Preface to the Fourth Edition

Welcome to the fourth edition of the Encyclopedia of Cancer. The third edition had appeared in 2011, and the tremendous response by the scientific community has encouraged us to prepare a subsequent edition that is now available. The past 5 years have seen an enormous progress in cancer research, with particular emphasis on the bench-to-bed paradigm and the application of personalized cancer medicine.

For this new edition, the multidisciplinary approach bridging basic science and clinical application was further developed. Numerous new entries by authorities from the international scientific community were added to meet the substantial progress in molecular cancer etiology, diagnostics, and therapy. Entries from the third edition were updated, and new entries were added addressing central areas of basic and clinical cancer research, such as personalized cancer medicine, immunotherapy, pediatric and adult oncology, and epigenetics.

The Encyclopedia of Cancer, fourth edition, will be available both in print and online version. The online version is designed as an interactive and dynamic database where authors at any time will be able to modify and update presentations in order to keep the content up to date. Additionally, new entries can be entered at any time, and contributors are encouraged to suggest new topics that they feel are insufficiently covered.

The technical preparation of the Encyclopedia of Cancer would not have been possible without the competent and dedicated input by Daniela Graf and Melanie Thanner. Their excellent and pleasant cooperation is highly appreciated. Thanks also to the publisher who has taken every effort to develop this prestigious Encyclopedia of Cancer into a useful instrument from which both basic scientists and clinicians may benefit.

Heidelberg, March 1, 2016
Manfred Schwab
Preface to the Third Edition

Recent developments in the rapidly developing field of cancer research are seeing a dynamic progress in basic and clinical cancer science, with translational research increasingly becoming a new paradigm. In particular, the identification of a large number of prognostic and predictive clinically validated biomarkers now allows exciting and promising new approaches in both personalized cancer medicine and targeted therapies to be pursued.

The third edition of the Encyclopedia of Cancer is now available 10 years after the first edition had come out in 2001. Numerous new entries addressing topics of basic cancer research have been added. As a major new feature, up-to-date and authoritative essays present a comprehensive picture of topics ranging from pathology, to clinical oncology and targeted therapies for personalized cancer medicine for major cancers types, such as breast cancer, colorectal cancer, prostate cancer, ovarian cancer, renal cancer, lung cancer, and hematological malignancies, leukemias, and lymphomas. This information source should be of great value to both the clinical and basic science community.

The Encyclopedia of Cancer, Third Edition, is available both in print and online versions. Contributors to the Encyclopedia of Cancer are encouraged to keep their presentations up-to-date by online editing. Clinical and basic scientists are encouraged to suggest new essays to the editor-in-chief.

The technical preparation of the Encyclopedia of Cancer would not have been possible without the competent input of Jutta Jaeger-Hamers, Melanie Thanner, and Saskia Ellis; their excellent and pleasant cooperation is highly appreciated.

Heidelberg, Germany
Manfred Schwab
Given the overwhelming success of the first edition of the Cancer Encyclopedia, which appeared in 2001, and the amazing development in the different fields of cancer research, it has been decided to publish a second fully revised and expanded edition, following the principal concept of the first edition that has proven so successful.

Recent developments are seeing a dynamic merging of basic and clinical science, with translational research increasingly becoming a new paradigm in cancer research. The merging of different basic and clinical science disciplines toward the common goal of fighting against cancer has long ago called for the establishment of a comprehensive reference source both as a tool to close the language gap between clinical and basic science investigators and as a platform of information for advanced students and informed laymen alike. It is intended to be a resource for all interested in information beyond their own specific expertise.

While the first edition had featured contributions from approximately 300 scientists/clinicians in one volume, the second edition includes more than 1,000 contributors in four volumes with an A–Z format of more than 7,000 entries. It provides definitions of common acronyms and short definitions of both related terms and processes in the form of keyword entries. A major information source are detailed essays that provide comprehensive information on syndromes, genes and molecules, and processes and methods. Each essay is well structured, with extensive cross-referencing between entries. Essays represent original contributions by the corresponding authors, all distinguished scientists in their own field, editorial input has been carefully restricted to formal aspects.

A panel of field editors, each an eminent international expert for the corresponding field, has served to ensure the presentation of timely and authoritative Encyclopedia entries. These new traits are likely to meet the expectancy that a wide community has toward a cancer reference work.

An important element in the preparation of the Encyclopedia has been the competent support by the Springer crew, Dr. Michaela Bilic, Saskia Ellis, and lately, Jana Simniok. I am extremely grateful for their excellent and pleasant cooperation.
The Cancer Encyclopedia, Second Edition, will be available both in print and online versions. Clinicians, research scientists, and advanced students will find this an amazing resource and a highly informative reference for cancer.

Heidelberg, Germany
Manfred Schwab
Cancer, although a dreadful disease, is at the same time a fascinating biological phenotype. Around 1980, cancer was first attributed to malfunctioning genes and, subsequently, cancer research has become a major area of scientific research supporting the foundations of modern biology to a great extent. To unravel the human genome sequence was one of those extraordinary tasks, which has largely been fueled by cancer research, and many of the fascinating insights into the genetic circuits that regulate developmental processes have also emerged from research on cancer.

Diverse biological disciplines such as cytogenetics, virology, cell biology, classical and molecular genetics, epidemiology, biochemistry, together with the clinical sciences, have closed ranks in their search of how cancer develops and to find remedies to stop the abnormal growth that is characteristic of cancerous cells. In the attempt to establish how, why, and when cancer occurs, a plethora of genetic pathways and regulatory circuits have been discovered that are necessary to maintain general cellular functions such as proliferation, differentiation, and migration. Alterations of this fine-tuned network of cascades and interactions, due to endogenous failure or to exogenous challenges by environmental factors, may disable any member of such regulatory pathways. This could, for example, induce the death of the affected cell, may mark it for cancerous development or may immediately provide it with a growth advantage within a particular tissue.

Recent developments have seen the merger of basic and clinical science. Of the former, particularly genetics has provided instrumental and analytical tools with which to assess the role of environmental factors in cancer, to refine and enable diagnosis prior to the development of symptoms, and to evaluate the prognosis of patients. Hopefully, even better strategies for causal therapy will become available in the future. Merging the basic and clinical science disciplines toward the common goal of fighting cancer calls for a comprehensive reference source to serve both as a tool to close the language gap between clinical and basic science investigators and as an information platform for the student and the informed layperson alike. Obviously this was an extremely ambitious goal, and the immense progress in the field cannot always be portrayed in line with the latest developments. The aim of the Encyclopedia is to provide the reader with an entrance point to a particular topic. It should be of value to both basic and clinical scientists working in the field of cancer research. Additionally, both students and lecturers in the life sciences should
benefit highly from this database. I therefore hope that this Encyclopedia will become an essential complement to existing science resources.

The attempts to identify the mechanisms underlying cancer development and progression have produced a wealth of facts, and no single individual is capable of addressing the immense breadth of the field with undisputed authority. Hence, the “Encyclopedic Reference of Cancer” is the work of many authors, all of whom are experts in their fields and reputable members of the international scientific community. Each author contributed a large number of keyword definitions and in-depth essays and in so doing it was possible to cover the broad field of cancer-related topics within a single publication. Obviously this approach entails a form of presentation, in which the author has the freedom to set priorities and to promote an individual point of view. This is most obvious when it comes to nomenclature, particularly that of genes and proteins. Although the editorial intention was to apply the nomenclature of the Human Genome Organisation (HUGO), the more vigorous execution of this attempt has been left to future endeavors.

In the early phase of planning the Encyclopedia, exploratory contacts to potential authors produced an overwhelmingly positive response. The subsequent contact with almost 300 contributory authors was a marvelous experience, and I am extremely grateful for their excellent and constructive cooperation. An important element in the preparation of the Encyclopedia has been the competent secretarial assistance of Hiltrud Wilbertz of the Springer-Verlag and of Ingrid Cederlund and Cornelia Kirchner of the DKFZ. With great attention to detail they helped to keep track of the technical aspects in the preparation of the manuscript. It was a pleasure to work with the Springer crew, including Dr. Rolf Lange as the Editorial Director (Medicine) and Dr. Thomas Mager, Senior Editor for Encyclopedias and Dictionaries. In particular I wish to thank Dr. Walter Reuss, who untiringly has mastered all aspects and problems associated with the management of the numerous manuscripts that were received from authors of the international scientific community. It has been satisfying and at times comforting to see how he made illustration files come alive. Thanks also to Dr. Claudia Lange who, being herself a knowledgeable cell biologist, has worked as the scientific editor. Her commitment and interest have substantially improved this Encyclopedia. As a final word, I would like to stress that although substantial efforts have been made to compose factually correct and well-understandable presentations, there may be places where a definition is incomplete or a phrase in an essay is flawed. All contributors to this Encyclopedia will be extremely happy to receive possible corrections, or revisions, in order for them to be included in any future editions of the “Encyclopedic Reference of Cancer.”

Heidelberg, Germany
Manfred Schwab
Manfred Schwab, Dr. rer. nat.
University-Professor of Genetics
Neuroblastoma Genomics B087
German Cancer Research Center (DKFZ)
Contributors

Apart from few editorial input, the respective authors are responsible for the content of their own texts.

**Vesa Aaltonen** Department of Ophthalmology, University of Turku, Turku, Finland

**Trond Aasen** Department of Pathology, Vall d’Hebron University Hospital, Barcelona, Spain

**Cory Abate-Shen** Herbert Irving Comprehensive Cancer Center, Columbia University Medical Center, New York, NY, USA

**Phillip H. Abbosh** Department of Pathology and Laboratory Medicine, Indiana University School of Medicine, Indianapolis, IN, USA

**Kotb Abdelmohsen** RNA Regulation Section, National Institute on Aging, National Institutes of Health, Biomedical Research Center, Baltimore, MD, USA

**Fritz Aberger** Department of Molecular Biology, University of Salzburg, Salzburg, Austria

**Hinrich Abken** Tumor Genetics, Clinic I Internal Medicine, University Hospital Cologne, and Center for Molecular Medicine Cologne, University of Cologne, Cologne, Germany

**Amal M. Abu-Ghosh** Department of Oncology and Pediatrics, Lombardi Comprehensive Cancer Center, Georgetown University, Washington, DC, USA

**Rosita Accardi** Infections and Cancer Biology Group, International Agency for Research on Cancer, Lyon, France

**Filippo Acconcia** Molecular and Cellular Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

**Christina L. Addison** Cancer Therapeutics Program, Ottawa Hospital Research Institute, Ottawa, ON, Canada

**Vaqar M. Adhami** School of Medicine and Public Health, University of Wisconsin, Madison, WI, USA

**Farrukh Afaq** Department of Dermatology, University of Alabama at Birmingham, Birmingham, AL, USA

**Chapla Agarwal** SOP-Administration, University of Colorado Denver – Anschutz Medical Campus, Aurora, CO, USA
Garima Agarwal College of Pharmacy, The Ohio State University, Columbus, OH, USA

Rajesh Agarwal Department of Pharmaceutical Sciences, Skaggs School of Pharmacy and Pharmaceutical Sciences, University of Colorado, Aurora, CO, USA

Patrizia Agostinis Department of Cellular and Molecular Medicine, Cell Death Research and Therapy Lab, KU Leuven Campus Gasthuisberg, Leuven, Belgium

Terje C. Ahlquist Roche Norway, Oslo, Norway

Kazi Mokim Ahmed Department of Radiation Oncology, Houston Methodist Research Institute, Houston, TX, USA

Khalil Ahmed Minneapolis VA Health Care System and University of Minnesota, Minneapolis, MN, USA

Shahid Ahmed Department of Oncology, University of Saskatchewan, Saskatoon, SK, Canada

Joohong Ahnn Department of Life Science, Hanyang University, Seoul, South Korea

Cem Akin University of Michigan, Ann Arbor, MI, USA

Gada Al-Ani Department of Cancer Biology, University of Kansas Cancer Center, The University of Kansas Medical Center, Kansas City, KS, USA

Ami Albihn Department of Microbiology, Tumor and Cell Biology (MTC), Karolinska Institutet, Stockholm, Sweden

Adriana Albini IRCCS Multimedica, Milano, Italy

Jérôme Alexandre Faculté de Médecine Paris – Descartes, UPRES 18-33, Groupe Hospitalier Cochin – Saint Vincent de Paul, Paris, France

Amal Yahya Alhefdhi Department of Surgery – MBC 40, King Faisal Specialist Hospital and Research Center, Riyadh, Kingdom of Saudi Arabia

Shadan Ali Karmanos Cancer Institute, Wayne State University, Detroit, MI, USA

Malcolm R. Alison Centre for Diabetes and Metabolic Medicine, Queen Barts and the London School of Medicine and Dentistry, Institute of Cell and Molecular Science, London, UK

Catherine Alix-Panabieres University Medical Center, Lapeyronie Hospital, Montpellier, France

Alison L. Allan Cancer Research Laboratories, London Regional Cancer Program and Departments of Oncology and Anatomy and Cell Biology, Schulich School of Medicine and Dentistry, University of Western Ontario, London, ON, Canada
Paola Allavena  Department of Immunology, Fondazione Humanitas per la Ricerca, Rozzano, Milan, Italy

Damian A. Almiron  Departments of Pediatrics and of Genetics, Norris Cotton Cancer Center, Geisel School of Medicine at Dartmouth, Hanover, NH, USA

Angel Alonso  Deutsches Krebsforschungszentrum, Heidelberg, Germany

Gianfranco Alpini  Departments of Medicine and Medical Physiology, Texas A&M Health Science Center, College of Medicine, Central Texas Veterans Health Care System, Baylor Scott & White Health, Temple, TX, USA

Marie-Clotilde Alves-Guerra  Molecular and Cellular Oncogenesis Program, The Wistar Institute, Philadelphia, PA, USA

Pierre Åman  LLCR, Department of Pathology, Institute of Biomedicine, Sahlgrenska Academy, Goteborg University, Gothenburg, Sweden

Kurosh Ameri  Department of Medicine, Division of Cardiology, Translational Cardiac Stem Cell Program, Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research, Cardiovascular Research Institute, University of California San Francisco (UCSF), San Francisco, CA, USA

Mounira Amor-Guéret  Institut Curie – UMR 3348 CNRS, Orsay Cedex, France

Grace Amponsah  Department of Pathology, Comprehensive Cancer Centre, The Ohio State Medical Centre, Columbus, OH, USA

John W. Anderson  Dream Master Laboratory, Chandler, AZ, USA

Kenneth C. Anderson  Department of Medical Oncology, Jerome Lipper Multiple Myeloma Center, Dana-Farber Cancer Institute, Boston, MA, USA

Nicolas André  Centre for Research in Oncobiology and Oncopharmacology, INSERM U911, Marseille, France

Metronomics Global Health Initiative, Marseille, France

Department of Pediatric Hematology and Oncology, La Timone Children’s Hospital, Marseille, France

Peter Angel  Division of Signal Transduction and Growth Control, Deutsches Krebsforschungszentrum, Heidelberg, Germany

Andrea Anichini  Department of Experimental Oncology, Fondazione IRCCS Istituto Nazionale per lo Studio e la Cura dei Tumori, Milan, Italy

Talha Anwar  Medical Scientist Training Program and Department of Pathology, University of Michigan Medical School, Ann Arbor, MI, USA

Peter D. Aplan  Genetics Branch, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA
Natalia Aptsiauri  UGC Laboratorio Clínico Hospital Universitario Virgen de las Nieves Facultad de Medicina, Universidad de Granada, Granada, Spain

