

UNIWeb 2017

workflow

Case studies on how two Canadian universities are leading the way in reusing academic data.

network

Institution-centric networking fosters collaborations and disseminates knowledge.

increasing research productivity



In this issue

by Diego Macrini

This issue is a collection of articles and case studies that illustrate how UNIWeb has been helping researchers and university administrators since 2013. The underlying theme across the issue is an exploration of how research productivity can be increased by having computer systems that exchange academic data, so that researchers only need to enter information once in any system. For Canada, this includes the communication of information to and from the Canadian Common CV so that its information can be used to generate annual activity reports and academic metrics. We also make a case for the advantages of creating institution-centric research networks that complement the thriving global research networks online.

We are proud to introduce the latest version of UNIWeb with an overview that explores new features and expansions. We go in depth on the topic of reporting and present a how-to that unveils the process involved in automating the generation of annual progress reports and other types of academic documents, while reusing the data collected for funding competitions.

Every university has its own approach to handling its academic data and annual reporting, which is why we have included two case studies on how selected universities chose to deploy UNIWeb. The first example is from the University of Ottawa, which followed a phased campus-wide rollout of the software, and unified the reporting standards across its academic units. The second case study is from across the country, at the University of British Columbia's

Okanagan campus, which implemented a heterogeneous reporting approach based on the variety of existing activity reports used by different units. These two studies capture different strategies for report automation, both with the goal of being least disruptive to researchers, while helping reviewers perform their evaluations more efficiently. We offer these case studies to you as guidelines and inspiration for how your institution could approach similar challenges.

Our discussion on institution-centric research networks shows that the principle of academic data reusability also extends to keeping institutional web profiles up-to-date with little effort. Moreover, we show that different entities within the research community of a university can benefit from having their own online presence. This includes web profiles for graduate students, research projects, groups and labs. Furthermore, we argue that the combination of all such profiles and their interconnections provide a valuable online presence for the physical research community of an institution. This online existence encourages internal and external web visitors to explore the wide range of academic opportunities at an institution, and provides a place for researchers to present their ongoing projects and research outputs.

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Increasing research productivity with UNIWeb

Institutions, research associations and funding agencies can help researchers be more competitive by simplifying academic workflows, and implementing new tools to foster interdisciplinary research collaborations.

UNIWeb is a research productivity software with two major components: an academic workflow system and a local academic network. These two components combine to create a system that eliminates the need to input the same academic data multiple times, as it exchanges data with other systems within an institution, and with external systems such as those of funding agencies, publishers, and partner organizations. Some of the information is also disseminated through the academic network, helping researchers stay current on the work of colleagues as well as find new collaboration opportunities within their institution.

The workflow component addresses ongoing issues such as time-consuming CV editing and activity reporting, necessary tasks that take researchers away from their research projects. With a researcher's academic data, UNIWeb operates like a personal assistant, simplifying tasks such as completing a Canadian Common CV (CCV), generating an annual activity report or keeping an online academic profile up to date. Academic data can be entered into UNIWeb by users or their delegates, and imported from the CCV. Publications can also be imported from all major repositories. With the information in the system, it's ready to be used and reused to forward the goals of researchers and the institution.

The social academic network component contributes to the productivity of office staff as much as that of the researchers. A research services office can use the academic network to promote funding opportunities to researchers based on their interests

and expertise, and to support researchers in project and team development. Technology transfer offices can connect industry partners with matching researchers and promote the outputs of collaborative projects. Graduate studies offices can showcase the internal research community to prospective students. IT departments can integrate UNIWeb with complementary systems to create tailored solutions for the institution.

“Workflow streamlines how faculty and staff generate reports and CVs for both internal work and funding competitions.”

UNIWeb 2017 builds on the workflow and networking technologies that have been used across Canadian universities since 2013. The latest version of the software comes with innovative technologies for creating a web presence for research projects, groups, labs, publications, and shared resources. With these tools, academics can develop an online presence for themselves and their labs to improve discoverability both within and outside an institution. This alternative method for discovery opens up new potential for fostering collaborations, and to attract talented prospective students, new faculty and industry partners to the institution.

Simplifying academic workflows

UNIWeb Workflow is a tool that addresses two key stages in the research cycle: the maintenance of an academic

CV for funding agencies, and the management of academic data for activity reporting and the evaluation of research outputs. The module includes an academic CV editor, Canadian Common CV integration, academic metrics computation, and report generation in MS Word for annual reports and academic CVs. **Workflow** streamlines how faculty and staff generate reports and CVs for both internal work and funding competitions. It improves the productivity of researchers, reviewers and academic administrators alike by eliminating the inefficiencies of manual processes. Administrators are able to collect the data they need in order to understand the strengths and achievements of both individuals and groups.

Reporting & Reviewing

Reporting annual activities and producing academic CVs can be reduced to a few clicks. A researcher chooses the report template in UNIWeb and UNIWeb produces it, filled with their academic data. Academic units can have the reports and CVs used by the faculty added to UNIWeb's system, allowing academics to use UNIWeb to generate reports that replicate the standards already used in any institution. Administrative staff can produce these reports as well, obtaining the bulk of the reports they need without the involvement of the researchers. It is all downloaded from the academic information stored in UNIWeb.

Reviewers benefit from this system as well. Every report has the same consistent style, and data can be presented based on clarity for the reader. Reviewers assess the well-formatted reports quickly and easily.

Further, reports are not a necessary step to generate metrics for academic units. UNIWeb comes with a rich list of predefined academic metrics for administrators to use to evaluate outputs and produce reports at the level of a department or faculty, or for custom groups of researchers. These metrics include statistics on research funding, supervisions, awards, publications, and more. All of this is taken directly from the CVs of researchers and reuses their data entry effort made for funding competitions. It is also possible to create new metrics, and if necessary, expand what is captured in the UNIWeb CV. The data required to produce these metrics, and the results themselves, can be downloaded as an excel file, allowing administration to use the data as they wish.

Delegating tasks

Researchers don't work alone, and UNIWeb is designed to allow users to get the help they need. With account delegation, researchers can have assistants added to their accounts without having to share personal passwords. The delegates can update CV and profile information, or prepare the CV for a funding competition. The researcher can request or remove access of a delegate at any time. Passwords stay private, while academics can distribute tasks to assistants.

Integrating with the CCV

CCV Sync is for researchers who apply for funding that requires an up-to-date Canadian Common CV (CCV). Researchers can share data between the CCV website and UNIWeb, allowing them to reuse the data they supply to funding agencies for internal reports and vice versa. The UNIWeb CV also includes all of the CCV funding templates, and stays current with the CCV website's updates. With error checks for funding templates, and same help texts as the ones in the CCV website, researchers can build their CVs for funding competitions with UNIWeb. When ready, users export their CV to the CCV website for final submission. Users can also choose to edit their CCV directly in the CCV website, and then import the latest version in UNIWeb to create their own academic CVs and activity reports.

CCV Sync works in concert with UNIWeb's CCV moni-

toring, an advanced component that is in charge of detecting changes in the CCV website and propagating those changes to all UNIWebs across Canada. The monitoring technology identifies changes in the data requirements, data constraints, help text and funding templates. Each UNIWeb system is regularly updated to reflect changes to the CCV while preserving the customization made by each institution to their own UNIWeb CV and templates. This breakthrough technology works in the background to maintain the bridge that allows researchers to maximize the results of their data entry efforts.

“Connect aims to make every element in the physical research community of an institution discoverable online.”

