

IOTA is a creative agency that supports writing, curatorial research, and cross-disciplinary artworks in new media, the web, visual, interactive and performance art.

We aim to reach beyond the scope and duration of traditional art exhibitions, to create an environment that fosters research opportunities, multi-sector partnerships including technology, biology, and grass roots movements.

Between October 2018 and June 2019 IOTA Institute hosted a series of free public exhibitions, events and installations in Halifax, NS. Whether it's creating microbial art using yeast, or engaging with a full-body exoskeleton, **Bio Art** is a practice that transcends the fields of visual art, media art, and science — applied, social and political. This continuously evolving practice also tests (and sometimes breaks) the boundaries of these fields. .

INTERVIEW WITH NINA SELLARS

by Mollie Cronin, 2020

MOLLIE CRONIN: *Could you tell me about your latest project, “Fat Culture,” and what drew you to working with fat as a material?*

NINA SELLARS: *“Fat Culture” began as a concept that evolved into a series of practice-led research projects: my aim was to make art interventions in anatomy museums and atlases that would focus attention on fat’s lack of representation in these spaces. Fat rarely appears in the visual archives of anatomy, or at least rarely in a way that appears meaningful, so I started by giving thoughtful attention to the omission.*

Fat (aka adipose tissue) is one of the most circulated, instrumentalised, and contested organs of the twenty-first century body, which makes its historical absence from anatomy museums and compendia seem problematic. For example, how do we attempt to speak about an organ that is not represented in anatomy’s historical narratives? Perhaps this goes some way towards explaining why it appears so contested in our era? Reflecting on medical historian Shigehisa Kuriyama’s observation that ‘anatomy eventually became so basic to the Western conception of the body that it assumed an aura of inevitability’ raises the question; do we conceive of a body without fat as an ideal?¹

My initial interest in fat came about many years ago when I was employed as a body dissector and anatomical illustrator at a medical school. In a dissection lab, fat is generally treated as the matter that you remove

in the act of revealing anatomy. I found this practice strange. In 2017-2018 I returned to the school to be artist in residence at SymbioticA, the biological arts laboratory at the University of Western Australia, to work with human preadipocyte cells living outside the body (i.e. in vitro in the tissue culture lab). My artwork *“Sentinels”* emerged from the research that I conducted during this residency and through my earlier, and ongoing, mentorships with J. William Futrell and Ramon Llull, who are leading researchers in adipose tissue and its use in regenerative medicine. *“Sentinels”* was first shown as a biological art installation, with the preadipocyte cells living, and growing, in the gallery space as part of the exhibition *“HyperPrometheus: The Legacy of Frankenstein”*, which was held at the Perth Institute of Contemporary Arts, Western Australia, in 2018. This exhibition was followed by a bio art digital iteration of the artwork that was installed at the Anna Leonowens Gallery in Halifax, Canada, for the *“IOTA Bio Art Series”* in 2019.

I should make clear also it’s not that I think of fat as a material for use, but rather I focus on fat as being an immensely interesting matter. The terms ‘material’ and ‘matter’ sound close in meaning but matter has a particular history and etymological origin that connects to specific discourses. Moreover, at SymbioticA, I tended to view the adipose tissue that I was working with as more of a collaborator, rather than a material, and I felt very responsible for its care.

MC: You write that you're interested in the way that the field of anatomy "has shaped our understanding of the body, identity, and subjectivity." Do you believe that the omission of / indifference to representations of fat in historical anatomical studies is reflective of cultural attitudes towards fat and fatness? And/or, how might it have shaped current attitudes?

NS: Yes, I'd say it's more than indifference; anatomy, as a body of knowledge, is founded on fat's omission. If we try to locate fat in terms of 'belonging', to sight and to be sited within the conceptual framework of anatomy, it can seem that fat belongs more with the instruments of dissection, e.g. the scalpel blade, the surgical forceps, and the receptacles of collection, rather than with the body of its origin. In a way, fat has been subject to systematic erasure within the discipline.

