

The background features a complex geometric design. On the left side, there is a vertical stack of triangles in red, grey, light blue, and yellow. On the right side, there is a large, stylized red neuron with a white nucleus and several branching processes.

# Publication and Commercialization Policies

for the Canadian Open Neuroscience Platform

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# Acknowledgements

The CONP Publication and Commercialization Policies were authored by Dylan Roskams-Edris and approved by the CONP Ethics and Governance Committee.

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# CONP Publication Policy

## **Preamble**

To meet the goals of open science and respect the dual human rights of (1) universal benefit from scientific advancements and (2) scientists to be recognized for their contributions (Universal Declaration of Human Rights, art.27), this Publication Policy provides guidance for building innovative, open platforms to accelerate discovery and promote health benefits. The CONP Publication Policy should be read with reference to the CONP's Mission, the CONP Commercialization Policy, and the CONP Ethics and Data Governance Framework.

## **1.0 Publication Policy Background**

1.1 Part of the Canadian Open Neuroscience Platform's (CONP) mission is to encourage the dissemination of scientific resources – including data, software, protocols, and publications – as widely and as openly as possible. Doing so will empower researchers to replicate and build upon one another's work, and to collaborate on an unprecedented scale. This new research ecosystem will lead to publications, along with other research outputs like conference posters and presentations, based on resources shared by a variety of contributors from distinct institutions.

1.2 This document explains the recommendations from the CONP Ethics and Governance Committee concerning best practices for fostering collaboration in a complex distributed research setting. The following sections identify and explain best practices in regards to scholarly research outputs and is aimed at encouraging the uptake of open science in the Canadian neuroscience community. The policy approaches contained herein consist of a combination of strong normative stances on the importance of open research practices; providing actionable informational resources to contributors, users, and the Canadian neuroscience community as a whole; and several limited conditions on the use and contribution of openly shared research resources.

1.3 This document may be updated from time to time to reflect emerging best practices in open neuroscience. When an update occurs the new version will be posted on the CONP website. Old versions, along with documentation concerning changes made, can be found on the CONP Zenodo.

## **2.0 Open Access Publishing**

2.1 **Background Information** – Scholarly articles published in scientific journals remain the primary way researchers share their results with the scientific community. A key component of open science involves making sure that barriers to accessing and using the content of these publications are reduced or eliminated.

**2.2 Rationale** – Open access journals eliminate the access and use barriers posed by article access fees, subscription fees, and copyright use restrictions. Without those barriers, researchers can freely access, use, and adapt the content of publications to fit their research or teaching context. Publishing in open access journals thereby increases the ability of researchers to engage with and replicate one another’s findings, which will in turn promote discovery. Open access publishing also allows the free use of results to educate students and serves the public by allowing interested citizens to engage with scientific developments without the barrier of access fees.

**2.3 Open Access Publishing of Articles** – The CONP should strongly encourage members of the Canadian neuroscience community to publish in open access journals. Open access publishing is all the more important for research supported by public funding and, therefore, ultimately, by the Canadian public, who should be able to access the fruits of this funding without restriction. Open access publishing is especially important if an article is based on openly shared resources. The use of shared resources (e.g. datasets and software) to generate publications should be encouraged, but it should be clear that such resources were shared in the spirit of openness and the results of their use should be similarly openly shared.

Open access publishing should be supported by a strong normative stance taken by the CONP. If a neuroscience resource sharing platform decides to make open publishing of results a condition of accessing the resources the platform provides this decision should be supported. Similarly, including open access publishing conditions in grant conditions should be supported. Journals that allow readers to not only access but also freely adapt, remix, modify, or otherwise use the content of articles are most preferable from an open science perspective. Publishing in journals that allow the author to maintain copyright ownership and publish under a license no more restrictive than an attribution-only license (e.g. CC-BY 4.0) is optimal.

To avoid conflict co-authors, along with anyone substantially involved in creating the manuscript, should agree on open access goals as early as possible in the research lifecycle.

**2.4 Additional Informational Resources** – To help researchers publish in open access journals the CONP should collect information and provide guidance about open access requirements of funders and institutions, open access policies of journals, and how open access publishing costs can be offset. This information should be made available on the CONP website. The CONP should also collect information about barriers to publishing in open access journals and make that information available on the CONP website.