An online presence for your research community

UNIWeb Connect is an institution-centric research network that provides a web-presence for researchers, research groups, projects, publications, and shared resources. This module fills a gap in how researchers find collaboration opportunities within an institution. It also integrates with the website of the institution in order to offer a web tool that prospective students, industry partners and other members of the international community can use to find academics within the institution.

Connect aims to make every element in the physical research community of an institution discoverable online. Public and private online profiles for researchers, publications, projects, and groups can now be created, and are automati-

cally linked to reveal the partnerships and potential knowledge base that faculty have available. This network facilitates the discovery of people and research relevant to a visitor's interests. UNIWeb's profiles can complement or take the place of existing institutional web profiles.

The networking tools make it easier to identify local faculty whose research interests match one's own, while disseminating new publications and the outputs of research projects. Researchers need no technical knowledge to create different types of profiles and share their work online. Moreover, the efforts put towards sharing is rewarded by the discovery of potential research partners within the institution, and by attracting prospective graduate students and industry partners.

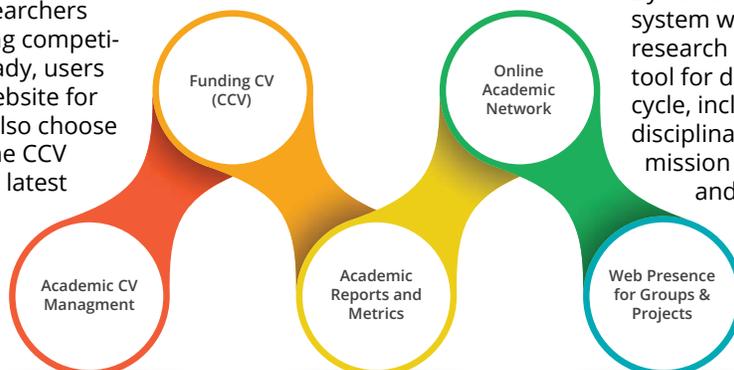
Beyond sharing knowledge, the network can simplify sharing physical resources. Does a team have equipment, lab space, or tools available? Researchers can maximize the use of physical resources by listing what is available to be shared.

Conclusion

UNIWeb is built on the premise that an effective method for improving research productivity is to have computer systems that can reuse academic data, while connecting researchers and helping them identify collaboration opportunities. The unifying theme across all UNIWeb modules is the ability to exchange academic data between different components of the system, and across other systems in order to increase productivity: the web profile of a researcher uses the information in her academic CV, which is reused for the CCV when applying for funding, and used again for her annual activity reports, and finally, for the computation of academic metrics of her department.

By combining an academic workflow system with an institution-centric research network, UNIWeb becomes a tool for different stages of the research cycle, including the formation of interdisciplinary research teams, the submission of CVs to funding agencies, and the reporting of academic contributions.

UNIWeb 2017 adds new capabilities for giving an online presence to research groups and projects. •



How to automate the generation of academic activity reports

The data in UNIWeb can be used to create reports and academic CVs. You can develop document templates so that researchers can download automatically generated reports as editable Word files. Researchers spend less time producing reports while the consistency of the reporting documents benefits reviewers with more efficient and faster evaluations.

Here we present the full pipeline of how a new report template is designed by administrators and used by reviewers and researchers.

A report template dictates what data is included in the document, and the way the document is styled, summarized and presented.

With only a few clicks, researchers can download well-designed progress reports and academic CVs.

1. START WITH AN ASSESSMENT



The first step in creating a new type of report is to determine the CV data that will be needed to generate it. Begin by meeting with the Vice-Deans of Research, and with the reviewers who will be reading the reports, to assess the needs and rules.

Compare the information needs with the data collected by UNIWeb, which by default gathers the same data as the CCV. Determine if additional data is required for the report. For example, reviewers might need to know if funding is internal or external, or if collaborations are local or international. That information is not captured in the CCV, so, if needed, it will require appropriate input fields in the UNIWeb CV.

Custom fields are marked with a special icon that tells users that they are meant for internal use.

2. ADD INPUT OPTIONS

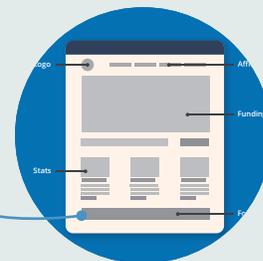
You can extend the UNIWeb CV with new sections and fields so that researchers have a place to enter information needed for new report types. It's okay to add new fields to existing CCV sections: UNIWeb will know not to export that data to the CCV website.

With the results of the needs assessment, define in concrete terms where in the UNIWeb CV users will enter any additional piece of data that is required for the new report type that you are creating.

You can also provide help-text to guide users as they enter data in the newly added fields.

A layout defines tables, text styles, data sorting, and data groupings.

3. DESIGN THE LAYOUT



Once you know that all the data needed to generate the report will be captured by the UNIWeb CV, you can proceed to define how the information should be presented in the document when it's downloaded, as well as decide how the document should look.

You can model the layout on similar reporting documents from the target academic unit, or you can start from scratch.

Since the documents will be generated by UNIWeb rather than manually by each researcher, you can choose an ambitious design that presents the data in ways that minimize review time: use formulas to sum up information based on specific criteria, and perform statistical data aggregations that highlight the main data that reviewers need to evaluate. Neither the researchers nor the reviewers have to do the math.

Input templates are optional and can be created during the design phase.

4. ENGAGE YOUR RESEARCHERS



After making a new report type in UNIWeb, ensure that the faculty are informed and understand their part in the process. Explaining the new document type to the researchers who will use it is a crucial step that directly influences its adoption rate.

While researchers will only need a few clicks to generate the document, they will still want to know about how the document is generated, the motivation behind its design, and how the report will be evaluated by reviewers.

Workshops and tutorial videos can be used to answer the most common questions.

5. SIMPLIFY DATA ENTRY

FUNDING TEMPLATE



Some reports may require information that is meaningful only for some academic units. In such cases, consider offering input templates to users.

Input templates improve the user experience by letting researchers select the target report (or funding application) when entering data. The template hides all the sections and fields that do not need to be filled in.

It is possible to define a default input template based on the unit of affiliation of each researcher.

6. ONE CLICK REPORTS



Once users complete their UNIWeb CV, they can download reports as editable Word files. They simply select the report type from a list to have it automatically generated in seconds.

Users can customize important aspects of the report before downloading it. Options include: the date range for the data (e.g., 3 years back from a given date); the citation style (APA, Chicago, MLA); and which sections to include.

Administrators can also download reports in bulk, efficiently gathering reports for an entire academic unit.

