9th Annual

European Antibody Congress 2013

11-13 November 2013
Starling Geneva Hotel & Conference Center
Geneva, Switzerland

Where global mAb, ADC and Biosimilar stakeholders meet to do business

Top 50 global antibody industry influencers of today

TOP 50 most influential people in the antibody field today

terrapinn.com/antibody

Who are the most influential people in the global antibody field?

This is the question we asked our blog subscribers, LinkedIn group members and anyone in our contact network to compile a comprehensive list of the Top 50 as named by you.

The following 50 personalities were picked based on their career achievements whether this was groundbreaking discovery and research or innovation, funding, lifetime dedication or simply because they might have inspired others to do well. It is great to see that we have representatives from a variety of continents and sectors.

Thank you to everyone who has helped us compile the list and please feel free to share it with your colleagues.

50

Gregg Silverman, Professor of Medicine and Pathology, Co-Director, Musculoskeletal Center of Excellence, Immunology / Antibody Engineering, Lupus and Autoimmune disease, **NYU School of Medicine**

Dr. Silverman has been involved in studies of autoantibodies since 1986. These studies began with clinical samples and the analysis of antibody gene usage in human rheumatoid factors from patients with essential mixed cryoglobulinemia, Hepatitis C, Rheumatoid Arthritis, and Sjogrens syndrome, and later evolved into investigations for the human B-cell repertoire and the response to B-cell superantigens. We have subsequently developed new insights into the immunomodulatory properties of B-cells as producers of protective autoantibodies to apoptotic cell membrane determinants that may oppose the development of inflammatory and autoimmune diseases. Recent work has led to the development of the Dual inhibitor receptor hypothesis, which provides a theoretical model to explain the molecular mechanisms of natural antibody mediated clearance of apoptotic cells and immune modulation.

49

Jeffrey Ravetch, Theresa and Eugene M. Lang Professor, Leonard Wagner Laboratory of Molecular Genetics and Immunology, **The Rockerfeller University**

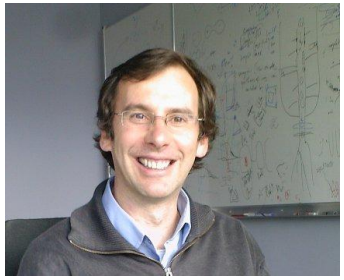
Dr. Ravetch dissects the cellular and molecular mechanisms that govern the generation of antibody specificity and the translation of that specificity into cellular responses. By identifying the genetic components that cause immune system cells to respond to specific antibodies, Dr. Ravetch hopes to gain a better understanding of how a functioning immune system protects organisms from invaders, and how a dysfunctional immune system attacks the body's own tissues. Work by Dr. Ravetch led to the cloning and mapping of the first malarial parasite chromosome and more recently to the cloning of the first Fc receptor genes.

48

David Chiswell, Executive Chairman, **Albireo**

After a career as a research scientist in both the UK and the US and nine years working in scientific management at Amersham International, David co-founded Cambridge Antibody Technology (CAT) in 1990. David was responsible for operational management from 1990 to 2002 and was CEO from 1996 to 2002. CAT listed on the London Stock exchange in April 1997 and Nasdaq in June 2001 raising over £120m on the public markets. Since leaving CAT in March 2002 David has been focusing on the development of early stage biotechnology companies including positions as non-executive chairman of Sosei Ltd, Arrow Therapeutics Ltd and Daniolabs Ltd, and director of Arakis Ltd. David is currently executive chairman of Nabriva Therapeutics and an advisor to Nomura Phase4 ventures. David was previously chairman of the UK's BioIndustry association (BIA) and remains on their board. In 2006 he was awarded the OBE by HM Queen for services to the biotechnology industry.

47



Andrew Griffiths, Director of the Laboratory of Biological Chemistry at the Institut de Science et d'Ingénierie Supramoléculaires (ISIS), **Université Louis Pasteur**

Andrew joined Greg Winter at the MRC Laboratory of Molecular Biology (LMB), where he developed phage-display for the selection of human antibodies for therapy, first as a Post Doc. (1989-1990) and later as a Cancer Research Campaign Fellow (1991-1995). This work has lead to 23 granted US Patents, on which Andrew Griffiths is an inventor. More recently he has been developing droplet-based microfluidic systems for directed evolution of enzymes, high-throuhgput screening for drug discovery, and diagnostic applications.

46

Eugene Zhukovsky, Chief Scientific Officer, Research, **Affimed Therapeutics**

Dr. Zhukovsky joined Affimed in 2011 as Chief Scientific Officer. He has 20 years professional experience in the field of biotherapeutics research and development. Prior to Affimed, Dr. Zhukovsky was a Senior Research Fellow in Biotherapeutics at Boehringer Ingelheim Pharmaceuticals where he led antibody discovery efforts. From 2002 to 2009 Dr. Zhukovsky was at Xencor Inc. where he led translational research efforts resulting in several therapeutic candidates targeting malignant and normal B cells. Dr. Zhukovsky perfomed a postdoctoral fellowship at Genentech; he received the PhD in biochemistry from Brandeis University and an MS degree in bioorganic chemistry from St. Petersburg's State University.

45

Ton Logtenberg, CEO, **Merus**

Ton Logtenberg holds a Ph.D. in Medical Biology and is the founder of Merus B.V. Ton was a professor at the Department of Immunology in Utrecht, The Netherlands and a co-founder of the Dutch biotechnology company Crucell NV, serving the company as Executive Vice President and Chief Scientific Officer. Ton is an expert in the field of antibody engineering with more than 80 scientific publications and 20 patents to his name.

