1. Use case name

*Note that an organization that is creating records, integrating into a repository, and integrating into a researcher information system would have three use case reports.*

**Use Case 1:** Integrate ORCID iDs with FIS components for access and reporting at CU-Boulder.

**Use Case 1a:** Integrate ORCID iDs with FIS components for access and reporting at CU-Colorado Springs.

**Use Case 2:** Support the FIS publication data ingest process using Symplectic Elements and other sources.

**Use case 3:** Share ORCID iDs through SPARQL endpoint with the American Psychological Association. This step will support APA’s desire to push publication data to individual ORCID records.

**Use cases and integration that will extend beyond the grant period:**

a. **Anschutz Medical Campus and Profiles RNS.** Integrate ORCID iDs with the Colorado Profiles system managed by the CCTSI group at the Anschutz Medical Campus. Display ORCID iDs for each researcher on Colorado Profiles. Additional integration potential will be explored as the vendor for the software in use, Profiles RNS, integrates ORCID more fully into their software capability and disambiguation process.

b. **Digital repository at CU-Boulder.** University Libraries have selected Digital Commons bepress as their platform option for an institutional repository. ORCID iDs will be a necessary piece of this project which is also slated to tie in to the FIS publication ingest project involving Symplectic Elements.

c. **Academic Analytics.** A third-party vendor providing faculty data for comparison across institutions, Academic Analytics, performs a rigorous, yet time-consuming, disambiguation process for faculty publications, honors, grants and more. ORCID iDs for our Boulder campus faculty could greatly assist that process.

d. **University Information Systems (UIS).** UIS oversees the enterprise systems for all four campuses at the University of Colorado including the HR management system and the research enterprise system. Integration of ORCID iDs within these systems will allow for sustainable maintenance by utilizing established personnel processes and portal access options and will ensure comprehensive use of ORCID iDs for manuscript and grant submissions. The vision is that ORCID iDs for all CU faculty will reside on the person record in the payroll system much like ones social security number. That will then feed to the research management system. Both the payroll system (Peoplesoft) and the research management system (moving to InfoEd) will be going through major upgrades over the next 12-24 months. The grant project team will attempt to create ORCID iDs for faculty at all four campuses, store the information and then move it to the enterprise system in the future.

e. **National Center for Atmospheric Research.** NCAR shares a number of faculty affiliates with the Boulder campus. Sharing ORCID iDs for our faculty with NCAR will contribute to their publication data collection efforts and will also facilitate our pilot to share linked data.

2. Institution name: University of Colorado Boulder

3. Project goals and scope
Adoption and Integration Program
Use Case Documentation

Please provide an overview of your project, why your organization chose to undertake it, what you hoped to achieve, and the scope of the project.

Project Overview and Scope
The Boulder campus of the University of Colorado (CU) has identified adoption of ORCID as a critical need to support efforts related to the association of publications and other scholarly works with the nearly 8000 faculty members working at the four CU campuses. The CU-Boulder Faculty Information System (FIS) Development Team has the expertise and infrastructure already in place to deliver ORCID iDs for these researchers. ORCID iDs could then be repurposed for efforts at each campus by, for example, Libraries, Institutional Research and Research Administration. Connections are also possible with additional non-University stakeholders in the region including the American Psychological Association (APA) and the National Center for Atmospheric Research (NCAR). ORCID iDs for faculty could be integrated easily if housed within the enterprise systems handled by University Information Systems (UIS) as this would allow using various payroll processes already in place for access and maintenance. See the attached diagram.

The FIS team envisions implementing ORCID as it has the capability to respond immediately and then to explore future data pathways with UIS during the grant period to allow time to schedule how best to receive the newly created ORCID into the larger, more complex enterprise processes.

This project includes a phased integration plan which involves designing, testing and implementing prototype software and related processes for delivering ORCID iDs for individual faculty members and giving easy access to the ORCID iD through existing reporting applications (FRPA) and on the public profiles of VIVO CU-Boulder and VIVO UCCS. These actions will allow faculty to use their ORCID ID for manuscript and grant submission processes and to begin to explore the ORCID profile offerings. The initial phase will create ORCID iDs for Boulder faculty only.

