



IPSR NEWS

Iowa Chapter, Physicians for Social Responsibility



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SMART NEWS

Promotion of PSR's SMART Security Platform at the January 2004 Caucuses was a great success. Feedback from you suggests SMART was passed at hundreds of Iowa precincts!! SMART is now making its way to the state platform convention.

IPSR Officers & Steering Committee

- Maureen McCue MD PhD, Coordinator
- John Rachow PhD MD, Secretary, Treasurer, Membership, Newsletter
- Kirsten Meredith, Webmaster & Liaison IPGV
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- Wayne Osborn PhD
- David Bedell MD

"Naturally, the common people do not want war. But after all, it is the leader of a country who determines policy and it is always a simple matter to drag people along whether it is a democracy, or a fascist dictatorship, or a parliament, or a communist dictatorship. A people can be brought to the bidding of the leader. This is easy. All you have to do is tell them they are being attacked and denounce the pacifists for being unpatriotic and exposing the country to danger. It works the same in every country."

— Hermann Goering, Nuremberg in 1946

March 20 Global Day of Action—*The World Still Says No to War*

March 20, 2004, the first anniversary of the Iraq war will be a GLOBAL DAY OF ACTION sponsored by United for Peace (www.unitedforpeace.org) and International A.N.S.W.E.R. (www.internationalanswer.org). Iowa Peace groups including the Iowa PSR Chapter are sponsoring coordinated events around the state from March 18 through March 21. Full details can be found at www.iowa-psr.org. See page 6 for maps and a schedule of March 20 events in Des Moines.

Plan to march with Iowa PSR in the big

Peace Parade and attend the indoor rally after the parade in Parents Hall at the Olmsted Center at Drake University. The rally will feature speakers **Tom Hayden**, International Peace Activist, and **Bruce Nestor**, National Lawyers Guild.

The Parade will assemble Saturday, March 20 at 12:30 PM on the Drake University Campus behind the parking lot on University between 29th and 30th Streets. It will commence at 1:00 PM and follow a 2 mile circular route
(March 20 — continued on page 2)

This issue of the newsletter explores various implications of the nuclear power and weapons industries. The Cold War nuclear standoff between great powers has been transformed into a even more frightening international trade in nuclear weapons and delivery systems that has allowed unstable governments to become nuclear powers. The 50-year-old promise of nuclear energy has not come to fruition. Rather, we are faced with insoluble disposal problems of immense quantities of dangerous nuclear waste that presents not only radiation hazards but risk of chemical toxicity through pollution of the environment from aging storage facilities and waste transportation accidents. Furthermore, nuclear waste presents a security problem should quantities fall into the wrong hands. Ω

Pakistan's Nuclear Weapons Black Market

PSR member, Ron Knief, has been closely following revelations about the international nuclear arms trade. He prepared the following report.

After 30 years it's just coming to light, Pakistan's international involvement in nuclear weapons proliferation. At the heart of the scandal is a Pakistani scientist, Abdul Qadeer Khan. He is revered in Pakistan as the father of Pakistan's atomic bomb. In early February he confessed that during the last 15 years, he ran a black market that sold nuclear weapons materials, designs, and technology to Iran, Libya, and

North Korea.

Thirty years ago in 1974, Dr. Khan's career took off while he was working in a nuclear enrichment plant at Almelo, the Netherlands. In May of that year, Pakistan's neighbor and arch-enemy India, conducted its first nuclear explosion, named "Smiling Buddha." In 1975 Dr. Khan suddenly left the Netherlands and in 1976 was in charge of Pakistan's nuclear weapons program. What he brought to the program that was so essential, and the Dutch accused him of stealing, was centrifuge technology.

They say the most difficult problem to mask
(Nuclear Black Market — continued page 2)

(March 20 — continued from page 1)

around the Drake campus including a segment on Martin Luther King Parkway. The rally will start at 2:30 PM after parade participants return to Olmsted Center.

PSR members and health care providers will march together wearing white jackets and stethoscopes behind a banner featuring the PSR SMART Security campaign. We will carry signs proclaiming, *Health Care Not Warfare*. The PSR contingent will pass out SMARTIES to promote the SMART Security Platform and be accompanied by our *Anti-war muscle-guided medical missile!*

March 20 events are designed to capture media attention and inspire people to become engaged with the issues. We will be joined by civil and human rights activists, nuns and religious clerics of all faiths, environmentalists, farmers, veterans, local politicians, educators, children, students, elders, workers, music makers, puppeteers, clowns, and jugglers—any and all Iowans eager to bring about a smarter, healthier, more secure approach to life on this small planet.

