HEALTH DESIGN

interview with JONATHAN AITKEN *(Director of Health Design Lab at Emily Carr)*

DEBORAH SHACKLETON: This afternoon, we're here with Jonathan Aiken, who is the Director for the Health Design Lab at Emily Carr University of Art + Design. My name is Deborah Shackleton and I'm one of the editors for the University's research journal *Current*. So this afternoon we are going to have an opportunity to hear Jonathan's ideas and themes for the HD Lab at Emily Carr. Can you describe for us the history and the mandate of the Health Design Lab?

JONATHAN AITKEN: Health design has been a big part of Emily Carr for many years. The GF Strong Rehabilitation Centre, BC Children's Hospital, Vancouver Coastal Health — all have been partners and part of the design community for some time. Rob Inkster, the previous director of research at Emily Carr, started an initiative in collaboration with Ron Burnett, the University president, around building a framework or identity developing projects under the health design banner. Essentially what we're doing is collecting projects and bringing them into one space so that we can talk about them as a group. My mandate is to provide students and faculty with really interesting complex social problems so that they can practice design research methodologies that are participatory and human centred in nature, to really get at the core of things that need to be changed in health design.

Because Emily Carr is new in developing a research culture, what is the role of Health Design in relationship to the overall University mandate?

I think the role of the health design lab is to show how design can be involved in socially important problems and to give faculty and students a practical outlet that could potentially make a difference. I think it also shows the health community how important design can be in changing behaviors, in changing attitudes, in changing systems, in changing the way they effectively work within the health care system. More and more as we are pulling partners in, they have become positively overwhelmed by the role that design can play. This is new to them and I think we're making great strides in showing how an art and design school can be relevant to the health care community.

What are some of the topics or issues that you as the director encounter on an ongoing basis and what are your long term plans for working with clients?

In terms of topics, I look for partners who have potential for being ongoing long-term partners. So a new partner for Emily Carr this year is

Providence Health Care. They were interested in the idea of partnering with an art and design school but unclear as to how we might proceed with them. Quickly an industrial design project came open: designing an ambulatory cart that might fit as part of their proposed building in a new flexible-space, architectural solution. So that was an easy fit, but I also thought it would be interesting to consider how communication design might play a role in this evolving narrative as well. It was a matter of showing the partner how design might factor in helping them build a story, a narrative, and how that might change for different constituencies from the internal health care profession to the external public community. I was able to take the one project and spin it into two.

Once a partner has been with Emily Carr for more than a year or two, then it's a more collaborative space. So then I work with the partner to look at problems that are meaningful to them — this can't be a theoretical problem but something that they're actually encountering and they need to solve. What I look for in terms of selecting that problem is something that has some complexity to it, so that our students and faculty really have something difficult to encounter, and that forces them to use participatory human centred design methodology.

In the long term I'm looking for partners who can commit to being part of an ongoing relationship so that I can get out of the space where projects last from between a few weeks to a few months to projects that might span several years.

Before the cameras were on we were talking a bit about the perception of health design that people have that you are designing health as opposed to being a designer or design team that can actually offer something to the sector. What kind of strategies are you looking at to change that perception?

What I'm trying to do is say, yes, health is the content and the vehicle, but really it's about design and it's about a way of applying creativity to really complicated problems. Healthcare happens to have a wealth of complicated problems so it's a great vehicle for teaching students about how to tackle a really complicated, difficult problem and how to apply co-creation research methodologies to resolving that problem. The strategy for changing people is building success stories and successful outcomes. Helping students to realize their designs toward some kind of successful outcome for the partner, and building that into a story, makes students and faculty see the value of the process.

Practice-based research figures prominently in terms of the methodologies that you're bringing to the University under this umbrella of the Health Design Lab. What kind of inputs, if I was going to work with you, would I need to bring to the relationship and what might I expect in terms of outputs, what would be the range there?

