

The Social Responsibility of Science

*Honoring and Advancing the Legacies of
JOSEPH ROTBLAT and RUTH ADAMS*



Thursday, November 3, 2005

National Academy of Sciences
2100 C Street NW, Washington, DC



Co-Sponsored by:

*US Pugwash – Pugwash Conferences on Science and World Affairs
Student Pugwash USA*



PROGRAM

3:00 *Welcome and Introductions*

Dr. Jeffrey Boutwell (Executive Director, Pugwash Conferences)

Ms. Christine Rovner (Executive Director, Student Pugwash USA)

3:10 *Joseph Rotblat and the 50th Anniversary of the Russell-Einstein Manifesto*

Prof. Paul Doty (Mallinckrodt Professor of Biochemistry, Harvard University, and a participant in the first Pugwash conference in July 1957), and the showing of a video of Sir Joseph Rotblat discussing the Manifesto

3:30 *Panel Presentations: The Social Responsibility of Science*

Prof. John Holdren (Harvard University, Woods Hole Research Center, and former Chair, Executive Committee, Pugwash Conferences)

“Nuclear Weapons: Getting to Zero”

Prof. Alan McGowan (New School University and Board Chair, Student Pugwash USA)

“Genetics and Social Responsibility”

Ms. Chitra Kumar (Environmental Protection Agency and former head of Student Pugwash USA campus chapter, Massachusetts Institute of Technology)

“Engaging a New Generation of Scientists”

4:45 *Closing Remarks: Remembering Jo Rotblat and Ruth Adams*

Ms. Sandra Ionno Butcher (Director, Pugwash History Project and former Executive Director, Student Pugwash USA)

Prof. Paolo Cotta-Ramusino (Secretary General, Pugwash Conferences on Science and World Affairs)

5:00 *Wine and Cheese Reception*

JOSEPH ROTBLAT

1908–2005

During the dark days of World War II and a time of great personal calamity, Joseph Rotblat followed his conscience out of Los Alamos and into a life dedicated to the responsible use of science and technology. Rotblat remained an optimist to his final days. “What is the alternative?” he said.

Rotblat was born in Warsaw in 1908. He experienced hardship during the first World War, and learned a trade at a young age—he started his own business as a young electrician at the age of 15. He secured a place at the Open University, despite the lack of formal education, and the power of his intellect quickly attracted attention.

He eventually earned a doctor of physics from the University of Warsaw (1938), a PhD from the University of Liverpool (1950), a DSc from the University of London (1953) and eight honorary degrees. In addition to many scientific accolades, he received some of the most prestigious awards bestowed upon citizens, including the Commander of the Order of the British Empire, the Albert Einstein Peace Prize, the Copernicus Medal from the Polish Academy of Sciences, the Lifetime Achievement Award of the Nuclear Age Peace Foundation, the Knight Commander of the Order of St. Michael and St. George, and the Nobel Peace Prize, to name but a few. A Fellow of the Royal Society, he wrote more than 400 publications, including at least 25 books on nuclear physics, radiation biology, nuclear weapons, the Pugwash movement, and the social responsibility of scientists.

Throughout his long and varied career, Joseph Rotblat was at the forefront of moral discussions on the role scientists can and should play in society. He was the youngest signatory of the 1955 Russell-Einstein Manifesto, and took to heart the Manifesto’s message and challenge. Working with giants of the last century like Bertrand Russell, Leo Szilard, Eugene Rabinowitch, Cecil Powell, and many others, he established the Pugwash Conferences on Science and World Affairs. He devoted much energy and time to fostering the International Student/Young Pugwash movement.

SELECTED TRIBUTES TO JOSEPH ROTBLAT

One could not help admiring this man of indomitable energy, moral integrity and high culture. Yet the most important thing about him was that even in very old age his mind remained crystal clear and his convictions firm. In a changed world facing new challenges, he addressed the people, ordinary citizens as well as world leaders, with an urgent appeal to rid the world of nuclear weapons, for in the final analysis this is the only way to a secure existence for future generations. Expressing my condolences for the passing of this remarkable man, I pay tribute to his long and eventful life, dedicated to serving the people, a life that is truly an inspiring example to all of us.