44

Peter Sondermann, Chief Scientific Officer and co-founder, **SuppreMol**

Peter is a co-founder of SuppreMol and has been involved in laying the scientific foundations of the company while working at the Max Planck Institute of Biochemistry together with Nobelist Robert Huber. Peter Sondermann was a Group Leader, Structural Immunology at the Max Planck Institute of Biochemistry, Martinsried. Before joining SuppreMol as a CSO, Peter was Head of Process Biochemistry at Glycart biotechnology AG, based in Schlieren, Switzerland which was sold to Roche group in 2005, where he was amongst others responsible for technical development and the post-clinical lead selected stages of the third generation anti-CD20 mAb Obinutuzumab currently being in Phase III clinical trials. Peter is the inventor of more than 10 patents or patent applications and has authored 25 peer reviewed scientific articles.

43

Richard Begent, Emeritus Professor of Oncology, **UCL Cancer Institute**

Richard directs the Cancer Research UK Targeting and Imaging Group and has researched antibody-targeted imaging and therapy of cancer since 1977. Encouraged by Greg Winter, he started work on phage-derived antibodies in 1992 with Kerry Chester and administered them to patients in 1994 for imaging of colorectal cancer. Since then the research group have also developed phage-derived antibodies for therapy as components of multi-functional fusion proteins. He is a medical oncologist with research activity in antibody targeted and anti-vascular cancer therapy and biomedical informatics. Imaging is crucial to the development of these therapies in order to obtain quantitative information about the distribution and function of imaging and therapeutic agents. He is also a member of the Board of Directors of The Antibody Society.

42

Ulrich Brinkmann, Scientific Director, Biologics Engineering, **Roche Pharma Research and Early Development**

Dr. Ulrich Brinkmann heads a Biologics Engineering unit within Roche Pharma Research in Penzberg, FRG. His Ph.D thesis covered development of expression systems to produce recombinant reteplase. Subsequently, he held positions as Postoc and Associate Scientist at the NIH/NCI (Ira Pastan Lab) focusing on antibody stabilization/engineering and recombinant immunotoxins for cancer therapy. Prior to joining Roche, he served as CSO in Functional Genetics and Pharmacogenetics companies, Xantos and Epidauros (now Beckmann Coulter) respectively. Ulrich Brinkmann is author and inventor of numerous publications and patents in the field of antibody engineering.

41

Louis Weiner, Professor and Director of Lombardi Comprehensive Cancer Center, Francis L. and Charlotte G. Gragnani Chair, **Department of Oncology Lombardi Comprehensive Cancer Center**

Dr. Weiner is recognized for his laboratory and clinical research focusing on new therapeutic approaches that mobilize the patient's immune system to fight cancer using monoclonal antibodies. His laboratory designs and produces new antibody-based proteins with the aim of improving their tumor-targeting and immune-stimulating properties. This research has led to the surprising and clinically important observation that tumor targeting is impaired if the antibodies attach too tightly to their tumor targets. Dr. Weiner has also developed, and has clinically tested, "bispecific" antibodies and related antibody-based proteins designed not only to recognize and bind to cancer cells but also to stimulate immune-system cells to attack the targeted cancer cells. He is also a member of the Board of Directors of The Antibody Society.

40

Kerry Chester, Professor of Molecular Medicine, Research Department of Oncology, **UCL Cancer Institute**

Kerry leads the Recombinant Antibody Therapeutics Group at the UCL Cancer Institute. Her main research interests are design and construction of antibody-based therapeutics and the interaction of these molecules with cancer targets. The basic antibody fragment used is the single chain Fv (scFv) and constructs such as scFv fusion proteins with enzymes or albumin are explored. There is a focus on Bench-to-Bedside and the Group has a licensed Production Facility to make antibody-based therapeutics in compliance with Good Manufacturing Practice (GMP). The Cancer Institute offers a unique opportunity for translational work as facilities are available for basic research, pre-clinical testing and Phase I clinical trials. She is also a member of the Board of Directors of The Antibody Society.

39

Nils Lonberg, Senior Vice President, Biologics Discovery, **Bristol-Myers Squibb**

Dr. Lonberg received his PhD in Biochemistry & Molecular Biology from Harvard University in 1985. After post-doctoral training at Memorial Sloan-Kettering Cancer Center, he joined GenPharm International, where Dr. Lonberg's research group developed genetically engineered strains of mice comprising germline-configuration human immunoglobulin genes. These transgenic animals have been used to discover over two dozen clinical-stage human sequence antibodies, including five FDA approved products. In 1997, GenPharm was acquired by Medarex, which was in turn acquired by Bristol-Myers Squibb in 2009. Dr. Lonberg is now Sr. VP at the Bristol-Myers Squibb Biologics Discovery site in California, where cancer immunotherapy is a major research focus.
Dr. Lonberg has published in the areas of molecular biology, developmental biology, immunology, and biotechnology. He is an inventor on numerous issued patents, including the third US patent covering a genetically engineered animal, and on patents covering seven marketed therapeutic drugs.

38

Andrew Bradbury, Research Scientist, **Los Alamos National Laboratory**

Andrew Bradbury was trained in medicine at the universities of Oxford and London, and subsequently practiced medicine for five years in the UK. He has been a technical staff member at Los Alamos National Lab since July 1999. He has worked in the field of phage display and antibody engineering for fifteen years, and has helped organize over thirty international congresses and practical courses in this field, both in Europe and the US. He has published over eighty peer reviewed articles, including a number of reviews and commentaries on phage display and antibody engineering, and has 12 filed patents/invention disclosures. He is one of the founder members of "The Antibody Society", and is on the editorial board of three journals.

