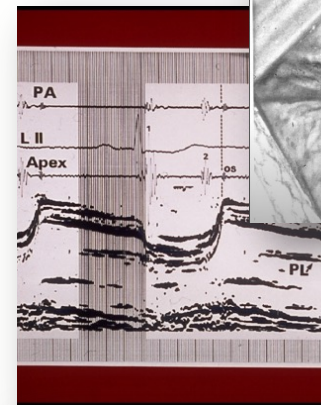


INNOVATORS AND INNOVATIONS THAT CHANGED OUR WORLD: PIONEERS AND DISCOVERY IN CONGENITAL CARDIOVASCULAR DISEASE

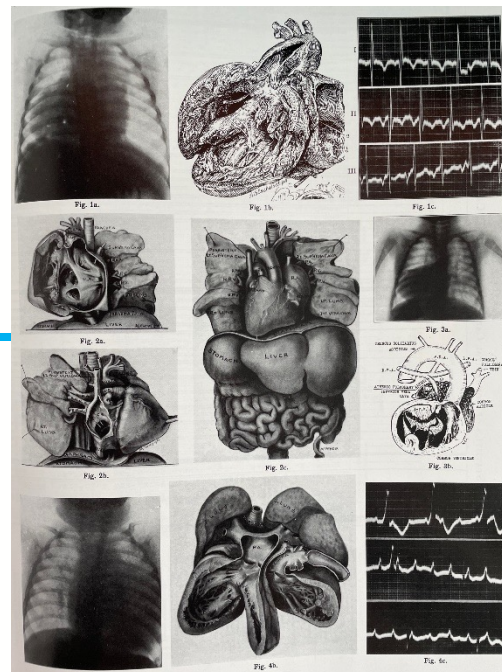
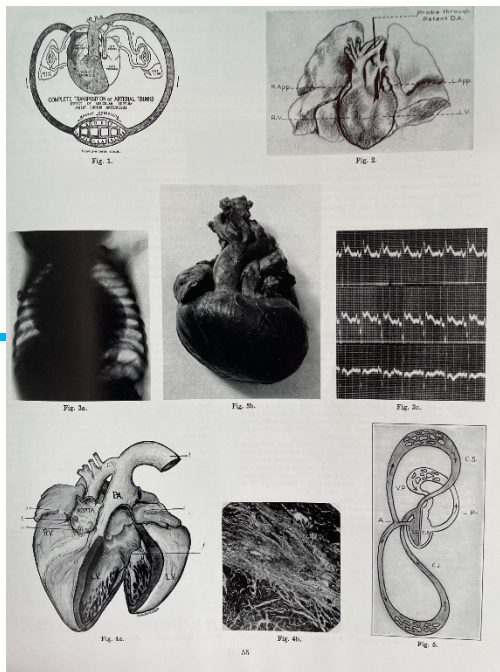
Meryl S. Cohen, MD, MS Ed
Professor of Pediatrics
Associate Chief, Division of Cardiology



