu/instr/  
    for journals in health sciences.
How do I find the PMCID?

- Use the PMID, find if it has a PMCID or NIHMS ID via the converter link:  [http://www.ncbi.nlm.nih.gov/pmc/pmctopmid/](http://www.ncbi.nlm.nih.gov/pmc/pmctopmid/)
  Use google.com to find:  PMCID converter
- If is has a PMCID, then add to citation.
- If has NIHMS id = in the NIHMS-PMC system. Can use NIHMS id for up to 3 months after date of publication, by then supposed to have PMCID.
  - Author check if STALLED in NIHMS system
    [http://www.nihms.nih.gov/db/sub.cgi](http://www.nihms.nih.gov/db/sub.cgi)  awaiting one/both approvals before PMC.
What if article not in PMC?

• Check journal’s/publisher’s policy: do they send or does author?

• If journal, contact and request they do this asap.

• OR ask journal if YOU can submit manuscript (not .pdf of the article) to NIHMS-PMC yourself—so you know it is done (esp if the article is a year or more from date of publication).

• Submit to NIHMS-PMC system  http://nihms.nih.gov/help/faq.shtml

• **Cannot** use “PMC Journal – In Process” for Method C or Method D journal articles.
How to cite articles in press?

• For Method A and B Journals, use “PMC Journal - In Process” if they don’t have the PMCID yet.

• Reminder: Method A & B Journals agree to post the final published article into PMC.

• You **cannot** use “PMC Journal – In Process” for Method C or Method D journal articles.
How to cite articles in press?

- For Method C & D Journals, use the **NIHMSID**.

  -> This article was sent to the NIHMS-PubMed Central system and is waiting for the PMCID. You CANNOT use the “In Process” for articles from Method C or D journals—won’t be accepted in the new RPPR.

- **NIHMSIDs will not be accepted 3 months after publication.**
  - If article goes through NIHMS smoothly (two approvals by authors) PMCID assigned in approx. 10 – 14 days.
  - Please use the PMCID once it is assigned.
Why you need the PMCID

For non-competing continuation grant awards with a start date of July 1, 2013 or beyond:

• **NIH will delay processing of an award** if publications arising from it are not in compliance with the [NIH public access policy](http://grants.nih.gov/grants/guide/notice-files/NOT-OD-13-042.html).

• Investigators will need to use [My NCBI](http://www.ncbi.nlm.nih.gov/myncbi) to enter papers onto progress reports. Papers can be associated electronically using the RPPR, or included in the PHS 2590 using the My NCBI generated [PDF report](http://www.ncbi.nlm.nih.gov/myncbi).

• The BOTTOM LINE: no PMCID = no $$
The RPPR is required for all awards issued under the Streamlined Non-competing Award Process (SNAP), and all F awards, with budget start dates on or after July 1, 2013.

The RPPR will display Public Access compliance status --> non-compliant publications will be flagged.

As with the eSNAP, publications in PD/PI’s MyNCBI account will be displayed for easy association with the progress report.

Research Performance Progress Report RPPR
http://grants.nih.gov/grants/rppr/index.htm
Tools: Keep track of articles

• **Public Access Compliance Monitor PACM** - list of articles the NIH “believes a grantee institution is responsible for.”

• **NIH RePORTER** – data drawn from eRA databases, Medline, PubMed Central, etc.

• **BOTH depend on author linking the grant to the publication. (via NCBI)**
Tool: PA Compliance Monitor


- To use: requires PACR role in eRA Commons. Request this role from Dave-myers@uiowa.edu

PACM: Institutional Summary -year
PACM Institutional Summary - total
1. Many have **not** started the process in NIHMS-PMC.

2. Stalled in NIHMS

Default by PMID; can also list by “PI” or Grant #. “PI” is actually list of authors or others who have had projects under that Grant #.
Stalled: awaiting final of two approvals in the NIHMS.
How to use the PACM

• From the **Institutional Summary** page, click on Non-Compliant number and go to Institution Details page.
  • Sort the non-compliant list by PI (or by grant #) and then download the list as a CSV file.

• The resulting Excel spreadsheet includes additional info [first author, title, ‘latest actor’] which provides tool for following up.
• “Supposed to be” updated twice a week.