37

Christian Schneider, Chair, CAT, **European Medicines Agency**

Dr. med. Christian K Schneider is Senior Medical Officer at the Danish Health and Medicines Authority (formerly the Danish Medicines Agency) since 2011. At the European Medicines Agency, he is the Chairman of the Committee for Advanced Therapies (CAT) since 2009, and also the Chairman of the CHMP Working Party on Similar Biological (Biosimilar) Medicinal Products. Between September 2007 and July 2011, he was a member of the Committee for Medicinal Products for Human Use (CHMP), co-opted for the area of Advanced Therapies – Gene, Cell and Tissue Therapies.

36

Mark Dennis, Principal Scientist, Antibody Engineering, **Genentech**

Mark has helped to pioneer phage display technology as a means to enhance and modify protein-protein interactions, utilized peptide phage display to generate novel peptide ligands, and developed a technology for enhancing the pharmacokinetics of proteins. His focus is on the delivery of antibodies across the blood-brain barrier, which presents a formidable challenge. In collaboration with Neurobiology and PK/PD Sciences, we are generating reagents to examine how the BBB forms and functions, with a particular focus on antibody dynamics at the BBB. Our efforts have focused on generating antibodies that target specific brain endothelial targets to enable receptor-mediated transport as a means to deliver antibodies across the BBB.
Our lab also focuses on the humanization of antibodies for clinical development with an eye towards enhancing humanization methods.

35

Brent Iverson, Chairman, Department of Chemistry and Biochemistry, **University of Texas at Austin**

Dr. Iverson's research program lies at the interface of chemistry and biology with a focus on the design, synthesis and study of large molecules that mimic or interact with biological systems. Milestone achievements include - development of the first synthetic folding molecules and the first artificial duplexes formed in water as mimics of proteins and DNA, and in collaboration with Chemical and Biomedical Engineer Dr. George Georgiou, several patented and commercially used technologies have been developed to engineer proteins such as antibodies for enhanced therapeutic activity. The lab is perhaps best known for developing a cure for anthrax called Anthim® based on an engineered anti-toxin antibody that has been commercialized by Elusys, Inc. and is nearing approval/acquisition as a strategic national biodefense countermeasure.

34

Mike Taussig, Founder and CEO of **Cambridge Protein Arrays Ltd,** Head of the Technology Research Group, **Babraham Institute**

As Head of the Technology Development Group at Babraham Institute, he collaborated on the production of human antibodies from transgenic mice and codeveloped ribosome display technology, for selection of antibodies, and in situ protein arraying. He is a named co-inventor on patents for eukaryotic ribosome display and in situ protein arrays. Mike has wide experience of managing large EU and ESF networking and research projects, including three EU consortia aiming to establish European resources of affinity binding reagents for analysis of the human proteome. He is a board member of the European Federation of Biotechnology and Editor in Chief of the EFB journal New Biotechnology (Elsevier). Mike is a Fellow of Selwyn College, Cambridge, where he teaches pathology.

33

Thierry Wurch, Global Director Antibody Projects, Oncology R&D Unit, **Institut de Recherches SERVIER**

Dr. Wurch completed a Ph.D in Molecular and Cellular Biology at the University Louis Pasteur (Strasbourg, FR, 1992), followed by a post-doctoral training at the University of Ghent (BE). Back to France in 1994, he raised a molecular biology laboratory at the Pierre FABRE Research Center in Castres (FR). In 2003, he moved to the Centre d'Immunologie Pierre FABRE where he established a Molecular and Cellular Biology Department dedicated to molecular pharmacology and protein and antibody engineering. Since September 2011, he acts as global director for the therapeutic antibody programs at the Institut de Recherches Servier, the largest independent French Parma group. He is currently member of the Editorial board of mAbs (Landes Bioscience) and Distinguished Advisor of The Antibody Society. He is co-author of about 90 publications.

32

Anna Wu, Chief Scientist (Co-Founder), **ImaginAb**

Dr. Anna Wu is a Professor in the Department of Molecular and Medical Pharmacology and a Professor in Pathology and Laboratory Medicine at the David Geffen School of Medicine at UCLA. She is also an Adjunct Professor of Molecular Biology at the Beckman Research Institute of the City of Hope in Duarte, CA. Dr. Wu is a respected leader in molecular imaging who currently serves as the Director of the Cancer Molecular Imaging Program in the Jonsson Comprehensive Cancer Center at UCLA. As an acknowledged expert in engineered antibodies for cancer targeting, Dr. Wu's research is the foundation of ImaginAb's technology. Dr. Wu received her A.B. in Biochemical Sciences from Harvard University and a PhD in Molecular Biophysics and Biochemistry from Yale University.

31

Germaine Fuh, Senior Scientist, Antibody Engineering, **Genentech**

Germaine is a a senior scientist of the Antibody Engineering Department at Genentech focusing on the technology of combinatorial antibody libraries for novel antibody discovery for human disease intervention. She recently developed a strategy to engineer antibodies to target two different molecules at the antigen-binding site, which has been useful as an option for generating therapeutic antibody.