4. Is your organization willing to serve as a resource for other organizations pursuing ORCID integration?  Yes

5. Project personnel
   Please include name, title, phone number, and email address for each contact:
   a. Project leader: Liz Tomich, Director of FIS Development, 303-492-4226, tomich@colorado.edu
   b. Technical contact: Don Elsborg, FIS Lead Developer, 303-492-4226, elsborg@colorado.edu
   c. Other team members:
      Vance Howard (technical), FIS Software Engineer, vance.howard@colorado.edu
      Andrew Johnson (outreach), Assistant Professor and Research Data/Metadata Librarian, 303-492-6102, andrew.m.johnson@colorado.edu

6. System(s) involved. Provide a workflow diagram showing where ORCID identifiers were collected and the system(s) modified to collect and/or store ORCID identifiers. A sample workflow diagram is available at https://orcid.org/blog/2013/08/08/suggested-practices-collection-and-display-orcid-ids-publishing-workflows?lang=zh-hant.
   Please see attached diagrams. One diagram shows ORCID id links for expanded network of stakeholders many of which will come in after the grant period. The other set of diagrams is specifically the Boulder campus implementation process.
7. **Project timeline**

*Please provide a brief overview of when your project began and its timeline for completion.*

February, 2014: Begin Use Case 1: To create ORCID iDs for all Boulder campus faculty and investigate API requirements, investigate ORCID process and capabilities, identify faculty population to include.

February/March – determine business and technical requirements and changes to current database structure, identify data to include in initial load, develop communication plan, test API, iterate revisions to reflect technical understanding. Decisions made include: allow opt out, distribute work to faculty member rather than pre-populating data to their profile. Data fields to include on initial Registration load: preferred name (first and last), preferred CU email, VIVO profile uri. Discussed but decided to not include information on other ids such as ResearcherID. See attached work flow diagrams for pre-registration, registration, pre-existing id and polling.

March 6 – Site visit

April – Communication plan implemented

April 1 – presentation to Council of Deans

April 8 – campuswide announcement of ORCID implementation to faculty and staff

April 18 – presentation to Department Chairs (about 70 administrators)

April 22 – Pre-registration email to specific faculty involved in implementation. Provide information, collect data on who has a pre-existing ORCID ids or who wants to opt-out.

Late April – meet with System stakeholders to discuss future needs to add ORCID iD to PeopleSoft person record for inclusion in the hiring process, grant funding process. Stakeholders to include technical and policy stewards of enterprise payroll and research management systems.

May 21-22 – ORCID Outreach Meeting

June 1-July 10: complete testing and development and initiate Registration process to create ORCID ids for tenure-track faculty, all instructors, all research faculty on the Boulder campus. Those identified with pre-existing ORCID ids will be directed to give CU-Boulder trusted party status. All others will be notified of creation of ORCID id and communication to come from ORCID. Actual registration to occur as early as possible in this time frame.

Add ORCID iD to campus reporting tool (FRPA) and VIVO profile for easy access by faculty and/or proxy.

July/August –

Begin **Use Case 1a: Integrate ORCID iDs with FIS components** for access and reporting at CU-Colorado Springs. Should be same effort as for CU-Boulder. Database structure already built. Special issues include communication plan support for that campus.

Begin **Use Case 2: Support the FIS publication data ingest process** using Symplectic Elements and other sources. Add ORCID iDs to Elements for all Boulder campus faculty. Requires HR Ingest process to be updated to include all research faculty not originally added to Elements and requires upgrade to more recent Elements software with ORCID integration.
Adoption and Integration Program
Use Case Documentation

Begin Use Case 3: Share ORCID iDs with American Psychological Association (APA). Share ORCID ids for Boulder faculty with the APA via SPARQL end point.

August – Share integration software on ORCID open source repository when implementation is complete.

August 31 – grant period ends

August/September – Follow-up with those who have not yet claimed their ORCID iD. Avoiding start of academic year in late August.

8. Project web page(s) – An informational web page for faculty is currently being developed.

9. Please identify the stakeholder groups within this project and describe the outreach/communications work your organization arranged in advance of implementation. Which stakeholders did you contact? How did you organize a team? What were the policy impacts?