PRESIDENT MIKHAIL GORBACHEV, Russia

At the time when it mattered most, many Manhattan Project scientists—some who in later years became icons for peace—were engaged in delicately balancing their consciences against their careers. But Joseph Rotblat did exactly what was right and moral. No equivocation, no this-or-that. He simply quit. Nukes are evil and immoral. What a marvelous example for everyone, particularly scientists, in a world where moral obfuscation is so fashionably common.

PERVEZ HOODBHOY, Professor of Physics, Quaid-e-Azam University, Islamabad, Pakistan, and Member, Pugwash Council

I was 15 when I met Dr. Rotblat at the 1959 Conference on the Dangers of Biological and Chemical Warfare...I didn't know enough at the time to be petrified at what I was hearing, but Dr. Rotblat did—and yet it never took the spring out of his step, nor kept that eager, hopeful smile off his face....We met again in 1997 in Pugwash, at the anniversary conference, which addressed not only nuclear dangers, but also the tension between the world's "North and South" countries which was beginning to eclipse the old East/West division. So Sir Joseph had even less to be smiling and energetic about. But as I walked with him up to the gentle hill to the school to attend an afternoon session, his thoughts were on the future, and of all the good that "we" could do, and the high school senior who would receive the first Rotblat Scholarship; and I had to trot to keep up with him.

LISSY GULICK, daughter of Anne/stepdaughter of Cyrus Eaton

He leaves a legacy of inspiration and courage to his many friends and colleagues around the world.

KOFI ANNAN, Secretary-General, United Nations

Sir Joseph was a great friend of my father's. He was also a friend of mine, although my contact is very recent. I was honored by Sir Joseph's agreement to be a member of the Select Advisory Committee of the Linus Pauling Centennial Award, founded by me in 2001 to commemorate the centennial of my father's birth, and greatly honored to present the 2002 Award to Sir Joseph himself in June 2003, in Geneva, Switzerland. With great sorrow, but with hope that Sir Joseph's influence will continue to enlighten the peoples of the world.

LINUS PAULING JR MD, Honolulu Hawaii

I was privileged to meet Jo Rotblat after spending more than 11 years in Saddam's prison for refusing to work on his nuclear weapon programme. He symbolised humanity's reach for peace and respect for life. We immediately realised that we shared a total commitment to the same ideals, although we came from very different backgrounds. He asked me, given my experience, what he could do to help scientists behind bars who share our values and commitment. My response was 'Your towering profile is an inspiration and source of comfort for them.' I am deeply saddened for his loss, not least for the sake of the scientists behind bars.

HUSSAIN AL-SHAHRISTANI, First Deputy Speaker, National Assembly, Baghdad, Iraq

"Prof" generously dedicated his time and energy to help students understand science's responsibility to use new advances and technologies for the benefit of humanity. He was instrumental in the founding and success of Student Pugwash USA, and he appreciated the curiosity and fresh perspectives that young people bring to these weighty discussions. His energy, wisdom, and unwavering support will be deeply missed.

CHRISTINE ROVNER, Student Pugwash USA

Participants of the First Pugwash Conference, Pugwash, Nova Scotia, Canada, 7-10 July 1957.





Speaking at the 54th Pugwash Conference, “Bridging a Divided World Through International Cooperation and Disarmament,” Seoul, South Korea, October 2004.

Our consolations in his passing are that he lived long and accomplished much, and indeed that he lived long enough to enjoy the major formal recognitions that came to him so late in life, so long overdue: the Nobel Peace Prize, election to the Royal Society, a knighthood. Our shame is that we did not succeed in presenting him, before he died, with the gift he most desired—a global prohibition of nuclear weapons. The greatest tribute we can pay to his memory is to push forward with increased determination now towards this end.

JOHN HOLDREN, Chair of the US Pugwash Group 1983–95

All who walked with him can truly say that we knew a real human being who lived life in an exemplary manner, with a lightness of heart and gentleness of person in contrast to the weightiness of the subjects he addressed. He showed us that to remember our humanity involves being the change we wish to see and that being a person of peace is part of the process of moving the world from the cult of violence to the culture of peace.