• Good way to find articles that are **stalled** in NIHMS: have had the NIHMS number for a long time but not yet the PMCID. Tells you who was the last person to “act” to get process going again.
Tool: NIH RePORTER

- Web based and real-time.
- Find publications by grant number or PI.
- Links to the PubMed abstract.
- No special admin role required.
Use NIH RePORT to find publications associated with PI and grant.

Could also use enter: iowa then use Lookup

http://projectreporter.nih.gov/reporter.cfm
Use RePORT to find publications associated with PI and grant.

<table>
<thead>
<tr>
<th>T Act Project Year Sub #</th>
<th>Project Title</th>
<th>Contact PI/Project Leader</th>
<th>Organization</th>
<th>FY Admin IC</th>
<th>Funding IC</th>
<th>FY Total Cost by IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 US4 NS053672 00</td>
<td>MECHANICAL CAUSES AND THERAPEUTIC STRATEGIES FOR THERAPEUTIC-RELATED MUSCULAR</td>
<td>CAMPELLE, KEVIN P.</td>
<td>UNIVERSITY OF IOWA</td>
<td>2012</td>
<td>NINDS</td>
<td>$537,061</td>
</tr>
<tr>
<td>5 US4 NS053672 00</td>
<td>ADMINISTRATIVE</td>
<td>CAMPELLE, KEVIN P.</td>
<td>UNIVERSITY OF IOWA</td>
<td>2012</td>
<td>NINDS</td>
<td>$112,371</td>
</tr>
<tr>
<td>5 US4 NS053672 00</td>
<td>RESEARCH TRAINING AND EDUCATION</td>
<td>CAMPELLE, KEVIN P.</td>
<td>UNIVERSITY OF IOWA</td>
<td>2012</td>
<td>NINDS</td>
<td>$141,019</td>
</tr>
<tr>
<td>5 US4 NS053672 00</td>
<td>MUSCULAR DYSTROPHY COOPERATIVE RESEARCH CENTER</td>
<td>CAMPELLE, KEVIN P.</td>
<td>UNIVERSITY OF IOWA</td>
<td>2012</td>
<td>NINDS</td>
<td>$1,474,037</td>
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<tr>
<td>5 US4 NS053672 00</td>
<td>CLINICAL TRIAL READINESS FOR THE DYSTROCYANIPATHICS</td>
<td>MATTHEWS, KATHERINE</td>
<td>UNIVERSITY OF IOWA</td>
<td>2012</td>
<td>NINDS</td>
<td>$355,117</td>
</tr>
<tr>
<td>5 US4 NS053672 00</td>
<td>MUSCLE BIOPSY/CULTURE/DIAGNOSTICS</td>
<td>MOORE, STEVEN A</td>
<td>UNIVERSITY OF IOWA</td>
<td>2012</td>
<td>NINDS</td>
<td>$332,669</td>
</tr>
</tbody>
</table>

This list was generated with grant number.
Only as good as the data entered: does not find publications that are not associated with the grant.
1. Paste PMID into PMCID converter link http://www.ncbi.nlm.nih.gov/pmc/pmctopmid/ (use google to find link). Article has no PMCID or no NIHMS id = not in NIHMS-PMC system.

2. Science – how does journal promote NIH Public Access, i.e. are they method A, B, C, D (slide 7)?
Find journal’s policy re: NIH PA

• Example: Science:
  
• 1. Are they a Submission Method A journal (slide 8)? Search the list = No  [http://publicaccess.nih.gov/submit_process.htm](http://publicaccess.nih.gov/submit_process.htm)

• 2. Google.com to find journal’s site
  • Find “information for authors” page on journal site.

• 3. OR use Univ of Toledo link  [http://mulford.meduhio.edu/instr/](http://mulford.meduhio.edu/instr/)

• 4. OR google.com Sherpa Romeo  [http://www.sherpa.ac.uk/romeo/](http://www.sherpa.ac.uk/romeo/)
Science: author to submit manuscript to NIHMS-PMC; set delay/embargo 6 months from print date. (Submission method C on slides 7, 8) How to: http://www.nihms.nih.gov/faq.html
Tools: PACM and RePORTER

• Both tools useful to identify publications in need of PMCID.
• Both tools useful to identify grants with publications.
• The PACM helps identify if/where article is stalled.
• (I think) RePORTER is easier to find publications by the grant.
• Author MUST link the publication to the grant in order for either tool to pick it up.
How DSP will help compliance

• Starting this week: send out notices to the PIs who have non-competing renewals due May 1, May 15 with July 1 start dates to remind them their publications must have PMCIDs.

