

THE BRONX CLUB OF VEGAS VALLEY NEWSLETTER DECEMBER 2012

***For more information about the Bronx Club
Of Vegas Valley, please send an email to
<http://bronx.xadar.com>***

***If you require any information about the Club, know of anyone interested in joining, or have ideas for upcoming events you would like to host, please contact Leslie or Sue at the following website:
<http://bronx.xadar.com/contactus.php>.***

***I am also the Newsletter Editor. If you have any articles or pictures about The Bronx that you would like to share and have put in the Newsletter, please forward them to me at the following:
cochair.bronxclub@xadar.com.***

WEBMASTERS' ADDRESS:

***Any questions about the website, please contact the webmaster at:
webmaster.bronxclub@xadar.com***

UPCOMING EVENTS

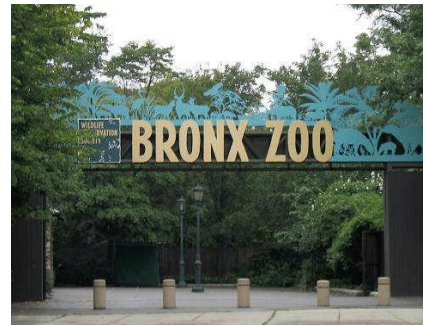
Saturday, December 15, 11:30 am, will be our third Annual Holiday Party at the home of the Braun's. It is on Saturday so it does not conflict with football. We will be having a potluck holiday brunch at the home of Les and Sue Braun. Sue and I will host the party. If you need directions to the Braun's home, please make note of that when you respond. Please let us know which of your favorite dishes you would like to bring. It should serve 10-12 and if needed can be reheated, not cooked when you arrive at the Braun's.

Cold dishes such as salads and fruits are good too. Since we only need so much of one type of dish, you might be asked to bring something other than your first choice. We are also having a White Elephant Auction. If you would like to participate, bring a wrapped gender less gift costing about \$8.00-\$10.00. Only those bringing a gift may participate. Exact details of how the auction works will be explained before the auction begins. There will be a \$2.00 per person charge to cover the cost of coffee, tea, soft drinks, paper goods and incidentals.

We have no volunteers for 2013. This is your Club please help.

If you can host an event from February to June or September to November, please let us know so we can put it in the schedule of upcoming events.

***Thanks,
Sue and Leslie***



***THE BRONX CLUB OF VEGAS VALLEY
INVITATION TO OUR DECEMBER EVENT
Third Annual Holiday Brunch***

Where: The home of Les and Sue Braun

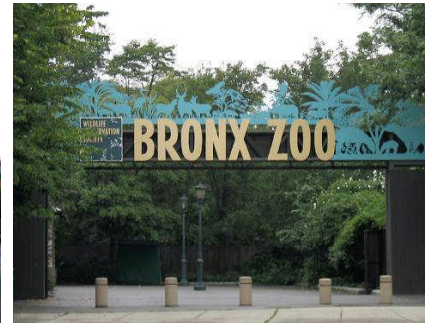
When: Saturday December 15, 2012 at 11:30 AM. Remember it is on Saturday not Sunday as usual.

Hosts: Sue and Leslie

RSVP: Send an [EZ RSVP Response](#), or an email to dechost.bronxclub@xadar.com, by December 8.

NOTES: We are having a potluck brunch. When you respond, please let us know what you would like to bring. We are also having a White Elephant Auction, which is a lot of fun. In order to participate in the Auction, you need to bring a genderless gift costing about \$8.00-\$10.00 for each participant. Details of the Auction will be explained just before it starts.

If you need the address and directions to the Braun's home, please put that in your response and it will be sent to you.



THE BRONX CLUB OF VEGAS VALLEY LADIES CLUB INVITATION

WHERE: *Honey Salt Restaurant, 1031 S. Rampart Blvd., 445.6100*

WHEN: *Thursday December 20, 2012, 12:30 pm*

HOST: *Rita Ort*

RSVP: *email to ladies.bronxclub@xadar.com.
Or call Rita at 242-8924.*



NOTES: *WEBSITE honeysalt.com/menus/lunch-menu/*

Look for the new format in the January Issue

Last part of the series; Academics and Science

Scientists

Ira Black

Ira Barrie Black (3/18/1941 – 1/10/ 2006) was an American physician and neuroscientist who was an advocate of stem cell research and was the first director of the Stem Cell Institute of New Jersey at Robert Wood Johnson Medical School which was created to advance research in the field.

