ORCID

ORCID Integration Use Case Documentation

1. Use case name:

A. ORCID Record Creation
B. ORCID integration with Profiles researcher networking software*
C. Outreach (Local Best Practice)
D. Central storage of ORCID IDs to link to other systems

2. Institution name: Boston University

3. Project goals and scope:

Background / Infrastructure / Setting

The project is an effort to implement ORCID iD adoption and integration among its Charles River (BU CRC) and Medical (BUMC) campuses, Boston Medical Center (BMC) with its 14 Boston HealthNet Community Health Centers (CHCs) and other affiliated partners, as well as the Boston VA Healthcare System and Edith Nourse Rogers Memorial Veterans Hospital.

In 2012, BU launched BU Profiles, a Research Networking Initiative based on Profiles RNS application that was originally developed under the supervision of Griffin M Weber, MD, PhD, with support from Grant Number 1 UL1 RR025758-01 to Harvard Catalyst - The Harvard Clinical and Translational Science Center from the National Center for Research Resources and support from Harvard University and its affiliated academic healthcare centers.

Project overview:

BU decided to undertake this ORCID integration initiative because of the value offered by a universal unique research identifier that is standards based, centrally administered, and actively and enthusiastically embraced by all key stakeholders in the academic ecosystem namely: academic institutions, publishers, libraries and researchers themselves. BU intends to make research networking and all aspects of the scholarly enterprise more efficient, effective. The ultimate goal is to accelerate not only discovery and invention but also the speed in which this new knowledge is advanced from the bench to the bedside.

With over 2,000 active BU Profiles for biomedical faculty and post-doctoral trainees at the medical campus, this first-stage achievement was co-resourced and supported by our Clinical and Translational Science Institute (CTSI) and Office of the Provost. BU recognized an emerging opportunity to deploy ORCID iDs in anticipation of its use to provide content to BU Profiles and as an important device throughout a scholar's career.

As such BU is particularly proud to be a 2012 ORCID Launch Partner and Early Adopter (http://www.bu.edu/orcid/). Our development plans and policy decisions have been demonstrated and discussed with Duke University, Harvard University, New York

University, Sloan-Kettering Cancer Center, US FDA and others. Institutions as far away as Hong Kong University are using our materials to announce their own process to get scholars into ORCID.

We have a stand-alone application in production that allows the BU community to create a new ORCID or report an existing account. The application was announced to the medical campus in mid-August, 2013. In our current integration, individuals with a BU Profile can populate their ORCID record with a biography, basic contact information, websites and publications, either at the time of ORCID record creation or as a subsequent update. Full- and part-time BUMC faculty have the option to opt-out of ORCID. For BUMC faculty who do not opt out, ORCID records will be created and prepopulated from BU Profiles in mid-September, 2013. As of the date of this report, it is notable that **only two** of our more than 2000 eligible faculty had opted out, and 18 faculty and 45 staff/students have created or reported an existing ORCID. BU is poised to use the grant funding to continue this momentum and provide field expertise and leadership to other institutions (http://ctsi.bu.edu/index.php/launching-the-bu-orcid-initiative-ensuring-credit-for-your-work/).

Within this setting we report our ORCID Implementation project updates in the following four key areas: 1. ORCID Record creation, 2. ORCID integration with Profiles researcher networking software, 3. Outreach, and 4. Central storage of ORCID IDs to link to other systems.

A. **Use-Case: ORCID Record creation**: Our objective is to create (or report existing ORCID records) for university constituents: BUMC faculty, BUMC postdocs, BU UROP (undergraduates focused on research), CRC grad students and CRC faculty. We initially created records for all BUMC faculty, and have an on-boarding process to identify new faculty for ORCID creation. However we plan to wait until ORCID delegate information can be sent through the API before creating any new ORCID records for faculty. The same is the case for CRC faculty, who we have not started creating ORCID records for yet. In the case of postdocs and students we would not have anyone act as a delegate, so for them the objective is to make them aware of ORCID and point them to an application which facilitates the creation and reporting of their ORCID (an opt-in). The objective is to target anyone from BU on the cusp of graduating first, before they leave the institution. The rational for this objective is to create and track the ORCID IDs for every researcher involved with the institution. We envision it will help us keep our Profiles research networking software up-to-date with works and other information, and it has the potential to help identify outcomes & productivity for people who leave BU (this can be helpful for creating training grant proposals, among other things).