ERA OF OBSERVATION AND CHD SURGERY



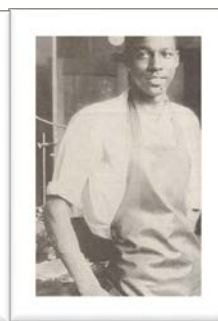
1936



ERA OF OBSERVATION AND CHD SURGERY



1938

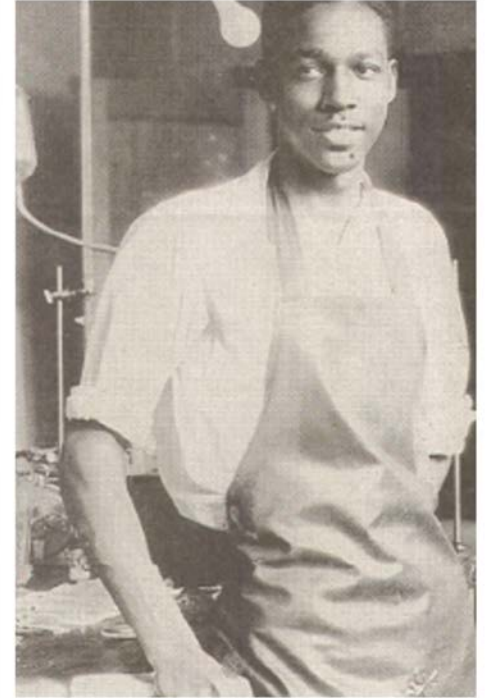


1943

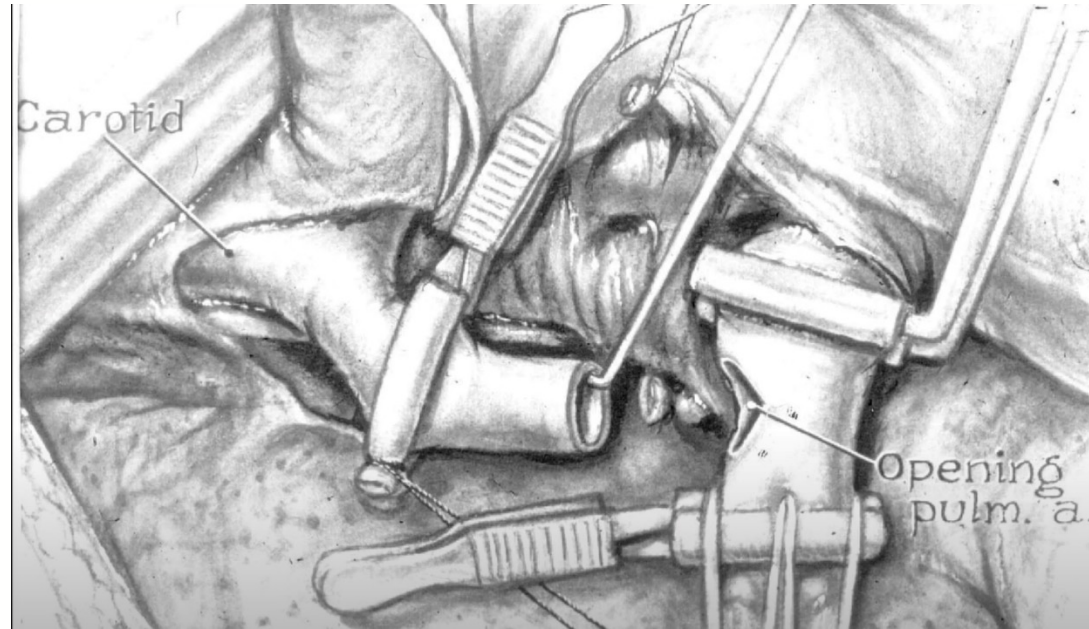
1936



