

# Ethics, Eugenics, and Pre-Implantation Genetic Diagnosis

# Eugenics

- ❁ “Good genes” or “good birth”
- ❁ The use of genetics to improve the health of a population

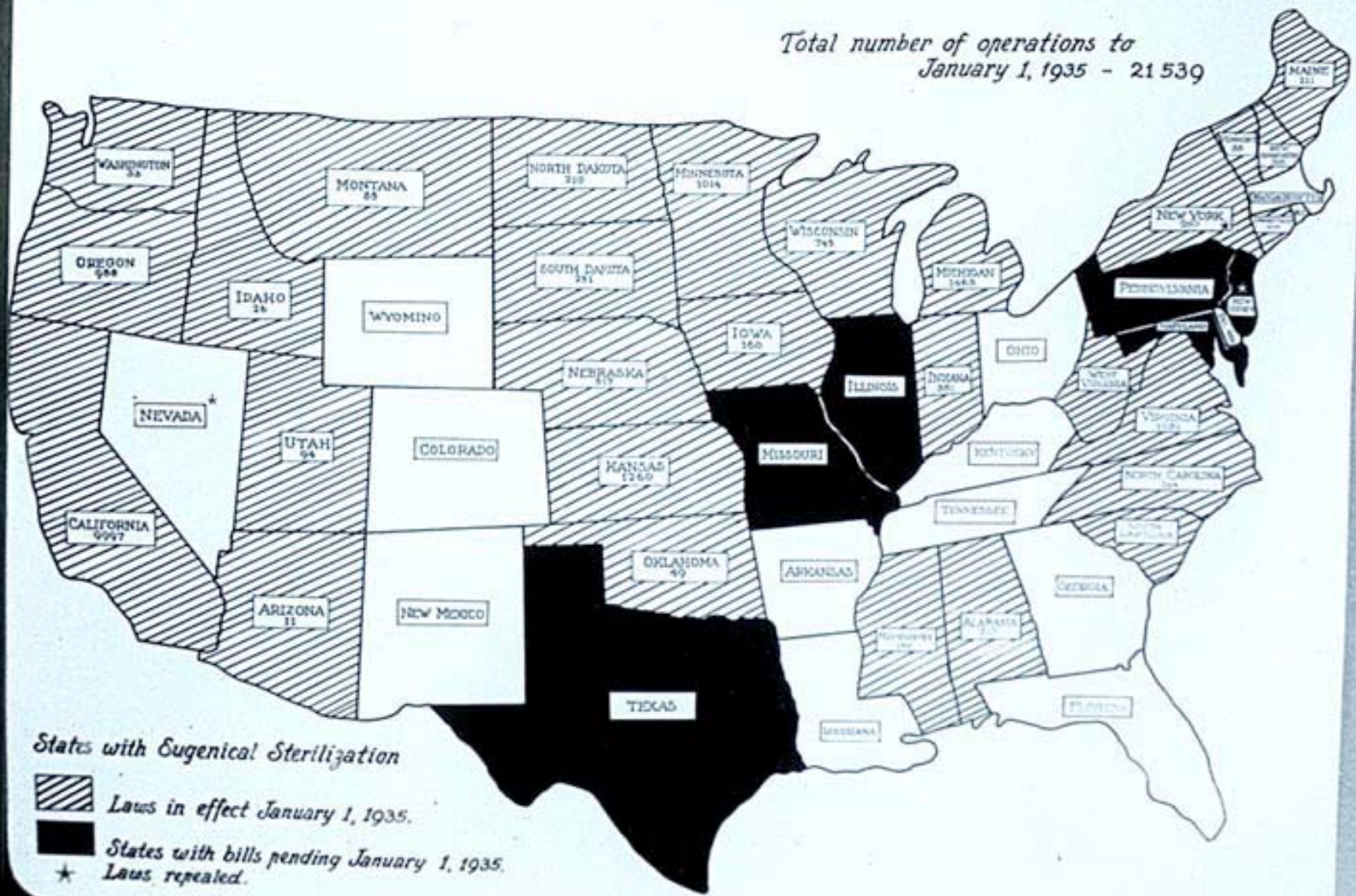
# Eugenics

- ✿ “Our starting point is not the individual, and we do not subscribe to the view that one should feed the hungry, give drink to the thirsty, or clothe the naked ... Our objectives are entirely different: We must have healthy people in order to prevail in the world.”