B. **Use-Case: ORCID integration with Profiles researcher networking software:** Our objective is to integrate ORCID within the Profiles researcher networking software, which will be available freely for use by other institutions. This will enable the creation of ORCID records through the Profiles/ORCID API. For individuals with an existing profile the API will have the capability to populate ORCID with works (publications), websites, biography (narrative), employment and education. There is a map between Profile roles to ORCID privacy levels. BU will be providing web content as a starting point (for items like an "about ORCID" web page and an optional institutional "ORCID Acknowledgement and Consent" page). Individuals lacking a profile still have the option

to create an ORCID through Profiles (faculty, staff, postdocs, trainees, students, etc.). The system will allow bulk ORCID creation by a system administrator based on various selection criteria (school, department, division, person-type, etc.). Within Profiles the ORCID is displayed as a hyperlink. People logged in to profiles and editing their profile will have the option to create an ORCID, if they don't have one. People will be able to conduct basic updates from Profiles to ORCID (one directional at present).

C. **Use-Case: Outreach (Local best practice):** Our team has become convinced that a universal opt-out strategy is best practice with ad hoc exceptions. Unfortunately this is not necessarily tenable in all circumstances so additional capacity for flexibility to adapt to local site culture and policies is required. An opt-out strategy is similarly being pursued with graduate students but may or may not be completely feasible based on awaited feedback from relevant leadership. Students will be targeted first because we are still awaiting final work and functionality for delegation from ORCID for faculty, et.al. Another best practice has been to ensure that all communications regarding ORCID be sent from the Provost's office to ensure that these email messages are much more likely to be read and acted upon.

D. **Use-Case: Central storage of ORCID IDs to link to other systems**: The objective is to facilitate the central storage of ORCID IDs for members of the BU community. There are key areas being discussed, with the current authoritative source being a central MS SQL repository, which we can expose to other systems. A dedicated field within the University HR system (SAP) to display the ORCID for faculty is planned for inclusion in Active Directory for the broader community is in active discussion within the University and IT leadership. BU recently approved a significant IAM (Identity and Access Management) project which would include ORCID ID storage, as well as timely onboarding of ALL constituents (students, faculty, staff and even guests, potentially). Until the IAM project has properly matured we are likely to use MS SQL as the main source of truth for all BU ORCIDs, which would allow direct query/integration with other systems as needed.

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

   Yes – we've already spoken and presented to Harvard, Duke, NYU, UCSF, Memorial Sloan-Kettering Cancer Center, University of Colorado/Denver, Wayne State, Elsevier and others.

5. **Project personnel:**

   - Project leader: Christopher Shanahan MD MPH (Faculty Lead, Research Networking, CTSI, BU School of Medicine) - cshanaha@bu.edu; 617-414-4562

   - Project Co-leader: Chris Dorney (dorney@bu.edu; 617-638-4269; Director, BUMC IT Application Services)

   - Technical contact: Peter Flynn (Senior Application Developer, BUMC IT Application Services; ORCID technical lead) - pflynn@bu.edu; 617-414-1237

   - Other team members:

     Marco Basta (Senior Application Developer, BUMC IT Application Services) - bastam@bu.edu; 617-414-1460)

Karim Kabbara (Senior Application Developer, BUMC IT Application Services) - kkabbara@bu.edu; 617-638-5427)

Jim Vlachos (Application & Web Specialist, BUMC IT Application Services) - jvlachos@bu.edu; 617-414-1299)

6. System(s) involved:

<u>The Workflow for Faculty Record Creation is as follows:</u>

1. Individual receives formal BU faculty academic appointment (appointment entered into faculty database and SAP by Provost office staff)
2. BU Profile created for new faculty member within a week of academic appointment appearing in faculty database.
3. BU Profiles disambiguation engine produces a first publication list viable with the faculty member's profile.
4. New Faculty member receives an email notice to login in to BU Profiles to review their profile and confirm publications and adds other content such as narrative, websites, awards, etc.

