INSTITUTE for ADVANCED STUDY

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A NEWSLETTER FROM THE DIRECTOR'S OFFICE INSTITUTE for ADVANCED STUDY

2005 -ISSUE ONE

This year the Institute for Advanced Study celebrates its 75th anniversary. Although the work of the Institute did not begin until 1933, the Certificate of Incorporation was signed on May 20, 1930, so this is really the Institute's birthday. We shall be celebrating this milestone on a number of occasions throughout 2005, reflecting on the vision of our founders, the remarkable achievements of those who have worked hen and the unique and vital contribution that the Institute makes to the world of scholarship today.

The continuing work of the Institute, and its adherence to its original mission of providing an environment in which a community of scholars and scientists can pursue fundamental research, free from external pressures, is only possible through the generosity not only of the founders but also generations of benefactors through the last seventy-five years. We shall use the opportunities provided by our anniversary celebrations to discuss the work of the Institute and the future directions it might take with our friends and supporters, and we hope to introduce the Institute to others who support its values and objectives.

In addition to our anniversary, 2005 also marks the centenary of Einstein's first great prolific burst of scientific activity. His annus mirabilis of 1905 is being celebrated around the world as well as here at the Institute.

Amongst the many on whom we depend for support, the Trustees of the Institute play a special role. The Institute is very fortunate in having a Board of Trustees outstanding for their individual achievements as well as their dedication to the Institute and its objectives, a tribute to the leadership of James Wolfensohn, who brings to the Institute not only the knowledge of the world that one might expect from the President of the World Bank, but also very wide cultural interests and a remarkable understanding of academia. The vitality of the Institute today reflects his continued commitment to this unique institution.

—Peter Goddard, Director

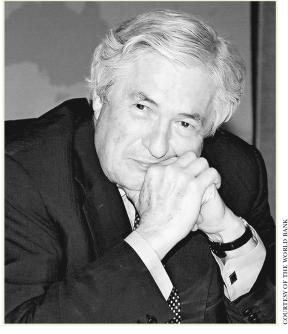
James Wolfensohn: A Leader in All Ways

ames D. Wolfensohn has served for a quarter of a century as a Trustee of the Institute for Advanced Study, nineteen of those years as Chairman of the Board. On the world's stage, he is known as President of the World Bank. In the United States, he is renowned as a philanthropist who has helped raise more than \$60 million to restore New York's landmark Carnegie Hall. In his native Australia, he is famed as an Olympic fencing champion. In music circles, he is recognized as a cellist who has performed with the likes of Vladimir Ashkenazy and Yo-Yo Ma. A cultural leader, music lover and patron of the arts, Mr. Wolfensohn has been described as a whirlwind, a Renaissance man, a Wall Street Wonder, the ultimate global networker, and as adroit as any politician on Capitol Hill.

Born in Australia on December 1, 1933, Mr. Wolfensohn holds B.A. and LL.B. degrees from the University of Sydney and an M.B.A. from the Harvard Business School. He has served as Executive Partner of Salomon Brothers in New York and head of its investment banking department, Executive Deputy Chairman and Managing Director of Schroeder's, Ltd. in London, President of J. Henry Schroeder's Banking Corporation in New York, and Managing Director, Darling & Co. of Australia.

He has led the board of New York's Carnegie Hall, is an Honorary Trustee of the Brookings Institution, and a member of the Council on Foreign Relations and the Century Association in New York. He has served both as Chairman of the Finance Committee and as Director of the Rockefeller Foundation and of the Population Council, and has been a member of the Board of The Rockefeller University. His many awards and honors include the first David Rockefeller Prize of the Museum of Modern Art in New York, an Honorary Knighthood from Queen Elizabeth II, and decorations from the Governments of Australia, France, Germany, Morocco, Norway, and Russia.

