



PHARMA 40 2007

1 Bill and Melinda Gates, co-chairs, the Gates Foundation

As co-chairs of the Bill & Melinda Gates Foundation, Bill and Melinda Gates have control of a fund of \$31.9 billion. One of the foundation's core missions is to tackle deadly diseases such as malaria and tuberculosis. With this kind of spending power and their determination to drive up global healthcare provision, the Gates' influence on the pharma industry is unquestionable.

'The Gates have largely abandoned their commercial ventures to run their foundation, which is dedicated to research aimed at eliminating serious infectious diseases,' commented one of our judges. 'Their example has moved others with substantial wealth to follow their example. hence they are a powerful force for good.'

The Gates meet with local, national, and international grantees and partners to further the foundation's goal of improving equity around the world. They also use their many public appearances to focus attention on these issues. Dr Tachi Yamada, president of the Gates

Foundation's global health programme, said: 'The pharmaceutical industry plays a huge role in improving global health, and we are proud to support several public-private partnerships working with industry. The pipeline of new drugs and vaccines for the developing world is stronger than before.'

Bill began his philanthropic efforts in earnest in 1994, when he created the William H Gates Foundation, which focused on global health. Three years later, he and Melinda created the Gates Library Foundation, which worked to bring public access computers with internet connections to public libraries in the US. The two groups merged in 2000 to form the Bill & Melinda Gates Foundation.

Joining Microsoft Corporation in 1987, Melinda oversaw the development of many of Microsoft's multimedia products. In 1996, she retired from her position as general manager of information products. Since then, she has directed her energies towards the non-profit world.

Welcome to *World Pharmaceutical Frontiers'* first Pharma 40 – a list of the most influential people in the industry, as judged by industry experts.

The Pharma 40 has been a great opportunity to evaluate the figures who have the biggest impact on our industry – and to see the sheer scope of their different influences. But when the votes came in, we had to triple-check our figures – not just

for accuracy, but because the top spot was such a surprise. Who would have thought philanthropists exert such a massive influence on the industry? Clearly, Bill and Melinda Gates are no ordinary philanthropists, controlling as they do a pot of \$31.9

billion, but does their position at the top spot represent a shift in the balance of power? Certainly, according to our judges, bigger does not mean better. Pfizer CEO Jeffrey Kindler ranks 19th on the list, and only a handful of CEOs crack the top 10.

Next year's Pharma 40 will, I'm sure, make equally compelling reading. Until then, do you think our judges have got it right? Is anyone missing from the list? Give us your feedback on the Pharma 40 on our website: www.worldpharmaceuticals.net