30

James Marks, Professor of Anesthesia and Pharmaceutical Chemist, **University of California**

Dr. Marks is a world recognized pioneer in the field of antibody engineering, especially the use of antibody gene diversity libraries and display technologies to generate human therapeutic antibodies.He was a graduate student at the Medical Research Council Laboratory of Molecular Biology under the supervision of Dr. Greg Winter and received his Ph.D. in 1992 for a thesis titled "Making human antibody fragments in bacteria and bacteriophage." He currently directs a research group working on the production of medically relevant human antibodies using antibody gene diversity libraries and display technologies. He has more than 180 relevant publications in the field and is an inventor on more than 100 issued or pending patents.
Dr. Marks serves on several biopharmaceutical scientific advisory boards, has more than 180 relevant publications in the field and is an inventor on more than 100 issued or pending patents. He is a member of the Board of Directors of The Antibody Society.

29

Roy Jefferis, Professor Emeritus Molecular Immunology, School of Immunity & Infection, College of Medical & Dental Sciences, **University of Birmingham**

After attaining BSc and PhD in Chemistry Roy moved to the Medical School (Birmingham) to undertake research into the structure and function of antibody molecules, in health and disease. His studies revealed the profound influence that glycosylation of the IgG class of antibody can have on the activation of effector mechanisms, *in vitro* and *in vivo*. Extension to the engineering and design of recombinant antibody therapeutics has resulted in consultancy contracts with the biopharmaceutical industry. His current focus is the potential for immunogenicity when there is a allotype mismatch between an IgG therapeutic and a patient's IgG haplotype. In consideration of published research he has been elected Member of the Royal College of Physicians (MRCP) and Fellow of the Royal College of Pathologists (FRCPath).

28

David King, Chief Scientific Officer, **Anaptsys Bio**

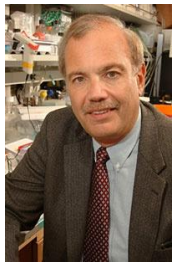
Dr. King joined AnaptysBio in November 2008. Prior to AnaptysBio, Dr. King was at Medarex, where he was involved in the design and selection of therapeutic antibodies, and led the development of a new class of antibody-drug conjugates. Dr. King is an established expert in antibody engineering and antibody therapeutics and has been involved in the design and development of three FDA-approved antibody products and several other clinical stage antibodies. At Celltech in the UK, where he worked for 14 years, he was the lead inventor of Cimzia®, a PEGylated antibody fragment for therapy of autoimmune diseases and was involved in the design and development of Mylotarg®, an antibody-drug conjugate for therapy of acute myeloid leukemia. Prior to joining Medarex, Dr. King was at Coulter Pharmaceuticals, later acquired by Corixa, where he was part of the team which successfully refiled the BLA for Bexxar®, a radiolabelled antibody for therapy of non-Hodgkin's lymphoma.

27

Tillman Gerngross, Professor of Bioengineering, **Dartmouth College,** CEO, **Adimab**

Tillman Gerngross, Ph.D., is a Professor of Bioengineering at Dartmouth College and active innovator and entrepreneur who has founded several successful venture backed companies. At GlycoFi, he developed a novel method for humanizing the glycosylation machinery in yeast to produce therapeutic proteins, including antibodies, with fully human carbohydrate structures. In 2006 Merck acquired the company for a record-setting $400 million. The same year *Nature Biotechnology* named Gerngross one of the most notable people in Biotechnology in the past ten years. In the fall of 2006 Gerngross joined SV Life Science as a Venture Partner to advise on investment opportunities in the bio-therapeutics area. In 2007 Gerngross co-founded Adimab, which over the past four years has developed a premier antibody discovery technology and in the last two years has signed partnerships with many of the world's leading pharmaceutical companies. In 2010 Gerngross founded Arsanis Inc. to develop antibody based strategies for the treatment of infectious diseases.

26



Dennis Slamon, director of Clinical/Translational Research, director of the Revlon/UCLA **Women's Cancer Research Program, JCCC**

Dennis J. Slamon, M.D., Ph.D., serves as director of Clinical/Translational Research, and as director of the Revlon/UCLA Women's Cancer Research Program at JCCC. He is a professor of medicine, chief of the Division of Hematology/Oncology and executive vice chair for research for UCLA's Department of Medicine. Slamon also serves as director of the medical advisory board for the National Colorectal Cancer Research Alliance, a fund-raising organization that promotes advances in colorectal cancer.
For 12 years, Slamon and his colleagues conducted the laboratory and clinical research that led to the development of the new breast cancer drug Herceptin. Slamon has won nearly two dozen national research awards honoring his scientific endeavors.

25

William Strohl, Vice President Biologics Research, **Janssen Pharmaceuticals**

Dr. William R Strohl studied Biology and Chemistry at Central Michigan University (Mount Pleasant, MI, USA), and received his PhD. in Microbiology and Biochemistry from Louisiana State University (Baton Rouge, LA USA) in 1980. Dr Strohl then joined Ohio State University (Columbus, OH USA) as Assistant, later Associate and Full Professor for Microbiology and Biochemistry. In 1997 Dr. Strohl moved to Merck Research Laboratories as Senior Director, later Executive Director with responsibility for various functions including Natural Products Microbiology, Biologics Research and Vaccines. In 2008 Dr. Strohl joined Centocor Research & Development (now Janssen R&D), as Senior Director and Head, Antibody Drug Discovery; since 2009, he has been Vice President and Head, Biologics Research, at Janssen. Dr. Strohl's research has resulted in more than 120 publications in peer-reviewed scientific journals and several patents in the field of pharmaceutical drug discovery and development of therapeutic mAbs.

