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COVER: Iridology, study of the iris as a means of diagnosing disease, is one of the many widely divergent therapies that currently falls under the heading of "holistic medicine." The combination of fact and fancy confounds attempts to evaluate the holistic approach to health care. See p. 410. (Iridology chart used originally by Henry Edward Lane, courtesy of Bernard Jensen)

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SCIENCE ON TV

SCIENCE NEWS prints the latest written word of scientific developments and noteworthy news. We've set this space aside to inform our readers of programs of scientific interest that are scheduled on television. Check your local listings for exact times.

• **Jan. 8 (PBS) National Geographic Society — "Dive to the Edge of Creation"** takes viewers on a multimillion dollar deep dive expedition off the Galapagos Islands, where scientists find teeming communities of animal life a mile and a half below the ocean's surface. Expedition leaders are Robert D. Ballard, geologist, and Frederick Grassle, biologist, both associate scientists at Woods Hole Oceanographic Institution. This marks the first time a mass audience will view footage of their discoveries.

The scientists used an impressive array of technological marvels, such as ANGUS, a 2-ton, unmanned sled fitted with a camera capable of shooting 3,000 pictures in a working day as it is towed above the ocean floor. The researchers descended in *Alvin*, a 25-foot submersible, to gather samples of lava, water samples, bacteria and specimens of animals. The uncommonly clear footage obtained was through the use of a CCD color television camera (the model used was the RCA prototype).

NOVA (PBS)

• **Jan. 8 — "Living Machines"** A new breed of scientists — natural engineers — is looking at living creatures through engineers' eyes and coming up with some surprising discoveries. It seems that many of the design concepts that we think of as human inventions were in fact first used in nature. According to Steven Wainwright of Duke University, "We have to assume they are good designs because the bad designs have been literally eaten up by the good ones." Some benefits and applications of natural engineering have yet to be discovered, but it promises to increase our sense of wonder at the beauty and complexity of living things.

• **Jan. 15 — "The Elusive Illness"** is Hepatitis B, a severely debilitating disease whose cure has eluded scientists for years. It is a detective story that includes such disparate elements as Australian aborigines, woodchucks in Pennsylvania and New York City's gay community.

After initial discoveries about the disease were made in the 1950s, subsequent studies revealed a strong connection between a particle first found in the blood of aborigines, leukemia victims and children with Down's syndrome. In woodchucks, Hepatitis B was connected with liver cancer. In 1976 the Nobel Prize was awarded to Baruch Blumberg for his discovery of the

Australia Antigen, which proved to be part of the Hepatitis virus.

Today, although the virus affects 80 percent to 90 percent of the populations of Asia and Africa and there is still no way to grow it in the lab for study, a vaccine has been prepared from the blood of carriers. A high incidence of Hepatitis B in New York City's gay community is leading to a massive vaccine trial.

• **Jan. 22 — "A is for Atom, B is for Bomb"** profiles Edward Teller, the "Father of the H Bomb." In this rare portrait of the highly controversial figure, "NOVA" traces Teller's career from the time of his youth in Hungary and his emergence as a brilliant science student in Germany in the 1920s. Forced to flee to the United States when Hitler came to power, Teller already enjoyed a reputation of international stature. After the outbreak of World War II, Teller became convinced of the need for stepped-up weapons research in the United States — a conviction he has maintained for 40 years, often in the face of heavy criticism.

• **Jan. 29 — "Black Tide"** First shown a year ago, this program documents the *Amoco Cadiz* oil spill — one of the most devastating oil tanker accidents in maritime history.

• **(PBS) — "The Voyage of Charles Darwin"** chronicles the life and work of Charles Darwin, one of the world's best-known naturalists. Former astronaut Neil Armstrong hosts the seven-part dramatic series. The first episode (Jan. 27) follows Darwin from medical school at the University of Edinburgh to Cambridge University, where he prepares for the clergy. At Cambridge, Darwin develops an intense interest in natural history and, with a recommendation from one of his professors, accepts the post of naturalist on the *HMS Beagle*.

• **(PBS) 3-2-1-Contact**, a weekly science series for youngsters aged eight to 12, premiers Jan. 14. In its first season "3-2-1-Contact" will offer 65 half-hour programs designed to stimulate youngsters to consider the world around them. Each week will feature a general theme, such as big vs. small and hot vs. cold, in order to investigate human experiences that involve science and technology. A magazine format, incorporating documentary films, location footage, animation, electronic special effects and several departments, will be used for each program.

The next issue of SCIENCE NEWS is the year-end double issue, containing the Science News Review of the Year and the Semiannual Index. It will be dated December 22 & 29 and will be mailed December 27. — Ed.