DOUGLAS ROCHE, O.C. Chairman Middle Powers Initiative
JONATHAN GRANOFF, President, Global Security Institute

When I stopped by to see Jo at his office, in 2002, I asked him, “What’s the secret to your longevity?” (He was only 94 then!) He grinned and said, “It’s a secret!” Then he laughed, and added, “It’s having something to live for.” In his case, stopping or slowing the mad nuclear arms race. He was a sweet and feisty fellow who made the world a saner and safer place.

WILLIAM LANOUILLE, US, Leo Szilard biographer

I am very sad to hear that Professor Joseph Rotblat has passed away and I wish to express my most sincere condolences as an atomic bomb survivor and a Japanese physicist. I am deeply saddened for his loss for peaceful future human being, not least for the sake of nuclear disarmament.

SHOJI SAWADA, Japan

In 2003 I had what I consider one of the most memorable experiences of my life. We brought Michael Douglas and Joseph together in Hamburg to tape an interview for our “What’s So Hard About Peace?” series. We got to sit in the room while Michael asked him about his childhood in Poland, walking off the Manhattan Project, the difficult moral decisions he had made in his life. Some of the crew came up to me after the shoot and thanked me, saying that being there had changed their lives.



Photo by Peter Hoennemann, reprinted courtesy of TheCommunity.com

Two of the women said they came away with crushes on Joseph. (Not surprising. He was completely charming in his sweet temperament, humility and warmth). Michael’s experience of the interview is probably best described by the expression on his face in the pictures taken afterwards.... The day before he passed away, I received an email from Desmond Tutu’s office about a letter some of the Nobel Laureates were signing, calling for reason and sanity on both sides in the Middle East. He said that Joseph Rotblat had just sent his best wishes to everyone from the hospital and they were just waiting for confirmation on his signature. It seems that true to form, the day before he died, Joseph Rotblat was still doing what he could to make the world a better place....

MARY WALD, Documentary filmmaker



Delivering the Nobel Prize acceptance speech.

I asked Joseph what kept him working for Disarmament, with so much enthusiasm and joy. He said it was important for people to have goals and he had two goals in life. “My short-term goal” he said “is the abolition of nuclear weapons, and my long-term goal is the abolition of war.” Joseph never saw his goals fulfilled, but he did fulfill the most important goal any human being can attain. He evolved and was transformed during his earthly journey, into a truthful, joyous, compassionate, gentle, kind, human being. He was truly an inspiring and wise man for our time... As for his goals of nuclear disarmament and a world without war, I believe we can best pay tribute to our brother Joseph, by continuing to work to make his

dreams come true and build a world safe for the human family.

MAIREAD CORRIGAN MAGUIRE, Nobel Peace Laureate

RUTH SALZMAN ADAMS

1923–2005

When asked why she became concerned about nuclear weapons, Ruth Adams said, “It stands to reason. All the influences in my life had something to do about crimes against humanity.”

Ruth was child of the depression, her mother was a New Deal social worker (“WPA furniture made of wooden crates and surplus food from the weekly truck were part of life in those days”). She grew up with knowledge of Hitler and the Holocaust and these influences, she said, led her to become more of a political person than those around her.

The 1955 Russell-Einstein Manifesto, which led to the formation of the Pugwash Conferences, summarized for her the dangers of the nuclear world. She said, “To those of us in Chicago [the Manifesto] was like finding a crack in the Iron Curtain. Especially to me, and to many of those in my generation in that setting, it gave meaning and set a principled direction that we could follow with enthusiasm.”

She later asked herself, “How the hell did I get involved with that group of scientists?” and she said it was “fateful.” It all started with an interview she had with Eugene Rabinowitch, which was “love at first sight.” Ruth became Rabinowitch’s young assistant at *The Bulletin of the Atomic Scientists*, and began to work with him to bring the concerns of scientists on nuclear weapons issues to a wider audience. In the course of this ground-breaking collaboration, they had correspondence with Joseph Rotblat, of the British Atomic Scientists’ Association. This early correspondence laid the groundwork for the eventual historic meeting, which took place in Pugwash, Nova Scotia in July 1957.