Rami I. Aqeilan  He Lautenberg Center for General and Tumor Immunology, Department of Immunology and Cancer Research-Institute for Medical Research Israel-Canada, Hebrew University-Hadassah Medical School, Jerusalem, Israel

Tsutomu Araki  Departments of Obstetrics and Gynecology, Nippon Medical School, Kawasaki and Tokyo, Japan

Sanchia Aranda  School of Nursing, The University of Melbourne, Carlton, VIC, Australia

Diego Arango  CIBBIM - Nanomedicina Oncologia Molecular, Vall d’Hebron Hospital Research Institute, Barcelona, Spain

David J. Araten  NYU School of Medicine, Laura and Isaac Perlmutter Cancer Center and the New York VA Medical Center, New York, NY, USA

Laura Arbona  Department of Biology, University of the Balearic Islands, Palma de Mallorca, Spain

Valentina Arcangeli  Department of Oncology, Instituto Scientifico Romagnolo per lo S, Infermi Hospital, Rimini, Italy

Gemma Armengol  Faculty Biosciences, U. Biological Anthropology, Universitat Autonoma de Barcelona, Barcelona, Spain

Elias S. J. Arnér  Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden

Marie Arsenian-Henriksson  Department of Microbiology, Tumor and Cell Biology (MTC), Karolinska Institutet, Stockholm, Sweden

Stefano Aterini  Department of Experimental Pathology and Oncology, University of Firenze, Florence, Italy

Scott Auerbach  Biomolecular Screening, National Toxicology Program, National Institute of Environmental Health Sciences (NIEHS), Research Triangle Park, NC, USA

Katarzyna Augoff  Department of Gastrointestinal and General Surgery, Wroclaw Medical University, Wroclaw, Poland

Marc Aumerclier  CNRS, INRA, UMR 8576-UGSF-Unité de Glycobiologie Structurale et Fonctionnelle, Université de Lille, Villeneuve d’Ascq, France

Riccardo Autorino  Clinica Urologica, Seconda Università degli Studi, Naples, Italy

Matias A. Avila  Division of Hepatology, CIMA, University of Navarra, Pamplona, Spain

Hava Karsenty Avraham  Division of Experimental Medicine, Beth Israel Deaconess Medical Center, Harvard Institutes of Medicine, Boston, MA, USA
Contributors

Shalom Avraham  Division of Experimental Medicine, Beth Israel Deaconess Medical Center, Harvard Institutes of Medicine, Boston, MA, USA

Sanjay Awasthi  United States Longview Cancer Center, Longview, TX, USA

Yogesh C. Awasthi  City of Hope, Duarte, CA, USA

Debasis Bagchi  Department of Pharmacy Sciences, Creighton University Medical Center, Omaha, NE, USA

Xue-Tao Bai  State Key Laboratory of Medical Genomics, Shanghai Institute of Hematology, Rui-Jin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, People’s Republic of China

Michael J. Baine  Department of Radiation Oncology, Fred and Pamela Buffett Cancer Center, University of Nebraska Medical Center, Omaha, NE, USA

Jürgen Bajorath  Department of Life Science Informatics, B-IT, University of Bonn, Bonn, Germany

Stuart G. Baker  Biometry Research Group, National Cancer Institute, Bethesda, MD, USA

Elizabeth K. Balcer-Kubiczek  Department of Radiation Oncology, Marlene and Stewart Greenebaum Cancer Center, University of Maryland School of Medicine, Baltimore, MD, USA

Enke Baldini  Department of Experimental Medicine, University of Rome “Sapienza”, Rome, Italy

Graham S. Baldwin  Department of Surgery, Austin Health, The University of Melbourne, Heidelberg, VIC, Australia

Sherri Bale  GeneDx, Rockville, MD, USA

Laurent Balenci  INSERM Unité Mixte 873, Grenoble, France

Sushanta K. Banerjee  Cancer Research Unit, Research Division, VA Medical Center, Kansas City, MO, USA

Michal Baniyash  The Lautenberg Center for Immunology and Cancer Research, Israel-Canada Medical, Research Institute Faculty of Medicine, The Hebrew University, Jerusalem, Israel

Shyam S. Bansal  Division of Cardiovascular Disease, University of Alabama at Birmingham, Birmingham, AL, USA

Nektarios Barabutis  Frank Reidy Research Center for Bioelectrics, Old Dominion University, Norfolk, VA, USA

Aditya Bardia  Massachusetts General Hospital Cancer Center and Harvard Medical School, Boston, MA, USA

Rafijul Bari  Departments of Medicine and Molecular Sciences, Vascular Biology Center, Cancer Institute, University of Tennessee Health Science Center, Memphis, TN, USA
Nicola L. P. Barnes  Department of Academic Surgery, South Manchester University Hospital, Manchester, UK

Robert Barouki  Inserm UMR-S 1124, Université Paris Descartes, Paris, France

Juan Miguel Barros-Dios  Department of Preventive Medicine and Public Health, School of Medicine, University of Santiago de Compostela, Santiago de Compostela, Spain

Harry Bartelink  Department of Radiotherapy, The Netherlands Cancer Institute–Antoni van Leeuwenhoek Hospital, Amsterdam, The Netherlands

Stefan Barth  Institute of Infectious Disease and Molecular Medicine and Department of Integrative Biomedical Sciences, University of Cape Town, Cape Town, South Africa

Helmut Bartsch  Division of Toxicology and Cancer Risk Factors, German Cancer Research Center (DKFZ), Heidelberg, Germany

Thomas Barz  Max-Panck-Institut für Psychiatrie, Munich, Germany

Holger Bastians  Abt. Molekulare Onkologie, Universitätsmedizin Göttingen, Göttingen, Germany

Anna Batistatou  Ioannina University Medical School, Ioannina, Greece

Surinder K. Batra  Eppley Institute for Research in Cancer and Allied Diseases and Department of Biochemistry and Molecular Biology, University of Nebraska Medical Center, Omaha, NE, USA

Frederic Batteux  Faculté de Médecine Paris – Descartes, UPRES 18-33, Groupe Hospitalier Cochin – Saint Vincent de Paul, Paris, France

Jacques Baudier  INSERM Unité Mixte 873, Grenoble, France

Paul Bauer  Pfizer Research Technology Center, Cambridge, MA, USA

Tobias Bäuerle  Institute of Radiology, University Medical Center Erlangen, Erlangen, Germany

Asne R. Bauskin  Department of Medicine, Centre for Immunology, St. Vincent’s Hospital, University of New South Wales, Sydney, NSW, Australia

Boon-Huat Bay  Department of Anatomy, National University of Singapore, Singapore, Singapore

Jean-Claude Béani  Clinique Universitaire de Dermato-Vénérologie, Photobiologie et Allergologie, Pôle Pluridisciplinaire de Médecine, CHU de Grenoble, Grenoble, France

Nicole Beauchemin  Goodman Cancer Research Centre, McGill University, Montreal, QC, Canada

John F. Bechberger  Department of Cellular and Physiological Sciences, The University of British Columbia, Vancouver, BC, Canada
Gerhild Becker Department of Palliative Care, University Hospital Freiburg, Freiburg, Germany

Katrin Anne Becker Department of Molecular Biology, University of Duisburg-Essen, Essen, Germany

Marie E. Beckner Department of Pathology, University of Pittsburgh School of Medicine, Pittsburgh, PA, USA

Roberto Bei Department of Clinical Sciences and Translational Medicine, Faculty of Medicine, University of Rome “Tor Vergata”, Rome, Italy

Claus Belka Department of Radiation Oncology, University of Tübingen, Tübingen, Germany

Anita C. Bellail Department of Pathology and Laboratory Medicine, Henry Ford Health System, Detroit, MI, USA

Larissa Belov School of Molecular and Microbial Biosciences, University of Sydney, Sydney, NSW, Australia

P. Annécie Benatrehina College of Pharmacy, The Ohio State University, Columbus, OH, USA

Maurizio Bendandi Department of Clinical Medicine, School of Medicine, Ross University, Roseau, Commonwealth of Dominica

Yaacov Ben-David Division of Molecular and Cellular Biology, Sunnybrook Health Sciences Centre, Toronto, ON, Canada

Martin Benesch Division of Pediatric Hematology and Oncology, Department of Pediatrics and Adolescence Medicine, Medical University of Graz, Graz, Austria

Suzanne M. Benjes Cancer Genetics Research, University of Otago, Christchurch, New Zealand

Carmen Berasain Division of Hepatology, CIMA, University of Navarra, Pamplona, Spain

Alan Berezov Department of Pathology, Laboratory Medicine and Abramson Cancer Center, University of Pennsylvania, Philadelphia, PA, USA

Rob J. W. Berg University Medical Center Utrecht, Utrecht, The Netherlands

Corinna Bergelt Institute of Medical Psychology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Rene Bernards The Netherlands Cancer Institute, Amsterdam, The Netherlands

Zwi Berneman Vaccine and Infections Disease Institute (VAXINFECTIO) Laboratory of Experimental Hematology, Faculty of Medicine and Health Sciences, University of Antwerp, Edegem, Belgium
Jérôme Bertherat  Endocrinology, Metabolism and Cancer Department, INSERM U567, Institut Cochin, Paris, France

Saverio Bettuzzi  Department of Biomedicine, Biotechnology and Translational Research, University of Parma, Parma, Italy

Arun Bhardwaj  Department of Oncologic Sciences, Mitchell Cancer Institute, University of South Alabama, Mobile, AL, USA

Kumar M. R. Bhat  Department of Anatomy, Kasturba Medical College, Manipal University, Manipal, Karnataka, India

Malaya Bhattacharya-Chatterjee  University of Cincinnati and The Barrett Cancer Center, Cincinnati, OH, USA

Caterina Bianco  Division of Extramural Activities, National Institutes of Health, Rockville, MD, USA

Tina Bianco-Miotto  Robinson Research Institute and School of Agriculture, Food and Wine, The University of Adelaide, Adelaide, SA, Australia

Jean-Michel Bidart  Department of Clinical Biology, Institut Gustave-Roussy, Villejuif, France

Jaclyn A. Biegel  Department of Pathology and Laboratory Medicine, Children’s Hospital of Los Angeles, Los Angeles, CA, USA

Margherita Bignami  Istituto Superiore di Sanita’, Rome, Italy

Irene V. Bijnsdorp  Department of Medical Oncology, VU University Medical Center, Amsterdam, The Netherlands

Chen Bing  Institute of Ageing and Chronic Disease, University of Liverpool, Liverpool, UK

Angelique Blanckenberg  Department of Chemistry and Polymer Science, Stellenbosch University, Matieland, South Africa

Giovanni Blandino  Translational Oncogenomic Laboratory, Regina Elena Cancer Institute, Rome, Italy

David E. Blask  Laboratory of Chrono-Neuroendocrine Oncology, Department of Structural and Cellular Biology, Tulane University School of Medicine, New Orleans, LA, USA

Jonathan Blay  Department of Pharmacology, Dalhousie University, Halifax, NS, Canada

Peter Blume-Jensen  Xtuit Pharmaceuticals, Boston, MA, USA

Sarah Bocchini  Department of Experimental Medicine, University of Rome “Sapienza”, Rome, Italy

Ann M. Bode  The Hormel Institute, University of Minnesota, Austin, MN, USA

Paolo Boffetta  Icahn School of Medicine at Mount Sinai, New York, NY, USA
Stefan K. Bohlander  Faculty of Medical and Health Sciences, The University of Auckland, Auckland, New Zealand

Valentina Bollati  EPIGET - Epidemiology, Epigenetics and Toxicology Lab - Department of Clinical Sciences and Community Health, University of Milan, Milan, Italy

Subbarao Bondada  Department of Microbiology, Immunology and Molecular Genetics, University of Kentucky, Lexington, KY, USA

Maria Grazia Borrello  Department of Experimental Oncology and Molecular Medicine, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy

Giuseppe Borzacchiello  Department of Veterinary Medicine and Animal Productions, University of Naples “Federico II”, Naples, Italy

Valerie Bosch  Forschungsschwerpunkt Infektion und Krebs, F020, German Cancer Research Center (DKFZ), Heidelberg, Germany

Chris Boshoff  Cancer Research Campaign Viral Oncology Group, Wolfson Institute for Biomedical Research, University College London, London, UK

Irina Bosman  Institute of Pharmacy, University of Bonn, Bonn, Germany

Galina I. Botchkina  Department of Pathology, Stony Brook University, Stony Brook, NY, USA

Institute of Chemical Biology and Drug Discovery, Stony Brook University, Stony Brook, NY, USA

Franck Bourdeaut  Département de pédiatrie, INSERM 830, Biologie et génétique des tumeurs, Institut Curie, Paris, France

Jean-Pierre Bourquin  Pediatric Oncology, University Children’s Hospital Zurich, Zurich, Switzerland

Hassan Bousbaa  Instituto Investigação Formação Avançada Ciências Tecnologias Saúde, CESPU – Cooperativa de Ensino Superior Politecnico e Universitario, Gandra PRD, Portugal

Norman Boyd  Campbell Family Institute for Breast Cancer Research, Ontario Cancer Institute, Toronto, ON, Canada

Sven Brandau  Department of Otorhinolaryngology, University Duisburg-Essen, Essen, Germany

Burkhard H. Brandt  Institute of Clinical Chemistry, University Medical Centre Schleswig-Holstein, Kiel, Germany

Hiltrud Brauch  Breast Cancer Susceptibility and Pharmacogenomics, Dr. Margarete Fischer-Bosch-Institute of Clinical Pharmacology, University of Tübingen, Stuttgart, Germany

Massimo Breccia  Department of Cellular Biotechnologies and Hematology, Sapienza University, Rome, Italy
Samuel N. Breit  Cytokine Biology and Inflammation Research Program, St Vincent’s Centre for Applied Medical Research (AMR), St Vincent’s Hospital, Sydney, NSW, Australia

Edwin Bremer  Department of Pathology and Laboratory Medicine, Section Medical Biology, Laboratory for Tumor Immunology, University Medical Center Groningen, Groningen, The Netherlands

Catherine Brenner  INSERM UMR-S 769, Labex LERMIT, Châtenay-Malabry, University of Paris Sud, Paris, France

David J. Brenner  Department of Radiation Oncology, Columbia University, New York, NY, USA

Amanda E. Brinker  Department of Cancer Biology, University of Kansas Cancer Center, The University of Kansas Medical Center, Kansas City, KS, USA

Nikko Brix  Clinic for Radiotherapy and Radiation Oncology, LMU Munich, Munich, Germany

Katja Brocke-Heidrich  Praxis für Naturheilkunde und ganzheitliche Therapie, Leipzig, Germany

Angela Brodie  University of Maryland School of Medicine, Baltimore, MD, USA

Jonathan Brody  Department of Surgery, Thomas Jefferson University, Philadelphia, PA, USA

Christopher L. Brooks  Institute for Cancer Genetics, and Department of Pathology, College of Physicians and Surgeons, Columbia University, New York, NY, USA

Mai N. Brooks  Surgical Oncology, School of Medicine, University of California, Los Angeles, CA, USA

David A. Brown  St. Vincent’s Centre for Applied Medical Research, St Vincent’s Hospital, University of New South Wales, Sydney, NSW, Australia

Karen Brown  Department of Cancer Studies, University of Leicester, Leicester, UK

Kevin Brown  University of Florida, College of Medicine, Gainesville, FL, USA

Tilman Brummer  Institut für Molekulare Medizin und Zellforschung, Zentrum für Biochemie und Molekulare Zellforschung (ZBMZ), Albert-Ludwigs-Universität Freiburg, Freiburg, Germany

