

A Declaration from Members of the World's Biotechnology Sector On Global Access to COVID Vaccines & Treatments and the Role of Intellectual Property

We, the undersigned CEOs of global biotechnology companies and associations have a social responsibility to work with other stakeholders – healthcare providers, governments, multilateral organizations, and non-governmental donor organizations – to ensure that COVID vaccines and treatments get to the patients in the world who most need them. We are working hard to fulfill this responsibility.

- **Our sector must continue to play a constructive, proactive part in developing COVID solutions and the global manufacturing capacity to produce them.** In the past year, over 950 global R&D projects have been launched on COVID vaccines, treatments, and biologics, as companies have diverted efforts from other projectsⁱ. 70 percent of these projects are by small and medium sized companiesⁱⁱ. Over 250 global partnerships have been formed to build manufacturing capacityⁱⁱⁱ. And we are working hard to do more.
- **Intellectual property is the foundation of our sector.** It is responsible for creating the global biotech network that responded so quickly to the COVID crisis in the first place. It is what gives investors the confidence to fund companies with long time horizons and high risks. It gave companies the assurance that they could quickly pivot during the early days of the pandemic into COVID projects. And it helped ensure the type of global cooperation and partnerships that are driving companies, countries, and manufacturers to quickly scale up the production.
- **We support strong, collaborative efforts like those endorsed by the G-20^{iv}** to address the global imbalances in access to COVID vaccines and treatments. Success will require national governments to address legislative or contractual impediments to supplying populations in need, especially in low- and middle- income countries. Bottlenecks and shortages in global supply chains for vaccine production need to be urgently addressed. And strained health-care systems in low-and middle-income countries need significant support to ensure vaccines get to people.
- **The proposed “waiver” of intellectual property rights proposed in the World Trade Organization (WTO) will be ineffective and counterproductive** in addressing this crisis. Intellectual property rights are *not* responsible for the imbalance in COVID vaccine supplies between higher and lower income countries. It will create a long contentious global negotiation that will not urgently address the crisis, and foster more “vaccine nationalism,” exacerbating shortages in an already strained global supply chain. It would divert limited resources from companies that are focused on maximizing current global partnerships while maintaining quality and patient safety. Lastly, it would send a powerful signal to the biotech sector and investors to avoid taking the risks to develop solutions in future public health emergencies.
- Current estimates are that existing **global vaccine manufacturers will produce more than 11 billion doses of COVID vaccines in 2021^v**, and significantly more in the first part of 2022. We are committed to working with other global stakeholders to see that these doses get to those that most need them, wherever they may be.

Company Signatories

United States of America

Alabama

Kanti Sunkavalli, CEO, Agile Biodetection
Karim Budhwani, CEO, CerFlux, Inc.
Deborah Bidanset, COO, SunFire Biotechnologies LLC
John Bowman, CEO, Sure Med Compliance

California

Sam Alworth, CEO, AcuraStem
Marilyn Bruno, CEO, Aequor, Inc.
Robert Bradway, CEO, Amgen
Gail Maderis, President & CEO, Antiva Biosciences, Inc.
Frank Watanabe, President & CEO, Arcutis Biotherapeutics
Michael Raab, President & CEO, Ardelyx
James Mackay, President & CEO, Aristeia Therapeutics
Jeffrey Cleland, CEO, Ashvattha Therapeutics, Inc
Wilson Xu, CEO, Balto Pharmaceuticals, Inc.
Niquette Hunt, CEO, Candasant Biomedical
Rachel Haurwitz, President & CEO, Caribou Biosciences, Inc.
Michael Narachi, President & CEO, CODA Biotherapeutics
John Nicols, President & CEO, Codexis, Inc
Sujal Shah, CEO, CymaBay Therapeutics
Ryan Beal, CEO, Dyve Biosciences
Luis Pena, President & CEO, Evommune, Inc.
Michael Morrissey, President & CEO, Exelixis
Alexander Hardy, CEO, Genentech
Ted Love, CEO, Global Blood Therapeutics
Francisco LePort, CEO, Gordian Biotechnology
Robert Bernard, CEO, Ichor Medical Systems, Inc
Grace Colon, CEO & President, InCarda Therapeutics
Brett Monia, CEO, Ionis
Michael Miille, CEO, Joyn Bio
Rohit Shukla, CEO, Larta
Guy Iannuzzi, CEO, Mentus
Howard Robin, CEO, Nektar Therapeutics
Paul Hastings, President & CEO, Nkarta Therapeutics
Francis Parnell, Chairman & CEO, Parnell Pharmaceuticals, Inc.
Jennifer Cheng, President & CEO, PTM Therapeutics, Inc.
Paul Mola, President & CEO, Roswell Biotechnologies Inc.
Rosemarie Christopher, President, RxRS CRO
Brian Neman, CEO, Sanguine BioSciences, INC.
Larry Stambaugh, Chairman & CEO, Sarmal, Inc.
Craig Parker, CEO, Surrozen, Inc
William Newell, CEO, Sutro Biopharma, Inc.
David Webb, CEO, Synbal, Inc.
Oliver Fetzner, CEO, Synthetic Genomics
Sen Sundaram, CEO, Terns Pharmaceuticals, Inc.
Rick Winningham, CEO, Theravance BioPharma