• Continue notices for future months.

• I am always happy to answer questions and provide training sessions.

• Dave Myers is learning more about the NIH Public Access and will be able to field questions as well.
Avoid Delays in Compliance

• **Encourage investigators to:**
  • Ensure compliance well before their annual reports are due and avoid last-minute.
  • When submitting, find out journal’s policy, and start the process as soon as accepted.
  • Use “My NCBI” to associate papers with awards today. [Tools are only as good as the data entered]

• Log in to NIHMS [http://www.nihms.nih.gov/db/sub.cgi](http://www.nihms.nih.gov/db/sub.cgi) to find if any articles are listed in “Stalled” tab.
  • Investigators will see only those articles in NIHMS.
Thank you

- DSP’s NIH Public Access webpage
  http://dsp.research.uiowa.edu/nih-public-access-policy

- Hardin Library Public Access Policy webpage
  http://guides.lib.uiowa.edu/nihpublicaccess

- THANK YOU.
  Please feel free to contact me with questions.
  Oliva Smith
  Division of Sponsored Programs DSP
  oliva-smith@uiowa.edu
  5-3708
What is My NCBI?


- Must link eRA Commons accounts and MyNCBI
- Once linked, users can associate publications with NIH grants.
- Tracks NIH Public Access compliance
- **The only way to enter publications into RPPR**
- Creates the publications section (Section E) of PHS 2590s
- Other time savers: Delegation, options to share and publish bibliographies, automate searches, etc.
Goals

• One Workflow System
• Access to all potential approvers
• Accommodate diverse routing rules
• Easy form integration
What is Workflow?

• Form Builder / Integration Tools
• Route Builder
• Offices / Office Routes
• Tools
• Inbox
• Form plug-ins and widgets
Unified Inbox

- One Interface – 3 Systems
- Combine Legacy MAUI & UI Workflow Forms with New Workflow Forms
- First WF Component to be Released
Unified Inbox Demonstration
Beta & Launch

• Entering Beta Phase – May 2013
• Available Campus-Wide – Summer 2013
• Old Inboxes Removed – Fall 2013
Questions?

samuel-schrup@uiowa.edu
michael-kaplan@uiowa.edu
Creating & Maintaining a Lean Culture

Dick See
Manager, UI Business Process Improvement
Organizational Effectiveness
Today’s Objectives

- Lean Background & Benefits
- Change Management
- Lean Tools
- Lean Successes on Campus
- Iowa Lean Consortium
- Keys to a Successful Conversion to Lean
What is Lean?

- It’s not an acronym
- It’s about the culture and a way of thinking
- A time-tested proven approach to improving processes within an organization by maximizing their value while reducing the waste.
- Allows an organization to do more with the same resources
- Encourages individuals to challenge preconceptions about the way they do what they do
- It is NOT about furloughs and layoffs!!
What Can Lean Do For You?

- Reduce frustration
- Minimize or eliminate errors
- Save time
- Eliminate unnecessary steps
- Provide a better understanding of a process
- Improve communications with others
- Teach you how to recognize waste & inefficiencies in your process
What are other benefits?

Using Lean tools an organization can expect to:

- Decrease the complexity of processes
- Provide an opportunity for those who do the work to develop ideas for improvement and efficiency
- Improve the quality and consistency of results
- Allocate more staff time to “mission critical” work
- Improve staff morale
- Increase process transparency which allows errors or problems to be identified more quickly
- Gain a shared appreciation for the integral part each person plays in the process being reviewed.
- Creates an opportunity for dialogue between all units involved in the process
Perceptions regarding change
Change Management

- Create an environment of expectation and sense of urgency
- Policy deployment must support lean goals
- Communicate the lean vision
- Encourage ‘learn by doing’
- Institutionalize the new approach
- Tools should be applied to the whole organization
- Be an influencer; encourage innovation & creativity
- Focus on the process instead of blame

“Be hard on the process, but soft on the operators.” Toyota
Change Management

- Empower everyone to suggest improvements
- Avoid hysteresis
  - Don’t let behaviors go back to the way they were.
- Recognize and celebrate improvements

We are what we repeatedly do. Excellence, then, is not an act, but a habit. - Aristotle
The Lean Mantra

- Simplify,
- Eliminate,
- Automate,
- then Integrate

Automating bad business practices will not fix your problems. (It will just allow them to happen faster!)
Where do you begin to improve your processes?