ORCID at BU – Integrated Record Creation Workflow within BU Profiles
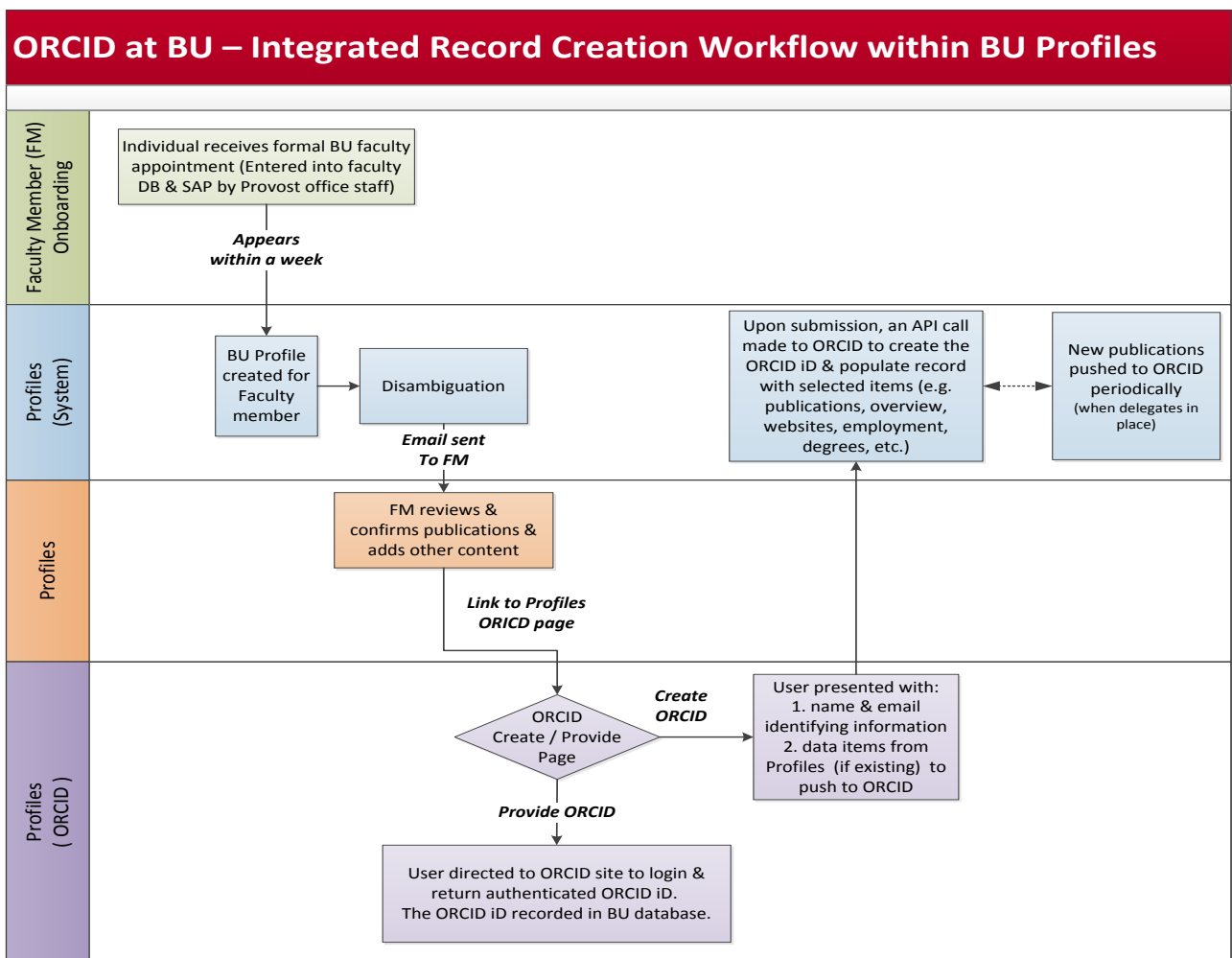
Future planned workflow when ORCID permits delegates.

1. BU Profiles IT Team will prompt the faculty member to create their ORCID iD (or ask if they want us to do it for them).
2. BU Profiles IT Team would then confirm they don't have one already first.
3. After confirmation faculty data will be pushed from their BU Profile to ORCID.

Additional considerations for future workflow to yet be devised

1. The faculty member will be questioned as some point, "If they have an existing ORCID" before we create a Profile, but that's not yet relevant.
2. New publications will be pushed to ORCID periodically.
3. A frequency for updates has not yet been established but will likely be on a monthly basis. (We are unlikely to resume doing that until delegates are in the API).
4. An exit policy and process will be devised.

Record creation workflow for Charles River Campus (Main) faculty

A record creation workflow for Charles River Campus (Main) faculty remains in development will depend on leadership decisions regarding opt-out vs opt-in, etc. Opt-out policy will be pursued but is not yet feasible without addition of ORCID Delegation functionality. Once ORCID delegation is in place and BU policy and procedures have been developed a record creation workflow will be devise and operationalized based on the existing workflow in place for Medical Campus faculty (See above).

Record creation workflow for Medical Campus Graduate Students.

A record creation workflow is in active development for Medical Campus Graduate Students. For CRC graduate students, discussions are underway with the Provost and deans. Tentatively, we will attempt to outreach to the graduate student body as well as those who will be graduating each year. Our goal is to ensure that all matriculating graduate students leave BU with an ORCID so that we will be able to track in the future. Since we cannot predict with certainly which students will create works of note (published work or is involved with a research grant, a patent, or produces other scholarly work) we want to ensure that we provide ORCID iDs to them all.

Another key workflow is being considered for all PhD students who are required to complete the Survey of Earned Doctorates and the AAUDE exit interview upon graduation. The Administration has worked with all the schools and colleges to mandate the survey as part of the clearance process for commencement, so the link could be included there for all PhD students to use. Email notification is also being considered to outreach all PhD students prior to the exit interview.