Joseph Goebbels, Nazi Minister of Propaganda, 1938

# LEGISLATIVE STATUS OF EUGENICAL STERILIZATION IN THE UNITED STATES AND THE TOTAL NUMBER OF OPERATIONS BY EACH STATE TO JANUARY 1, 1935.

*Total number of operations to  
January 1, 1935 - 21 539*



*States with Eugenic Sterilization*



*Laws in effect January 1, 1935.*



*States with bills pending January 1, 1935.*



*Laws repealed.*

Nov 6 - 1924 (Send to Mrs. Williams for files Please)

# THE SAVANNAH PRESS

## SCHOOL PRINCIPAL AND FAMILY TAKE FAIR TOP HONORS

JAMES A. KELLEYS WIN IN  
"FITTER FAMILIES"  
CONTEST

AWARDS ANNOUNCED  
IN ALL CLASSES

The highest family score in the "Fitter Family" contest at the Georgia State Fair was made by the James A. Kelley family of Isle of Hope. It was announced in the awards made public today by Mrs. Mary T. Watts, who was in charge of the contest.

The prize winning family consists of Mr. and Mrs. Kelley and their two daughters, Elizabeth and Priscilla.

### The Awards.

The awards announced today are as follow:

Single adult (woman): Blue ribbon: Miss Elizabeth Ravanel, 116 McDonough street, east. Honorable mention, Miss Josephine Clark, 47th and Reynolds street.

Single adult (man): Blue ribbon: A. B. Childs, Berryton.

Pair (man, wife and no children): Mr. and Mrs. C. E. Davis, Garnett, S. C.

Small family: Blue ribbon: Jesse Strickland, Waycross.

Average family: Blue ribbon: James A. Kelley, Isle of Hope. Honorable mention: Arthur H. Richter, 1311 East 47th street.

Large family: Blue ribbon: John E. Archer, Ludowick. Honorable mention, Arthur Burke, Rocky Ford.

Sweepstake: Highest family score: James A. Kelley, wife and two children, Elizabeth and Priscilla, Isle of Hope.

## Win "Fitter Families" Sweepstakes



—Photo by Feltz.  
Mr. and Mrs. James A. Kelley and their two daughters, Elizabeth and Priscilla, of Isle of Hope, won the blue ribbon in the small family class and the sweepstakes at the "Fitter Family" contest conducted during the Georgia State Fair.

### Close Contest.

"The Kelley family won by only a narrow margin over the Richter family," Mrs. Watts said today in discussing the awards. "Both families are of extremely high types. There was also close competition in the single adults, women's class, not less than five made an 'A' grade."

This year was the second that the "Fitter Family" contest has been held at the fair, and the number of places represented by the entrants is especially pleasing to Mrs. Watts. There were three entrants in the contest this year who participated last, and in instance their scores were higher than before. The examinations given are very extensive and cover the mental and physical fields.

### Well Known.

The Kelley family, winners of the sweepstakes and the blue ribbon in the average family class is well known in Savannah. Both Mr. and Mrs. Kelley are teachers at the Isle of Hope school Priscilla and Elizabeth who helped their parents to win these honors are grade pupils in the same school. Mr. Kelley was principal of the summer grade schools at the last term and is principal at Isle of Hope. He is interested in young people and is an active scout master, which probably accounts to some extent for his good physical condition, for it takes outdoor recreation to keep up the vigor of a person employed indoors many hours each day.

When Mr. Kelley was asked his object in entering the "Fitter Family" contest he said: "I believe in practicing what I preach and I am preaching the doctrine of keeping fit. This contest gave me an opportunity to invole the physical and mental condition of my entire family. We expect to look for the weak points and build up."

### Again Next Year.

Mrs. Kelley frankly asserts that the Kelley family will be back again next year and endeavor to hold the high score in Georgia. "I mean to keep on the job each day of the next 365 and bring up our score. It may be good this year, but it will be better next."

Miss Ravanel, high score, single adult, had strong competition for honors. Miss Ravanel is a nutrition expert and is working under the auspices of the Council of Jewish Women.

