

## Heredity and Genetics

### A OK?

24 min; color; c,a

1/2" VHS **CC6013,VH**

Analyzes the effect of vitamin A deficiency on children living in developing countries. Compares efforts to distribute vitamin A capsules in Ghana with sugar fortification practices in Guatemala. Introduces "golden rice," a variety invented in Europe and genetically engineered to contain vitamin A. Incorporates the larger sphere of globalization concerns by discussing the role of small farmers in a market increasingly dominated by genetically modified crops. (BULFROG;c2000)

Agriculture; Food supply; Genetics; Nutrition

### ACCIDENTS OF CREATION

60 min; color; c,a

1/2" VHS **NC2152,VH**

The Secret of Life series - Examines DNA and its role in evolution, pointing out that mutations can have both beneficial and negative effects. Shows a group of plants in Hawaii which are on the verge of splitting into separate species, and a goose which is becoming extinct because its gene pool is no longer diverse. Considers how the same gene which provides protection from malaria can result in sickle-cell anemia in the next generation, and how a genetic mutation was responsible for the development of ruminant mammals. Discusses the differences between humans and chimpanzees, which hold 99% of their genes in common. Narrated by David Suzuki. *Closed Captioned.* (WGBHTV;BBC;FFHS;c1993)

Adaptation (Biology); Evolution; Genetics

### THE AMISH: A FAMILY LEGACY

25 min; color; h,c

1/2" VHS **NC1817,VH**

Genetics Series - Considers the relative influences of heredity and environment on human beings by examining the work of geneticists with the Amish population in Lancaster County, PA. Examines the consequences of inbreeding within this population and the extent to which environmental factors can contribute to the disease characteristics of a population. (BBC;CORT;r1987)

Genetic counseling; Genetics; Heredity

### THE ASCENT OF MAN: A PERSONAL VIEW BY J. BRONOWSKI SERIES

Dr. Jacob Bronowski charts humanity's progress from the vantage point of the scientist/philosopher.

#### THE ASCENT OF MAN: A PERSONAL VIEW BY J. BRONOWSKI, NO. 12: GENERATION UPON GENERATION

55 min; color; h,c,a

1/2" VHS **CA1332,VH**

Reproduces, using time lapse photography, Gregor Mendel's experiments with pea plants, and using microphotography, the cloning of a spotted fish. Features Dr. Bronowski reconstructing "the adventure story of the twentieth century"—the study of DNA. (TIMELIF;p1975)

Genetics; Science—History; Scientists; World history

### BEYOND THE DOUBLE HELIX

25 min; color; h,c

1/2" VHS **NC1820,VH**

Genetics Series - Provides discussions by molecular biologists about research in new areas of genetics not related to the double helix model. Discusses research on the problem of "packing" of DNA to determine how a molecule can be fitted into a cell whose diameter is one millionth the length of the molecule. (BBC;CORT;r1987)

Genetics

### BILL MOYERS WORLD OF IDEAS SERIES

Presents a series of 50 half-hour interviews conducted by journalist Bill Moyers with a wide range of philosophers, historians, scientists, writers, artists, and teachers who share their knowledge about a variety of timely issues. Discusses where America and the world stand as we approach the end of the century. *For descriptions see individual titles:*

MAXINE SINGER [EC2404]

### BIRTH, SEX, AND DEATH

60 min; color; c,a

1/2" VHS **NC2153,VH**

The Secret of Life series - Looks at the master genes that determine our sex, our development, and possibly the length of our lives. Narrated by David Suzuki. *Closed captioned.* (WGBHTV;BBC;FFHS;c1993)

Genetics, Human

### BORN BAD

45 min; color; h,c,a

1/2" VHS **CC6560,VH**

Explores the possibility of a psychological and/or genetic predisposition for criminal behavior. Interviews convicted felons, including convicted murder Patrick Frizzell; prison psychologists; and researchers regarding factors related to biology, chemistry, environment, and gender. Briefly reviews the history of psychological evaluation and therapy of criminals and landmark legislation that has directed methods of treatment. Addresses the controversy over interpretation of research results, particularly by the legal profession. Suggests that if psychopathology has a biological basis, counseling may only help criminals hide their problems and that exposure to violence may make brain cells form chemical pathways that evoke aggressive behavior. (INSIGHM;c1994)

Behavior genetics; Crime and criminals; Psychology, Abnormal; Violence

### BREAKING THE CODE: APPLYING GENETIC TECHNIQUES TO HUMAN DISEASE

38 min; color; h,c,a

1/2" VHS **NC2254,VH**

Examines new techniques in genetic engineering as applied to genetic diseases. Explains and illustrates basic genetic concepts, DNA architecture, genetic coding, heredity, the process for producing human proteins, and testing methods involving Polymerase Chain Reactions (PCR) and electrophoresis. Focuses on the genetic diseases hemophilia, Huntington's disease, and cystic fibrosis. Discusses gene therapy as an option in some cases involving genetic diseases. (HUMANRM;c1996)

Diseases; Genetic counseling; Genetics, Human

### BRINGING UP SUPERBABIES: IS THE SKY THE LIMIT?

27 min; color; h,c,a

1/2" VHS **EC2470,VH**

Explores the origins of human competence and the possibilities of enhancing the native talents and abilities of the very young. Questions the influence of nature versus nurture in developing abilities. Projects what the future holds with new educational computer programs for infants and young children. Ponders if we will produce more Beethovens and Einsteins or merely more children under stress. (WARDMAU;UUT;c1984)

Developmental psychology; Heredity; Infants (From birth to two years of age)

### CANCER: A GENETIC DISEASE

25 min; color; h,c

1/2" VHS **NC1818,VH**

Genetics Series - Evaluates the relative importance that heredity and environment contribute to the risk of developing cancer. Focuses on research in America, Britain, and Japan to determine geneticists' current understanding of the mechanisms of carcinogenesis. (BBC;CORT;r1987)

Cancer; Genetics; Heredity

## Heredity and Genetics

### CHILDREN BY DESIGN

60 min; color; c,a

1/2" VHS **NC2157,VH**

The Secret of Life series - Looks at the extraordinary choices created for ordinary people by the current state of genetic engineering. Narrated by David Suzuki. *Closed Captioned.* (WGBHTV;BBC;FFHS;c1993)

Bionics; Genetic counseling; Genetics, Human

### CLONING: HOW & WHY

31 min; color; h,c,a

1/2" VHS **NC2273,VH**

Examines the process of cloning mammals and some of the reasons for it. Explains sexual reproduction in plants and animals and reveals how cloning differs by taking a non-sexual cell from an adult organism and using it to create a duplicate of the organism. Discusses the breakthrough in cloning which occurred when scientists at the Roslin Institute in Scotland cloned a sheep named "Dolly." Shows how this breakthrough was followed by other scientists at the University of Wisconsin-Madison who were the first to successfully clone cattle. Examines medical and commercial benefits of cloning mammals, as well as the controversies surrounding the possibilities and issues of cloning human beings. (STONBI;HAWKHAS;c1998)

