

The first five years of *FACETS*: Canada's multidisciplinary open access academy journal

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I am pleased to announce that *FACETS*, the new multidisciplinary journal published by Canadian Science Publishing (CSP), is officially listed in the Science Citation Index after its fifth year of open access publishing. As its founding Editor-in Chief, I would like to take this opportunity to look back at *FACETS*' journey so far.

FACETS: the vision

FACETS' stated mission is "to advance science by publishing high-quality, open access research that represents the multifaceted global community of researchers and offers choice to our authors." The vision for *FACETS* began with the recognition of a gap and an opportunity to fill that gap. *FACETS* emerged at a time when few options existed to discuss sciences in the Canadian societal context. We envisioned *FACETS* as Canada's first multidisciplinary, open access science journal in response to Canada's need for a venue to present new scientific discoveries and to discuss science in the context of the role that science plays in society.

I was encouraged by the enthusiasm of so many people for the idea of a new journal in Canada for discussing issues related to science and society. What made *FACETS* come together was the talent and generosity so apparent in our colleagues and our publisher CSP (formerly NRC Research Press), a publisher of 24 scientific journals with a 92-year history of publishing respected science.

One important factor that boosted *FACETS*' reputation from the start was CSP's not-for-profit status. CSP uses its revenue to cover the expenses for publishing its world-class journals and to advance the cause of academic communication and publishing in Canada, which controverts the philosophy of publishers whose key motivator is profit. In addition to publishing journals, CSP runs a professional blog (blog.cdnsiencepub.com/about-the-blog/) to help researchers discover, explore, and share science written in digestible bites and has a Medium channel dedicated to *FACETS* for plain language summaries of *FACETS*' articles (medium.com/facets). CSP also supports various awards and recognition activities and sponsors a wide range of academic societies. And, of course, CSP supports new innovations like *FACETS* to adapt to an evolving digital academic landscape.

As our name indicates, *FACETS* represents the multifaceted nature of research. To achieve this vision, *FACETS* benefits from the volunteer service of 86 Subject Editors from 11 countries that offer the breadth that our journal demands, and we frequently rely on the talent of our respected peers to serve as Guest Editors, as is often the practice of multidisciplinary journals.

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A multidisciplinary journal with a Canadian perspective

Multidisciplinary perspectives in science are needed to help address the challenges of the twenty-first century, be it health, energy, environment, technology, societal change, or others. To give one example, conservation science combines fields as broad as biology, ecology, geography, public policy, economics, philosophy, sociology, and communications (Dick et al. 2016), and conservation goals can only be achieved when these perspectives are combined. The world's future challenges will largely be framed in both natural and socioeconomic dimensions, requiring a convergence of expertise. *FACETS* is positioned to shine a spotlight on Canadian issues and perspectives in ways unmatched by any other journal. Options are limited for publishing perspectives on research issues such as the impact of Tri-Council decisions on research in Canada, the influence of Canada's *Species at Risk Act* or its *Fisheries Act* on species conservation in Canada, the emergence of community-based research in Canada, or even the impact of a global pandemic from a Canadian science and societal perspective, to give only a few examples. The multidisciplinary nature of *FACETS* provides a means to bring these discussions to light with the help of its Editorial Board members, many of whom incorporate multi- and interdisciplinary perspectives in their own research.

FACETS is open to everyone

We have sought to position *FACETS* as part of the global transition to open access academic publishing. The world is currently experiencing a seismic shift in the way research is communicated and we wanted our new journal to be part of that transition. In this “Age of the Internet”, online communication is still a relatively new reality. Only two decades ago, research publications were still printed on paper and hand delivered to libraries and mailboxes, making research a largely exclusive enterprise. Researchers could only access diverse academic research publications if they had an affiliation to a university or research institute, and most of society was excluded from the research enterprise. The world has changed considerably since then.

