

# BOOK AND MEDIA REVIEWS

## ***Building a Mental Health Ethics Film Series, Building Mental Health Ethics Literacy***

**Timothy Krahn BA (Hons)  
Novel Tech Ethics, Dalhousie University  
Halifax, Canada**

### **ABSTRACT**

Building mental health ethics literacy can be understood as fostering recognition and discernment, critical reflection and assessment, of the mores that inform our understandings of mental health conditions and how these translate into treatment practices. Given the public impact of film as mirror and shaper of our (cultural) understandings of mental health, what better way to build mental health ethics literacy than to: (i) start (at the local level) a film series with panel discussions on mental health ethics issues; and (ii) build critical commentary on mental health ethics issues in and through film with relevant scholarly writing?

### **Key words:**

Ethics, mental health, education, ethics literacy, film, moral imagination

### **Introduction**

In 1997, A.F. Jorm and colleagues introduced the term “mental health literacy”, defining it as “knowledge and beliefs about mental disorders which aid their recognition, management or prevention” (Jorm et al., 1997). Presumably the relevant beliefs that stand to aid—or, as the case may be, hinder—the recognition, management, or prevention of mental health conditions are importantly structured by social and cultural mores (norms and values) (cf. Hoagwood et al., 1996; Surgeon General & (DHHS), 2001). This being the case, mental health literacy should be expanded to include a critical awareness of the mores (norms and values) operative in mental health in our society. The practice of holding up our social attitudes and cultural mores to critical scrutiny and mining them for standards to give us guidance for determining how we ought to treat one another (and on some theories, how we aim to live together) is part of the business of *doing* ethics. Building mental health ethics literacy, among other things (Ballantyne, 2008), can be understood as fostering recognition and

discernment, critical reflection and assessment, of the mores that inform our understandings of mental health conditions and how these translate into treatment practices. Most basically, this process can begin by listening to the voices of users (of mental health services) and having those voices count towards the treatment they receive (cf. Faulkner & Layzell, 2000; Rose & Sainsbury Centre for Mental Health, 2001). In this regard, to make real listening possible involves unpacking those aspects of our culture that both facilitate and block us from hearing with understanding. Given the public interest in film (Croteau & Hoynes, 2006), and given the public impact of film (Giroux, 2002; cf. Street, 1997)—including the capacity of films to sometimes mirror and sometimes shape our cultural understandings of mental health (Grainger-Monsen & Karetzky, 2006; Wolff et al., 1996)—what better way to build mental health ethics literacy than to: (i) start (at the local level) a film series with panel discussions on mental health ethics issues; and (ii) initiate a devoted column in this journal to engage critical commentary on mental health ethics issues *in* and *through* film? With respect to the latter initiative, please expect a commentary on *The Soloist* (pending its release on April 24th, 2009 for Canada) in the next issue of *JEMH*. The purpose, then, of this commentary is to explain the basic mechanics and components of how to build a film series on mental health ethics.

### **Finding the purpose**

Novel Tech Ethics is an interdisciplinary research team based at Dalhousie University that focuses on a wide range of ethical issues associated with the introduction of novel technologies. Current research addresses the concerns of the individual, the community, and humanity at large in relation to recent advances in neural and genetic technologies, including how these developments are redrawing the face of mental health today. Academic exchanges, public discussion, and collegial debate contribute to our understanding of these issues and inform our contributions to public policy and to public education. In 2007 we hosted *States of Mind*, our first (of now three) film series on the ethics of mental health as a public education initiative to build mental health ethics literacy. [See table 1]

TABLE 1

STATES OF MIND 2007	STATES OF MIND 2008	STATES OF MIND 2009
<i>A Beautiful Mind</i> Universal Pictures	<i>Away from Her</i> The Film Farm	<i>Michael Clayton</i> Warner Brothers
<i>Iris</i> Alliance Atlantis	<i>Awakenings</i> Columbia Pictures	<i>The Savages</i> Fox Searchlight Pictures
<i>The Hours</i> Paramount Pictures	<i>What's Eating Gilbert Grape</i> Paramount Pictures	<i>Music Within</i> Metro Goldwyn Mayer Pictures
<i>Eternal Sunshine of the Spotless Mind</i> Alliance Atlantis	<i>Thumbsucker</i> Sony Pictures Clasics	<i>Charlie Bartlett</i> Metro Goldwyn Mayer Pictures