### **3.0 Preprints and Postprints**

**3.1 Background Information** – Another important way of making publications openly accessible is by depositing copies of manuscripts submitted to journals in openly accessible repositories. The version of an article an author can place in a repository varies depending on the policies of the journal to which the article was submitted. Some journals allow authors to submit the final version after review and acceptance (a “postprint”), other journals only allow an earlier

pre-review version (a “preprint”), some allow authors to deposit both preprints and postprints, while yet others require the author to refrain from depositing preprints or postprints during an embargo period.

**3.2 Rationale** – Submitting preprints and postprints plays a key role in opening science. If the journal that accepts an article is closed access (i.e. requires a subscription or the payment of an access fee) then the deposited copy makes the results the publication communicates openly accessible. A parallel copy in a repository also means that even if the journal were to cease to exist, or have its database of articles deleted or corrupted, a copy would remain findable and accessible. Depositing both preprint and postprint versions of an article also brings transparency to the publishing process.

**3.3 Deposition of Preprints and Postprints** – The CONP should strongly encourage members of the Canadian neuroscience community who have submitted manuscripts to journals to deposit preprints and/or postprints of those articles in appropriate openly accessible repositories. These articles should be openly licensed using an attribution-only license (e.g. CC-BY 4.0). As a corollary, members of the Canadian neuroscience community should be encouraged to publish in journals that allow preprint and/or postprint versions of the accepted manuscript to be deposited and made freely available without an embargo period.

Depositing both preprints and postprints of a manuscript, with proper version documentation, should be encouraged.

To avoid conflict co-authors, along with anyone substantially involved in creating the manuscript, should agree on where and when to submit preprints and/or postprints as early as possible in the research lifecycle.

**3.4 Additional Informational Resources** – To assist researchers in depositing preprints and postprints the CONP should collect information concerning appropriate repositories, as well as creating or collecting online resources to help researchers find journal policies concerning preprints and postprints. This information should be made available on the CONP website. The CONP should also collect information on barriers to depositing preprints and postprints and make this information available on the CONP website.

## **4.0 Citing Shared Resources**

**4.1 Background Information** – One result of open science initiatives that facilitate the sharing of research resources will be that scholarly publications, research proposals, abstracts submitted to conferences, posters, and conference presentations may be based on the work of researchers distributed across different research environments. Openly shared data and software used to generate research outputs, for example, may be created by multiple researchers distributed among distinct institutions. In this new environment proper citation and acknowledgement will be central.

**4.2 Rationale** – Recognizing contributions in a fair and transparent way through proper citation and the use of persistent digital identifiers encourages continued sharing of resources and creates vital links between data, software, physical materials, methods, and results necessary for open and replicable science. Promoting appropriate citation of shared resources helps ensure these goals are met.

**4.3 Citation Using Resource DOI and Resource Specific Citation Preference** – The CONP should support fair citation practices in two ways: (1) by taking steps to ensure that shared resources are associated with a persistent digital identifier (e.g. a DOI), and (2) enabling those who share resources to specify how they would like to be cited (e.g. by supplying a resource specific citation preference on neuroscience resource sharing platforms).

The obligation to use a shared resource’s persistent identifier and resource specific citation preference in the body and/or citations of research outputs should be reflected in the terms of use of neuroscience resource sharing platforms. The persistent digital identifier and citation preference should be clearly indicated on the page through which a shared resource can be accessed.

**4.4 Additional Information** – The CONP should collect information and provide guidance on how to link a shared resource with a persistent identifier, how to find a resource’s persistent identifier and resource specific citation preference, best citation practices, and how to cite within different research outputs. This information should be made available on the CONP website.

## **5.0 Open Sharing of Datasets and Derived Datasets**

**5.1 Background Information** – Sharing the datasets that underly results reported in publicly disclosed research outputs (e.g. journal articles and conference presentations) is vital to allowing others to replicate and build upon those results. Simply sharing data, however, may not be sufficient to make it findable, accessible, interoperable, and re-useable (FAIR). Replication and further work can only be efficiently facilitated by proper documentation and best practices in open data sharing.

Additionally, openly shared datasets will often only be the starting point of further research. Upon accessing a dataset a researcher may process, transform, combine, or modify it to fit the needs of their research, creating what is commonly referred to as a “derived dataset”. These derived datasets, and the software used to modify them, are important resources that may enable further work and, especially if used for publication purposes, should be re-shared with the scientific community.

**5.2 Rationale** – Part of the CONP’s mission is to support a sustainable and growing open data environment. An important part of this goal is for the datasets that underlie papers, including derived datasets, to be shared, described, and linked to the resources used to create them. Doing so will allow the Canadian neuroscience community to rapidly replicate, build on, and contribute to each other’s work.