Ruth Adams, describing her experience at that first Pugwash Conference, said, “As a young person, sitting in discussions, that commitment and passion for international humanity cut across all those fears, constraints, and even that Iron Curtain.”

Ruth later served as editor of the *Bulletin* at two separate times, and founded the influential program on Peace and International Cooperation at the MacArthur Foundation. She served on the boards of many important non-governmental and grant-making organizations. Her interests were wide-ranging and global. For example, through Pugwash connections, she was instrumental in establishing the International Centre for Insect Physiology and Ecology in Nairobi, Kenya. She worked with Leo Szilard to help establish the Council for a Livable World. She served as an advisor and mentor to many young people, and fostered the development of the International Student/Young Pugwash movement. Her concerns spanned social and economic and intergenerational lines, and she always took a holistic approach to challenging topics. Ruth indeed taught us all to “learn to think in a new way” as the Russell-Einstein Manifesto encourages us to do.

SELECTED TRIBUTES TO RUTH ADAMS



Ruth Adams was ambitious for the world. She believed that we could live together without violence, cooperating to solve problems, delighting in our differences, and enjoying ourselves in the company of one another....She expressed strong opinions, but encouraged creativity and exploration. To work with her was to enter a world where everything was connected to everything else, where curiosity drove exploration, and where questioning was a way of being. She inspired all of us to be better than we could possibly be because she was ambitious for the world. Ruth believed in the possibility of world peace....The point is (I can hear her saying) that we are all responsible for one another. Political borders, ideological divides, income differences, religious beliefs mattered not a wit to her....She was the most deeply affectionate person I have ever known. She saw our warts and flaws while she honored our intelligence and goodness. She loved humanity—one by one. It was out of this robust and demanding affection that she sought world peace....

KENNETTE BENEDICT, *Bulletin of the Atomic Scientists*

I first met Ruth in the mid-1970s, when she was editor of *The Bulletin of the Atomic Scientists* and I was just beginning to work on security issues. The first lesson she taught me was that it is possible to write an entire article about the Department of Defense without using acronyms. It is possible—I just wish more people had learned the lesson. Ruth understood the power of jargon to create and protect special communities and she worked at the *Bulletin* to pull down those barriers to a wider public understanding of national security issues.... Like many other women in the field, I have reason to be grateful for her encouragement—in an era and in places in which women were often treated as invisible, she went out of her way to create opportunities for us.... She had progressed from being—I believe—the youngest person at the first Pugwash meeting in 1957 to being a much-loved senior figure in the movement, but she never lost her ability to bring generations together, as well as different nationalities and disciplines. She infused us all with her strong belief that it was an obligation to join the struggle for a better world and her unquenchable optimism that we could make a difference.

JUDITH REPPY, Cornell University

[The last two Pugwash Conferences that Ruth attended] symbolized all that she contributed to the success of Pugwash through the years: her bedrock commitment to peace and justice for all peoples, her delight in engaging younger people in lively debates about how we all need to do more to reach those goals, and her sparkle and vitality in touching everyone she met. Ruth will be missed, sorely, but those qualities of hers will always be with us.

JEFFREY BOUTWELL, Executive Director, Pugwash Conferences



Ruth speaking from the porch of Thinkers' Lodge, Pugwash, Nova Scotia, July 2003.

Ruth loved the beauty of the natural world and lived in it and with it in mind... I still see her at the wheel with the dramatic scenery [of Basalt, Colorado] behind her, pointing out the features of the land she loved...Ruth left me an example, a best practice of life, about how to connect, foster and befriend people. Ruth's life is a reminder to me to slow down, to take time to get to know other people in depth, to listen to them and understand their lives, and to help people, especially younger people, along the way.

GLORIA DUFFY, The Commonwealth Club of California

She made us feel as though we had something special to contribute. She shared with us her enthusiasm, friendship, contacts and belief that young people can and must play a role in determining the future.