1 Bill and Melinda Gates
Co-chairs, Bill & Melinda Gates Foundation

2 Daniel Vasella
MD, chairman and CEO, Novartis

3 Andrew von Essenbach
Acting commissioner, US FDA

4 Craig C Mello
Professor, University of Massachusetts

& Andrew Z Fire
Professor, Stanford School of Medicine

5 Thomas Lönngren
Executive director, EMEA

6 Craig Venter
Former CEO, Accelerys

7 Arthur Higgins
Chairman, Bayer Healthcare Executive Committee

8 Christopher Lipinski
Ex-senior research fellow, Pfizer

9 Bill Clinton
Founder, Clinton Foundation

10 Ginger Graham
CEO, Amylin Pharmaceuticals

11 Professor Rolf Krebs, scientist

12 Roger L Williams, CEO, United States Pharmacopeia

13 David Brennan, CEO, AstraZeneca

14 Arthur Levinson, CEO, Genentech

15 Jean-Pierre Garnier, CEO, GSK

16 Israel Makov, president and CEO, Teva

17 Marvin Carruthers, professor, University of Colorado

18 M Cass Wheeler, CEO, American Heart Association

19 Jeffrey Kindler, CEO, Pfizer

20 Sir Michael Rawlins, chairman, NICE

21 Henri A Termeer, CEO, Genzyme

22 Dr M Venkateswarlu, drugs controller general of India

23 Frances M Visco, president, National Breast Cancer Coalition

24 Senator Charles E Grassley, chairman, Senate Finance Committee

25 Dietmar Hopp, entrepreneur and co-founder, SAP

26 Tejendra Khanna, chairman, Ranbaxy

27 Eliot Spitzer, governor of New York

28 Tony Clement, minister of health, Canada

29 Shao Mingli, commissioner of the State FDA, China

30 Nancy Pelosi, speaker, US House of Representatives

31 Anji Reddy, chairman, Dr Reddy's Laboratories

32 Michael J Fox, founder, Michael J Fox Foundation

33 H Fred Mickleson, chairman, National Board of Directors, American Cancer Society

34 Bernard Poussot, president and vice chairman, Wyeth

35 Jean-François Dehecq, chairman and CEO, Sanofi Aventis

36 Ronald D Luff, director of anatomic clinical trials, Quest Diagnostics

37 Richard Reichman, William Bonnez and Robert Rose
University of Rochester

38 Ranjit Shahani, president, Organisation of Pharmaceutical Producers of India

39 Richard T Clark, CEO, Merck

40 Pankaj Patel, chairman, Zydus Cadila

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Daniel Vasella

Daniel Vasella earns second place in the Pharma 40 as CEO of Novartis, one of the largest pharma companies in the world, generating sales of \$37 billion in 2006. In charge of the Swiss giant since 1996, Vasella should be used to appearing in such power lists; three years ago, *Time* magazine named him as one of its 100 most influential people of 2004.

Vasella graduated with an MD from the University of Bern in 1979. After holding a number of medical positions in Switzerland, he joined Sandoz Pharmaceuticals Corporation in the US in 1988, where he became a member of the Sandoz Group Executive Committee and CEO of Sandoz Pharma Ltd.

He has been the recipient of a number of awards, including the Harvard Business School's Alumni Achievement Award, the Appeal of Conscience Award and the AJ Congress Humanitarian Award. In 2002, he was awarded an honorary doctorate by the University of Basel. He has also been honoured with the Ordem Nacional do Cruzeiro do Sul (Brazil) and holds the rank of Chevalier in the Ordre National de la Légion d'Honneur (France).

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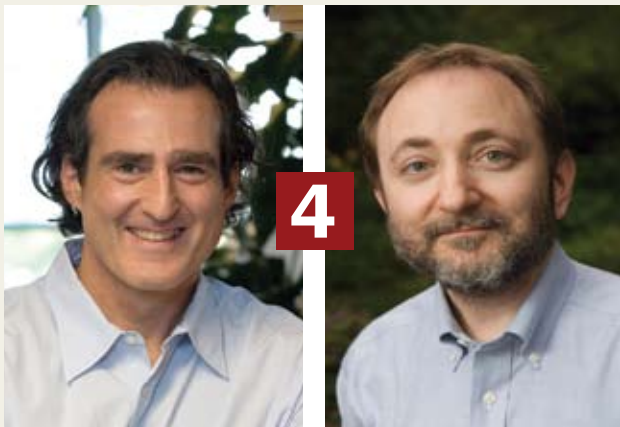
Andrew C von Eschenbach

Andrew C von Eschenbach, MD, was sworn in as the 20th commissioner of the US FDA in December 2006. He leads the US's premier consumer protection and health agency and, as such, holds sway over regulated products that account for more than 20% of consumer spending.

As the former director of the National Cancer Institute (NCI), von Eschenbach is a nationally recognised urologic surgeon and oncologist. His distinguished career as a leader in the fight against cancer spans nearly three decades. Himself a cancer survivor, von Eschenbach has had a major impact on the fight against cancer, which extends beyond the clinical and academic communities. He is a founding member of C-Change and was president-elect of the American Cancer Society.