The parade and local events will not be complete without your participation. We also encourage you to bring marchers from your hospital or clinic, secure endorsements and support from your colleagues and your church. Please create a banner, a sign, or leaflets to take to the parade. We are also collecting funds and supplies for the *Free Clinics of Iowa*. At the very least, please send us a cut-out tracing of your hand (preferably on card stock, signed with

your name and hometown), to show that you are *Lending a Hand for Peace*. We are collecting thousands of hand prints to display at the rally and then send on to Washington.

Please send donations and hand prints to Iowa PSR, 20 East Market St, Room 200, Iowa City, IA 52245. If you have questions, please feel free to contact Maureen McCue, MD at 319-828-4789 or e-mail mickiq@earthlink.net. For more information and last-minute updates, please visit our web site: www.iowa-psr.org.

SUPPORTING ORGANIZATIONS

Alliance for Justice; American Friends Service Committee; Ames Interfaith Council; Amnesty International; Axiom Foundation; Catholic Peace Ministry; Catholic Worker House; Center for the Exploration and Practice of Nonviolence; Central Iowa Students for Peace; Dubuque Peace & Justice; Dubuque SOA Watch; Drake National Layers Guild; Ecumenical Ministries of Iowa; Eulenspiegel Puppets; Grandmothers Against War; Grandview College Center for NonViolence; Iowa City Free Medical Clinic; Iowa City Human Rights Commission; Iowa Green Party; Iowa Peace Network; Iowans For Peace; Iowa Physicians for Social Responsibility; Iowa United Nations Association; Johnson County Greens; Linn County Greens; Methodist Federation for Social Action; Mobilization Against War; Our Ladies of the Americas Social Justice Committee; Peace Action; Peace Time; QC Action; Sioux Land People for Peace; Sisters of St. Francis; Center for Active Nonviolence, Clinton; STAR*PAC Stop the Arms Race Political Action Committee; West Branch People for Peace; Women For Peace; Women's International League for Peace and Freedom. Ω

(Nuclear Black Market — continued from page 1)

ter in making a nuclear weapon is mastering the art of enriching uranium. Enriching uranium is what a centrifuge does, and this is the know-how Dr. Khan possessed.

The scope and audacity of the black market is not fully known yet, but what is known, is very unnerving. What was bought, sold and bartered globally includes parts for centrifuges made in Malaysia, high-speed switches that can be used as detonators made in the United States, missile technology exchanged by North Korea for centrifuge technology, bomb designs of Chinese origin, and enough uranium hexafluoride sold to Libya to make one bomb. This is just a partial list of the trafficking and countries involved, but it has been said basically the whole kit to make a nuclear weapon was for sale.

As politically sensitive as this issue is, it's not being addressed properly in Pakistan or in this country. Pakistan's president, Pervez Musharraf, has pardoned Dr. Khan. Our government is not making it an issue and is not raising the concern that are a lot of experts on the subject, that is, the question of who else might have received and benefited from this black market.

I believe Pakistan's nuclear weapons black market was, and still is, a very serious threat to our national security. I would like to see more discussion and intelligence done on this issue. It's not in the best interest of our nation to be kept in the dark when all of this is coming to light. — Ron Knief, PSR member Ω

WE GAVE AWAY WEAPONS-GRADE URANIUM, NOW UNACCOUNTED

The following is derived from an article in the New York Times March 7, 2004 authored by reporters Joel Brinkley and William J. Broad

In a report issued February 6, 2004, and partially reported on in the Wall Street Journal on February 13, the Inspector General disclosed that the United States is making little effort to recover weapons-grade uranium that the government dispersed to 43 countries under the Atoms for Peace Program begun in the 1950's. A similar report was issued in 2002.

The highly enriched uranium was originally given with the expectation that it would be used for peaceful means and be returned or otherwise accounted for. Iran and Pakistan were among countries that received enriched uranium. US efforts to recover

the uranium, in either the original or resulting spent form according to the terms the original loans, have been lax. The US reportedly has recovered approximately 2,600 Kg of the 17,500 Kg given. A bomb requires only 10 kilograms of weapons-grade uranium. This report was issued even as the Bush administration warns that Al Qaeda and possibly other terrorist organizations are trying to obtain nuclear materials to make a bomb. According to the NYT article "Approximately half of the uranium is in the hands of government agencies, universities or private companies in 12 countries that are 'not expected to participate in the program' to return it. Among those countries are Iran, Pakistan, Israel, Mexico, Jamaica and South Africa."