At the Institute for Advanced Study, he exemplifies excellence and service. "It is an honor to work for an institution headed by Jim," comments John Bahcall, the Richard Black Professor in the School of Natural Sciences. "But, there is a price: I think all of us at IAS have wondered at some time or other if a particular piece of our research was worthy of the high standards that Jim embodies.



James D. Wolfensohn

Explaining to Jim the significance of some work is enormously motivating and somewhat intimidating; I can testify to both."

Jim Wolfensohn's connection with the Institute began in 1979, when he was Chairman of the Board of Trustees of the John F. Kennedy Center for the Performing Arts in Washington, D.C., and President and Chief Executive Officer of James D. Wolfensohn, Inc. In 1995, when he took on the high-profile position of President of the World Bank, he relinquished these positions and all other obligations, save one. He remained as Chairman of the Institute's Board of Trustees. "It was the only one that I didn't give up because in its own way, I think the Institute has the potential for similar leverage in terms of influencing the lives of scholars globally," he says.

Mr. Wolfensohn's regard for the Institute is embodied in his admiration for development economist Albert O. Hirschman, Professor Emeritus in the Institute's School of Social Science. "Albert is a luminous figure," says Mr. Wolfensohn, who displays a photograph of Professor Hirschman in his Washington, D.C., office. His friendship with Professor Hirschman, he claims, enhances his credibility in development circles. In 2000, Mr. Wolfensohn helped to create the Albert O. Hirschman Professorship in the School of Social Science. Eric S. Maskin, the first Albert O. Hirschman Professor (see sidebar), acknowledges Jim Wolfensohn as "a superb

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Eric S. Maskin

conomist Eric S. Maskin came to the Institute for Advanced Study in 2000 from Harvard University, to take up an appointment as the Institute's first Albert O. Hirschman Professor in the School of Social Science. "Albert Hirschman is one of economics' deepest and most original thinkers. I feel truly honored—and also somewhat daunted—to hold a position bearing his name," says Maskin, whose work in game theory, social choice theory, and the economics of incentives is drawn upon extensively by economists and political scientists in the areas of industrial organization, finance, and development.

Professor Hirschman is renowned for his innovative, lucid, and brilliantly argued contributions to economics, the history of ideas, and the social sciences. His view of development acknowledges the complexity of human behavior and social reality. He has traced the contrast between "interests" and "passions" in the history of social thought from Machiavelli to Tocqueville. "Albert and I are quite different," comments Maskin, "my work is rather mathematical while he is one of the few remaining literary economists. But much of his life has been devoted to using economics to make the world a better place—and that's an ideal to which I also aspire." An example of this is Maskin's recent involvement in designing an auction in the U.K. that is part of the effort to counteract global warming by reducing greenhouse gas emissions.

Maskin's approach is influenced by his background as a mathematician—he received his A.B. degree in mathematics from Harvard University in 1972, and his A.M. and Ph.D. degrees in applied mathematics from Harvard University in 1974 and 1976, respectively. Much of his research has focused on the theory of majority rule, and its viability as a voting system that yields the truest representation of the wishes of the electorate. Early work on "implementation"

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embodiment of the Hirschmanian ideal, under whose leadership, the World Bank, though sometimes controversial, has been a remarkable force for the eradication of poverty."

Engaged in the world's most pressing issues-poverty, education, and globalization—Jim Wolfensohn holds a unique position at the intersection of the private and public sectors. He has made the reduction of poverty his mission. "Jim is the most intensely moral person I know," comments John Bahcall, "although I am sure he would reject the characterization. He is constantly doing things to make the world better, whether it is empowering peasant women in India or providing the best conditions for the finest music to be heard in New York or Washington. He creates time

he doesn't have, in what must be his 48-hour days, to make sure that IAS is doing the right things in the right ways."

Through the World Bank, Mr. Wolfensohn has helped to forge strategic partnerships in education, including the Global Distance Learning Network and the Development Gateway. "Poverty covers the planet, so does science

and technology," he says. With Phillip Griffiths, Professor in the School of Mathematics and former Director of the Institute (1991–2003), Mr. Wolfensohn has helped to set up the Millennium Science Initiative which strives to create and nurture world-class science and scientific talent in the developing world, and which he cites as an instance of the Institute's contribution on the global scene.

