

## **An open letter from Nobel laureates**

The undersigned Nobel laureates voice our support for the Ukrainian people and the free and independent state of Ukraine as it faces Russian aggression.

In a move that recalls the infamous attack of Nazi Germany on Poland in 1939 (using similar tricks of feigned provocation) and on the Soviet Union in 1941, the government of the Russian Federation, led by President Putin, has launched an unprovoked military aggression — nothing else but a war — against its neighbor, Ukraine. We choose our words carefully here, for we do not believe the Russian people have a role in this aggression.

We join in condemning these military actions and President Putin's essential denial of the legitimacy of Ukraine's existence.

There is always a peaceful way to resolve disputes. The Russian invasion blatantly violates the United Nations Charter, which says "All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state." It ignores the Budapest Memorandum of 1994, which obligated Russia and others to respect the sovereignty, independence, and existing borders of Ukraine.

Russia's security concerns can be addressed within the framework of the UN Charter, the 1975 Helsinki Final Act, and the 1990 Paris Charter. To make war, as President Putin and his collaborators have done, is an unwarranted, bloody, and unproductive way to a future.

The Russian invasion will stain the international reputation of the Russian state for decades to come. It will pose barriers to its economy and inflict hardships on its population. The sanctions imposed will restrict the ease of movement of its talented and hardworking people in the world. Why raise this fence between Russia and the world now?

Hundreds of Ukrainian soldiers, Russian soldiers, and Ukrainian civilians, including children, have died already. It's so sad, so unnecessary. We gather in this appeal to call upon the Russian government to stop its invasion of Ukraine and withdraw its military forces from Ukraine.

We respect the calm and the strength of the Ukrainian people. We are with you. Our hearts go out to the families and friends of all, Ukrainians and Russians, who have died and been injured already. May peace come to this piece of our beautiful world.

## 181 signees:

Name	Category	Prize Year
Peter Agre	Chemistry	2003
Frances H. Arnold	Chemistry	2018
Paul Berg	Chemistry	1980
Thomas R. Cech	Chemistry	1989
Martin Chalfie	Chemistry	2008
Emmanuelle Charpentier	Chemistry	2020
Aaron Ciechanover	Chemistry	2004
Elias James Corey	Chemistry	1990
Robert F. Curl Jr.	Chemistry	1996
Johann Deisenhofer	Chemistry	1988
Jennifer A. Doudna	Chemistry	2020
Jacques Dubochet	Chemistry	2017
Gerhard Ertl	Chemistry	2007
Bernard L. Feringa	Chemistry	2016
Joachim Frank	Chemistry	2017
Richard Henderson	Chemistry	2017
Dudley R. Herschbach	Chemistry	1986
Avram Hershko	Chemistry	2004
Roald Hoffmann	Chemistry	1981
Robert Huber	Chemistry	1988
Brian K. Kobilka	Chemistry	2012
Roger D. Kornberg	Chemistry	2006
Yuan T. Lee	Chemistry	1986
Robert J. Lefkowitz	Chemistry	2012
Jean-Marie Lehn	Chemistry	1987
Michael Levitt	Chemistry	2013
Tomas Lindahl	Chemistry	2015
Benjamin List	Chemistry	2021
Roderick MacKinnon	Chemistry	2003
David W.C. MacMillan	Chemistry	2021
Hartmut Michel	Chemistry	1988
Paul L. Modrich	Chemistry	2015
William E. Moerner	Chemistry	2014
Ryoji Noyori	Chemistry	2001
John C. Polanyi	Chemistry	1986
Venkatraman Ramakrishnan	Chemistry	2009
Jean-Pierre Sauvage	Chemistry	2016
K. Barry Sharpless	Chemistry	2001
Dan Shechtman	Chemistry	2011
Hideki Shirakawa	Chemistry	2000
George P. Smith	Chemistry	2018

Sir James Fraser Stoddart	Chemistry	2016
Sir John E. Walker	Chemistry	1997
Arieh Warshel	Chemistry	2013
M. Stanley Whittingham	Chemistry	2019
Sir Gregory P. Winter	Chemistry	2018
Kurt Wuthrich	Chemistry	2002
Ada E. Yonath	Chemistry	2009
Angus S. Deaton	Economics	2015
Peter A. Diamond	Economics	2010
Robert F. Engle III	Economics	2003
Eugene F. Fama	Economics	2013
Oliver Hart	Economics	2016
Bengt Holmstrom	Economics	2016
Finn E. Kydland	Economics	2004
Eric S. Maskin	Economics	2007
Daniel L. McFadden	Economics	2000
Robert C. Merton	Economics	1997
Paul R. Milgrom	Economics	2020
Roger B. Myerson	Economics	2007
Edmund S. Phelps	Economics	2006
Alvin E. Roth	Economics	2012
Robert J. Shiller	Economics	2013
J. M. Coetzee	Literature	2003
Kazuo Ishiguro	Literature	2017
Elfriede Jelinek	Literature	2004
Patrick Modiano	Literature	2014
Herta Muller	Literature	2009
Orhan Pamuk	Literature	2006
Wole Soyinka	Literature	1986
Mario Vargas Llosa	Literature	2010
James P. Allison	Medicine	2018
Harvey J. Alter	Medicine	2020
Werner Arber	Medicine	1978
Richard Axel	Medicine	2004
David Baltimore	Medicine	1975
Bruce A. Beutler	Medicine	2011
J. Michael Bishop	Medicine	1989
Elizabeth H. Blackburn	Medicine	2009
Michael S. Brown	Medicine	1985
Linda B. Buck	Medicine	2004
William C. Campbell	Medicine	2015
Mario R. Capecchi	Medicine	2007
Peter C. Doherty	Medicine	1996
Andrew Z. Fire	Medicine	2006