Early life and education

Black graduated from the Bronx High School of Science. He majored in Philosophy at Columbia University and received his M.D. from Harvard Medical School in 1965.

Professional career

He was on the faculty of the Weill Cornell Medical College of Cornell University from 1975 to 1990, serving as the Chief of its Laboratory of Developmental Neurology, as the Nathan Cummings Professor of Neurology. In 1990, he became the Chair of the Department of Neuroscience and Cell Biology at the UMDNJ-Robert Wood Johnson Medical School.

Black was an advocate for research using stem cells to repair damage from such conditions as cancer and Alzheimer's disease and his own research showed that the technique could be used to encourage the body's own stem cells to create needed new cells and as a form of gene therapy. Studies he performed in 2000 that were published in The Journal of Neuroscience Research showed that when an antioxidant was added to stem cells extracted from bone marrow, the undifferentiated stem cells transformed into cells with the characteristics of neurons within minutes and were successfully transplanted into the brains and spinal cords of rats. The results were "an incredible achievement" in opening the path to creating treatments for conditions that had been previously untreatable by using stem cells to create needed cells of different forms. Black's approach was to use neurons developed from the individual's own adult stem cells to avoid issues of transplant rejection without requiring modifications to the genome, while avoiding the ethical concerns raised with the use of embryonic stem cells.

The Stem Cell Institute of New Jersey, formed following the passage of legislation in 2004 making New Jersey the second state in the nation to approve stem cell research, named him as its first director. Affiliated with the University of Medicine and Dentistry of New Jersey, he served there as chair of the department of neuroscience and cell biology. As director of the Stem Cell Institute, he expressed his frustration with federal opposition to embryonic stem cell research. He stated that the therapies that could result from such studies had the potential to "get patients out of bed and out of wheelchairs" and that the researchers in the U.S. were trailing those elsewhere who were able to make further progress in their studies.

In 1992, Black served a term as president of the Society for Neuroscience. Published works include his 1991 book Information in the Brain: A Molecular Perspective and the 2002 publication of The Changing Brain: Alzheimer's disease and Advances in Neuroscience.

Personal

A resident of Skillman, New Jersey and Andes, New York, Black died at age 64 of sepsis related to a cancerous tumor on 1/10/ 2006, at the Hospital of the University of Pennsylvania in Philadelphia. His son survived him. He divorced his wife, the former Janet Linquist, in 1999.

Adrian Kantrowitz

Born 10/4/1918 died 11/14/2008 was an American cardiac surgeon who performed the world's first pediatric heart transplant at Maimonides Medical Center in Brooklyn on December 6, 1967. It was only the second time that a human heart was transplanted into another human being, taking place just three days after Christian Barnard's seminal attempt in South Africa made headlines around the world and ushered in a new era in clinical organ transplantation. Kantrowitz also invented the intra-aortic balloon pump (IABP), a left ventricular assist device (L-VAD), and an early version of the implantable pacemaker.

Biography

Kantrowitz was born in New York City on 10/4/1918. His mother was a costume designer and his father ran a clinic in the Bronx. He told his mother as a three-year old that he wanted to be a doctor, and as a child built an electrocardiograph from old radio parts together with his brother

Education and military service

He graduated from New York University in 1940, having majored in math. He attended the Long Island College of Medicine (now SUNY Downstate Medical Center) and was awarded his medical degree in 1943 as part of an effort to accelerate the availability of physicians during World War II. During an internship at the Jewish Hospital of Brooklyn, he developed an interest in neurosurgery, and had a paper published in 1944 paper, "A Method of Holding Galea Hemostats in Craniotomies", in which he proposed a new type of clamp to be used while performing a craniotomy during brain surgery.

He served for two years as a battalion surgeon in the United States Army Medical Corps. Kantrowitz was discharged from the Army in 1946 with the rank of major.

After his military service, he switched to specialize in cardiac surgery due to the paucity of positions in neurosurgery. In 1947, he was an Assistant Resident in Surgery at Mount Sinai Hospital in Manhattan.

Montefiore Hospital

He was on the surgical staff of Montefiore Hospital in the Bronx from 1948 until 1955. He started at Montefiore as Assistant Resident in Surgery and Pathology, and progressed to Cardiovascular Research Fellow before becoming Chief Resident in Surgery. At the New York Academy of Medicine, on 10/16/1951, he screened the world's first movies taken inside a living heart, showing the sequential opening and closing of the mitral valve inside a beating heart. Using dogs and other animals as experimental subjects, Kantrowitz developed an artificial left heart, an early version of an oxygen generator for use as a component in a heart-lung machine and a treatment for coronary artery disease in which blood vessels would be rearranged during surgery. He also developed a device that allowed individuals who were paralyzed to have their bladders empty through a signal sent from a radio-controlled device.