Extension packages

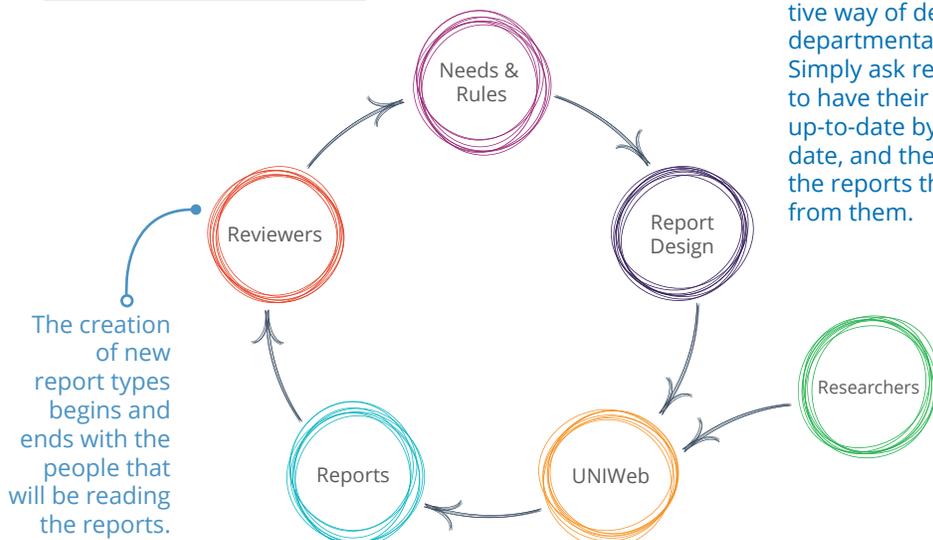
The design of a new document type can be time consuming. Instead, start with one of UNIWeb's extension packages. These packages include professional needs assessments, input options (data schema) and report layouts.

Reuse Data: CCV+

The data collected by the Canadian Common CV is very rich, and will likely have most of the data that you need, but not necessarily all of it. By shifting to a CCV+ mindset, you can maximize data reusability and increase research productivity.

Batch Report Downloads

The ability to download pre-designed documents in batches from a group of users is an effective way of dealing with departmental deadlines. Simply ask researchers to have their UNIWeb CV up-to-date by a certain date, and then download the reports that you need from them.



The power of an institution-centric research network

There are advantages to bringing the research community within an institution online. Researchers, graduate students and research projects can each have an online presence and links that reveal research connections between them. Interactive webpages invite the discovery of opportunities within the institution, and provide a new venue for researchers to disseminate their work.

Physical research networks, such as those formed by the members of universities, research centres or associations, have rich and multilayered connections. Understanding how connections are formed, and helping the networks grow is strategically important for increasing the productivity of research communities.

Academic social networks online, such as ResearchGate and Academia.edu, belong to the category of global and centralized networks: they operate within a single proprietary website. They provide an effective tool to track the work of colleagues around the world. However, the global focus of these networks limits the attention that they place on local research communities and their interrelationships.

A UNIWeb network is designed to address the needs of an institution and its own local research community. Rich

and diverse environments such as universities can benefit from networks that permit the same open-ended networking as global networks, as well as all the benefits of having researchers working physically close by. It complements the global academic networks, which em-

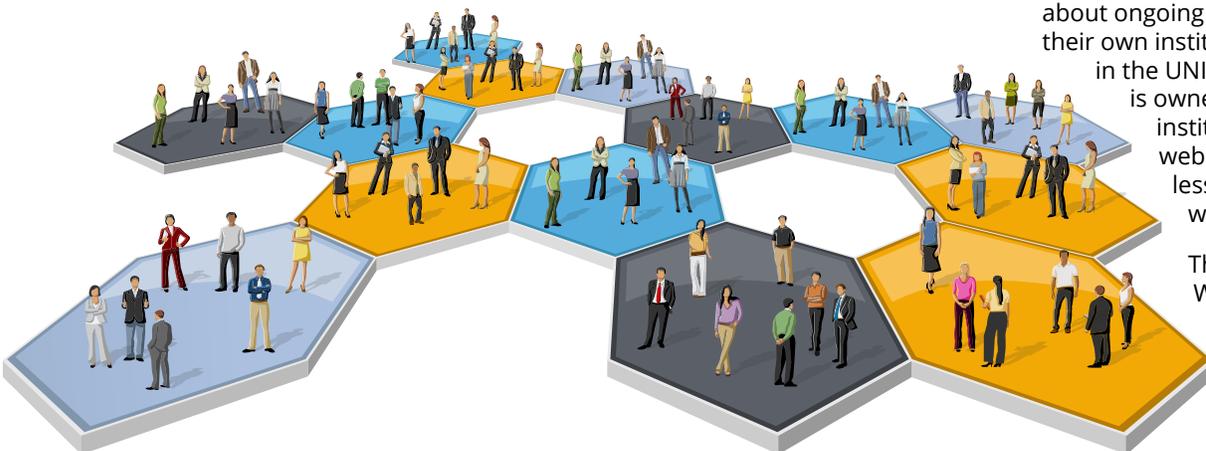
“It is not uncommon for researchers to be unaware of the work of colleagues within the same institution...”

phasize world-wide connections, by focusing its attention on the community of researchers within an institution, and their connections with external collaborators. The primary focus of a UNIWeb network is to capture the richness of

interests, projects, groups, publications and interactions within a community of researchers under a common umbrella. The intangible connections between researchers and projects are made explicit online to be discovered both from within the local community and from the community at large.

One reason to consider adopting an institution-centric social research network is to enhance the research hub that is defined by the institution itself. It is not uncommon for researchers to be unaware of the work of colleagues within the same institution because physical and social barriers reduce individuals' interactions, making people rely on serendipitous encounters to identify new research collaboration opportunities. An online local network acts as a “yellow pages,” and provides a live visualization of the research community within the institution along with their projects, helping individuals discover potential collaborations and learn about ongoing research projects within their own institution. The information in the UNIWeb of an institution is owned exclusively by the institution, and the network's webpage integrates seamlessly with the institutional website.

The local nature of UNIWeb fills a gap in how researchers connect and share information with others. Social dynamics within an institution are different



from those in the global research population. For instance, UNIWeb proactively connects researchers based on common interests, while a similar approach in a global network would be overwhelming. Moreover, the participation of users in a local network can be encouraged by taking advantage of their physical proximity. Local connections discovered through the network can lead to research collaborations. Shareable resources can be publicized online. The mission of UNIWeb is to bring online what is happening within the well-established physical network at an institution. New opportunities can be discovered in the network as it flexes and grows with the additions and departures of graduate students, postdoctoral fellows and academics.

Increasing Discoverability

University websites often have a great deal of information that visitors would be interested in, if only they could find it. Discoverability is a measure of how easily information can be found on a website, including information that one is actively looking for, and information that is relevant, but that one would not even think of searching for. There are several complementary techniques for improving discoverability, including organizing information in a logical manner, indexing all content in order to enable accurate search results, and using “recommenders.” The latter is, for example, what online stores use when they suggest items to buy based on past purchases. UNIWeb employs all these techniques to increase the discoverability of researchers and their work within a university. When integrated with the website of a university, it creates an interactive experience that invites researchers, students and web visitors to explore and discover.

UNIWeb adds new life to institutional webpages. Faculty and staff can keep their institutional web profiles updated with little effort, helping web visitors find the most current research of the faculty. UNIWeb’s system is faster than traditional methods of utilizing an IT person to manage content updates. It only takes a few steps to add new pub-

lications to an institutional web profile, tag them with research topics, and link them to research projects. This then allows web visitors to find research out-

their own UNIWeb networks. With overlapping networks, organizations can provide users with the ability to let users synchronize all or part of their accounts across other UNIWebs. For example, this would allow a researcher to edit her CV in the UNIWeb of her University, and have it automatically updated on the UNIWeb of a research centre to which she is affiliated, and even on the government agency where she regularly submits her funding applications.

The ability of UNIWeb to interconnect accounts across autonomous UNIWeb networks is an innovative piece of technology that opens the door to a new way of managing the submission of academic information across independent organizations.