One possible reason so little uranium has been returned is that, in a 1996 decision, the US decided to charge recipients \$5,000 per Kg to return the uranium. Hmm...let's see, 17,500 Kg x \$5,000/Kg = \$87.5 million. This seems to be a pittance compared to the \$133 million the US spends *daily* on the Iraq occupation. Ω

THREE MINUTES TO MIDNIGHT—*The Impending Threat of Nuclear War*

Nuclear Policy Research Institute Conference
January 2004 Washington, DC

Under a travel grant from the chapter, IPSR Coordinator, Maureen McCue, MD, PhD attended the NPRI Conference. She prepared the following report.

This vitally important conference was organized and chaired by Dr. Helen Caldicott, one of the founders and promoters of PSR and IPPNW. Conference participants included an unprecedented gathering of weapons and policy experts: military leaders, directors of weapons laboratories, physicists, UN personnel, internationally known scientists and activists against nuclear weapons proliferation, and former government leaders, among others. They came from Japan, Russia, Geneva, France, Israel, and Pakistan. I sat behind former Defense Secretary Robert McNamara.

Conference Topics Covered:

- The Medical and Ecological Implications of Nuclear War
- The Hair Trigger: How a Nuclear War Could Start
- Nuclear Plans and Nuclear Targeting *After* the Cold War
- Nuclear Labs and Nuclear Development, *Post* Cold War
- Regional Nuclear Dangers
- Reflections on the War Experience by Bobby Muller, President of the Vietnam Veterans of America Foundation
- Understanding Nuclear Challenges: The Role of the Media

Setting a serious mood, the conference opened with a harrowing description of the destructive power of nuclear weapons especially the effects of the fire ball released on detonation. Lest anyone had forgotten the horrific stories of Hiroshima, Nagasaki, the Bikini island Bravo test and its unexpected victims fishing on the Lucky Dragon 80 miles away, or the Utah tests, the discussion was accompanied by photos and personal narratives.

After reviewing the contents and destructive power of our existing arsenal, speakers addressed the process of Stockpile Stewardship and the plans for funding, developing and deploying new nuclear weapons, preparing the Nevada Test Site for renewed nuclear testing, and building a powerful new bomb factory known as a Modern Pit Facility (MPF). Several speakers asserted that only through the development of ever more sophisticated weaponry will we remain safe; others asserted that such plans only make us less

secure. Speaking philosophically, yet others questioned the moral integrity and sanity of any such plans. Unfortunately, despite the importance of these issues the public is poorly informed and public oversight is minimal.

The Bush administration plans to go ahead with development of the Robust Nuclear Earth Penetrator (RNEP), the Nuclear “Bunker Buster.” Congress recently overturned a ten-year old ban on the development of nuclear weapons with a yield of less than five kilotons. Theoretical capabilities and risks of earth penetrating bombs for bunker busting were addressed including the destabilizing nature of such plans. The environmentally destructive policy of weapons testing ceased over a decade ago under the Comprehensive Test Ban Treaty. Abandoning treaty obligations, the administration has received funding to reduce the time it would take to plan and resume nuclear testing by readying the Nevada test site for use by 2005.

The administration has requested funding to design and build a Modern Pit Facility (MPF), a powerful new bomb factory. A “pit” is the plutonium core for a nuclear weapon without which the weapon cannot detonate. Fortunately, these plans were delayed for a year. Other plans to recycle older weapons and redesign new weapons and weapons delivery systems are proceeding under the Stockpile Stewardship program.

The psychology of creation and reaction to weapons accumulation, the risk that these destructive technologies would eventually find their way into the hands of dangerous actors unafraid to use them, was the conference’s powerful subplot. Each speaker, regardless of their position or background, agreed that given their unrestrained power to destroy and induce retaliation, nuclear weapons should never be used. That was their only point of agreement. Yet, the more the U.S. stockpiles and develops weapons of mass destruction, the greater the likelihood that other nations and actors will acquire or develop their own such weapons. In many ways, the conference foretold and predicted the existence of a deadly black market in nuclear weapons and the actions of the Pakistan weapons expert Dr. Khan, who sold Pakistan’s expertise to the highest bidder (*see page 1 lead article by member Ron Knief*).