Broadly speaking, the purpose of the series has been to provide a forum for two-way communication between the academic and medical communities and the general public in an effort to: (i) broaden the dissemination of knowledge of ethics in mental health; and (ii) sound out, listen to, and critically shape the concerns of those who are (and will be) affected by the development and use of novel technologies in this field. In this way we have connected the concerns of our research mandate to a broader public audience that includes both professionals and lay persons. Too often public education is only understood as “informing the public” (Goldie & Knifton, 2007). Arguably, any effort at public engagement should be grounded in conditions for genuine dialogue, involving: (i) open communication and deliberation; and (ii) allowing for the possibility for disagreement and movement—at times, affirming change(s)—through discourse. More specifically, our film series has aimed to open up spaces, as led by a panel of experts, where all stakeholders in mental health can learn from one another by asking questions, sharing relevant information and experiences, awakening interest in, creating awareness of, negotiating through, and critically debating the ethical issues as showcased in the films that profile mental health conditions.

### Choosing the program and other pragmatic decisions

Each year since beginning the series, we have featured topical films on a common weekday evening for four consecutive weeks. Each screening is followed by a moderated and panelled discussion. Building such a series is foremost about building relations with people, and knowing your target audience is critical. Our target audience is as diverse as all those who are concerned about mental health ethics issues, and importantly, those who might *come to be* concerned about mental health ethics issues through participation in the film series. Speaking to this diversity of perspectives in a way that can track interests that cut across cultural, socio-economic, and educational boundaries, not to

mention age demographics, is a challenge, but a welcome one. We have purposefully focused (primarily) on mainstream films because they provide a common currency for public interests that traverse many of the aforementioned divides. In focusing on popular films, we also hope to do our part to collaboratively unpack the significance that these films have for driving common norms and values in mental health.

As a means to bridge to the various relevant communities—and especially users (of mental health services) and their own communities—we have purposefully hosted the series away from the centre of the university campus within a theatre (seating capacity 168) at the Queen Elizabeth II Hospital. The early winter (mid-January to the beginning of February) works well for probably a number of reasons. It is reasonable to presume that after the holiday season, people in Nova Scotia are not as busy and (perhaps) looking for something to help the winter pass; addressing mental health issues at this time of year, is also timely, given the prevalence of Seasonal Affective Disorder, commonly known as “winter depression” (Lam, 2001). What is more, at this time of the year there are fewer competing events, and panellists tend to be more available than later on in the year: for instance, those that are academics are at the start (as opposed to the usually busy end) of term. And importantly, the media is more available for coverage, not to mention that many significant film awards ceremonies are also held at this time of the year.

Putting together an effective program for surfacing mental health ethics issues starts with finding a set of films that fit together and that hold the relevant educational potential (i). Dorothy Nyswander’s “watchword, ‘start where the people are’” is as appropriate to mental health ethics education as it is in health education work in general (McDonald et al., 2007:269). Our approach has been to begin public education from what the lay public appears to already be interested in, and then build from this to broaden critical appreciation. Strategically, we have started each year with an academy award winner or nominee: *A Beautiful Mind* in 2007, *Away from Her* in 2008, and *Michael Clayton* in 2009. [See Table 1] One way that we have used to gauge local interest in films—albeit this is a limited indicator—is to see how many holds have been placed on them in the public library system. Not all films chosen have had a direct mental health focus. For instance, both *Michael Clayton* and *What's Eating Gilbert Grape* feature mental health conditions that are neither central to the plot nor a critical factor for the main characters in either film. Even so, both films yielded fertile mental health ethics discussions because they give attention to “lifestyle” and socio-cultural determinants of mental health. In trying to “start where people are at”, we have also selected films that tie into the work of existent community organizations. Since January is Alzheimer’s Awareness month, we chose to screen the film *Iris* (in 2007) and *Away from Her* (in 2008) during that month. We have tried to choose the films in such a way as to give balanced representation of a variety of mental health conditions, selecting some that have not received much media attention (e.g. Encephalitis/Catatonia in *Awakenings*) and others (e.g. Anxiety disorders in *The Hours*) that did not seem to have any major society (or community organization) presence in Halifax at the time of screening. We have also tried with each series to build in programming that features mental health issues across the spectrum of age groups (e.g. adolescents with *Thumbsucker*, *What's Eating Gilbert Grape*, and *Charlie Bartlett*; young adults

with *Eternal Sunshine of the Spotless Mind*, and *Music Within*; middle-aged persons with *The Savages*; seniors with *Iris* and *Away from Her*).