Joseph L. Goldstein	Medicine	1985
Carol W. Greider	Medicine	2009
Jeffrey Connor Hall	Medicine	2017
Leland H. Hartwell	Medicine	2001
Harald zur Hausen	Medicine	2008
Jules A. Hoffmann	Medicine	2011
Tasuku Honjo	Medicine	2018
H. Robert Horvitz	Medicine	2002
Sir Michael Houghton	Medicine	2020
Tim Hunt	Medicine	2001
Louis J. Ignarro	Medicine	1998
David Julius	Medicine	2021
William G. Kaelin Jr.	Medicine	2019
Eric R. Kandel	Medicine	2000
Barry J. Marshall	Medicine	2005
Craig C. Mello	Medicine	2006
Edvard Moser	Medicine	2014
May-Britt Moser	Medicine	2014
Ferid Murad	Medicine	1998
Erwin Neher	Medicine	1991
Sir Paul M. Nurse	Medicine	2001
Christiane Nusslein-Volhard	Medicine	1995
John O'Keefe	Medicine	2014
Yoshinori Ohsumi	Medicine	2016
Satoshi Omura	Medicine	2015
Ardem Patapoutian	Medicine	2021
Stanley B. Prusiner	Medicine	1997
Sir Peter J. Ratcliffe	Medicine	2019
Charles M. Rice	Medicine	2020
Sir Richard J. Roberts	Medicine	1993
Michael Rosbash	Medicine	2017
James E. Rothman	Medicine	2013
Bert Sakmann	Medicine	1991
Randy W. Schekman	Medicine	2013
Gregg L. Semenza	Medicine	2019
Phillip A. Sharp	Medicine	1993
Hamilton O. Smith	Medicine	1978
Jack W. Szostak	Medicine	2009
Susumu Tonegawa	Medicine	1987
Harold E. Varmus	Medicine	1989
Eric F. Wieschaus	Medicine	1995
Torsten N. Wiesel	Medicine	1981
Shinya Yamanaka	Medicine	2012
Michael W. Young	Medicine	2017

Carlos Filipe Ximenes Belo	Peace	1996
Shirin Ebadi	Peace	2003
Leymah Roberta Gbowee	Peace	2011
Tawakkol Karman	Peace	2011
The 14th Dalai Lama	Peace	1989
Denis Mukwege	Peace	2018
Maria Ressa	Peace	2021
Oscar Arias Sanchez	Peace	1987
Juan Manuel Santos	Peace	2016
Kailash Satyarthi	Peace	2014
Jody Williams	Peace	1997
Muhammad Yunus	Peace	2006
Hiroshi Amano	Physics	2014
Barry Clark Barish	Physics	2017
J. Georg Bednorz	Physics	1987
Gerd Binnig	Physics	1986
Steven Chu	Physics	1997
Francois Englert	Physics	2013
Jerome I. Friedman	Physics	1990
Andre Geim	Physics	2010
Reinhard Genzel	Physics	2020
Andrea Ghez	Physics	2020
Sheldon Glashow	Physics	1979
David J. Gross	Physics	2004
F. Duncan M. Haldane	Physics	2016
John L. Hall	Physics	2005
Serge Haroche	Physics	2012
Klaus Hasselmann	Physics	2021
Gerardus 't Hooft	Physics	1999
Takaaki Kajita	Physics	2015
Wolfgang Ketterle	Physics	2001
Klaus von Klitzing	Physics	1985
J. Michael Kosterlitz	Physics	2016
Anthony J. Leggett	Physics	2003
John C. Mather	Physics	2006
Michel Mayor	Physics	2019
Arthur B. McDonald	Physics	2015
Gerard Mourou	Physics	2018
James Peebles	Physics	2019
Arno Penzias	Physics	1978
William D. Phillips	Physics	1997
H. David Politzer	Physics	2004
Adam G. Riess	Physics	2011
Brian P. Schmidt	Physics	2011

Horst L. Stormer	Physics	1998
Donna Strickland	Physics	2018
Joseph H. Taylor Jr.	Physics	1993
Kip Stephen Thorne	Physics	2017
Daniel C. Tsui	Physics	1998
Rainer Weiss	Physics	2017
Frank Wilczek	Physics	2004
David J. Wineland	Physics	2012