Biotechnology; Embryology; Genetics-Experiments; Microbiology; Reproduction

### CONFRONTING THE KILLER GENE

60 min; color; h,c,a

1/2" VHS **NC1894,VH**

Nova Series - Examines the implications of a new laboratory test that can detect the presence of Huntington's Disease, a hereditary disorder characterized by nerve deterioration and certain death. Focuses on four individuals, including well-known musician Arlo Guthrie, who are all faced with a decision: to test or not to test. *Closed Captioned.* (WGBHTV;CORT;c1989)

Diseases; Genetic counseling

### CONQUERING CANCER

60 min; color; c,a

1/2" VHS **NC2154,VH**

The Secret of Life series - Considers how the discovery that cancer is a disease of the genes precipitated an explosion in our understanding of cancer and the oncogenes that cause it. Narrated by David Suzuki. *Closed Captioned.* (WGBHTV;BBC;FFHS;c1993)

Cancer; Genetics

### DEADLY INHERITANCE

43 min; color; c,a

1/2" VHS **HC1667,VH**

Follows one woman's decision to undergo genetic testing to determine whether or not she will develop Huntington's disease, a progressive, fatal neurological condition that doesn't develop until middle age. Includes footage of family members discussing implications of having someone diagnosed with the disease as well as everyday events leading up to the moment when the mother decides to be tested. (NORTHLT;FANLIGH;c1997)

Diseases; Ethics; Genetic counseling; Heredity; Philosophy (CPI)

### DECODING THE BOOK OF LIFE

58 min; color; c,a

1/2" VHS **NC2017,VH**

Nova Series - Explores the "human genome project," an ambitious worldwide study that hopes to map in exact detail the entire range of human genes. Discusses the potential for ethical, social, and economic abuses inherent in such an undertaking. Uses graphics, historical footage, and interviews to trace the history of genetics and DNA mappings. *Closed Captioned.* (WGBHTV;CORT;c1989)

Genetics

### DECONSTRUCTING SUPPER

47 min; color; h,c,a

1/2" VHS **CC6209,VH**

Investigates the industrialization of our food system, asserting that 70% of processed foods on supermarket shelves in North America contain genetically modified ingredients. Points out that the Canadian and U.S. governments rely on the industries themselves for studies of the safety of genetically modified foods. Explains how scientists move genes from completely unrelated life forms that could never mate into food crops such as soy, corn, and canola to provide toxicity to insect pests, resistance to herbicides, and other qualities desired by large-scale agriculture. Mentions the related issue of unlabelled Bovine Growth Hormone in the milk supply. Contrasts this with the massive public pressure in Europe against GM food and resistance to GM farming in India. Includes interviews with scientists, conservationists, journalists, and farmers. (BULFROG;c2002)

Agriculture; Agriculture-Economic aspects; Food supply; Genetics

### DELICATE BALANCE: UNDERSTANDING HUMAN HEALTH THROUGH BIOTECHNOLOGY

28 min; color; c,a

1/2" VHS **HC1363,VH**

Defines biotechnology as the understanding and use of the body's natural controls to restore and maintain its balance and examines its role in human health care. Presents examples of treating heart attack patients with the TPA protein and hemophiliacs with factor 8, both of which are produced naturally by the human body. Credits these advances in medical treatment to new techniques in genetic engineering. Emphasizes that biotechnology can be used to produce vaccines to prevent diseases. Urges viewers to differentiate between using genetic engineering to alleviate pain and suffering and using it to create genetically near perfect people. (RUTLERT;NEWDIMM;c1988)

Genetics; Medicine

### DEPLETING THE GENE BANK

26 min; color; h,c,a

1/2" VHS **NC2110,VH**

Life Revolution Series - Explains the dangers of depleting the gene bank: when new diseases or predators appear, species may be wiped out because no naturally resistant varieties remain; and the smaller number of varieties offered tend to omit the regionally well adapted ones in favor of more generally adapted plants. The hopeful side of agricultural experimentation includes plant tissue culture, which is the model for a way to produce more and better plants, more quickly. (HARJONA;FFHS;c1990)

Agriculture; Biotechnology; Genetics

### DESIGNER PLANTS

26 min; color; h,c,a

1/2" VHS **NC2109,VH**

Life Revolution Series - Biotechnology is all that stands between a burgeoning world population and starvation. Ordinary milking cows are a disappearing species, plants are genetically matched to growing conditions and are being engineered to kill the caterpillars that attack them. Shows how this is done and explains its benefits, while warning of the dangers inherent in efforts to alter natural evolution. (HARJONA;FFHS;c1990)

Agriculture; Biotechnology; Genetics

## Heredity and Genetics

### DEVELOPMENT OF THE AXOLOTL

8 min; color; c,a

1/2" VHS **NC1493,VH**

Studies the early stages of the development of the axolotl, an aquatic salamander, with emphasis upon genetically determined characteristics. Mates two wild-type, dark axolotls, each heterozygous for white and albino mutations. Uses time-lapse photography to show cleavage to the blastula stage, gastrulation, and neurulation. Observes rotation and elongation of the embryo, followed by identification of the gills, somites, and eyes. Records as the embryo breaks free of the vitelline membrane. Shows the well-developed gills, heart, and eyes in a later state. Concludes by showing the dark, golden albino, white, and white albino larvae. (INUAVC; INUISS;p1977)

Embryology; Genetics

### DEVELOPMENTAL BIOLOGY

19 min; color; h,c,a

1/2" VHS **NC1613,VH**

Investigates the role of genetic programming in the life cycle of an organism. Differentiates the function of differentiation, fertilization, and genes in the development process. Explains the action of hormones on genes and cloning experiments with plants and animals. (CORT; c1982)

Embryology; Genetics

### DNA AND THE EVIDENCE FOR EVOLUTION

20 min; color; h,c,a

1/2" VHS **NC1788,VH**

Evolution Series - Examines the structure and replicating processes of DNA and looks at the effects of genetic mutation. Demonstrates the Lederberg Experiment and reviews the evidence of fossils, structural and biological homologies, adaptation, and natural selection. (FFHS; r1984)

Evolution; Genetics-Experiments

### DNA TECHNIQUES

26 min; color; h,c,a

1/2" VHS **NC2108,VH**

Life Revolution Series - Analyzes the potential misuse of genetic information and demonstrates the potential of genetic engineering to provide the first true preventive medicine program in medical history, as well as the possibility of eradicating single-gene disorders like thalassemia. Explains the dangers of narrowing the genetic pool, and shows the injection of human genetic material into mouse ova so that it merges with the mouse DNA. Asks if this is the first step to eliminating genetic illness-or to eliminating the human race. (PRIMEDP; CANOPTI;FFHS;c1990)

Biotechnology; Ethics; Genetics; Genetics-Experiments; Medicine; Philosophy (CPI)

### THE DOCTOR IS IN SERIES

*For descriptions see individual titles:*

GENETICS [NC2117]