Maimonides Medical Center

From 1955 to 1970, he held surgical posts at Maimonides Medical Center in Brooklyn. In February 1958, a heart-lung machine Kantrowitz had developed was used during open-heart surgery on a six-year-old boy while the surgeons repaired a one-inch hole between the chambers of the boy's heart that was present since birth. In an October 1959 lecture at the American College of Surgeons, Kantrowitz and colleague Dr. William M. P. McKinnon reported on a procedure in which a portion of muscle from the diaphragm was used to create a "booster" heart to help pump blood in a dog, taking over as much as 25% of the pumping burden of the natural heart.

The booster heart functions by receiving a signal sent by a radio transmitter, triggered by the pulse of the natural heart. Kantrowitz noted that the procedure was not ready to be performed on humans. Ruff, a "friendly dog of unknown ancestry" was honored by the New York Academy of Sciences as "research dog of the year" for his unwitting participation in the implantation of a booster heart 18 months earlier in a procedure performed by Kantrowitz.

In the early 1960s, Kantrowitz developed an implantable artificial pacemaker together with General Electric. The first of these pacemakers was implanted in May 1961. The device included an external control unit that could adjust the pacing rate from 64 to 120 beats per minute to allow the patient to deal with physical or emotional stress.

Throughout the 1960s, he collaborated with a team that included his the . Building on his experiments with dogs, he performed the world's second permanent partial mechanical heart implantation in a human on 2/4/1966, which was successful, though the patient died 24 hours after surgery as a result of preexisting liver disease. His second implant of a partial mechanical heart on a 63-year old woman, on 5/18/1966, lasted 13 days, until the patient died of a stroke. For almost two weeks after surgery, the patient was improving, was able to sit up and eat. This surgery used a valve less device developed with his brother Arthur in which the natural electrical impulses of the patient's heart controlled the action of the pump.

In what turned out to be a race with South African cardiac surgeon, Dr. Christian Barnard, Kantrowitz prepared for a potential human heart transplant by transplanting hearts in 411 dogs over a five-year period together with members of his surgical team. Barnard performed the first human-to-human heart transplant on 12/3/1967.

On 12/6/1967, Kantrowitz performed the first human heart transplant in the United States, removing the heart of a brain-dead baby and implanting it into the chest of a 19-day-old infant who had a heart defect that would have been fatal. The recipient lived for a little more than six hours after the surgery.

Adrian Kantrowitz, working in conjunction with his brother, Arthur Kantrowitz invented the intra-aortic balloon pump. Inserted through the patient's thigh, it was directed into the aorta, and alternately expanded and contracted in order to reduce strain on the heart. Based on Kantrowitz's theory of "counter pulsation", the device inflated the balloon with helium gas when the heart relaxed and deflated it when the heart pumped blood.

The pump did not require surgery and could be inserted using local anesthetic in an emergency room or at a patient's bedside. The device was first used in August 1967 to save the life of a 45-year-old woman who was having a heart attack. The device could be used in the 15% of heart attack patients who went into severe shock, 80% of whom could not be helped by the protocols that existed before the balloon pump. Since the device went into widespread use in the 1980s, it had been used in some three million patients by the time of his death.

Sinai Hospital

He and his entire team of surgeons, researchers, biomedical engineers, and nurses relocated to Sinai Hospital (now Sinai-Grace Hospital) in Detroit in 1970, where he assumed the position of attending surgeon and Chairman of the Department of Surgery.

At Sinai Hospital, Kantrowitz experimented further with heart transplants and continued development of the balloon pump, and partial mechanical hearts. In August 1971, he implanted an artificial heart booster in a 63-year-old man whose weakened heart could not pump sufficient oxygenated blood to his body. The patient became the first partial mechanical heart patient to be sent home, and died three months after the surgery.

Personal

Kantrowitz married Jean Rosensaft on 11/25/1948. His wife was an administrator on the surgical research laboratories at Maimonides Medical Center while he was there. In 1983, they co-founded L.VAD Technology, Inc., a company specializing in research and development of cardiovascular devices, with Dr. Kantrowitz as president and his wife as vice president. , On 11/14/2008, Kantrowitz died at age 90, in Ann Arbor, Michigan of heart failure.