That there are parallels between Wolfensohn's work at the World Bank and the work of the Institute should come as no surprise to those who understand the Institute's mission. "At the World Bank, fighting poverty gets to the question of universal values. Poverty is global in its reach. The world of ideas is global. The Institute is global in its outreach," Mr. Wolfensohn has said. He attributes part of the Institute's success to its size and its ability to attract and maintain excellence; as a place where you can get to know everybody, and interact with others. Success is also due to the fact that there is "a tolerance here for intellectual risk-taking." This is a part of

what attracts excellent thinkers and researchers to the Institute, he says, and is crucial to the enterprise. "There are no rules for what anybody does here. When you come into [the Institute] you are invited to work without limits. For this, the Institute must maintain its independence," he says.

The Institute's international aspect (a majority of Members and Faculty come from outside the United States) is also one that is particularly appreciated by Wolfensohn, a native Australian whose parents emigrated from England in the 1930s, and whose Jewish forebears had settled in England from Europe in the 19th century. He has seen the Institute grow to include programs such as the Program for Women in Mathematics, and the IAS/Park City Mathematics Institute, in which his wife,

> Elaine Wolfensohn, takes a particular interest, and the Artistin-Residence Program, which is close to both their hearts.

Music has been an important part of Jim Wolfensohn's life hood when he listened to his mother singing and playing the piano. It was through music that he met his future wife, Elaine,

since early childat a rehearsal for the Boston Symphony

Orchestra in 1957. At that time, he was a student at Harvard Business School and Elaine was a French major at Wellesley College.

It is fitting then, that in 1993, the lecture hall that was erected as part of a new mathematics building was named in his honor. Wolfensohn Hall is the venue for many Institute concerts and lectures. Its place at the center of IAS campus activities is a reflection of Mr. Wolfensohn's leadership of the Board of Trustees and his long commitment to the Institute.

Jim Wolfensohn's personal generosity has been felt in each of the four Schools. "Jim Wolfensohn takes trusteeship seriously and puts any organization placed in his trust under his protection and guidance," comments fellow Trustee, Vartan Gregorian, President of Carnegie Corporation of New York. "He is a man of integrity, generous with his time, and his wealth, often giving anonymously. He is also a maverick and has a great sense of humor. Above all, he is fun to be with."



James D. Wolfensohn with fellow members of the Board of Trustees of the Institute for Advanced Study in May 2004. From left to right: Vice-Chairman Richard B. Black, Chairman James D. Wolfensohn, Vice-Chairman Martin L. Leibowitz, and President of the Corporation Charles Simonyi.



BEOUESTS

lthough Walter F. Keleher traveled widely throughout Europe and Asia, there is no record of his having visited the Institute for Advanced Study. Born in Rochester, New York, into a close-knit and hardworking family, Walt Keleher developed a deep regard for learning and science. He was the second son of Harry and Rose Keleher and grew up with his German grandmother and his uncle living in the cottage next door. His father's death, when Walter was just nine years old, placed the family in financial difficulties. His mother and grandmother cultivated a large vegetable garden and his uncle handcaned chair seats in a backyard shed. With no money to send Walter or his brother, Bill, to college, both brothers had to work and study. Walter worked his way through the University of

Rochester, earning a degree in chemical engineering.

Mr. Keleher's first job after leaving university was with a company that produced paving products. Soon, however, he went to work for Arthur Anderson as a consultant. As such, he traveled widely. Adventurous of spirit and always attracted to science and new developments in technology, he enjoyed introducing family members, especially of the younger gener-



Walter F. Keleher (1918–2002) in 1962

reel-to-reel tape recorders and new foods such as avocados and artichokes. He was one of the first to have a talking computer and he communicated with people all over the world as a HAM radio operator. Learning was his constant passion and he read widely in nonfiction.