Choosing films with broad public appeal has worked to bring in a diverse audience, but near the end of each series we have included at least one alternative, “Indie-style”, “stretch-your-mind” film that takes an approach to the material that is atypical (e.g. *Eternal Sunshine of the Spotless Mind*, *Thumbsucker*, and *Music Within*). [See table 1] Purposefully, we have positioned these screenings near the end of each series in the event that they might be experienced by some audience members as too alienating (as feedback indicated from *Eternal Sunshine*). Our hope for the future is to grow the series to include more documentaries and art films that have been written, produced, or directed by users (of mental health services) or that feature actors with mental health conditions: to borrow a phrase from *M-POWER*, “Nothing about us, without us!” (M-Power, 2009) At Novel Tech Ethics, we have already begun steps along this path with our other public education events for Brain Awareness Week. These have included a screening and panel discussion of *Rage for Order: Autism* (a documentary by Oliver Sacks), and recently, *The Diving Bell & the Butterfly*. The latter, though hardly an “Indie-film”, is nonetheless stylistically more challenging than many popular films because of its camera work that well captures a first-person perspective of the patient protagonist (a stroke survivor), including his states of distress portrayed from the “inside out”. Both these screenings were staged shortly after the *States of Mind* film series and yielded capacity and well over-capacity crowds.

## Assembling an effective panel

The next critical component for building a successful film series on the ethics in mental health is assembling an effective panel. This is probably the most involving task. Given that our emphasis is on ethics, we have opted for a single ethics expert across all four sessions of each series so as to provide an element of continuity for the panel discussion. We always include at least one clinician and one person with direct experience of the relevant mental health condition, most preferably a mental health services user and if not, a family member or someone with close relations to persons with mental health conditions. Besides our ethics anchor (with a few exceptions in our first year), we exchange panelists anew for each session. These have included clinicians, researchers, social workers, educators, a law professor, community representatives, advocates, and users (of mental health services) selected according to their relevant expertise as matched with each film. This is admittedly a lot of work, but the sheer variety and changeover of panelists has helped to keep our programming and the discussions fresh. Again, getting the right expertise and ensuring fair representation on the panel to match with the film is a challenge, but the process has also provided opportunities to grow and connect our research to the various relevant communities and stakeholders. We have had panels as large as five members and as small as three. Having a diversity of perspectives sometimes involves including more members on the panel, but can also mean simply choosing panelists committed to presenting a diversity of perspectives. Smaller panels are more likely to attract the criticism of being unbalanced and lacking in representation. The challenge with larger panels is that

they can more easily become unbalanced as questions directed at more, rather than fewer panelists have a tendency to fall “between” them and tend to receive uneven uptake as a result. We try to remember that expertise can come as well from the “floor” as from the “front” which is in keeping with our attempts through this forum to break down some of the power differentials that still obtain between professionals and other mental health stakeholders (cf. Bracken & Thomas, 2005; Miller & Rose, 1986). Any attempt to stage a public event dealing with mental health is likely to involve political dimensions and to be received as such: it is good to remember that getting a diverse audience and working in ways to maximize audience participation and ownership for the discussion is usually key to providing a balanced and satisfying discussion regardless of how many persons staff the panel.

## Reaching the audience

Recruiting a diverse audience means reaching out far and wide. Effective advertising is an important skill and getting expert advice on how to manage this aspect of marketing the film series has been important. Advertising requires investment, and for our series this has meant starting by telephone and making personal contact with various mental health agencies, organizations, and institutions. What is more, having a web posting (of each event) to direct contacts to can save time and make communications more efficient and clear. Our posters for each *States of Mind* series have been downloadable from our website two to three months before the start of each series. A public service announcement for the media (prepared by the university’s Communications Department) is sent out six weeks in advance. Personalized e-mail notices are sent out about six to eight weeks in advance for those recipients who might see fit to post a notice on their website, intranet magazines, or in printed newsletters. Then seven to ten days before the series begins, an e-mail notice is sent out to all on our mailing list with a request that recipients pass the invitation onto anyone they think might be interested. A final reminder notice for each movie is e-mailed the day before, or the day of, each session. At each screening, we also run a slideshow that includes a slide with photos of all the panelists, their names and affiliations; a slide reminding the audience of the remaining films in the series and any other upcoming public education events that Novel Tech Ethics is hosting; a slide directing those interested to our website; a slide thanking our sponsors; and a final slide to remind people to fill out their evaluation forms and their contact information if they would like to be added to our mailing list. Our e-mailing list has grown to over 1700 contacts in just over three years, but almost all of these contacts have come in one subscriber at a time. A communications expert (who was instrumental in designing and managing the very successful Douglas Hospital mental health film series, *Brain Frames*) once told me that her goal in advertising was to always attract new people to each event. One very effective way that we have achieved this is by getting uptake with the local newspapers, radio stations and other media outlets that have run stories in advance of the series in both 2008 and 2009. Indeed, it is on the strength of these inroads with the media that we have been able to make this public education initiative reach out to those not already “plugged into” the various existent channels of communication for ethics and mental health education.