24

Christian Klein, Head Oncology Programs, **Roche Glycart AG**

Christian Klein joined Roche Pharma Research, Roche Diagnostics GmbH in Penzberg, Germany in 2002. From 2007-2009 he headed a department in Discovery Oncology. In this function he was responsible for the identification, validation and preclinical development of novel antibody therapies. Since 2006, he acts as the preclinical science leader in the global life cycle team for the novel Type II CD20 antibody GA101 that is currently in PhII/III clinical trials. During that time, he initiated and lead several research projects on bispecific antibodies and their application including the Ang-2-VEGF CrossMAb. In 2010 he joined Roche Glycart AG, Schlieren, Switzerland as Head of Oncology Programs, overseesing projects and project leaders in the field of antibody-based cancer immunotherapy.

23

Henry Lowman, Chief Scientific Officer, **CytomX**

Henry Lowman joined CytomX in September 2010 as vice president of research and has since been promoted to chief scientific officer. He began his career as a National Institutes of Health Postdoctoral Fellow at Genentech, and then moved on to roles as scientist and senior scientist in the protein engineering department, before leading Genentech's antibody engineering department as associate director and then director where he focused on the research and development of protein and antibody therapeutics. His career interests include structure-based protein design, structure-function analysis and molecular diversity techniques, which he has applied in therapeutic development projects such as human growth hormone and IGF-1, as well as to therapeutic antibodies directed against IgE, VEGF, and CD20. Dr. Lowman is an author on more than 60 scientific publications, inventor on more than 60 issued patents and an editorial board member for the antibody journal *mAbs*.

22

Florian Wurm, Full Professor, Cellular Biotechnology Laboratory, **École polytechnique fédérale de Lausanne**

F.M. Wurm has published more than 200 scientific papers and holds 20 patents. He is member of the Executive Board of the European Society of Animal Cell Technology and he is or was a member of the Scientific Advisory Boards of a number of companies as well as of the International Aids Vaccine Initiative, an institution of the Rockefeller Foundation. Prof. Wurm serves as a consultant to the pharmaceutical biotechnology industry, mainly in the fields of animal cell technology for recombinant protein production and in regulatory affairs. He works in an editorial role and as scientific reviewer for a number of international journals, such as Nature Biotechnology, Journal of Biotechnology, Biotechnology and Bioengineering, Biotechnology Progress and Cytotechnology. He is founder and Chief Scientific Officer of ExcellGene SA, a company established in 2001 in Monthey, Switzerland.

21

Jochen Salfeld, Divisional Vice President, Biologics Research, **Abbott Bioresearch Center**

Jochen is the Divisional Vice President of Biologics Research at the Abbott Bioresearch Center in Worcester, Massachusetts, and us responsible for the oversight and strategic development of Abbott's human therapeutic antibody generation efforts. He had an instrumental role in the development of HUMIRA, the first fully human mAb for the treatment of rheumatoid arthritis, leading his team from concept and discovery to the marketing stage. In addition, he has extensive expertise in the areas of biotechnology, antibody engineering, cytokine biology, virology, formal preclinical and clinical development of biological therapeutics and project management. His work has been published in numerous books and journals.

20

Roland Kontermann, Mildred-Scheel-Professor, **University of Stuttgart**

PhD in Molecular Biology from the University of Heidelberg. After working as a postdoc in the laboratory of Sir Gregory Winter at the MRC Centre for Protein Engineering, Cambridge, UK, group leader at the Institute of Molecular Biology and Tumor Biology of the University of Marburg, and subsequently Head of Research at vectron therapeutics AG. Since 2004 Professor of Biomedical Engineering at the Institute of Cell Biology and Immunology of the University of Stuttgart, Germany. Current research focuses on the development of recombinant bispecific and bifunctional antibody molecules, including half-life extension strategies, and targeted nanoparticulate carrier systems for tumor therapy.

19

Paul Perren, Senior Vice President & Scientific Director, **GenMab**

Dr Paul Parren has been working in the field of recombinant antibodies for 25 years. In 2002, he joined Genmab where he is a member of the senior management team. He has a strong expertise in antibody biology and immunotherapy and is particularly interested in unravelling the mechanisms by which antibodies act in vivo, and to apply this knowledge to the development of novel antibody therapeutics. He has published extensively both in the scientific as well as the patent literature, with over 100 original publications, 28 issued patents in the major economies (US, EU, JP) and 42 PCT applications. Currently, his studies focus on antibody structure-function relationships, bispecific antibodies and antibody-drug conjugates. He is an inventor of the CD38 antibody daratumumab which is currently in Phase I/II clinical trials and the CD20 antibody ofatumumab (Arzerra).

18

Janice Reichert, Managing Director, **Reichert Biotechnology Consulting,** Editor in Chief, **mAbs Journal**

Dr. Reichert is an internationally-recognized expert in the development of peptide and antibody-based therapeutics. She is Founder and Managing Director of Reichert Biotechnology Consulting LLC, a pharmaceutical business intelligence research firm, and Founder and Editor-in-Chief of mAbs, a peer-reviewed, PubMed-indexed biomedical journal that focuses on topics relevant to antibody research and development. She previously held a position as Senior Research Fellow at Tufts Center for the Study of Drug Development (CSDD). Dr. Reichert has published extensively on development trends for peptide and antibody-based therapeutics and she has presented her research results as an invited speaker at conferences held worldwide. She is President of The Antibody Society and serves on the editorial boards of several journals (Drug Discovery Today, Generics and Biosimilars Initiative Journal).

17

Dane Wittrup, Carbon P. Dubbs Professor of Chemical Engineering and Biological Engineering, **Massachusetts Institute of Technology**

Wittrup's research program is focused on protein engineering of biopharmaceutical proteins by directed evolution. Areas of interest include: pretargeted radioimmunotherapy; biological response modification of EGFR; and immunotherapy of cancer via engineered cytokines and vaccines. He is also the Co-Founder, Office of the CSO, Chairman of the SAB Adimab, and Co-founder, BioDisplay Technologies (acquired by Abbott Laboratories 2001).