Stake holders for the ORCID Adoption Project

Boulder Campus:
Office of the Provost/Academic Affairs
University Libraries
Office of Institutional Research
Vice Chancellor for Research

CU-Colorado Springs Campus
Academic Affairs
Office of Institutional Research

Denver/Anschutz Medical Campus
CCTSI group – Colorado Profiles

CU System
University Information Systems (UIS)
Payroll & Benefits Systems (PBS)
Research Administration (eRA)

External Stakeholders
Academic Analytics (data provider)
American Psychological Association (APA) – publisher
National Center for Atmospheric Research (NCAR)

Stakeholders contacted during the outreach stage in advance of implementation included: subject liaison librarians, department staff, research administration, department chairs, and Deans of schools and colleges.

Policy impacts have been low to date. Decision made to minimize data pushed to ORCID profile and to distribute the effort to the individual researcher for now. Opt-outs will be allowed. We anticipate policy changes will occur within research administration work flows related to funding reporting procedures and/or human resource data processes related to new employee information gathering. These policies will be dictated by a different group of stakeholders at the CU System level. Preliminary discussion with these System-level groups responsible for enterprise data systems will occur likely in late April or early May. Our initial goal is to simply create the ORCID iDs and get that movement rolling.

10. Please provide an overview of your communications plan as well as examples of your communications outputs, which may be adapted by other organizations for their integrations.
Adoption and Integration Program
Use Case Documentation

This includes email messages, web pages, LibGuides, press releases, instructional videos, internal documentation, training materials, etc.

See attached for current communication plan and existing outputs. Other emails, presentations, handouts, and a webpage are currently being developed for a substantial communication effort in the month of April.

11. Are you willing to share your source code? If yes, please provide a link.


Yes, we are willing to share source code and will provide that github link in the future.
**ORCID Preregistration**

**FIS Team**
- Begin
  - Send prereg notices
    - Bounce?
      - No
        - Resend
        - Handle bounces
      - Yes
        - Flag existing ID
        - Flag opt out
        - Yes
          - Yes
            - Yes
            - No
          - No
            - No
  - No
    - Yes
      - Resend

**Faculty**
- Prereg notice
  - iD exists?
    - No
      - Yes
        - Concerns?
          - No
            - End
          - Yes
            - No
            - End
    - Yes
      - No
      - Yes
        - End
Preexisting iD

FIS Team

Begin

Send Preexisting iD notice

Preexisting ORCID ID

Store

Faculty

Preexisting iD notice

email on file?

Yes

Trusted Party?

Yes

Add CU email

No

iD Not Accessible

ORCID

No

Yes
ORCID Polling

FIS Team

Begin

Get ID profile

Record primary ID

Set claimed TRUE or FALSE

Set deactivate date or NULL

Faculty

For all CU ORCID faculty

Query primary ID

Deprecated?

Yes

No

Return ID profile

ORCID

FIS
University of Colorado Boulder
ORCID Adoption and Implementation Communication Plan

Objectives

- To communicate the value of the ORCID initiative to various stakeholders at CU-Boulder, including administrators, faculty, and others
- To communicate procedural information for accepting or rejecting ORCID iDs to faculty who will be registered with iDs during the implementation process

Timeline of Events

February:

- Overview presentations to Libraries groups:
  - Libraries faculty
  - Liaison librarians
- Overview email to liaison librarians and Libraries faculty
- Development of talking points and promotional materials (leveraging existing materials when applicable) for liaison librarians to use to communicate with departments

March 6th:

- Site visit from ORCID Executive Director Laure Haak

March-April:

- General outreach via liaison librarians
- Targeted emails and presentations to various groups:
  - Boulder Faculty Assembly Libraries Committee
  - Deans of Colleges and Schools
  - Department Chairs
  - Engineering (contact: Joann Zelasko)
  - Institutes (contacts: Shelly Sommer and others)
  - Research leadership (contacts: Christina Tenerowicz and Tricia Rankin)

Early April:

- Overview email sent to all faculty from the Provost

Late April:

- Preregistration email sent to all faculty allowing faculty to opt-out or provide an existing ORCID id
Late May/Early June:

- Targeted outreach regarding procedures for accepting ORCID ids (depends on timing of technical implementation):
  - Via liaison librarians
  - Email from the Provost
  - Webpage

August:

- Post-implementation communication (e.g., where to see ORCID ids in campus systems)
- Outreach regarding unclaimed ORCID ids
CU-Boulder SAMPLE: ORCID Outreach – Talking Points for Librarians

ORCID Talking Points

What is ORCID?