## Making an impact and addressing challenges

All the events have resulted in lively and engaging discussions with attendance including users (of mental health services), advocates, community representatives, clinicians, health care providers, researchers, social workers, educators, academics, students, and public officials. Providing time and the right context for addressing mental health stakeholders' ethics concerns is a pressing challenge in a healthcare and social services system that is already seriously taxed (Lützén, 2008). The panel-led discussions provide an opportunity for mental health ethics education to occur outside some of the pressures (and constraints) of clinical settings. Very importantly, almost half of those speaking from the floor are now users (of mental health services or their relatives and friends) relating their stories and experiences that are critically informing the resulting debates and building public understanding. Mental health services users, individually and in partnership, are in significant ways showing that they have many of the ethical answers themselves. Just the very practice of cultivating public listening and providing conditions to empower and capacitate users (of mental health services) to speak out, is assuredly part of building mental health ethics literacy in the community.

Admittedly, one of our main challenges with the discussions—especially at those sessions when the theatre is overflowing—has been to maintain an ethics focus. To do so (as affirmed by audience feedback through our evaluation process), the moderator now includes in the introduction to each session a statement of three or four very basic, orienting, ethics questions that the audience is encouraged to consider while viewing the film. After viewing the film, taking a short break, and then assembling the panel, we now also ask our ethics expert to give a three- to five-minute commentary on the film before asking for questions from the floor. This has proven successful in giving the audience entry points for beginning to think about the relevant mental health ethics issues. The audience is also reminded before leaving that a set of ethics questions, along with film reviews and relevant links to healthcare resource materials (including links to local support services), are to be found on our website. The Halifax Regional Municipality public has proven overwhelmingly responsive and we are committed at Novel Tech Ethics to meet the challenge to continue to communicate with and to build ethics literacy in the broader community into the future.

Broadly speaking the film series is succeeding at:

1. disseminating information to the general public about psychiatric conditions, mental health services, and mental health ethics research;
2. building individual awareness and social concern for mental health ethics issues and how these trace out in our culture through the medium of popular film;
3. providing a platform for users (of mental health services), their friends and families to themselves offer their concerns and ethical guidance to the public (researchers included);
4. deconstructing the misinformation, stereotypes and stigma in our culture that still attach to mental health conditions; and,

5. assisting mental health stakeholders to consider how to pursue better ways to both treat and respond ethically to persons with mental health conditions.

For those who may be new to matters of mental health ethics education, in the words of another festival organizer, “It is hoped that by bringing a film [series] of this nature to both mainstream and fringe audiences a serious attempt [is being] made at educating individuals, encouraging them to either re-evaluate the preconceptions they hold, or to inform them about phenomena which they are not normally exposed to” (Mental Health Media, 2003).

## Growing moral imagination through film

Building mental health ethics literacy by engaging with film can provide an opportunity to critique and grow the social imagination implicated in the “geography” of mental health in our society. Whenever we really engage with a story—be it through the film itself, or through the various personal responses we have heard in some of our panel-led, public discussions with the *States of Mind* film series—we are engaging not with abstract or theoretical concepts and moral codes; instead, narrative accounts put us in touch with persons and some of the intricacies of their lives (Anonymous, 2009; cf. McCoppin, 2008). In the case of stories presented in film, the persons we engage with are both the characters in the film story and the implied person that has chosen to portray them that way. As Wayne Booth explains:

Putting that implied author aside for a moment, just think about the characters whom that implied person has chosen to dramatize. They always exhibit, if the story is not just a Sunday School sermon, complex values ... When we join such characters, loving them or hating them, in the virtual world of story, we are inescapably caught up in ethical activity—now taking the word “ethical” as covering ... the whole range of human qualities, good and bad: the virtues, the powers, the habits of mind and heart. (Booth, 1998)

In this way, part of building mental health ethics literacy can be seen to include learning to imagine the complicated life of another person and considering what it would be to have their experiences and to make their choices within the complexities that define their world. Films are an especially good vehicle for allowing this sort of moral reflection and the depth that comes with it to surface (cf. McCoppin, 2008). As an art form that enlists the imagination, then, films have the capacity to give viewers a chance to acquire experience vicariously by dwelling in cultural contexts or “worlds” that may be quite different from that which they normally experience (cf. Posner, 1997:19). This is to say, in viewing films we are given a chance to experience and learn about values and sensibilities in our own or others' cultures and “worlds” that may be different (even very different) from our own, yet not so different as to be unintelligible (McCoppin, 2008:184). Thought-provoking movies thus have the capacity to stimulate our curiosity and sense of wonderment about others, including those with mental health conditions. This sense of wondering and of exploring different points of view, even (perhaps) to the

point of questioning one's own preconceived views and values, is one way to begin to develop an ethical outlook (Anonymous, 2009; Nussbaum, 1995). Well chosen films, like "[l]iterary works that promote identification and emotional reaction, can cut through... self-protective stratagems, requiring us to see and to respond to many things that may be difficult to confront," says Martha Nussbaum(ii) (2000:359). By harnessing the powers of moral imagination, our experience at Novel Tech Ethics is that well chosen movies are effective at building mental health ethics literacy on a public scale.

If you are considering starting a film series or film festival related to issues of mental health, we suggest you contact some of the many established and extremely innovative precedents already available across Canada. These include *Frames of Mind Monthly Mental Health Series* (Vancouver); *Rendezvous with Madness Film Festival* (Toronto); *Imagine Film Festival* (Whitby); *Mind's Eye Film Festival* (Peterborough), *Shadows of the Mind Film Festival* (Sault Saint Marie), *Frames of Mind Film Festival* (Montreal), *ViewFinders - International Film Festival for Youth in partnership with the Sun Life Financial Chair in Adolescent Mental Health*, (Halifax), and *States of Mind: A Film Series on the Ethics of Mental Health* (Halifax). There are also some very interesting international mental health film initiatives: namely, *The Scottish Mental Health and Film Festival* and the *New York City Mental Health Film Festival*.

---

## Endnotes

i) It is also important to seek expert legal advice on how to obtain permission to publicly screen any film as per the relevant restrictions of copyright.

ii) I do not herein mean to imply that cultivating moral imagination is sufficient for securing normative competence, only that it provides an entry point for building ethics literacy which can be one part of normative competency. For a very insightful discussion of issues of narrative and normative competency, see Hilde Lindemann Nelson, *Damaged Identities, Narrative Repair* (2001), especially chapter 2 "Narrative Approaches to Ethics".

---

## References

Anonymous (2009). Erev Yom Kippur (5768) -- Imagining Ethics. Temple Israel Long Beach. Retrieved March 5, 2009, from: <http://tilb.org/sermons/documents/YOMKIPPUREVE5768.doc>

Ballantyne, R. (2008). Achieving Ethical Mental Health Practices. *Journal for Ethics in Mental Health*, 3, 1.

Booth, W. C. (1998). Why Banning Ethical Criticism Is a Serious Mistake. *Philosophy and Literature*, 22, 366-393.

Bracken, P. & Thomas, P. (2005). *Postpsychiatry*. Oxford: Oxford University Press.

Croteau, D. & Hoynes, W. (2006). *The Business of Media: Corporate Media and the Public Interest*. (2nd ed ed.) Thousand Oaks, Calif: Pine Forge Press.

Faulkner, A. & Layzell, S. (2000). *Strategies for Living: A Report of User-Led Research into People's Strategies for Living With Mental Distress*. London: Mental Health Foundation.

Giroux, H. A. (2002). *Breaking in to the Movies: Film and the Culture of Politics*. Malden, MA: Blackwell.

Goldie, I. & Knifton, L. (2007). Reel Magic. *Ment. Health Today*, 21.