**5.3 Sharing Data** – The CONP should strongly encourage members of the Canadian neuroscience community to share the datasets underlying any results reported in a publicly disclosed research output. Datasets should be shared on a platform that is openly accessible, in a standard format, be well documented, have an associated persistent digital identifier, and be shared in accordance with the licensing recommendations found in the CONP Commercialization Policy (s. 3). Journals that require datasets to be submitted directly to them and require assignment of copyright in those datasets to the journal should be avoided.

The only exception to open sharing of data should be to protect privacy interests of research participants. If sharing is limited by considerations relating to privacy interests such limitations, and how data has been modified to meet them, should be clearly stated on the page where the data can be accessed.

To avoid conflict co-authors, along with anyone substantially involved in generating the dataset, should agree on data sharing goals, including when and where to share, as early as possible in the research lifecycle.

**5.4 Sharing Derived Data** – The CONP should strongly encourage members of the Canadian neuroscience community re-share any derived datasets as long as it is done in accordance with any restrictions protecting the privacy interests of research participants. Re-sharing is especially important if the derived data was used to generate a publication or other publicly disclosed research output. The re-shared derived dataset should be clearly linked to the original dataset by using the original dataset’s persistent identifier and any resource specific citation preference on the page where the derived data can be accessed.

It may be appropriate for neuroscience resource sharing platforms to make resharing of derived datasets used for publication a condition of using the platform. If so, this condition should be reflected in the platform’s terms of use, and information about how and where to re-share derived datasets should be provided.

To avoid conflict co-authors, along with anyone substantially involved in generating the derived dataset, should agree on data sharing goals, including when and where to share, as early as possible in the research lifecycle.

**5.5 Resharing Software Used to Create Derived Datasets** – The CONP should strongly encourage the open sharing of any software used to create a derived dataset. Furthermore, the CONP should strongly encourage the creators of derived datasets to describe the software used in the re-shared dataset’s description and include a link to the software sharing site where a copy of the software has been made openly available in accordance with the recommendations of the CONP Commercialization Policy (s. 4).

**5.6 Additional Informational Resources** – To support open data sharing the CONP should collect information on data sharing services, best practices in open data sharing, the creation of derived datasets, where and how to re-share derived datasets, and best practices concerning how to document the process of creating derived datasets. This information should be made available



on the CONP's website. The CONP should also collect information on barriers to sharing data encountered by members of the Canadian neuroscience community and make this information available on the CONP website.

## **6.0 Open Sharing of Software and Modified Software**

**6.1 Background Information** – Software for collecting, processing, modeling, visualizing, and archiving data is becoming an ever more important part of neuroscience. When such software is openly shared it can be accessed and modified to fit the needs of a researcher's specific research context, further accelerating discovery and enabling reproducibility.

**6.2 Rationale** – In addition to supporting a sustainable and growing open data environment the CONP aims to support sustainable and growing open software development. Openly sharing software, and re-sharing modifications to openly shared software, are important for both allowing others to build on prior work as well as replicating reported results.

**6.3 Sharing Software** – The CONP should strongly encourage members of the Canadian neuroscience community to share the software used to collect, process, and store data underlying results reported in any publicly disclosed research output. A necessary corollary of this is that members of the Canadian neuroscience community should be encouraged to use openly shared software wherever possible. This recommendation extends to software which is itself the subject of research even when not used in data generation.

Shared software should ideally be shared in its source code form on a freely accessible online software sharing platform, be well documented, have an associated persistent digital identifier, and shared in accordance with the licensing recommendations found in the CONP Commercialization Policy (s. 4).

If software used to generate results is proprietary and cannot be openly shared then the version of the software used, as well as any plugins, addons, or custom written code, should be well documented in both any resulting publication and on the page through which corresponding data can be accessed.

To avoid conflict co-authors, along with anyone substantially involved in generating the software used, should agree on software sharing goals, including when and where to share, as early as possible in the research lifecycle.

**6.4 Resharing Modified Software** – The CONP should strongly encourage members of the Canadian neuroscience community to re-share any openly shared software that has been materially modified during the course of research. Such encouragement should apply both to openly shared software and any software that underlies software pipelines. For example, a piece of software shared through a site like Github may be used to create a pipeline, meaning that the software can be directly applied to a shared dataset through an online platform. If a user accesses the software that underlies a pipeline and materially modifies to fit their research they should

re-share the modified version in accordance with s. 6.3 above. Re-sharing is especially important if the software was used to generate results reported in a publication or other publicly disclosed research output.