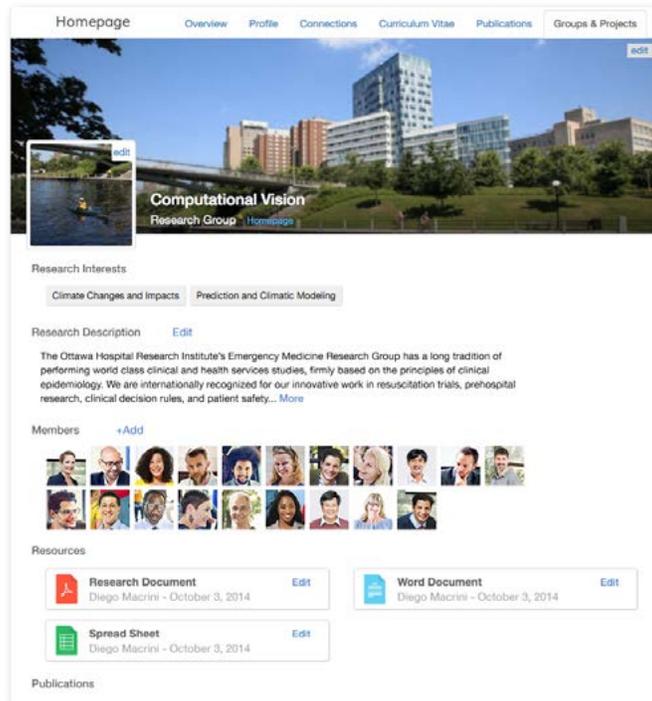
The UNIWeb model for representing researcher communities online is based on the premise of going from each local community outward. This is done by enabling the creation of larger-scale networks made of independent sub-net-

works that exchange information with one another using open and secure methods of communication.

UNIWeb Connect 2017

Connect is the UNIWeb module that allows institutions to create their own research networks on the web. Connect 2017 takes the premise of linking researchers based on interests and expands it in every direction. Researchers, publications, groups and projects each have their own specialized types of web profiles, which allow them to function as both informational landing pages for researchers and as hubs for related connections. The information available in any type of profile, as well as how it is presented, can be customized based on the needs of each institution.

Without any technical knowledge, researchers and graduate students can add multimedia content to complement their research outputs, which helps disseminate more knowledge to the community. Researchers and collaborators can identify opportunities relevant to their work that would have otherwise never been discovered. •



UNIWeb 2017: Creating a web profile for a research lab is easy and requires no technical knowledge.

puts by topic and discover the projects that produced the work. Moreover, it better positions the institutional website as a go-to place to discover new academic contributions.

“The local nature of UNIWeb fills a gap in how researchers connect and share information with others.”

Linking institutions and partner organizations

There is always growth potential in any network. Once local research networks are fully established with a significant portion of the researchers, some institutions may be interested in growing beyond their own campus. Partner organizations such as hospitals, research centres, research associations and funding agencies can have



Photography: David Giral

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Case Study

University of Ottawa

Modernizing the system for annual reporting becomes an opportunity for improving how data is assessed and gathered, from the way Canadian Common CV data is handled to promoting the discoverability of research contributions.

The University of Ottawa (uOttawa) is a research-intensive institution, and one of the largest bilingual universities in the world. This article describes how the University addressed the challenges of improving academic reporting, supporting researchers during funding applications, and increasing the discoverability of researchers for collaborations and partnerships.

With UNIWeb as part of the uOttawa's toolkit since 2013, the University re-envisioned its academic reporting with the premise that an efficient academic data collection and evaluation process would mean that the university could better evaluate the strengths and weaknesses of its research communities in order to plan the growth of their programs.

A secondary objective was to address the barriers that limited the number of internal collaborations. The community of researchers at the university is physically spread over several sites across the city of Ottawa, a geographical barrier that can inadvertently limit a researcher's connections. This and other factors motivated academic administrators to consider novel ways to help researchers find collaborators and experts for support and to ask questions. This initiative was seen as crucial to fully exploiting the synergies within the institution. A related concern was supporting researchers in promoting their achievements to the general public. The implementation of a UNIWeb network contributed to advancing these objectives.

The Vision

Measuring research performance is a necessary and time consuming task for all universities. By improving the collection and evaluation of academic data, the university ensures that the administrative teams have the information that they need without taxing their researchers. Without the burden of creating and submitting reports, researchers can direct more time to more meaningful research activities.

The University of Ottawa saw an opportunity in UNIWeb's technology to modernize how academic data was reported and reviewed within the institution. UNIWeb contributes the ability to collect user data and use it for generating reports and maintaining public profiles.

Automating reports means less work for researchers, minimized errors, and a significantly more time-effective solution than producing the reports by hand. With software now creating the reports instead of researchers, the reports can be elaborately designed based on what benefits the end readers. This new report system and its easily reviewed data benefits the whole campus. As data can be collected into UNIWeb from online repositories as well as the CCV website, researchers can quickly assemble the data that the administration requires.

Gathering Academic Data

The institution planned a report template with a campus-wide scope in order to address the needs of all its academic units. The administrators created a unified style and format for annual activity reporting, named uoCV, that would henceforth become standardized across the campus.

The University assembled a central project team of business analysts and IT personnel to perform a requirement analysis across academic units and create customization requests. A committee formed by academic administrators led the team through the design of the new annual report template, ensuring that the long-term plan for changes and improvements aligned with the institutional vision.

Every academic unit performed a requirement analysis of what they needed for data and reporting. The project team examined the existing workflows, and determined what data each one used for their internal reports and faculty. With this information, they developed the list of additional data fields that was required to account for the data needs of all units. A side benefit of this evaluation was a reduction of the number of software systems the university was using. The team determined that academic data of researchers already stored in other systems could be migrated into UNIWeb, reducing the number of software systems that the staff needed to maintain. After completing the requirement analysis of the academic units, the institution requested 21 new sections and a total of 305 new fields for the UNIWeb CV. This means that the CV data captured by uOttawa's UNIWeb is significantly larger than that captured by the

CCV. These additions are bilingual, including the names of the fields, the options available for data entry, and the help text displayed for both sections and fields.

Creating a report template

With the data-collection needs addressed, the next step was creating the report template. Such a template describes how UNIWeb's Report system assembles a researcher's information into a document and how that document looks. First the team described what data shows up in the final document and where it comes from, by mapping the sections in the UNIWeb CV to sections in the uoCV document. Next, the team designed how the data is compiled and presented to readers. A major objective in the design of the uoCV layout was to aggregate the data in a way that made reviewers more efficient when comparing and evaluating hundreds of documents.

As report documents would now be generated by software based on precise rules defined by the institution, this was an opportunity to design a report template that included sophisticated calculations, styling, and formatting to create an effective document for reviewers to evaluate. The design addresses the reviewers' needs, summarizing information in a clear, concise way that hadn't been realistic when researchers produced the paperwork manually.

The report template was made in both English and French languages, allowing users to enter data in their preferred language, or in both if they so choose. Enabling an automatically generated document that could accommodate both English and French had its linguistic challenges. Documents produced in French have additional grammatical concerns compared to the English versions, such as the feminine and masculine forms of titles and degrees. Proximify engineers collaborated with experts at the university to ensure the gender concordance of the French version of the template, and created an option that allowed users to choose whether they preferred the masculine or feminine form.

Designing a layout

Once the institution specified how it wanted its new activity report to look and operate, the Proximify software engineers built their report template in UNIWeb's Report system. One key design aspect was to use formulas to present information that reviewers needed to see in a concise manner. The CCV website collects funding data in a very

granular fashion that can be difficult to evaluate. The uoCV summarizes that information in tables that sum over items according to data-aggregation formulas. Examples are the lifetime summaries of contributions and supervisions, which are automatically calculated by UNIWeb and presented to reviewers in the form of easy-to-read summary lists.