- Develop critical thinking regarding your processes.

  - What processes:
    - Are ‘mission critical’
      - If it’s not, can you still afford to perform it?
      - What happens if you stop doing it?
    - Require frequent rework
      - “If you don't have time to do it right, when will you have time to do it over?”
    - Require a ‘shadow system’
    - Cause you headaches/frustration
    - Review your processes for value to your customer/client and waste
Follow the ‘Process Improvement Pyramid’

1) Identify ‘Mission Critical’ Processes

2) Review for value/waste - simplify or eliminate process steps

3) Reallocate responsibilities to staff
Where do you begin to improve your processes?

- Initiate a problem solving exercise
  - W. Edwards Deming’s PDCA Cycle
    - Plan, Do, Check, Act
  - Refer to the eight step problem solving chart
  - Perform a root cause/value analysis
    - Ask the ‘5 whys’
    - Review the ‘8 Forms of Waste’ list
Review your processes for the 8 Forms of Waste

- Waste from Overproduction
  - Producing services or information that no one needs / uses

- Waste from Waiting
  - Waiting for information or a process to be completed

- Waste of Transportation
  - Unnecessary report routing

- Waste of Unnecessary Processing
  - Multiple formats of the same information
  - Redundant or shadow processes

- Waste of Excess Inventory
  - Obsolete or redundant data on shared drives

- Waste of Unnecessary Motion
  - Searching for documents or other information

- Waste from Product Defects
  - Redoing applications or recreating reports

- Waste from Behaviors or Underutilized People
  - ‘We’ve always done it that way’
Different Lean Tools

- Eight step problem solving process
- A3 Process Improvement Document
- Burst – Small scope
- Kaizen – Large scope
- Five S’s – base level organization
  - Office
  - Lab
  - Electronic
### 8 Step Problem Solving Process

**Plan – Do – Check – Act (PDCA)**

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Define the Problem</th>
</tr>
</thead>
</table>
| - What is the problem?  
- How do you know it is the problem?  
- What did the problem stop or delay on your work?  
- If there was no problem, why is it not better present now?  
- If there was no work, would it not be better present now? |

<table>
<thead>
<tr>
<th>Step 2</th>
<th>Clarify the Problem</th>
</tr>
</thead>
</table>
| - What is the objective to resolve the problem?  
- Is the problem to meet the customer or is it a person in the organization?  
- Is the problem to be solved to meet the customer or is it a person in the organization?  
- Is the problem to meet the customer or is it a person in the organization?  
- Is the problem to meet the customer or is it a person in the organization? |

<table>
<thead>
<tr>
<th>Step 3</th>
<th>Define the Goals</th>
</tr>
</thead>
</table>
| - What is your next step or desired future state?  
- What will you accomplish if you meet your goal?  
- What is the present situation for solving the problem? |

<table>
<thead>
<tr>
<th>Step 4</th>
<th>Identify Root Cause of the Problem</th>
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</thead>
</table>
| - Identify possible causes of the problem.  
- Analyze possible root causes of the problem.  
- What information or data do you have to validate this root cause? |

<table>
<thead>
<tr>
<th>Step 5</th>
<th>Develop Action Plan</th>
</tr>
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</table>
| - Enumerate a list of actions required to address the root cause and prevent problems from occurring in the future.  
- Assign an owner and timeline to each action.  
- Ensure someone to ensure completion. |

<table>
<thead>
<tr>
<th>Step 6</th>
<th>Execute Action Plan</th>
</tr>
</thead>
</table>
| - Implement action plans to correct the root cause.  
- Verify solutions are complete. |

<table>
<thead>
<tr>
<th>Step 7</th>
<th>Evaluate the Results</th>
</tr>
</thead>
</table>
| - Review the results from the action plans.  
- Did you meet your goals defined in Step 2?  
- Compare the current process view, time, and effort with the previous process step.  
- Move to any unresolved obstacles.  
- Use feedback to correct errors and add new steps to address issues. |

<table>
<thead>
<tr>
<th>Step 8</th>
<th>Continuously Improve</th>
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</table>
| - Look for additional opportunities to implement actions.  
- These problems will not come back if the improvements become institutionalized.  
- Implement the 8 Step Problem Solving Process to drive further improvements. |
# A3 Document