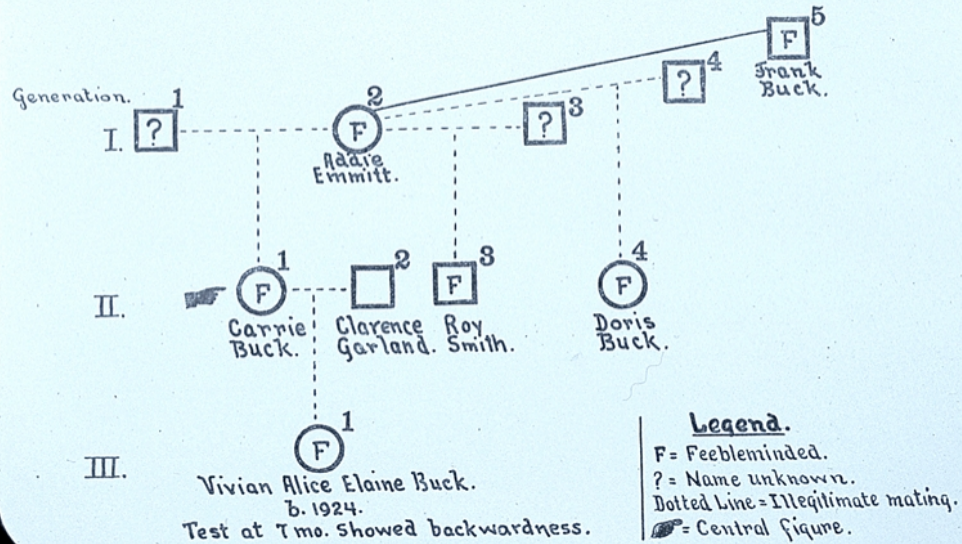
### Going to New York.

Mrs. Watts, who has been in Savannah for nearly three weeks in the interest of fitter families, leaves today by boat for New York for a conference with the executive board of the Eugenes Society of the United States, under whose auspices she is conducting her work. Mrs. Watts is highly complimentary of the health work in Savannah and the co-operation she has received. When asked how the families examined compared with those in other states she declared she had never had better returns and that the general average is very high. "Kansas still has the high-score family" so far, but it is a question how long they can hold it. Georgia is a close second," she declared.

# Eugenics

- ❁ Positive eugenics (Francis Galton): Encourage people with “good genes” to have more children
- ❁ Negative selection: Don’t allow “bad genes” to be reproduced
  - ❁ Forced sterilization or abortion
  - ❁ Marriage restrictions
  - ❁ “Euthanasia”

Most Immediate Blood-kin of Carrie Buck.  
Showing illegitimacy and hereditary feeble-mindedness.



Truman State University. Noncommercial, educational use only.

# The Carrie Buck case

# Genetics and Medicine

- ❁ Genetic testing
- ❁ Prenatal genetic testing
- ❁ Pre-implantation genetic diagnosis
- ❁ Genetic counseling for prospective parents



# Genetic Testing

- ❁ Predictive testing: Polycystic kidney disease
  - ❁ Fluid-filled sacs grow on kidneys, possibly other organs
  - ❁ Autosomal dominant (50% chance if one parent is affected)
  - ❁ Onset: 30 to 40 years, possibly earlier/later
  - ❁ No cure available; life-prolonging treatment possible (dialysis or kidney transplantation)

# Genetic Counseling

- “An informative and supportive dialogue regarding a known, potential, or unsuspected genetic condition.”
- Manic-depressive illness (Kay Redfield Jamison)
- “To whom is the genetic counselor responsible? The patient or married couple alone? Other family members? Future generations who may suffer increasing numbers of persons with genetic defects?”  
*Ruth Macklin, “Moral Issues in Human Genetics: Counseling or Control?”*

