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Beyond Comfort Zones: an experiment in medical and art education

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Kelli Auerbach's specialty is bridging medicine with art and creative writing. She holds a degree in Cultural Studies of Medicine from Brown University and an MFA in Fiction from Brown as well. Kelli has taught at Rhode Island School of Design, Brown, California Institute of the Arts, University of Cape Town, and USC Keck School of Medicine. She has presented papers and led workshops at conferences such as: Make It Better: A Conversation on Art, Design, and the Future of Healthcare; the & Now Literary Festival; Innovations in Medical Education; and The Examined Life: Writing and the Art of Medicine. Her short stories have appeared in the journals 3rd Bed and Encyclopedia and she recently completed *The Owl House*: a novel. Kelli's numerous honors include a Fulbright to South Africa, fellowships from the Rhode Island State Council for the Arts, and a grant from the Mutter Museum/College of Physicians Library to research her next novel.

Jay Baruch, MD is Assistant Professor of Emergency Medicine at Alpert Medical School of Brown University, where he serves as Director, Ethics Curriculum and Co-Director, Medical Humanities and Bioethics Scholarly Concentration. He is a former Faculty Fellow, Cogut Center for the Humanities at Brown University, where he worked on a program in clinically focused medical humanities, with a central emphasis on creativity as a medical instrument. He is the author of the short fiction collection, *Fourteen Stories: Doctors, Patients and Other Strangers* (Kent State University Press, 2007).



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**Abstract:**

Practicing medicine and creating art are both informed by observation and perception, yet how artists and doctors view the world and their place in it might be quite different. By bringing two populations together – RISD students and Warren Alpert Medical School students – into one experimental course, “No Innocent Eye: Knowledge and Interpretation in Art and Medicine,” art and medical students were asked to engage in topics and work with skills and processes that might not be considered typical fare in art and medical school curriculums, but which we hope gave doctors-in-training creative ways of rethinking medical practice and patient care, and presented art students with new conceptual and material tools to push their art-making.

**Supporting material:**

Backbone Book  
No Innocent Eye Poster  
Injecting Words



*There is no innocent eye. To the task of seeing, each observer brings experiences, hates, loves, prejudices, preconceptions, and knowledge. There is no perception without interpretation, and interpretation of the observed world is one of art's functions. By interpreting reality, the artist transforms our perceptions of what we see, just as the trained medical eye interprets what it reads from the body.<sup>i</sup>*

On a bitterly cold February night, 14 students from Rhode Island School of Design (RISD) and 12 students from the Alpert Medical School at Brown University sat in a classroom on RISD campus watching the documentary, *Sick: The Life and Times of Bob Flanagan, Supermasochist*. It was the first time the students had met. It was the first session of our experimental new course, “No Innocent Eye: Knowledge and Interpretation in Art and Medicine.” We watched performance artist Bob Flanagan, one of the longest-living survivors of cystic fibrosis, grapple with unbearable pain by inflicting pain on himself and encouraging others to inflict pain on him too. We watched him infamously hammer a nail through his penis. We watched him cough uncontrollably again and again and again. And, ultimately, we watched him die in a hospital bed.

The classroom was quiet.

In the ensuing discussion, we asked whether the fact that Flanagan had cystic fibrosis altered our understanding of his sadomasochism. Would opinions change if he weren't suffering from a fatal disease? How is the pain he inflicts upon himself different from the suffering incurred from his illness? We explored the various power relationships, including the one with his lover, and the role of the ever-present camera in shaping behavior. We asked students which scenes made them avert their gaze, and why. We also examined how Flanagan upended viewer expectations by displaying himself as a sexualized patient, as well as describing his S&M in a medicalized and clinical tone. Interestingly, conversation was dominated by the RISD students. We don't think the medical students were shell shocked from the film's content, but stunned by this departure from standard curriculum fare. Also, they weren't accustomed to the types of open, non-reductive questions bouncing around the room.

Toward the end of class, we met briefly with our respective groups: Kelli Auerbach with the RISD students and Jay Baruch with the medical students. Then, as everyone dispersed, a RISD glass major lagged behind and asked Jay, “How are the med students holding up so far?”

“I think they're going to be OK.”

“For us, sadomasochism is no big deal,” she said, “Welcome to art school.”