Arthur Robert Kantrowitz

Born 10/20/1913 – 11/29/2008) was an American scientist, engineer, and educator. Kantrowitz grew up in The Bronx, and graduated from DeWitt Clinton High School. He earned his B.S., M.A. and, in 1947, his Ph.D. degrees in physics from Columbia University. During his studies at Columbia, Kantrowitz started working as a physicist, in 1936, for the NACA, work he would keep for ten years. He went on to teach at Cornell University for the next ten years; meanwhile he founded the Avco-Everett Research Lab (AERL) in Everett, Massachusetts, in 1955.

He developed shock tubes which were able to produce the extremely hot gases needed to simulate atmospheric re-entry from orbital speeds and thereby solved the critical nose cone re-entry heating problem which accelerated the development of recoverable spacecraft. He was AERL's director, chief executive officer, and chair until 1978 when he took on a professorship at Dartmouth College. From 1956 to 1978, he also served as a vice president and director of Avco Corporation.

Kantrowitz's interdisciplinary research in the area of fluid mechanics and gas dynamics led to contributions in the field of magneto hydrodynamics and to the development of high-efficiency, high-power lasers. He first suggested a system of laser propulsion to launch bulk payloads into orbit, using energy from ground-based lasers to increase exhaust velocity and thereby reduce the propellant-to-payload mass ratio.

His early research included supersonic diffusers and supersonic compressors in the early 40's, which has been applied to jet engines. He invented the total energy variometer in 1939, used in soaring planes. Is also the co-inventor of an early scheme for magnetically contained nuclear fusion, patent the application in 1941. In 1950, he invented a technique for producing the supersonic source for molecular beams; subsequently used by chemists in research that led to two Nobel Prizes.

In the 1960s and 1970s, he led the design and development at AERL of the first intra-aortic balloon pump. The balloon pump is a temporary cardiac assist device, which has been used worldwide on three million people. The device was used on his own failing heart.

Another contribution to science was the stagnation-point flow experiment in which processes of initial interaction of fresh flowing blood with an artificial surface can be directly visualized under a high-power microscope. This technique has become an important method for experimentally studying this vital interaction and led to a variety of circulatory prostheses, including the artificial heart.

Kantrowitz, as an advocate of the separation of science and technology from political or ideological concerns, first proposed in 1967 the creation of an Institution for Scientific Judgment, commonly referred to as the Science Court, to assess the state of knowledge in scientific controversies of importance to public policy. He further developed the Science Court as its Task Force Chairman in President Ford's Advisory Group on Anticipated Advances in Science and Technology, 1975-1976.

According to Jerry Pournelle "We could have developed all this [i.e. large scale commercial space development] in the 60's and 70's, but we went another path.

Arthur Kantrowitz tried to convince Kennedy's people that the best way to the Moon was through development of manned space access, a von Braun manned space station, and on to the Moon in a logical way that left developed space assets. That did not work, because Johnson's support of the Moon Mission was contingent on spending money in the South: the real objective was the reindustrialization of the South. The Moon mission itself was a stunt."

Kantrowitz was a fellow of the American Academy of Arts and Sciences, American Association for the Advancement of Science, American Astronautical Society, American Institute of Aeronautics and Astronautics (honorary), American Physical Society, American Institute for Medical and Biological Engineering and member of the National Academy of Engineering and National Academy of Sciences and International Academy of Astronautics. In 1953-1954, he held both Fulbright and Guggenheim Fellowships at Cambridge and Manchester Universities.

Kantrowitz was an honorary trustee of the University of Rochester, an honorary life member of the Board of Governors of The Technion, and an honorary professor of the Huazhong Institute of Technology, Wuhan, China. Kantrowitz also served on the Board of Advisors for the Foresight Institute, an organization devoted to preparing for nanotechnology.

Kantrowitz held 21 patents and wrote or co-authored more than 200 scientific and professional papers and articles. He also co-authored *Fundamentals of Gas Dynamics*, 1958, Princeton Univ. Press.

Kantrowitz died at age 95, 11/29/2008, while visiting relatives in New York. He had suffered a heart attack on the previous day.

Academics

Rev. Joseph A. O'Hare

A Jesuit priest Reverend O'Hare was born in 1931, New York City civic leader and editor. He was a longtime president of Fordham University and, for a brief period, President of Regis High School, a New York City Jesuit High School.

O'Hare was born in New York City. He trained for the priesthood at the Ateneo de Manila University in the Philippines, where he was ordained in 1961. He taught at Ateneo de Manila from 1955 to 1958 and again from 1967 to 1972. He earned a doctorate in Philosophy from Fordham in 1968.