7. Project timeline

Key ORCID Events at BU

- 5/17/2012: BU Attended ORCID Outreach meeting (Cambridge, MA).
- Fall 2012: BU agreed to be an ORCID Early adoption partner.
- December 2012: BU became an ORCID member.
- Spring 2013: BUMC Provost Council/General Council approves BUMC process.

- May 2013: BU interface to push Profiles publications, narrative and websites to ORCID developed.
- June 2013: www.bu.edu/orcid launched; Opt-out process for faculty announced.
- July 2013: 2000[+] ORCID records/IDs created for faculty, postdocs and students.
- 3/25/14: The only ORCID integrator known of to have:
  - Created new ORCID records for employees
  - Transferred information between member systems and the ORCID Registry
- Spring 2013: Process demonstrated to Harvard, NYU, UCSF, Memorial Sloan-Kettering Cancer Center, University of Colorado/Denver, Wayne State, Elsevier and others.
- May, 2013: BU presented remotely to the ORCID Outreach in Oxford and to a US FDA hosted "Implementing ORCID in Federal Government" session, which included 20 different federal agencies
- Sept 2013: ORCID Adoption & Integration grant awarded to BU.
- Feb 2014: ORCID integration in Profiles API completed and delivered to Recombinant Corp (Deloitte Consulting LLP) for QA and ultimate release to other universities.

Timeline

Action Items	10-13	11-13	12-13	1-14	2-14	3-14	4-14	5-14	6-14	7-14	8-14	9-14
Profiles/researcher information system (start Oct 2013, planned release April 2014)	▓											
ORCID iD Record creation/existing												
GMS Post-doctoral Trainees invited to ORCID (started Oct 2013, sent Nov 2013)	▓	▓										
BU UROP students invited (started on January 2014, April/May target)				▓	▓	▓	▨	▨				
BU Grad Students invited to ORCID (Tim)							▨					
Populate Engineering ORCID records with Publications / Push to BU Profiles									▨			
CRC Faculty invited to ORCID										▨	▨	▨

Key	
▓	Completed
▨	Pending

8. Project web page(s):

http://www.bu.edu/orcid

http://profiles.bu.edu

http://sites.bu.edu/orcid/creation

9. **Please identify the stakeholder groups within this project and describe the outreach/communications work your organization arranged in advance of implementation.**

Stakeholders

We engaged the following stakeholders.

- Select deans at BU CRC & BUMC (both campuses)
- Provosts of both BU campuses (BUMC and CRC), BUMC Associate Provost for Research, BUMC Associate Provost for Graduate Affairs, and other associate/assistant provosts.
- Communications (Corporate and school-level offices)
- Information Technology
- General Counsel
- CTSI / Faculty representation
- University Library

ORCID Implementation Team

We built off of an existing BU Profiles Group, comprised of faculty and technology representatives. We presented ORCID directly to the Provost Council for policy decisions and a green light to move forward (nearly all stakeholder are represented in that group).

Our implementation team discussed the project with University Library and alerted the University Provost of our approach for the medical campus. The implementation team also presented the project to University Provost for Research, VP for Information Technology, VP for Research Finance & Operations/Sponsored Programs, and the University Associate Provost for Faculty Affairs for input and buy-in.

Policy impacts

Our development and implementation team employed three key policy strategies:

1. The team worked hard to ensure engagement from the medical campus Provost Council members. These key leadership individuals were uniquely capable of making critical key high-level decisions (e.g. opt-out for faculty; opt-in for others) that directly impacted the efficiency and success of our ORCID implementation.

2. We sought out and ensured that BU General Counsel reviewed ORCID policy and our implementation plan. With BU General Counsel assistance, we created the BU ORCID Acknowledge and Consent. This essential document defined: a. ORCID terms of use, b. the ORCID privacy policy, c. record dispute procedures, d. privacy levels, and e. information for users concerning what to expect, and how data might be might be used.

3. The project started at the medical campus, due to the relative ease of pushing publications data for faculty and postdocs in BU Profiles. University leadership was made aware of that approach.

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.

See web pages *Project web page(s)*: above.

http://sites.bu.edu/orcid/agreement/

ORCID Invite email from BUMC Provost sent to all BUMC Faculty, Staff, and Students

(See attached email "FW: ***ORCID draft announcement***"" in Appendix A below)

ORCID Invite email from BUMC Associate Provost for Graduate Medical Sciences sent to all BUMC Post-Docs

(See email attached "***FW: Postdocs: sign up for ORCID: Ensure credit for your work throughout your career***" in Appendix B below)

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

Yes, we are willing to share our source code. The code is available through Nick Brown at Harvard CTSI Development team (profiles@hms.harvard.edu).