### DOGS AND MORE DOGS

60 min; color; h,c,a

1/2" VHS **NC2420,VH**

Explores the variations and behaviors found in dog breeds by looking at their genetics and evolution. Discusses two theories of the origins of dogs: that humans captured baby wolves and gradually tamed them, or that wolves themselves chose domestication, living near people and in increasingly complex relationship with them. Observes the great variation in coat colors, ear sizes, etc., and links them to varying levels of hormones. Points out that different dogs are bred for different jobs. Genetic diseases have been linked with various breeds, and genetic mapping may be used to prevent these particular problems. Includes animation, graphs, and interviews with dog owners. Interview Mike Levine of UC Berkeley, James Serpell and Karen Overall of the University of Pennsylvania, Ray Coppinger of Hampshire College, Patricia Coppinger of Wolf Park in Indiana, Robert Wayne of UCLA, Elaine Johnston, a Saluki breeder, Charlotte McGowan, a Papillion breeder, Harriet Ritvo of MIT, and Emmanuel Mignot of Stanford University. (WGBHTV; c2004)

Animals, Domestic; Evolution; Genetics

### DROSOPHILA: BIOLOGY AND BEHAVIOR

25 min; color; c,a

1/2" VHS **NC2286,VH**

Evolution Series - Looks at the Hawaiian picture-wing fly, with 508 endemic species, a unique opportunity for the study of evolution. Some species are separated by only small differences in food, egg-laying, or mating preferences. Examines behavioral and physical differences in field and lab environments, and outlines scientists' ongoing efforts to preserve and protect this source of evolutionary information. (BBC;OPENUN; PENNSU;c1992)

Adaptation (Animals); Behavior genetics; Evolution; Insects

### EVOLUTION: MAN TAKES A HAND

26 min; color; h,c,a

1/2" VHS **NC2106,VH**

Life Revolution Series - Explains that the consequences of gene splicing are unforeseeable and describes the scientific and governmental regulations under consideration; describes the sequencing of DNA and how the information gained from reading these sequences, and explains that cells activate only certain genes at certain times. Follows the scientific and economic history of interferon and Interleukin-2. (HARJONA;FFHS;c1990)

Biochemistry; Biotechnology; Evolution; Genetics

### EVOLUTION SERIES

Presents a series of eleven programs that explain the theories of evolution and describes the techniques and experiments that support these theories. *For descriptions see individual titles:*

DNA AND THE EVIDENCE FOR EVOLUTION

[NC1788]

HEREDITY AND MUTATION [NC1787]

### EVOLUTION SERIES

DROSOPHILA: BIOLOGY AND BEHAVIOR

[NC2286]

## Heredity and Genetics

### FIELD OF GENES

44 min; color; h,c,a

1/2" VHS **NC2305,VH**

Examines how technology has allowed genetically manipulated food products to trickle into the food chain. Reveals the methods used to produce genetically manipulated products and how the companies that produce them get farmers to buy these new products. Highlights the concerns many environmentalists and scientists have over the introduction of "new" foods into the environment and food chain. (THOMSJA;BULFROG;c1998)

Agriculture; Biotechnology; Environmental protection; Food chains (Ecology); Genetics

### THE GAY GENE

30 min; color; c,a

1/2" VHS **EC2943,VH**

Focuses on genetic research into the so called "gay gene," from initial interviews with gay men and their families, to the plotting of family trees, the extraction of DNA, and the analysis of samples in the lab. Also considers the findings of the research: that homosexuality is, in part, genetically determined. (FFHS;c1997)

Genetics; Human; Heredity; Homosexuality; Social ethics; Philosophy (CPI)

### THE GENE HUNTERS

52 min; color; c,a

1/2" VHS **NC2404,VH**

Describes an ambitious but controversial scientific enterprise to collect the DNA of native peoples worldwide, before they disappear forever. Follows researchers contacting isolated tribes in South America's forests, deserts, and mountains, as well as in high-tech labs in the U.S. Poses fundamental questions about human origins and migration, native rights, medical ethics, and profit. (FFHS;c1994)

Ethics; Evolution; Genetics; Philosophy (CPI)

### THE GENETIC CODE

11 min; color; c,a

1/2" VHS **NC2298,VH**

Visualizing Cell Processes Series - Uses videomicrography to illustrate cell processes that occur at the molecular and sub-microscopic levels. Includes discussion of the protein nature of life; protein structure; transcription, translation and protein synthesis; gene regulation in prokaryotes; classes of eukaryote DNA; exons and introns; and mutations. (BIOMA;INSIGHM;c1994)

Biochemistry; Cells; Genetics

### GENETIC ENGINEERING AND PROTEIN SYNTHESIS

27 min; color; h,c

1/2" VHS **NC1969,VH**

Modern Biology Series - Uses animation and live photography to explain protein synthesis. Explains "gene splicing" and illustrates how plasmids can have a DNA fragment removed and replaced with a donor DNA fragment or gene, producing valuable substances such as insulin and interferon. Takes a step-by-step approach to illustrate three ways of obtaining donor genes or DNA fragments to insert into plasmids. (BENM;c1987)

Genetics; Protein biosynthesis

### GENETIC GAMBLE

58 min; color; h,c,a

1/2" VHS **NC1761,VH**

Nova Series - Explores the technical and ethical problems of applying breakthroughs in genetic engineering to the curing of inherited human disease. Examines research aimed at altering an individual's genetic code through insertion of gene sequences for missing enzymes into somatic cells. Points out that the potential of human genetics experimentation raises serious moral and ethical concerns. *Closed Captioned.* (WGBHTV;CORT;c1985)

Biotechnology; Diseases; Ethics; Genetic counseling; Genetics; Philosophy (CPI)

### GENETIC TIME BOMB

45 min; color; c,a

1/2" VHS **NC2265,VH**

Discusses the increasing loss of crop diversity world-wide, the increasing potential for environmental disaster due to the loss of genetic material, and the ways in which modern agriculture has contributed to this situation. Examines the history of awareness about the importance of plant diversity beginning with Russian scientist Nikolei Vavilov in 1916 to current grassroots cooperatives and governmental agencies attempting to preserve biogenetic diversity. Documents the financial and personnel problems which plague these organizations and limit their effectiveness. Discusses the history of the Green Revolution which began in the 1960's, when Nobel Laureate Norman Borlaug produced dwarf varieties of wheat, and examines the ways in which the Green Revolution failed. Interviews a number of scientists, activists, and other individuals concerned with biodiversity. (ORPUBRO;VIDEOPR;c1994)

Agriculture; Environmental protection; Food; Genetics

### GENETICALLY ENGINEERED FOOD: ARE WE AT RISK?

34 min; color; h,c,a

1/2" VHS **NC2386,VH**

Probes the biotechnology industry's advances in genetically modified food to shed light on the growing controversy behind these products. Interviews experts on both sides of the debate to bring out the potential risks to the environment and human health posed by food monopolies. Lends weight to farmers' traditional cross-breeding methods in contrast to the ethically questionable practices of companies like Monsanto. Presents the views of the Italian Green Party to highlight the differences between American and European responses to genetically modified (GM) products. (PYRAMID;c2001)