Antonio Brunetti  Department of Health Sciences, University of Catanzaro “Magna Græcia”, Catanzaro, Italy

Andreas K. Buck  Department of Nuclear Medicine, University of Würzburg, Würzburg, Germany
Laszlo Buday  Department of Medical Chemistry, Semmelweis University Medical School, Budapest, Hungary

Marie Annick Buendia  Hopital Paul Brousse, Inserm U785, Centre Hépatobiliaire, Villejuif, France

Ralf Buettner  City of Hope National Medical Center and Beckman Research Institute, Duarte, CA, USA

Nigel J. Bundred  Department of Academic Surgery, South Manchester University Hospital, Manchester, UK

Alexander Bürkle  Department of Biology, University of Konstanz, Konstanz, Germany

Barbara Burwinkel  Division Molecular Biology of Breast Cancer, University of Heidelberg, Department of Gynecology and Obstetrics, Heidelberg, Germany

Xavier Busquets  Department of Biology, University of the Balearic Islands, Palma de Mallorca, Spain

Jagdish Butany  Laboratory Medicine and Pathobiology, University Health Network/Toronto, Toronto, ON, Canada

Neville J. Butcher  School of Biomedical Sciences, University of Queensland, St Lucia, QLD, Australia

Timon P. H. Buys  Department of Cancer Genetics and Developmental Biology, British Columbia Cancer Research Centre, Vancouver, BC, Canada

Miguel A. Cabrita  Cancer Therapeutics Program, Ottawa Hospital Research Institute, Ottawa, ON, Canada

Jean Cadet  Département de Médecine Nucléaire et Radiobiologie, Faculté de Médecine et des Sciences de la Santé, Université de Sherbrooke, Sherbrooke, QC, Canada

Yi Cai  Department of Pathology, Baylor College of Medicine, Houston, TX, USA

Yiqiang Cai  Section of Nephrology, Yale University School of Medicine, New Haven, CT, USA

Bruno Calabretta  Kimmel Cancer Institute, Thomas Jefferson University, Philadelphia, PA, USA

Daniele Calistri  Molecular Laboratory, Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori (I.R.S.T.), Meldola, Italy

Javier Camacho  Department of Pharmacology, Centro de Investigación y de Estudios Avanzados del I.P.N., Mexico City, D.F., Mexico

William G. Cance  Departments of Surgical Oncology, Roswell Park Cancer Institute, Buffalo, NY, USA
Amparo Cano  Departamento de Bioquimica, Facultad de Medicina, UAM, Instituto de Investigaciones Biomédicas “Alberto Sols” CSIC-UAM IdiPAZ, Madrid, Spain

Anthony J. Capobianco  Molecular and Cellular Oncogenesis Program, The Wistar Institute, Philadelphia, PA, USA

Emilia Caputo  Institute of Genetics and Biophysics – ABT, Napoli, Italy

Salvatore J. Caradonna  Department of Molecular Biology, Rowan University School of Osteopathic Medicine, Stratford, NJ, USA

Michele Carbone  University of Hawaii Cancer Center, Honolulu, HI, USA

Vinicio Carloni  University of Florence, Florence, Italy

Neil O. Carragher  Drug Discovery Group, Edinburgh Cancer Research Centre, University of Edinburgh, Edinburgh, UK

Michela Casanova  Pediatric Oncology Unit, Fondazione IRCCS Istituto Nazionale dei Tumori, Milano, Italy

Wolfgang H. Caselmann  Medizinische Klinik und Poliklinik I, Rheinische Friedrich-Wilhelms-Universität, Bonn, Germany

Giuliana Cassinelli  Molecular Pharmacology Unit, Department of Experimental Oncology and Molecular Medicine, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy

Webster K. Cavenee  Ludwig Institute for Cancer Research, UCSD, La Jolla, CA, USA

Esteban Celis  Georgia Cancer Center, Augusta University, Augusta, GA, USA

Chiswili Chabu  Howard Hughes Medical Institute, Yale University School of Medicine, New Haven, CT, USA

Wook-Jin Chae  Department of Immunobiology, Yale University School of Medicine, New Haven, CT, USA

Ho Man Chan  Division of Biochemistry and Molecular Biology, Davidson Building, University of Glasgow, Glasgow, UK

Shing Leng Chan  Cancer Science Institute of Singapore, National University of Singapore, Singapore, Singapore

Dawn S. Chandler  Department of Pediatrics, Columbus Children’s Research Institute, Center for Childhood Cancer, The Ohio State University School of Medicine, Columbus, OH, USA

Guru Chandramouly  Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, USA

Mau-Sun Chang  Institute of Biochemical Sciences, National Taiwan University, Taipei, Taiwan
Mei-Chi Chang  Biomedical Science Team, Chang Gung Institute of Technology, Taoyuan, Taiwan

Lung-Ji Chang  Department of Molecular Genetics and Microbiology, College of Medicine, University of Florida, Gainesville, FL, USA

Jane C. J. Chao  School of Nutrition and Health Sciences, Taipei Medical University, Taipei, Taiwan

Christine Chaponnier  Department of Pathology and Immunology, University of Geneva, Geneva, Switzerland

Konstantinos Charalabopoulos  Ioannina University Medical School, Ioannina, Greece

Malay Chatterjee  Department of Pharmaceutical Technology, Jadavpur University, Calcutta, West Bengal, India

Sunil K. Chatterjee  University of Cincinnati and The Barrett Cancer Center, Cincinnati, OH, USA

Gautam Chaudhuri  Department of Molecular and Medical Pharmacology and Department of Obstetrics and Gynecology, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA

M. Asif Chaudry  University Department of Surgery, Royal Free and University College London Medical School, London, UK

Dharminder Chauhan  Department of Medical Oncology, The Jerome Lipper Multiple Myeloma Center, Dana Farber Cancer Institute, Harvard Medical School, Boston, MA, USA

Jeremy P. Cheadle  Institute of Medical Genetics, Cardiff University, Heath Park, Cardiff, UK

Ai-Ping Chen  Department of Gynecology, Affiliated Hospital of Qingdao University, Qingdao, China

Chienling Chen  Department of Molecular Genetics and Microbiology, College of Medicine, University of Florida, Gainesville, FL, USA

Herbert Chen  Department of Surgery, University of Alabama - Birmingham (UAB) School of Medicine, UAB Hospital and Health System, University of Alabama Comprehensive Cancer Center, Birmingham, AL, UK

Jie Chen  Department of Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China

Sai-Juan Chen  State Key Laboratory of Medical Genomics, Shanghai Institute of Hematology, Rui-Jin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, People’s Republic of China

Taosheng Chen  Chemical Biology and Therapeutics, St. Jude Children’s Research Hospital, Memphis, TN, USA
Wenxing Chen  Department of Clinical Pharmacy, College of Pharmacy, Nanjing University of Chinese Medicine, Nanjing, China

Yingchi Chen  Department of Molecular Genetics and Microbiology, College of Medicine, University of Florida, Gainesville, FL, USA

Zhu Chen  State Key Laboratory of Medical Genomics, Shanghai Institute of Hematology, Rui-Jin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, People’s Republic of China

George Z. Cheng  Harvard Medical School, Boston, MA, USA

Jin Q. Cheng  Molecular Oncology Program and Research Institute, H. Lee Moffitt Cancer Center, University of South Florida College of Medicine, Tampa, FL, USA

Liang Cheng  Department of Pathology and Laboratory Medicine, Indiana University School of Medicine, Indianapolis, IN, USA

Chun Hei Antonio Cheung  Department of Pharmacology and Institute of Basic Medical Sciences, College of Medicine, National Cheng Kung University, Tainan, Taiwan, Republic of China

Ya-Hui Chi  Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Zhunan, Taiwan

Martyn A. Chidgey  School of Cancer Sciences, University of Birmingham, Birmingham, UK

Sudhakar Chintharlapalli  Department of Veterinary Physiology and Pharmacology, Texas A&M University, College Station, TX, USA

Alexandre Chlenski  Department of Pediatrics, Section of Hematology/Oncology, University of Chicago, Chicago, IL, USA

Daniel C. Cho  Beth Israel Deaconess Medical Center, Boston, MA, USA

William Chi-Shing Cho  Department of Clinical Oncology, Queen Elizabeth Hospital, Kowloon, Hong Kong

Michael Chopp  Neurology Research, Henry Ford Health System, Detroit, MI, USA

Pei-Lun Chou  Division of Allergy-Immunology-Rheumatology, Department of Internal Medicine, Lin Shin Hospital, Taichung, Taiwan

Claus Christensen  Department of Cancer Genetics, Danish Cancer Society, Copenhagen, Denmark

Rikke Christensen  Clinical Genetics, Aarhus University Hospital, Aarhus, Denmark

Gerhard Christofori  Department of Biomedicine, University of Basel, Basel, Switzerland

Richard I. Christopherson  School of Life and Environmental Sciences, University of Sydney, Sydney, NSW, Australia
Fong-Fong Chu  Department of Cancer Biology, Beckman Research Institute of City of Hope, Duarte, CA, USA

Wen-Ming Chu  Cancer Biology Program, University of Hawaii Cancer Center, Honolulu, HI, USA

Bong-Hyun Chung  BioNanotechnology Research Center, Korea Research Institute of Bioscience and Biotechnology, Yuseong, Daejeon, Republic of Korea

Fung-Lung Chung  Department of Oncology, Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, Washington, DC, USA

Jacky K. H. Chung  Department of Medical Genetics and Microbiology, University of Toronto, Toronto, ON, Canada

Sue Clark  Imperial College London, London, UK

Pier Paolo Claudio  The University of Mississippi, Medical Center Cancer Institute, Jackson, MS, USA

Elizabeth B. Claus  Department of Epidemiology and Public Health, Yale University School of Medicine, New Haven, CT, USA

Pascal Clayette  SPI-BIO, Service de Neurovirologie, CEA, CRSSA, EPHE, Fontenay aux Roses Cedex, France

Dahn L. Clemens  Research Service, Veterans Administration Medical Center, Omaha, NE, USA

Steven C. Clifford  Northern Institute for Cancer Research, Newcastle University, Newcastle upon Tyne, UK

Kevin A. Cockell  Nutrition Research Division, Health Canada, Ottawa, ON, Canada

Susan L. Cohn  Department of Pediatrics, Section of Hematology/Oncology, University of Chicago, Chicago, IL, USA

Graham A. Colditz  Washington University in St. Louis, St. Louis, MO, USA

Paola Collini  Anatomic Pathology Department, Fondazione IRCCS Istituto Nazionale Tumori, Milano, Italy

Andrew R. Collins  Department of Nutrition, University of Oslo, Oslo, Norway

Nicoletta Colombo  Istituto Europeo di Oncologia, Milan, Italy

Joan W. Conaway  Stowers Institute for Medical Research, Kansas, MO, USA

Ronald C. Conaway  Stowers Institute for Medical Research, Kansas, MO, USA

Bong-Hyun Chung: deceased.
Lellys Mariella Contreras Department of Cancer Biology, University of Kansas Cancer Center, The University of Kansas Medical Center, Kansas City, KS, USA

Amanda E. Conway Molecular Cancer Biology, Duke University Medical Center, Durham, NC, USA

Nathalie Cools Vaccine and Infections Disease Institute (VAXINFECTIO) Laboratory of Experimental Hematology, Faculty of Medicine and Health Sciences, University of Antwerp, Edegem, Belgium

Helen C. Cooney UCD School of Biomolecular and Biomedical Science, UCD Conway Institute, University College Dublin, Dublin, Ireland

Scott Coonrod Baker Institute for Animal Health, Department of Biomedical Sciences, School of Veterinary Medicine, Cornell University, Ithaca, NY, USA

Kumarasen Cooper Pathology and Laboratory Medicine, Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA, USA

Laurence J. N. Cooper Division of Pediatrics, Department of Immunology, MD Anderson Cancer Center, Houston, TX, USA

Michael K. Cooper Department of Neurology, Vanderbilt Medical Center, Nashville, TN, USA

Peter J. Coopman IRCM, INSERM U1194, Montpellier Cancer Research Institute, Montpellier, France

Lanfranco Corazzi Department of Experimental Medicine, University of Perugia, Perugia, Italy

Maria Paola Costi Department of Pharmaceutical Sciences, University of Modena and Reggio Emilia, Modena, Italy

Richard J. Cote Department of Pathology, Miller School of Medicine, University of Miami, Miami, FL, USA

Massimo Cristofanilli Division of Hematology and Oncology, Robert H Lurie Comprehensive Cancer Center, Chicago, IL, USA

Marcus V. Cronauer Department of Urology, University Hospital Schleswig-Holstein – Campus Lübeck, Lübeck, Germany

Sidney Croul Department of Pathology, UHN, University of Toronto, Toronto, ON, Canada

Ronald G. Crystal Division of Pulmonary and Critical Care Medicine, Weill Cornell Medical College, New York, NY, USA

Bruce D. Cuevas Department of Molecular Pharmacology and Therapeutics, Stritch School of Medicine, Loyola University Chicago, Maywood, IL, USA

Jiuwei Cui Jilin University, Changchun, Jilin, China

Edna Cukierman Basic Science/Tumor Cell Biology, Fox Chase Cancer Center, Philadelphia, PA, USA
Contributors

Zoran Culig  Department of Urology, Innsbruck Medical University, Innsbruck, Austria

David Cunningham  Department of Medicine, The Royal Marsden NHS Foundation Trust, London, UK

David T. Curiel  Division of Cancer Biology, Washington University, St. Louis, MO, USA

Franck Cuttitta  NCI Angiogenesis Core Facility, National Cancer Institute, National Institutes of Health, Advanced Technology Center, Gaithersburg, MD, USA

Andrea Cziffer-Paul  Department of Pathology, The Mount Sinai School of Medicine, New York, NY, USA

Massimino D’Armiento  Department of Experimental Medicine, University of Rome “Sapienza”, Rome, Italy

Yun Dai  Department of Gastroenterology, Peking University First Hospital, Beijing, China

Yataro Daigo  Institute of Medical Science, The University of Tokyo, Tokyo, Japan

Lokesh Dalasanur Nagaprasantha  City of Hope National Medical Center, Duarte, CA, USA

Ashraf Dallol  Centre of Innovation in Personalised Medicine, King Abdulaziz University, Jeddah, Kingdom of Saudi Arabia

Tamas Dalmay  School of Biological Sciences, University of East Anglia, Norwich, UK

Ivan Damjanov  Department of Pathology, University of Kansas School of Medicine, Kansas City, KS, USA

Vincent Dammai  Dammai-Morgan Scientific Consultants LLC, Mount Pleasant, SC, USA

Chendil Damodaran  University of Louisville, Louisville, KY, USA

Janet E. Dancey  Canadian Cancer Trials Group, Queen’s University, Kingston, ON, Canada

Nadia Dandachi  Department of Internal Medicine, Division of Oncology, Medical University Graz, Graz, Austria

Chi V. Dang  Division of Hematology, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, USA

Alla Danilkovitch-Miagkova  National Cancer Institute-FCRDC, Frederick, MD, USA

Kakoli Das  Cancer and Stem Cell Biology Program, Duke-NUS Graduate Medical School, Singapore, Singapore
Kaustubh Datta  Department of Urology Research, Department of Biochemistry and Molecular Biology, Mayo Clinic College of Medicine, Rochester, MN, USA