Many organisations have recognised von Eschenbach for his accomplishments, including the American Medical Writers Association, the American Urological Association, and the Uniformed Services University of Health Sciences. In 2006, he was named one of *Time* magazine's 100 most influential people.

4



Craig C Mello and Andrew Z Fire

Craig Mello and Andrew Fire were jointly awarded the Nobel Prize in Physiology or Medicine in 2006 for their discovery of RNA interference – a breakthrough which has revolutionised the the study of gene function. Global pharma companies have been quick to exploit its ease of use, low cost and adaptability to high-throughput applications.

Mello was previously a postdoctoral fellow at the Fred Hutchinson Cancer Research Center in the laboratory of Dr James Priess. He joined the faculty of the University of Massachusetts Medical School in 1994.

Fire conducted his initial work on gene silencing by double-stranded RNA at the Carnegie Institution. In 1989, he became an adjunct professor in the Johns Hopkins University department of biology and joined Stanford in 2003.



5

Thomas Lönngren

Thomas Lönngren was appointed executive director of the European Medicines Agency (EMA) in January 2001. The EMA is responsible for the scientific evaluation of applications for European marketing authorisation for medicinal products – about one-third of the new drugs introduced to the world market each year. Companies submit one single marketing authorisation application to the EMA for the whole of Europe.

Lönngren qualified as a pharmacist from the University of Uppsala in 1976, where he was a lecturer until 1978. He served with the Swedish National Board of Health and Welfare from 1978 to 1990. From 1982 to 1984 he acted as senior pharmaceutical consultant for the Swedish International Development Agency's health cooperation programme in Vietnam. In 1990, he was appointed director of operations, Swedish Medical Products Agency, later becoming deputy director-general.



8

Christopher Lipinski

Dr Christopher Lipinski is best known as the author of the *Rule Of Five*, a simple algorithm for predicting drug compounds likely to show oral activity. He is currently a scientific adviser to Melior Discovery, a drug repurposing startup. He was adjunct senior research fellow at the Pfizer Global R&D Groton CT Laboratories until he retired in 2002.

A consultant on drug-like properties, he serves on many scientific advisory and journal editorial boards. In 2006, he received an honorary law degree from the University of Dundee, and he is winner of the 2006 Society for Biomolecular Sciences Achievement Award.

In 2005 he won the American Chemical Society's E. B. Hershberg Award for Important Discoveries in Medicinally Active Substances and in 2004 won the the ACS Division of Medicinal Chemistry's Division of Medicinal Chemistry Award. He is responsible for over 225 published articles and presentations and 17 issued US patents.



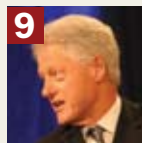
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J Craig Venter

Our judges ranked Dr J Craig Venter high in the Pharma 40 for his visionary contributions to genomic research, which have secured his place as one of the leading scientists of the 21st century. He is the founder and president of the J Craig Venter Institute and the J Craig Venter Science Foundation, and the founder of the Institute for Genomic Research. Research at the Venter Institute reflects his interest in advancing the science of genomics and in applying genomic advances to the world's most vexing public health and environmental challenges.

In 1998, he became the first president of Celera Genomics, where he sequenced the human genome using the whole genome shotgun technique, new mathematical algorithms and new automated DNA sequencing machines.

His many awards include the 2002 Gairdner Foundation International Award and the Ludwig Darmstaedter Prize.



9

Bill Clinton

Bill Clinton is perhaps another surprising face to appear in our top 10, but as founder of the Clinton Foundation, he heads an organisation which campaigns strongly on global health issues. And as a former president of the US, his public profile is second to none.

After leaving the White House, Clinton founded the Clinton Foundation, an organisation that campaigns on global health issues, with an emphasis on HIV/AIDS; economic empowerment; leadership development and citizen service; and racial, ethnic and religious reconciliation. Following the 2002 Barcelona AIDS Conference, he began the Clinton Foundation HIV/AIDS Initiative, which is currently bringing life-saving treatment to over a quarter of a million people around the world.