Agriculture—Economic aspects; Food supply; Genetics—Experiments; Nutrition

### GENETICALLY MODIFIED CROPS: HOPE VS. HYPE

22 min; color; h,c,a

1/2" VHS **NC2408,VH**

Investigates the emergence of genetically modified food in the American food market. Explains crop hybridization. Looks at European laws governing labeling for genetically modified food. Includes interviews with scientists, farmers and consumers. (FFHS;c1999)

Advertising; Agriculture—Economic aspects; Botany; Farm produce; Genetics

## Heredity and Genetics

### GENETICS

30 min; color; c,a

1/2" VHS **NC2117,VH**

The Doctor Is In series - Considers the ethical issues developing from the Human Genome Project. Despite the billions of dollars being spent on the project, it is unclear how this new information about the risk of developing genetic diseases or passing them on to one's child will affect people. Considers the ethical issues developing from the Human Genome Project by following three cases at the Dartmouth-Hitchcock Medical Center: a little boy with Menkes Disease, which results in death at an early age; a young woman with Li-Fraumeni syndrome, which has caused her to develop thyroid cancer in her twenties, and a family with a history of Huntington's Disease, in which different members have different attitudes toward genetic testing. Points out that disclosure of genetic conditions may result in loss of jobs and health insurance as well as social ostracism. (DARHIME;FFHS;c1992)

Biotechnology; Ethics; Genetic counseling; Philosophy (CPI)

### GENETICS: MENDEL'S LAWS

14 min; color; h,c

1/2" VHS **NC0935,VH**

Re-creates Mendel's experiments to show how he arrived at his laws of heredity. Explains in detail the laws of dominance, segregation, and independent assortment. Also mentions de Vries and his theory of mutations, Correns and his law of incomplete dominance, and Muller who discovered that genes can be altered by X-rays. (CORT;c1962)

Heredity

### GENETICS SERIES

*For descriptions see individual titles:*

THE AMISH: A FAMILY LEGACY [NC1817]

BEYOND THE DOUBLE HELIX [NC1820]

CANCER: A GENETIC DISEASE [NC1818]

JUMPING GENES [NC1815]

MUSCULAR DYSTROPHY: THE RACE FOR THE GENE [NC1819]

PATTERNS OF DEVELOPMENT [NC1812]

PATTERNS OF DIVERSITY [NC1813]

PATTERNS OF EVOLUTION [NC1814]

PATTERNS OF INHERITANCE [NC1811]

WHEAT: A NEW BREED [NC1816]

### GROWING SYNTHETICS

26 min; color; h,c,a

1/2" VHS **NC2112,VH**

Life Revolution Series - Follows the course of the research into the artificial culture of natural trees, as well as new methods of accelerating plant propagation and growth. Demonstrates how extraordinarily effective gene-spliced bacteria can be—but how, if a mistake is made, we know of no way to undo the combination and bring the menacing new creation back into the test tube. (HARJONA;FFHS;c1990)

Agriculture; Biotechnology; Genetics; Genetics—Experiments

### HEREDITY AND MUTATION

20 min; color; h,c,a

1/2" VHS **NC1787,VH**

Evolution Series - Discusses naturally-occurring and man-induced mutagens, drosophila melanogaster, and genetic investigation. Demonstrates how DNA is extracted and precipitated. (FFHS;r1984)

Genetics—Experiments; Heredity

### HEREDITY AND THE ENVIRONMENT: BEGINNINGS OF A BABY

29 min; color; c

1/2" VHS **EC3133,VH**

Explores how environment affects the fertilization of the egg by sperm in the passing on of genetic traits. Briefly reviews mitosis and meiosis, the inheritance of genes, and heterozygous and homozygous expression of dominant and recessive traits. (INSIGHM;c2005)

Genetics, Human; Heredity; Human reproduction

### HEREDITY AND THE ENVIRONMENT: BLUEPRINTS FOR A BABY

29 min; color; c,a

1/2" VHS **NC2289,VH**

Explores the various aspects of conception, the function of genes and chromosomes and the process of cell division. Also explains sex determination, inherited traits, and the influence and interaction of heredity and environment on a fetus. (MAGNASI;CHDEMEI;c1996)

Genetics, Human; Heredity; Human reproduction

### HOMO SAPIENS 1900

84 min; color; c,a

1/2" VHS **CC5851,VH**

Presents the history of eugenics in Europe, the Soviet Union, and the U.S. Interweaves archival footage with voice-over narration of the debates over eugenics, propaganda, and links to a presumed improved society. Highlights Germany and Russia as center stages for the popularization of eugenics, and discusses the utilization of the theory in nation-building and Nazism. (COHENPE; ICAR;c1999)

Genetics, Human; Heredity; Social values

### HOPEFUL MONSTERS

50 min; color; c

1/2" VHS **NC2349,VH**

Presents the history of and current studies in genetics and evolution. Profiles the research of Mike Levine and Bill McGinnis on the role of regulatory genes in the embryonic development of the fruit fly. Discusses homeotic or control genes, the Cambrian explosion of diversity in the evolution of organisms, gene manipulation and gene mapping. Includes critical opinions of gene manipulation and genetic research. (BBC;FFHS;c1998)

Evolution; Genetics—Experiments; Science—History

### HOW BABIES GET MADE

58 min; color; h,c,a

1/2" VHS **NC1795,VH**

Nova Series - Explores the recent research in genetic differentiation, which investigates how a single fertilized egg cell can develop into a complete organism. Provides evidence which suggests that a "master" set of genes is responsible for all genetic duplication. *Closed Captioned.* (WGBHTV;CORT;r1987)

Embryology; Genetics

### HUMAN ANIMAL SERIES

*For descriptions see individual titles:*

NATURE/NURTURE [CC3489]

### HUMAN GENOME

26 min; color; h,c,a

1/2" VHS **NC2107,VH**

Life Revolution Series - Shows how genes are being located and identified, and discusses the moral and psychological dilemmas confronting doctor and patient when they know that the patient will develop an untreatable disease like Huntington's chorea. Summarizes the discovery in the 1950s that genes were sections of the long strand of hereditary material, DNA; the development of the techniques in the 1970s of cutting and splicing that strand; and the efforts in the 1990s to label the individual genes that carry beneficial or unwanted characteristics. (PRIMEDP;CANOPTI;FFHS;c1990)

Biotechnology; Diseases; Ethics; Genetic counseling; Genetics; Philosophy (CPI)