**6.5 Additional Informational Resources** – The CONP should collect information and provide guidance on software sharing, open software licenses, the modification of software, and resharing software. This information should be made available through the CONP website. The CONP should also collect information on barriers to sharing software encountered by members of the Canadian neuroscience community and make this information available on the CONP website.

# Commercialization Policy

## **Preamble**

To meet the goals of open science and respect the dual human rights of (1) universal benefit from scientific advancements and (2) scientists to be recognized for their contributions (Universal Declaration of Human Rights, art.27), this CONP Commercialization Policy provides guidance for building innovative, open platforms to accelerate discovery and promote health benefits. The CONP Commercialization Policy should be read with reference to the CONP's Mission, the CONP Publication Policy, and the CONP Ethics and Data Governance Framework.

## **1.0 Commercialization Policy Background**

1.1 By empowering neuroscientists to openly share their research resources and ideas the Canadian Open Neuroscience Platform (CONP) will facilitate the increase in the rate of discovery made possible by open science. Some of these discoveries will have commercial application and contribute to the eventual creation of products and services useful to researchers, physicians, patients, and the public.

1.2 The CONP should encourage the development of useful products and services while at the same time ensuring that shared resources are and remain openly accessible and freely usable. This Commercialization Policy has been developed to assist in this effort by identifying approaches that support a balance between ensuring that the use of shared resources is not restricted via intellectual property rights while at the same time encouraging their use in commercial development.

1.3 This document explains the recommendations from the CONP Ethics and Governance Committee concerning best practices in fostering collaboration in a complex distributed research setting. The following sections identify and explain best practices in regards to intellectual property and licensing and are aimed at encouraging the uptake of open science in the Canadian neuroscience community. The policy approaches presented consist of a combination of strong normative stances on the importance of ensuring the continued openness of shared resources; providing actionable informational resources to contributors, users, and the Canadian neuroscience community as a whole; and several limited conditions on the use and contribution of resources shared through open science platforms.

1.4 This document may be updated from time to time to reflect emerging best practices in open neuroscience. When an update occurs the new version will be posted on the CONP website. Old versions, along with documentation concerning changes made, can be found on the CONP Zenodo.

## **2.0 Patents and Shared Resources**

**2.1 Background Information** – Patent protection has historically been a key element in the commercialization of biotechnology. When a patent is granted for an innovation the owner of the patent has the right to exclude others from using, developing, or distributing that innovation for commercial purposes. In simple terms, the patent establishes a wall of legal protections around an innovation that allows the owner to grant or deny others the ability to use it.

While the above description of patents may at first seem to leave academic researchers free to use the underlying innovations, the continued blurring of the lines between pure research and commercial application makes this my no means certain. Furthermore, patenting academic discoveries often means that the results that underly those discoveries are not shared with the research community until a patent application is filed, and even when they are the use of the innovation in further discovery may be severely limited if the patent is granted.

**2.2 Rationale** – To foster collaboration and discovery the resources shared by the Canadian neuroscience community should be as free from restrictive patent rights as possible. This doesn't mean that commercial entities interested in using shared resources to develop and commercialize patentable innovations cannot do so; indeed, such use may lead to important innovations that serve the public good. It does mean, however, that shared resources should not be subject to patent rights and that any novel patents based in any way on shared resources should not interfere with how others access and use shared resources.

**2.3 Patent Rights on Shared Resources** – The CONP should take a very strong stance against anyone attempting to obtain patents that could interfere with the use of shared resources. This should be a clear normative stance supported by conditions on access to resources the CONP supports, funding from the CONP, and any other kind of support provided by the CONP. The restriction on obtaining patent rights that may interfere with shared resources should extend to anyone, including commercial entities, accessing and/or using shared resources.

Neuroscience resource sharing platforms should take steps to ensure that users not attempt to obtain patent rights that could interfere with the use of resources shared through the services they provide. Such steps may include an access condition to that effect. This condition should be reflected in the platform's terms of use and relevant policies.

**2.4 Keeping Shared Resources Free of Patent Restrictions** – The CONP should discourage the Canadian neuroscience community from sharing resources that are subject to patent rights. Alternatively, if a shared resource is subject to patent rights that may interfere with its use, permissions and licenses should be applied such that use of those resources for any purpose is not restricted. Such licenses and permissions should be clearly indicated.