He was associate editor of the Catholic weekly America between 1972 and 1975, and was editor in chief between 1975 and 1984, when he became president of Fordham University.

While serving as president of Fordham he was appointed by Mayor Edward I. Koch to the Mayor's Committee on Appointments, which interviewed candidates for city commissioners, and the Charter Revision Commission of the City of New York.

O'Hare was appointed the first chairperson of the city's Campaign Finance Board in 1988, and was reappointed twice in the 1990s by Mayor Rudolph Giuliani, serving until 2003. The board was created in the wake of several political corruption scandals. It gives matching funds to qualified candidates.

O'Hare was chairman of the Association of Jesuit Colleges and Universities, Association of Catholic Colleges and Universities (ACCU), and served as President of Fordham University for 19 years, the longest tenure of any president in the school's 166-year history. After retiring from Fordham in 2003, he returned to America as associate editor.

Robert Sobel

Sobel was born 2/19/1931 and died 6/2/1999. He was an American professor of history at Hofstra University, and a well-known and prolific writer of business histories.

Biography

Sobel was born in the Bronx. He completed his B.S. (1951) and M.A. (1952) at City College of New York, and after serving in the U.S. Army, obtained a Ph.D. from New York University in 1957. He started teaching at Hofstra in 1956. Sobel eventually became Lawrence Stess a Distinguished Professor of Business History at Hofstra. After his death, the university established the Robert Sobel Endowed Scholarship for Excellence in Business History and Finance.

Books

Sobel's first business history, published in 1965, was The Big Board: A History of the New York Stock Market. It was the first history of the stock market written in over a generation. The book was met with favorable reviews, and solid sales, and Sobel's writing career was launched. Several of his subsequent books were best sellers.

Besides writing more than 30 books, Sobel authored many articles, book reviews, and scripts for television documentaries and mini-series. From 1972 to 1988, Sobel's weekly investment column, "Knowing the Street," was nationally syndicated through New York Newsday.

He was regularly published in national periodicals, including The New York Times and the Wall Street Journal. At the time of his death, Sobel was also a contributing editor to Barron's Magazine. He was a regular guest on financial and other news shows, such as Wall Street Week and Crossfire.

Sobel was most famous for his only work of fiction. The 1973 book "For Want of a Nail." This book is an alternate history in which Burgoyne won the Battle of Saratoga during the American Revolutionary War. This work detailed the history of an alternate timeline, complete with footnotes. Sobel had authored, or co-authored, several actual textbooks. For Want of a Nail was republished in 1988 and won several science fiction awards.

Wall Street

Sobel's dominant passion was Wall Street. This was a fascination since his childhood. "It is as though you are walking through a historical theme park, with this engaging man at your side pointing out the sights," said Andrew Tobias, the author and investment guide, in a review in The New York Times of The Last Bull Market: Wall Street in the 1960s (W. W. Norton, 1978).

Most of Sobel's books were written for a general audience, but he never bristled when some scholarly writers dismissed him as a "popularizer," said his colleague and friend George David Smith, a professor of economic history at New York University. "Quite the contrary—he saw that as his mission in life."

Carolyn Porco

Carolyn C. Porco (born 3/ 6/53) is an American planetary scientist known for her work in the exploration of the outer solar system, beginning with her imaging work on the Voyager missions to Jupiter, Saturn, Uranus, and Neptune in the 1980s. She leads the imaging science team on the Cassini mission currently in orbit around Saturn. She is also an imaging scientist on the New Horizons mission launched to Pluto on 1/19/2006. She is an expert on planetary rings and the Saturnian moon, Enceladus.

She has co-authored over 100 scientific papers. Subjects ranging from the spectroscopy of Uranus and Neptune, the interstellar medium, the photometry of planetary rings, satellite/ring interactions, computer simulations of planetary rings, the thermal balance of Triton's polar caps, heat flow in the interior of Jupiter.

In addition, a suite of results on the atmosphere, satellites, and rings of Saturn from the Cassini imaging experiment.

Porco was responsible for the epitaph and proposal to honor the late renowned planetary geologist Eugene Shoemaker by sending his remains to the Moon aboard the Lunar Prospector spacecraft in 1998.

A frequent public speaker, Porco has given two popular lectures at TED as well as the opening speech for Pangea Day, a May 2008 global broadcast coordinated from six cities around the world, in which she described the cosmic context for human existence. Porco has also won a number of awards and honors for her contributions to science and the public sphere; for instance, in 2009, New Statesman named her as one of 'The 50 People Who Matter Today.' In 2010, she was awarded the Carl Sagan Medal, presented by the American Astronomical Society for Excellence in the Communication of Science to the Public. And, in 2012, she was named one the 25 most influential people in space by Time magazine.

