#### **EXHIBIT B-7**

Wikipedia Historical Information

# Walter E. Fernald State School

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The Walter E. Fernald State School, now the Walter E. Fernald Developmental Center, located in Waltham, Massachusetts, is the Western hemisphere's oldest publicly funded institution serving people who have developmental disabilities. <sup>[2]</sup> Originally a Victorian sanatorium, it became a "poster child" for the American eugenics movement during the 1920s. It later was the scene of medical experiments in the twentieth century. Investigations into this research led to new regulations regarding human research in children.

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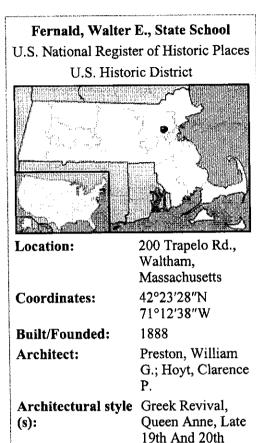
### History

The Fernald Center, originally called the Massachusetts School for Idiotic Children, was founded by reformer Samuel Gridley Howe in 1848 with a \$2,500 appropriation from the Massachusetts State Legislature. The school eventually comprised 72 buildings total, located on 186 acres (0.75 km²). At its peak, some 2,500 people were confined there, most of them "feeble-minded" boys.

Under its first resident superintendent, Walter E. Fernald (1859–1924), an advocate of eugenics, the school was viewed as a model educational facility in the field of mental retardation. It was renamed in his honor in 1925, following his death the previous year.

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The institution did serve a large population of mentally retarded children, but the *The Boston Globe* estimates that upwards of half of the inmates tested with IQs in the normal range. In the 20th century, living conditions were spartan or worse; approximately 36 children slept in each dormitory room. There were widespread reports of physical and sexual abuse, This situation changed radically, starting in the 1970s, when a class action suit, Ricci v. Okin, was filed to upgrade conditions at Fernald and several other state institutions for persons with mental retardation in Massachusetts. U.S. District Court Judge Joseph L. Tauro, who assumed oversight of the case in 1972, formally disengaged from the case in 1993, declaring that improvements in the care and conditions at the facilities had made them "second to none anywhere in the world."



Governing body: State

MPS: Massachusetts
State Hospitals
And State Schools

MPS

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## Nuclear Medicine Research in Children

The Fernald School was the site of the 1946–53 joint experiments by Harvard University and MIT that exposed young male children to tracer doses of radioactive isotopes. <sup>[3]</sup> Documents obtained in 1994 by the United States Department of Energy <sup>[4]</sup> revealed the following details:

- The experiment was conducted in part by a research fellow sponsored by the Quaker Oats Company.
- MIT Professor of Nutrition Robert S. Harris led the experiment, which studied the absorption of calcium and iron.
- The boys were encouraged to join a "Science Club", which offered larger portions of food, parties, and trips to Boston Red Sox baseball games.
- The 57 club members ate iron-enriched cereals and calcium-enriched milk for breakfast. In order to track absorption, several radioactive calcium tracers were given orally or intravenously.
- Radiation levels in stool and blood samples would serve as dependent variables.
- in another study, 17 subjects received iron supplement shots containing radioisotopes or iron. [5]
- Neither the children nor their parents ever gave adequate informed consent for participation in a scientific study.

[6]

The Advisory Committee on Human Radiation Experiments, reporting to the United States Department of Energy in 1994, reported on these experiments:

In 1946, one study exposed seventeen subjects to radioactive iron. The second study, which involved a series of seventeen related subexperiments, exposed fifty-seven subjects to radioactive calcium between 1950 and 1953. It is clear that the doses involved were low and that it is extremely unlikely that any of the children who were used as subjects were harmed as a consequence. These studies remain morally troubling, however, for several reasons. First, although parents or guardians were asked for their permission to have their children involved in the research, the available evidence suggests that the information provided was, at best, incomplete. Second, there is the question of the fairness of selecting institutionalized children at all, children whose life circumstances were by any standard already heavily burdened.

The highest dose of radiation that any subject was exposed to was 330 millirem, the equivalent of less than one year's background radiation in Denver.<sup>[7]</sup>

The school also participated in studies of thyroid function in patients with Down Syndrome and their parents. <sup>[8]</sup> This study showed that their iodine metabolism was similar to normal controls.