The emergence of online journals, combined with the rise of open access, is expanding the reach, influence, and relevance of research to the world. For example, a recent *FACETS* article reported that peer-reviewed scientific journals are the most trusted source of scientific information by all members of society, from the public, to policy members, and scientists alike (Wilson et al. 2016). However, due to restricted access, typically from paywalls imposed by publishers, academic journals are still among the sources least used by society, save for those who work in universities, hospitals, museums, and research institutes (Wilson et al. 2016). This situation is even worse in poorer countries where even top institutes have limited access to academic journals. The push to bring open access to peer-reviewed journals is about creating broader access to the most trusted sources of information. Open access also has the potential to improve scientific literacy at a time when it is sorely needed in society.

Moreover, a peer-reviewed open access journal like *FACETS* makes articles not only accessible to all potential readers but also searchable because its articles are indexed in freely available public databases like Google Scholar. Articles in *FACETS* are thus easily discoverable and accessible by anyone online, avoiding the tedious and frustrating practice of searching through repositories or being stopped by paywalls.

However, open access journals are still a contentious and complex topic because many of these journals rely on article processing charges (APCs) to cover basic operating costs and APCs can be cumbersome to researchers. Most governments and granting councils currently do not have a coherent strategy for supporting open access publishing by their researchers. CSP currently offsets *FACETS*' operating costs by charging APCs, but *FACETS*' APC costs are among the lowest by industry standards, and CSP offers APC waivers to researchers from Research4Life member countries. Notably, CSP is actively looking for a sustainable business model that will reduce the financial burden

on researchers by partnering with academic libraries who are interested in supporting open access publishing. Open access publishing is still a work in progress, and we haven't overcome all challenges, but the benefits are evident as we progress to a more equitable and inclusive society. The global movement to open access academic publishing must continue.

Our partnership with the Royal Society of Canada

In 2016, shortly after our launch, the *FACETS* team reached out to the Royal Society of Canada (RSC), Canada's premier academic society, with a new idea. At that time, we saw similarities between *FACETS* and the RSC mission, part of which is "to advance knowledge, encourage integrated interdisciplinary understandings and address issues that are critical to Canada and Canadians" ([RSC website](#)). *FACETS* and the RSC both believe in making our publications available to all, so it was clear our objectives were aligned from the start.

The RSC publishes expert panel reports and policy briefings, but unlike its progenitor the Royal Society in the United Kingdom, it did not have an official peer-reviewed publication. We opened discussions with the RSC by participating in its annual meetings. The discussions revealed interest among the RSC community across disciplines, and in June 2017 *FACETS* became the official journal of the RSC Academy of Science for a trial period of five years.

Our partnership with the RSC has been a meaningful one. In the past five years, *FACETS* has published 60 articles authored or co-authored by RSC Fellows or RSC College members (with 9 more articles by RSC members accepted, and currently 11 more in peer-review), showing a high level of engagement by the society. Another important development in our partnership is the publication of RSC policy briefings and expert panel reports. In April 2020 the RSC formed a task force involving over 330 leading academics to provide leadership and advice on the rapidly emerging problems caused by the COVID-19 pandemic. *FACETS* is publishing a special collection of these policy briefings on issues spanning the future of long-term care in Canada ([Estabrooks et al. 2020](#)), reconciling civil liberties and public health in response to COVID-19 ([Flood et al. 2020](#)), supporting mental health during a pandemic ([Asmundson et al. 2020](#)), drug discovery of anti-virals ([Bubela et al. 2020](#)), and many more (see facetsjournal.com/topic/rsc-taskforce-on-covid-19). This collection demonstrates how only a multidisciplinary journal like *FACETS* can address a multifaceted topic like a global pandemic. More hot topics of similar scope are on the horizon, including a special collection of RSC policy briefings on climate change and other related environmental issues. We hope to see our partnership with the RSC continue to present a new perspective on important topics that affect Canada and the world in ways that only a multidisciplinary and open access journal can do.