While even many conservatives find current administration ideas and goals indefensible, a radical program to create the next generation of nuclear weapons is moving forward, and the administration is (as in so many things) oblivious to public, congressional or world opinion. This is an issue against which we cannot afford to be ignorant or silent. The future survival of life as we know it on our planet hangs in the balance. For more information on the conference and speakers, visit the web site:

www.3minutestomidnight.org/DesktopDefault.aspx.

—Maureen McCue, MD, PhD, PSR member Ω

**WE NEED A NUCLEAR POWER REVIVAL
LIKE WE NEED A REVIVAL
OF DDT, ASBESTOS & LEAD PAINT**

National Information and Resource Service: www.nirs.org. Check this web site for facts on nuclear energy provisions in the Energy Bill still under debate in the U.S. Senate

THE INSOLVABLE DILEMMA OF NUCLEAR WASTE DISPOSAL

Maureen McCue, MD, PhD offers this opinion on the health and environmental impact of all of nuclear programs and explores the environmental impact of reviving either the nuclear power industry (pending Energy Bill) or reinvigorating the weapons program.

Whether or not you believe nuclear weapons have legitimate deterrent properties, whether or not you believe producing nuclear energy can be divorced from the process of developing weapons as in so-called "peaceful atoms programs," the issue of waste has yet to be solved. Even if the most positive scenario supporting the production of nuclear weapons and nuclear power generation were to be realized, the dilemma of what to do about all the hazardous waste remains.

Virtually every gram of plutonium, reactor fuel element, and container of enriched uranium radioactive waste ever produced since 1942 remains with us today as a lethal mountain of waste.

Where did the mountain of Nuclear Waste come from? It began with the first self-sustaining nuclear chain reaction at the Fermi reactor. Then uranium ore mines and mills produced hundreds of tons of toxic tailings that leach into the ground and blow into the atmosphere. Refining, manufacturing, enrichment, and filtering processes for weapons or energy production, cooling spent fuel rods, and dismantling of decommissioned or obsolete weapons, and all components in contact with these radioactive materials themselves become toxic waste. The half-life of uranium 238, the main component of depleted uranium, is 4.5 billion years. Because products of decay are also radioactive, these wastes actually become more toxic with time.

Scientific and engineering experts have labored long to find adequate ways to dispose of massive and highly dispersed amounts of hazardous and long lived waste products. The processes

involved in handling, shipping or altering these products are never without risk of serious accident due to intentional or unintentional human failings. Besides the inherent toxicity whenever radioactive waste products are released into the atmosphere or leached into soil and groundwater, many waste products risk being weaponized if they fall into the hands of unscrupulous actors.

Out of sight, out of mind? Slight of Hand? The most recent solutions proposed include transporting tens of thousands of truckloads of highly radioactive waste to the dump-site at Yucca Mountain. Others promote reprocessing irradiated fuel to yield plutonium, or conversely to process weapons grade plutonium into nuclear fuel. All of these approaches are not only rife with technical difficulties and failings, but they are all very costly. Comprehensive cleanup or recycling programs for existing waste are estimated to cost in the hundreds of billions of dollars over many decades.

Other policy makers endeavor to solve the problem simply by relaxing regulatory standards or reclassifying the waste to avoid dealing with the problem. Once reclassified as "incidental waste," radioactive waste products will be able to enter less regulated public waste streams and recycling projects. For example, the Federal government has proposed selling radioactively contaminated metals to the commercial market for use in pots and pans, prostheses, coins, zippers, and other consumer goods.

None of the solutions proposed to date is free of significant risks, none of the solutions proposed to date can guarantee that materials stored or transported will reach their destination safely or remain safely contained, as will be necessary essentially, for all eternity. The worst problem with the waste site idea is that if all the waste currently sitting on power or weapons plant grounds were to reach Yucca Mountain successfully, that dump would be full. Any additional waste produced would again have no where to go. Let's stop it now!