An avid raconteur, Walt Keleher gathered about him a group of loyal friends who cared for him and read to him in his later years when he was

An avid raconteur, Walt Keleher gathered about him a group of loyal friends who cared for him and read to him in his later years when he was blind. Having never married and with no children, it was Mr. Keleher's wish that his estate would benefit academic research. He chose the Institute for Advanced Study as the best place for his legacy. In his will, he stipulated that the Institute for Advanced Study be the beneficiary. His friends and family carried out his wishes.

ation, to new technologies such as

It is a fitting legacy to a life characterized by independence of spirit that the estate of Walter F. Keleher benefits the independent research institution of higher learning that is the Institute for Advanced Study.

The Institute for Advanced Study is sincerely grateful to the family and friends of Walter F. Keleher and to the memory of a friend of scholarship.

Bequests play an important role in supporting the Institute for Advanced Study. Each and every bequest, no matter how small, adds its strength to the Institute and associates your name or the name of your family with the Institute permanently. For some donors, such a willed gift is the most realistic way of making a substantial contribution. Bequests may be of various types: cash, securities, property, or works of art. An unrestricted bequest enables the

Institute to direct your gift where it will have the greatest impact. You may direct your bequest to a School, to endow Professorships or Memberships, to libraries or buildings, to maintain facilities, to underwrite research, or to fund other specific areas or interests.

Should you wish to consider the Institute in your estate plans, please call Kamala Brush, (609) 734-8031 or email kbrush@ias.edu.

THE ASSOCIATION OF MEMBERS OF THE INSTITUTE FOR ADVANCED STUDY (AMIAS)

The Institute for Advanced Study acknowledges with gratitude the contributions of the following former Members who have supported AMIAS consistently for the last 10 years.

Susan Ames,

Member in the School of Natural Sciences, 1972-74

Edward Cline,

Member in the School of Mathematics, 1978–79

Owen S. Connelly,

Member in the School of Historical Studies, Fall 1989, Fall 1992, and Fall 1995

Loyal Durand,

Member in the School of Natural Sciences, 1957-59, Fall 1975

George Glauberman, Member in the School of Mathematics, Jan–Mar 1969, Apr–Jun 1994

Robert C. Howell,

Member in the School of Historical Studies, 1982–83, Fall 1993

William E. Lang,

Member in the School of Mathematics, 1978-79

Timothy O'Meara,

Member in the School of Mathematics, Fall 1957, Fall 1962

David Pingree,

Member in the School of Historical Studies, 1968-69, 1978-79

L. Richardson, Jr.,

Member in the School of Historical Studies, Fall 1967

Wilhelm Stoll,

Member in the School of Mathematics, 1957–59

Earl J. Taft,

Member in the School of Mathematics, Fall 1969, 1973–74, 1978–79, Fall 1982, Jan–May 1987, Jan–Apr 1995, July–Aug 1995

Mitsuru Yasuhara,

Member in the School of Mathematics, 1970-71

AMIAS: Supporting Scholarship for Thirty Years

Then AMIAS, the Association of Members of the Institute for Advanced Study, was formed in 1974, its aim was to keep former Members informed about the work of the Institute and to obtain the broadest possible representation of their views. What began as a small group has blossomed into a 5,000-strong organization with Members in more than fifty countries across the globe. Through Member conferences, special lectures and receptions hosted by the Director, as well as sponsorship of an AMIAS Member each year, the Association supports the Institute's mission and continues for future generations the opportunities for independent, undistracted scholarship that Members have experienced since the founding of the Institute for Advanced Study seventy-five years ago.

Initially independent of the Institute, since 1994 AMIAS has been supported by the Office of the Director and is now an integral part of campus life. The Association offers current Members and Visitors and their families a variety of cultural and recreational activities. These include movies, lectures, and trips to museums and cultural events. A monthly newsletter, *Times at the Institute*, provides a calendar of activities on campus as well as events of interest in Princeton and the New York–Philadelphia metropolitan area.