Special collections in *FACETS*

FACETS has also used special collections to bring together broad multidisciplinary perspectives on a range of topics. For example, a collection titled "Social Dimensions of Rural African Agriculture, Food and Development" addresses the question of how smallholder farms in sub-Saharan Africa are increasing their food security using formal seed systems, improved breeding strategies for dairy farmers, and strategies to improve agricultural yield. Another collection titled "Ranavirus research: 10 years of global collaboration" compiled the findings of the Global Ranavirus Consortium, an organization that documented the rise and impact of pathogens that affect fish and amphibian populations, contributing to economic effects on aquaculture and the global amphibian decline. A collection with a Canadian focus is "Conservation in Canada: Identifying and overcoming barriers", which examines political barriers to conservation in Canada. Themes explored include the effectiveness of Canada's conservation areas in protecting species and Indigenous governance and knowledge systems. Collections currently under development include "Ärramät, the intersections of biodiversity

conservation and Indigenous health and well-being” and “Food, Fiber, Fuel, and Function: Pathways to manage ecosystem services in Canada’s working landscape”. These special collections highlight some of the breadth of participation in our new journal.

Participatory Indigenous research and knowledge systems in *FACETS*

FACETS supports the rise of community-based and Indigenous participatory research and acknowledges that Indigenous knowledge has too often been ignored in the natural sciences (Wong et al. 2020). Indigenous Peoples and their cultures have typically been the subjects and objects of study, rather than its participants (Castleden et al. 2010). Research councils and researchers alike have long recognized the importance of knowledge sharing and partnerships with Indigenous communities, but they are now taking more concrete actions. Meaningful partnerships will only result from inclusive behaviours, and *FACETS*, along with its publisher CSP, is in a unique position to embrace Indigenous participation in ways rarely seen in other scientific journals. One example of a concrete action taken by *FACETS* has been to explore new approaches to authorship to honour Indigenous traditions. In one special instance, we allowed the inclusion of an Indigenous collective as an author in a *FACETS* article (Germida et al. 2021). Although this contravened CSP’s current authorship policy, we continue to look for ways to adapt our authorship policies to a more inclusive landscape.

A series of articles in *FACETS* addresses the development of better ways to establish meaningful dialogues and partnerships between Indigenous Peoples and non-Indigenous researchers. For example, Schang et al. (2020) highlighted how ecological research is often disconnected from Indigenous cultures and traditions. They surveyed 159 research articles on terrestrial ecosystems and found that only 11 of those studies included acknowledgement of Indigenous stewardship, acknowledged Indigenous Territories, or named the Indigenous group on whose Territory the work was conducted. To help address these concerns, and following the format of the *Truth and Reconciliation Commission* that proposed 94 Calls to Action to realign the relationship between Indigenous and non-Indigenous communities in Canada, Wong et al. (2020) proposed 10 additional Calls to Action for natural scientists working on Indigenous lands. These included calls for natural scientists to understand the socio-political landscape of their research sites and to seek meaningful relationships and collaborations with Indigenous communities when conducting research on Indigenous Territory. These measures can serve to shift the power dynamic and enable more meaningful knowledge sharing between Indigenous communities and their Treaty partners. Other benefits of meaningful collaborative research between Indigenous communities and scientists include improved communication, building trust and capacity, and considering how Indigenous knowledge can work in parallel with other knowledge systems (MacMillan et al. 2019). It only makes sense that these issues would come to light in a journal like *FACETS*, one uniquely connected to the research landscape in Canada and sensitive to the needs of its diverse residents.

FACETS so far

Five years ago, I would not have imagined *FACETS* to be where it is today. *FACETS* is a new voice for science and its role in society, and its reach and popularity continue to expand beyond my expectations. A scan of its recent articles underscores its role in reporting matters of national and international importance. It is now attracting a steady stream of submissions and that will grow, especially now that *FACETS* is included in the Science Citation Index and has received its first journal impact factor (2.535). Its popular Integrative Science Section provides a platform to discuss the role of science in our society, and its Science Applications Forum articles link science to policy, something that was lacking in this country until now. Articles in *FACETS* are indexed on all the major platforms. It was accepted for inclusion in the Directory of Open Access Journals and was awarded the DOAJ

seal, speaking to its reputation as a respected member of the open access community. *FACETS* was even recognized shortly after its launch by the Canadian Association of Learned Journals with its 2018 Scholarly and Research Communication Innovation Award. Importantly, *FACETS* is the official journal of the Royal Society of Canada's Academy of Science, Canada's premier scientific society. The *FACETS* team has taken great pride in watching its journal grow from an idea to a new reality of national and international significance. I hope you will include *FACETS* on your reading list and in your plans for communicating your research to the world.