—Maureen McCue, MD, PSR member Ω

The nuclear waste problem is far too complex to cover in one short article. For more information on the nuclear waste issue, visit the following web sites:

Nuclear Information & Resource Service (NIRS): www.nirs.org
Public Citizen: www.citizen.org/cmep/energy/enviro_nuclear/nuclear_waste/FEIS
NRDC: www.nrdc.org/bushrecord/nuclear_disposal.asp#1560
DOE Yucca Mt. report: <http://tis.eh.doe.gov/nepa/eis/eis0250/eis0250index.html>

Dr. Seuss would have been 100 this month.

NUKE WASTE AND SHAM

I DO NOT LIKE YOUR STORAGE PLAN.
I DO NOT LIKE IT, OPPOSED, I AM.
YOU SHOULD NOT PUT YOUR GARBAGE IN A PLACE
THAT CANNOT CONTAIN HIGH LEVEL WASTE.

YOU SHOULD NOT MOVE IT ON A TRAIN.
YOU SHOULD NOT MOVE IT WITH A CRANE.
YOU CAN'T IGNORE SHOSHONE CLAIMS.
FOR THAT, YOU ALL SHOULD BE ASHAMED!

NOT ON A TRAIN.
NOT WITH A CRANE.
NOT IN YUCCA MOUNTAIN,
THAT'S INSANE!

I DO NOT LIKE YOUR STORAGE PLAN.
I DO NOT LIKE IT, ENRAGED, I AM.

YOU SHOULD NOT MOVE
WASTE IN THE CASKS.
YOU SHOULD NOT MOVE IT
QUITE SO FAST.

NOT IN A CASK.
NOT WITH YOUR PAST.
NOT WITH YOUR
HELPFUL PAPER MASKS.

I DO NOT LIKE YOUR STORAGE PLAN.
I DO NOT LIKE IT, INSULTED, I AM.
YOU CAN'T DENY THE SIMPLE FACT
THAT YUCCA MOUNTAIN'S FULL OF CRACKS.

THE GROUND BENEATH THE MOUNTAIN MOVES.
HOT WATER, EARTHQUAKES, MAGMA PLUMES.
AS OBVIOUS AS THE SKY IS BLUE,
YOUR PLAN ENSURES WE ALL ARE DOOMED.

I DO NOT LIKE YOUR STORAGE PLAN.
I DO NOT LIKE IT, HORRIFIED, I AM!

WOULD YOU MOVE YOUR FAMILIES NEAR THIS SITE?
WOULD YOU MOVE THEM THERE AND SLEEP WELL AT NIGHT?
I DO NOT THINK SO. AM I RIGHT?
YOU SHOULD FORGET THIS DEADLY FLIGHT.

I DO NOT LIKE YOUR STORAGE PLAN.
I DO NOT LIKE IT, APPALLED, I AM!

— Jen Leong

Source:

State of Nevada Agency for Nuclear Projects
www.state.nv.us/nucwaste and choose link to Yucca
Mountain. Ω

HEALTH EFFECTS OF DEPLETED URANIUM

The Nuclear Policy Research Institute (NPRI), Dr. Helen Caldicott, President, held its first scientific symposium on June 14, 2003 to explore what is currently known about the health effects of depleted uranium (DU) munitions. Key experts from a variety of fields convened at the New York Academy of Medicine to present their findings, answer questions and review current policies. Dr. Navdeep "Dipi" Sidhu, Iowa PSR member, attended the conference supported by a travel grant from the chapter and offers this summary of health effects of DU. Dr. Sidhu emphasizes that our knowledge about DU is woefully sparse but what information is available, suggests DU is a greatly underestimated risk to the environment and human health.

"Depleted" Uranium (DU) is approximately 60%, 85% and 100% as radioactive as natural uranium in alpha, gamma and beta radiation, respectively, and 100% as chemically toxic.

There is no lower threshold for the deleterious dose of ionizing radiation. Furthermore, recent research indicates that the damaging effects of low-dose alpha radiation may have been underestimated.¹

Exposure to DU can occur through inhalation, ingestion and contaminated wounds.²

Impact and combustion of DU munitions (a use stemming largely from its high-density cheap-waste status) leads to aerosol production. The lodging in lungs of insoluble DU compounds could result in long-term focal irradiation with attendant risk of lung cancer.³ Kidneys, the main excretory organ for soluble DU compounds, and bones are among other critical organs exposed.^{4,5}

Corrosion of DU compounds leading to contamination of groundwater was detected by the United Nations Environmental Programme in Serbia and Montenegro, suggesting the risk of its passage into the food chain, including milk, and its dispersion by wind. The World Health Organization (WHO) also points out the risk of high-dose DU ingestion by children in war zones.²

Residual DU can be detected in the urine of exposed individuals and differentiated from natural uranium more than 10 years after exposure using high-resolution multi-collector ICPMS mass spectrometry. There is a pressing need for more research to assess exposure to DU of both civilians in war zones and war veterans, and to establish the health effects of such an exposure.