\*

Legendary physician/educator, William Osler, famously declared that medicine is an art<sup>iii</sup>, but doesn't that imply that medicine should be practiced by artists? Clinical acumen and compassionate care both depend upon imagination, the ability to read patients, probe silences, and respond creatively.<sup>iii iv</sup> However, graduate medical training

historically deemphasizes creativity, imagination, and workable comfort with uncertainty, focusing instead on students' ability to master a mountain of facts and answer specific questions with one correct answer.

Both authors of this article have long believed that the skills they've developed from writing fiction and making art are critical to their engagement with medicine – Jay Baruch in his clinical work in the emergency department, and Kelli Auerbach in her studies of medical history and culture. However, such deeply held beliefs don't serve as a structured or particularly clear-cut didactic platform. These “skills”--fascination with messiness and nuance, curiosity for details that don't make sense, comfort with process over product--resist easy packaging and numerical quantification. Antithetical to how most medical students are taught, such skills encourage a style of learning in which asking the right questions and learning to navigate ambiguity and uncertainty can be invaluable when attending to the complex needs of actual patients.

In the spring of 2010, in our course, “No Innocent Eye: Knowledge and Interpretation in Art and Medicine,” we asked students from RISD and Alpert Medical School to engage each other in an educational model new to both art and medical school curricula. As the course title suggests, we were specifically interested in exploring how each group of students observes and interprets the world, and how those ways of seeing might illuminate each other. Doing so, we hoped, would give doctors-in-training creative ways to rethink medical practice and patient care, and present art students with new conceptual and material tools to push their craft.

Art schools have brought students to cadaver labs to gain a deeper understanding of human anatomy. Medical schools have brought students to art museums to hone observational and diagnostic skills.<sup>v vi vii</sup> But to our knowledge, there had never been a course like this one.

## **The Genesis**

With a degree in Cultural Studies of Medicine, an MFA in Creative Writing, and a background in interdisciplinary course design, Kelli Auerbach (KA) was already combining these interests at RISD. Art schools often provide few opportunities for students to engage with science and medicine both analytically and creatively, yet KA saw that students were hungry for this type of involvement. Propelled by the success of a Literature and Medicine course she taught in 2009--a course that devoted each week to a particular medical topic, with creative writing/visual assignments in conversation with those topics--KA was keen to develop this hybrid pedagogy further by bringing art and medical students together.

So when she began contacting people “up the hill” at Alpert Medical School, Jay Baruch (JB) was mentioned as a possible collaborator--an emergency physician and fiction writer with academic interests in medical ethics and medical humanities, as well as experience developing and implementing interdisciplinary curricula and programs.

We began brainstorming and spent over six months developing the syllabus. We shared a willingness to push boundaries and risk failure in hopes of creating a wholly new experience that would engage students in original ways, taking them out of familiar comfort zones and encouraging an ethos of experimentation.

Much has been written in medical literature about the potential benefits of reflective writing, and implementing the close reading of literature in order to hone skills that might improve the close reading of patients: narrative medicine as a means for developing empathy, reflective capacity, and trust in the profession.<sup>viii ix x xi xii</sup> These goals and the great efforts put forth by many visionaries in the medical humanities are very deserving. Our primary aim, however, wasn't to turn students into more sensitive or empathic physicians, or to improve professional well-being. If these worthy outcomes were achieved, they were welcome side effects rather than primary objectives.

Creative work would be the focus and goal. Examination of the inner life was relevant only in how it related to the creative process. We felt the act of *creating* stories was fundamentally different from *reading* them. Just as we understood that building a house requires a different scope of knowledge and appreciation for details than that possessed by a diligent repair person, we took aim at constructing and understanding stories from the inside out. Our goal was to then connect the dots so students would better understand how writing skills were relevant to both clinical and art-making contexts. Additionally, creative writing would put the two groups on more of an equal playing field. Neither group would feel "expert." Although art students are, of course, familiar with the creative process, they often maneuver more comfortably through the visual realm than the written one.

Our examination of art and creativity differed from the vertical transmission paradigm commonly employed in medical schools, where art experts--curators and museum educators--discuss completed, highly accomplished work. Instead, by placing the locus of discussion with the artists themselves, we would emphasize artistic process, creative choices, the "how" and "why" and "why not" of art-making and creativity. The course was designed to spark dialogue and optimize horizontal discourse between doctors and artists in training.