Like Bill and Melinda Gates, our judges believe Clinton's high-profile healthcare crusade is already changing the face of pharma.



7

Arthur J Higgins

Bayer Healthcare is another global pharma giant and Arthur J Higgins has been leading it since July 2004. With a worldwide workforce of nearly 40,000 in the fields of pharmaceuticals, animal health, consumer care and diabetes care, his influence on the global market is undeniable.

Born in Scotland, Higgins studied at Scotland's Strathclyde University, where he gained a Bachelor of Science in biochemistry. He began his career in 1978 in the UK with Bristol-Myers. He has subsequently worked for Sandoz, Fisons, Abbott Laboratories and Enzon Pharmaceuticals.

He is a member of the board of directors of the Pharmaceutical Research and Manufacturers of America and a member of the Council of the International Federation of Pharmaceutical Manufacturers and Associations.



10

Ginger Graham

Although she is soon to step down as CEO of Amylin, Ginger Graham was picked by our judges for being a truly creative leader. Graham has been Amylin CEO since June 2006 and president since September 2003.

She has served on the Audit Committee and the Nominating and Governance Committee, and has also held various positions with the Guidant Corporation and Eli Lilly and Company.

She serves on the board of directors of the Pharmaceutical Research and Manufacturers of America, the California Healthcare Institute, the Harvard Business School Health Advisory Board, the Harvard Business School Dean's Advisory Board, the Advisory Board for the Kellogg Center for Executive Women, the Advisory Board for the California Council on Science and Technology, and the University of California, San Diego Health Sciences Advisory Board. She has an MBA from Harvard University.

Have our judges got it right? Is anyone missing from the list? Give us your feedback on the Pharma 40 on our website www.worldpharmaceuticals.net

11 Professor Rolf Krebs

During a career spanning 35 years, Professor Krebs has served as president of the European Federation of Pharmaceutical Industries and Associations from 1996 to 1998 and as president of the International Federation of Pharmaceutical Manufacturers Association from 2000 to 2002. He is responsible for the development of a large number of pharmaceutical products, has served on many advisory boards and committees, and has contributed to over 30 books.

12 Roger L Williams, CEO, United States Pharmacopeia (USP)

Roger L Williams, MD, has been the executive vice president and CEO of the USP since April 2000. He provides strategic leadership for USP under the direction of its Board of Trustees. He also serves as chairman of the Council of Experts, USP's scientific body, which continuously revises the USP and National Formulary.

13 David Brennan, CEO, AstraZeneca

David Brennan is an executive director of AstraZeneca plc, and a member of the executive board of the Pharmaceutical Research and Manufacturers of America. He is also honorary board member of the US CEO Roundtable on Cancer.

14 Arthur Levinson, CEO, Genentech

Arthur Levinson joined

Genentech in 1980 as a senior scientist holding various positions until he became chairman and CEO in July 1995. Levinson was appointed a member of the board of directors that same year and was named chairman of the board in 1999.

15 Jean-Pierre Garnier, CEO, GlaxoSmithKline

JP Garnier assumed this role in January 2001 with the merger of SmithKline Beecham and Glaxo Wellcome. He joined SmithKline Beecham in 1990 as president of its pharmaceutical business in North America and was chairman of pharmaceuticals from 1994 until 1995.

16 Israel Makov, president and CEO, Teva Pharmaceuticals

Israel Makov has been the president and CEO of Teva since April 2002. Makov is one of the founders of the Israel National Nanotechnology Initiative. He has also been a director of Bank Hapoalim since October 2002, and a director of Ramot at Tel Aviv University since 2001.

17 Marvin Caruthers, University of Colorado

The methodologies that are currently used for chemically synthesising DNA were originally developed in Professor Caruthers' laboratory almost 20 years ago. His research has also pioneered a two-step DNA synthesis

approach for preparing DNA chips and large amounts of DNA.