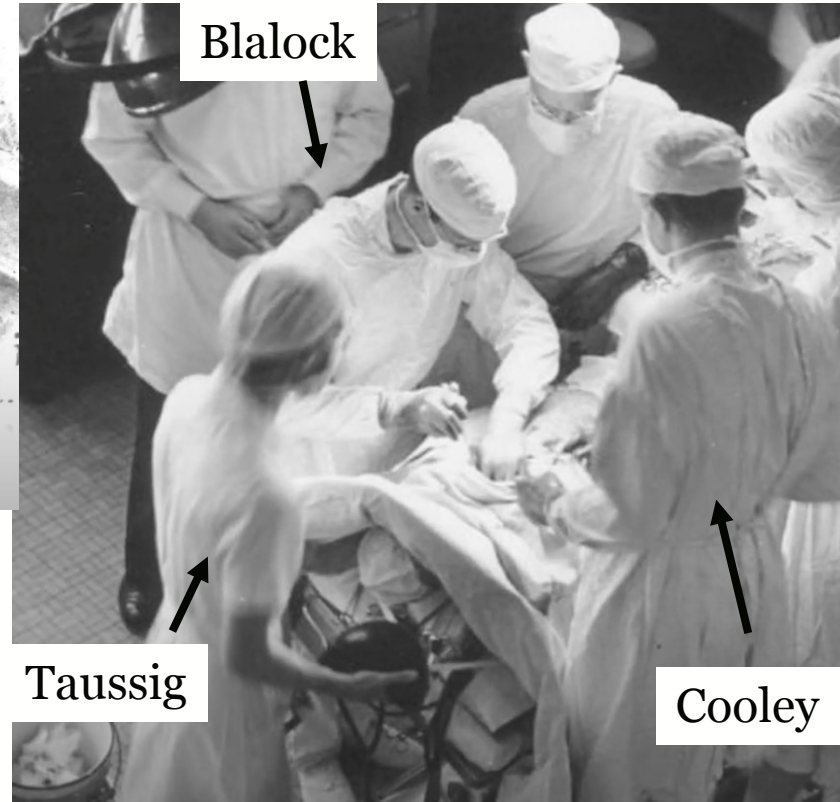
ERA OF OBSERVATION AND CHD SURGERY



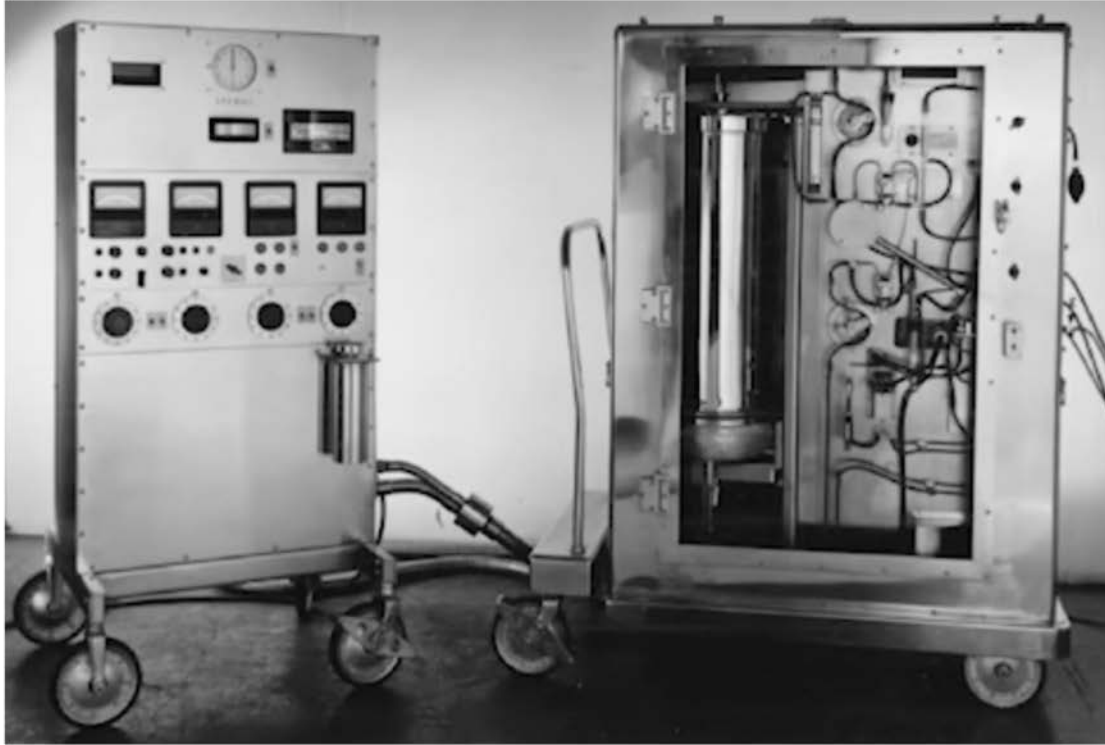
INNOVATION THROUGH COLLABORATION



“Alfred Blalock, you genius of a man, baby Eileen is pinkening up like a glorious sunrise!”