16

John Lambert, Executive Vice President and Chief Scientific Officer, **ImmunoGen**

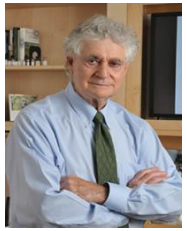
Dr Lambert received a BA in Natural Sciences in 1972 and received a PhD degree in Biochemistry in 1976 from Cambridge University, for his research on the structure of multimeric glycolytic enzymes under the supervision of Professor Richard N. Perham. He did his postdoctoral training at the University of California at Davis, where he worked on the structure if ribosomes (1976-1980), and with at the University of Glasgow (1980-1982), where he worked on the *arom* multienzyme complex. In 1982, Dr Lambert joined the research program supported by ImmunoGen., at the Dana-Farber Cancer Institute, Harvard Medical School, where he was Assistant Professor of Pathology (1982-1987). Dr Lambert was appointed Director of Biochemistry in 1990, and Senior Director of Research in 1992. He joined the Senior Management team of the Company as Vice President in 1994, and served in a variety of roles until becoming EVP and Chief Scientific Officer in 2009.

15

Mark Sliwkowski, Distinguished Staff Scientist, Research Oncology, **Genentech**

Mark joined Genentech in 1991 as a senior scientist and has worked on a number of programs involving drugs directed against the human epidermal growth factor receptor family (also known as the HER or ErbB family). Gratifyingly, two of these drugs, Herceptin (Trastuzumab) and Tarceva (erlotinib) have received U.S. Food and Drug Administration approval.

14



Ira Pastan, Head, Molecular Biology Section, Laboratory Chief, Center for Cancer Research, **National Cancer Institute**

Dr. Pastan is chief of the Laboratory of Molecular Biology, Center for Cancer Research. He obtained his M.D. from Tufts University, received his medical training at Yale University and research training at the NIH. He established the Laboratory of Molecular Biology in 1970. Pastan is currently working at the NIH investigating recombinant immunotoxins for use in cancer therapy. This technique employs a hybrid protein molecule - an antibody attached to a potent bacterial toxin - to selectively target tumorous cells. Pastan's lab focuses on variations of the exotoxin derived from Pseudomonas aeruginosa. He is a member of the National Academy of Sciences, a Fellow of the AAAS and the American Society of Microbiology. In 2009, he was awarded the prestigious International Antonio Feltrinelli Prize for Medicine.

13

Michael Neuberger, Joint Head of Division of Protein and Nucleic Acid Chemistry, Member of Executive Committee, **Medical Research Council Cambridge**

Dr. Neuberger's major research interests are directed towards understanding the biochemical processes and the physiological pathways by which antibody diversity is created. He has been awarded numerous awards in recognition of his scientific contributions in the antibody field. He is also a past or present member of a number of academic and editorial boards and has consulted for various companies interested in antibody engineering including Cambridge Antibody Technology (CAT), Xenova-Cantab, and Therapeutic Human Polyclonals. He is the lead inventor on various granted patents and applications in the field of antibody engineering. He is also a member of the AnaptysBio Scientific Advisory Board.

12

Mark McCamish, Global Head of Biopharmaceutical Development, **Sandoz International**

Dr. McCamish leads research and development of all biologics at Sandoz Biopharmaceuticals, which is the world leader in development and commercialization of follow-on biologics or biosimilars. His responsibilities include leadership involving selection of the target, cloning, technical development, scale-up, pre-clinical and clinical development and interfaces with regulatory authorities worldwide. Previously he was Senior VP and Chief Medical Officer at three biotechnology companies and held senior positions at Amgen and Abbott Laboratories. He has held professorships and maintained academic practices at the University of California, Davis and The Ohio State University. He has published broadly in several therapeutic areas in multiple journals including The New England Journal of Medicine, Journal of the American Medical Association, and Lancet.

11

Carlos Barbas, Founder and CSO, **Zyngenia**

Dr. Barbas is as well as the Professor of The Scripps Research Institute, Departments of Molecular Biology and Chemistry and The Skaggs Institute for Chemical Biology. Dr. Barbas is the author of more than 280 scientific articles and is a named inventor on more than 47 issued U.S. patents. Dr. Barbas and his colleagues have contributed to the first human and synthetic antibody phage libraries, the development of the first artificial transcription factors capable of regulating endogenous genes (zinc finger technology), and development of chemically programmed antibodies (the CovX core technology. His research interests have focused on the development of new therapeutic approaches to human diseases through studies at the interface of synthetic organic chemistry, molecular biology, and medicine. Dr. Barbas was a co-founder of Prolifaron LLC, an antibody company acquired by Alexion Pharmaceuticals in 2000. He was also the founder of CovX Inc. and inventor of the company's innovative chemically programmed antibody technology.

10

John McCafferty, Director of Research, **University of Cambridge**

In 1990 John McCafferty was one of the founders of Cambridge Antibody Technology (now Medimmune) where he demonstrated for the first time the display of antibodies and enzymes on the surface of filamentous phage.

After 12 years at CAT John formed a group at the Sanger Institute developing and utilising methods for protein generation and recombinant antibody isolation in high throughput. He currently leads a laboratory at the Biochemistry Dept at University of Cambridge utilizing phage display technology to develop functionally blocking antibodies for research and therapeutic applications.