## The Players

Fourteen RISD students and twelve Brown students enrolled in the course. Brown participants included nine medical students and three undergraduates in the pioneering Program in Liberal Medical Education (PLME), which merges a broad undergraduate experience with graduate medical education over eight years. The Brown students spanned from an undergraduate in his junior year to students in their fourth year of medical school. The RISD students were undergraduates representing a diverse range of both fine art and design disciplines: film/animation/video, architecture, interior architecture, illustration, painting, glass, industrial design, jewelry, sculpture and apparel.

Because of the rigor and challenges of this endeavor, students at both institutions needed to apply. We received almost 65 applications, which required a writing sample as well as an explanation of why the course was relevant to the applicant's field of study. Originally we planned for 20 students--10 from each institution (even though 20 would already push at the edge of a writing workshop, in which 12 to 15 is ideal). But student demand forced us to relax our initial enrollment constraints. We raised numbers and shifted the class structure to accommodate 26 students. Even so, we had to turn away a dozen more who showed up the first day, hoping to get in.

## The Course

We met once a week for three hours, on RISD campus, for a total of 12 weeks. Each class was devoted to a particular topic: pain, madness, elective amputation, enhancement technology, choosing disability, desire and performance within the medical encounter, medical illustration and photography, and death on display. Assignments included weekly creative writing and mixed-media exercises, a collaborative project and a final individual project.

Topics were carefully chosen for ethical dimensions that resonated simultaneously in realms of both art and healing. Readings consisted of medical essays, short stories and the novel *Geek Love* by Katherine Dunn. Although there was a fair amount of reading, most energy was spent on writing. We employed creative writing throughout the semester--short in-class exercises and longer homework assignments--to examine how elements of fiction apply to other artistic mediums as well as to the imaginative act of doctoring. Formal discussions of writing technique included: narrative arc and tension; description and detail; relationships between word choice, sentence structure and overall pacing; effective use of setting and image; character development; style; time; dialogue; text versus subtext; and point of view. By telescoping in and out among various techniques and their overall effects, we demonstrated how minor details reveal character, and how voice isn't only about what's said but how it's expressed and what's left silent. We continually related such insights to the practice of medicine. For example, an understanding of the mechanics of dialogue can give students skills with which to be more effective listeners.

A range of invited speakers joined the class to lead vibrant discussions. They included Dr. Christine Montross: psychiatrist, poet and author of the book *Body of Work: Meditations on Mortality from the Human Anatomy Lab*; Terri Kapsalis: academic, author and artist, who also gave a public multi-media performance of her illustrated book, *The Hysterical Alphabet*; and Jocelyne Prince, a RISD professor and experimental glass artist who often incorporates science and medicine into her work.

## The Body

One of the most engaging sections of the course occurred mid-semester with a three-week investigation of the human body. In the first week, RISD students led a figure drawing session with a live model. In the second week, medical students led a session at Brown's anatomy lab, displaying cadavers in various states of dissection. For the third week, the entire class visited Brown's John Hay Library and perused its remarkable collection of anatomy books dating back to the 1400's, including an original edition of Vesalius's *De Humani Corpora Fabrica*. This triptych of weeks provoked fascinating discussions on the different ways artists and doctors relate and respond to the body, and the challenging moral and aesthetic issues that arise depending on the context of the gaze and who is doing the gazing.

RISD students took responsibility and ownership of the figure drawing session by deciding what materials were required and even which particular model they wanted. Everyone in class, including the authors of this article, was set up with an easel, a large drawing pad and charcoal. Throughout the session, which included a series of quick sketch exercises, longer drawings and a collaborative drawing, the RISD students explained what they did when looking at the figure, how they approached representing it: lines, angles, the movement of muscle and bone beneath skin. While the RISD students had been extremely participatory in the course until this point, it was striking to see them truly in their element, confident, clearly articulating their ways of seeing and knowing.

After the figure drawing, we returned to our classroom to debrief. The medical students revealed that the experience was intimidating, exciting, frustrating, pleasurable, unnerving and liberating, all at the same time. Particularly noteworthy was one medical student's comment that what struck him most was looking at a naked body, uninterrupted, for two hours. His field of expertise was the human body, yet he'd never had the opportunity to truly look at one for an extended period--cadavers, yes, but not a live body. Rather, he'd been trained how to cover and drape patients, how to maneuver hospital gowns so as to reveal as little as possible. RISD students expressed that in watching the medical students draw for the first time, they were able to re-see something they take for granted--they spend countless hours looking at bodies--and were reexamining their own relationships, as artists, to the human figure.