## Heredity and Genetics

### IMMORTAL THREAD

60 min; color; c,a  
1/2" VHS **NC2151,VH**

The Secret of Life series - Uses the childhood of David Suzuki, the narrator, as the starting point of an explanation of the process of genetic inheritance and of the function of DNA. Shows how recent discoveries and experiments confirm that all of life is related through the same ancient genetic instructions. Uses computer-animated models, on-location footage of experiments, narration and commentary, and interviews. *Closed Captioned.* (WGBHTV;BBC;FFHS;c1993)  
Genetics; Heredity

### IS CRIMINAL BEHAVIOR GENETIC?

50 min; color; c,a  
1/2" VHS **CC5950,VH**

Examines the possibility that criminal and anti-social behavior is genetic. Presents arguments and studies that support and deny the possibility. Interviews scholars, convicted criminals, former criminals, and families. Discusses social factors, environmental stress factors, use of drugs to treat oppositional or defiant behaviors, the conflict between genetics and free will in terms of the law, and the possible uses of genetic arguments in legal defense and prosecution. (FFHS;c1996)  
Behavior genetics; Crime and criminals; Genetics; Human; Law

### IS IT A BOY OR A GIRL?

60 min; color; c,a  
1/2" VHS **CC6065,VH**

Investigates the phenomenon of intersexuality, which occurs in one in every 2,000 births in the U.S., and in 65,000 births annually worldwide. Briefly explains the chromosomal and hormonal problems that can result in ambiguous sexual anatomy. Provides interviews with psychologist Howard DeVore, himself an intersex, and pediatric urologist Kenneth Glassberg, who have differing views on treatment for these conditions. Interviews people who have true hermaphroditism (mosaic XX-XY), congenital adrenal hyperplasia, hypospadias, androgen insensitivity syndrome, and 5-alpha-reductase syndrome, which occurs with unusual frequency in parts of the Dominican Republic. Shows how the local culture accommodates to children who appear female at birth but masculinize at puberty. Points out that there is little data on patient satisfaction with gender assignment, and follows intersex individuals who are lobbying Congress to prevent sex-assignment surgery on young children. (ISNA)

Gender identity; Genetics; Human; Medicine; Sex differences (psychology); Sex-Research; Social ethics; Philosophy (CPI)

### JUMPING GENES

25 min; color; h,c  
1/2" VHS **NC1815,VH**

Genetics Series - Follows the development of antibiotic-resistant bacteria, focusing on small pieces of DNA, called transposons, which can move within a bacterium and between different species, bringing about genetic changes. Examines a collection of bacteria from the pre-antibiotic era to determine if antibiotic-resistant genes have always been in the bacterial chromosome. (BBC;CORT;c1987)

Bacteria; Genetics

### LIFE REVOLUTION SERIES

Examines the nature of genetic science, which promises to transform the air we breathe, the food we eat, the fuel we burn, the diseases we get, even human beings themselves. The promises and the dangers of genetic engineering and its scientific bases, are looked at. Each program focuses on a particular aspect of this revolutionary field.

DEPLETING THE GENE BANK [NC2110]  
DESIGNER PLANTS [NC2109]  
DNA TECHNIQUES [NC2108]  
EVOLUTION: MAN TAKES A HAND [NC2106]  
GROWING SYNTHETICS [NC2112]  
HUMAN GENOME [NC2107]  
RECOMBINANT TECHNOLOGY [NC2114]  
SOWING THE SEEDS OF DISASTER [NC2111]  
SUPERANIMALS, SUPERHUMANS? [NC2115]  
WHITHER BIOGENETICS? [NC2116]

### THE LYNCHBURG STORY

51 min; color; h,c,a  
1/2" VHS **CC5064,VH**

Discusses the theory of eugenics and the forced sterilization of over 8,000 people at the Lynchburg Colony of Virginia from 1927 to 1972. Examines the background of the theory of race preservation, its popular acceptance in pre World War II society, and the Supreme Court case that opened the way for mass sterilization in the United States. Emphasizes that many, if not most, sterilizations were performed to reduce the incidence of "feeble mindedness," whose victims included the poor, the uneducated, girls who had been raped, and others who were felt to be socially undesirable. Speaks with several people who were sterilized about the experience and the effect it has had on their lives. (EADIEBR;FILMK;c1993)  
Ethics; Genetics; Human; Human rights; Population; Science-History; Philosophy (CPI)

### MACNEIL/LEHRER NEWSHOUR SERIES

*For descriptions see individual title:*  
NEWS HOUR WITH JIM LEHRER: MARCH 16,  
2000 [CC5744]

### MAKING BABIES PERFECT

51 min; color; c,a  
1/2" VHS **HC1494,VH**

On the Eighth Day Series - Provides a critical appraisal of the uses of genetic technology. Includes interviews with such people as scientist and feminist Ruth Hubbard and disability activist Marsha Saxton. (BASENGW;WOMENMM;c1992)

Biotechnology; Ethics; Genetics; Philosophy (CPI)

### MAXINE SINGER

28 min; color; c,a  
1/2" VHS **EC2404,VH**

Bill Moyers World of Ideas Series - Presents an interview between Bill Moyers and Maxine Singer, a biologist specializing in genetics who is also president of Carnegie Institution in Washington. Features Dr. Singer's special concerns about the ethics of science and the dilemmas of choice, focusing on the consequences that accompany scientific research. Discusses her work as organizer of the Asilomar Conference in 1975, where she and other scientists drew up guidelines for the ethics of genetic research. (MCCABE;PBSV;c1988)  
Ethics; Genetics-Experiments; Science-Methodology; Philosophy (CPI)

### MODERN BIOLOGY SERIES

*For descriptions see individual titles:*  
GENETIC ENGINEERING AND PROTEIN  
SYNTHESIS [NC1969]

## Heredity and Genetics

### MOTHERLAND: A GENETIC JOURNEY

90 min; color; h,c,a

1/2" VHS **NC2415,VH**

Illustrates the science, ethics, personal dimensions, and history of the field of human genetics and how it has developed over the years to produce the modern database system of genetic mapping. Depicts the modern implications of genetic tracing of ancestry from both a western and non-western perspective. Evaluates the potential hazards and byproducts with regard to genetic mapping and testing. Follows three people of African descent as they test their DNA and then visit Africa and the Caribbean as part of a special program to help the descendants of slaves reclaim some of the history that was lost by the slave trade. Addresses a wide range of identity issues related to the African diaspora. Interviews several geneticists, including Fatimah Jackson and Rick Kittles. (FILMK;c2003)

Blacks; Genetics; Human; Slavery

### MOTHERLAND: MOVING ON

60 min; color; j,h,c,a

1/2" VHS **CC6593,VH**

Follows up a British production, "Motherland: A Genetic Journey," in which three British citizens of African descent were chosen for genetic testing to identify their hereditary past. Two years later, the subjects travel to locations in Africa, Jamaica, the U.S. and Britain to meet with distant relatives. They offer personal insights and reflections before, during, and after the arranged meetings while simultaneously tackling issues of race and identity. (FILMK;c2004)