Eric Dube, President & CEO, Travers Therapeutics
Bonnie Anderson, Executive Chairwoman, Veracyte, Inc.
George Scangos, CEO, Vir Biotechnology
Keith Murphy, CEO, Viscient Biosciences

Colorado

Ron Lowy, Executive Chairman, PharmaJet

Connecticut

Jeff Kindler, CEO, Centrexion Therapeutics
Erika Smith, CEO, ReNetX Bio

Delaware

Hervé Hoppenot, CEO, Incyte

Florida

Susan Washer, President & CEO, AGTC
John Crowley, Chairman & CEO, Amicus Therapeutics
Marc Thibonnnier, Founder & President, AptamiR Therapeutics, Inc.
James Sapirstein, President & CEO, Azurrx Biopharma

Georgia

Ajay Houde, Co-Founder & CEO, Annoviant, LLC (F/K/A TGen Tech, LLC)
Steven Damon, CEO, Micron Biomedical

Illinois

Richard Gonzalez, Chairman of the Board & CEO, AbbVie

Indiana

David Ricks, Chairman & CEO, Eli Lilly and Company

Massachusetts

Habib Dable, President & CEO, Acceleron Pharma
Jackie Fouse, CEO, Agios Pharmaceuticals
John Butler, President & CEO, Akebia Therapeutics
Ludwig Hantson, CEO, Alexion Pharmaceuticals, Inc.
Richard Pops, Chairman & CEO, Alkermes
John Maraganore, CEO, Alnylam Pharmaceuticals
Sylvia Wulf, President & CEO, AquaBounty Technologies, Inc.
Tim Van Hauwermeiren, CEO & Co-Founder, argenx
Alicia Secor, CEO, Atalanta Therapeutics
John Oyler, Co-Founder, Chairman, & CEO, BeiGene
Michel Vounatsos, CEO, Biogen Inc.
Nick Leschly, CEO, bluebird bio
Melissa Bradford-Klug, President, Citrine Medicine
Ranjeet Banerjee, CEO, Cold Chain Technologies
Laurence Reid, CEO, Decibel Therapeutics
David Lucchino, CEO, Frequency Therapeutics
Chip Clark, President & CEO, Genocea Biosciences, Inc.
Jeff Livingstone, CEO, Igia Pharmaceuticals
Mark Enyedy, President & CEO, ImmunoGen

Adelene Perkins, CEO & Chair, Infinity Pharmaceuticals
Richard Paulson, President & CEO, Karyopharm
Louis Arcudi, CEO, Millendo
Stephane Bancel, CEO, Moderna
Stephen Yoder, President & CEO, Pieris Pharmaceuticals
Pablo Cagnoni, CEO, Rubius Therapeutics
Rogerio Vivaldi, President & CEO, Sigilon Therapeutics
Tony Loebel, President & CEO, Sunovion
Nancy Simonian, CEO, Syros Pharmaceuticals
Marc Casper, Chairman, President & CEO, Thermo Fisher Scientific Inc.
David Hoey, CEO, Vaxxas Inc.
Jeff Baxter, President & CEO, VBI Vaccines
Reshma Kewalramani, CEO & President, Vertex Pharmaceuticals Inc.
Paula Ragan, CEO, X4 Pharmaceuticals Inc.
Chris Garabedian, Chairman & CEO, Xontogeny

Maryland

Robert G. Kramer, President & CEO, Emergent BioSolutions
Rachel King, CEO, GlycoMimetics, Inc.
Scott Koenig, President & CEO, MacroGenics, Inc.
Stanley Erck, President & CEO, Novavax, Inc.
Oliver Schacht, President & CEO, OpGen Inc.
Ken Mills, President & CEO, REGENXBIO Inc.