ERA OF OBSERVATION AND CHD SURGERY



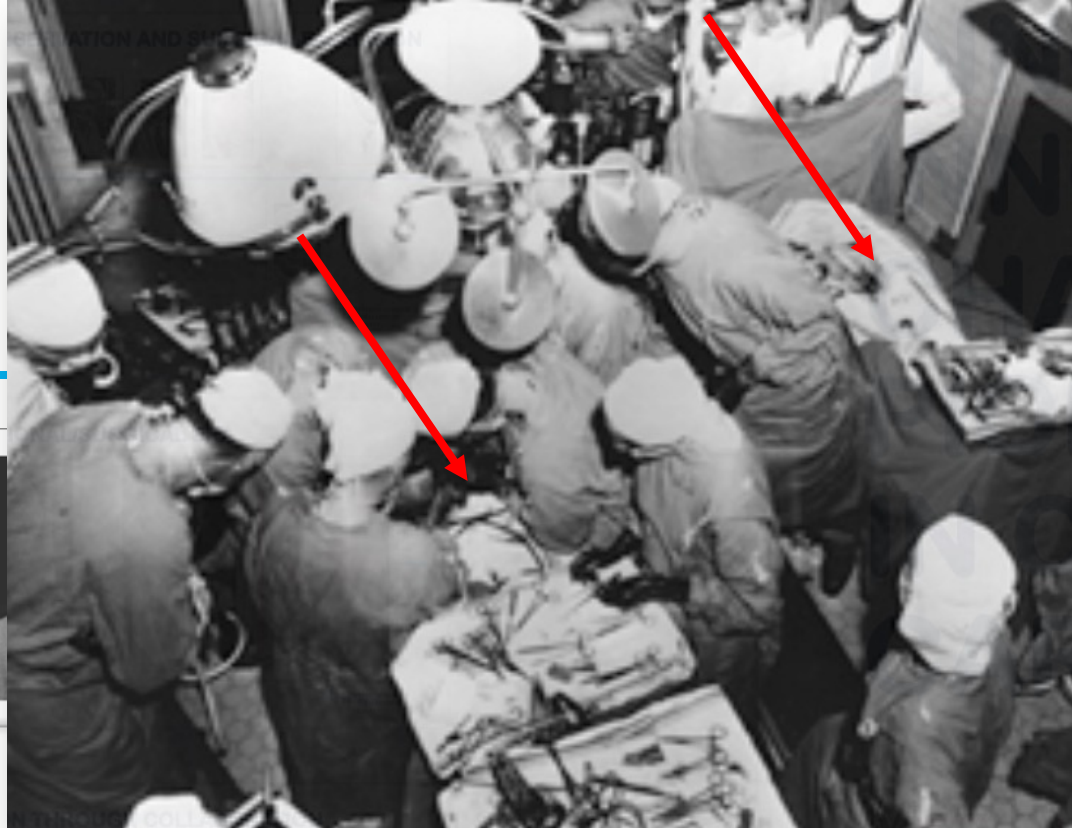
1953



ERA OF OBSERVATION AND CHD SURGERY



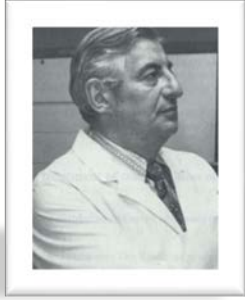
1890s



1954

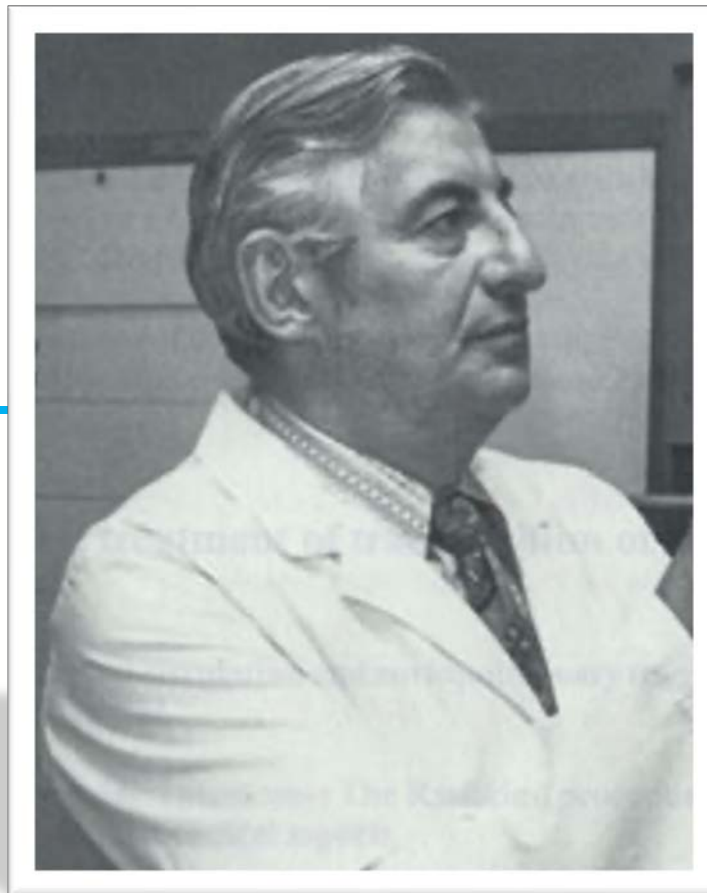


ERA OF CHD DIAGNOSIS AND TREATMENT



1966

ERA OF CHD DIAGNOSIS AND TREATMENT



1966

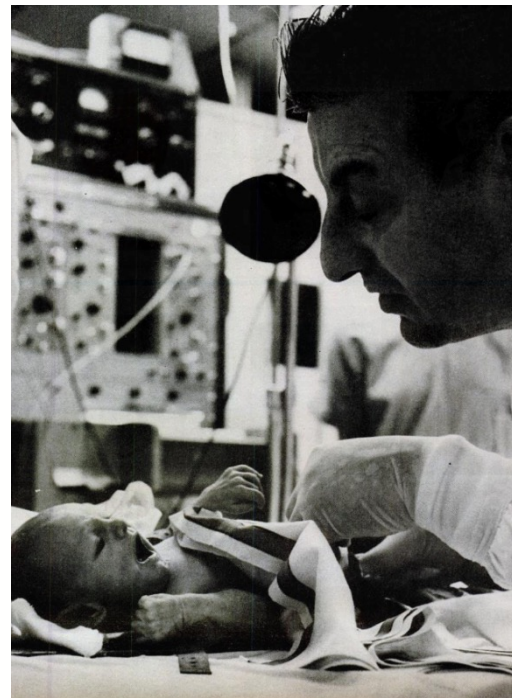
INNOVATION THROUGH CREATIVE DESIGN



Balloon To Save a Baby

“The balloon broke through a paper thin wall of tissue, enabling oxygenated blood to start flowing through the aorta. Then Bobby’s skin turned pink”