18 M Cass Wheeler, CEO, American Heart Association

M Cass Wheeler has been CEO of the one of the US's largest campaigning health groups since October 1997. Under his leadership, the AHA merged its 56 individual state and metropolitan affiliates into 12 regional affiliates and adopted a single corporate structure.

19 Jeffrey Kindler, CEO, Pfizer

Jeffrey Kindler became chairman and CEO of Pfizer, the world's largest research-based pharmaceutical company in 2006. In his previous role of vice chairman and general counsel, he has led Pfizer's worldwide legal, compliance, communications, government relations, corporate citizenship, policy development and global security groups.

20 Sir Michael Rawlins, chairman, National Institute for Clinical Excellence (NICE)

Sir Michael Rawlins has been chairman of NICE since its formation in 1999. He is also chairman of the Advisory Council on the Misuse of Drugs, an honorary professor at the London School of Hygiene and Tropical Medicine, University of London, and emeritus professor at the University of Newcastle upon Tyne.

21 Henri A Termeer, CEO, Genzyme

Henri A Termeer was appointed CEO of one of the world's foremost biotech companies, Genzyme Corporation, in 1985. Under his leadership, Genzyme has grown into one of the world's leading biotechnology companies.

22 Dr M Venkateswarlu, drugs controller general of India

As DCGI, Dr Venkateswarlu controls access to the Indian market, which is seeing massive growth and interest from major pharma companies.

23 Frances M Visco, president, National Breast Cancer Coalition

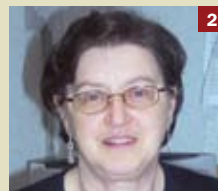
Frances Visco is the first president of NBCC, and a member of its board of directors and executive committee. In 1993, President Clinton appointed her as one of three members of the President's Cancer Panel, and she was the first consumer to chair the Integration Panel of the Department of Defense Peer-Review Breast Cancer Research Program.

24 Senator Charles E Grassley (Iowa)

As chairman of the Senate Finance Committee, Grassley has considerable influence over the shape and scope of key quality-of-life issues, including Medicare and Medicaid, affecting US citizens. He has also been a major campaigner on pharmaceutical reform.

Judging panel

Pharma 40 candidates were drawn from your suggestions on our website as well as nominations from pharma industry experts. From a shortlist, each judge ranked the names independently and from their decisions we compiled the final list. Here, we profile our judges, with thanks to each of them.



1 Michael A Santoro is an associate professor in the business environment department at the Rutgers Business School in Newark, New Jersey in the US, and a faculty member of the Rutgers Center for Global Change and Governance.

2 Agnes V Klein, MD, DPH is director of the Centre for the Evaluation of

25 Dietmar Hopp, German billionaire

The co-founder of German software company SAP has invested millions in biotech and sees the sector as one with great growth opportunities.

26 Tejendra Khanna, chairman, Ranbaxy

Tejendra Khanna has been chairman of Ranbaxy Laboratories Ltd since 1999. He is widely regarded as an expert in international trade and public administration.

27 Eliot Spitzer, governor of New York

Spitzer's nomination to this list came in before his appointment as governor of New York, while he was still attorney general. His position reflects the influence he has had on the industry and for helping to develop new disclosure policies in the pharmaceutical business.

28 Tony Clement, minister of health, Canada

There has been much focus on Canada's health system and the cost of drugs in the country. Tony Clement's authority over this area has been acknowledged in his ranking.

29 Shao Mingli, commissioner of the State FDA, China

Shao Mingli oversees the standards set for the manufacture and approval of drugs to one of the world's largest markets. Although access to this market is limited, it is growing. Interest

among pharma companies has piqued and his influence on the industry is likely to grow in the forthcoming years.