The session at the anatomy lab was equally fascinating and instructive, from the ritual of what clothes to wear (the medical students warned everyone not to wear anything precious, since the scent of formaldehyde was often impossible to wash out), to the donning of latex gloves in a particular way. The theatrical aspect of the experience was not lost on anyone, especially since we'd recently discussed relationships between medicine, performance and the unintentional theatricality sometimes embedded in medical education and practice. Until this point in the semester, the medical students had occasionally seemed slightly (but happily) unmoored, sorting their way through the weird world of art school, where "right answers" aren't even invited to the party. Yet, from the moment we entered the anatomy lab, the medical students were unabashedly in their element, in graceful and generous control, separating us into small groups to better explain each cadaver. None of the RISD students had ever seen a cadaver. None had experienced looking inside the human body. They were dumbstruck.

After spending two hours with the cadavers, we moved to another room to relate the lab experience to that week's readings about the BODY WORLDS exhibits and death on display. While we anticipated RISD students would be gobsmacked, the medical students were also, unexpectedly, at a loss for words. Showing and explaining the cadavers had forced them to not only reflect on their own experience with dissection, but to look at anatomy and the human body anew.

### **Collaboration**

After the course's experiential triptych on the human body, we paired medical students with RISD students and gave them two weeks to produce a collaborative piece: any topic or theme, any medium (written, visual, or both). The prompt was intentionally

open-ended. Since the guiding spirit of the course was risk-taking, we didn't want to restrict the range of possibility. We expected students to explain how their process unfolded, how and why they had chosen the projects they pursued, any obstacles or surprises experienced along the way, and what they learned from the experience.

The quality of their collaborative projects was exceptional, and included sculpture, glass, drawing, collage, photography, video, bookmaking, and poetry. Working together deepened familiarity and trust between the groups and allowed for more nuanced insight into each other's worlds. For example, a fourth-year medical student and a sculpture student began their collaboration in the metalsmithing studio. "Let's just start chopping up metal and see what happens," the sculptor suggested. Generating into the unknown, with no clearly recognizable goal or outcome, was a process of artistic creation utterly normal for the RISD student. For the medical student, the experience was strange and unexpected, yet captivating. This pair then spent a morning in the emergency department at Rhode Island Hospital, drawing, as they described, "scenes of everyday life and everyday chaos. Each [of us] drew from our own perspective--empty rooms, wheelchairs, trauma, equipment--on tracing paper. The hope was that we would be able to suggest in multiple manners the presence of a patient despite not drawing a patient at all." The students' ink drawings and hand-written observations were then overlaid in book form and joined with 3-0 surgical sutures.<sup>xiii</sup>

In another collaboration, a glass major and a medical student spent an evening in the hot shop, where, "Treating molten glass as if it were a living organism, we attempted to perform a standard checkup on the hot glass." A static video documents their actions in close-up. At the end of a metal glassblowing pipe, bubbles of molten glass morph and expand, while the medical student's hands, in thick protective gloves, perform heart palpitations on the molten bubbles and gently tap them with metal reflex tools. The students presented to the class both the video and the glass vessels shaped by their physical exam.<sup>xiv</sup>

In a third collaboration, a first-year medical student described to his RISD partner the nerve-rattling experience of performing his first lumbar puncture under the watchful gaze of an attending physician. The RISD student, in turn, constructed a book, *How to Perform a Spinal Tap*, that looked and functioned like a spine. Digging in between the "vertebrae" in order to read the scraps of handmade paper required some blind digging, similar to the spinal needle. As the RISD student explained,

In thinking about the act of physically puncturing the spinal column, I came to relate the human spine with the exposed spine structure used in bookbinding. As a result, a complex book structure emerged, opening in two directions to reveal the dichotomy that exists between medical procedure and patient reaction. As the book opens along the spine, the vertebrae are exposed and can be curved to reveal [text describing the] actual medical procedure of performing a spinal tap. On the other side, the book opens traditionally to expose the inner dialogue of a patient being punctured through the spinal column by a medical student who has never performed such a procedure before.<sup>xv</sup>