Blacks; Genetics; Human; Heredity; Slavery

### THE MOUSE AS A MODEL ORGANISM

30 min; color; h,c,a

1/2" VHS **NC2325,VH**

Because of their genetic similarities to humans, mice are often used by scientists to study aspects of mammalian biology that have direct implications for human health. Shirley Tilghman examines recent advances in the study of the mouse, explaining how the Human Genome Project has helped identify genes that function similarly in mice and humans. (MONLARP;INSIGHM;c1996)

Genetics

### MOUSE THAT LAID THE GOLDEN EGG

55 min; color; j,h,c,a

1/2" VHS **NC2156,VH**

The Secret of Life series - Explores the ethical questions surrounding recent developments in genetic engineering in which animals of one species are given genes of another for specific medical and economic purposes. Presents basic explanations with demonstrations of the techniques and concepts involved while discussing both the possible positive medical benefits and the ethical arguments against this technology. Uses interviews with representatives from the National Wildlife Federation, the Humane Society, several genetic engineering companies, and activist Jeremy Rifkin as well as narration by David Suzuki. *Closed Captioned*. (WGBHTV;BBC;FFHS;c1993)

Biotechnology; Ethics; Genetics-Experiments; Philosophy (CPI)

### MUSCULAR DYSTROPHY: THE RACE FOR THE GENE

50 min; color; h,c

1/2" VHS **NC1819,VH**

Genetics Series - Follows the race between scientists to be the first to isolate the gene that causes Duchenne muscular dystrophy. Explains how the site of the gene has been identified on the X chromosome, and how this information is being used to develop probes for the detection of carriers of the disease. Points out that although analysis of family pedigrees coupled with prenatal diagnosis can help prevent this disease, the only hope for sufferers is the development of some form of treatment. (BBC;CORT;r1987)

Diseases; Genetic counseling; Genetics; Human

### NATURE AND NURTURE: HEREDITY AND ENVIRONMENT

30 min; color; c

1/2" VHS **EC3132,VH**

Examines the relationships between heredity and environment in the determination of personality and physical characteristics in humans. Uses examples from the Minnesota study of identical twins to compare the influence of genetics and environment. Describes dominant and recessive traits, genotypes and phenotypes, and the use of genetic counseling to detect and treat genetic abnormalities before or shortly after birth. (ICAR;c2003)

Behavior genetics; Genetics; Human

### NATURE/NURTURE

52 min; color; c,a

1/2" VHS **CC3489,VH**

Human Animal Series - Looks at different influences on human behavior and how some characteristics are inherited and others are acquired. Examines a study done on identical twins separated at birth to answer questions about nature vs. nurture behavioral influences. Illustrates that knowing what is genetic, chemical, or voluntary in behavior helps people adapt the environment to themselves and themselves to the environment. Hosted by Phil Donahue. (FFHS;c1986)

Genetics; Heredity; Learning; Psychology of

### NEWS HOUR WITH JIM LEHRER: MARCH 16, 2000

60 min; color; c,a

1/2" VHS **CC5744,VH**

Macneil/Lehrer Newshour Series - Reports the top news of the day for March 16, 2000. Summarizes the national news and includes reports on the stock market. Includes reports on truck drivers' political action against rising fuel prices, on Taiwan and on Albanian Kosovars. Features the "race" to map the human genome and profiles the two major competitors who seek to patent aspects of use of the genomic information. Profiles the NCAA March Madness marketing blitz and asks whether collegiate basketball players, who make so much money for their schools and for the NCAA, should not also receive pay. IU Professor Murray Sperber is briefly interviewed and suggests that they should. Profiles the Electronic book, which was given major support by the publication of a Stephen King short story exclusively in electronic form. Interviews publishers about the future of print and how electronic publishing will affect the industry. (MACNLEH;PBSV;c2000)

Computers; Genetics; Human; Sports

### NOVA SERIES

*For descriptions see individual titles:*

CONFRONTING THE KILLER GENE [NC1894]

DECODING THE BOOK OF LIFE [NC2017]

GENETIC GAMBLE [NC1761]

HOW BABIES GET MADE [NC1795]

THE SEARCH FOR THE DISAPPEARED [CC3630]

SEEDS OF TOMORROW [NC1758]

## Heredity and Genetics

### NUCLEAR TRANSPLANTATION

12 min; color; h,c,a

1/2" VHS **NC1448,VH**

Reveals, through photomicrography and time-lapse sequences, the research technique of nuclear transplantation using two mated dark axolotls, each heterozygous for white and albinism. Shows the following process: fertilized eggs are collected, their cells divide and are then disaggregated into single cells; nuclei from these are selected for donor transplant, drawn from a random blastula; unfertilized white axolotl eggs are activated by electric shock and their nuclei destroyed by ultraviolet irradiation; then a donor-cell nucleus is carefully injected into each of a number of eggs which divide as usual. Observes that the resulting embryos eventually form into a clone of dark larvae. (INUAVC;INUISS; p1976)

Embryology; Genetics

### ON THE EIGHTH DAY SERIES

Raises important questions about why new reproductive and genetic technologies are being developed and how they may affect the lives of individual women and society as a whole.

MAKING BABIES PERFECT [HC1494]

### PATTERNS OF DEVELOPMENT

25 min; color; h,c

1/2" VHS **NC1812,VH**

Genetics Series - Studies the role of genes in building up the complex forms of living creatures by analyzing mutations that drastically alter the body plan of an embryo. Examines the embryos of frogs and fruit flies to analyze how body parts as different as eyes, legs, or wings can arise from a set of initially identical cells. Discusses molecular techniques coming into use for determining which genes are active at any given stage of development. (BBC;CORT;r1987)

Embryology; Genetics

### PATTERNS OF DIVERSITY

25 min; color; h,c

1/2" VHS **NC1813,VH**

Genetics Series - Discusses the current controversies surrounding the theory of evolution, including the concept of random molecular drift of individual proteins versus an organism's response to changes in the environment. Considers ways in which such changes might be incorporated in the genetic material. (BBC;CORT;r1987)

Evolution; Genetics

### PATTERNS OF EVOLUTION

25 min; color; h,c

1/2" VHS **NC1814,VH**

Genetics Series - Highlights field studies in evolutionary biology, which concerns the dynamic interaction between organisms and their environment. Considers the common forces operating in different habitats that give rise to the diversity of living forms. Suggests ways in which organisms may select, modify, and transform their environments, setting the stage for their own evolution. (BBC;CORT;r1987)

Evolution; Genetics

### PATTERNS OF INHERITANCE

25 min; color; h,c

1/2" VHS **NC1811,VH**

Genetics Series - Demonstrates how it is possible to trace back the ancestry of a contemporary species by using the basic rules of genetics. Examines the research of Dr. John Turner of the University of Leeds on South American butterfly populations, which links specific genetic changes with variations in the patterns on butterflies' wings. (CORT;r1987)

Butterflies; Genetics

### PRENATAL TESTING: THE BURDEN OF KNOWING

54 min; color; c,a

1/2" VHS **HC1557,VH**

Discusses prenatal diagnosis, pregnancy complications and decision making. (CONQUWE;DRAKELD;DIRCIN; c1994)