Neuroscience resource sharing platforms should take steps to ensure that users who share resources agree that either: (1) they have no patent rights that would interfere with the use of the resource they are sharing or, (2), if any such patent rights exist, that anyone accessing the resource has permission to use it on a royalty-free basis for any purpose. This condition should be reflected in the platform's terms of use.

**2.5 Avoiding Patent Interference with Shared Resources** – The CONP should take steps to ensure that any patents for innovations developed by incorporating or building upon shared resources do not interfere with the use of shared resources.

Accomplishing this goal may require neuroscience resource sharing platforms to have such non-interference as an access condition. If such a condition is warranted it should be reflected in the platform's terms of use.

**2.6 Citing Shared Resources in Patents** – The CONP should take steps to ensure that patents that incorporate or rely on shared resources cite those resources in a persistent, transparent, and fair manner. Such citation should include at least: (1) any persistent digital identifier (e.g. a DOI) associated with the shared resource and (2) any citation preference indicated by those who shared the resource. These elements should be included in the specification and non-patent citations of any patent application.

**2.7 Licensing Patents Enabled by Shared Resources** – The CONP should take steps to ensure that those who obtain patent rights for innovations that are based in any way on shared resources are strongly encouraged to license the innovation in such a way that researchers, physicians, and non-profit organizations are able to use the innovation on a royalty-free basis.

**2.8 Additional Informational Resources** – The CONP should collect information and provide guidance on patents, licenses, and alternatives to patenting. The resulting information should be made available through the CONP website.

### **3.0 Copyright and Shared Data**

**3.1 Background Information** – While data itself is usually exempt from copyright protection in Canada it can happen that – because of the nature of the data within a dataset, how the parameters of data collection were designed, or how a dataset is organized – datasets may be subject to copyright protection. Unlike patents, which must be applied for, copyright applies automatically and must be either waived or openly licensed to prevent restrictions on use.

**3.2 Rationale** – Open data means that those who access the data have to be free to use it, remix it, combine it, modify it, adapt it, and otherwise alter it for any purpose. This kind of freedom can only be ensured if those sharing their data either waive their rights or apply an open attribution-only license.

**3.3 Rights Waiver or Open Data License for Shared Data** – The CONP should strongly encourage members of the Canadian neuroscience community who share datasets to either: (1) waive rights in datasets to the extent allowable by law (e.g. by applying a public domain dedication like the PDDL), or (2) apply an open attribution-only license where the only requirement is that those who use the dataset include an appropriate attribution (e.g. by applying an ODC-BY license). The license applied should be clearly indicated on the page where the dataset can be accessed and in the documentation that accompanies the dataset.

Neuroscience resource sharing platforms, including the CONP Portal, should strongly encourage, and potentially make a sharing condition, that those who share datasets apply either a rights waiver or an attribution-only license. If sharing in this way is a condition for sharing data it should be reflected in the contribution workflow, any contribution agreement, and the terms of use.

Public domain dedications or attribution-only licenses should also be applied to any derived datasets created by modifying shared datasets.

**3.4 Additional Informational Resources** – The CONP should collect information and provide guidance concerning dataset copyright, university copyright and authorship policies, open data licenses, and how to apply licenses to datasets. This information should be made available on the CONP website.

#### **4.0 Copyright, Shared Software, and Software Pipelines**

**4.1 Background Information** – The use of software has become ubiquitous throughout the neuroscience research lifecycle. As such openly sharing software has become as important as sharing data to making research replicable and allowing others to build on results.

Members of the Canadian neuroscience community will access shared software either directly through software sharing sites (e.g. Github) or through platforms that create software pipelines that allow software to be applied within the platform itself.

While the use of many kinds of scientific resource can be restricted through patent protection the use of software is often restricted through copyright. Unlike patents, which must be applied for, copyright applies automatically and must be either waived or openly licensed to prevent restrictions on use.

**4.2 Rationale** – Openly sharing software means that others must be able to modify and adapt the software to their needs. The best way of ensuring this openness is to make sure that the shared software, including the software that underlies pipelines, applies an open software license.

**4.3 Open Software Licenses for Shared Software** – The CONP should strongly encourage the Canadian neuroscience community to share any software used in their research through an online software sharing platform and to apply an open software license (e.g. MIT License) that is no more restrictive than a copyleft license (e.g. GNU General Public License). Software can also be dedicated to the public domain using a public domain dedication (e.g. CC0) and doing so may be the most effective way to ensure that software can be used without restriction.