SANDRA IONNO BUTCHER, former executive director, Student Pugwash USA



Ruth and Will Marshall in Pugwash, Nova Scotia.

Ruth inspired thousands of young people to get involved with and contribute to the issues of peace and social justice, not only through professional careers but through their work with civic institutions everywhere...To Ruth, public service was a privilege, rather than a chore.

VICTOR RABINOWITCH, Washington, DC

You know, I don't think she would have remembered my name, but I surely remember hers. In the few hours that I met her she became an example of what I want to be. I met her a little over five years ago now and she was simply one of the best role models of a strong woman for people my age—intelligent, strong, secure in her knowledge and fearless in her joy of life—and that was from three hours.

JENNIFER SELTZER, former staff member, Student Pugwash USA



Martin Kaplan, Ruth Adams and Jennifer Leaning at the 1998 Pugwash Workshop on Public Health (Havana, Cuba).

Ruth Adams was the rarest of committed policy intellectuals; someone whose abiding passion for justice was matched by her consummate talent in getting justice done. She had little patience with empty elitism or PC posturing but worked with a daring and a vision matched by very few. Her interest—whether it was in supporting Student Pugwash, advancing the equality of women in science and policy, championing ISODARCO and other open policy forums, or in negotiating the start of the critically important MacArthur Peace and Security program—was to define the next “large” goal, find the means necessary to achieve it, and push tirelessly to make things happen. She was remarkably successful in so many areas and so modest in tooting her own horn in the process, that it will be years before we realize the full extent of what we all have lost.

CATHERINE MCARDLE KELLEHER, Naval War College, Newport, Rhode Island

It wasn't until I heard her speak on her early life three years ago, that I realized just how special Ruth was. Not only did she almost represent the US at the Olympics in swimming, but during World War II she arranged a dance between African Americans and Whites at the shipyard she was working in (which caused her to be fired). On a more personal note, Ruth and her husband Bob, a leading archaeologist, were always gracious hosts. To this day I remember staying in her house in San Diego, helping to clean up after a buffet and asking whether some dishes should be put in the dishwasher. “Better not,” she replied with a smile, “they are sixteenth century.”

**PAUL GUINNESSY, Former UK Student Pugwash Member,
Online Editor, *Physics Today***

Ruth Adams followed her own unique calling and path. We hope, and expect, as she did, that others will continue to do the same.

BOB ADAMS, San Diego, California, and Basalt, Colorado

TO HONOR JOSEPH ROTBLAT'S LIFE AND LEGACY, Pugwash has set up a special fund to help make possible the establishment of his archives at Churchill College Cambridge. If you would like to contribute, please make your check payable to 'British Pugwash Trust (Nobel)' and send your donation to: Joseph Rotblat Archive Fund, Pugwash Conferences, Ground Floor Flat, 63A Great Russell Street, London WC1B 3BJ. Alternately, donations may be made out to US Pugwash, noted for the Rotblat Archives, and sent to US Pugwash at the address below. We will forward them to UK Pugwash.

TO HONOR RUTH ADAMS'S COMMITMENT TO THE NEXT GENERATION, US Pugwash and Student Pugwash USA have established a fund to provide a travel stipend for a student leader to attend the annual Pugwash Conference and the associated Student/Young Pugwash pre-conference. Donations can be sent to US Pugwash at the address below.

We are certain that they both would ask each of you to spend some time helping young people better understand the complex issues at the juncture of science, technology, and society—through your mentorship, participation in events, and support of young peoples' initiatives.

Our special thanks go to Jo Husbands and Ben Rusek for their help in organizing today's event, and to Anne Read for design and layout of this booklet and Cardinal Press of Fredericksburg, - Virginia for printing.

Pugwash

**Conferences on
Science and World Affairs**

1111 19th Street NW, Suite 1200
Washington, DC 20036
pugwashdc@aol.com
www.pugwash.org

SPUSA

**Student Pugwash
USA**

2029 P Street NW, Suite 301
Washington, DC 20036
spusa@spusa.org
www.spusa.org