and Greg and I were going there this time to do some experiments with ^{253}Es to make new nuclides by neutron bombardment in the MTR high flux reactor. On the plane I started playing with some numbers related to the amount of einsteinium that we could obtain, and I suddenly realized that if we took the maximum amount of ^{253}Es that could be obtained at that time, about 3×10^{10} atoms, and bombarded it with a beam of 100 microamperes per cm^2 of ^{4}He ions, we would make one atom of element 101 every five minutes or so assuming a cross section of about a millibarn. The assumption of beam intensity was about an order of magnitude greater than had ever been obtained, but I blithely assumed that this problem could be overcome.

Very excitedly I took the calculations over to the others and we started to discuss the possibility of making the new element. I remember that Stan and Bernie were not enthusiastic. One of the most critical problems was that the einsteinium target had a half-life of only 20 days so it would be necessary to do the experiments in a very limited time. I argued that we could make it a little easier by making only one target, a recoil target. This would allow us to separate the transmutation products without dissolving the target by merely catching them in a foil placed next to it. This had never been done before with low energy light ions, but I was confident that the technique would work. We finally decided to make the try but to reach our goal took a lot more effort than I had envisioned.

In principle, the idea was perfect but it took us a while before we were able to make it work. We made something like five targets before we had a successful one. The reason for our difficulties was that we at first made the targets by vaporization (I was known as the blow-torch chemist in those days!) and yet they were too thick. We incorporated ^{244}Cm with the ^{253}Es so that we