- ORCID “is an open, non-profit, community-driven effort to create and maintain a registry of unique researcher identifiers and a transparent method of linking research activities and outputs to these identifiers” (http://orcid.org/content/initiative).
- ORCID ids look like this: 0000-0002-7952-6536
- Each ORCID id is also associated with an ORCID profile. Here’s an example of an ORCID profile: http://orcid.org/0000-0002-7952-6536
- Everything in an ORCID profile other than name and id number, which are always public, can be displayed publicly or privately.
- There are over 500,000 (and growing) ORCID ids already registered to researchers around the world.

Why is ORCID important?

- In many cases it is difficult to identify an individual researcher unambiguously across the many platforms (journals, databases, university websites, funding agency systems, etc.) in which their work appears.
- Ambiguity can occur when different systems use different versions of the same name (e.g., A. Johnson, A. M. Johnson, Andrew M. Johnson) or when multiple individuals have the same name.
- Because of this ambiguity, it is difficult and time-consuming to create a complete record of a researcher’s work for purposes like annual reporting.
- This ambiguity can also make it difficult to ensure that researchers receive proper attribution for all of their work.
- ORCID attempts to solve this problem by creating unique researcher ids that can be linked to existing identifier systems as well as things like journal publisher manuscript submission systems, funding agency grant application workflows, and other tools.
- Unlike other identifier systems, ORCID is open and community-driven, and reaches across disciplines, geographic regions, and types of content (e.g., articles, books, data sets, grants, software, etc.).
- ORCID ids reach across content held by a particular publishers, journals, funding
CU-Boulder SAMPLE: ORCID Outreach – Talking Points for Librarians

agencies, etc.

How is CU implementing ORCID?

- Initially, CU is creating ORCID ids for all faculty, but students, staff, and others can register for an ORCID id themselves for free.

- Prior to the creation of ORCID ids, faculty will be given the opportunity via a simple webform to choose to opt out of having an id created or to provide an existing id to use instead if they have already registered with ORCID.

- After ORCID ids are created, faculty will receive an email with a link that will allow them to claim their id.

- ORCID ids will appear in campus systems like FRPA and VIVO without any action required by faculty.

- Faculty can also use their ORCID ids in any of the rapidly growing number of systems operated by publishers, funding agencies, professional societies, and other institutions that have partnered with ORCID.
Dear ____________:

The Office of Faculty Affairs and the University Libraries recently received a grant from the Alfred P. Sloan Foundation to implement ORCID ids for all CU-Boulder faculty. You can read more about all of the projects funded by this program here: http://orcid.org/blog/2013/09/27/announcing-orcid-adoption-integration-program-awardees.

For those who are unfamiliar with ORCID, it “is an open, non-profit, community-driven effort to create and maintain a registry of unique researcher identifiers and a transparent method of linking research activities and outputs to these identifiers” (http://orcid.org/content/initiative). While there are other researcher identifier schemes already in place (e.g., ResearcherID, Scopus Author ID, ISNI), ORCID is unique in its open and non-proprietary model and its coverage across disciplines and research outputs. ORCID is also working with many of the existing identifier systems to ensure that they are linked with ORCID ids.

All of these characteristics have already led to the creation of over 500,000 ORCID ids (and growing) and to an impressive list of funding agencies, publishers, professional societies, universities, and others integrating ORCID into their tools, services, and workflows: http://orcid.org/organizations/integrators/integration-chart.

The goals of implementing ORCID at CU-Boulder are to streamline faculty reporting efforts in systems like FRPA, which will also contribute to richer faculty profiles in VIVO (http://vivo.colorado.edu), and to make it easier for faculty to be identified with and to receive attribution for all of their research, including articles, books, software, data sets, and more. This information is valuable not only to faculty themselves but also to funding agencies, research administration, departmental staff, and others.

The ORCID registration process will require minimal effort on the part of individual faculty members. More information about this process will be announced via email in April.

We hope you agree that this is an important effort in improving the ways in which information about faculty research is identified, collected, and used for a number of important purposes.

Please let me know if you have any questions.

Thank you,

[Your Name]