The uoCV is a sophisticated document with elegant institutional branding. It has a version for the production of the annual activity report, where all the variables are preset, such as the timeframe of the document and the sections included. There is another version, the 'Personal CV,' that lets users customize the document for other applications. The options for users include choosing the timeframe of the document (how many years back the document should go), selecting the sections they want to include, and choosing the citation style. These options allow the standardized report to be adaptable to the individual needs of researchers. With different citation styles available at download (APA, MLA, or Chicago), researchers can choose their preferred style while benefiting from the unified reporting system.

Interaction with the CCV website

While the addition of data described above is important for the internal needs of the institution, it doesn't impact UNIWeb's synchronization with the CCV website. Researchers and staff can import the data stored in the CCV website to build their UNIWeb CV. Researchers can use UNIWeb for internal reporting, and can export the complete CCV data to the CCV website when needed for funding competitions.

Input Templates: Generic and Medicine

Once the uoCV was defined, the next step was to tailor the user experience when entering data into the system. In particular, the researchers in the Faculty of Medicine have very different needs in terms of data entry compared to other researchers in the university. To address these needs, two input templates were created: uOttawa Generic and uOttawa Medicine. Each input template filters the sections and fields available in the UNIWeb CV for the users. This means that a user will only see the sections and data fields that are associated to the selected input template.

Users select input templates from a list that includes both CCV funding templates and uOttawa templates. This integration makes it easier for users to get used to the idea of switching templates based on what report or funding

competition they are targeting. In addition, the software preselect the appropriate uOttawa input template for users based on their academic units.

Feedback from researchers

Workshops were performed to announce the new report type, train researchers in how to use UNIWeb to generate it, and receive feedback from researchers.

Left: One of the new CV sections added by uOttawa. Right: "Presentation type" is a new data field added to the existing CCV section "Presentations."

Since the new uoCV was different from what researchers were used to producing for annual activity reports, it was important to establish at the outset how the report was generated by UNIWeb and how it affected their reporting process. It was also important that researchers understood the benefit of using the new approach. Once users were familiar with the rules that the software was following to generate the reports, they could take full advantage of its benefits.

With the newly developed report templates, producing annual activity reports and academic CVs became a simpler process. Researchers did not have to maintain multiple documents for internal evaluations and external funding applications. This led to a reduction in data-entry mistakes. Furthermore, internal reviewers receive reports that are generated in a consistent manner by all researchers, and with a document layout that puts the focus on the information relevant to the evaluation process.

The feedback on the reports created so far has been overwhelmingly positive, as researchers and administrators alike experienced the benefits of generating documents in less time and with more accuracy than if they were done manually. Administrators can download reports in bulk for groups of researchers, freeing researchers from the task of creating and submitting reports.

Public institutional profiles

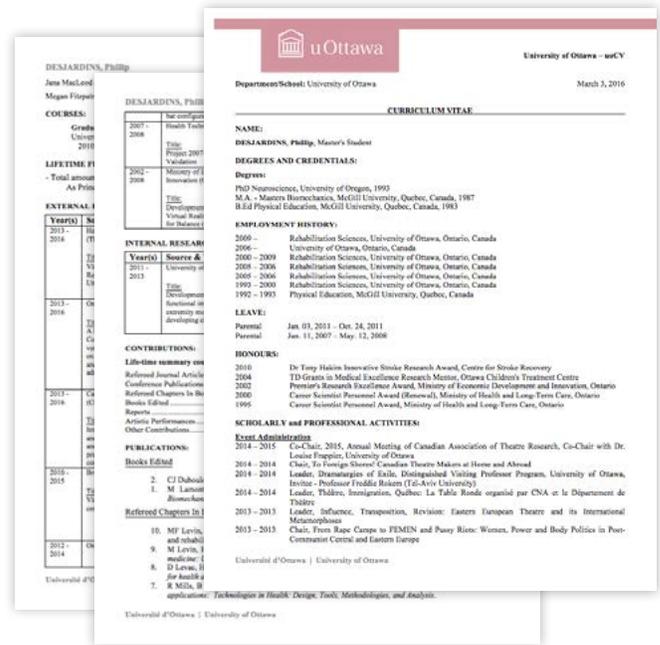
Some academic units choose to use UNIWeb's public web profiles for their institutional webpages. The goal was to further reuse data while giving researchers more control over their public institutional profile. The academic data in the (private) CV can be used to populate the public web profiles, helping researchers to keep them up-to-date and relevant.

The institution tailored the data collected in its web profiles in the same way than it did for the uoCV generation. For example, a new public section for office hours was added with a custom field to select an office location from a list of options. The options show all existing building addresses in the University, which eliminates the inconsistencies and inaccuracies of manually-entered addresses. Every request was made by taking into consideration how it could enhance research productivity, improve the experience of the end users, and help web visitor find relevant information.

Research Network

The public web profiles that are linked to the institutional website also operate as a bridge for visitors to explore the research network. Visitors searching for a particular researcher can find their recent work and their ongoing projects. Searching a particular research topic allows users to quickly discover who shares that interest and what work is done on it. Many researchers were excited to discover connections that went beyond their existing networks within the institution.

With uOttawa's UNIWeb, researchers have a new tool to broaden their academic network at the university. No longer limited by geography or their office locations, uOttawa professors and graduate students can identify collaboration



opportunities across all the campuses of the institution. In addition, prospective students can have a glimpse of what the research community at the University can offer them, including which other graduate students may one day be sharing a lab with them.

Conclusion

UNIWeb is a part of the University's vision to improve the collection and reporting of academic data. With this information, administrators can quickly identify strengths and define new goals within the institution. For the researchers, UNIWeb is an informative source on what intellectual capital is available for providing expertise on specific areas or to build an interdisciplinary research team.

UNIWeb is an innovative and efficient option for researchers to maintain their CCV, and a way to reuse data-entry efforts toward the generation of academic reports.

For administrators and reviewers, UNIWeb means a significant reduction in the time required to collect and evaluate reports. Administrators, staff, and researchers all benefit from the ability to enter data into one software system and then reuse that information in annual reports, CCV submissions, and public web profiles. The adoption of the software has also enhanced the research networks within the institution while giving them an online presence. •

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Case study

University of British Columbia Okanagan Campus

Adoption of a new reporting system is facilitated with the preservation of existing document styles across academic units. Different stages of the research cycle are addressed by combining solutions for CCV submissions, internal activity reporting and identification of potential research collaborators.

When introducing a new reporting system, university administrators are faced with the competing objectives of minimizing the disruption to existing procedures, while obtaining all the benefits offered by the new system. In this case study, we look at how the University of British Columbia Okanagan campus (UBCO) approached the goal of automating the generation of annual activity reports in a way that prioritized a smooth integration with the well-established option of creating them with a word processor based on general styling rules.

UBCO has a web portal, known as RIMES, with software tools for researchers at every stage of the research cycle, from planning a project all the way to preserving their contributions in repositories. UNIWeb was included in this toolbox to offer researchers multiple solutions: a tool to find potential collaborations for research projects, an alternative and efficient way to prepare their Canadian Common CV (CCV) for funding competitions, and a way of reusing the CCV information to generate their annual activity reports. In turn, the inclusion of UNIWeb in the academic workflow provided university administrators with the data to perform statistical analyses of internal academic metrics of academic units and specific groups of researchers.