30 Nancy Pelosi, speaker of the House of Representatives

The first woman in US history to lead a major party, congresswoman Pelosi has promised an agenda of driving reform in healthcare in her role as speaker of the House of Representatives.

31 Anji Reddy, chairman, Dr Reddy's Laboratories

Under Anji Reddy's chairmanship, Dr Reddy's Labs has been credited with turning the Indian bulk drug industry from dependence on imports in the mid-1980s to self reliance in the mid-1990s and into the export-oriented industry that it is today.

32 Michael J Fox, actor

Michael J Fox was diagnosed with young-onset Parkinson's Disease in 1991. Since 1998 he has committed himself to the campaign for increased Parkinson's research and the Michael J Fox Foundation is dedicated to ensuring the development of a cure for Parkinson's disease within this decade.

33 H Fred Mickleson, chairman of the National Board of Directors, American Cancer Society

Fred Mickleson has been an active volunteer the American Cancer Society, one of the largest and most important

health campaigning organisations, for more than 30 years, serving as chair at the local and national levels, including chairman of the board of the California Division.

34 Bernard Pousot, president and vice-chairman of Wyeth

Bernard Pousot was elected COO and to the Wyeth board of directors in January 2007 and was elected president and vice chairman in April 2006. He is responsible for overseeing Wyeth Pharmaceuticals, Wyeth Consumer Healthcare and Fort Dodge Animal Health.

35 Jean-François Dehecq, chairman and CEO, Sanofi-Aventis

Jean-François Dehecq was selected for this list after he created what is now one of the world's largest drugmakers through an aggressive takeover of Aventis.

36 Ronald D Luff, Quest Diagnostics

Ronald D Luff, MD, is director of anatomic pathology for Quest Diagnostics' Teterboro laboratory. He also serves as clinical professor and medical director of the Program in Cytotechnology at Thomas Jefferson University in Philadelphia.

37 Richard Reichman, MD, William Bonnez, MD and Robert Rose, PhD, University of Rochester

Richard Reichman is professor of medicine and of microbiology and immunology, William Bonnez is associate professor of medicine and Robert Rose is associate professor of medicine and of microbiology and immunology at the University of Rochester. They are the inventors of a vaccine to prevent human papillomaviruses, a type of cancer that kills more than 250,000 women around the world every year.

38 Ranjit Shahani, president, Organisation of Pharmaceutical producers of India (OPPI)

Ranjit Shahani is vice chairman and managing director, Novartis India Limited. He has been president of OPPI since 2001, and is chairman of INTERPAT in India.

39 Richard T Clark, CEO, Merck

Richard T Clark has held a broad range of operating and strategic positions during his tenure with Merck, a world-leading research-driven pharmaceutical company.

40 Pankaj Patel, chairman, Zydus Cadila

Pankaj Patel has guided Zydus Cadila down a path of accelerated growth, from a Rs220 crore company to a Rs870 crore group with competence in healthcare.

Radiopharmaceuticals and Biotherapeutic Products in the Biologics and Genetic Therapies Directorate. Her special interests include the appropriate design of clinical trials and the various and complex ethical issues attendant to the design and conduct of clinical trials.

3 Dr Richard Barker is director general of the

Association of the British Pharmaceutical Industry and has more than 20 years' experience in the healthcare industry, holding a range of senior leadership roles in the UK and internationally. He is the founder and president of New Medicine Partners, an advisory firm assisting pharmaceutical and biotechnology companies.

He is also chairman of Molecular Staging, a genomics and proteomics company serving academic researchers and major pharmaceutical companies.

4 Clive Savage is director of corporate communications, EMEA, at IMS Health. Operating in more than 100 countries, IMS Health is the world's

leading provider of market intelligence to the pharmaceutical and healthcare industries.

5 Simon Hammett is head of life sciences at Deloitte and Touche, London.

6 James Drury James Drury is editor of *World Pharmaceutical Frontiers*.