Pran K. Datta  Departments of Surgery and Cancer Biology, Vanderbilt-Ingram Cancer Center, Vanderbilt University School of Medicine, Nashville, TN, USA
Department of Medicine, University of Alabama at Birmingham, Birmingham, AL, USA

Leonor David  IPATIMUP (Institute of Molecular Pathology and Immunology of the University of Porto) and Medical Faculty of the University of Porto, Porto, Portugal

David Mark Davies  Department of Oncology, South West Wales Cancer Centre, Swansea, UK

Juhayna Kassem Davis  Carolinas HealthCare System, Charlotte, NC, USA

Alexey Davydov  Fox Chase Cancer Center, Philadelphia, PA, USA

Shaheenah Dawood  Department of Medical Oncology, Dubai Hospital, Dubai, United Arab Emirates

Robert Day  Department of Surgery/Division of Urology, Institut de Pharmacologie, Faculté de Médecine et des sciences de la santé, Université de Sherbrooke, Sherbrooke, QC, Canada

Terry Day  Head and Neck Tumor Program, Hollings Cancer Center, Medical University of South Carolina, Charleston, SC, USA

Suzane Ramos da Silva  Department of Molecular Microbiology and Immunology, Keck School of Medicine, University of Southern California, Los Angeles, CA, USA

Enrique de Alava  Institute of Biomedicine of Sevilla (IBiS), Virgen del Rocio University Hospital /CSIC/University de Sevilla, Seville, Spain

Diederik de Bruijn  Department of Human Genetics, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands

Floris Aart de Jong  Amgen BV, Breda, The Netherlands

Vincenzo de Laurenzi  Department of Experimental Medicine and Biochemical Sciences, University of Tor Vergata, Rome, Italy

Ben O. de Lumen  Department of Nutritional Sciences and Toxicology, University of California at Berkeley, Berkeley, CA, USA

Elvira de Mejia  Department of Food Science and Human Nutrition, University of Illinois, Urbana-Champaign, IL, USA

Ana Ramirez de Molina  Nutritional Genomics and Cancer Unit, IMDEA Food Institute, Madrid, Spain
Christiane de Wolf-Peeters  Department of Pathology, University Hospitals of K.U. Leuven, Leuven, Belgium

Jochen Decker  Hematology Oncology Medical School Clinic III, University of Mainz, Mainz, Germany

P. Markus Deckert  Zentrum für Innere Medizin II – Abteilung für Onkologie und Palliativmedizin, Klinikum Brandenburg, Brandenburg an der Havel, Germany

Francesca Degrassi  Institute of Molecular Biology and Pathology IBMN c/o “Sapienza” University, Italian National Research Council CNR, Rome, Italy

Amir R. Dehdashti  Division of Neurosurgery, University of Toronto, Toronto, ON, Canada

Maryse Delehedde  R&D Lunginnov, Campus de l’Institut Pasteur de Lille, Lille, France

Olivier Dellis  Signalisation Calcique et Interactions Cellulaires dans le Foie, INSERM UMR-S 1174, Université Paris-Sud 11, Orsay, France

Renée M. Demarest  Molecular and Cellular Oncogenesis Program, The Wistar Institute, Philadelphia, PA, USA

Berna Demircan  University of Florida, College of Medicine, Gainesville, FL, USA

Miriam Deniz  Department of Obstetrics and Gynaecology, University of Ulm, Ulm, Germany

Samuel Denmeade  The Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins, Baltimore, MD, USA

David A. Denning  Department of Surgery, Marshall University, Huntington, WV, USA

Sylviane Dennler  Department of Molecular Cell Biology, Leiden University Medical Center, Leiden, The Netherlands

Channing J. Der  University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

Barbara Deschler  Comprehensive Cancer Center Mainfranken, Clinical Trials Office, University of Würzburg, Würzburg, Germany

Chantal Desdouets  Institut Cochin, Université Paris Descartes, CNRS, Paris, France

Peter Devilee  Human Genetics, Leiden University Medical Center, Leiden, The Netherlands

Mark W. Dewhirst  Department of Radiation Oncology, Duke University, Durham, NC, USA

Girish Dhall  Division of Hematology-Oncology, Department of Pediatrics, Children’s Hospital Los Angeles and the Keck School of Medicine, University of Southern California, Los Angeles, CA, USA
Danny N. Dhanasekaran  Stephenson Cancer Center, University of Oklahoma Health Sciences Center, Oklahoma City, OK, USA

Pier Paolo Di Fiore  IFOM, the FIRC Institute of Molecular Oncology, Milan, Italy

Giuseppe Di Lorenzo  Cattedra di Oncologia Medica, Dipartimento di Endocrinologia e Oncologia molecolare e clinica, Università degli Studi “Federico II”, Naples, Italy

Dario Di Luca  Department of Medical Sciences, University of Ferrara, Ferrara, Italy

Marc Diederich  College of Pharmacy, Seoul National University, Seoul, South Korea

Joseph DiFranza  Department of Family Medicine and Community Health, University of Massachusetts Medical Center, Worcester, MA, USA

Martin Digweed  Institute of Medical and Human Genetics, Charité – Universitätsmedizin Berlin, Berlin, Germany

Peter ten Dijke  Department of Molecular Cell Biology, Leiden University Medical Center, Leiden, The Netherlands

Gerard Dijkstra  University Medical Center Groningen, University of Groningen, Groningen, The Netherlands

Nathalie Dijsselbloem  Lab of Eukaryotic Gene Expression, LEGEST-University Gent, Ghent, Belgium

Helen Dimaras  The Hospital for Sick Children, Department of Ophthalmology and Vision Science, The University of Toronto, Toronto, ON, Canada

Jian Ding  State Key Laboratory of Drug Research, Shanghai Institute of Materia Medica, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, People’s Republic of China

Zhaoxia Ding  Department of Gynecology, Affiliated Hospital of Qingdao University, Qingdao, China

Jürgen Dittmer  Klinik für Gynäkologie, Universität Halle-Wittenberg, Halle (Saale), Germany

Henrik J. Ditzel  Department of Cancer and Inflammation Reserch, Institute for Molecular Medicine, University of Southern Denmark, Odense C, Denmark

Dan Dixon  Cancer Biology, University of Kansas Medical Center, Kansas City, KS, USA

Cholpon S. Djuzenova  Klinik für Strahlentherapie der Universität Würzburg, Würzburg, Germany

Christian Doehn  Urologikum Lübeck, Lübeck, Germany
Yasufumi Doi  Department of Medicine and Clinical Science, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan

Milos Dokmanovic  Division of Monoclonal Antibodies, Office of Biotechnology Products, Office of Pharmaceutical Science, Center for Drug Evaluation and Research, U.S. Food and Drug Administration, Bethesda, MD, USA

Qiwan Dong  The University of Western Sydney, Sydney, NSW, Australia
Department of Endocrinology, Central Clinical School, Royal Prince Alfred Hospital, The University of Sydney, Sydney, NSW, Australia

Zigang Dong  The Hormel Institute, University of Minnesota, Austin, MN, USA

Ben Doron  Oregon Health and Science University, Portland, OR, USA

Qing Ping Dou  The Prevention Program, Barbara Ann Karmanos Cancer Institute and Department of Pathology, School of Medicine, Wayne State University, Detroit, MI, USA

Thierry Douki  Laboratoire “Lésions des Acides Nucléiques”, Institute Nanosciences et Cryogénie, Grenoble, France

Harry A. Drabkin  Division of Hematology-Oncology, Medical University of South Carolina and the Hollings Cancer Center, Charleston, SC, USA

Tommaso A. Dragani  Fondazione IRCCS Istituto Nazionale Tumori, Milan, Italy

Kenneth Drake  Department of Chemistry and Biochemistry, University of Texas at Arlington, Arlington, TX, USA

Martin Dreyling  Department of Internal Medicine III, University of Munich, Großhadern, Munich, Germany

Nathalie Druesne-Pecollo  UMR U1153 INSERM, U1125 INRA, CNAM, Université Paris 13, Centre de Recherche Epidémiologie et Statistique Sorbonne Paris Cité, Bobigny, France

Brian J. Druker  Oregon Health and Science University Cancer Institute, Portland, OR, USA

Denis Drygin  Pimera, Inc., San Diego, CA, USA

Raymond N. DuBois  ASU Biodesign Institute, Tempe, AZ, USA

Dan G. Duda  Steele Laboratories for Tumor Biology, Department of Radiation Oncology, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA

Jaquelin P. Dudley  Department of Molecular Biosciences and Institute for Cellular and Molecular Biology, The University of Texas at Austin, Austin, TX, USA

Roy J. Duhé  Department of Pharmacology and Toxicology, University of Mississippi Medical Center, Jackson, MS, USA
Department of Radiation Oncology, University of Mississippi Medical Center, Jackson, MS, USA

Ignacio Duran  Department of Medical Oncology and Hematology, Robert and Maggie Bras and Family New Drug Development Program, Princess Margaret Hospital, Toronto, ON, Canada

Stephen T. Durant  R&D, Oncology, Innovative Medicines, AstraZeneca, Little Chesterford, UK

Meenakshi Dwivedi  Department of Life Science, Hanyang University, Seoul, South Korea

Madalene A. Earp  Department of Health Sciences Research, Mayo Clinic College of Medicine, Rochester, MN, USA

Behfar Ehdaie  Department of Surgery, Urology Service, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

Justis P. Ehlers  Cole Eye Institute, Cleveland Clinic, Cleveland, OH, USA

Gerhard Eisenbrand  Department of Chemistry, Division of Food Chemistry and Toxicology, University of Kaiserslautern, Kaiserslautern, Germany

Mohamad Elbaz  Department of Pathology, Comprehensive Cancer Centre, The Ohio State Medical Centre, Columbus, OH, USA

Patricia V. Elizalde  Laboratory of Molecular Mechanisms of Carcinogenesis, Institute of Biology and Experimental Medicine (IBYME), CONICET, Buenos Aires, Argentina

Bassel El-Rayes  Department of Hematology and Medical Oncology, Emory University School of Medicine, Atlanta, GA, USA

Winship Cancer Institute of Emory University, Atlanta, GA, USA

Mitsuru Emi  Departments of Obstetrics and Gynecology, Nippon Medical School, Kawasaki and Tokyo, Japan

Steffen Emmert  Clinic for Dermatology and Venereology, University Medical Center Rostock, Rostock, Germany

Caroline End  Division of Molecular Genome Analysis, DKFZ, Heidelberg, Germany

Daniela Endt  Department of Human Genetics, Biozentrum University of Würzburg, Würzburg, Germany

Rainer Engers  Institute of Pathology, University Hospital Düsseldorf, Düsseldorf, Germany

Marica Eoli  Unit of Clinical Neuro-Oncology, Istituto Neurologico Besta, Milan, Italy

Anat Erdreich-Epstein  Division of Hematology-Oncology, Department of Pediatrics, Children’s Hospital Los Angeles and the Keck School of Medicine, University of Southern California, Los Angeles, CA, USA
Süleyman Ergün  Institute für Anatomie und Zellbiologie, Julius-Maximilians-Universität Würzburg, Würzburg, Germany

Pablo V. Escribá  Department of Biology, University of the Balearic Islands, Palma de Mallorca, Spain

Nuria Están-Capel  Service of Clinical Analysis, Dr. Peset University Hospital, Valencia, Spain

Konstantinos Evangelou  Molecular Carcinogenesis Group, Laboratory of Histology-Embryology, Medical School, National and Kapodistrian University of Athens, Athens, Greece

Mark F. Evans  Department of Pathology and Laboratory Medicine, University of Vermont, Burlington, VT, USA

B. Mark Evers  Department of Surgery, The University of Texas Medical Branch, Galveston, TX, USA

Vera Evtimov  Monash University, Melbourne, VIC, Australia

Jörg Fahrer  Department of Toxicology, University Medical Center Mainz, Mainz, Germany

Cristina Maria Failla  Experimental Immunology Laboratory, IDI-IRCCS, Rome, Italy

Marco Falasca  Faculty of Health Sciences, School of Biomedical Sciences, Curtin University, Perth, WA, Australia

Fang Fan  Department of Pathology, University of Kansas School of Medicine, Kansas City, KS, USA

Saijun Fan  Long Island Jewish Medical Center, Albert Einstein College of Medicine, Bronx, NY, USA

Bingliang Fang  Department of Thoracic and Cardiovascular Surgery, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Jinxu Fang  Department of Chemical Engineering and Materials Science, Viterbi School of Engineering, University of Southern California, Los Angeles, CA, USA

Lei Fang  Dermatology Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA

Valeria R. Fantin  Merck Research Laboratories, Boston, MA, USA

Z. Shadi Farhangrazi  Biotrends International, Denver, CO, USA

Omid C. Farokhzad  Laboratory of Nanomedicine and Biomaterials, Department of Anesthesiology, Brigham and Women’s Hospital, Boston, MA, USA

William L. Farrar  National Cancer Institute – Frederick, Frederick, MD, USA
Alessandro Fatatis  Department of Pharmacology and Physiology, Drexel University College of Medicine, Philadelphia, PA, USA

Andrew P. Feinberg  Department of Medicine and Center for Epigenetics, Institute for Basic Biomedical Sciences, Johns Hopkins University School of Medicine, Baltimore, MD, USA

Mark A. Feitelson  Department of Biology, Temple University, Philadelphia, PA, USA

Francesco Feo  Department of Biomedical Sciences, Division of Experimental Pathology and Oncology, University of Sassari, Sassari, Italy

Félix Fernández Madrid  Department of Internal Medicine, Division of Rheumatology, Wayne State University, Detroit, MI, USA

Paula Fernández-García  Department of Biology, University of the Balearic Islands, Palma de Mallorca, Spain

Marie Fernet  INSERM U612, Institut Curie-Recherche, Orsay, France

Audrey Ferrand  INSERM U.858, Institut de Médecine Moléculaire de Rangueil, IFR150, Université Paul Sabatier, Toulouse, France

Andrea Ferrari  Pediatric Oncology Unit, Fondazione IRCCS Istituto Nazionale Tumori, Milano, Italy

Stefania Ferrari  Department of Pharmaceutical Sciences, University of Modena and Reggio Emilia, Modena, Italy

Robert A. Figlin  Division of Hematology Oncology, Samuel Oschin Comprehensive Cancer Institute, Cedars-Sinai Medical Center, Los Angeles, CA, USA

Lorena L. Figueiredo-Pontes  Medical School of Ribeirão Preto, University of São Paulo, Ribeirão Preto, Brazil

Cristina Fillat  Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS) and Centro de Investigación Biomédica en Red de Enfermedades Raras (CIBERER), Barcelona, Spain

Daniel Finley  Department of Cell Biology, Harvard Medical School, Boston, MA, USA

Gaetano Finocchiaro  Unit of Experimental Neuro-Oncology, Istituto Nazionale Neurologico Besta, Milan, Italy

Paul B. Fisher  Departments of Urology, Pathology and Neurosurgery, Columbia University Medical Center, College of Physicians and Surgeons, New York, NY, USA

James Flanagan  Institute of Reproductive and Developmental Biology, Imperial College London, London, UK

Michael Fleischhacker  Universitätsklinikum Halle (Saale), Klinik für Innere Medizin I, Schwerpunkt Pneumologie, Halle (Saale), Germany
Eliezer Flescher  Department of Human Microbiology, Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

Jonathan A. Fletcher  Albany Medical College, Albany, NY, USA

Barbara D. Florentine  Department of Pathology, Henry Mayo Newhall Memorial Hospital, Valencia, CA, USA
CA and Keck School of Medicine, University of Southern California, Los Angeles, CA, USA