The question is, can fat be viewed differently in the study of anatomy and, if yes, what form would it take; in particular would it diverge from the paradigms of classical anatomy representations? At the very least, it's important to highlight its complex positioning in anatomy's history. In part, this is what I am hoping to achieve with the idea of making fat interventions in the archives of anatomy. Essentially, to question the cultural and scientific implications of the relative absence of fat in the history of anatomy and the significance this has for contemporary discourses about the human, non-human, and posthuman.

MC: I think the question you raise about the body without fat as the ideal is a very interesting one, and one often grappled with in the field of fat activism / fat liberation movement. There seems to be a cultural belief that there is the body and then there is the fat that sits on top of it, that fat is simply an obstruction to the "true" body or the "true" self underneath ("there's a thin person inside of you just waiting to get out").

MC: It is almost as if fat is not considered to be of the body, as you articulated, but something that invades it: fat as parasite, as tumor. So your approach of viewing fat as a "collaborator" is really refreshing. By focusing on this overlooked organ, what insights have you gained? Has anything surprised you about working with and on the subject of fat?

NS: The concept of fat not being part of the body is fascinating isn't it, because it doesn't make sense. If you keep pursuing a line of questioning that follows anatomy's own logic, anatomy appears to falter in its reasoning – exposing a paradoxical positioning of fat as being part of us and not part of us, simultaneously. The more you interrogate the status of fat the more uncertain anatomy appears. I think of fat as being the critical organ of posthumanism because it has this elegant way of exposing the assumptions and biases that appear to reside in our humanist anatomical ordering of the body. How we see ourselves has a material impact on our lives and it's important to question what is presented as a given. Fat keeps surprising me by making me doubt what I thought I knew.

For example, the relatively recent act of classifying fat as an organ raises questions about the ways in which fat was previously perceived. For if we consider it a given that the anatomical body is made up of organs, how then did this formerly considered 'non-organ' of the body exist in an environment in which it was seen to operate as an almost, but not quite yet, accepted part of the anatomical body? Complicating the situation further is the finding that fat contains significantly higher pluripotent stem





cell yields than bone marrow. These adipose-derived stem cells can be differentiated towards different cell lineages, i.e. to grow fat, bone, cartilage, muscle and neuronal cells, which means that fat has gone from its position as a non-organ, to that of an organ, to now being an organ that has the capacity to make all other organs (i.e. ADSCs have the potential to become any of the body's cells). In a sense, we are witnessing fat's transgression of the boundaries that work to define our understanding of anatomy.

Anatomy is a way of ordering knowledge of the body that is western in origin: historically, when western thinkers are interested in something they tend to cut it up, figuratively or literally, they dissect to understand. Anatomy is a discipline of trenchant division and thus challenged by ambiguity. Fat is all about ambiguity. The apparent plasticity and adaptability of fat exceeds the anatomical convention that unifies organs into objects with a clearly discernible boundary, structure and function. Conceptually, this challenge is really interesting as it evocatively leaves adipose tissue to flicker at the boundary of the human and non-human. However, this liminal positioning also raises issues, especially since the terms 'body' and 'anatomy' are often used interchangeably and seen as synonymous in society.

You provided examples of terms that are often invoked in discussions of fat, which also work to give us insight into the conflict: 'parasite' and 'tumor'. The former suggests an entity's stealthy invasion into the body, unbeknownst to the host, the latter a disruption, or rather corruption, of the flesh, which also raises

questions of the host's complicity. Because fat evades easy capture in anatomy's classifications, we seem to try and resolve the ambiguity by reaching for analogies that position fat as a parasitic or abnormal 'other' that lies outside anatomy. This practice of taking a matter that simply appears 'different' and flipping it into being perceived as a negative, i.e. the antagonist to the ideal, reveals the humanist foundations of modern anatomy.

The body that aligns with this cultural belief originates with humanism and the sixteenth-century flayed figures of anatomy's history in which fat is rarely depicted. The word 'depicted' being the key term here, as the first anatomical illustrations to record and disseminate this particular way of seeing the body emerged from the Renaissance and this vision is what we have inherited. Irrespective of the technological sophistication experienced in our engagement with contemporary anatomical images, there appears to be a certain recycling of what is essentially a 16th-century perception. As a maker of anatomical images I feel both aware, and complicit.