From CCV to annual reporting

UNIWeb was introduced as a tool for UBCO researchers in June 2014 with the objective of helping them manage their CCV efficiently. The software was used primarily to import/export academic

data from/to the CCV website, and edit the data with a modern and fast web interface. This simplified the generation of the CCVs required by funding competitions, and reduced the overall time spent preparing funding applications. A year later, work began on reusing the CCV information stored in UNIWeb to create editable Word documents that had the format of the standard UBCO CV, and creating the activity reports that researchers submitted annually to their academic units. The data gathered

their annual reports manually if they so chose, facilitating the transition for researchers.

While most of the data required for the reports was already available in the CCV of researchers, there were some aspects of the reports that required information that was not captured by the CCV website. For example, the annual activity reports included information on how a researcher's activities contributed to the university's commitments.

UBCO assigned an internal project leader to gather the needs of each academic unit (an ongoing process). This task involves coordinating the addition of new data fields requested by the academic units, and deciding where it is most appropriate for users to input that data into the system. The project leader also handles the report template requests, which require a mapping between the name and location of each needed piece of information and the intended name and location of that data in each report type.

The implementation of the design of the annual activity reports and CVs were flexible as to how sections could be ordered and categorized. The administration was not limited to the existing structure of the CCV in any way. They could change how information was named, categorized, and ordered in the academic CVs and reports. For example, the UBCO report for the Faculty of Health and Social Development renamed the CCV section 'Supervisory Activities' to 'Teaching' in their report. They also moved the 'Teaching' section up in the document to follow the section on employment, as opposed to

Download Options
Select the content layout and file format for your CV or report.

Document type	UBC Annual Activity Report
Faculty	Health and Social Development (C)
Years back	1 year
End Date	yyyy/m/d
File format	Microsoft Word (.doc)
Citation Style	APA (6th edition)

by the CCV website had much in common with what was already used for annual reports and academic metrics, and UNIWeb enabled the automatic generation of reports for both researchers and administrators.

The institution saw an important advantage in having UNIWeb generate annual activity reports that followed the exact same format that researchers were already using for their academic units. Keeping the reports the same meant that researchers could still create

being after 'Research Funding History' like it is in the CCV.

In addition to creating report templates, the institution requested the creation of input templates to help guide users when entering data into the system. Similar to the funding templates used by the CCV website, UNIWeb's input templates are used to filter the data sections and fields available on the interface based on the requirements of a given report. Each input template reduces the number of form fields available to only those that are used by a target document type.

With UNIWeb expanded to account for UBCO's unique data needs, and custom report templates set up in the system, the annual reporting workflow was greatly accelerated. Researchers only have to worry about keeping their UNIWeb CV up to date, and by doing so, they have both their CCV ready for funding competitions, and their internal activity reports prepared for annual evaluations.

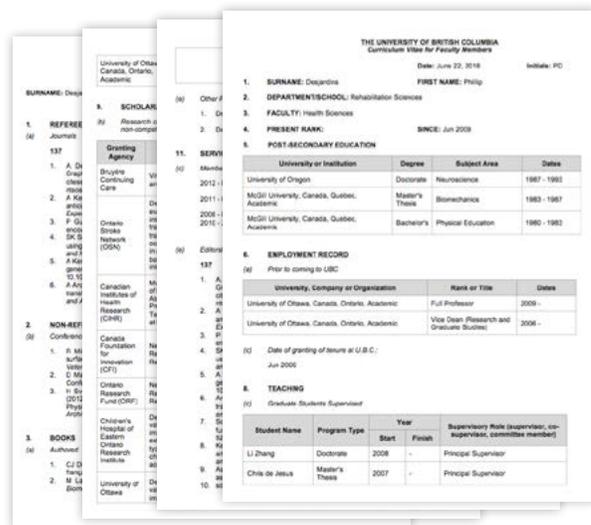


UBCO University Centre

Photography: Michael Hintringer

The integration of UNIWeb with the university's single-sign-on system facilitates user adoption, and eliminates the need to create accounts manually for each faculty. This means that users are able to log in with the same credentials that they use to access the rest of their academic software and services at the university.

complementary functionality can be an effective approach to maximizing the reusability of academic data. UBCO plans to use UNIWeb's ability to communicate data between itself and other systems. By interconnecting these systems, the University hopes to combine the individual strengths of each piece of software and have an integrated solution that unites different sources of information into a coherent repository of academic data.



Measuring Performance

The academic data collected by the UNIWeb CV, both what is present in the CCV and also what was added by UBCO for annual reporting is also available for the computation of academic metrics. As a result, metrics over groups of researchers can be accessed at any time, without requiring additional submission of information from the faculty.

Conclusion

The institution established a CV management tool that facilitates their reporting system while keeping their existing annual activity report styles. The administration favoured keeping current reports over a complete overhaul of reporting procedures. The approach minimized disruption, and gave adopters immediate access to the benefits of automated reporting. Researchers also use the system to discover how their work links them with other researchers on campus, potentially identifying previously unknown connections, and potential collaborators. •

The UBCO research network

UNIWeb's research network enhanced the ability of faculty to discover how their research interests connected them with other academics at UBCO. RIMES staff wanted to facilitate how researchers expanded their networks and built research project teams. With up-to-date profiles that reuse publication information from the CV, UNIWeb connects researchers based on common research interests. Researchers can discover new collaborators and partners based on relevant research interests, finding opportunities that might otherwise have been left to chance.

The raw data in researchers' CVs can also be downloaded as an Excel file. UBCO administrators use this feature to perform their own statistical calculations and reporting using the rich set of computational tools in Excel. For example, it only takes a few clicks to download a workbook with the list of all publications in an academic unit within a given timeframe.

Moving Forward

While many software tools work independently, linking those that offer

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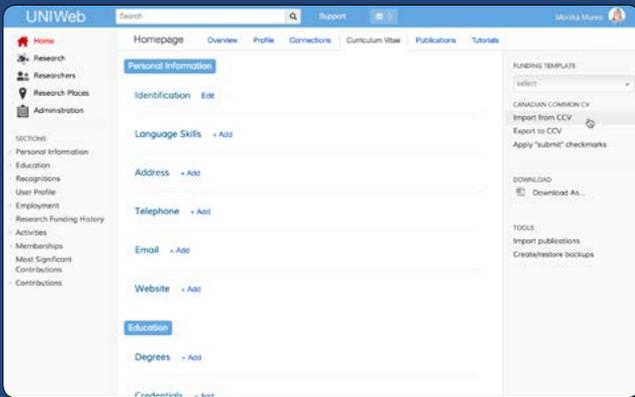
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Hit the ground running

Set up an account and start producing right away. Researchers and support staff can follow these simple steps to prepare internal and external CVs, create public web profiles, and engage with the institutional academic network.