## Final Projects



During the last weeks of the course, students presented their individual projects to the class for critique. Like the collaborations, students had free reign with their finals: any medium, any topic. Visual pieces were brought to class, whereas written work was distributed beforehand via email so that students could come to class with prepared comments for their peers. We anticipated that the medical students would present written work, since it was closer to their comfort zone, but several students boldly ventured into the visual realm. Inspired by the session at the anatomy lab, a first-year medical student crafted internal organs out of homemade challah bread<sup>xvi</sup>. A third-year student created a 20-minute video documentary about the complex reasons people attend medical school. A PLME student made a highly detailed drawing, stylistically inspired by the centuries-old anatomy books we'd seen, which grappled with our class discussions on elective amputation and Body Identity Integrity Disorder (BIID). In her drawing, the student re-imagined that the Little Mermaid's desire for human feet was actually a symptom of BIID. In another project, a first-year medical student created a mixed-media watercolor, based on Netter's medical plates, with an accompanying sound installation. Through this piece she was exploring the events in the anatomy lab and her personal reflections on the body.<sup>xvii</sup>

The RISD students' final projects were equally provocative and innovative. Engaged by themes of revealing and concealing, an apparel student utterly reconceived the traditional hospital gown by creating a single (and aesthetically beautiful) garment that could be reconfigured in multiple ways depending on the needs of the situation. An illustration student created a comic book based on the history and decay of an abandoned mental hospital on the outskirts of Providence, where she'd stealthily broken in many times to explore its "silent playground of outdated medical equipment, rotting floorboards, and creeping ivy." Inspired by the documentary, *Sick*, as well as our readings on Gynecology Teaching Associates programs, a jewelry student forged her own nipple out of copper, pierced it with a silver bar, and turned it into a brooch to be worn on the chest, "to allow any woman to feel comfortable and open with her body without actually exposing her breasts."<sup>xviii</sup>

The students' final projects were so striking that we realized we needed to organize a gallery exhibition, even though this had never been an intended activity. Since the medical students had never displayed their work or produced an art show, the exhibition became another exercise in collaboration and risk-taking. The event, held at RISD and sponsored by Brown's Department of Emergency Medicine and RISD's Division of Liberal Arts, displayed the students' individual and collaborative projects as well as a mass-produced zine containing a selection of the students' writings from the course. Despite the fact that the show occurred during final exams week and competed with a slew of other gallery openings, it was attended by over 200 people from Brown, RISD and the broader public--a remarkable turnout under any circumstances.

## Student Response

In evaluations, students reviewed the course very highly.

Comments from medical students include:

I learned to be a better observer and listener and to think about medicine and

patients and appreciate different opinions more.

Every medical practitioner should take a course like this. It is a great way to more effectively become a 'whole' practitioner. Seldom has such an amalgamation of students come together to learn from each other, and it was truly an experience of a lifetime.

It was a great experience to write freely for the first time in four years of medical school!!!

The class was extremely enriching and opened my eyes to new perspectives on the often insular world of medicine. Despite being a 'medical' student, I learned just as much new information about med school as I did about art school.

Comments from RISD students include:

The course successfully demanded students to think outside the bounds of art or medicine.

This was such an exciting class. I would start working on my pieces the night they were assigned. The class has affected my work for years to come. This was a game-changing class.

A life-changing course. I thought (before coming into this course) I couldn't write – now I write all the time and incorporate writing in my artwork! The course pushed my mind and work in new directions.

This collaboration was such a unique idea that produced some of the most beautiful, compelling and powerful work that I have ever seen. This class has led me to discover so many things about the connections that my art can make to a larger world.

Clearly, strong enthusiasm and excitement exist for this type of art/medicine educational experiment. When applying for the course, many medical students expressed concern about possibly missing classes because of tests or clinical responsibilities. Attendance, however, was outstanding. On multiple occasions during the semester, medical students asked to be excused for a variety of valid reasons, including important basic sciences exams the following day, or particularly long days on OB/GYN or surgery clerkships, and yet these students unexpectedly showed up to class anyway.

## Challenges

During the first few weeks of the course, discussion was led by the RISD students, both because we were on their "turf" (literally and figuratively) but also, we quickly discovered, that since critique and feedback are built into art education, the RISD students were accustomed to talking in class. Over the course of the semester, though, the medical students opened up more and more, until, by mid-semester, participation was relatively equal. Most encouraging, students were really speaking *to each other*--asking questions, thoroughly interested in how each other understood/responded to/engaged with their work, either as artists or doctors-in-training. This kind of horizontal knowledge transmission, exactly the intention of the course, was thrilling to watch.