Michigan

Mina Sooch, CEO, Ocuphire Pharma

Minnesota

Mark Platt, President & CEO, Recombinetics, Inc.
Arkadiusz Dudek, CEO, TTC Oncology

North Carolina

Arthur Alfaro, CEO & Director, 21MedTech
John Temperato, President & CEO, 9 Meters Biopharma
Jerzy Szewczyk, CEO, BioKier Inc.
Damian Shea, President, Statera Environmental Inc.
Anna Rath, CEO, Vestaron
Jian Bao, Co-Founder & CEO, ZY Therapeutics Inc.
Jason Zhou, CEO, Zymeron Corporation

New Jersey

Giovanni Caforio, CEO, Bristol Myers Squibb
Ivan Cheung, Chairman, Eisai Inc.
Jennifer Taubert, Executive Vice President, Worldwide Chairman, Pharmaceuticals, Johnson & Johnson
Mark Trudeau, President & CEO, Mallinckrodt Pharmaceuticals
Kenneth C. Frazier, CEO, Merck
Alex Martin, CEO, Palladio Biosciences
Stuart Peltz, CEO, PTC Therapeutics

New Mexico

Robert Curtis, President & CEO, Respira Therapeutics, Inc.

New York

Ron Cohen, President & CEO, Acorda Therapeutics, Inc.
Chandrabali Ghose-Paul, CEO, Bioharmony Therapeutics
Jeremy Levin, CEO, Ovid Therapeutics
Albert Bourla, CEO, Pfizer
Phil Gomez, CEO, SIGA Technologies, Inc.
Kaspar Baenziger, CEO, Spicona
Rashida Karmali, CEO, Tactical Therapeutics Inc.

Oklahoma

Colin Cumming, CEO, SensiQ

Pennsylvania

Wei He, Inventor, Founder & CEO, DTRM Biopharma
Briggs Morrison, CEO, Syndax
Carrie Bourdow, President & CEO, Trevena, Inc.
Albert Gianchetti, President & CEO, XyloCor Therapeutics

South Carolina

Richard Alberti, Chief Operating Officer, Medpoint
Lou Kennedy, CEO, Nephron Pharmaceuticals
David Stefanich, CEO, RYMEDI inc.
Shawn Regan, CEO, RhythmLink International, LLC
Cephus Simmons, Founder/CEO, SealCath, LLC
Bruce Johnson, CEO, Stomagienics, Inc.
Shea Harrelson, Co-Founder, Vikor Scientific
John Carrington, CEO, ZVerse
Scott Pancoast, CEO & Founder, Zylö Therapeutics Inc.

South Dakota

Eddie Sullivan, President & CEO, SAB Biotherapeutics, Inc.

Texas

Linnea Fletcher, Executive Director, InnovATEBIO

Utah

Myles Greenberg, President & CEO, Alucent Biomedical Inc.
Rob Etherington, CEO, Clene, Inc.
Flagg Flanagan, CEO & Chairman of the Board, DiscGenics, Inc.

Virginia

David Kalergis, CEO, Atelerix Life Sciences Inc.

Washington

Bradford Zakes, President & CEO, Cerevast Medical, Inc.
Eric Dobmeier, President & CEO, Chinook Therapeutics
Steve Harr, CEO, Sana Biotechnologies

