In the lepton world I was intrigued by the careful measurements being made on the (g-2) of the muon by Charpak *et al.*[6] and on the (g-2) of the electron by Wilkinson and Crane[7] at my University. I was also interested in the precision studies of positronium and muonium then in progress as well as other precision atomic physics experiments. (Indeed as a graduate student at Columbia University in the years 1950 to 1955, I worked under I.I. Rabi on an atomic beam experiment. And it was there that I first learned about positronium from Vernon Hughes.) These low energy studies of the charged leptons were in very capable hands, and I thought that it would be most useful for me to consider high energy experiments on charged leptons, experiments which might clarify the nature of the lepton or explain the electron-muon problem.

The opportunity appeared to think seriously about such experiments in 1962 when W.K.H. Panofsky offered me a position at the yet-to-be built Stanford Linear Accelerator Center. Here was a laboratory which would have primary electron beams, a laboratory at which one could easily obtain a good muon beam, a laboratory in which one could easily obtain a good photon beam for production of particle pairs. And on the same campus at the High Energy Physics Laboratory, the Princeton-Stanford e^-e^- storage ring was operating.[8]

From the time that the SLAC linear accelerator began operation in 1966 until the discovery of the τ in 1975, my colleagues and I cast a wide experimental net in our studies of leptons. These studies fell into three classes which I shall describe in turn: photoproduction searches for new charged leptons, studies of muon-proton inelastic scattering to seek $e - \mu$ differences, and e^+e^- colliding beam searches for new charged leptons. Figure 1 shows schematically the history of our three classes of lepton studies set against the construction history of the SLAC linear accelerator and the SPEAR e^+e^- storage ring.

Before turning to these studies, I describe the general thinking in the 1960's in the lepton world about the possible existence and types of new leptons. Since the 1950's a great deal of thought had been given to the concept of lepton number and lepton number conservation. This is not the place to record that intricate history. It is sufficient to note