Several topics presented ethical challenges confronting healthcare providers and patients: the experience and treatment of pain, elective amputation, enhancement

technologies, choosing disabilities, and privilege and transgression in traveling anatomical exhibits like BODY WORLDS. We chose intellectually and emotionally challenging issues that would have common currency and appeal for both groups of students. Early feedback revealed that students, on the whole, found the readings and discussions quite valuable. However, a few students expressed difficulty seeing how particular topics fit into the course's larger creative endeavor. As the semester progressed, we became more concrete and explicit in drawing the connections between the topics, the creative exercises, and the value of creative writing and narrative skills to improving students' interpretive, analytic, and meaning-making abilities.

Until very recently, Alpert Medical School was perched on College Hill, located on the campus of Brown University. Most of the course took place at RISD, which is a short walk "down the hill." We wonder about the metaphorical implications of this descent, physically moving to a space, and an institution, that is famous for training wildly original and innovative artists and thinkers. Did the physical space inspire or hinder the medical students' acclimation and development? Would the spirit of the class differ if it were held at the medical school or a neutral location?

Though the medical students taking this course received credit, it was an add-on to their responsibilities in school and on the hospital wards. The demands of the course in classroom time, readings, writing and creating projects far exceeded those of the typical medical elective. Because of medical students' large academic load, we feared a possible effort gap between them and their RISD counterparts, who are notorious for their work ethic. Such a discrepancy, if present, was barely perceptible. If anything, the medical students seemed to embrace and adopt the creative discipline of their RISD colleagues.

## Outcomes

Art students are trained to give and receive rigorous critique on a daily basis. They are expected to explain their work, and, based on feedback from professors and peers, be open to revising, rethinking, and at times, radically departing from original intentions and ideas. Art students are encouraged to make mistakes, to embrace failure as a valuable and utterly integral part of the learning process. Such training differs significantly from most medical education. Therefore, some of the salient benefits the medical students received from sustained interaction with art students in this interdisciplinary course were: an increased comfort and facility with feedback, becoming more confident expressing and justifying their opinions, and being more receptive to contradictory points of view.

The medical students also learned to be more comfortable with ambiguity--something art students live and breathe--and felt better equipped to navigate through the gray zones that present themselves in clinical contexts. Through novel and open-ended collaborations, the medical students developed team-building skills, as well as a more expansive mind-frame in approaching complex situations. Clinical applications include: soliciting valuable input from various members in the hierarchy of the healthcare team, each of whom possesses insight, perspective and expertise; and encouraging communication strategies to provide high quality care and reduce medical error.

Most broadly, medical students gained insight into creative dimensions necessary for clinical work. And by working closely with students who are passionate about their art, medical students were reminded of the passions they possess as well, passions and interests which often get pushed aside during medical training, yet interests which ultimately can make them more effective physicians.

The benefits for the RISD students were equally compelling and profound. At the most basic level, the course gave them new ways to think about their artwork in terms of topic, concept, and mode of execution. The benefits, however, extend beyond the use of new materials or finding inspiration in medicine. Discussion about the potential relationships between art and medicine usually revolves around the idea that artists can help make health care more comforting and humane (for example, putting paintings on hospital room walls), or that artists can contribute to innovations in medical practice (designing more effective tools), or in medical environments (redesigning the layouts of waiting rooms and wards), or to more effective communication of health information (via graphic design).<sup>xix</sup>

Making medicine more humane, and functional, are certainly positive contributions artists can make to the field of medicine. But, in ways perhaps more valuable and profound, our course gave art students the palpable sense that their particular ways of knowing--their knack for problem-solving, for seeing things from multiple perspectives at the same time, for maneuvering through and synthesizing complex ideas, for soaking in a wealth of stimuli in order to create something new--have far-reaching practical applications beyond the gallery wall. By questioning what medicine is, and how it works, the art students were able to see that their knowledge-making isn't fringe, but can be critical to larger dialogues about medicine, science, politics, the law, and beyond. Their role in the larger world doesn't just have to be putting lipstick on the pig (that is, pretty pictures on hospital walls), but rethinking the pig entirely.<sup>xx</sup>

We hope to continue this type of coursework and collaboration in the future, delving even deeper into the myriad ways that art and medicine can propel each other forward.

