



Research Clusters 2018-2019

New Feminist Discourses and Social Change

Crista deLuzio, History; Susann Scholz, Theology; Bonnie Wheeler, English

Feminism has once again become a culturally approved term, but the connection between feminist scholarship and social change has thinned in the past decade. A group of eighteen SMU faculty and graduate students came together on May 5 with philanthropist/feminist scholar Helen LaKelly Hunt and long-time activist Vivian Castleberry to talk about Hunt's new book on the religious roots of American feminism in the abolitionist movement. During that conversation, we realized that SMU's feminist community could itself benefit from revitalization. As scholars and teachers, we use the tools of feminist analysis but we remain uncertain about "correct" relations between our scholarly and reformist agendas.

We'd like to think through this question, among others, in a cluster next year that would have six notable speakers and several small discussion sections. We would also engage the Women and Gender Studies Program in this project. Our goal is to produce an edited set of essays that poses questions about the place of feminist visibility in the academy. We want to develop the field of feminist thought further as we engage in both an embodiment of and conscious reflection upon feminist discourse. Can we see feminist theory in the service of social change?

Medieval Matters

Bonnie Wheeler, English; Shira Lander, Religious Studies/Director of Jewish Studies; Danielle Joyner, Art History, Meadows

The "Medieval Matters" Research Cluster plans a year-long initiative to reinvigorate the strong, diverse, and engaged community of medievalists among the faculty and students at SMU and in the metroplex area. As a working group, we will examine fresh methodological approaches to the study of the Middle Ages with the goal of generating opportunities for new collaborative teaching and research across disciplinary boundaries. Among other possibilities, we envision a fully vetted book and digital project (with national and international contributors) that advances current understandings of the uses and limits of transdisciplinary teaching/research in the Middle Ages.

Preparing for the Second Century of Historical Inquiry about the Hilltop

Ashley Tull, Simmons School of Education and Human Development; Joan Gosnell, University Archivist, Central University Libraries; Timothy Binkley, Archivist, Bridwell Library, Perkins School of Theology

As SMU launches into its Second Century, we will pause a moment to examine historical SMU events and issues, their meaning and significance. Cluster members will meet monthly to discuss readings from One Hundred Years on the Hilltop and visit the University Archives and the Archives at Bridwell Library. At the end of the academic year, cluster members will develop and disseminate a research agenda for further study of SMU's history based on gaps, newly developed interests and contemporary issues identified through their time together.

Biopsychosocial Research: In Interdisciplinary Initiative

Pia Vogel, Biology; Thomas Ritz, Psychology

The Biopsychosocial Research Cluster brings together faculty from Psychology, Biology and Chemistry to use their combined expertise to discover molecular events linked to psychological, social, physical or medical challenges of humans. The biopsychosocial model of health incorporates, in its ideal conceptualization, processes on multiple levels, including biochemical and cellular processes, physiological function, psychological levels of behavior and experience of the individual, family and peer-group processes, as well as levels of the society, community and physical environment. The cluster has been active for a couple of years. The cluster research has been successful and resulted in several papers published over the last years, as well as in obtaining SMU a Dean's Research Council grant to two of the members.

GIS at SMU

Klaus Desmet, Economics; Mark McCoy, Anthropology; Jessie Zarazaga, Lyle School of Engineering

This Research Cluster brings together faculty, graduate students, and staff who are interested in GIS (Geographic Information Systems, for mapping and spatial analysis). In recent years the greater availability of spatial data has led to a growing interest in GIS across a variety of fields, including anthropology, art, earth sciences, economics, engineering, human rights and the humanities. The goals of the cluster include 1) connecting SMU faculty and students who may be working independently in the area of spatial analysis, and sharing the different uses and potentials of GIS across their fields; 2) identifying specific needs for SMU faculty training in GIS tools; and 3) helping the library and the Ford Building in setting up facilities and support strategies for GIS at SMU

Music and Spirituality

Daniel Tague, Music, Meadows; Evelyn Parker, Perkins School of Theology; Jennifer Townsend, Music Therapy Center of Performing Arts Medicine Houston Methodist Hospital

The purpose of this research cluster is to develop an unprecedented new course in the use of music and spirituality in a clinical care setting. Utilizing the setting of Houston Methodist hospital that already has a robust music therapy program that interacts with hospital chaplains, it will be mutually beneficial to share expertise and collaborate in teaching students about the appropriate and clinical use of music in a setting where the client's spirituality is often more pronounced.

The course curriculum being developed will offer an in-depth exploration of the role spirituality plays in the medical setting, ways in which music can be used to address spirituality, spiritual needs and well-being within the therapeutic context, and the impact that co-treating between music therapists and spiritual care workers can have on patient care. This new curriculum will also explore cultural and ethical issues, boundaries and contraindications surrounding this work.