## Title

<table>
<thead>
<tr>
<th>Background</th>
<th>Countermeasures</th>
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<tbody>
<tr>
<td></td>
<td>Suspected Cause</td>
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<tr>
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<td>2.</td>
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<td>3.</td>
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<td>8.</td>
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<td>9.</td>
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</tbody>
</table>

## Current Condition

## Goal

## Root Cause Analysis

## Effect Confirmation

## Follow-up Actions

<table>
<thead>
<tr>
<th>Investigation Item</th>
<th>Responsibility</th>
<th>Due</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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</table>
The PDCA cycle is overlaid on the A3 template:
Root Cause Analysis

- 5 Whys – Jeff Bezos Example
- Cause & Effect Diagram
  - Fishbone Diagram
Cause & Effect Diagram aka – Fishbone Diagram
Completed A3 Document
Burst Events

- Very narrow scope
- Short time frame – less than one day
- Fewer people needed in the discussion (but not always)
- Fewer number of action items
Kaizen Events

Brings together:
- the leadership of a process, who have recognized a need and documented a “case for change”,
- with customers, frontline workers, and other stakeholders in the process
in a structured, facilitated discussion lasting up to three full days.
What is the purpose of the Five S process?

To assist individuals to become more organized and productive by enhancing their ability to:

1) effectively collect
2) efficiently store, and
3) quickly retrieve relevant materials, supplies, hardcopy and/or electronic information.
The Five S’s are:

1. **Sorting**: Separating the needed from the not-needed.
2. **Simplifying**: A place for everything and everything in its place. Create information storage systems that another person could easily understand.
3. **Systematic cleaning**: Create time in your schedule to routinely maintain a clean work environment
4. **Standardizing**: Develop and document common methods to maintain consistency
5. **Sustaining**: Hold your gains and continue to improve.
Common shared file organization
Lab Five S Successes
## Campus Lean Successes

Clinic Trials Contract negotiation time reduced **77%**

- Before LEAN: 31 weeks
- After LEAN: 7 weeks

Voluntary Retirement Savings Program review time reduced **93%**

- Before LEAN: 650 hours annually
- After LEAN: 48 hours

Building Project Accounting Capitalization – one person's time reduced **99%**

- Before LEAN: 6 weeks annually
- After LEAN: 3 hours

Organ Transplant Clinic “Work in Progress” reduced **88%**

- Before LEAN: 163 outstanding cases
- After LEAN: 20 cases

Organ Transplant Clinic “Time to Evaluate” reduced **82%**

- Before LEAN: 340 days
- After LEAN: 60 days

Pharmacy Prescription Processing mail-out lead times reduced **89%**

- Before LEAN: 14 days
- After LEAN: 3 days

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*2010 Winner, Iowa Business Council “Partners in Efficiency Award”
†2010 Finalist, Iowa Business Council “Partners in Efficiency Award”
Iowa Lean Consortium

- At least 10 events per year sponsored by the Consortium

March 5
Keep the Lean Fire Burning
Hosted by HNI Hearth & Home at Iowa Wesleyan College
Mt. Pleasant, IA
Learn More

May 7
Problem Solving to Align Purpose, Process & People
Presented by: Tracey Richardson
Ames, IA
Learn More!

June 7
Swim Lane Mapping
Kreg Tool
Huxley, IA
Learn More

October 30
ILC Conference
Keynote Speaker: Jamie Flinchbaugh
Details Coming Soon!

- Members offer internal training to members
- Event attendance is free to all U of I staff
- List on other information and resources on website
- http://www.iowalean.org/ - Go to Members Area
Keys to Success

- It takes true commitment and a change in culture – 
  Be the change you wish to see
- Those who do the work should be those who develop 
  the new process
- Involve all affected stakeholders
- Make changes now
- Practice accountability
- Leadership determines the success or failure of any Lean initiative!!

“If you change the way you look at things, the things 
you look at will change.” - Unknown
Contact Information

For further information or assistance

- richard-see@uiowa.edu – 384-0766
  - http://www.uiowa.edu/hr/workconsult/lean/index.html
  - Organizational Effectiveness – 335-2085

Other campus lean leader contacts:

- UI Health Care: Randy Fry – randy-fry@uiowa.edu
- State Hygienic Laboratory: Lorelei Kurimski – lorelei-kurimski@uiowa.edu