“When the doctor bent down to coo at his little patient...after the procedure, Bobby cooed right back”



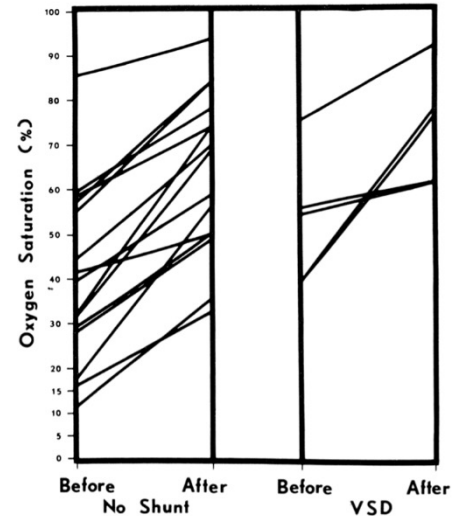
Transposition of the Great Arteries

Results of Palliation by Balloon Atriostomy in Thirty-one Infants

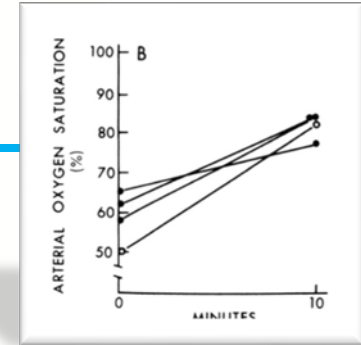
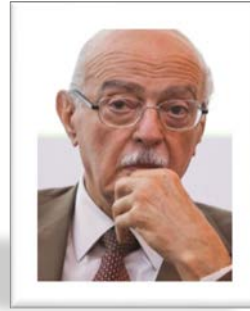
By WILLIAM J. RASHKIND, M.D., AND WILLIAM W. MILLER, M.D.



- All 31 survived BAS
- 26 had immediate palliation
- 22 long-term survivors



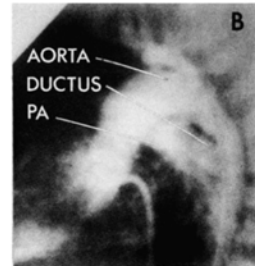
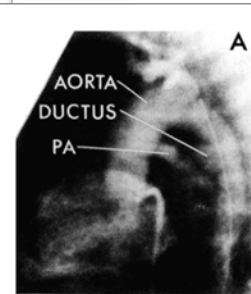
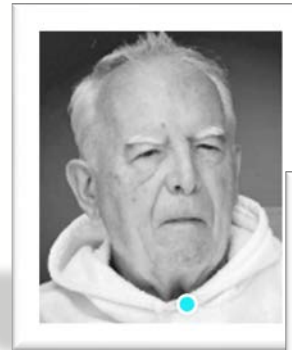
ERA OF CHD DIAGNOSIS AND TREATMENT