Tamara Floyd  Cancer Vaccine Section, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA

Riccardo Fodde  Department of Pathology, Josephine Nefkens Institute, Erasmus MC, Rotterdam, The Netherlands

Judah Folkman  Children’s Hospital and Harvard Medical School, Boston, MA, USA

Hamidreza Fonouni  Department of General, Visceral and Transplantation Surgery, University of Heidelberg, Heidelberg, Germany

Kenneth A. Foon  The Pittsburgh Cancer Institute, Pittsburgh, PA, USA

Alessandra Forni  Department of Occupational and Environmental Health “Clinica del Lavoro L. Devoto”, University of Milan, Milan, Italy

David A. Foster  Department of Biological Sciences, Hunter College of the City University of New York, New York, NY, USA

Paul Foster  Department of Endocrinology and Metabolic Medicine, Imperial College Faculty of Medicine, St. Mary’s Hospital, London, UK

Paul Fréneaux  Département de Pathologie, Institut Curie, Paris, France

Rodrigo Franco  Redox Biology Center, School of Veterinary Medicine and Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, NE, USA

David A. Frank  Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA, USA

Stuart J. Frank  Division of Endocrinology, Diabetes, and Metabolism, Department of Medicine, UAB, Endocrinology Section, Birmingham VAMC Medical Service, Birmingham VA Medical Center, University of Alabama, Birmingham, AL, USA

Stanley R. Frankel  Merck Research Laboratories, Boston, MA, USA

Michael J. Franklin  Division of Hematology, Oncology and Transplantation, University of Minnesota, Minneapolis, MN, USA

Aleksandra Franovic  Department of Cellular and Molecular Medicine, Faculty of Medicine, University of Ottawa, Ottawa, ON, Canada

Ralph S. Freedman  UT MD Anderson Cancer Center, Houston, TX, USA
Michael R. Freeman  Urological Diseases Research Center, Children’s Hospital Boston, Harvard Medical School, Boston, MA, USA

Emil Frei  Dana-Farber Cancer Institute, Boston, MA, USA

Jean-Noël Freund  INSERM U1113 and Fédération de Médecine Translationnelle de Strasbourg (FMTS), Université de Strasbourg, Faculté de Médecine, Strasbourg, France

Errol C. Friedberg  University of Texas Southwestern Medical Center, Dallas, TX, USA

Steven M. Frisch  Mary Babb Randolph Cancer Center and Department of Biochemistry, West Virginia University, Morgantown, WV, USA

Andrew M. Fry  University of Leicester, Leicester, UK

Mark Frydenberg  Department of Surgery, Monash University, Melbourne, VIC, Australia

Hendrik Fuchs  Institute for Laboratory Medicine, Clinical Chemistry and Pathobiochemistry, Charité – Universitätsmedizin Berlin, Berlin, Germany

Atsuko Fujihara  Department of Urology, Kyoto Prefectural University of Medicine, Kyoto, Japan

Hirotaka Fujiki  Department of Clinical Laboratory Medicine, Faculty of Medicine, Saga University, Saga, Japan

Jiro Fujimoto  Department of Obstetrics and Gynecology, Gifu University School of Medicine, Gifu City, Japan

Jun Fujita  Department of Clinical Molecular Biology, Graduate School of Medicine, Kyoto University, Kyoto, Japan

Hiroshi Fukamachi  Department of Molecular Oncology, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University (TMDU), Tokyo, Japan

Kenji Fukasawa  Molecular Oncology Program, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL, USA

Tomoya Fukui  Department of Respiratory Medicine, Kitasato University School of Medicine, Sagamihara, Kanagawa, Japan

Simone Fulda  Institute for Experimental Cancer Research in Pediatrics, Goethe-University Frankfurt, Frankfurt, Germany

Claudia Fumarola  Department of Experimental Medicine, Unit of Experimental Oncology, University of Parma, Parma, Italy

Kyle Furge  Van Andel Research Institute, Grand Rapids, MI, USA
Mutsuo Furihata Department of Pathology, Kochi Medical School, Kochi, Japan

Rhoikos Furtwängler Universitätsklinikum des Saarlandes, Klinik für Pädiatrische Onkologie und Hämatologie, Homburg/Saar, Germany

Bernard W. Futscher Department of Pharmacology and Toxicology, Arizona Cancer Center and College of Pharmacy, University of Arizona, Tucson, AZ, USA

Ulrich Göbel Clinic of Pediatric Oncology, Hematology and Immunology, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany

Tobias Görg Department of Dermatology, University of Münster, Münster, Germany

Ursula Günther Institute of Pathology, University Hospital, Basel, Switzerland

Shirish Gadgeel Karmanos Cancer Institute, Wayne State University, Detroit, MI, USA

Jochen Gaedche Department of General, Visceral and Pediatric Surgery, University Medical Center, Göttingen, Germany

Federico Gago Departamento de Ciencias Biomédicas, Facultad de Medicina, Universidad de Alcalá, Alcalá de Henares, Madrid, Spain

William M. Gallagher UCD School of Biomolecular and Biomedical Science, UCD Conway Institute, University College Dublin, Dublin, Ireland

Bernard Gallez Biomedical Magnetic Resonance, Université Catholique de Louvain, Brussels, Belgium

Brenda L. Gallie The Hospital for Sick Children, Department of Ophthalmology and Vision Science, The University of Toronto, Toronto, ON, Canada

Antoine Galmiche EA4666, Université de Picardie Jules Verne (UPJV), Amiens, France

Service de Biochimie, Centre de Biologie Humaine (CBH), University Hospital of Amiens (CHU Sud), Amiens, France

Ramesh K. Ganju Department of Pathology, Comprehensive Cancer Centre, The Ohio State Medical Centre, Columbus, OH, USA

Ping Gao Division of Hematology, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, USA

Dolores C. García-Olmo Unidad de Investigación, Complejo Hospitalario Universitario de Albacete, Albacete, Spain

Roy Garcia City of Hope National Medical Center and Beckman Research Institute, Duarte, CA, USA
Robert A. Gardiner  School of Medicine, University of Queensland, Brisbane, QLD, Australia
Centre for Clinical Research, University of Queensland, Herston, QLD, Australia
Royal Brisbane and Women’s Hospital, Brisbane, QLD, Australia
Edith Cowan University Western Australia, Joondalup, WA, Australia

Lawrence B. Gardner  The NYU Cancer Institute, New York University
School of Medicine, New York, NY, USA

Patricio Gariglio  Genetic and Molecular Biology, CINVESTAV-IPN, Mexico City, México

Cathie Garnis  MIT Center for Cancer Research, Cambridge, MA, USA

Andrei L. Gartel  Department of Medicine, University of Illinois at Chicago,
Chicago, IL, USA

Ronald B. Gartenhaus  The University of Maryland Marlene and Stewart
Greenebaum Cancer Center, Baltimore, MD, USA

Thomas A. Gasiewicz  University of Rochester Medical Center, Rochester,
NY, USA

Patrizia Gasparini  Tumor Genomic Unit, Department of Experimental
Oncology, Istituto Nazionale Tumori, Milan, Italy

Zoran Gatalica  Department of Pathology, Creighton University School of
Medicine, Omaha, NE, USA

Grégory Gatouillat  Laboratory of Biochemistry, IFR53, Faculty of Pharmacy,
Reims, France

Adi F. Gazdar  Hamon Center for Therapeutic Oncology Research and
Departments of Pathology, Internal Medicine and Pharmacology, University
of Texas Southwestern Medical Center, Dallas, TX, USA

Christian Geisler  Department of Hematology, The Finsen Centre,
Rigshospitalet, Copenhagen, Denmark

Klaramari Gellei  Department of Biomedical Engineering, Wayne State Un-
iversity, Detroit, MI, USA

Eleni A. Georgakopoulou  Department of Histology and Embryology, Faculty
of Medicine, National and Kapodistrian University of Athens, Athens,
Greece

Spyros D. Georgatos  Department of Basic Sciences, The University of
Crete, School of Medicine, Heraklion, Crete, Greece

Julia M. George  Queen Mary University of London, London, UK

Kimberly S. George Parsons  Department of Chemistry, Marietta College,
Marietta, OH, USA
Armin Gerger  Department of Internal Medicine, Division of Oncology, Medical University Graz, Graz, Austria

Ulrich Germing  Klinik für Hämatologie, Onkologie und Klinische Immunologie, Heinrich-Heine-Universität, Düsseldorf, Germany

Jeffrey E. Gershenwald  Department of Surgical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Andreas J. Gescher  Department of Cancer Studies, Cancer Biomarkers and Prevention Group, University of Leicester, Leicester, Leicester, UK

Christian Gespach  Laboratory of Molecular and Clinical Oncology of Solid tumors, Faculté de Médecine, Université Pierre et Marie Curie-Paris 6, Paris, France

INSERM U. 673, Paris, France

B. Michael Ghadimi  Department of General, Visceral and Pediatric Surgery, University Medical Center, Göttingen, Germany

Michelle Ghert  Department of Surgery, Hamilton Health Sciences, Juravinski Cancer Centre, McMaster University, Hamilton, ON, Canada

Riccardo Ghidoni  Laboratory of Biochemistry and Molecular Biology, San Paolo Medical School, University of Milan, Milan, Italy

Saurabh Ghosh Roy  Department of Cell and Developmental Biology, University of California, Irvine, Irvine, CA, USA

Ronald A. Ghossein  Department of Pathology, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

Lorenzo Gianni  Department of Oncology, Instituto Scientifico Romagnolo per lo s, Infermi Hospital, Rimini, Italy

Michael K. Gibson  Case Western Reserve University, Cleveland, OH, USA

Michael Z. Gilcrease  Department of Pathology, Breast Section, MD Anderson Cancer Center, Houston, TX, USA

M. Boyd Gillespie  Head and Neck Tumor Program, Hollings Cancer Center, Medical University of South Carolina, Charleston, SC, USA

François Noël Gilly  Department of Digestive Oncologic Surgery, Hospices Civils de Lyon–Université Lyon 1, Lyon, France

Thomas Gilmore  Biology Department, Boston University, Boston, MA, USA

Oliver Gimm  Department of Surgery, University Hospital, Linköping, Sweden

Alessio Giubellino  Laboratory of Pathology, Center for Cancer Research, National Cancer Institute, Bethesda, MD, USA

Morten F. Gjerstorff  Department of Oncology, Odense University Hospital, Odense C, Denmark
Shannon S. Glaser  Department of Internal Medicine, Texas A&M Health Science Center, Central Texas Veterans Health Care System, Temple, TX, USA

Hansruedi Glatt  Federal Institute for Risk Assessment (BfR), Berlin, Germany

Olivier Glehen  Department of Digestive Oncologic Surgery, Hospices Civils de Lyon–Université Lyon 1, Lyon, France

Aleksandra Glogowska  Department of Human Anatomy and Cell Science, College of Medicine, Faculty of Health Sciences, University of Manitoba, Winnipeg, MB, Canada

Thomas W. Glover  Department of Human Genetics, University of Michigan, Ann Arbor, MI, USA

John C. Goddard  Jacksonville Hearing and Balance Institute, Jacksonville, FL, USA

Andrew K. Godwin  The University of Kansas Medical Center, Kansas City, KS, USA

Elspeth Gold  Department of Anatomy, Otago School of Medical Sciences, Dunedin, New Zealand

Gary S. Goldberg  Molecular Biology, University of Medicine and Dentistry of New Jersey, Stratford, NJ, USA

Itzhak D. Goldberg  Long Island Jewish Medical Center, Albert Einstein College of Medicine, Bronx, NY, USA

Susanne M. Gollin  Department of Human Genetics, University of Pittsburgh Graduate School of Public Health and the University of Pittsburgh Cancer Institute, Pittsburgh, PA, USA

Roy M. Golsteyn  Department of Biological Sciences, University of Lethbridge, Lethbridge, AB, Canada

Rohini Gomathinayagam  Stephenson Cancer Center, University of Oklahoma Health Sciences Center, Oklahoma City, OK, USA

Ellen L. Goode  Department of Health Sciences Research, Mayo Clinic College of Medicine, Rochester, MN, USA

Gregory J. Gores  Miles and Shirley Fiterman Center for Digestive Diseases, Division of Gastroenterology and Hepatology, Mayo Clinic College of Medicine, Rochester, MN, USA

Vassilis Gorgoulis  Department of Histology and Embryology, Faculty of Medicine, National and Kapodistrian University of Athens, Athens, Greece

Noriko Gotoh  Division of Cancer Cell Biology, Cancer Research Institute, Kanazawa University, Kanazawa city, Ishikawa, Japan

Lynn F. Gottfried  LeClairRyan, Rochester, NY, USA
Stéphanie Gout  Le Centre de recherche du CHU de Québec-Université Laval: axe Oncologie, Le Centre de recherche sur le cancer de l’Université Laval, Québec, QC, Canada

Ammi Grahn  Department of Clinical Chemistry and Transfusion Medicine, Institute of Biomedicine, Sahlgrenska Academy at Göteborg University, Göteborg, Sweden

Galit Granot  Felsenstein Medical Research Center, Beilinson Hospital, Sackler School of Medicine, Tel Aviv University, Petah Tikva, Israel

Denis M. Grant  Department of Pharmacology and Toxicology, Faculty of Medicine, University of Toronto, Toronto, ON, Canada

Heidi J. Gray  Gynecologic Oncology, University of Washington, Seattle, WA, USA

Peter Greaves  Department of Cancer Studies, University of Leicester, Leicester, UK

John A. Green  Department of Cancer Medicine, University of Liverpool, Liverpool, UK

Mark I. Greene  Department of Pathology, Laboratory Medicine and Abramson Cancer Center, University of Pennsylvania, Philadelphia, PA, USA

Michael Greene  Auburn University, Auburn, AL, USA

Arjan W. Griffioen  Angiogenesis Laboratory, Department of Pathology, Maastricht University, Maastricht, The Netherlands

Dirk Grimm  BIOQUANT, Cluster of Excellence Cell Networks, University of Heidelberg, Heidelberg, Germany

Matthew J. Grimshaw  Breast Cancer Biology Group, King’s College London School of Medicine, Guy’s Hospital, London, UK

Stephen R. Grobmyer  Department of Surgery, Division of Surgical Oncology, University of Florida, Gainesville, FL, USA

Bernd Grosche  Department of Radiation Protection and Health, Bundesamt für Strahlenschutz (Federal Office for Radiation Protection), Oberschleissheim, Germany

Isabelle Gross  INSERM U1113, Université de Strasbourg, Strasbourg, France

Michael Grusch  Institute of Cancer Research, Department of Medicine I, Medical University of Vienna, Vienna, Austria

Wei Gu  Institute for Cancer Genetics, and Department of Pathology, College of Physicians and Surgeons, Columbia University, New York, NY, USA

Francisca Guardiola-Serrano  University of the Balearic Islands, Palma de Mallorca, Spain
Juliana Guarize Department of Thoracic Surgery, European Institute of Oncology, Milan, Italy

Valentina Guarneri Istituto Oncologico Veneto IRCCS, Division of Medical Oncology 2, Department of Surgery, Oncology and Gastroenterology, University of Padova, Padova, Italy

Tiziana Guarnieri Department of Biology, Geology and Environmental Sciences, Alma Mater Studiorum University of Bologna, Bologna, Italy

Liliana Guedez Immunopathology Section, National Eye Institute, Bethesda, MD, USA

Frederick Peter Guengerich Department of Biochemistry and Center in Molecular Toxicology, Biochemistry and Center in Molecular Toxicology, Vanderbilt University School of Medicine, Nashville, TN, USA