Wisconsin

David Kettner, President, Virent

United Kingdom

Iraj Ali, CEO, Achilles Therapeutics
Claire Thompson, CEO, Agility Life Sciences
David Miles, CEO, AKL Research and Development
Richard Waterfield, CEO, AngioDesign
Ross Breckenridge, CEO, Arjuna Therapeutics
David Reynolds, CEO, AstronauTx
Kevin Lee, CEO, Bicycle Therapeutics
Erik Miljan, CEO, BioDivide Limited
Alison Clayton, CEO, Biogelx
Stefan Ogrodzinski, CEO, BioStatus Group
Matthew Durdy, CEO, Cell and Gene Therapy Catapult
Will West, CEO, CellCentric
Euan Cameron, CEO, Cohesion Medical Ltd
Carolyn Porter, CEO, CytoSeek
Mark Warne, CEO, DeepMatter Group
Martin Whitaker, CEO, Diurnal Group
Anthony Finbow, CEO, Eagle Genomics
David Hipkiss, CEO, Enesi Pharma Limited
Tim Wilson, CEO, Epsilon Ltd
Werner Lanthaler, CEO, Evotec
Martin Meeson, CEO, Fujifilm Diosynth Biotechnologies
Bernard Gilly, CEO, GenSight Biologics
Peter Jackson, CEO, INFEX Therapeutics
Ian Fotheringham, CEO, Ingenza
Wayne Channon, CEO, iosBio
Simon Saxby, CEO, Leaf Expression Systems
David Reynolds, CEO, LoQus23 Therapeutics
Ian Abercrombie, CEO, Medannex
Barry Sharples, CEO, Micregen
Darrin M Disley, CEO, Mogrify
Deborah O'Neil, CEO, NovaBiotics
Rosamond Deegan, CEO, OMass Therapeutics
Henrik Hagemann, CEO, Puraffinity
Lisa Anson, CEO, Redx Pharma
Pieter-Willem Histsma Mulier, CEO, RevoluGen
Cliff Holloway, CEO, Scancell Holdings
Greg Madison, CEO, Shield Therapeutics
Malcolm Weir, CEO, Sosei Heptares
Charlotte Casebourne, CEO, Theolytics
Jonny Ohlson, CEO, Touchlight Genetics Ltd
Malcolm Boyce, CEO, Trio Medicines Limited
Bill Enright, CEO, Vaccitech Ltd
Suzanne Dilly, CEO, ValiRx

Netherlands

Michiel Lodder, CEO, 20Med Therapeutics
Pieter Gaillard, CEO, 2-BBB Medicines BV
Bas Reichert, CEO, BaseClear BV
Herman Steen, CEO, BiOrion Technologies BV
Bertus Quint, CEO & Founder, DEBx Medical BV
Jos Lunenberg, CEO, ENPICOM BV
Onno van de Stolpe, CEO, Galapagos
Jan van de Winkel, CEO, Genmab A/S
Roel Schaapveld, CEO, InterRNA Technologies B.V.
Remko van Leeuwen, CEO, Madam Therapeutics
Jos Joore, CEO, MIMETAS B.V.
Sijmen de Vries, President & CEO, Pharming Group NV
Bernd van Buuren, CEO, Protinhi B.V.
van de Sande, CEO, Synaffix B.V.
Hans Preusting, CEO, Synerkine Pharma
Erik van den Berg, CEO, AM-Pharma
Rob Meijer, CEO, Amphera BV
Aram Krol, CEO, Euretoss
Troels Jordansen, CEO, Glycostem Therapeutics B.V.
Marco de Boer, CEO, NTrans Technologies BV
Katrien Reynders, CEO, Pan Cancer T
Han van 't Klooster, CEO, PHarmaCytics
Willemijn Vader, CEO, VitroScan B.V.

Switzerland

Carlo Bertozzi, CEO, Acthera Therapeutic
Werner Tschollar, CEO, AMYRA Biotech AG
Marc Gitzinger, CEO, BioVersys AG
Michael Bauer, CEO, Cellestia
Lorenzo Bosisio, CEO, EffRx Pharmaceuticals
Anne Schmidt, CEO, Elthera AG
Filippo Riva, Managing Director, Humabs BioMed SA
Jean-Paul Clozel, CEO, Idorsia
Alcide Barberis, CEO, Mabyron AG
Miro Venturi, CEO, Sintetica
Klaas Zuideveld, CEO, Versameb

Germany

Sebastian Guth, Head of the Americas, Bayer
Jean-Michel Boers, President & CEO, USA, Boehringer Ingelheim
Antje Roetger, CEO, Carpegen GmbH
Johannes Bacher, Managing Director, Co-Founder, Curetis GmbH
Klaus Afflerbach, CEO, Navigo Proteins

Australia

Geoff Daly, CEO, Analytica Ltd
Paul Perreault, Managing Director & CEO, CSL Behring

Canada

Russell Mcallister, CEO, Bold Therapeutics Inc.
Sanj Singh, CEO, Temple Therapeutics