The purpose of the course is to prepare theology students and music therapists to bring a music perspective that is often overlooked in the medical milieu to enhance the spiritual care of patients. A critical appraisal of various musical styles and interventions will be fostered through hands on practice under the supervision of the spiritual care and music therapy teams at Houston Methodist Hospital working in conjunction with SMU faculty. The final objective of the course is for each student to have developed a set of skills needed to utilize music and music interventions for meeting spiritual needs within the context of the therapeutic relationship. Concurrent research will evaluate the efficacy of this new curriculum and its outcomes. The data from the research will be crucial in proving the effectiveness of the instruction, as well as aid in course revisions before moving ahead with replicating the course in future semesters. Select members of the research cluster plan to publish the results of the study in a peer reviewed journal.

Telling our Stories: Women of Color and the Power of Narratives

Karen Thomas, SMU Meadows School of the Arts; Candice Bledsoe, SMU Simmons School of Education

This research cluster will explore the power of narratives to help students connect to the human experience. The use of narrative inquiry and the experiences of women of color utilizing oral storytelling, print, film, and other multimedia platforms will generate discussions about principles to employ when crafting stories and counter stories for empowerment. Sharing stories of institutionalized racism and sexism, may inspire confidence in students, professors, and college practitioners to disturb and realign power asymmetries in socially just ways.

Cognitive Science

Justin Fisher, Philosophy; Alan Brown, Psychology

The Cognitive Science Cluster sponsors a series of talks and other activities intended to draw together various people who do research on cognition at SMU. Cognition is information processing that occurs in brains or artificial systems, including gathering information from the environment (perception), drawing further conclusions (reasoning and inference), storing away information for future usage (learning and memory), using information to guide further activity (planning, decision making, and action), and other mental activities involving that information (emotion, creativity, conscious experience, and aesthetic response).

Mapping Human Rights Sites in Dallas

Dr. Rick Halperin, Director, Embrey Human Rights Program; Edward Gray, DLS candidate, Simmons School; Jennifer McNabb, DLS candidate, Simmons School

According to Michael Philips in his book, *White Metropolis*, Dallas has created a series of false narratives around its history, leading to an obfuscation of human rights abuses, especially where race is concerned. Dallas has not come to terms with its true history, which has had repercussions into the present and recent past, from the Kennedy assassination to current injustices in racial and economic inequality to Dallas's part in the incarceration epidemic. All over Dallas there are sites redolent of an untold past. We propose a project to map the human rights sites in Dallas through an interdisciplinary approach with a prominent educational component. This proposal envisions partnerships with the new Dallas Holocaust Museum, as well as area high schools (especially Booker T. Washington), and community colleges.

Native American and Indigenous Studies at SMU

Kacy Hollenback, Anthropology; Mike Adler, Anthropology; Neil Foley, History

This research cluster brings together faculty, staff, and graduate students with interests in indigenous studies. The focus will be on traditional and contemporary indigenous forms of culture, language, art, knowledge, economy, ecology, politics, and identity, as well as contemporary issues surrounding sovereignty, tradition, human rights, intellectual property rights, heritage, health, environmental justice, and development. Our year-long goals involve (1) creating and fostering a viable campus community at SMU, (2) identifying areas for collaborative research, and (3) defining existing and future teaching needs.

Machine Learning and Control Theory

Minh-Binh Tran, Mathematics; Alejandro Aceves, Mathematics ; Chul Moon, Statistics

Multilayer neural networks have been shown to be the most powerful models in machine learning. However, the fundamental reasons for this success remains not well understood and for that it will require mathematical tools and expertise. One of the most important mathematical tools that can be used to study neural networks is Control/Mean Field theory that deals with the behavior of dynamical systems with inputs, and how their behavior is modified by feedback. By this cluster, we would like to create a forum for faculties and researchers at regional universities and companies working on this important topic

Technology, Society, and Value

Kenneth Daley, Philosophy; Robert Howell, Philosophy; Sukumaran Nair, Computer Science and Engineering

The DCII “Technology, Society and Value” Research Cluster provides a forum for interdisciplinary collaboration on ethical issues raised by emerging technologies. The past several years have made it painfully clear that new technologies—from social media to artificial intelligence—will change the way we interact as a society and will raise new ethical issues in the process. This research cluster provides an opportunity for scholars and industry professionals across various domains to connect and learn from each other’s perspective on these issues, with a goal of determining some of the more promising avenues for future research.

Center for Applied Remote Sensing

Jonathan Dehn, CEE, Lyle School of Engineering; Zhong Lu, Earth Sciences, Dedman College of Humanities and Sciences; Dinesh Rajan, EE, Lyle School of Engineering; Joseph Camp, EE, Lyle School of Engineering; Kimberly DeGrandpre, Earth Science, Graduate Student

The Mission is to combine the various applied remote sensing efforts across SMU and in the DFW area to ensure the best use of resources for the benefit of researchers and students.

The specific goals are: (1) to set up a system for exchange of data, ideas and software (2) provide a forum for researchers to present their research to audiences they may otherwise miss and (3) lay the groundwork for a more permanent research center here at SMU.

Health Simulations and Virtual Reality

Eric G Bing, Professor of Global Health; Anthony Cuevas, Simmons School of Education and Human Development; Ernest Jouriles, Psychology; Elizabeth Stringer, SMU Guildhall