## Conclusion

It's easy to give lip service to notions of experimentation and risk-taking, to prodding students beyond their comfort zones and pushing them to challenge norms and their own preconceived ideas. But what risks were we willing to take as educators to achieve these aims?

The decision to use *Sick* on the first day of the course wasn't made lightly. JB hadn't seen the documentary and trusted KA's experience with using this film in previous courses. Classroom trust and solidarity were absolutely essential for this course to succeed; we chose to have JB watch the film for the first time with the students, to process and respond in real time. Ultimately, the film articulated key themes we'd return to again and again throughout the semester. In screening *Sick*, we asked students to test their emotions and reflexive judgments, to consider Bob Flanagan in all his complexity: not just a sadomasochist performance artist but an articulate, charismatic and

compassionate person facing death on his own terms. Throughout the course, students consistently found themselves in unknown, and at times, uncomfortable (but ultimately fruitful) situations--the figure drawing studio, the anatomy lab, the collaborative realm.

We relived the tension over showing *Sick* when debating whether to open an academic article with a scene that mentions a penis nailed to a wood board. But we couldn't honor the goals and spirit of the course, and respect the bold places our students went with their work, by writing a traditional academic article that left out what might, at first impression, provoke a negative response. If, however, during the opening section of this article, readers looked up and took a deep breath, they are in excellent company.

Acclaimed Japanese film director, Akira Kurosawa, once said, "To be an artist means never to avert one's eyes." The work of doctoring and art-making both share this mandate. To be a good artist, to be a good doctor, means looking, looking again, looking deeper, especially in those moments that might evoke uncertainty and unease. But there are no innocent eyes, no perception without interpretation, no experiences that aren't first filtered and refracted through the mind of the observer.<sup>xxi</sup>

One of the most powerful outcomes of our class was that it gave all of us insight into when we want to avert our gaze, and provided tools with which to turn back our heads and refocus. The task of doctors and artists isn't limited to interpreting their worlds, but transforming them.

## Appendices

A few placards, written by the students, which accompanied their projects at our gallery show:

*Diagram 1* by Alison Schwartz, RISD Sculpture, 2011  
(Materials: paper, wax, nails)

This piece was inspired by our class's visit to the Brown Anatomy Lab. Seeing a dead body for the first time was an incredibly powerful experience. One of the main influences for the piece was the system of dissection of the bodies. I was fascinated by the description of the dissections, thinking about breaking down the body into smaller and smaller pieces. I imagined the bodies broken down until they were unrecognizably small, and the sense of the whole totally destroyed.

*You are what you eat* by Liz Gilbert, Brown MD, 2013  
(Materials: challah bread, scalpel)

This piece came out of a conversation we had in class about the traveling exhibit, BODY WORLDS. The discussion revolved around whether or not the exhibit was disrespectful by displaying human remains as art and entertainment. Someone finally mentioned that perhaps the root of our discomfort with the exhibit stemmed from our discomfort with death, and with human remains. We all agreed they were due some respect, but why was unclear. Dead bodies are not people, but I realized at that time I had never quite figured out what they were, even though I had spent a semester dissecting one.

Pondering this, I remembered the old saying, “You are what you eat.” I thought about the relationship between what we eat and the gross pathologies we spent so much time studying. I decided to make a piece centered on this theme. I wanted the piece to be a metaphor for the changes that can occur in our own bodies from what we consume. For example, a lifetime of a diet high in saturated fats and cholesterol can turn the major vessels of the heart into stiff, blocked passages. Fat can collect around the heart, distorting its shape. With the consumption of large amounts of alcohol, the liver first enlarges and becomes fatty, a process called steatosis. Then, if alcohol consumption continues, the liver can become cirrhotic – the normal liver tissue is replaced with fibrous scar tissue, which leads to liver failure. To represent this process, I decided to make internal organs out of bread. I shaped the dough into roughly life size organ shapes, then let them rise, and then baked them. The shapes became distorted--as they rose, they puffed up, and in the oven they expanded further and changed color, a rough allegory for some of the changes that occur inside our own bodies.

Note: At the gallery show, the challah organs were arranged on a table, with a scalpel and sign encouraging people to slice and eat the bread.