Genetic counseling; Pregnancy; Prenatal influences

### QUESTION OF GENES: INHERITED RISKS

120 min; color; c,a

1/2" VHS **NC2276,VH**

Explores the ethical, moral, medical, and insurability implications of the powerful new technology of genetic testing as it follows the personal journeys of individuals and families who discover potential inherited genetic weaknesses involving cystic fibrosis, heart disease, Alzheimer's disease, and breast cancer. (CHEDANP; ORPUBRO;c1997)

Genetic counseling

### RACE THE POWER OF AN ILLUSION SERIES

#### EPISODE ONE: THE DIFFERENCE BETWEEN US

56 min; color; c,a

1/2" VHS **CC6253,VH**

Explores how recent scientific discoveries have toppled the concept of biological race. Follows 12 students working in Cold Spring Harbor Lab with Scott Bronson to sequence and compare their DNA and mitochondrial DNA (mtDNA), as they determine that an individual's closest genetic match is not always aligned with race. Discusses the evolution of disease, genetic traits, and skin color differences to trace how race became an idea that is so often considered biologically based. Outlines the work of Charles Davenport's Eugenics Record Office in gathering data to support research on the inheritance of human traits. Points out that early eugenics workers were unaware of the role of DNA and genes as physical markers in inheritance, and they often tried to trace inheritance of such complex phenomena as mental illness, intelligence, and athletic ability. Analyzes former laws that banned interracial marriage in an attempt to prevent "mongrelization" of the races. Determines through mtDNA data that each human has crossed ethnic or racial lines at some point in ancestral heritage. Features comments by Pilar Ossorio, Alan Goodman, Joseph Graves, Jr., Stephen Jay Gould, Mary Claire King, and Eric Nisbet-Brown. *Closed captioned.* (CANEWSR;c2003)

Ethnic groups; Genetics, Human; Prejudices and antipathies

## Heredity and Genetics

### EPISODE TWO: THE STORY WE TELL

56 min; color; c,a

1/2" VHS **CC6254,VH**

Questions the belief that race is a concept that human beings have always held. Traces the race concept through the European conquest of the Americas. Starts with the influence of European Enlightenment philosophy on Thomas Jefferson, the slave-holding president who wrote that "All men are created equal." Surveys the transatlantic slave trade and the treatment of Native Americans, from early assimilation of Cherokees into the Colonial mainstream to the 1830 Indian Removal Act. Provides examples of evolving racial ideologies displayed at the 1904 World's Fair and in popular American magazines during the 1920s. Discusses common systematic errors in historical studies which purported racial hierarchies. Includes commentary from historians Paul Finkelman, Robin D. G. Kelley, James Horton, Theda Perdue, George M. Frederickson, Mia Bay, Reginald Horsman, Ira Berlin, Mae Ngai, Matthew Pratt Guterl, anthropologists Audrey Smedley and Lee D. Baker, policy analyst for the Cherokee Indians Richard Allen, and author Scott Malcomson. *Cloesed captioned.* (CANEWSR;c2003)  
Ethnic groups; Genetics, Human; Prejudices and antipathies

### RECOMBINANT TECHNOLOGY

26 min; color; h,c,a

1/2" VHS **NC2114,VH**

Life Revolution Series - Vaccine developers are using genetic engineering techniques to create more effective vaccines that are cheaper to produce and easier to deliver. The diseases for which vaccines are being sought range from AIDS to colon cancer; the long-range goal is to understand the role of oncogenes and therefore to help solve the underlying problem of cancer itself. (HARJONA;FFHS;c1990)  
Biotechnology; Cancer; Diseases; Genetics

### RICE: A PRECIOUS COMMODITY

31 min; color; j,h,c

1/2" VHS **CC6485,VH**

Focuses on the history of rice production, its genetic properties, modern production, processing, and development into a variety of different products. Discusses the geographic distribution of rice production past and present and its importance as a primary food source. Addresses environmental and health issues regarding the production of rice as well as the development of genetically modified strains. Uses maps and other illustrations. (FFHS;c2003)  
Agriculture; Agriculture-Economic aspects; Food supply; Genetics

### THE SEARCH FOR THE DISAPPEARED

58 min; color; h,c,a

1/2" VHS **CC3630,VH**

Nova Series - Follows Argentine and American scientists asked to help locate kidnapped children and to identify thousands of dead in the aftermath of a military reign of terror in Argentina from 1976 to 1982. Presents techniques used in identification of exhumed human remains and discusses the role of a genetic data bank in determining the identity of kidnapped children. (WGBHTV;CORT;r1987)  
Anthropology; Argentina; Genetics, Human; Human rights; CLACS

### THE SECRET OF LIFE SERIES

ACCIDENTS OF CREATION [NC2152]

BIRTH, SEX, AND DEATH [NC2153]

CHILDREN BY DESIGN [NC2157]

CONQUERING CANCER [NC2154]

IMMORTAL THREAD [NC2151]

MOUSE THAT LAID THE GOLDEN EGG [NC2156]

WHO ARE YOU? [NC2158]

### THE SECRET OF SEX: FINDING THE ESSENCE OF MAN AND WOMAN

50 min; color; c,a

1/2" VHS **CC6210,VH**

Focuses on research into sex hormones and their influence on body and brain chemistry. Interviews a person with androgen insensitivity syndrome who considers herself a woman despite having a Y chromosome, and a transgender XX woman undergoing testosterone treatments to acquire male characteristics. Follows research underway on the pervasive effects of sex hormones on everything from cognitive functioning, strength and reaction time, finger length, to children's play. Discusses the role of chromosomes in setting off the biochemical cascade that creates sexual differences, particularly the SRY gene on the Y chromosome, which "makes" a male. Interviews leading American and British research scientists and scholars, including Roy Levin, Peter Goodfellow, Marc Breedlove, John Burn, Ruben Gur, John Manning, Lee Silver, and Melissa Hines. (FFHS;c2002)  
Genetics, Human; Human reproduction; Sex-Research

### SEEDS OF TOMORROW

58 min; color; i,j,h,c,a

1/2" VHS **NC1758,VH**

Nova Series - Visits Ethiopia, Greece, and Peru to examine the genetic heritage of our foods and the worldwide efforts to save the seeds plant breeders use to create new and better crops for the future. Shows how the advanced agricultural technologies of the "green revolution," developed to increase the food supply, threaten the vigor of the gene pool by letting traditional strains die out in favor of hybrid monocultures. (WGBHTV;CORT;c1985)  
Agriculture; Food supply; Genetics; Seeds

### SEX GAMES

26 min; color; h,c,a

1/2" VHS **HC1531,VH**

Argues that sex testing as performed at the Olympic Games is inaccurate and unfair, and ruins the careers of many female athletes. Discusses the fact that some women have XY (male) genotypes, yet because of hormonal problems present a normal female appearance with no "masculine advantage." Argues that these individuals are women and should be allowed to compete as such. Outlines the IOC's stated purposes in keeping the tests, discusses the counter arguments, and talks with women who have been unfairly disqualified about what it has done to them personally and as athletes. (MARRISA;FILMK;c1993)  
Gender identity; Genetics, Human; Olympic games; Sex-Research; Women

