I have always been fascinated by the act of listening. It was my discovery of electronic music in the early 1970s that encouraged me to listen to the sounds of the surrounding environment. The recording technologies that spurred the initial development of this field gave us the ability to create a container for sounds that were not conventionally thought of as musical. A sonic snapshot of life experience could be stored for considered listening in another time and place. I began my composing career with a reel-to-reel tape recorder and splicing equipment. Soon after, a Buchla modular analogue synthesizer provided a fabulous addition to my sound palette. The tape recorders, however, were what really sparked the imagination of this young classical pianist, enhancing my sensitivity to sound.

When I returned to composing in the mid-1990s, after nearly twenty years leave, my initial fascination was with the sounds of Jewish culture. I imagined and soon crafted soundscape compositions that captured my sense of that world. Some of these form the core of my 1998 CD, 'Stories Heard and Retold'. I never planned to return to the concert stage, but the immediacy and excitement of spontaneous invention sparked my interest in an unexpected way. I have remained interested in shaping recognizable sounds and abstractions of those sounds, the approach of soundscape composition, but I soon became captivated by the relationship between physical gesture and the shaping of sound. I began to work on a more embodied approach to performance than characterized the field in the past. Fast computer processors, sensor technologies, and Max/MSP made this possible.

My live performance work has followed two parallel paths: constructing live performance instruments for my own professional level concertizing, and creating accessible sound sculptures that can be performed by anybody. At that point, I could not have imagine that it would be just a short time before my love of the piano, my main instrument since age six, would be rekindled.

My interest in live, often solo performance, first led me to build the multi-sensor 'eBoard' for which I designed numerous interfaces with Max/MSP. The goal was to create an interactive instrument that is capable of making musical choices to which I could respond and this first instrument was designed to shape, in a nuanced manner, the playback of sound samples. eBoard also recorded sounds in the moment, plus transformed the sounds of a home-built four stringed harp built onto the body of the instrument. It also provided a gestural interface to perform software physical models of acoustical instruments. I also designed a second instrument, 'Keeboard,' played with the fingers, to perform physical models of acoustical instruments.

The next step in my live performance instruments was to electronically expand the capabilities of acoustical instruments. These included a traditional Jewish shofar (ram's horn) and a Turkish Saz (long-necked stringed instrument), electronically adapted with sensors similar to those used in the eBoard. It has been a fabulous learning experience,
and a terrific challenge to integrate traditional instrumental technique with the functionality of electronics. The eShofar continues to be one of my active projects.

Most recently, I have been treating piano performance, solo and in small ensembles, as the center of expanded instrument systems. My current software interfaces track, analyze and transform piano performance information as I play, and generates a multiplicity of sounds, including variations of my own real-time performance as well as pre-recorded sound materials. These performances have reached across the worlds of avant-garde art music and jazz.

My interest in populist musical performance pointed my development of two installation works. The first was a series of interactive sound sculptures, grouped together under the title 'Sounds of a Community'. In this continuously unfolding sound installation, visitors shape sounds from Jewish religious life by manipulating sculptures modeled upon traditional Jewish ritual objects. The second work, 'Layered Histories,' created in collaboration with digital visual artist Cynthia Beth Rubin, allows a visitor who enacts writing gestures on an ornamental manuscript to navigate through the geographic, aesthetic and religious worlds traversed by the 12th century Marseilles Bible.

These projects bring together my love of soundscapes and field recordings with my appreciation for sensor technologies, and a desire to engage people who are unfamiliar with electronic music. I am interested in harnessing new technologies in ways that help people explore their identities and cultures in a manner that keeps the electronics subtly present but not completely visible.

My work in recent years has also focused upon the history of electronic music, specifically outside Europe and North America. It is my goal to clearly establish the international nature of the field from its inception and the diverse forms of expression that reflect many human cultures. Some of these narrative texts and oral histories may be viewed at the EMF Institute, on the web at http://www.emfinstitute.emf.org.

My goal in all of these musical projects is, first and foremost, to create music and to point to the musical qualities of our world. I find that the technologies I draw upon can be humanizing influences, offering flexible, musically responsive, and ever fascinating ways to engage the imagination. My work encourages people to cross boundaries between conventional and new musical aesthetics, traditional cultures and modern life, and religious and secular sensibilities. It is my belief that the creative imagination can continue to spur new technological advances, just as new technologies open new pathways that spark the creative imagination. Electronic music, approached from a humanistic perspective, can continually focus and cultivate our awareness of the inherent musicality of the world we live in.