*Dissection/Decomposition* by Jess Miller, RISD Painting, 2012

(Materials: dirt, plastic wrap, wrap bandage, tissue paper, butcher paper, Hefty bag, paint, balloons, tree blossoms; shot with video camera)

First impressions are truly the strongest; in our introduction to the cadavers at the Brown Anatomy Lab, we were told that it was fine to touch them gently--and it was to my surprise that in the more fully dissected cadaver, the preserved tissues felt like a fine leather. It was strange, for my hand (though covered by a glove) was taking an unexpected pleasure in touching something that otherwise would have caused revulsion or fear. The organs, and the other non-muscular parts of the body, looked more like deflated bags.

I am thinking in terms of visual and tactile metaphors in this piece--not trying to replicate the look of the body exactly, but in what it looks like, feels like. What you see is what the piece is referring to, the idea of the body as recyclable and compostable, and as something that we have access to as a cadaver. Thinking of it in layers, and of us (also having a body) going through it/our layers to find what the composure is, underneath our decorative wrappings. It is finding the organic elements, the soil that we are all made of and return to, in the end.

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- <sup>i</sup> Winkler MG. Seeing Patients. *Literature and Medicine* 1992;13:217.
- <sup>ii</sup> Osler W. The Master-Word in Medicine, in *Aequanimitas*, p. 368.
- <sup>iii</sup> Charon R. Narrative medicine: A model for empathy, reflection, profession and trust. *JAMA* 2001;286:1897-1902.
- <sup>iv</sup> Coulehan J, Belling C, Williams PC, et al. Human Contexts: Medicine in Society at Stony Brook University School of Medicine. *Academic Medicine* 2003;78: 987-992.
- <sup>v</sup> Bardes CL., Gillers D., Herman AE. Learning to look: Developing clinical observational skills at an art museum. *Medical Education*, 35: 2001: 1157-1161.
- <sup>vi</sup> Reilly JM., Ring J., Duke, L. Visual thinking strategies: A new role for art in medical education. *Family Medicine*, 37:2005: 250-252.
- <sup>vii</sup> Inskeep SJ, Lisko SA.. Alternative clinical nursing experience in an art gallery. *Nurse Educator*, 26;2001: 117-119.
- <sup>viii</sup> Charon R. Narrative medicine: A model for empathy, reflection, profession and trust. *JAMA* 2001;286:1897-1902.
- <sup>ix</sup> Charon R. Narrative Medicine: Form, Function, and Ethics. *Annals of Internal Medicine* 134; 2001: 83-87.
- <sup>x</sup> Reisman AB, Hansen H, Rastegar A. The craft of writing: a physician-writer's workshop for resident physicians. *Journal of General Internal Medicine*. 2006;21: 1109-1111.
- <sup>xi</sup> Dasgupta S, Charon R. Personal illness narratives: using reflective writing to teach empathy. *Acad. Med* 2004;79: 351-56.
- <sup>xii</sup> Kerr L. More than words: applying the discipline of literary creative writing to the practice of reflective writing in health care education. *Journal of Medical Humanities* 2010;31:295-301.
- <sup>xiii</sup> "A Trip to the Emergency Department" by Alison Schwartz (RISD) and Peter Chai (Alpert Medical School).
- <sup>xiv</sup> "Operating on Glass" by Naomi Mishkin (RISD) and Liz Gilbert (Alpert Medical School).
- <sup>xv</sup> "How to Perform a Spinal Tap" by Jessica Desautels (RISD) and Sol Adelsky (Alpert Medical School).
- <sup>xvi</sup> Challah is a traditional Jewish bread eaten on the Sabbath and holidays.
- <sup>xvii</sup> Projects described, in order, all by Alpert Medical students: "You Are What You Eat" by Liz Gilbert, "Beginnings" by Pojen Deng, "Untitled" by Ivy Chang, "Expression of Anatomy" by Elvera Sofos.
- <sup>xviii</sup> Projects described, in order, all by RISD students: "Untitled" by Tessa Zeng, "Post-Mortem" by Chelsea McAlarney, "Pleasing Pain" by Simone Paasche.
- <sup>xix</sup> This conversation on art, design and the future of healthcare was the subject of a RISD symposium in March 2011, funded by the Robert Wood Johnson Foundation. <http://makeitbetter.risd.edu/>.
- <sup>xx</sup> Adapted from a comment by Aidan Petrie, Chief Innovation Officer of Ximedita, at the Make It Better symposium, regarding the designer's role in medical development: "It's not about putting lipstick on the pig, it's about the pig."
- <sup>xxi</sup> Winkler MG. Seeing Patients. *Literature and Medicine* 1992;13:217.

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