Abhijit Guha Division of Neurosurgery, University of Toronto, Toronto, ON, Canada

Katherine A. Guindon Department of Pharmacology and Toxicology, Queen’s University, Kingston, ON, Canada

Erich Gulbins Department of Molecular Biology, University of Duisburg-Essen, Essen, Germany

Charles A. Gullo Microbiology NUS (Research), Duke/NUS GMS, Singapore, Singapore

Aparna Gupta Life Science Research Associate, Department of Gastroenterology and Hepatology, Stanford University School of Medicine, Stanford, CA, USA

Sonal Gupta Department of Pathology, The Sol Goldman Pancreatic Cancer Research Center, Johns Hopkins University School of Medicine, Baltimore, MD, USA

Murali Gururajan Department of Hematology and Oncology, Cedars-Sinai Medical Center, Los Angeles, CA, USA

Bristol-Myers Squibb & Co, Princeton, NJ, USA

James F. Gusella Center for Human Genetic Research, Massachusetts General Hospital, Boston, MA, USA

Graeme R. Guy Signal Transduction Laboratory, Institute of Molecular and Cell Biology, Singapore, Singapore

Manuel Guzmán Department of Biochemistry and Molecular Biology I, School of Biology, Complutense University, Madrid, Spain

Geum-Youn Gwak Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Gangnam-gu, Seoul, South Korea
Guy Haegeman  Lab of Eukaryotic Gene Expression, LEGEST-University Gent, Ghent, Belgium

Stephan A. Hahn  University of Bochum, Bochum, Germany

Jörg Haier  Comprehensive Cancer Center Münster, University Hospital Münster, Münster, Germany

Numsen Hail  Department of Pharmaceutical Sciences, The University of Colorado at Denver and Health Sciences Center, Denver, CO, USA

Pierre Hainaut  International Prevention Research Institute, Lyon, France

Brett M. Hall  Department of Pediatrics, Columbus Children’s Research Institute, The Ohio State University, Columbus, OH, USA

Janet Hall  Centre de Recherche en Cancérologie de Lyon (CRCL), UMR Inserm 1052 - CNRS 5286, Lyon, France

Joyce L. Hamlin  Department of Biochemistry and Molecular Genetics, University of Virginia School of Medicine, Charlottesville, VA, USA

Rasha S. Hamouda  GeneDx, Rockville, MD, USA

Kelsey R. Hampton  Department of Cancer Biology, Kansas University Cancer Center, Kansas City, KS, USA

The University of Kansas Medical Center, Kansas City, KS, USA

Lina Han  Department of Leukemia, Section of Molecular Hematology and Therapy, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Ross Hannan  Department of Cancer Biology and Therapeutics, John Curtin School of Medical Research, ANU College of Medicine, Biology and the Environment, Canberra, ACT, Australia

Chunhai Hao  Department of Pathology and Laboratory Medicine, Henry Ford Health System, Detroit, MI, USA

J. William Harbour  Bascom Palmer Eye Institute, University of Miami, Miami, FL, USA

Mark Harland  Section of Epidemiology and Biostatistics, Cancer Research UK Clinical Centre, Leeds Institute of Molecular Medicine, St. James’s University Hospital, Leeds, UK

Adrian L. Harris  Weatherall Institute of Molecular Medicine, John Radcliffe Hospital, University of Oxford, Cancer Research UK, Headington, Oxford, UK

Randall E. Harris  Director Center of Molecular Epidemiology, The Ohio State University, Columbus, OH, USA

Marion Hartley  Ruesch Center for the Cure of Gastrointestinal Cancers, Lombardi Comprehensive Cancer Center, Georgetown University, Washington, DC, USA
Uzma Hasan  CIRI, Oncoviruses and Innate Immunity, INSERM U1111, Ecole Normale Supérieure, Université de Lyon, CNRS-UMR5308, Hospices Civils de Lyon, Lyon, France

Mia Hashibe  University of Utah, Salt Lake City, UT, USA

Masaharu Hata  Division of Radiation Oncology, Department of Oncology, Yokohama City University Graduate School of Medicine, Yokohama, Kanagawa, Japan

Yosef S. Haviv  Division of Nephrology, Hadassah-Hebrew University Medical Center, Department of Medicine, Jerusalem, Israel

John D. Hayes  Medical Research Institute, Jacqui Wood Cancer Centre, University of Dundee, Dundee, UK

Nicole M. Haynes  Cancer Therapeutics Program, Trescowthick Laboratories, Peter MacCallum Cancer Centre, East Melbourne, VIC, Australia

Hong He  Department of Surgery, Austin Health, The University of Melbourne, Heidelberg, VIC, Australia

Lili He  Molecular Oncology Program and Research Institute, H. Lee Moffitt Cancer Center, University of South Florida College of Medicine, Tampa, FL, USA

Li-Zhen He  Memorial Sloan-Kettering Cancer Center, Weill Cornell Graduate School of Medical Sciences, New York, NY, USA

Ruth He  Lombardi Comprehensive Cancer Center, Georgetown University, Washington, DC, USA

Yu-Ying He  Medicine/Dermatology, University of Chicago, Chicago, IL, USA

Stephen S. Hecht  The Cancer Center, University of Minnesota, Minneapolis, MN, USA

Ingrid A. Hedenfalk  Department of Oncology, Clinical Sciences, Lund University, Lund, Sweden

Petra Heffeter  Department of Medicine I, Institute of Cancer Research, Medical University of Vienna, Vienna, Austria

Ahmed E. Hegab  Department of Geriatric and Respiratory Medicine, Tohoku University Hospital, Sendai, Japan

Axel Heidenreich  Division of Oncological Urology, Department of Urology, University of Köln, Köln, Germany

Olaf Heidenreich  Northern Institute for Cancer Research, Newcastle University, Newcastle upon Tyne, UK

Werner Held  Ludwig Center for Cancer Research, Department of Oncology, University of Lausanne, Epalinges, Switzerland
Carl-Henrik Heldin  Ludwig Institute for Cancer Research, Uppsala University, Uppsala, Sweden

Wijnand Helfrich  Groningen University Institute for Drug Exploration (GUIDE), University Medical Center Groningen, Department of Pathology and Laboratory Medicine, Section Medical Biology, Laboratory for Tumor Immunology, University Medical Center Groningen, Groningen, The Netherlands

Debby Hellebrekers  Department of Pathology, GROW-School for Oncology and Developmental Biology, Maastricht University Hospital, Maastricht, The Netherlands

Ingegerd Hellstrom  Department of Pathology, University of Washington, Seattle, WA, USA

Karl Erik Hellstrom  Department of Pathology, University of Washington, Seattle, WA, USA

Paul W. S. Heng  Department of Pharmacy, National University of Singapore, Singapore, Singapore

Kai-Oliver Henrich  DKFZ, German Cancer Research Center, Heidelberg, Germany

Rui Henrique  Department of Pathology, Portuguese Oncology Institute-Porto, Porto, Portugal

Ellen C. Henry  University of Rochester Medical Center, Rochester, NY, USA

Elizabeth P. Henske  Center for LAM Research and Clinical Care, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, USA

Donald E. Henson  Uniformed Services University of the Health Sciences, Bethesda, MD, USA

Serge Hercberg  UMR U1153 INSERM, U1125 INRA, CNAM, Université Paris 13, Centre de Recherche Epidémiologie et Statistique Sorbonne Paris Cité, Bobigny, France

Meenhard Herlyn  The Wistar Institute, Philadelphia, PA, USA

Heike M. Hermanns  Med. Klinik II, Hepatologie, Universitätsklinikum Würzburg, Würzburg, Germany

Blanca Hernandez-Ledesma  Instituto de Investigación en Ciencias de la Alimentación (CIAL, CSIC-UAM, CEI UAM+CSIC), Madrid, Spain

Wolfgang Herr  Universitätsklinikum Regensburg, Regensburg, Germany

Erika Herrero Garcia  Department of Pharmacology, University of Illinois College of Medicine, Chicago, IL, USA

Helen E. Heslop  Center for Cell and Gene Therapy, Baylor College of Medicine, Texas Children’s Hospital, and The Methodist Hospital, Houston, TX, USA
Contributors

**Jochen Hess** Division of Signal Transduction and Growth Control, Deutsches Krebsforschungszentrum, Heidelberg, Germany

**Dominique Heymann** Physiopathologie de la Résorption Osseuse et Thérapie des Tumeurs Osseuses Primitives, University of Nantes, Nantes, France

**Martha Hickey** Obstetrics and Gynaecology, The University of Melbourne, Parkville, VIC, Australia

**James Hicks** Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, USA

**Kevin O. Hicks** Auckland Cancer Society Research Centre, The University of Auckland, Auckland, New Zealand

**Colin K. Hill** Department of Radiation Oncology, Keck School of Medicine, University of Southern California, Los Angeles, CA, USA

**Shawn Hingtgen** Division of Molecular Pharmaceutics, UNC Eshelman School of Pharmacy, Biomedical Research Imaging Center, University of North Carolina, Chapel Hill, NC, USA

**Isabelle Hinkel** INSERM U1113, Université de Strasbourg, Strasbourg, France

**Boaz Hirshberg** Cardiovascular and Metabolic Diseases, Pfizer Inc, Groton, CT, USA

**Ari Hirvonen** Finnish Institute of Occupational Health, Helsinki, Finland

**Ricardo Hitt** Hospital Universitario Severo Ochoa, Madrid, Spain

**Eiso Hiyama** Natural Science Center for Basic Research and Development, Department of Pediatric Surgery, Hiroshima University Hospital, Hiroshima University, Hiroshima, Japan

**Falk Hlubek** Department of Pathology, Ludwig-Maximilians-University of Munich, Munich, Germany

**Steven N. Hochwald** Departments of Surgical Oncology, Roswell Park Cancer Institute, Buffalo, NY, USA

**Mir Alireza Hoda** Division of Thoracic Surgery, Medical University of Vienna, Vienna, Austria

**Michael Hodsdon** Department of Laboratory Medicine, Yale University School of Medicine, New Haven, CT, USA

**Kasper Hoebe** Division of Immunobiology, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA

**Markus Hoffmann** Hals-, Nasen- und Ohrenheilkunde, Kopf- und Halschirurgie, Universitätsklinikum Schleswig-Holstein, Campus Kiel, Kiel, Germany
Michèle J. Hoffmann  Department of Urology, Heinrich Heine University, Düsseldorf, Germany

Lorne J. Hofseth  Department of Pharmaceutical and Biomedical Sciences, South Carolina College of Pharmacy, University of South Carolina, Columbia, SC, USA

Susanne Holck  Department of Pathology, Copenhagen University Hospital, Hvidovre, Denmark

Stefan Holdenrieder  Institute of Clinical Chemistry and Clinical Pharmacology, Universitätsklinikum Bonn, Bonn, Germany

James F. Holland  Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai, New York, NY, USA

Petra Den Hollander  Department of Translational Molecular Pathology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Caroline L. Holloway  BC Cancer Agency, Vancouver Island Centre, Victoria, BC, Canada

Arne Holmgren  Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden

Astrid Holzinger  Tumor Genetics, Clinic I Internal Medicine, University Hospital Cologne, and Center for Molecular Medicine Cologne, University of Cologne, Cologne, Germany

Jun Hyuk Hong  Division of Urologic Oncology, The Cancer Institute of NJ, Robert Wood Johnson Medical School, New Brunswick, NJ, USA

Adilia Hormigo  Department of Neurology, Medicine (Division Hematology Oncology) and Neurosurgery, Icahn School of Medicine at Mount Sinai and The Tisch Cancer Institute, New York, NY, USA

Joshua Hornig  Head and Neck Tumor Program, Hollings Cancer Center, Medical University of South Carolina, Charleston, SC, USA

Michael R. Horsman  Department of Experimental Clinical Oncology, Aarhus University Hospital, Aarhus, Denmark

Andrea Kristina Horst  Inst. Experimental Immunology and Hepatology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

David W. Hoskin  Departments of Pathology, and Microbiology and Immunology, Dalhousie University, Halifax, NS, Canada

Andreas F. Hottinger  Departments of Clinical Neuroscience and Oncology, CHUV, Lausanne University Hospital, Lausanne, VD, Switzerland

Peter J. Houghton  Greehey Children’s Cancer Research Institute, UT Health Science Center, San Antonio, TX, USA

Anthony Howell  CRUK Department of Medical Oncology, University of Manchester, Christie Hospital NHS Trust, Manchester, UK
Lynne M. Howells  Department of Cancer Studies, University of Leicester, Leicester, UK

Chia-Chien Hsieh  Department of Human Development and Family Studies (Nutritional Science and Education), National Taiwan Normal University, Taipei, Taiwan

Shie-Liang Hsieh  Department of Microbiology and Immunology, National Yang-Ming University, Immunology Research Center, Taipei Veterans General Hospital; Genomics Research Center, Academia Sinica, Taipei, Taiwan

Wei Hu  Departments of Gynecologic Oncology and Reproductive Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Cheng-Long Huang  Department of Second Surgery, Kagawa University, Kagawa, Japan

Gonghua Huang  Department of Immunology, St. Jude Children’s Research Hospital, Memphis, TN, USA

Shile Huang  Department of Biochemistry and Molecular Biology and Feist-Weiller Cancer Center, Louisiana State University Health Sciences Center, Shreveport, LA, USA

Kay Huebner  Department of Molecular Virology, Immunology and Medical Genetics, Ohio State University Comprehensive Cancer Center, Columbus, OH, USA

Pere Huguet  Department of Pathology, Vall d’Hebron University Hospital, Barcelona, Spain

Maureen B. Huhmann  Department of Nutrition Sciences, School of Health Related Professions, Rutgers The State University, Newark, NJ, USA

Wen-Chun Hung  National Institute of Cancer Research, National Health Research Institutes, Tainan Taiwan, Republic of China

Tony Hunter  Salk Institute, Molecular and Cell Biology Laboratory, La Jolla, CA, USA

Teh-Ia Huo  Institute of Pharmacology, School of Medicine, National Yang-Ming University, Taipei, Taiwan

Jacques Huot  Le Centre de recherche du CHU de Québec-Université Laval: axe Oncologie, Le Centre de recherche sur le cancer de l’Université Laval, Québec, QC, Canada

Karen L. Huyck  Department of Pathology, Brigham and Women’s Hospital, Boston, MA, USA

Sam T. Hwang  Dermatology Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA

Brandy D. Hyndman  Department of Pathology and Molecular Medicine, Queen’s University Cancer Research Institute, Queen’s University, Kingston, ON, Canada
Maitane Ibarguren Department of Biology, University of the Balearic Islands, Palma de Mallorca, Spain

Takafumi Ichida Department of Hepatology and Gastroenterology, Juntendo University School of Medicine, Shizuoka Hospital, Shizuoka, Japan

Yoshito Ihara Department of Biochemistry, School of Medicine, Wakayama Medical University, Wakayama, Japan

Hitoshi Ikeda Department of Pediatric Surgery, Dokkyo Medical University Koshigaya Hospital, Koshigaya, Saitama, Japan

Landon Inge Norton Thoracic Institute, St. Joseph’s Hospital and Medical Center, Phoenix, AZ, USA

Kazuhiko Ino Department of Obstetrics and Gynecology, Nagoya University Graduate School of Medicine, Nagoya, Japan

Juan Iovanna INSERM, Stress Cellulaire, Parc Scientifique et Technologique de Luminy, Marseille Cedex, France

