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**Transgressive Biology and Material Feminism:  
Bioconversations in Art, Evolution and Emergence**

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## ABSTRACT

Biology's capacity to infect and transgress across the boundaries of species, organs, psychologies, the cultural domain, and even time, is the core theme around which this investigation revolves. Rather than being the genetically-determined "matter" posited by neo-Darwinism, or the passive, culturally-inscribed bodies suggested by theories of social and cultural construction, the biological is reconfigured as an active force with agency and the capacity for construction, invention, and interaction with cultural forces at genomic, cytoplasmic, physiologic, psychologic, social, and cultural levels. This investigation begins with work of Charles Darwin, its intersections with feminist theory, and the contemporary interpretation of Darwin's work in neo-Darwinism. The theories of contemporary evolutionary and developmental biologists, such as Susan Oyama, are used to undertake a critique of the genomic hegemony that underpins neo-Darwinian understandings of biological change and development, using emergent understandings in postgenomics, epigenetics, and developmental biology, in concert with more traditional studies in ethology. This investigation also draws on recent feminist scholarship, the so-called "new materialist" approaches that are engaging with the materiality of the human body and the biological world in new ways. Rather than regarding the biological as that which is inert and obstructive to feminist goals, or that which is passively written over by the cultural, these approaches are crediting the biological domain with creative force and highly complex, ambiguous, and generative relations with the psychological and cultural realms in which it entangles. In the final chapter of this thesis I undertake an analysis of art's entanglements with the biological. Visual art, with its capacity to overturn, disturb, or reunite received categorisations, shares ontological ground with the types of biological transgressions I explore in earlier chapters. Art is explored through its relations with genetics and evolution, through its capacity to provide figurations of biology-culture and temporal infectivity, and in its capacity to touch biologies – nerve cells and organs – through its affective, cognitive, and political provocations. Collectively, this investigation offers regenerated and re-invigorated understandings of the biological world and of embodiment, offering up new strategies for engagement with the biological in scientific, feminist and aesthetic realms of practice. Whilst the arts have a long tradition of openness to cross-infection by other disciplinary approaches, the sciences and feminist scholarship have been less exemplary in this regard. This investigation also contributes to much needed dialogue across the sciences and humanities, through its cross-disciplinary engagements.