There are, of course, many more transuranium nuclides known that I have not been able to describe in the time available. For the sake of completeness these are summarized in the following slide (Figure 16).

It should be emphasized that these nuclides are the product of the investigations of a number of laboratory groups besides our own. I should like to mention especially the work of W. M. Manning, M. H. Studier and co-workers of the Argonne National Laboratory in Chicago, Illinois, as well as the work of the United States Atomic Energy Commission's Los Alamos Laboratory, and the Chalk River Laboratory of the Canadian National Research Council. I feel that I should especially single out the contributions of my colleague Albert Ghiorso whose name, as you may have noticed, has come up time after time as I have gone through my description here of the work on the transuranium elements. Ghiorso has been a key man throughout and is one of those individuals without whom a laboratory such as ours simply could not run.

I suppose that I should say a few words with respect to the possibility for future production and identification of additional transuranium elements, especially in view of the possibility of their production by heavy ion bombardment of transuranium elements. As an aid to such a program the radioactive properties can be estimated, as I have already indicated, on the assumption of a smooth nuclear energy surface and the systematics of radioactivity. Again, I must emphasize that such considerations are negated in the event that a stable subshell of 148 neutrons should be found to exist, and this must be regarded as a definite possibility. It is interesting to note that our considerations on the systematics of spontaneous fission (28) indicate that this method of decay will