References:

1. Zhou, H.N. et al. Radiation risk to low fluences of alpha particles may be greater than we thought. *Proceedings of the National Academy of Sciences of the United States of America* **98**, 14410-14415 (2001).
2. Depleted Uranium: Sources, Exposure and Health Effects. Executive Summary, World Health Organization.
3. Operation Desert Storm: Army Not Adequately Prepared to Deal with Depleted Uranium Contamination. pp. 17-18, United States General Accounting Office, January 1993.
4. Health and Environmental Consequences of Depleted Uranium Use in the U.S. Army, Army Environmental Policy Institute, June 1995.
5. Depleted Uranium: Scientific Basis for Assessing Risk, Nuclear Policy Research Institute, July 2003, www.nuclearpolicy.org

—Navdeep Sidhu, MD, PSR member Ω

WHAT IS DEPLETED URANIUM?

This article is derived from a 22 page report that summarizes the June 2004 NPRI Conference at the NY Academy of Science. The full report as well as speakers' slides and papers can be downloaded from NPRI's web site: www.nuclearpolicy.org. (Go to the DU Weapons link under Issues.)

Natural uranium is a dense, weakly radioactive element present in varying trace amounts in rocks, soil, water, air, plants, animals, and even humans. Uranium and its compounds have proven valuable to humans for well over a century and served various civilian functions, including colored glazes for pottery. The advent of nuclear weapons in the 1940's expanded the demand for enriched uranium, which is essential for the generation of both nuclear fuel and nuclear weapons.

Natural uranium contains three major radioactive isotopes, U-238, U-235, and U-234. U-238 comprises about 99.27% of uranium in nature, with 0.72% U-235 and 0.0054% U-234. To be used as a nuclear fuel or in nuclear weapons, uranium must be enriched in U-235, most commonly by the process of gaseous diffusion. Nuclear power fuel requires enriched uranium composed of 3-5% radioactive U-235. Highly enriched uranium used for nuclear weapons necessitates an increase to over 90% U-235. However, the enrichment process produces a disproportionately large amount of byproduct, depleted uranium (DU). Producing just 1 kilogram of highly enriched uranium creates about 200 kilograms of DU. DU closely resembles natural uranium in its chemical, physical, and toxicological properties. DU emits about 40% less alpha radiation and 15% less gamma radiation than natural uranium.

Since the dawn of the nuclear weapons program, the United States has accumulated a stockpile of DU that exceeds 700,000 tons,

making the US the largest generator of DU worldwide. DU hexafluoride (DUF6), the form of DU produced by the enrichment process, must be stored in containers. Should the containers leak, DUF6 poses a potential risk because it readily reacts with water vapor in the atmosphere to form chemically toxic uranyl fluoride and highly corrosive hydrofluoric acid. The DOE stores the waste DUF6 in some 57,700 steel cylinders, each holding about 12 metric tons, located at the three major gas diffusion plants in Oak Ridge, Tennessee; Paducah, Kentucky; and Portsmouth, Ohio.

Commercially, DU serves various functions in the fields of medicine, aviation, space, and petroleum exploration. It has a density 1.7 times that of lead, making it effective ballast for commercial aircraft, ships, and even satellites. In the aviation industry, DU is used as counterweights in aircraft elevators, radar antennae, landing gear, and rotor blades. The medical industry uses DU in radiation shields in radiotherapy units. The petroleum industry has employed DU in some of its drilling equipment.

DU embodies several characteristics that make it particularly appealing to the military. Physically, DU is extremely dense and pyrophoric, spontaneously igniting and burning upon impact. When a DU shell hits a hard target, the projectile "sharpens as it melts and pierces heavy armor." Upon impact, DU ignites and aerosolizes, forming tiny particles suspended in air with dispersion into the surrounding area. Depending on several conditions, 18-70% of the DU penetrator oxidizes to form suspended aerosols comprised of 50-96% respirable-size particles. When used as plating in tank armor, DU provides an almost impenetrable shield against conventional weapons.