9

Peter Senter, Vice President, Chemistry and Distinguished Fellow, **Seattle Genetics**

Peter Senter joined Seattle Genetics in August 1998 and has served as Vice President, Chemistry since September 2002. In February 2009, Dr. Senter was recognized as the company's first Distinguished Fellow. He leads Seattle Genetics' chemistry department, which carries out research in antibody-drug conjugate technologies, including the development of potent drug payloads, novel linker systems, conjugation methodology and mechanism of action studies. He is the Senior Editor of Bioconjugate Chemistry and serves on the Editorial Board of four scientific journals.. His research interests include targeted drug delivery, protein chemistry and biochemistry, and anti-cancer drug design. Dr. Senter has authored more than 100 scientific publications and holds more than 20 patents.

8

Dennis Burton, Professor, Department of Immunology and Microbial Science, **The Scripps Research Institute**

Dennis Burton is widely considered a leader in the HIV vaccine field and one of the world's primary masters in antibodies.

In 1989, he arrived at Scripps Research to work in Dr. Lerner's lab. At the time, Burton and several others in the Lerner lab were trying to make recombinant antibodies using a new technology. During this time, Burton made his largest breakthrough and a much-praised paper in Science. One morning that October, he says, he came in and saw a series of spots on radioactive plates. "What that meant is we'd made recombinant antibodies outside of animals and here they were for the first time," Burton says. That afternoon, the lab rejoiced with champagne and Burton wrote the date on the bottle. He still keeps the bottle in his kitchen cupboard.

7

Sachdev Sidhu, Professor, Banting and Best Department of Medical Research, **University of Toronto**

The Sidhu Lab studies the relationships between protein structure and function, using phage display in conjunction with high-throughput screening and sequencing. Dr. Sidhu and his lab have applied these advances to the development of synthetic antibody libraries, which we and others are currently using for the development of therapeutic antibodies for unmet medical needs. Dr. Sidhu, PhD is a Co-Founder and serves as Director of Reflexion Pharmaceuticals, Inc. and on many scientific advisory boards. He returns to academia after a distinguished career at Genentech where he led the development of its phage display technology. He has published more than 50 scientific papers and is a co-inventor on 12 patents filed with the US patent office. He is a member of the Board of Directors of The Antibody Society.

6

Alain Beck, Head of Physico-Chemistry Department, **Centre d'Immunologie Pierre Fabre;** Associate Editor, **mAbs Journal**

Dr. Beck has contributed to the R&D of anticancer mAbs, vaccines and peptides. He is inventor on 16 patents and author of more than 90 publications (editorials, features, research papers, invited reviews and meeting reports). He acts as associate editor of mAbs and as invited guest editor or contributor for special issues on mAbs (Nature Rev Immunol, Curr Pharm Biotech, Medecine/ Sciences, Analytical Chemistry, Exp Op Drug Discov and Meth Mol Biol). He has contributed to more than 140 scientific meetings as chairman, invited keynote speaker, panelist, moderator, advisor, and/or organizer. He is regularly interviewed on biosimilars, biobetters, next generation antibodies, antibody drug conjugates, bispecifics, Fc-fusion proteins and peptides and alternative protein scaffolds. He is also frequently invited to boards of experts by WHO, EMA, European Commission, funding agencies, French valorization agencies and bio-clusters.

5

James Huston
Managing Member
Huston BioConsulting LLC

Jim earned his Ph.D. with Professor Charles Tanford at Duke University, pursuing the physical biochemistry of immunoglobulin fragments and domains. He did postdoctoral work at Stanford and Harvard Medical Schools. In 1983 he shifted from his academic lab to the new realm of biotechnology, at Creative BioMolecules, beginning research to access the Fv region of antibodies. NCI SBIR Grants (Phase I & II) from 1985 through 1988 led to the first publication on successful engineering of a single-chain Fv and to the invention of single-chain Fv fusion proteins.

Further NCI funding (1990-1995) then allowed a multi-group effort (Lou Houston, Jim Huston, Jim Marks, Walt Stafford, Lou Weiner) to explore the limits of scFv targeting, therapy, and imaging studies in HER-2 overexpressing breast cancer. Jim continued to exploit the scFv as intrabodies (IntraImmune Therapies, 1997-2000) and in the pharma setting (Lexigen & EMD Serono, 2000-2010) where he continued to publish on intrabodies for the treatment of Huntington's Disease, half life extension of novel fusion proteins (SEEDbodies), and imaging with positron emission tomography. He is currently returning to a biotech-like environment for his antibody engineering research. Jim is also a member of the Board of Directors of the Antibody Society.

4

Sir Gregory Paul Winter
Master of Trinity College
Cambridge University

Sir Gregory Paul Winter, CBE, FRS is a British biochemist, a pioneer of therapeutic monoclonal antibodies. He invented techniques to both humanise (1986) and, later, to fully humanise using phage display, antibodies for therapeutic uses. In 1989 Winter was a founder of Cambridge Antibody Technology, which was one of the early commercial biotech companies involved in antibody engineering. One of the most successful antibody drugs developed was HUMIRA (adalimumab), which was discovered by Cambridge Antibody Technology as D2E7 and developed and marketed by Abbott Laboratories. HUMIRA, an antibody to TNF alpha, was the world's first fully human antibody, which achieved annual sales exceeding $1bn therefore achieving blockbuster status. In 2000, Winter founded a company called Domantis to pioneer the use of domain antibodies, which use only the active portion of a full-sized antibody. Recently he founded another company, Bicycle Therapeutics which is trying to develop very small protein mimics based on a covalently bonded hydrophobic core.