Shared software should also include documentation about how the software was designed and/or modified. The license applied should be clearly indicated on the page where the software can be accessed and in the documentation that accompanies the software.

Neuroscience resource sharing platforms, including the CONP Portal, that facilitate software sharing and the creation of software pipelines should make sure the underlying software is openly licensed or dedicated to the public domain.

**4.4 Licensing and Sharing of Modified Software** – The CONP should strongly encourage those who modify shared software – such that copyright applies to the modified software – to apply an open software license and share it through an online software sharing platform accompanied by appropriate documentation.

**4.5 Preventing Copyright Interference with Shared Software** – If an open software license or public domain dedication is not applied to shared software then steps should be taken to ensure the owner does not use their copyright to interfere with the free use of that software. It may be appropriate to include a condition to this effect in the terms of use of neuroscience resource sharing platforms.

**4.6 Additional Informational Resources** – The CONP should collect information and provide guidance about shared software, software pipelines, software copyright, and open software licenses. This information should be made available on the CONP website.

## **5.0 Copyright in Visual or Textual Research Outputs**

**5.1 Background Information** – In addition to data and software, researchers may share other copyrightable research outputs, such as publications, posters, presentations, protocols, figures, and visualizations. Like data and software, it is important that others can use and adapt these outputs. Someone might, for example, wish to include a video of brain activity shared on a neuroscience resource sharing platform in a conference presentation. While that use may be permissible under current copyright law, the only way to be sure is to apply an open copyright license or public domain dedication.

**5.2 Rationale** – In the spirit of open science, those who access shared resources should be able to access, use, and adapt visual and textual research outputs as freely as possible. Doing so disseminates findings as quickly as possible and allows others to build on previous work.

**5.3 Rights Waiver or Open Copyright License for Shared Text and Visualizations** – The CONP should strongly encourage members of the Canadian neuroscience community to share any textual or visual research output under a public domain dedication (e.g. CC0) or an attribution-only license (e.g. CC-BY 4.0). Such licenses should be applied whether these resources are posted on personal webpages or shared via a neuroscience resource sharing platform. Which license has been applied should be clearly indicated on the page through which the resource is accessed.

The CONP should further strongly encourage the application of a public domain dedication or attribution-only license to any derived works based on shared text or visualizations.

**5.4 Additional Information** – The CONP should collect information and provide guidance about copyright in text and visualizations, dedicating text and visualizations to the public domain, and open copyright licenses. This information should be made available on the CONP website.

## **6.0 Copyright in Outputs Generated by Applying Shared Software and Software Pipelines to Shared Data**

**6.1 Background Information** – Applying shared software to shared datasets, either directly or through platforms that enable users to apply software pipelines, will enable users to generate various outputs. While it is difficult to know exactly what outputs may be produced in this way there are four exemplary use cases: (1) visualizations, (2) textual summaries, (3) statistical summaries, and (4) new datasets.

Visualization software may be applied to a dataset to generate a visual representation (e.g. video or graph) of that dataset; text mining software may be applied to a dataset that includes text-as-data to generate a synthesis of that text or an automatically generated textual report; statistical software may be used on a dataset to detect correlations or generate statistics to describe the dataset; processing software or artificial intelligence software may be applied to generate derived datasets or novel datasets generated through training an artificial intelligence system.

**6.2 Rationale** – Whether the output generated by applying software to a dataset, or multiple datasets, is the product of human creativity such that it is a copyrightable work is an unsettled issue. If at any point the output of software, or some subset of outputs, is determined to be subject to copyright protection then, to promote open science and fairness, the outputs generated by applying openly shared software and pipelines on openly shared datasets should be openly shared in turn.

**6.3 Rights Waiver or Open License for Outputs of Shared Software Applied to Shared Data** – The CONP, the Canadian neuroscience community, and neuroscience resource sharing platforms should remain attentive to the possibility of copyright applying to the outputs of software. If such outputs are determined to be copyrightable, the CONP should strongly encourage or mandate that any copyrightable output is licensed under terms no more restrictive than the data it was used on. If, for example, the dataset was shared under an attribution-only license the output generated by applying shared software should be shared under either an attribution-only license or a public domain dedication. This condition should be reflected in the software license and platform terms of use.

It may be appropriate to extend the approach discussed above to outputs generated by applying proprietary software (i.e. software not shared under an open software license) to shared data. The CONP and neuroscience resource sharing platforms should remain attentive to this possibility and update their approach accordingly.





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