In the 1991 Gulf War, the Pentagon estimates that 320 tons of DU in munitions were expended. Ω

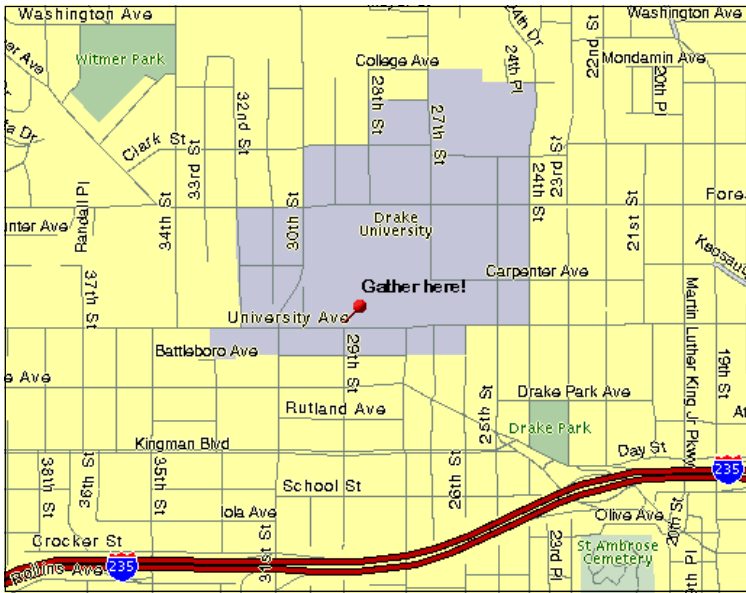
GLOBAL DAY OF ACTION—*The World STILL Says No to War*

Parade and Rally

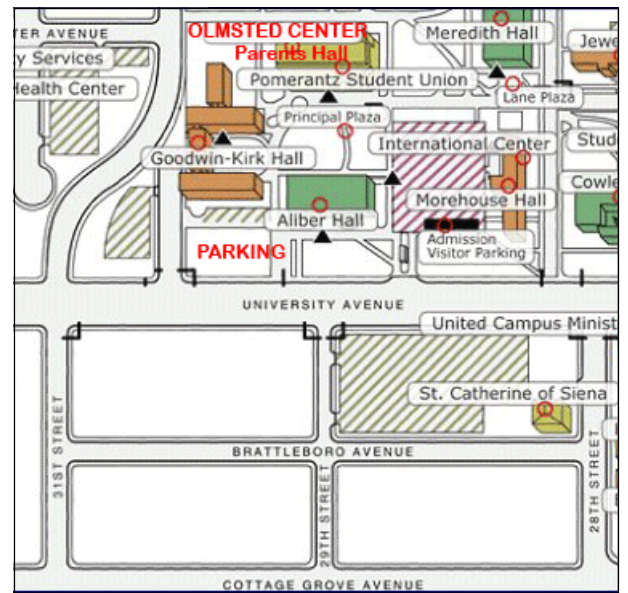
Des Moines, Iowa, March 20, 2004

Olmsted Center, Drake University

(For full details, visit: www.iowa-psr.org)



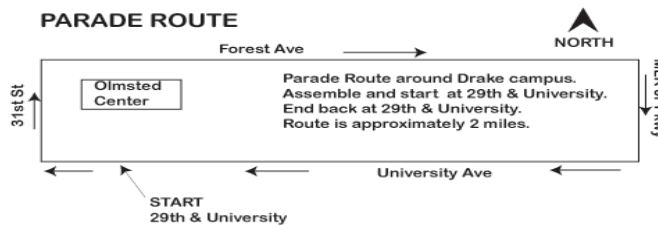
Drake Campus, Des Moines



Drake Campus, Olmsted Center

PROGRAM:

- 11:00 AM** Film: “Breaking the Silence—Truth & Lies in the War on Terror” Bulldog Theatre, Olmsted Center, Drake
- 12:30 AM** Parade participants line up at 29th & University
- 1:00 PM** Parade begins



2:30 PM Rally indoors at 2:30 PM in Parents Hall in the Olmsted Center on the Drake campus.

