

Abstract for an Invited Paper
for the SES11 Meeting of
The American Physical Society

A Personal Perspective on Triangle Universities Nuclear Laboratory Development¹

THOMAS B. CLEGG, UNC-Chapel Hill, Dept of Physics & Astronomy and TUNL

Nuclear physics research in NC began seriously in 1950 when Henry Newson and his colleagues at Duke attracted support for a 4 MeV Van de Graaff accelerator with which they grew their doctoral training program. The lab's scientific achievements also grew, including the discovery in 1966 of fine structure of nuclear analog states. By then UNC and NC State had attracted Eugen Merzbacher and Worth Seagondollar who, with Newson, brought more faculty to work at an enlarged three-university, cooperative lab. Launched at Duke in 1967 with a 30 MeV Cyclograff accelerator, and subsequently equipped with a polarized H and D ion source and polarized H and ³He targets, an extensive program in light-ion and neutron physics ensued. Faculty interest in electromagnetic interactions led to development since 2001 of TUNL's HI γ S facility to produce intense 1-100 MeV polarized photon beams with small energy spread. Photonuclear reaction studies there today are producing results of unmatched quality. These 60 years of nuclear physics research have produced ~250 doctoral graduates, many of whom have gone on to very distinguished careers. A personal perspective on these activities will be presented.

¹Work supported in part by the US Dept of Energy Office of Nuclear Physics.