Since the first AMIAS conference, held in May 1975, subsequent conferences have offered former Members the opportunity to hear Institute Faculty and fellow Members from all four Schools. AMIAS also hosts regional receptions throughout the United States and other countries, including Israel, France, United Kingdom, Germany and Japan. Recent receptions hosted by Peter Goddard in California, Seattle, Chicago, Philadelphia, London and Cambridge, England, have featured Faculty of all four schools, with presentations from Avi Wigderson on modern cryptography, Arnold J. Levine on the human genome, Michael Walzer on terrorism, Heinrich von Staden on science, religion and politics in ancient Greece, Eric S. Maskin

on the patenting of software, and former Member Diana Kormos-Buchwald, Associate Professor of History, California Institute of Technology, on the Einstein Papers Project.

Next year AMIAS members will participate in celebrating the Institute's 75th anniversary (see page 6).

While there are no membership dues for AMIAS, Members are encouraged to contribute, in any amount, to the AMIAS Fund, which enables the Institute to support a Member in one of its four Schools each year, on a rotating basis. Recent AMIAS Members include: anthropologists Michael Fortun (Rensselaer Polytechnic Institute) and Mayfair Yang (University of California, Santa Barbara) in the School of Social Science; classicist Egbert J. Bakker (Université de Montréal), and Islamicist Yohanan Friedmann (The Hebrew University of Jerusalem) in the School of Historical Studies; and applied mathematician Eric Vanden Eijnden (Courant Institute, New York University) in the School of Mathematics. This year, Devin J. Stewart, Associate Professor at Emory University, is the AMIAS Member in the School of Historical Studies. He is working on "Text and Palimpsests: Reconstructing the History of Islamic Jurisprudence."

AMIAS is governed by a Board of Trustees which meets annually. Founding president, Reginald Allen, was a Member in the School of Historical Studies (1966–67, Fall 1970, 1974–75). Founding treasurer, Murray Gerstenhaber (School of Mathematics, 1952–53, 1957–59, 1965–66, 1980–81), is AMIAS' longest serving officer. The current president, Melvyn B. Nathanson, was a Member in the School of Mathematics (1974–75, 1990–91, 1999–2000) and the current vice president, Jennifer T. Roberts, was a Member in the School of Historical Studies (Fall 1985). James Stasheff, Member in the School of Mathematics (1964–65, 1969–70, Fall 1987), serves as AMIAS secretary.

For more information about AMIAS or to make a contribution to the AMIAS Fund, please contact Linda Geraci at llg@ias.edu or (609) 734-8259.

Annual Welcome Reception for New Members



John Friedlander of the University of Toronto (center), with Professor Emeritus Atle Selberg in the School of Mathematics (left) and Professor Enrico Bombieri, IBM von Neumann Professor in the School of Mathematics.



Robert Langlands, Hermann Weyl Professor in the School of Mathematics, with Member Ioan Badulescu.



Bruce Grant of Swarthmore College (left) and Wolf Lepenies of the Wissenschaftskolleg zu Berlin, Visitor in the School of Social Science and Director's Visitor.



Members in the School of Mathematics, from left: Gady Kozma of Tel Aviv University, Eli Berger of Princeton University, Shiri Artstein of Tel Aviv University, Bo'az Klartag of Tel Aviv University, and Guy Kindler of Rutgers, The State University of New Jersey.



Particle physicist Tian Yu Cao, from Boston University, was a joint Visitor for the fall of 2004–05 in the Schools of Natural Sciences and Historical Studies.



From left to right: Justin Vazquez-Poritz of the University of Kentucky with his wife Michelle Phan, Piljin Yi of the Korea Institute for Advanced Study, and Michelle Sage, Administrative Officer in the School of Natural Sciences.



Adam Ashforth, Visiting Associate Professor in the School of Social Science (left), with Irving Lavin, Professor Emeritus in the School of Historical Studies.