He was elected a Fellow of the Royal Society in 1990 and awarded the Royal Medal by the society in 2011 "for his pioneering work in protein engineering and therapeutic monoclonal antibodies, and his contributions as an inventor and entrepreneur". He is a member of the Advisory Council for the Campaign for Science and Engineering. Winter was appointed CBE in 1997, and further honoured as Knight Bachelor in 2004. Already a Fellow of Trinity College, University of Cambridge, Sir Gregory was appointed to succeed Lord Rees of Ludlow OM, from July 2012, as Master of Trinity.

3

Simon Moroney
CEO
MorphoSys

Dr. Moroney is one of the MorphoSys co-founders. Prior to that, Dr. Moroney held positions in the Department of Pharmacology, University of Cambridge, UK, as Assistant Professor in the Chemistry Department of the University of British Columbia, Vancouver, Canada, and as Associate in the Chemistry Department of the ETH in Zurich, Switzerland, where he also held a position as Lecturer. He was an Associate in the Harvard Medical School, Boston, USA, and an employee of ImmunoGen Inc., where he worked on the first generation of anti-cancer antibody conjugates.

Dr. Moroney studied chemistry in his native New Zealand, where he completed an MSc with 1st class honors and was a Commonwealth Scholar to the University of Oxford, where he was awarded a D.Phil. in Chemistry.

In 2002, Dr. Moroney received the German Cross of the Order of Merit by Dr. Johannes Rau, President of the Federal Republic of Germany, for his services to the biotechnology industry.
Dr. Moroney acts as member of the Supervisory Board of ProtAffin AG, Graz, Austria.

2

Paul Carter
Senior Director and Staff Scientist,
Antibody Engineering Department
Genentech

Dr. Carter has over 25 years of experience in biotechnology: Genentech (1986-2000 and 2010-present), Immunex/Amgen (2000-2003), Seattle Genetics (2003-2008) and VLST (2008-2009).

Dr. Carter's accomplishments in drug development include initiating the antibody humanization program at Genentech and co-inventing Herceptin®, a humanized antibody approved by the FDA for the treatment of HER2-overexpressing breast and gastric cancers. He is also a co-inventor of 3 other antibodies that reached clinical development. Beyond antibody therapeutics, Dr. Carter's inventions include technologies for high-level antibody fragment expression and protein hetero-multimerization using "knobs-into-holes". He is an inventor or co-inventor on at least 30 US patents.

Dr. Carter has authored or co-authored 95 scientific publications together cited >9,000 times. Dr. Carter has co-organized 11 international meetings on antibody engineering and therapeutics. He has delivered over 95 conference presentations and invited lectures including keynotes. He led the postdoctoral programs at Genentech (1998-2000), Immunex (2001-2002) and Amgen (2002-2003).

Dr. Carter received a B.A. in Natural Sciences from Cambridge University in 1982. He obtained a Ph.D. in 1986 under Sir Gregory Winter, Ph.D., F.R.S. at the MRC Laboratory of Molecular Biology in Cambridge. From 1986-1989 Dr. Carter was a Postdoctoral Fellow with Dr. James A. Wells at Genentech.

1

Andreas Plückthun

Director, Department of Biochemistry

University of Zurich

Andreas Plückthun (born 7. May 1956) studied chemistry at the University of Heidelberg and received his graduate education at the University of California at San Diego, where he obtained a Ph.D. in 1982. He was a postdoctoral fellow at the Chemistry Department of Harvard University (1982-85). From 1985 until 1993, he was group leader at the Genzentrum and Max-Planck-Institut for Biochemistry in Martinsried, Germany. He was appointed to the faculty of the University of Zurich as a Full Professor of Biochemistry in 1993.

In 1992, he co-founded the Munich biotech company MorphoSys AG (listed on the Frankfurt TecDAX) and he served as a member of the supervisory board and as Chief Scientific Advisor until 2007. In 2004 he co-founded the Biotech Company Molecular Partners AG which is located in Zurich-Schlieren, where he serves on the Supervisory board. He is a member of the Board of Directors of The Antibody Society.

His research achievements include fundamental contributions enabling the emergence of antibody engineering, notably by the use of E. coli as an engineering platform, studies on synthetic antibodies which lead to the first fully synthetic antibody library, the development of ribosome display — a true in vitro protein evolution technology—, and the development of the Designed Ankyrin Repeat Protein (DARPin) technology. More recently his laboratory developed technologies for evolving stable G-protein coupled receptors for advancing their detailed study. His current research is centered on protein engineering, combining protein design, directed evolution and applications. While protein engineering is always in the center, his research is very interdisciplinary.

We'd love to hear your views on all of this…

terrapinn.com/antibody

Join the conversation

Click here to leave a comment on this page on the Total BioPharma blog

Click here to contribute to our LinkedIn discussion

Click here to follow us on Twitter @totalbiopharma

Click here to sign up for the Total BioPharma blog e-newsletter for more on Pharmaceutical, biopharmaceutical and biotechnology specialist tips and industry updates.

We'd love to meet you too…

terrapinn.com/antibody

We're hosting the 9th annual European Antibody Congress from 11-13 November 2013 in Geneva and would love to see you there.

The European Antibody Congress is the region's largest event dedicated to science, technology and business development: an exhibition, a strategic keynote conference, real life case studies and interactive roundtables.

This 3 track congress covers science and strategy for the development and production of mAbs, ADC's, bispecifics and alternative scaffolds.

European Antibody Congress has a proven track record of introducing sellers to buyers. The event its where solution and service providers grow their business and stand out from the crowd..

PLUS, a number of the above individuals will also be speaking at this event.