## **Twenty-first Century**

The buildings and grounds survive as a center for mentally disabled adults, operated by the Massachusetts Department of Mental Retardation. In 2001, 320 adults resided at Fernald, with ages ranging from 27 to 96 years and an average age of 47 years. According to a December 13, 2004 article in the *Boston Globe*, Massachusetts Governor Mitt Romney announced in 2003 that the facility would be closed and the land sold by 2007. In 2003, a coalition of family advocates and state employee unions began a campaign to save Fernald and asked U.S. District Judge Joseph L. Tauro to resume his oversight of the Ricci v. Okin class action lawsuit that had led to improvements at Fernald and the other state facilities beginning in the 1970s.

In an August 14, 2007 ruling, Judge Tauro ordered the Department of Mental Retardation to consider the individual wishes of all 185 institution residents before closing the facility. However, in September 2007, the new administration of Governor Deval Patrick appealed Tauro's ruling to the First Circuit U.S. Court of Appeals in Boston. In a statement, the Patrick administration contended that Fernald had become too expensive to continue to operate and that equal or better care could be provided in private, community-based settings for the remaining Fernald residents. The administration's cost claims have been disputed by the Fernald League for the Retarded, Inc., the Massachusetts

Coalition of Families and Advocates for the Retarded, Inc. (COFAR) and other family-based organizations, which have continued to advocate for the preservation of Fernald as a site for ICF/MR-level care for its current residents. Those advocacy organizations have proposed a "postage-stamp" plan under which Fernald would be scaled back in size and the remaining portion of the campus sold for development. The Patrick administration, however, has declined to negotiate with those Fernald advocates, and has pressed ahead with its appeal and closure plans.

Fernald was the subject of a 2007 documentary film "Front Wards, Back Wards" directed by W.C. Rogers, which has been shown on some PBS television stations.

#### References

- 1. ^ "National Register Information System". National Register of Historic Places. National Park Service. 2009-03-13. http://www.nr.nps.gov/.
- 2. ^ ""The Walter E. Fernald Association"". http://fernaldassociation.com/fernaldCenter.htm. Retrieved on 2009-06-09.
- BRONNER F, HARRIS RS, MALETSKOS CJ, BENDA CE (January 1956). "Studies in calcium metabolism; the fate of intravenously injected radiocalcium in human beings". The Journal of Clinical Investigation 35 (1): 78–88. doi:10.1172/JCI103254. PMID 13278403.
- 4. ^ "OT-19. Radioisotope Studies at the Fernald State School, Massachusetts". http://www.hss.energy.gov/healthsafety/ohre/roadmap/experiments/0491doc.html#0491\_Other. Retrieved on 2009-06-07.
- 5. ^ SHARPE LM, PEACOCK WC, COOKE R, HARRIS RS (July 1950). "The effect of phytate and other food factors on iron absorption". The Journal of Nutrition 41 (3): 433–46. http://jn.nutrition.org/cgi/pmidlookup?view=long&pmid=15428911.
- 6. ^ "Chapter 7: The Studies at Fernald School". ACHRE Report. "It is clear that the doses involved were low and that it is extremely unlikely that any of the children who were used as subjects were harmed as a consequence."
- 7. ^ Hussain, Zareena (January 7, 1998). "MIT to pay \$1.85 million in Fernald radiation settlement". The Tech 11 (65). http://tech.mit.edu/V117/N65/bfernald.65n.html. Retrieved on 2009-06-09.
- 8. ^ KURLAND GS, FISHMAN J, HAMOLSKY MW, FREEDBERG AS (April 1957). "Radioisotope study of thyroid function in 21 mongoloid subjects, including observations in 7 parents". *The Journal of Clinical Endocrinology and Metabolism* 17 (4): 552–60. PMID 13406017. http://jcem.endojournals.org/cgi/pmidlookup?view=long&pmid=13406017.
- D'Antonio, Michael. The State Boys Rebellion. New York: Simon & Schuster, 2004.

### **External links**

■ Excerpts from the writings of Walter E. Fernald (http://www.brandeis.edu/lemberg/SGHL/PDF/Bibliographies/Walter%20Elmore%20Fernald.pdf)

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