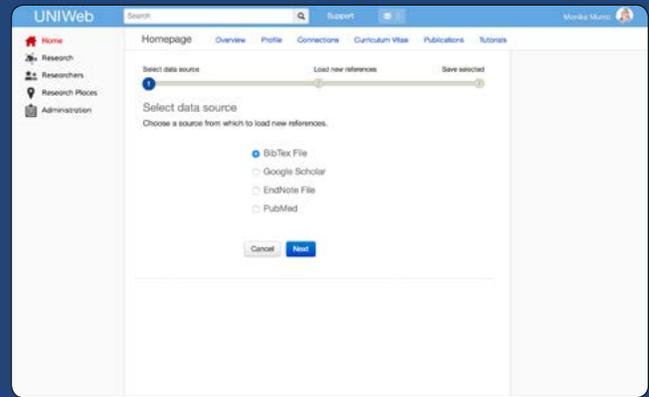
Take advantage of existing data to set up a new account. It only takes a few steps to have an academic CV and a public web profile ready. It is also easy for support staff to follow these steps, and have accounts ready before users log-on for the first time. The

first 5 steps are all that is needed to start a new account. The remaining steps show how to make the best use of the account. The benefits are immediate: ability to manage a CV for funding applications, instant academic activity reports, and a map of potential collaborators.



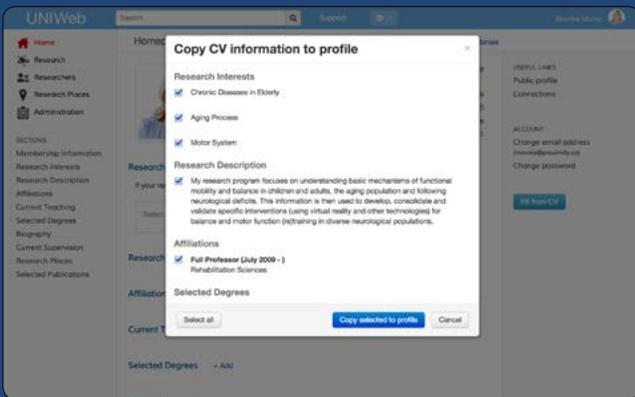
1. Fill your academic CV

Your account has a private page to store your academic CV data. Store your complete academic history. If you have a CCV website account, you can import your CCV into UNIWeb. Click **Import from CCV** for the steps.



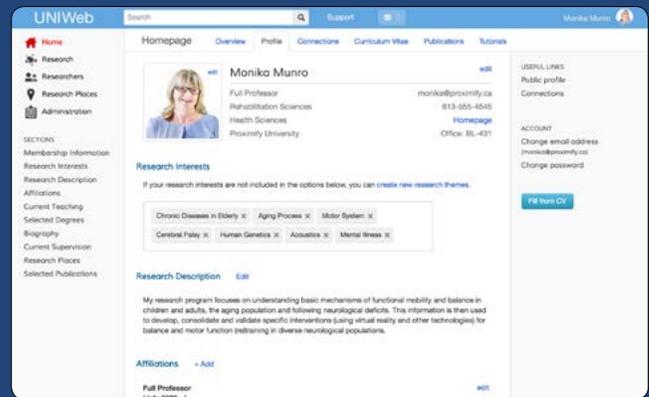
2. Add new publications

Gather a complete list of your publications using existing sources: Google Scholar, Pubmed, Endnote, and BibTex. The last two are file types generated by the export options of most reference managers.



3. Fill your public profile

Colleagues and visitors will be directed to your public profile. Specific sections of the profile can be filled using information from the CV. Use the **Fill from CV** button on the right of the profile page.



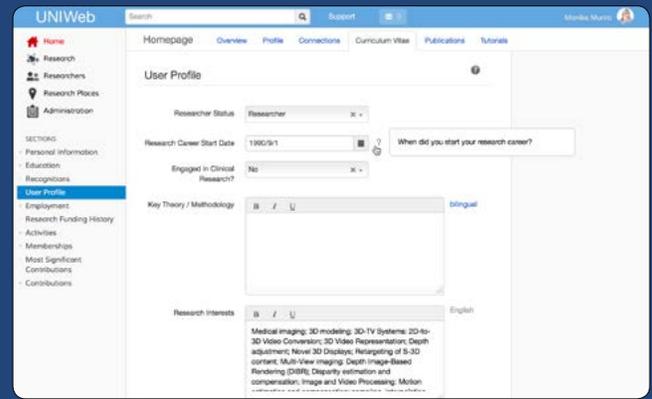
4. Add research interests

Improve your discoverability by summarizing your research interests. Pick from research themes or create your own to classify your work.



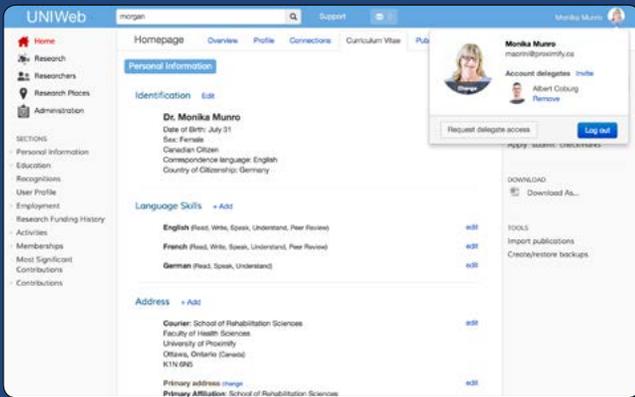
5. Add research places

Share where you have done fieldwork and conducted research. Find where others are operating geographically. Add information about what expertise you have in various regions, and get connected globally!



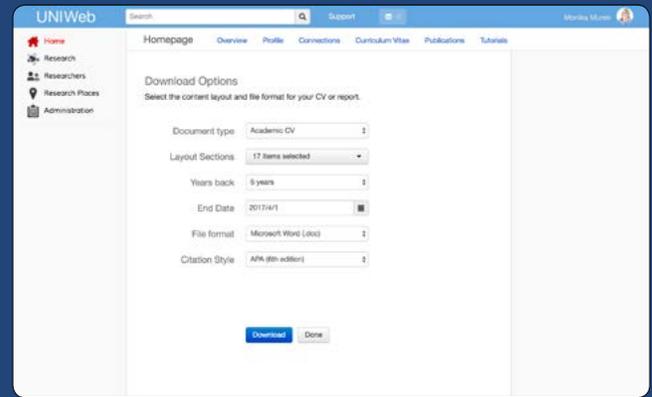
6. Keep your CV and CCV up to date

With templates and help-text from the CCV, users can prepare their CVs for funding competitions in UNIWeb. Export the complete CCV data to the CCV website when you are applying for funding.



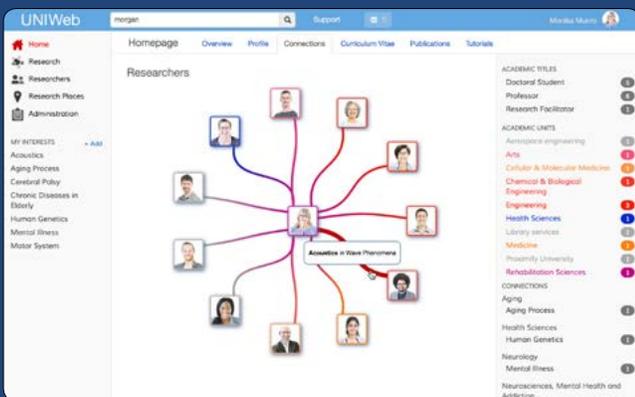
7. Invite account delegates

Want someone else to update your account info for you? Invite them to be an account delegate. Secure and convenient.