Education

Porco was born in New York City. She graduated in 1970 from Cardinal Spellman High School in the Bronx. She earned a BS degree from the State University of New York at Stony Brook in 1974. She received her PhD in 1983 from the California Institute of Technology in the Division of Geological and Planetary Sciences. Supervised by dynamicist Peter Goldreich, she wrote her doctoral dissertation focused on Voyager discoveries in the rings of Saturn.

Career

Voyager

In the fall of 1983, Dr. Porco joined the faculty of the Department of Planetary Sciences within the University of Arizona; the same year she was made a member of the Voyager Imaging Team. In the latter capacity, she was an active participant in the Voyager encounters with Uranus in 1986 and Neptune in 1989, leading the Rings Working Group within the Voyager Imaging Team during the Neptune encounter.

As a young Voyager scientist, she was the first person to describe the behavior of the eccentric ringlets and the "spokes" discovered by Voyager within the rings of Saturn. To elucidate the mechanism by which the outer Uranian rings were being shepherded by the Voyager-discovered moons Cordelia and Ophelia; and to provide an explanation for the shepherding of the rings arcs of Neptune by the moon Galatea, also discovered by Voyager.

She was a co-originator of the idea to take a 'portrait of the planets' with the Voyager spacecraft, and participated in the planning, design, and execution of those images in 1990, including the famous Pale Blue Dot image of Earth.

Cassini–Huygens

In November 1990, Dr. Porco was selected as the leader of the Imaging Team for the Cassini–Huygens mission an international mission that successfully placed a spacecraft in orbit around Saturn and deployed the atmospheric Huygens probe to Saturn's largest satellite, Titan. She is also the Director of the Cassini Imaging Central Laboratory for OPerations (CICLOPS), which is the center of uplink and downlink operations for the Cassini imaging science experiment and the place where Cassini images are processed for release to the public. CICLOPS is part of the Space Science Institute in Boulder, Colorado.

In the course of the ongoing mission, Porco and her team have discovered seven moons of Saturn: Methone and Pallene, Polydeuces, Daphnis, Anthe, Aegaeon, and a small moonlet in the outer B ring.

They also found several new rings, such as rings coincident with the orbits of Atlas, Janus and Epimetheus (the Saturnian 'co-orbitals') and Pallene; a diffuse ring between Atlas and the F ring; and new rings within several of the gaps in Saturn's rings.

Porco's team was responsible for the first sighting of a hydrocarbon lake, as well as a lake district, in the south polar region of Titan in June 2005. (Groups of similar – and larger – features were sighted in the North Polar Region in February 2007.) The possibility that these sea-sized features are partially filled with liquid hydrocarbons completely is significantly strengthened by subsequent observations by other Cassini instruments.

Her team was also responsible for the first sighting of plumes erupting from Enceladus, Saturn's sixth largest moon. They first suggested, and provided detailed scientific arguments, that these jets might be geysers erupting from reservoirs of near-surface liquid water under the south pole of the small moon.

New Horizons

Porco is a member of the imaging team for the New Horizons mission to Pluto and the Kuiper Belt. The probe is scheduled for a Pluto flyby in 2015.

University Positions

Porco served on the faculty of the University of Arizona from 1983 to 2001. She achieved tenured professorship in 1991. Porco taught both graduates and undergraduates. She was one of five finalists for the University of Arizona Honors Center Five Star Faculty Award, a campus-wide student-nominated, student-judged award for outstanding undergraduate teaching.

Porco is a Senior Research Scientist at the Space Science Institute in Boulder, Colorado, and she is an Adjunct Professor at the University of Colorado at Boulder.

NASA Advisor

Porco has been an active participant in guiding the American planetary exploration program through membership on many important NASA advisory committees, including the Solar System Exploration Subcommittee, the Mars Observer Recovery Study Team, and the Solar System Road Map Development Team. In the mid-1990s, she served as the chairperson for a small NASA advisory working group to study and develop future outer solar system missions and she served as the Vice Chairperson of the Steering Group for the first Solar System Decadal Survey, sponsored by NASA and the National Academy of Sciences.

Public speaking

Porco speaks frequently on the Cassini mission and planetary exploration in general, and has appeared at renowned conferences such as Pop! Tech (2005, 2006) and TED (2007, 2009). She attended and was a speaker at the Beyond Belief symposium on November 2006.