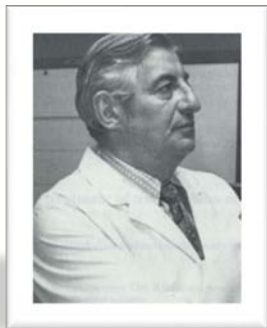
1966

Early 70s

1975



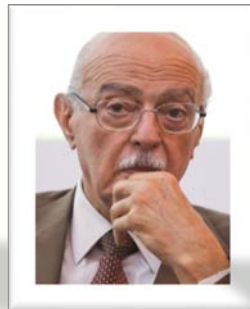
ERA OF CHD DIAGNOSIS AND TREATMENT



1966



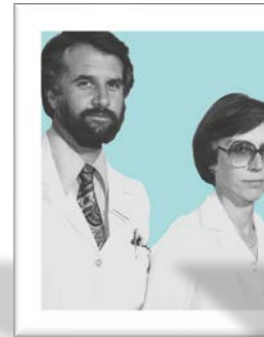
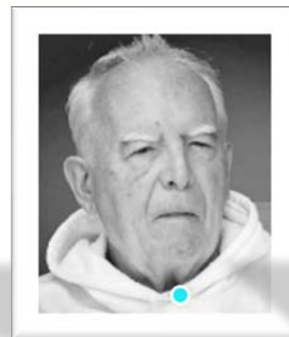
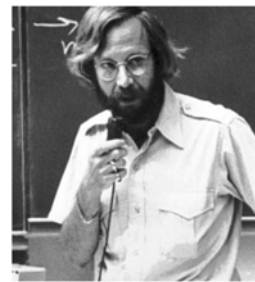
Early 70s



1975



Late 70s



ERA OF SUBSPECIALTY CARE

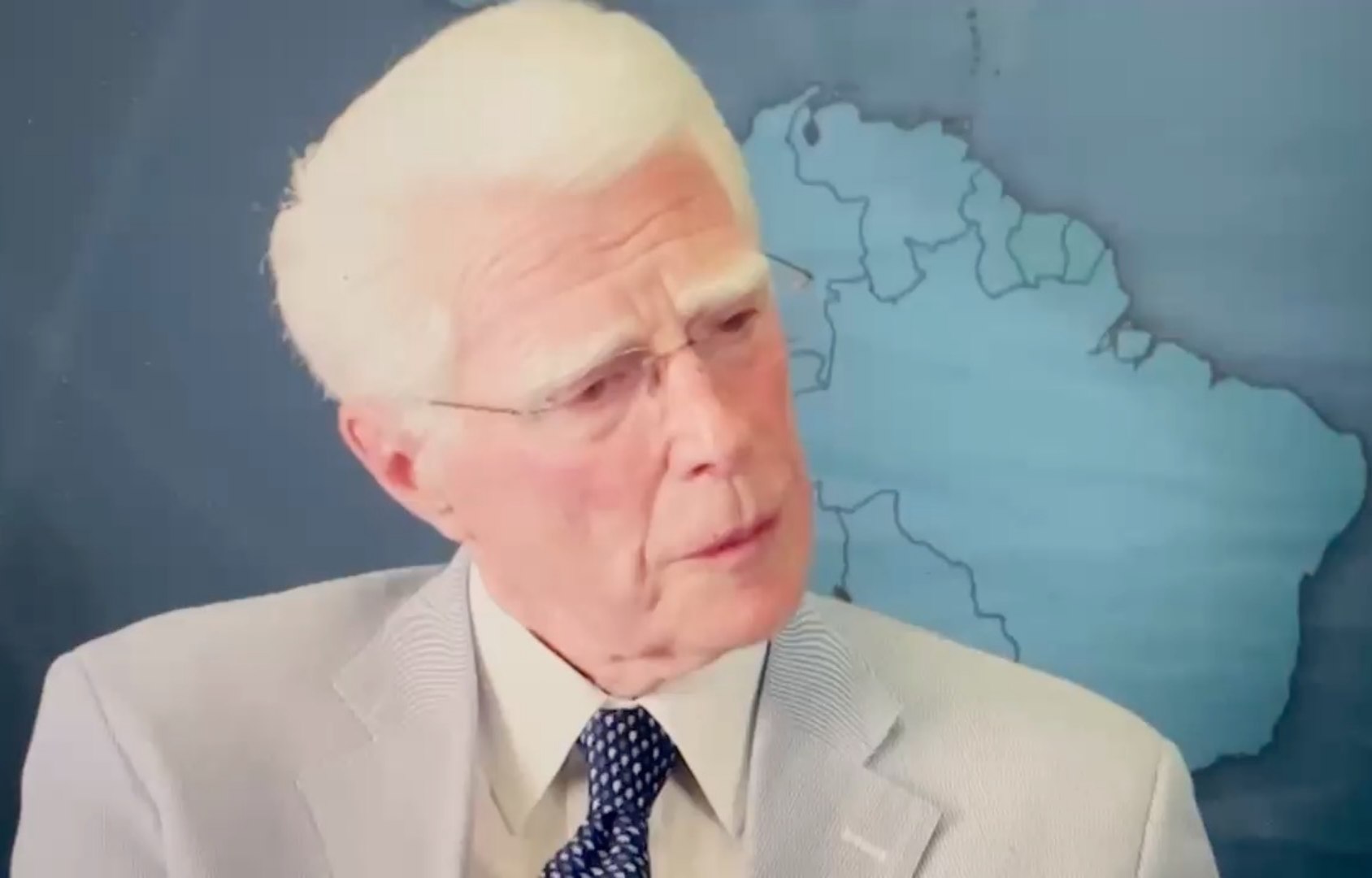


1970s-80s

ERA OF SUBSPECIALTY CARE



1970s-80s



ERA OF SUBSPECIALTY CARE



1970s-80s



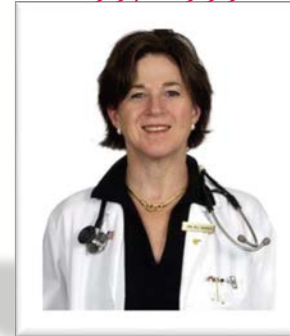
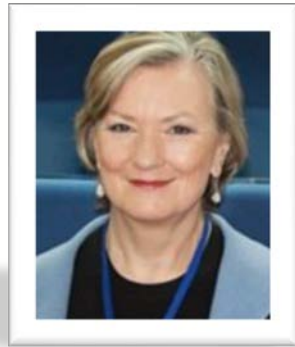
1985-1990