Denmark

Preben Bruun-Nyzell, CEO, 2N Pharma
Lars Fruergaard Jørgensen, CEO, Novo Nordisk

France

David Loew, CEO, Ipsen Pharma SAS
Paul Hudson, CEO, Sanofi

Italy

Alessandro Sidoli, CEO, Axxam SpA
Lucio Rovati, CEO & Chief Scientific Officer, Rottapharm Biotech

Japan

Osamu Okuda, CEO & President, Chugai Pharmaceutical Co., Ltd.
Christophe Weber, CEO, Takeda Pharmaceuticals

Lithuania

Arnas Karuzas, CEO, Ligence
Rimantas Tuskevicius, CEO, SatiMed

Ireland

Bruce Cozadd, Chairman & CEO, Jazz Pharmaceuticals

Israel

Oren Glanz, CEO, Lempo Therapeutics

Portugal

Simão Soares, CEO & Co-Founder, SilicoLife

Spain

Luis Mora Capitan, Managing Director, Pharma Mar

Supporting Biotechnology Associations

Michelle McMurry-Heath, President & CEO, BIO
Steve Bates, Chair, International Council of Biotechnology Associations and CEO, UK BioIndustry Association
Lorraine Chiroiu, CEO, AusBiotech
Andrew Casey, President & CEO, BIOTECCanada
Patricia Trinler, President, CR biomed
Claire Skentelbery, Director General, EuropaBio
Franck Mouthon, Chairman, France Biotech
Viola Bronsema, CEO, Secretary General, Bio Deutschland
Ricardo Gent, Executive Director, German Association of Biotechnology Industries
Matt Moran, Director, BioPharmaChem Ireland
Riccardo Palmisano, President, Federchimica Assobiotec
Osamu Nagayama, President, Japan Bioindustry Association
Annemiek Verkamman, Managing Director, HollandBIO
Simão Soares, CEO & President, P-BIO
Ion Arocena, CEO, AseBio (Spanish Bioindustry Association)
Helena Strigård, Director General, SwedenBIO
Michael Altorfer, CEO, Swiss Biotech Association
Wallace Lin, President, Taiwan Bio Industry Organization
Rachel Lane, Executive Director, BIO Alabama
Joan Koerber-Walker, President & CEO, Arizona Bioindustry Association, Inc. (AZBio)
Joe Panetta, President & CEO, Biocom California
Mike Guerra, President & CEO, California Life Sciences
Ahmed Enany, President, Southern California Biomedical Council (SoCalBio)
Jennifer Paton, President & CEO, Colorado BioScience Association
Michael Fleming, President, Delaware BioScience Association
Jessica Hyland, Executive Director, Iowa Biotechnology Association
John Conrad, President & CEO, Illinois Biotechnology Innovation Organization
Kristin Jones, President & CEO, Indiana Health Industry Forum
Kendalle Burlin O'Connell, President & COO, MassBio
Stephen Rapundalo, President & CEO, Michigan Biosciences Industry Association (MichBio)
Kelly Gillespie, President & CEO, Missouri Biotechnology Association
Rob Owen, Executive Director, Bio Nebraska
Debbie Hart, President & CEO, BioNJ
Greg Byrnes, Executive Director, NMBio
Jennifer Hawks Bland, CEO, NewYorkBIO
Erin Ford, Interim President & CEO, South Carolina BIO (SCBIO)
Abby Trotter, Executive Director, Life Science TN
Tom Kowalski, President & CEO, Texas Healthcare and Bioscience Institute (THBI)
Leslie Alexandre, President & CEO, Life Science Washington
Laura Gunter, Interim CEO, NCBio
Ivan Lugo, Executive Director, INDUNIV Research Center, Inc
Robb Stoddard, President & CEO, BioAlberta
Meaghan Seagrave, Executive Director, BioNB
Jason Field, President & CEO, Life Sciences Ontario
Rory Francis, CEO, Prince Edward Island BioAlliance

Endnotes

ⁱ Biotechnology Innovation Organization, **COVID -19 Biotracker**, <https://www.bio.org/policy/human-health/vaccines-biodefense/coronavirus/pipeline-trackerink>

ⁱⁱ Ibid.

ⁱⁱⁱ List of Global Vaccine Partnerships, https://www.bio.org/sites/default/files/2021-05/Industry_Partnerships_on_COVID_BIO.pdf

^{iv} https://global-health-summit.europa.eu/rome-declaration_en

^v https://www.bio.org/sites/default/files/2021-05/Airfinity_production.pdf