# Prenatal Genetic Testing

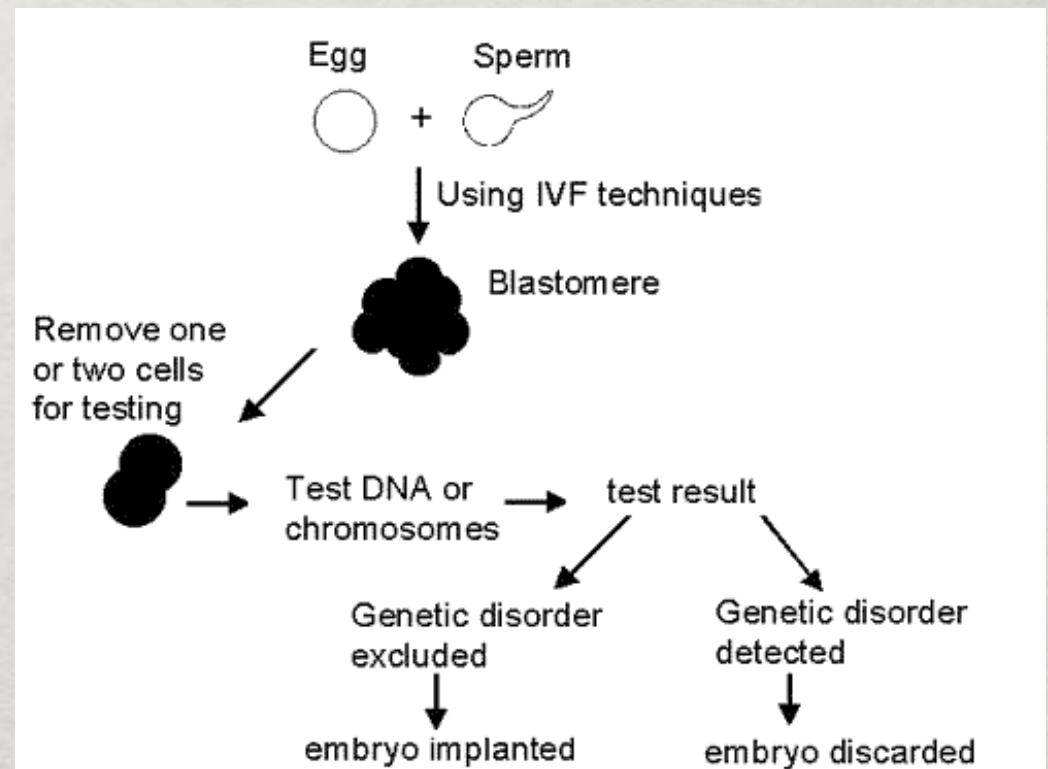
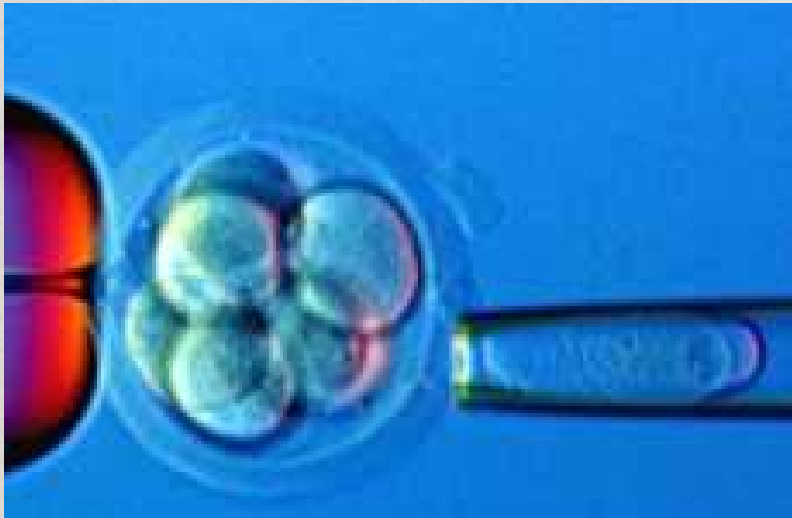
- ✿ Cystic fibrosis
  - ✿ Recessive (25% chance if both parents are carriers)
  - ✿ Life expectancy: 30 years
  - ✿ Carrier test available to pregnant couples or those planning to become pregnant

# PGD



Pre-implantation genetic diagnosis

# PGD



# Nash Case

- ❁ Fanconi Anemia:
  - ❁ Recessive (25% offspring affected)
  - ❁ Dismorphologies, mildly reduced IQ, leukemia by 6-7 years old, require hematopoietic stem cell transplant (bone marrow) to survive, donor must be HLA (human lymphocyte antigen) matched

# Nash Case

- ❁ 6-year-old Molly affected by Fanconi Anemia (FA)
- ❁ Nashes hope to have more unaffected children
- ❁ Seek 2-stage PGD: FA- & HLA match for Molly
- ❁ 5 IVF cycles to get 1 matched embryo
- ❁ Adam born 8/2000 in Denver; cord blood flown to MN for transplant in late 9/2000

# Role-Play Activity

- We are the Ethics Review Board for General Hospital, a local public hospital. The Review Board has to determine a policy for the hospital regarding whether PGD should be permitted for the following purposes:
  - to help two CF carriers avoid passing on the disease;
  - to help a couple produce umbilical cord cells for an existing child with Fanconi's anemia;
  - to help a couple select the sex of their child for "family balancing";
  - To help a short couple produce a taller child.