“No Conclusive Evidence: Traumatic Brain Injuries and Epistemologies of Ignorance”

A common theme in public and scientific narratives about sport-related concussions is how little is actually known about the scope and severity of these injuries. Ground-breaking scientific research and educational programs have worked to inform athletes, coaches and fans alike about the risk of traumatic brain injuries across specific sports; yet these conversations are commonly qualified with an admission pointing to substantial gaps in scientific knowledge concerning the causes and effects of concussions in sport contexts. While much attention should be given to the practices through which scientific knowledge and expertise about the brain emerge, this paper explores how ignorance and uncertainty regarding sport-related brain injuries are constructed, disseminated and maintained. Following feminist scholarship advocating for nuanced “epistemologies of ignorance” (Tuana & Sullivan, 1997, 2006), I interrogate how conditions of not knowing are produced and intersect with dominant power structures in the context of sport’s contemporary concussion “crisis.” I investigate complex manifestations of ignorance within statements from professional sports organizations, as well as calls for athletes to “know the risks” associated with their sport. This paper concludes by considering how critical attention to epistemologies of ignorance might lead to interdisciplinary collaborations across the sciences and humanities and inform a publicly engaged sociology of sport.

“The Becoming of Traumatic Brain Injury: Discerning Entanglements of Law, Science, and Society through Sport”

Concussions in sport have received widespread media attention, raising awareness of traumatic brain injury (TBI). Although TBI is a leading cause of disability globally, it is often characterized by experts as a “silent epidemic” that has vast, albeit overlooked, effects on sufferers, their families, and their communities. This paper critically looks at the emergence of sport-related TBI as a lens through which to discern how law, science, advocacy and social relations converge in shaping understandings of the injury. To borrow Karen Barad’s language, this paper traces TBI’s “becoming” in the world. It draws on insights from feminist science studies to illuminate how different human and nonhuman actors, forms of knowledge, representations, and politics contribute to narratives about TBI and its embodied effects. Feminist science studies, a feminist materialist approach, enables a central focus on questions of power, knowledge, and the political without being bound exclusively to the categories of women or gender. Accordingly, this analysis scrutinizes how TBI becomes constituted through discourse, technicalities of law and science, material conditions, and inequality. In doing so, it gleans insight into shifting cultural norms that increasingly render the mind as part of – as opposed to distinct from – the body.

“Protein Ecologies: Building Surplus Muscle, Regenerating Excess Whey”

This paper emerges from an ongoing attempt to grapple both with protein as a material-affective-discursive subject and with the potential of vital materialist and political ecological approaches for reckoning with this “building block” of life. Protein – an inelegant descriptor for the infinite variety of ways that amino acids combine to support, catalyze, communicate, protect, and transport the essential substances and structures of animal and plant organisms – has a life of its own. Here we explore the
ways in which protein’s capacities animate body projects, with a focus on how the building of ‘surplus muscle’ is entangled with complex political-economic forces, social relations, and body aesthetics. We trace how protein travels and mutates through and with bodies and machines in a dance of dispersion and assemblage that creates surpluses of value, whey, and waste, strengthening some bodies and compromising others, including those of non-human animals. In doing so we also consider how protein resists and refuses the attempts of agribusiness and biomedical professionals, as well as consumers, to harness its vitality for all sorts of ends. Protein powder - itself a technoscientific outcome borne of attempts to manage the unruly and environmentally destructive proteins constitutive of whey effluent – represents one site through which to assess the epistemological and political implications of protein’s agentic capacities.

1G: Madeleine Pape, University of Wisconsin-Madison
“The Fairest of Them All: The Science of Sex Difference in the Court of Arbitration for Sport”

Feminist science scholars have contested binary notions of sex difference by demonstrating its scientific fallibility. Yet even feminist versions of the biological bases of sex difference risk reifying the ascendancy of scientific accounts of truth. This paper presents a textual analysis of court proceedings when the Court of Arbitration for Sport was confronted with deciding whether Indian Sprinter, Dutee Chand, could compete as a female athlete. Chand’s case was built on the claim that the Hyperandrogenism Regulations of the International Association of Athletics Federations (IAAF) were scientifically flawed. But although the court ruled that sufficient scientific evidence had not yet been generated to justify the Regulations, they endorsed efforts to pursue that evidence. In short, the IAAF may have lost the case, but Chand’s scientific experts did not “win” it. By defining the right to compete as a matter of the content of science, Chand’s legal team and experts obscured the gendered and tilted playing field upon which scientific production takes place. Furthermore, the right to unconditional recognition as a woman – in sport and beyond – was reduced to a matter of science alone.