MC: It is not uncommon for bio artists to turn to their own bodies as subjects or sources of matter- you yourself have worked with scans of the inside of your skull and with fat liposuctioned from your body. But you also often work with light and projections to construct forms, oscillating between the most intimate materials (your own flesh) to the most intangible (transparent, light). What interests you about these different approaches? That being said, historically the field of anatomy has relied on both physical dissection and the drawn image, so perhaps there is not a strong dichotomy to these different ways of tackling your subject matter?

NS: Both approaches relate back to the practice of anatomy, and my interest in examining how the discipline is enacted and conveyed. By focusing on anatomy as a process it can help in uncovering some of the influences and ways of thinking that inform the decisions made in individual moments of knowledge making. It allows us to ask broad questions about the religious and political beliefs of a particular time, the optical technologies that were made available in the

corresponding era, or even subtler, more localized questions, for instance, about the quality of a light source that was used in a dissection room. The idea is that we can try to revisit moments in anatomy's history to re-evaluate previous acts of inclusion and exclusion made in our collective knowledge of anatomy, and consider the impact they have on our contemporary understanding of the subject.

At first glance, light may seem an inconsequential or self-evident requirement of observation, i.e. it is either on or off, you see or you don't. What possible questions could arise? But it's not that simple; indeed, it's far more interesting. In each act of anatomy, we can think of light playing the role of both environment and agent. By this I mean that a light source doesn't just let us see, by illuminating a room, rather it is the architect of what is being made available to the eye in each instance. For example, a dissection conducted by candlelight in the Renaissance era offers a far different experience to one held in a modern surgically lit laboratory. Yet, it is not only that advances in technology allow us to see more they also allow us to see differently. Consider light sources that penetrate the body, rather than illuminate its surface. Here I am referring to the diagnostic imaging technologies that employ frequencies from the extremes of the electromagnetic spectrum, specifically X-ray, computerized tomography (CT) and, if we are going to be very generous in our understanding of what counts as light, we can also include magnetic resonance imaging (MRI). With their invention, suddenly we were able to see inside a living body and simultaneously transparency became a diagnostic tool. My light installation artwork, "*Lucida*", provided a space in which to actively think through, and engage with, these ideas visually. There is a certain intimacy to light in its traversing of the anatomical body, which I find poetic. I have a particular fondness for MRI, as it saved my life. I was very ill when a teenager, but because the doctors could not see the cause it meant I was not receiving treatment; that is, until I had an MRI. In a sense, I am also interested in seeing, almost seeing, falsely seeing, and those instances in which there is a complete failure to notice.



Returning to your point that historically the field of anatomy has relied on both physical dissection and the drawn image, this is very true. At its etymological origins in ancient Greek, the word anatomy literally means to cut the body asunder (late Latin — *anatomia*, from Greek — *ana-* "up" + *tomia* "cutting" from *temnein* "to cut"). The cut of anatomy can be considered a twofold act. The physical action of cutting the body asunder, as well as the visual cut of image making which carves out a particular representation of the body.

MC: It's fascinating to consider how studies conducted in the Renaissance continue to hold such an impact on the field of anatomy today. To bring things back to the present, what is your art practice and research looking like these days? We've all experienced incredible upheaval in our lives in the last few months, and while many restrictions around the pandemic are loosening up for us here in Nova Scotia, your community in Melbourne is entering a second lockdown. Has the pandemic changed your lines of inquiry, or ability to work on certain projects?