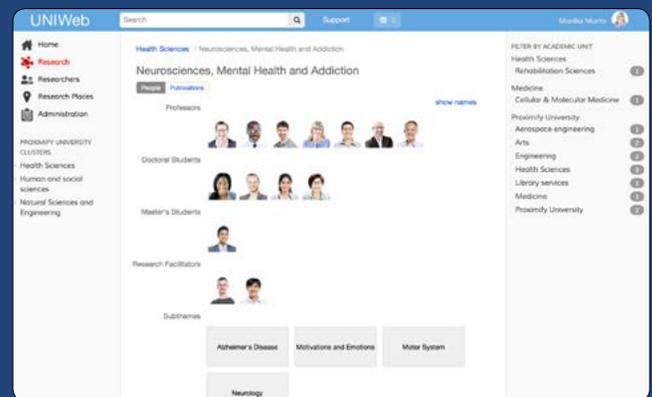
8. Download CVs and reports

With all your CV information on UNIWeb, it is available to use and reuse as you need. On the CV page, you can download your CV or annual reports according to what your institution has made available.



9. Find potential collaborators

Start with the Connections tab in your account, but feel free to explore! Find out who shares research interests with you. You can search research interests or people.

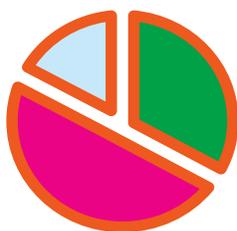


10. Navigate areas of study

Explore the automatically created research clusters to find people, publications, groups, projects and shared resources based on broad or specific areas of study.

Easy steps to import an academic CV document

Does your academic CV exist only as a Word document? Here are some effective ways to take that information and use it to speed up the process of creating a reusable UNIWeb CV.



START WITH PUBLICATIONS

A large portion of an academic CV is dedicated to listing publications. That's good news because importing references from Endnote and BibTex files is easy. If you don't have a bibliography file, don't worry, you can create one automatically with Google Scholar.

By creating a Google Scholar profile, you'll be using Google's search power to find all your publication references. It might even find articles that you have forgotten about. Google Scholar will give you the option to check which publications are yours. The last step is just to download all your publications as a BibTex file and import them into UNIWeb.

Google Scholar will keep updating your publications over time, so you can use it to keep your CV up-to-date effortlessly.

DELEGATES TO THE RESCUE

If you have a Word or PDF version of your academic CV, you can copy the data to UNIWeb. While importing it automatically is not possible due to the unstructured nature of the document, you can still benefit from having an up-to-date CV by hiring students or other types of assistants to copy the information (excluding publications).



The UNIWeb delegates feature allows you to invite one or more delegates to help you with your CV. The list of active delegates is always available in the user menu (ie, the picture of you on the screen's top-right corner). From there, you

can add or remove delegates with ease, and without having to risk security by sharing passwords.



Copy-pasting information from a document into UNIWeb will take some time. Fortunately, UNIWeb is designed for fast data entry, with no downtime when moving across pages. Entering data in a CV section, saving it and moving to the next section is an instantaneous step, which eliminates unnecessary idling and saves time.

REUSE YOUR EFFORT

Some portions of your UNIWeb CV will demand your attention because they need more granular information than normally available in a standard CV document. For example, funding agencies require a great deal of detail regarding past funding.

UNIWeb is all about reusing data. Once it's entered, it's used for computing academic metrics, generating official webpages, applying for funding (via CCV), and generating your annual activity reports. Having your data in UNIWeb will multiply the results of your data entry efforts.

CCV COMES FIRST

Keep in mind that if you already have data in your CCV, you should import it in UNIWeb before following any of the steps here.

TIGHT SECURITY
Delegates don't inherit permissions, meaning that account-holders with administrative access can freely add delegates while preserving data security.



Get your questions answered

OUR TEAM OF EXPERTS IS AVAILABLE TO ASSIST YOU WITH DESIGNING YOUR UNIQUE IMPLEMENTATION



Q.

Adoption rate

Would my institution's network need to be adopted by all faculty?

A. A common concern is whether a UNIWeb network should be shown publicly on the web before all researchers of the institution have an active profile in it. There are two approaches to this. The first is to have support staff create web profiles for all faculty before the network is launched publicly. This may be done in situations where the network profiles are also used as faculty profiles of the institutional website. In this case, having all the profiles set up is important. The staff can efficiently set this up so

the full list of profiles is ready on day one. A second approach is to understand that the network doesn't need to be "complete" on day one to be useful. Individuals today are used to the organic growth of social networks, and would simply assume that it is only a matter of time before all profiles are active.

Just remember that offering an institutional single sign-on option, proper communication, and workshops are essential steps that you can take to improve adoption rates.

CONTACT US

Send us your questions at info@proximify.ca or call us at 613-627-3029.

Q.

The combo

What's the benefit of combining a workflow system and a research network?

A. Researchers need motivation to create web profiles for themselves and their projects. By integrating an academic workflow system that can be used for both funding applications and internal annual reports, users get direct benefits from using the system. Because of this, they are motivated to accessing the software on a regular basis.

When researchers update their CV, they also spend a little time updating their web profile and making other contributions to the network. These keeps the network active and provides opportunities for researchers to discover unknown aspects of their local community.

Q.

Workflow and CCV

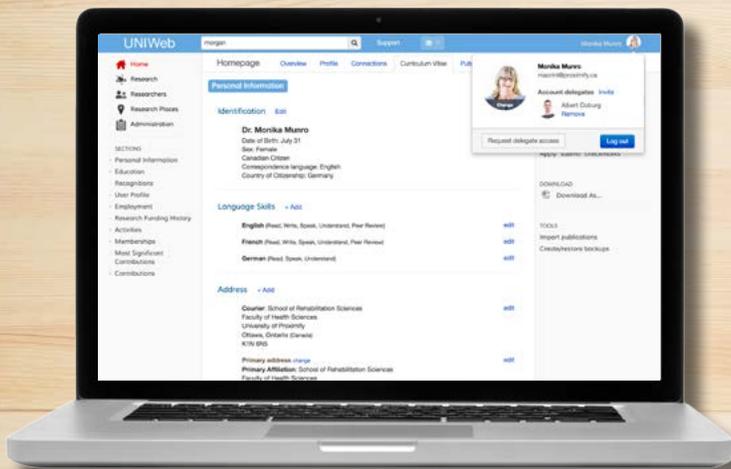
Does UNIWeb add an extra step to the management of a CCV?

A. With UNIWeb, researchers can choose how to manage their Canadian Common CV. They can edit their CCV information in the CCV website, and then import it into UNIWeb, or they can edit it in UNIWeb and then export it to the CCV website. It is also possible to switch between these two approaches at any given time depending on what's more convenient at the moment.

Most users prefer UNIWeb's interface for managing their CCV because it makes them more efficient. But some are used to the CCV website's interface and prefer not to learn a new one. What is important is that the CCV data is available to be copied from one system to another, making the information available to be used to generate institutional reports and collect academic metrics.

UNLOCK YOUR RESEARCH PRODUCTIVITY

Reuse academic data for funding applications and reports. Stay up to date with the work of colleagues and students.



ABOUT US

UNIWeb is a research productivity software with workflow automation and networking tools.



TIME SAVER

CCV Sync simplifies data entry for the Canadian Common CV.



DATA REUSABILITY

CV data is used for internal annual activity reports and academic metrics.



ACADEMIC NETWORK

A web presence for individuals, groups and projects in your local community.



POWERFUL API

Integrates with internal and external computer systems.

START TODAY

UNIWeb can be acquired by an entire institution or individual academic units.



Cloud and self-hosting options available. Request a free trial for your institution.



Your institution has full ownership of all the information stored in the system.

THERE IS MORE

Learn more about UNIWeb by visiting us at



www.uniweb.network