EMCEE: ED FALLON, Iowa Representative

SPEAKERS:

MAYOR FRANK COWNIE

“Welcome”

TOM HAYDEN, International peace activist

KEYNOTE: “War, Occupation & Empire”

BRUCE NESTOR, National Lawyers Guild

“Protect the Bill of Rights”

LANA ROSS, Legislative Advocate, UMC

“Education & Healthcare-Not Warfare”

JEAN BASINGER, WILPF, recently in Iraq

“Ending the Occupation”

RITA HOHENSHEL, WILPF

On crossing the line: “Dissenting from War”

CHERYL BRODERSEN, concerned citizen

“Rachel Corrie: Peace Maker”

4:30 PM Film: “Uncovered: The Whole Truth About the Iraq War” Bulldog Theatre, Olmsted Center, Drake

STUDENT PSR GROUP SPONSORS SPEAKER

Aranthan Jones, senior health policy advisor for the Congressional Black Caucus, will speak on racial and ethnic disparities in health care on Monday, March 22 at 6:30 PM in 1110 MERF (Medical Education and Research Facility) at the Carver College of Medicine. *(Please enter the auditorium from the second floor.)*

Mr. Jones also serves as a lead health advisor to the Select Committee on Homeland Security’s Subcommittee for Prepared-

ness and Response. He has undergraduate degrees in Sociology and Anthropology from Iowa State and a MPH from George Washington School of Public Health and Health Services. He has extensive experience in the US and internationally in HIV/AIDS, minority health, health globalization, and chronic diseases. He has worked at the University of Illinois School of Public Health, the World Health Organization, Johns Hopkins School of Public Health, and the Fogerty International Center at the NIH. Ω

UPDATE FROM IPGV

Kirsten M. Meredith, Communications Coordinator, Iowans for the Prevention of Gun Violence, offers the following update.

On Tuesday March 2, when much of the country and media attention was focused on the “Super Tuesday” Democratic primaries, the US Senate rejected a terrible bill that would have granted the gun industry blanket immunity from civil liability and denied the victims of gun violence their day in court. The bill, S.1805 or the “Protection of Lawful Commerce in Arms Act,” was co-sponsored by a majority of Senators, including Iowa’s Chuck

Grassley (R), and it was expected to pass.

However, when Senators supporting gun violence prevention were able to attach amendments to the bill to renew the federal assault weapons ban and close the “gun show loophole,” the NRA decided it could no longer support the bill, and urged its supporters to vote against it. The final vote was 90-8, with both Sen. Tom Harkin and Sen. Chuck Grassley voting against it. This is a distinct and undeniable defeat for the NRA, for whom the bill was a top priority. For more, see www.ipgv.org.

— Kirsten Meredith, PSR member Ω

Contact Us

Got ideas? Questions? Contact us, please. Constructive criticism welcome.

- Our mailing address: Iowa PSR
20 E Market St, Room 200
Iowa City, IA 52240
- E-mail can be sent to: mac81185@aol.com.
- Faxes can be sent to: 319-828-9911
- Check our web site: www.iowa-psr.org. (View and download this and old newsletters in PDF format.)

If you wish to contribute, join PSR, or renew membership, please detach and complete both sides as appropriate.

Donate to IPSR Projects. IPSR can now accept donations earmarked for specific projects.

March 20 Parade & Rally in Des Moines expenses (speaker travel, etc)	\$ _____
Donation for Free Medical Clinics, in association with March 20 Parade & Rally	\$ _____
Immigrant and Refugee Educational Video Project (IPSR News Volume 2, Number 2)	\$ _____
Student PSR Affiliate at the University of Iowa (See article, page 6)	\$ _____
Office, web site, and Newsletter Support	\$ _____
Donation TOTAL (carry to other side)	\$ _____

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IPSR
20 East Market St, Room 200
Iowa City, IA 52245



March 20, Des Moines, Drake Campus, Parade at 1:00 PM and
Rally at 2:30 PM—BE THERE!!

**WE NEED A NUCLEAR POWER REVIVAL
LIKE WE NEED A REVIVAL
OF ~~DDT, ASBESTOS & LEAD PAINT~~**

Please detach and pass on to physicians, other health care professionals, or citizens who may be interested in PSR.

Join! Renew! Forward to a Colleague!

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PSR Membership:

- \$ 125 - Health professional with doctoral degree
 \$ 50 - Other health care professionals and general public
 \$ 35 - Retired
 \$ 15 - Student (first year student membership is free)

\$ _____ Total contributions from other side

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Membership confirmation will be sent to you by national PSR.

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