Grainger-Monsen, M. & Karetzky, K. (2006). The Mind in the Movies: A Neuroethical Analysis of the Portrayal of the Mind in Popular Media. In J. Illes (Ed.), *Neuroethics: Defining the Issues in Theory, Practice, and Policy* (pp. 297-320). Oxford: Oxford University Press.

Hoagwood, K., Jensen, P. S., Petti, T., & Burns, B. J. (1996). Outcomes of Mental Health Care for Children and Adolescents: I. A Comprehensive Conceptual Model. *J.Am.Acad.Child Adolesc. Psychiatry*, 35, 1055-1063.

Jorm, A. F., Korten, A. E., & Jacomb, P. A. (1997). 'Mental Health Literacy': a Survey of the Public's Ability to Recognise Mental Disorders and Their Beliefs About the Effectiveness of Treatment. *Medical Journal of Australia*, 166, 182-186.

Lam, R. W. (2001). Seasonal Affective Disorder FAQ. Canadian Mental Health Association. Retrieved March 18, 2009, from: [http://www.cmha.ca/bins/content\\_page.asp?cid=3-86-93-291](http://www.cmha.ca/bins/content_page.asp?cid=3-86-93-291)

Lützn, K. (2008). Time for Ethics. *Nursing Ethics*, 15, 145-146.

M-Power (2009). Statement of Purpose. [www.m-power.org](http://www.m-power.org). Retrieved March 26, 2009, from: [http://www.m-power.org/about\\_us](http://www.m-power.org/about_us)

McCoppin, R. (2008). Questioning Ethics: Incorporating the Novel into Ethics Courses. In C. C. Irvine (Ed.), *Teaching the Novel Across the Curriculum: a Handbook for Educators* (pp. 179-193). Westport, Conn: Greenwood Press.

McDonald, M., Antunez, G., & Gottemoeller, M. (2007). Using the Arts and Literature in Health Education. *International Quarterly of Community Health Education*, 27, 265-278.

Mental Health Media (2003). A Mental Health Film Festival - London, June 2003. [mhmedia.com](http://www.mhmedia.com). Retrieved March 14, 2009, from: <http://www.mhmedia.com/press/festival.html>

Miller, P. & Rose, N. S. (1986). *The Power of Psychiatry*. Cambridge: Cambridge University Press.

Nelson, H. L. (2001). *Damaged Identities, Narrative Repair*. Ithaca, N.Y: Cornell University Press.

Nussbaum, M. C. (2000). The Literary Imagination. In D. H. Richter (Ed.), *Falling Into Theory: Conflicting Views on Reading Literature* (pp. 355-365). Boston: Bedford Books of St. Martin's Press.

Nussbaum, M. C. (1995). *Poetic Justice: The Literary Imagination and Public Life*. Boston, Mass: Beacon Press.

Posner, R. A. (1997). Against Ethical Criticism. *Philosophy and Literature*, 21, 1-27.

Rose, D. & Sainsbury Centre for Mental Health (2001). *Users' Voices: The Perspectives of Mental Health Service Users on Community and Hospital Care*. London: Sainsbury Centre for Mental Health.

Street, J. (1997). *Politics and Popular Culture*. Philadelphia: Temple University Press.

Surgeon General & (DHHS), D. o. H. a. H. S. (2001). Mental Health: Culture, Race, Ethnicity - Supplement to Mental Health: Report of the Surgeon General. U.S. Department of Health and Human Services, Office of the Surgeon General, Substance Abuse and Mental Health Services Administration. Retrieved March 15, 2009, from: <http://mentalhealth.samhsa.gov/cre/default.asp>

Wolff, G., Pathare, S., Craig, T., & Leff, J. (1996). Community Knowledge of Mental Illness and Reaction to Mentally Ill People. *British Journal of Psychiatry*, 168, 191-198.

---

**Acknowledgements:** Research funded by Canadian Institutes of Health Research, NNF 80045, *States of Mind: Emerging Issues in Neuroethics*. Thanks to Françoise Baylis and the Novel Tech Ethics research team for feedback on previous drafts of this article.

---

**Competing interests:** none

---

**Address for Correspondence:**

**Timothy Krahn**  
**Research Associate**  
**Novel Tech Ethics**  
**Intellectual Commons, Dalhousie University**  
**1234 LeMarchant Street**  
**Halifax NS B3H 3P7**

**e-mail:** [tim.krahn@dal.ca](mailto:tim.krahn@dal.ca)