Irmgard Irminger-Finger Molecular Gynecology and Obstetrics Laboratory, Department of Gynecology and Obstetrics, Geneva University Hospitals, Geneva, Switzerland

Meredith S. Irwin Cell Biology Program and Division of Hematology-Oncology Hospital for Sick Children, University of Toronto, Toronto, ON, Canada

Toshihisa Ishikawa Biochemistry, Molecular Biology, and Pharmacogenomics, NGO Personalized Medicine and Healthcare, Yokohama, Japan

Toshiyuki Ishiwata Department of Integrated Diagnostic Pathology, Graduate School of Medicine, Nippon Medical School, Tokyo, Japan

Mark A. Israel Departments of Pediatrics and of Genetics, Norris Cotton Cancer Center, Geisel School of Medicine at Dartmouth, Hanover, NH, USA

Antoine Italiano Early Phase Trials and Sarcoma Units, Institut Bergonie, Bordeaux, France

Norimasa Ito Departments of Surgery and Bioengineering, University of Pittsburgh, Pittsburgh, PA, USA

Michael Ittmann Department of Pathology, Baylor College of Medicine, Houston, TX, USA

Richard Ivell School of Biosciences and School of Veterinary Medicine and Science, University of Nottingham, Nottingham, UK

Antoni Ivorra Department of Information and Communication Technologies, Universitat Pompeu Fabra (UPF), Barcelona, Spain

Nobutaka Iwakuma Department of Surgery, Division of Surgical Oncology, University of Florida, Gainesville, FL, USA
Shai Izraeli  Pediatric Hemato-Oncology, Sheba Medical Center and Tel Aviv University, Ramat Gan, Israel

Paola Izzo  Department of Molecular Medicine and Medical Biotechnology, School of Medicine and Surgery, University of Naples Federico II, Naples, Italy

Mark Jackman  Wellcome/CRC Institute, Cambridge, UK

Alan Jackson  Centre for Imaging Sciences, University of Manchester, Manchester, UK

Deborah Jackson-Bernitsas  Department of Systems Biology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Stephan C. Jahn  Department of Pharmacology and Therapeutics and the UF and Shands Cancer Center, University of Florida, Gainesville, FL, USA

David Jamieson  School of Clinical and Laboratory Sciences, Newcastle University, Newcastle upon Tyne, UK

Siegfried Janz  Department of Pathology, Carver College of Medicine, University of Iowa, Iowa City, IA, USA

Daniel G. Jay  Tufts University School of Medicine, Boston, MA, USA

Gordon C. Jayson  Cancer Research UK Department of Medical Oncology, Christie Hospital, Manchester, UK

Kuan-Teh Jeang  National Institute of Allergy and Infectious Disease, NIH, Bethesda, MD, USA

Diane F. Jelinek  Department of Immunology, Mayo Clinic, College of Medicine, Rochester, MN, USA

Jiang-Huei Jeng  Laboratory of Pharmacology and Toxicology, School of Dentistry, National Taiwan University Hospital and National Taiwan University Medical College, Taipei, Taiwan

Elwood V. Jensen  National Institute of Health, Bethesda, MD, USA

Erika Jensen-Jarolim  Institute of Pathophysiology and Allergy Research, Center of Pathophysiology, Infectiology and Immunology, Medical University Vienna, Vienna, Austria

Shuai Jiang  Department of Biology and Biological Engineering, California Institute of Technology, Pasadena, CA, USA
Yufei Jiang  Cancer Vaccine Section, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA

Charlotte Jin  Departments of Clinical Genetics, University Hospital, Lund, Sweden

Chengcheng Jin  The David H. Koch Institute of Integrative Cancer Research, Massachusetts Institute of Technology, Cambridge, MA, USA

Andrew K. Joe  Department of Medicine, Herbert Irving Comprehensive Cancer Center, New York, NY, USA

Manfred Johannsen  Fachartzpraxis Urologie Johannsen and Laux, Berlin, Germany

Kaarthik John  Division of Microbiology, Tulane University, Covington, LA, USA

Alan L. Johnson  Pennsylvania State University, State College, PA, USA

Sara M. Johnson  Department of Surgery, The University of Texas Medical Branch, Galveston, TX, USA

Won-A Joo  The Wistar Institute, Philadelphia, PA, USA

V. Craig Jordan  Breast Medical Oncology, MD Anderson Cancer Center, Houston, TX, USA

Serene Josiah  Cambridge, MA, USA

Richard Jove  Vaccine and Gene Therapy Institute of Florida, Port Saint Lucie, FL, USA

Jaroslaw Jozwiak  Department of Histology and Embryology, Medical University of Warsaw, Warsaw, Poland

Jesper Jurlander  Department of Hematology, Rigshospitalet, Copenhagen, Denmark

Donat Kögel  Experimental Neurosurgery, Center for Neurology and Neurosurgery, Goethe-University Hospital, Frankfurt am Main, Germany

Ralf Küppers  Institute of Cell Biology (Cancer Research), University of Duisburg-Essen, Medical School, Essen, Germany

Chaim Kahana  Department of Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel

Bernd Kaina  Department of Toxicology, University Medical Center Mainz, Mainz, Germany

Kiran Kakarala  Departments of Otolaryngology-Head and Neck Surgery, University of Kansas Medical Center, Kansas City, KS, USA

Tadao Kakizoe  National Cancer Center, Tokyo, Japan

Ganna V. Kalayda  Institute of Pharmacy, University of Bonn, Bonn, Germany
Tuula Kallunki  Unit of Cell Death and Metabolism, Danish Cancer Society Research Center, Copenhagen, Denmark

Takehiko Kamijo  Research Institute for Clinical Oncology, Saitama Cancer Center, Ina, Saitama, Japan

Yasufumi Kaneda  Department of Gene Therapy Science, Graduate School of Medicine, Osaka University, Suita, Osaka, Japan

Kazuhiro Kaneko  Department of Gastroenterology, Endoscopy Division, National Cancer Center Hospital East, Chiba, Japan

Inkyung Kang  Department of Surgery, University of California, San Francisco, San Francisco, CA, USA

Jayakanth Kankanala  Center for Drug Design, Academic Health Center, University of Minnesota, Minneapolis, MN, USA

Yung-Hsi Kao  Department of Life Sciences, College of Science, National Central University, Jhongli City, Taiwan

David E. Kaplan  Division of Gastroenterology, University of Pennsylvania, Philadelphia, PA, USA

Niki Karachaliou  Instituto Oncológico Dr. Rosell, Quiron-Dexeus University Hospital, Barcelona, Spain

Sophia N. Karagiannis  St. John’s Institute of Dermatology, Division of Genetics and Molecular Medicine, Faculty of Life Sciences and Medicine, King’s College London, London, UK

Nilesh D. Kashikar  Departments of Surgery and Cancer Biology, Vanderbilt-Ingram Cancer Center, Vanderbilt University School of Medicine, Nashville, TN, USA

Matilda Katan  CRC Centre for Cell and Molecular Biology, Institute of Cancer Research, London, UK

William K. Kaufmann  Department of Pathology and Laboratory Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

Manjinder Kaur  Department of Pharmaceutical Sciences, School of Pharmacy, University of Colorado Health Sciences Center, Denver, CO, USA

Sukhwinder Kaur  Department of Biochemistry and Molecular Biology, University of Nebraska Medical Center, Omaha, NE, USA
Ingo Kausch Department of Urology, Ammerlandklinik Westerstede, Westerstede, Germany

Koji Kawakami Department of Pharmacoepidemiology, Graduate School of Medicine and Public Health, Kyoto University, Kyoto, Japan

Frederic J. Kaye National Cancer Institute, NIH and National Naval Medical Center, Bethesda, MD, USA

Stanley B. Kaye Drug Development Unit, Institute of Cancer Research, The Royal Marsden Hospital, Sutton, UK

Evan T. Keller Departments of Urology and Pathology, University of Michigan, Ann Arbor, MI, USA

Daniel Keppler Department of Biological Science, College of Pharmacy, Touro University-CA, Vallyo, CA, USA

Santhosh Kesari Department of Translational Neuro-Oncology and Neurotherapeutics, John Wayne Cancer Institute, Providence St. John’s Health Center, Santa Monica, CA, USA

Jorma Keski-Oja Departments of Pathology and of Virology, Haartman Institute, University of Helsinki, Helsinki, Finland

Khandan Keyomarsi Department of Experimental Radiation Oncology, Unit 1052, University of Texas MD Anderson Cancer Center, Houston, TX, USA

Abdul Arif Khan Department of Pharmaceutics, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia

Shahanavaj Khan Department of Pharmaceutics, College of Pharmacy, King Saud University, Riyadh, Saudi Arabia

Chand Khanna Comparative Oncology Program, Center for Cancer Research, National Cancer Institute, Bethesda, MD, USA

Samir N. Khleif GRU Cancer Center, Augusta, GA, USA

Roya Khosravi-Far Department of Pathology, Harvard Medical School, Beth Israel Deaconess Medical Center, Boston, MA, USA

Tobias Kiesslich Department of Internal Medicine I, Paracelsus Medical University, Institute of Physiology and Pathophysiology, Paracelsus Medical University, Salzburg, Austria

Fumitaka Kikkawa Department of Obstetrics and Gynecology, Nagoya University Graduate School of Medicine, Nagoya, Japan

Nerbil Kilic Kantonspital St. Gallen, St. Gallen, Switzerland

Isaac Yi Kim Division of Urologic Oncology, The Cancer Institute of NJ, Robert Wood Johnson Medical School, New Brunswick, NJ, USA

Jung-whan Kim Department of Biological Sciences, The University of Texas at Dallas, Richardson, TX, USA
Miran Kim  Division of Gastroenterology, Liver Research Center, Rhode Island Hospital and Warren Alpert Medical School of Brown University, Providence, RI, USA

Moonil Kim  BioNanotechnology Research Center, Korea Research Institute of Bioscience and Biotechnology, Yuseong, Daejeon, Republic of Korea

Seong Jin Kim  Laboratory of Cell Regulation and Carcinogenesis, National Cancer Institute, Bethesda, MD, USA

Su Young Kim  Pediatric Oncology Branch, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA

Adi Kimchi  Department of Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel

A. Douglas Kinghorn  College of Pharmacy, The Ohio State University, Columbus, OH, USA

David Kirn  Jennerex Biotherapeutics Inc., San Francisco, CA, USA

Youlia M. Kirova  Department of Radiation Oncology, Institut Curie, Paris, France

Shinichi Kitada  Burnham Institute for Medical Research, La Jolla, CA, USA

Karel Kithier  Department of Pathology, Wayne State University School of Medicine, Detroit, MI, USA

Chikako Kiyohara  Department of Preventive Medicine, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan

Celina G. Kleer  Department of Pathology and Comprehensive Cancer Center, University of Michigan Medical School, Ann Arbor, MI, USA

George Klein  Microbiology, Tumor and Cell Biology, Karolinska Institute, Stockholm, Sweden

Michael J. Klein  Department of Pathology and Laboratory Medicine, Hospital for Special Surgery, New York, NY, USA

Elena Klenova  Department of Biological Sciences, University of Essex, Colchester, Essex, UK

Thomas Klonisch  Department of Human Anatomy and Cell Science, College of Medicine, Faculty of Health Sciences, University of Manitoba, Winnipeg, MB, Canada

Elizabeth Knobler  Department of Dermatology, Columbia College of Physicians and Surgeons, New York, NY, USA

Robert Knobler  Department of Dermatology, Medical University of Vienna, Vienna, Austria

Beatrice Knudsen  Cedars-Sinai, Los Angeles, CA, USA
Stefan Kochanek  Division of Gene Therapy, University of Ulm, Ulm, Germany

Manish Kohli  Medical Oncology, Mayo Clinic, Rochester, MN, USA

Katri Koli  Translational Cancer Biology Program, University of Helsinki, Helsinki, Finland

Christian Kollmannsberger  Division of Medical Oncology, British Columbia Cancer Agency, Vancouver Cancer Centre, University of British Columbia, Vancouver, BC, Canada

Yutaka Kondo  Department of Epigenomics, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan

Lin Kong  Department of Radiation Oncology, Fudan University Shanghai Cancer Center, Shanghai, China

Marina Konopleva  Department of Leukemia and Department of Stem Cell Transplantation and Cellular Therapy, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Roland E. Kontermann  Institute of Cell Biology and Immunology, University of Stuttgart, Stuttgart, Germany

Janko Kos  Faculty of Pharmacy, University of Ljubljana, Ljubljana, Slovenia

Marta Kostrouchova  Institute of Cellular Biology and Pathology, 1st Faculty of Medicine, Charles University, Prague, Czech Republic

Athanassios Kotsinas  Molecular Carcinogenesis Group, Laboratory of Histology-Embryology, Medical School, National and Kapodistrian University of Athens, Athens, Greece

Evangelia A. Koutsogiannouli  Department of Urology, Heinrich Heine University, Düsseldorf, Germany

Heinrich Kovar  Children’s Cancer Research Institute, Vienna, Austria

Craig Kovitz  Department of Medical Oncology, University of Texas MD Anderson Cancer Center, Houston, TX, USA

Christian Kowol  Institute of Inorganic Chemistry, University of Vienna, Vienna, Austria

Barnett S. Kramer  Office of Disease Prevention, National Institutes of Health, Bethesda, MD, USA

Oliver H. Krämer  Department of Toxicology, University Medical Center Mainz, Mainz, Germany

Barbara Krammer  Department of Molecular Biology, University of Salzburg, Salzburg, Austria

Henk J. van Kranen  National Institute of Public Health and Environment, Bilthoven, The Netherlands
Contributors

Robert Kratzke  Division of Hematology, Oncology and Transplantation, University of Minnesota, Minneapolis, MN, USA

Thomas Krausz  Department of Pathology, University of Chicago, Chicago, IL, USA

Jürgen Krauter  Medizinische Klinik III – Hämatologie und Onkologie, Klinikum Braunschweig, Braunschweig, Germany

Bernhard Kremens  Department of Pediatric Hematology, Oncology and Respiratory Medicine, University Hospitals of Essen, Essen, Germany

Betsy T. Kren  Minneapolis VA Health Care System and University of Minnesota, Minneapolis, MN, USA

Yasusei Kudo  Department of Oral Molecular Pathology, Institute of Biomedical Sciences, Tokushima University Graduate School, Tokushima, Japan

Deepak Kumar  Department of Biological and Environmental Sciences, University of the District of Columbia, Washington, DC, USA

Parvesh Kumar  Department of Radiation Oncology, Keck School of Medicine, University of Southern California, Los Angeles, CA, USA

Rakesh Kumar  Department of Biochemistry and Molecular Medicine, George Washington University, Washington, DC, USA

Hiroki Kuniyasu  Department of Molecular Pathology, Nara Medical University School of Medicine, Kashihara, Nara, Japan

Siavash K. Kurdistani  Department of Biological Chemistry, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA

Elena Kurenova  Departments of Surgical Oncology, Roswell Park Cancer Institute, Buffalo, NY, USA

Keisuke Kurose  Departments of Obstetrics and Gynecology, Nippon Medical School, Kawasaki and Tokyo, Japan

Peter Kurre  Department of Pediatrics, Oregon Health and Science University, Portland, OR, USA

Robert M. Kypta  Cell Biology and Stem Cells Unit, CIC bioGUNE, Derio, Spain

Imperial College London, London, UK

Juan Carlos Lacal  Instituto de Investigaciones Biomedicas, CSIC, Madrid, Spain

James C. Lacefield  Departments of Electrical and Computer Engineering and Medical Biophysics, University of Western Ontario, London, ON, Canada