What we ask partners to bring is enthusiasm and participation. The best partners come with a really interesting problem that they're passionate about. Vancouver Coastal Health has been a terrific supporter for several years; they engage with problems enthusiastically and openly, and look to Emily Carr as an agent of change. In one recent project, they asked us to look at the problem space of improving lift use compliance in Residential Care facilities to reduce workplace injuries. In another, they looked to us to provide insight into communication problems between oncoming and offgoing nursing shifts. In both cases, the problems are well defined, but the causes are complex and difficult to ascertain. As well, they bring us people, often up to 20 to 30 participants for several sessions. In a project we're working on now, they called me and asked "what's the maximum number of people we can send?" And that's a brand new problem for me because usually all we can get is 10 or 15 people. They had to cap it at 30 because they had more people than that wanting to take part.

That sounds very exciting and full in terms of a partnership. What is different or similar to your understanding of design thinking and the thinking that the partner brings to the collaboration.

By bringing the partner and the designer into the same shared space not only does the designer gain a much richer understanding of that problem space; it also provides the end users or the participants, the people who will be engaging with the solution, a role in forming that solution. So now we've become designers of strategy and process, enabling these participants to become designers themselves. It ends up with a much richer, more rounded solution to a problem. We bring multiple perspec-

tives to that problem, giving them a range of things to think about that they never would've encountered on their own. A great example of that was the hand hygiene project where the partner came to us looking to simply boost compliance rates for hand sterilization from visitors to hospital. They had tried to resolve this problem with posters and sanitation dispensers positioned at as many locations as they could, but they plateaued. So our students came up with a range of different solutions, one of them a really simple device, which for every click of a hand dispenser gave a funny blooping noise, put an image of a hand on a large monitor and then that hand became part of a larger graphic. People were lining up to do this! That kind of thinking is not something that a hospital can do, it's not their expertise, but we can as designers.

What are the challenges? Can you think of some areas in which you've had to do some tough learning in regard to the role of the lab in the university?

A big challenge is the increasing digitization of the space. Virtually any system design that we come up with ends up with some kind of digital application, an app for an iPhone, a tablet, or computer system, all of them horrendously expensive and incredibly difficult to implement. Implementation is certainly one of the first problems: how do we take the results of our ideas and put them together in a functioning outcome for the partner? A second problem is the issue of privacy around medical records. We're at a space now where I do believe in five years we will all have direct control of our medical information, but at the moment we don't, we have indirect control of it and nobody talks to each other. We're trying to design for that space a few years out even though we can't implement them now without huge changes to the laws, the structure, the way hospitals talk to labs, and fundamentally who controls that information is in flux. The third one is capacity, and that's a problem being a small art and design school in a large community. The projects that are coming in are fascinating; I'm quickly running out of places and people for them, so I have to be selective about which ones to bring in.

> ## WE'VE BECOME DESIGNERS OF STRATEGY AND PROCESS, ENABLING THESE PARTICIPANTS TO BECOME DESIGNERS THEMSELVES. IT ENDS UP WITH A MUCH RICHER, MORE ROUNDED SOLUTION TO A PROBLEM.

And as director for this virtual laboratory, what are the themes or issues that the lab will likely encounter in the next couple of years?

The direction that I'd like to take is into a more transdisciplinary understanding of how design can relate to a large complex problem. Traditionally when you talk of designing for health, we're typically talking products or assistive devices, objects that can help a person physically, and that will continue to be a big part of what health design is. But more importantly, we're looking at a broader view of what design can bring, which means that some outcomes may be communication design, interaction design, industrial design and almost always a blend of all three. Systems design plays an important part; we can't start instituting any kind of change without changing things at a structural level. A project last year was about this really interesting space where nurses coming on shift don't overlap with nurses going off shift, they communicate on the fly and impromptu, and there's no structure for it. They came to us looking for how we could facilitate that exchange of information. Many of the projects ended up being apps for an iPad where crucial information would float to the top so that things they needed to be most aware of are front and centre, while other students looked at it from an educational point of view, recommending changing the way this is taught at nursing school as a change to the curriculum.

Emily Carr is moving towards a new campus on Great Northern Way. Can you project into that space and imagine the Health Design Lab what you see?

Absolutely, I would love to have space. In this location, we're always fighting for space. It would be wonderful to have even a studio space where people can come and go and share ideas and work together. It would also be really interesting to have some kind of flexible prototyping space where we could mock up a room and then test how an ambulatory cart might come in and out of that room and what special considerations there are. And I've heard that from partners as well, architectural partners, healthcare partners — they would love to be able to test out some of these ideas in real space.

Interviewed by Deborah Shackleton