### SILENT ANGELS: THE RETT SYNDROME STORY

50 min; color; c,a

1/2" VHS **HC1693,VH**

Reports on Rett Syndrome, a neurological disorder discovered in 1965 and almost always found in girls. Profiles families living with this disorder as they discuss their infant daughters' mysterious regression, including seizures, repetitive hand movements, and lack of speech. Explains the 1999 breakthrough discovery of a mutation on the X chromosome that is associated with many cases of Rett Syndrome. Narrated by Julia Roberts. (FFHS;c2000)  
Diseases; Genetics, Human; Nervous system

## Heredity and Genetics

### SKIN DEEP: THE SCIENCE OF RACE

60 min; color; c,a

1/2" VHS **NC5389,VH**

Demonstrates that, although skin color shapes and defines our self-image as well as our impressions and expectations of others, an individual may have more in common genetically with an individual of another race than with someone else in one's own racial group. Interviews various scientists who point out that race, while a socially powerful construct, does not have a genetic basis. Shows various groups working to live together in Toronto, one of the world's most multicultural cities. (MATHUVI;FILMK;c1995)

Ethnic groups; Genetics, Human; Prejudices and antipathies

### SOWING THE SEEDS OF DISASTER

26 min; color; c,a

1/2" VHS **NC2111,VH**

Life Revolution Series - Shows how PCB-eating organisms are designed, tested, and produced, how frost-resistant plant strains are produced, and what the dangers are in introducing alien substances into our ecosystems. Focuses on the pollution at Love Canal, which epitomizes the problems technology creates through its inability to forecast the side-effects of new processes. (HARJONA;FFHS;c1990)

Biotechnology; Genetics; Pollution

### STEM CELLS

24 min; color; h,c

1/2" VHS **NC2387,VH**

Provides an introduction to stem cell research and its significance to related fields such as animal cloning and the Human Genome Project. Distinguishes between two basic types of stem cells: embryonic, which grow indefinitely and can be turned into healthy blood, muscle, or other cells with the right signal; and adult stem cells, which can only become one type. Talks to experts about the importance of this research for future treatments of such conditions as diabetes, Parkinson's and heart disease. Listens to ethicist Dr Alta Charo discuss the debate over stem cell research and the need to explore the freedom of scientific inquiry. (HAWKHAS;c2002)

Diseases; Embryology; Ethics; Genetics-Experiments; Philosophy (CPI)

### SUPERANIMALS, SUPERHUMANS?

26 min; color; h,c,a

1/2" VHS **NC2115,VH**

Life Revolution Series - Presents the phenomenon of "superanimals," patented animal species such as the "geep"-part goat, part sheep-which have been genetically engineered to take advantage of the best traits of two or more species. Questions whether the human species might undergo biological engineering, as women can already to some extent select the genetic profiles of the children they choose to bear. Considers some of the ethical and economic dilemmas intrinsic to genetic engineering, such as the question of who owns an individual's DNA. (HARJONA;FFHS;c1990)

Ethics; Evolution; Genetics; Philosophy (CPI)

### VISUALIZING CELL PROCESSES SERIES

Helps draw connections between the inferred molecular processes of the cell and the actual functioning of cells and entire organisms. Covers DNA replication, osmosis, motor protein action, transcription, photosynthesis, and cellular respiration.

THE GENETIC CODE [NC2298]

### WHEAT: A NEW BREED

25 min; color; h,c

1/2" VHS **NC1816,VH**

Genetics Series - Studies the combination of traditional and modern approaches of wheat breeders in their search for crops of the future. Discusses the successes and problems that face tomorrow's wheat breeders of Great Britain and the United States. (CORT;r1987)

Food supply; Genetics

### WHITHER BIOGENETICS?

26 min; color; h,c,a

1/2" VHS **NC2116,VH**

Life Revolution Series - Looks at the problems and potential of biotechnology. Possible benefits include more and better vaccines; an end to cancer, AIDS, and heart attacks; and methods for cleaning up toxic wastes, while potential risks include the creation of dangerous and irreversible side effects, the political use of genetic information, the development of bioweaponry, and the perversion of scientific breakthroughs for private gain. (HARJONA;FFHS;c1990)

Biotechnology; Ethics; Genetics; Philosophy (CPI)

### WHO ARE YOU?

60 min; color; c,a

1/2" VHS **NC2158,VH**

The Secret of Life series - Considers whether genes really determine human destiny by surveying research that attempts to separate genetic contributions from environmental effects. Suggests that genes set up machinery in the nerves that allows them to change in response to environmental cues; genes allow us to learn in order to adapt to a changing environment, since the brain can adapt to changing circumstances much more quickly than genes can. Follows research on identical twins, genetically pure strains of mice, and the brains of alcoholics to determine how genes and the environment interact. Points out that culture is transmitted from generation to generation through observational learning, resulting in more cultural differences between groups of people than there are biological differences. Narrated by David Suzuki. *Closed Captioned*. (WGBHTV;BBC;FFHS;c1993)

Behavior genetics; Heredity; Psychology

### THE WORLD OF CHEMISTRY SERIES

Explores the foundations of chemical structures and their behavior through theory, using computer animation, and in practice with demonstrations at industrial and research laboratories. Discusses breakthroughs and current challenges in chemistry with scientists. Hosted by Nobel laureate Roald Hoffman.

#### THE WORLD OF CHEMISTRY, NO. 23: PROTEINS: STRUCTURE AND FUNCTION & NO. 24: THE GENETIC CODE

56 min; color; c,a

1/2" VHS **FC1648,VH**

*Proteins: Structure and Function* discusses proteins, which are polymers built of amino acids. Explains how a large number of different protein molecules arise from only 20 basic amino acids. Shows how the number, kind, and sequence of amino acids in the polypeptide chain dictate the level of structure. *The Genetic Code* investigates the structure and role of the nucleic acids DNA and RNA. Discusses how the human body manufactures complex proteins to sustain life and how traits are passed from generation to generation. *Closed Captioned*. (EFC;ANBERG;c1988)

Biochemistry; Genetics; Protein biosynthesis

**XXXY**

13 min; color; h,c,a

1/2" VHS **CC5922,VH**

Documents the experiences of two intersex (neither anatomically male nor female) individuals who tell their own stories. Details their experiences with painful surgeries and attempts at fitting in as a boy or girl. Discusses the early and multiple surgeries done to correct the intersex condition, condemms the medical establishment for making such procedures normative, and calls for an end to these surgeries. (UCEMC;c2000)

Sex change; Gender identity; Genetics; Medicine; Sex-Research; Sex roles; Social adjustment; Social ethics; Philosophy (CP)