Porco's 2007 TED talk, "The Human Journey," detailed two major areas of discovery made by the Cassini mission: the exploration of the Saturnian moons, Titan and Enceladus. In her introductory remarks, Porco explained: So the journey back to Saturn is really part of, and is a metaphor for, a much larger human voyage. In describing the environment of Titan, with its molecular nitrogen atmosphere suffused with organic compounds, Porco invited her audience to imagine the scene on the moon's surface: Stop and think for a minute. Try to imagine what the surface of Titan might look like. It is dark: high noon on Titan is as dark as deep Earth twilight on the Earth. It is cold, it is eerie, it is misty, it might be raining, and you are standing on the shores of Lake Michigan brimming with paint thinner. That is the view that we had of the surface of Titan before we got there with Cassini.

And I can tell you that what we have found on Titan, though not the same in detail, is every bit as fascinating as that story is, and for us, for Cassini people, it has been like a Jules Verne adventure come true.

After describing various features discovered on Titan by Cassini, and presenting the historic first photograph of Titan's surface by the Huygens Lander, Porco went on to describe Enceladus and the jets of "fine icy particles" which erupt from the moon's southern pole. We have arrived at the conclusion that these jets may be erupting from pockets of liquid water near, under the surface of Enceladus. Therefore, we have, possibly, liquid water, organic materials and excess heat. In other words, we have possibly stumbled upon the holy grail of modern-day planetary exploration, or in other words an environment that is potentially suitable for living organisms. I do not think I need to tell you that the discovery of life elsewhere in our Solar system would have enormous cultural and scientific implications. Because if we could demonstrate that genesis had occurred – not once but twice, independently, in our Solar system – then that means by inference it has occurred a staggering number of times throughout our Universe in its 13.7 billion year history.

Porco's 2009 TED Talk was "Could a Saturn moon harbor life?"

Television and film

Porco has been a regular CNN guest analyst and consultant on astronomy. She has made many radio and television appearances explaining science to the lay audience, including appearances on the MacNeil/Lehrer News hour, CBS's 60 Minutes, Peter Jennings's The Century. TV documentaries on planetary exploration such as The Planets on the Discovery Channel and the BBC, A Traveler's Guide to the Planets on the National Geographic Channel, Horizon on the BBC, and a Nova Cassini special on PBS. For the 2003 A&E special on the Voyager mission entitled Cosmic Journey: The Voyager Interstellar Mission and Message, Porco appeared onscreen and served as the show's science advisor and animation director.

Porco served as an adviser for the 1997 film Contact, which was based on a novel by the well-known astronomer Carl Sagan. The actor Jodie Foster portrayed the heroine in the movie, and Sagan reportedly suggested that she use Porco as a real-life model to guide her performance.

Porco was also an adviser on the 2009 film Star Trek. The scene, in which the Enterprise comes out of warp drive into the atmosphere of Titan, and rises submarine-style out of the haze, with Saturn and the rings in the background, was Porco's suggestion.

Interviews and articles

Porco has given numerous interviews in print media on subjects ranging from planetary exploration to the conflict between science and religion (for example, Newsweek and the journal The Humanist).

She has been profiled many times in print, beginning in the Boston Globe (October 1989), the New York Times (August 1999, September 2009), the Tucson Citizen (2001), Newsday (June 2004), for the Royal Astronomical Society of Canada (2006), in Astronomy Now (2006), in Discover Magazine (2007), and also online on CNN.com (2005) and Edge.org.

Prior to Cassini's launch, she was a strong and visible defendant of the usage of radioactive materials on the Cassini spacecraft. She is a supporter of a plan for human spaceflight toward the Moon and Mars, and in an op-ed piece published in The New York Times; she highlighted the benefits of a deep-space-capable heavy launch vehicle for the robotic exploration of the solar system.

Other

In 1994, Porco was a member of a committee (chaired by Carl Sagan) entitled Public Communication of NASA's Science, and in 1999, she reviewed a biography of Sagan for the Guardian. Her popular science articles have been published in The Sunday Times, Astronomy, the Arizona Daily Star, Sky & Telescope, American Scientist, and Scientific American. She is active in the presentation of science to the public as the leader of the Cassini Imaging Team, as the creator/editor of the website where Cassini images are posted. She writes the site's homepage "Captain's Log" greeting to the public.

She is also the CEO of Diamond Sky Productions, a small company devoted to the scientific, as well as artful, use of planetary images and computer graphics for the presentation of science to the public.

Awards and honors

In 1999, Porco was selected by The Sunday Times (London) as one of 18 scientific leaders of the 21st century, and by Industrial Week as one of 50 Stars to Watch. In 2008 she was chosen to be on Wired magazine's inaugural 'Smart List: 15 People the Next President Should Listen To.