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Author contributions

JMB conceived and designed the editorial. JMB drafted and revised the manuscript.

Competing interests

The author has declared that no competing interests exist.

References

- Asmundson GJG, Blackstock C, Bourque MC, Brimacombe G, Crawford A, Deacon SH, et al. 2020. Easing the disruption of COVID-19: supporting the mental health of the people of Canada—October 2020—an RSC Policy Briefing. *FACETS*, 5: 1071–1098. DOI: [10.1139/facets2020-0082](https://doi.org/10.1139/facets2020-0082)
- Bubela T, Gold ER, Goel V, Morgan M, Mossman K, Nickerson J, et al. 2020. Open drug discovery of anti-virals critical for Canada's pandemic strategy. *FACETS*, 5: 1019–1036. DOI: [10.1139/facets-2020-0079](https://doi.org/10.1139/facets-2020-0079)
- Castleden H, Morgan VS, and Neimanis A. 2010. Researchers' perspectives on collective/community co-authorship in community-based participatory Indigenous research. *Journal of Empirical Research on Human Research Ethics*, 5(4) 23–32. PMID: [21133784](https://pubmed.ncbi.nlm.nih.gov/21133784/) DOI: [10.1525/jer.2010.5.4.23](https://doi.org/10.1525/jer.2010.5.4.23)
- Dick M, Rous AM, Nguyen VM, and Cooke SJ. 2016. Necessary but challenging: Multiple disciplinary approaches to solving conservation problems. *FACETS*, 1: 67–82. DOI: [10.1139/facets-2016-0003](https://doi.org/10.1139/facets-2016-0003)
- Estabrooks CA, Straus SE, Flood CM, Keefe J, Armstrong P, Donner GJ, et al. 2020. Restoring trust: COVID-19 and the future of long-term care in Canada. *FACETS*, 5: 651–691. DOI: [10.1139/facets-2020-0056](https://doi.org/10.1139/facets-2020-0056)
- Flood CM, MacDonnell V, Thomas B, and Wilson K. 2020. Reconciling civil liberties and public health in the response to COVID-19. *FACETS*, 5: 887–898. DOI: [10.1139/facets-2020-0070](https://doi.org/10.1139/facets-2020-0070)

Germida JJ, Blais JM, Ketley S, and Busnarda J. 2021. Community-based Indigenous knowledge. FACETS, 6: 837–838. DOI: [10.1139/facets-2021-0043](https://doi.org/10.1139/facets-2021-0043)

MacMillan GA, Falardeau M, Girard C, Dufour-Beauséjour S, LacombeBergeron J, Menzies AK, and Henri DA. 2019. Highlighting the potential of peer-led workshops in training early-career researchers for conducting research with Indigenous communities. FACETS, 4: 275–292. DOI: [10.1139/facets-2018-0046](https://doi.org/10.1139/facets-2018-0046)

RSC website. [online]: Available from rsc-src.ca/en/about-us/our-purpose/mandate-mission-and-vision.

Schang KA, Trant AJ, Bohnert SA, Closs AM, Humchitt M, McIntosh KP, et al. 2020. Ecological research should consider Indigenous peoples and stewardship. FACETS, 5: 534–537. DOI: [10.1139/facets-2019-0041](https://doi.org/10.1139/facets-2019-0041)

Wilson MJ, Ramey TL, Donaldson MR, Germain RR, and Perkin EK. 2016. Communicating science: Sending the right message to the right audience. FACETS, 1: 127–137. DOI: [10.1139/facets-2016-0015](https://doi.org/10.1139/facets-2016-0015)

Wong C, Ballegooyen K, Ignace L, Johnson MJ, and Swanson H. 2020. Towards reconciliation: 10 Calls to Action to natural scientists working in Canada. FACETS, 5: 769–783. DOI: [10.1139/facets-2020-0005](https://doi.org/10.1139/facets-2020-0005)