Stephan Ladisch  Center for Cancer and Immunology Research, Children’s Research Institute, Children’s National Medical Center and The George Washington University School of Medicine, Washington, DC, USA
Hermann Lage  Institute of Pathology, Charité Campus Mitte, Berlin, Germany

Charles P. K. Lai  Department of Cellular and Physiological Sciences, The University of British Columbia, Vancouver, BC, Canada

Henry Lai  Departments of Bioengineering, University of Washington, Seattle, WA, USA

Dale W. Laird  Department of Anatomy and Cell Biology, University of Western Ontario, London, ON, Canada

Hilaire C. Lam  Center for LAM Research and Clinical Care, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, USA

Janice B. B. Lam  Department of Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China

Wan L. Lam  Department of Cancer Genetics and Developmental Biology, British Columbia Cancer Research Centre, Vancouver, BC, Canada

Hui Y. Lan  The Chinese University of Hong Kong, Hong Kong, China

Joseph R. Landolph, Jr.  Department of Molecular Microbiology and Immunology, and Department of Pathology; Laboratory of Chemical Carcinogenesis and Molecular Oncology, USC/Norris Comprehensive Cancer Center, Keck School of Medicine; Department of Molecular Pharmacology and Pharmaceutical Sciences, School of Pharmacy, Health Sciences Campus, University of Southern California, Los Angeles, CA, USA

Ari L. Landon  The University of Maryland Marlene and Stewart Greenebaum Cancer Center, Baltimore, MD, USA

Robert Langer  Department of Chemical Engineering and Center for Cancer Research, Massachusetts Institute of Technology, Cambridge, MA, USA

Sigrid A. Langhans  Nemours Center for Childhood Cancer Research, Alfred I duPont Hospital for Children, Wilmington, DE, USA

Cinzia Lanzi  Molecular Pharmacology Unit, Department of Experimental Oncology and Molecular Medicine, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy

Rosamaria Lappano  Department of Pharmacy and Health and Nutritional Sciences, University of Calabria, Rende, Italy

Paola Larghi  Department of Immunology, Fondazione Humanitas per la Ricerca, Rozzano, Milan, Italy

James M. Larner  Department of Therapeutic Radiology and Oncology, University of Virginia School of Medicine, Charlottesville, VA, USA

Göran Larson  Department of Clinical Chemistry and Transfusion Medicine, Institute of Biomedicine, Sahlgrenska Academy at Göteborg University, Göteborg, Sweden
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lars-Inge Larsson</td>
<td>Department of Pathology, Copenhagen University Hospital, Hvidovre, Denmark</td>
</tr>
<tr>
<td>Susanna C. Larsson</td>
<td>Division of Nutritional Epidemiology, Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden</td>
</tr>
<tr>
<td>Philippe Lassalle</td>
<td>INSERM U774, Institut Pasteur de Lille, Lille, France</td>
</tr>
<tr>
<td>Antony M. Latham</td>
<td>Endothelial Cell Biology Unit, Leeds Institute of Genetics Health and Therapeutics (LIGHT), University of Leeds, Leeds, UK</td>
</tr>
<tr>
<td>Farida Latif</td>
<td>Institute of Cancer and Genomic Sciences, University of Birmingham, Edgbaston, Birmingham, UK</td>
</tr>
<tr>
<td>Paule Latino-Martel</td>
<td>UMR U1153 INSERM, U1125 INRA, CNAM, Université Paris 13, Centre de Recherche Epidémiologie et Statistique Sorbonne Paris Cité, Bobigny, France</td>
</tr>
<tr>
<td>Kirsten Lauber</td>
<td>Clinic for Radiotherapy and Radiation Oncology, LMU Munich, Munich, Germany</td>
</tr>
<tr>
<td>Béatrice Lauby-Secretan</td>
<td>Section of the IARC Monographs, IARC/WHO, Lyon, France</td>
</tr>
<tr>
<td>Virpi Launonen</td>
<td>Department of Medical Genetics, Biomedicum Helsinki, University of Helsinki, Helsinki, Finland</td>
</tr>
<tr>
<td>Martin F. Lavin</td>
<td>University of Queensland Centre for Clinical Research at Royal Brisbane and Women’s Hospital, The University of Queensland, Brisbane, QLD, Australia</td>
</tr>
<tr>
<td>Brian Law</td>
<td>Department of Pharmacology and Therapeutics and the UF and Shands Cancer Center, University of Florida, Gainesville, FL, USA</td>
</tr>
<tr>
<td>Gwendal Lazennec</td>
<td>INSERM, Montpellier, France</td>
</tr>
<tr>
<td>Pedro A. Lazo</td>
<td>CSIC-Universidad de Salamanca, Instituto de Biología Molecular y Celular del Cáncer, Salamanca, Spain</td>
</tr>
<tr>
<td>Gail S. Lebovic</td>
<td>Director of Women’s Services, The Cooper Clinic, Dallas, TX, USA</td>
</tr>
<tr>
<td>David P. LeBron</td>
<td>Department of Pathology and Molecular Medicine, Queen’s University Cancer Research Institute, Queen’s University, Kingston, ON, Canada</td>
</tr>
<tr>
<td></td>
<td>Protein Function Discovery Group, Queen’s University, Kingston, ON, Canada</td>
</tr>
<tr>
<td></td>
<td>Division of Cancer Biology and Genetics, Cancer Research Institute, Queen’s University, Kingston, ON, USA</td>
</tr>
<tr>
<td>Sean Bong Lee</td>
<td>Department of Pathology and Laboratory Medicine, Tulane University School of Medicine, New Orleans, LA, USA</td>
</tr>
<tr>
<td>Seong-Ho Lee</td>
<td>Department of Nutrition and Food Science, University of Maryland, College Park, MD, USA</td>
</tr>
</tbody>
</table>
Stephen Lee  Department of Cellular and Molecular Medicine, Faculty of Medicine, University of Ottawa, Ottawa, ON, Canada

William P. J. Leenders  Department of Pathology, Radboud University Medical Center Nijmegen, Nijmegen, The Netherlands

Andreas Leibbrandt  Institute of Molecular Biotechnology of the Austrian Academy of Sciences, Vienna, Austria

Manuel C. Lemos  CICS-UBI, Health Sciences Research Centre, University of Beira Interior, Covilhã, Portugal

Eric Lentsch  Head and Neck Tumor Program, Hollings Cancer Center, Medical University of South Carolina, Charleston, SC, USA

Derek LeRoith  Division of Endocrinology, Diabetes and Bone Diseases, Mount Sinai School of Medicine, New York, NY, USA

Yun-Chung Leung  Lo Ka Chung Centre for Natural Anti-cancer Drug Development and Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University, Hong Kong, China

Francis Lévi  Warwick Medical School, University of Warwick, Coventry, UK

Jay A. Levy  University of California, School of Medicine, San Francisco, CA, USA

Benyi Li  Department of Urology, The University of Kansas Medical Center, Kansas City, KS, USA

Guideng Li  Institute for Immunology, School of Medicine, University of California, Irvine, CA, USA

Kaiyi Li  Department of Surgery, Baylor College of Medicine, Houston, TX, USA

Yan Li  Department of Immunology, Cleveland Clinic, Cleveland, OH, USA

Daiqing Liao  Department of Anatomy and Cell Biology, UF Health Cancer Center, University of Florida College of Medicine, Gainesville, FL, USA

Yung-Feng Liao  Institute of Cellular and Organismic Biology, Academia Sinica, Taipei, Taiwan

Emmanuelle Liaudet-Coopman  IRCM, INSERM, UMI, CRLC Val d’Aurelle, Montpellier, France

Rossella Libè  Endocrinology, Metabolism and Cancer Department, INSERM U567, Institut Cochin, Paris, France

Danielle Liddle  Gray Institute for Radiation Oncology and Biology, Department of Oncology, University of Oxford, Oxford, UK

Jane Liesveld  James P. Wilmot Cancer Center, University of Rochester, Rochester, NY, USA
Stephanie Lin  Medical Oncology, Ingham Research Institute, Liverpool, NSW, Australia

Ke Lin  Department of Haematology, Royal Liverpool University Hospital, Liverpool, UK

Sheng-Cai Lin  Department of Biomedical Sciences, School of Life Sciences, Xiamen University, Xiamen, Fujian, China

Shiaw-Yih Lin  Department of Systems Biology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Wan-Wan Lin  Department of Pharmacology, College of Medicine, National Taiwan University, Taipei, Taiwan

Yong Lin  Molecular Biology and Lung Cancer Program, Lovelace Respiratory Research Institute, Albuquerque, NM, USA

Janet C. Lindsey  Northern Institute for Cancer Research, Newcastle University, Newcastle upon Tyne, UK

Christopher A. Lipinski  Melior Discovery, Waterford, CT, USA

Joseph Lipsick  Stanford University, Stanford, CA, USA

Fei-Fei Liu  Princess Margaret Cancer Centre, University Health Network, Toronto, ON, Canada

Department of Radiation Oncology, Princess Margaret Hospital, Toronto, ON, Canada

Department of Radiation Oncology, University of Toronto, Toronto, ON, Canada

Department of Medical Biophysics, University of Toronto, Toronto, ON, Canada

Tao Liu  Department of Medicine, Harvard Medical School, Brigham and Women’s Hospital, Boston, MA, USA

Wen Liu  Division of Life Science, Hong Kong University of Science and Technology, Kowloon, Hong Kong

Xiangguo Liu  School of Life Science, Shandong University, Jinan, Shandong, China

Yiyan Liu  Department of Radiology, New Jersey Medical School, Rutgers University, New Brunswick, NJ, USA

Hui-Wen Lo  Department of Cancer Biology, Wake Forest University School of Medicine, Winston-Salem, NC, USA

Ting Ling Lo  Signal Transduction Laboratory, Institute of Molecular and Cell Biology, Singapore, Singapore

Victor Lobanenkov  Section of Molecular Pathology, Laboratory of Immunopathology, NIAID, National Institutes of Health, Bethesda, MD, USA
Holger N. Lode  Klinik und Poliklinik für Kinder und Jugendmedizin, Universitätsmedizin Greifswald, Greifswald, Germany

Lawrence A. Loeb  University of Washington, Seattle, WA, USA

Robert Loewe  Department of Dermatology, Division of General Dermatology, Medical University of Vienna, Vienna, Austria

Steffen Loft  Department of Environmental Health, University of Copenhagen, Copenhagen, Denmark

Dietmar Lohmann  Institut für Humangenetik, Universitätsklinikum Essen, Essen, Germany

Matthias Löhr  Department of Clinical Science, Intervention and Technology (CLINTEC), Karolinska Institutet, Stockholm, Sweden

Vinata B. Lokeshwar  Department of Biochemistry and Molecular Biology, Medical College of Georgia; Augusta University, Augusta, GA, USA

Alexandre Loktionov  DiagNodus Ltd, Babraham Research Campus, Cambridge, UK

Elias Lolis  Department of Laboratory Medicine, Yale University School of Medicine, New Haven, CT, USA

Pier-Luigi Lollini  Laboratory of Immunology and Biology of Metastasis, Department of Experimental, Diagnostic and Specialty Medicine, University of Bologna, Bologna, Italy

Weiwen Long  Department of Biochemistry and Molecular Biology, Wright State University, Dayton, OH, USA

David J. López  University of the Balearic Islands, Palma de Mallorca, Spain

Miguel Lopez-Lazaro  Department of Pharmacology, Faculty of Pharmacy, University of Seville, Seville, Spain

Ana Lopez-Martin  Hospital Universitario Severo Ochoa, Madrid, Spain

Charles L. Loprinzi  Department of Oncology, Mayo Clinic, Rochester, MN, USA

Jochen Lorch  Dana Farlur Cancer Institute, Boston, MA, USA

Edith M. Lord  Department of Microbiology and Immunology, University of Rochester School of Medicine and Dentistry, Rochester, NY, USA

Reuben Lotan  Department of Thoracic Head and Neck Medical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Ragnhild A. Lothe  Department of Cancer Prevention, Rikshospitalet-Radiumhospitalet Medical Centre, Oslo, Norway

Michael T. Lotze  Department of Surgery and Department of Immunology, University of Pittsburgh, Pittsburgh, PA, USA
Christophe Louandre  EA4666, Université de Picardie Jules Verne (UPJV), Amiens, France
Service de Biochimie, Centre de Biologie Humaine (CBH), University Hospital of Amiens (CHU Sud), Amiens, France

Chrystal U. Louis  Center for Cell and Gene Therapy, Baylor College of Medicine, Texas Children’s Hospital, and The Methodist Hospital, Houston, TX, USA

Dmitri Loukinov  Section of Molecular Pathology, Laboratory of Immunopathology, NIAID, National Institutes of Health, Bethesda, MD, USA

David B. Lovejoy  Department of Pathology, University of Sydney, Sydney, NSW, Australia

José Lozano  Department of Molecular Biology and Biochemistry, University of Málaga, Málaga, Spain

Guanning N. Lu  Departments of Otolaryngology-Head and Neck Surgery, University of Kansas Medical Center, Kansas City, KS, USA

Jiade J. Lu  Department of Radiation Oncology, Fudan University, Shanghai Cancer Center, Shanghai, China

Jing Lu  Departments of Molecular and Cellular Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Tzong-Shi Lu  Division of Experimental Medicine, Beth Israel Deaconess Medical Center, Harvard Institutes of Medicine, Boston, MA, USA

Yuanan Lu  Department of Public Health Science, University of Hawaii, Honolulu, HI, USA

Irina A. Lubensky  National Cancer Institute, Division of Cancer Treatment and Diagnosis, National Institutes of Health, Rockville, MD, USA

Jared M. Lucas  Divisions of Human Biology, Fred Hutchinson Cancer Research Center, Seattle, WA, USA

Andreas Luch  German Federal Institute for Risk Assessment (BfR), Berlin, Germany

Maria Li Lung  Department of Clinical Oncology, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, China

Jian-Hua Luo  Department of Pathology, University of Pittsburgh, Pittsburgh, PA, USA

Gary H. Lyman  Public Health Sciences and Clinical Research Divisions, Hutchinson Institute for Cancer Outcomes Research, Fred Hutchinson Cancer Research Center, Seattle, WA, USA

Henry Lynch  Department of Preventive Medicine and Public Health, Creighton University, Omaha, NE, USA
Elsebeth Lynge  Institute of Public Health, University of Copenhagen, Copenhagen, Denmark

Scott K. Lyons  Molecular Imaging Group, CRUK Cambridge Research Institute, Li Ka Shing Centre, Cambridge, UK

Wenjian Ma  National Institute of Environmental Health Sciences (NIEHS), Research Triangle Park, NC, USA

Michael MacManus  Department of Radiation Oncology, Peter MacCallum Cancer Centre, East Melbourne, VIC, Australia

Britta Mädge  DKFZ, Heidelberg, Germany

Claudie Madoulet  Laboratory of Biochemistry, IFR53, Faculty of Pharmacy, Reims, France

Rolando F. Del Maestro  Montreal, QC, Canada

Marcello Maggiolini  Department of Pharmacy and Health and Nutritional Sciences, University of Calabria, Rende, Italy

Brinda Mahadevan  Abbott Nutrition, Regulatory Affairs, Abbott Laboratories, Columbus, OH, USA

Joseph F. Maher  Cancer Institute, University of Mississippi Medical Center, Jackson, MS, USA

Csaba Mahotka  Institute of Pathology, Heinrich Heine Universität, Düsseldorf, