

Research US NAVY & US VETERANS AFFAIRS

1850: Navy surgeon E.R. Squibb set up a laboratory to test medications plus standardize large-scale production of ether & chloroform.

1853: Congress authorized building the Naval Medical Laboratory at Brooklyn (NY) Naval Hospital. 1883: When the Museum of Naval Hygiene, Washington, DC, began examining pathology specimens, a system of Navy medical research evolved, emphasizing chemistry & tropical medicine.

1915: The Naval Medical Supply Depot, Brooklyn, NY, opened a chemical laboratory & testing department, to ensure purity of purchased medications.

1925: The VA conducted the 1st hospital-based studies under its newly established research program & began publishing the "US Veterans' Bureau Medical Bulletin," designed, in part, to "promote research along practical lines".

1927: Navy investigators elucidated the cause of heat stroke. 1928: The VA reported on the long-term health effects of chemical warfare.

1932: The VA established the Tumor Research Laboratory at the Hines (IL) VA – the 1st lab to receive VA Central Office funds specifically for research.

1941: The Navy Bureau of Medicine (BUMED) established a "Research Division".

1945: The Naval Medical Research Institute received the "Wellcome Prize" for its work on blast injury protection. 1946: The Office of Naval Research opened.

1946: VA tuberculosis studies – among the 1st large-scale clinical trials – led to development of the VA Cooperative Studies Program.

1946: The US Naval School of Aviation Medicine proved it was possible, under laboratory conditions, to adapt humans to simulated high altitude functioning without supplemental oxygen.

1947: The US Naval Institute of Tropical Medicine developed a therapeutic regimen for cholera using whole blood & guidance by plasma-specific gravity – a breakthrough in determining life-saving extracellular fluid requirements.

1953: Naval Medical Research Unit No. 4 at Naval Training Center, Great Lakes, IL, 1st isolated influenza virus in tissue culture & a year later identified the 1st influenza type B variant.

1958: The VA reported contributions to developing implantable cardiac pacemakers for preventing potentially life-threatening arrhythmias.

1960: The VA pioneered concepts leading to development of computerized axial tomography (the "CAT scan").

1962: Naval Medical Research Unit No. 3, at Cairo, Egypt, discovered the natural infection cycle of West Nile fever, which involves mosquitoes & birds as primary vectors & hosts.

1968: The VA performed the 1st successful liver transplants & developed techniques for suppressing the body's natural attempt to reject transplanted tissue.

1968: The Naval Submarine Medical Research Laboratory developed the 3-agent stannous fluoride anti-carries technique, which became the basis of the preventive dentistry program for the US Navy & elsewhere.

1969: The US Naval Institute of Tropical Medicine 1st demonstrated the role of attenuated Rubella (German measles) vaccine in preventing naturally acquired disease in humans.

1970: The VA published a landmark "Cooperative Study on Hypertension," showing that medication could control blood pressure & reduce the incidence of major cardiovascular events.

1974: The Navy's BUMED Research Division became the Naval Medical Research & Development Command.

1977: VA investigators received the Nobel Prize for research on brain peptide hormone production & for development of serum radioimmunoassay.

1991: The VA developed systems that allow patients to move paralyzed limbs. 1994: VA investigators demonstrated that a daily aspirin tablet reduced by half the rate of death & nonfatal heart attacks in patients with unstable angina.

1994: VA investigators identified a gene associated with a major risk for schizophrenia.

2002: The VA, together with the National Institutes of Health, published results from the largest hypertension study ever, noting that conventional diuretics were better than newer medicines for treating high blood pressure.

2005: VA investigators demonstrated the effectiveness of a new vaccine for shingles. 2007: The VA, together with the Massachusetts Institute of Technology & Brown University, unveiled the 1st powered ankle-foot prosthesis.

2009: VA investigators showed that traditional "on pump" heart bypass surgery yields better 1-year outcomes than a newer "off pump" method.

2010: The VA demonstrated that prior head injury may double the risk of developing amyotrophic lateral sclerosis (ALS).

2011: VA investigators identified a potential blood marker for cognitive decline.

references: <http://www.med.navy.mil/sites/nmrc/documents/Timeline.pdf>

http://www.research.va.gov/ResearchWeek/press_packet/Accomplishments.pdf