Friends of the Institute for Advanced Study

he Institute for Advanced Study prepares to celebrate the 75th anniversary of its founding in 2005. Friends of the Institute will celebrate their 25th Anniversary, also in 2005. A special event is being planned for the Friends' 25th, to take place on February 2, 2005. Friends also have many other opportunities to participate in activities throughout the year, with lectures, concerts, films, and other special events. On January 21, 2005, Director Peter Goddard and Friends President Tina Greenberg will host a dinner for all new Friends of the Institute. For further information about the Friends, please contact Pamela Hughes, (609) 734-8204, or phughes@ias.edu.



Roberta and Fred Slivon with Fayne and Sam Petok at the annual Friends picnic in June.



Pamela Aarons and Saul Skoler at the Institute.



Joachim and Anke Kapp at the annual Friends picnic.



Conrad and Ann Plimpton at the annual Friends picnic.



Guest Frank Calaprice (center) with Friends Elizabeth and Peter Baughan at a Friends Forum in October.



Friends of the Institute, from left: Cy and Jackie Meisel with Frances and Eric Reichl, attending the annual Friends picnic in June.



Caroline and John Pallat attending a Friends Forum in October, at which guest speaker Eric S. Maskin, the Albert O. Hirschman Professor in the School of Social Science, asked "How Should Presidents be Elected?"

Director's Circle Dinner

IN MEMORIAM

The Institute for Advanced Study notes with deep sadness the passing of the following Friends.

Edward T. Cone Elizabeth Kauzmann James B.D. Palmer David Robertson



Michael and Francesca Liechenstein and John Rassweiler.



Current Friends President Tina Greenberg with past Presidents Mary Keating and Bill Bardel.

MASKIN (Continued from page 2)

theory, begun in the mid-1970s, addressed the question of procedural rules to ensure the best choice from among a set of alternatives. A vast literature on implementation, influenced by Maskin's groundbreaking work, has since evolved. In the early 1990s, working with Mathias Dewatripont, Professor of Economics at the Université Libre de Bruxelles and Director of the European Center for Advanced Research in Economics and Statistics (ECARES), Maskin set out the first theoretical explanation for the so-called soft budget constraint, a phenomenon that played a major role in the failure of socialist economies. Since 1991, sometimes in collaboration with Partha Dasgupta, who is Frank Ramsey Professor of Economics at the University of Cambridge, Professor Maskin has been examining different methods of transferring assets from public to private hands to ensure a more productive use of assets.



The Institute for Advanced Study is grateful to the Wolfensohn Family Foundation for their support of the Albert O. Hirschman Chair. Support is also acknowledged from: the late Edward T. Cone, Deutsche Bank AG, The Horace W. Goldsmith Foundation, Joanna S. and Daniel Rose, and The Cable Charitable Foundation.

Albert O. Hirschman, Professor Emeritus in the School of Social Science, and Eric S. Maskin, Albert O. Hirschman Professor in the School of Social Science, at the Institute for Advanced Study in October 2004.

The Institute for Advanced Study Celebrates its 75th Anniversary in 2005

ver four weekends, one for each of its Schools, the Institute will celebrate its 75th anniversary. A fifth celebration, honoring Institute founders Louis Bamberger and Caroline Bamberger Fuld and Albert Einstein's special relationship to the Institute and its early development, will be held on the anniversary of the signing of the Institute's Certificate of Incorporation on May 20, 1930.

March 11–12: School of Mathematics April 8–9: School of Historical Studies September 23–24: School of Natural Sciences November 11–12: School of Social Science

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AMIAS

(ASSOCIATION OF MEMBERS OF THE INSTITUTE FOR ADVANCED STUDY) Melvyn B. Nathanson, President

FRIENDS OF THE INSTITUTE FOR ADVANCED STUDY Tina Greenberg, President

EINSTEIN LEGACY SOCIETY Martin A. Chooljian, Charles L. and Rosanna Jaffin, Co-Chairs

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