



Reproductive & Transformative Technologies

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Alexis Rockman (2000) *The Farm*



Alexis Rockman (1993) *Biosphere: Laboratory*

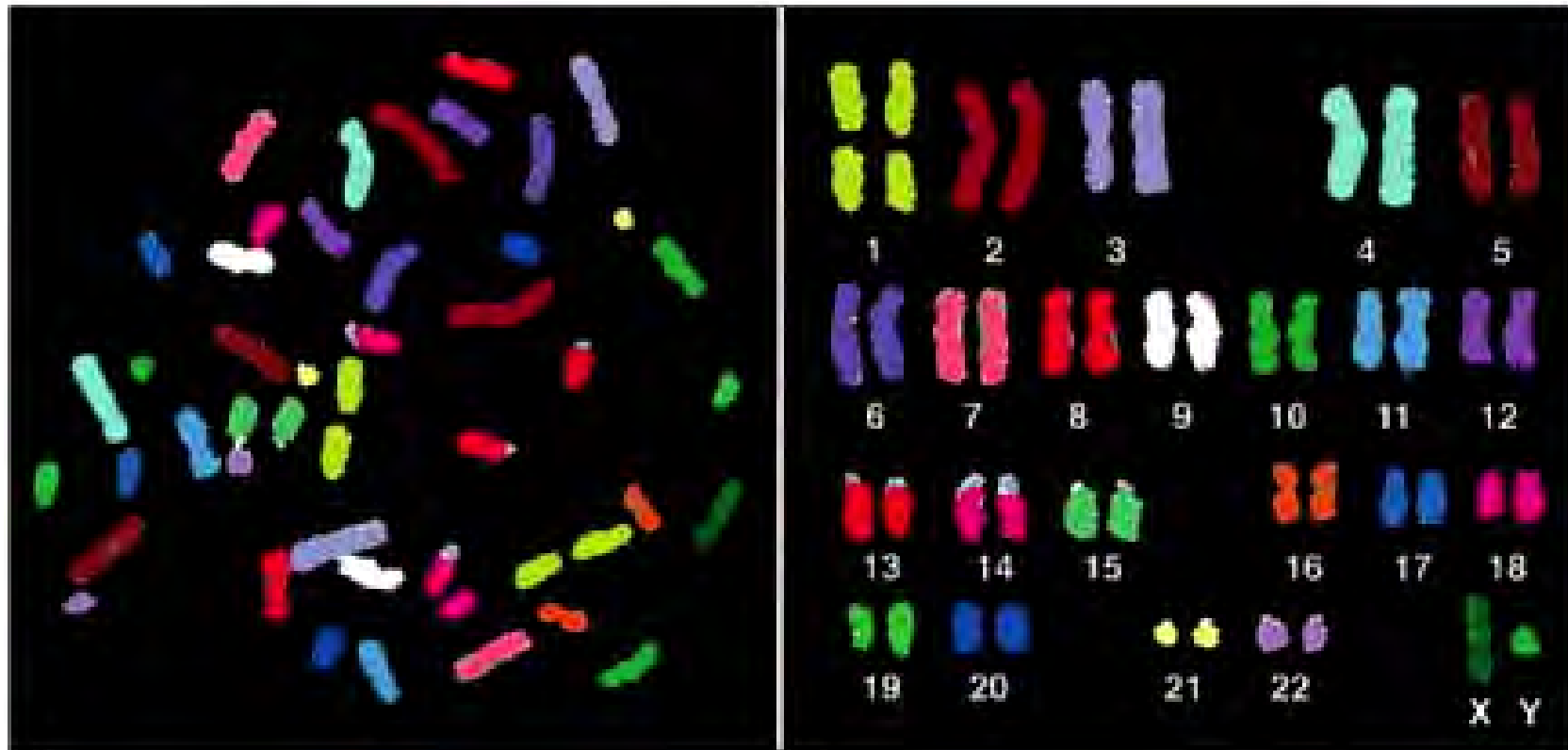




Outline

1. Six IHT projects on genetics and screening
2. Two consequences of genetic screening
3. Cross cutting implications

Genetic screening



(A)

(B)



Screening for genetic disease

1. Genetic screening for susceptibility to disease: the case of haemochromatosis

(Atkinson, Bharadwaj, Clarke, Hutton, Ravine, Worwood).

2. Construction of risk estimates in a cancer genetics clinic

(Prior, Gray, Hughes, Pill, Wood).



Genetic knowledge and understanding

3. Transformations in genetic subjecthood

(Kerr, Cunningham-Burley, Tutton).

4. Definitions of genetic knowledge and pre-implantation genetic diagnosis

(Franklin, Braude, Roberts, Rutherford).

Screening in pregnancy





Innovations in prenatal screening

5. Social and ethnic differences in attitudes and consent to prenatal testing

(Hewison, Ahmed, Cuckle, Green, Hirst, Mueller, Thornton).

6. Social implications of one stop first trimester prenatal screening

(Lewando-Hundt, Sandall, Grellier, Heyman, Pitson, Spencer, Tsouroufli, Williams)



Two consequences of genetic screening

1. Potential creation of genetic iceberg

- a) Individual risk assessment
- b) Family communication
- c) Working with uncertain and ambiguous knowledge

2. Informed choice

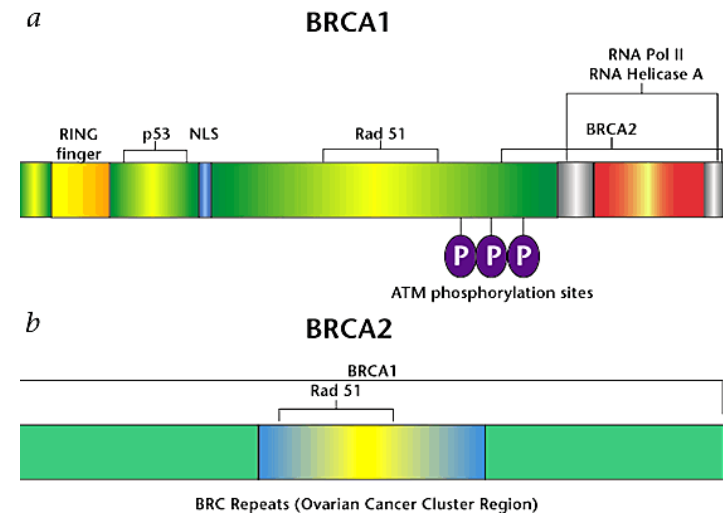
- a) Increase in screened for conditions
- b) Shifts in screening methods



Genetic iceberg: individual risk assessment

- Uncertain status of being neither sick nor healthy
- Low risk more anxious?
- Intended and unintended effects

Uncertain Genetic Risk Status

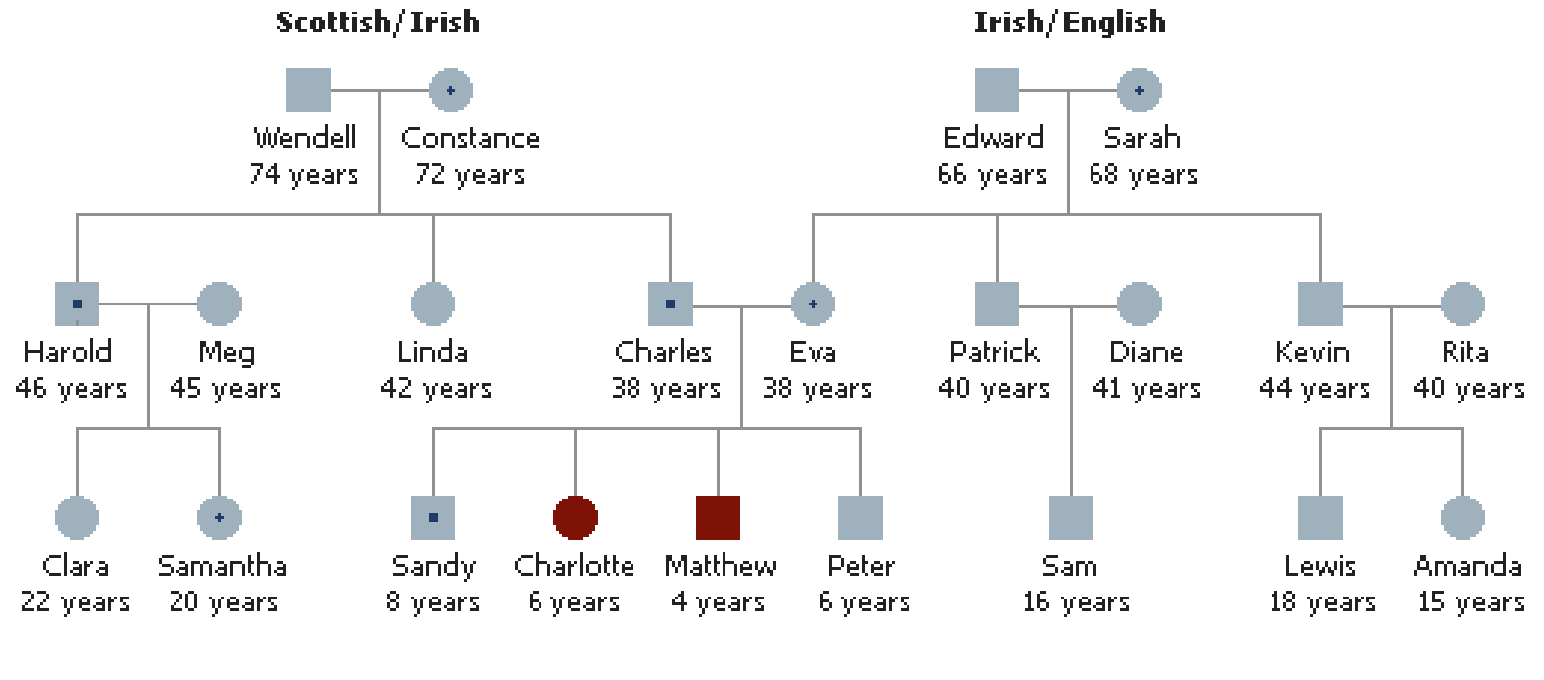




Genetic iceberg: family communication

- Information is individual and familial
- More genetic counselling support

Genetic Pedigrees (CF)



Key

- Male
- Female
- ● Cystic Fibrosis
- ● Healthy carrier of cystic fibrosis gene



Genetic iceberg: uncertain knowledge

- What counts as at risk status?
- Value of uncertainty?
- Changing communication styles



Informed choice: increase in screened conditions

- Cluster individual conditions into categories?
- No dominant attitude to termination
- Unmet need for information and counselling

Nuchal Translucency Measurement



Point of Care First Trimester Technologies

Kryptor



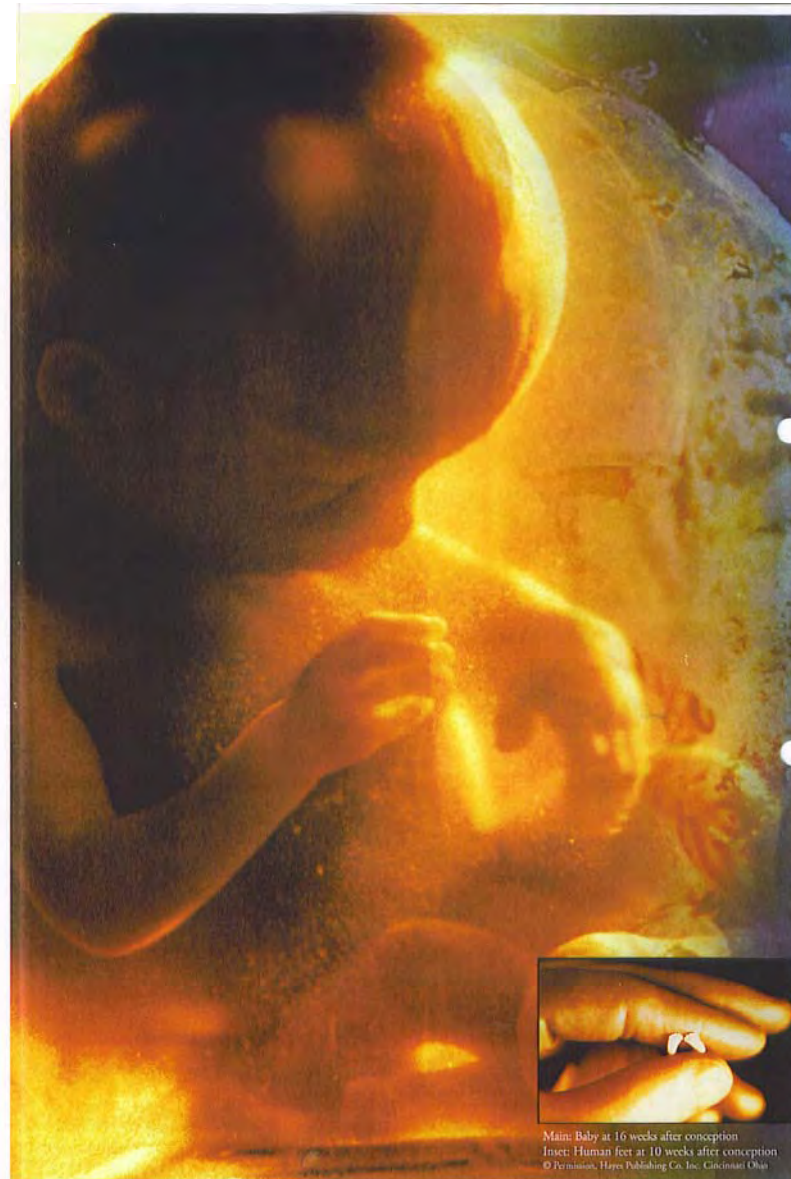
Delfia Express



Informed choice: shifts in screening methods

- 97.5% accepted screening in innovative site
- Screening increasingly routinised
- The end of informed choice?
- Information needs

Technological images: higher quality fetal images



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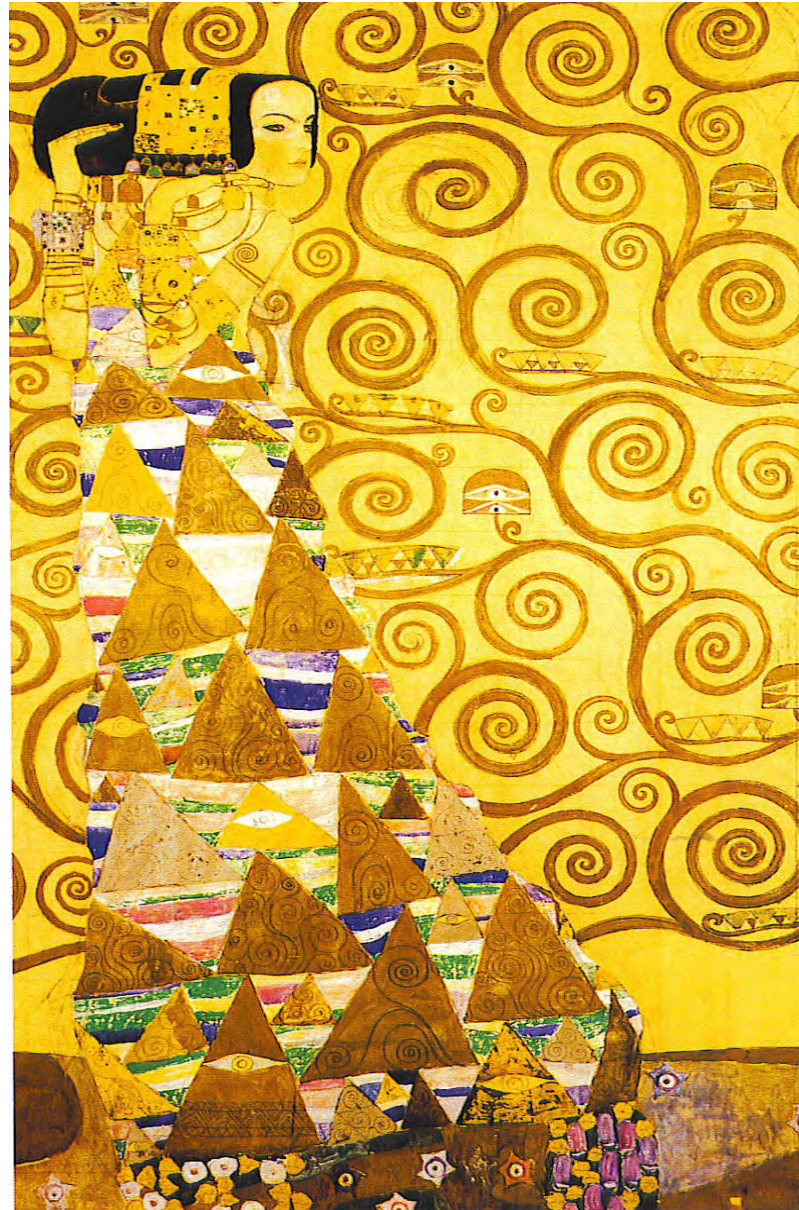




Conclusions: cross cutting implications

- IHTs redefine nature of health and illness
- New knowledge of uncertain meaning
- Routinisation of genetic screening
- Variability in people's risk perceptions

Expectation (Gustav Klimt, 1905)



Earliest image of Andrew Webster: Destined to lead IHT Programme