Her contributions to the exploration of the outer solar system were recognized with the naming of Asteroid (7231) Porco, which is "Named in honor of Carolyn C. Porco, a pioneer in the study of planetary ring systems...and a leader in spacecraft exploration of the outer solar system."

In 2008, Porco was awarded the Isaac Asimov Science Award by the American Humanist Association. In September 2009, Porco was awarded The Huntington Library's Science Writer Fellowship for 2010. That same month, New Statesman named her as one of 'The 50 People Who Matter Today.' In October 2009, she and Babak Amin Tafreshi were each awarded the 2009 Lennart Nilsson Award in recognition of their photographic work. The award panel's citation for Dr. Porco reads as follows:

"Carolyn Porco combines the finest techniques of planetary exploration and scientific research with aesthetic finesse and educational talent. While her images, which depict the heavenly bodies of the Saturn system with unique precision, serve as tools for the world's leading experts, they also reveal the beauty of the universe in a manner that is an inspiration to one and all."

In October 2010, Porco was awarded the 2010 Carl Sagan Medal for Excellence in the Communication of Science to the Public, presented by the American Astronomical Society's Division for Planetary Sciences.

In May 2009, Porco received an Honorary Doctorate of Science from the State University of New York at Stony Brook, of which she is an alumna. In 2011, she won the Distinguished Alumni Award from the California Institute of Technology, the highest honor regularly bestowed by Caltech. In 2012, Porco was named one the 25 most influential people in space by Time magazine.

There are so many others that I am only going to list some of their name and the field in which they were involved.

- ***Todd Gitlin (born 1943) – sociologist; co-founder of Students for a Democratic Society.***
- ***Robert Lefkowitz (born 1943) - Nobel Prize for chemistry of protein receptors, 2012.***
- ***Paul Levinson (born 1947) – science-fiction and non-fiction author; communications professor.***
- ***Ronald Mallett (born 1945) – theoretical physicist of time travel.***
- ***Joseph M. McShane (born 1942) – Jesuit priest; president of Fordham University.***
- ***Alan Pred (1936-2007) – geographer at University of Chicago and University of California, Berkeley.***
- ***Murray Rothbard (1926–1995) – economist; helped define modern libertarianism.***
- ***Ken Schaffer (born 1947) – inventor; invented wireless guitar, video place shifting.***

- **Joseph Francis Shea (1925–1999) – aerospace engineer; headed NASA's Apollo program.**
- **Michael I. Sovern (born 1931) – Chancellor Kent Professor of Law and President Emeritus of Columbia University.**
- **Robert Spinrad (1932–2009) – computer designer; director of the Xerox Palo Alto Research Center.**
- **Leonard Susskind (born 1940) – theoretical physicist.**
- **Neil deGrasse Tyson (born 1959) – astrophysicist; director of the American Museum of Natural History's Hayden Planetarium; host of PBS's educational-television series NOVA science NOW.**
- **Allen Weinstein (born 1937) – historian; Archivist of the United States.**
- **Barry Wellman (born 1942) – sociologist; University of Toronto professor studying social networks, community and the Internet.**
- **Rosalyn Sussman Yalow (born 1921) – medical physicist; co-winner of the 1977 Nobel Prize in Physiology or Medicine.**
- **Yosef Hayim Yerushalmi (1932–2009) – historian; Salo Baron Professor of Jewish History at Columbia University.**

Celebrating birthday's this month are:

Martin Fessler December 7

Ron Scher December 9

Sue Alesevich December 25

And, celebrating their 50th Anniversary

Greg and Barbara Abbott on December 25.

Our November event was held at The Cathay House in Chinatown.

Our guest speaker was Ms. Kim Taylor from the Forensic Department of Las Vegas Metro. She gave a very interesting talk and all enjoyed the event. Following are some pictures from that evening.



Forensic Specialist Kim Taylor and Co-chair Leslie Schoenberg



New Members Murray Goldman, Annette Bonder, Herb Sachs



New member Jane Fielding, members Edith and Dave Einhorn, Greg Abbott.



Arlene and Arnie Ruditsky, Webmaster Les Braun



Mike and Ronnie Sander



Michele and Ken Stern



Ronnie Sander and Ladies Lunch Club Host Rita Ort



Co-chairs seated Sue Braun, Leslie Schoenberg



Instructional materials Kim brought with her.



Forensic Specialist I, Kim Taylor explaining what her job entails.