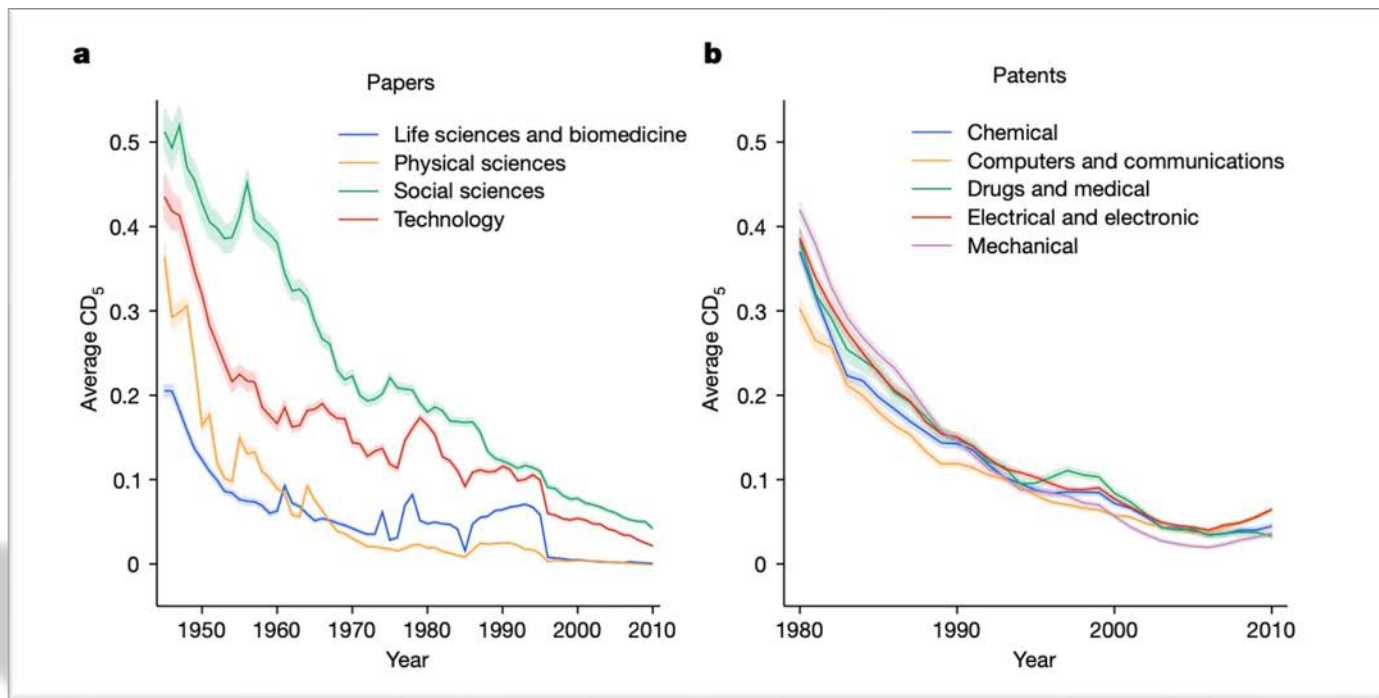
1997-1999



2003



DECLINE OF DISRUPTIVE INNOVATION



INNOVATION OPPORTUNITIES FOR THE FUTURE

PRENATAL LIFE



Prenatal
Treatment
Of CHD

Genetic
Origins

Personalized
Medicine

End Organ
Protection

Effective
lusitropic tx

Eradication
of RHD

Prevention
of CM and PH

Prevention
of Surgical
Heart Block

Accurate
prediction of
Sudden Death risk

Elimination of
the Fontan
Circulation

Better heart
replacement
strategies

Lifelong
Valves and
Conduits

Improved
ACHD
QOL

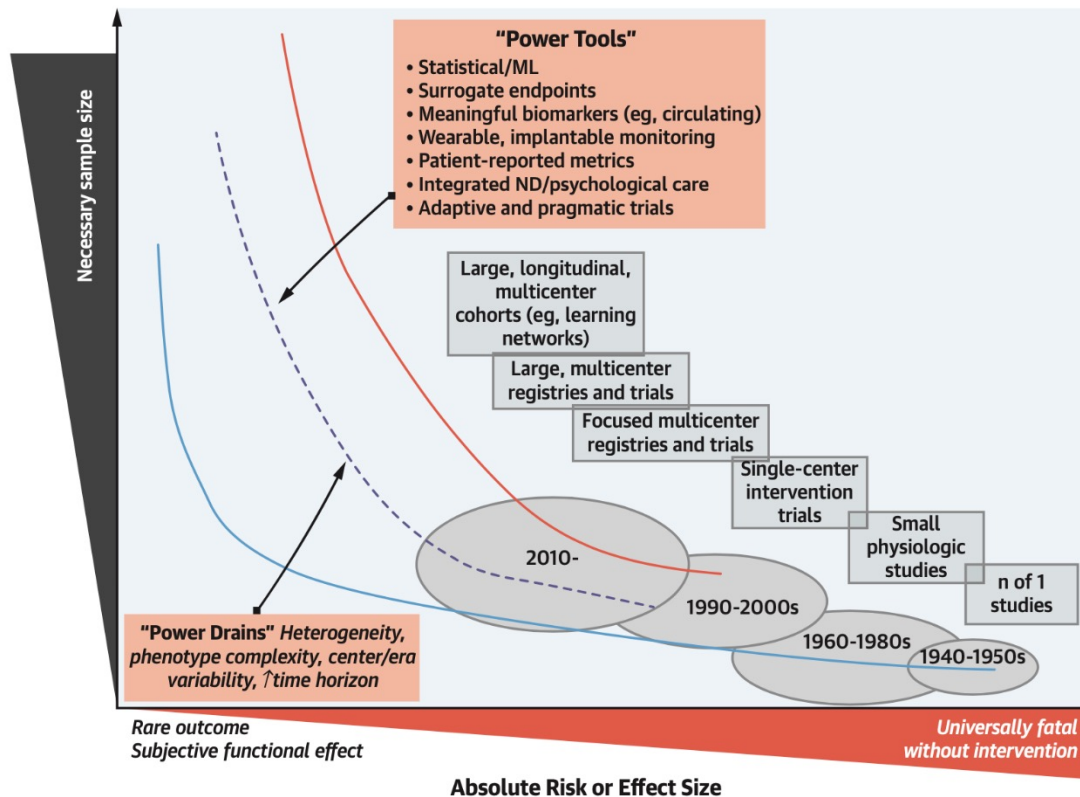
END OF LIFE



THANK YOU



CENTRAL ILLUSTRATION The Changing Landscape of Congenital Heart Disease Research



Opotowsky AR, et al. J Am Coll Cardiol. 2022;80(23):2239-2250.