NS: The pandemic hasn't changed my line of inquiry, but 2020 has been quite a year — with the bushfires and pandemic, it's hard to evade, and like most people I have needed to change my plans. I was at the China Central Academy of Fine Arts in Beijing in December 2019 and planned to return in 2020, to co-curate the *Beijing Media Arts Biennale*. Another event that I was looking forward to this year was that of co-curating, *Anatomy & Beyond*, an exhibition and conference, to be held at the Pauls Stradiņš Museum of the History of Medicine in Riga, Latvia. I've not been able to return to working on site at the Harry Brookes Allen Museum of Anatomy and Pathology at the University of Melbourne, where I am a curator: instead, I've been working remotely from home, designing exhibitions, displays, and online content. I am an introvert at heart, so being at home is not too hard, but I am missing friends and family. While I am restricted in opportunities for making artworks, I've returned to drafting ideas in my journal and generally planning for better times. I was fortunate also to win a COVID-19 quick response grant from the City of Melbourne allowing me to make experimental maquettes for future installations. Also, I've just completed a chapter for an ANU Press publication — 'Fat Matters: Fluid Interventions in Anatomy'. In *"Fluid Matter(s): Flow and Transformation in the History of the Body"*, edited by Natalie Köhle and Shigehisa Kuriyama doi.org/10.22459/FM.2020.

MC: In Iota's recent Bio Art Hangout one of the prompts was regarding the possible synergy between a pandemic and the field or genre of bio art. In your opinion, is bio art (because it is a genre that deals with the human body, with viruses, etc.) particularly well poised to engage in work about a pandemic? And if the pandemic is not something you're interested in making work about, are there areas of research or technological advances in the field of medicine (spitballing off of your interest in MRI's...) that you are curious to explore in the future?

NS: Artists who work in the biological arts genre are well positioned to raise interesting questions in regard to the pandemic, as they often think about ecologies and systems — positioning humans as just one of many species coexisting through dynamic relationships with other nonhuman entities. I am interested in these ideas, but not in directly making artwork about the pandemic. I think this time I am content to listen, there is a lot to take in.

As for technological advances, at the moment I am less interested in what is new per se and more fascinated by the allure of the new and notions of progress, and in critically exploring the practices of the 'art & science' genre more generally.

NOTE

Shigehisa Kuriyama, *The Expressiveness of the Body: And the Divergence of Greek and Chinese Medicine* (New York: Zone Books, 1999), 117.

All images: IOTA Bio Art Series, Chantal Routhier photography, 2019

Nina Sellars is a scholar and visual artist, and Curator of the Harry Brookes Allen Museum of Anatomy and Pathology, Melbourne University, Australia. Sellars lectures in anatomy for artists and is a trained prosector (i.e. dissector of cadavers for medical display). Her arts practice hybridizes the disciplines of art, science and humanities and focuses on the contemporary and historical influence of anatomy on our understanding of the body, identity and subjectivity. Classically trained in drawing and photography her artwork now extends into tissue engineering and light installations; as her interest in anatomy has taken her from working in art studios and anatomy & biology labs to working in physics labs and medical imaging facilities – here she critically engages with the cultural implications of anatomy.

Sellars was Artist in Residence, SymbioticA, biological arts lab, The University of Western Australia (2016 & 2018) funded by the Australia Council for the Arts; and Research Fellow, Alternate Anatomies Lab, School of Design and Art, Curtin University (2013-2015). Her artwork has been exhibited nationally and internationally, including most recently – ‘HyperPrometheus: The Legacy of Frankenstein’, Perth Institute of Contemporary Art, Perth (2018); ‘Human+: The Future of Our Species’, ArtScience museum, Singapore (2017), and ‘New Romance: Art and the Posthuman’, Museum of Contemporary Art, Sydney, NSW (2016). In 2018 Sellars was an invited guest speaker at the Department of Art & Media at ZHdK Zurich University of the Arts, Switzerland and, in 2017, the ‘#postARTandSCIENCE’ symposium, Wellcome Collection, London, UK; the ‘Virtual Futures’ salon, Victoria & Albert museum, London, UK; and the ‘Ceroplastics international Congress on Wax Modelling’, Gordon Museum of Pathology, Kings College, London, UK.

Mollie Cronin is a freelance writer, illustrator, curator, and consultant in Halifax, Nova Scotia. Since 2015 she has been a regular contributor to The Coast alt weekly as both an arts writer and cartoonist. Cronin has contributed writing and illustrations to several Canadian arts and literary magazines, including MacLean’s, Visual Arts News, and Riddle

fence. She is a graduate of NSCAD University where she received a Bachelor of Arts in Art History.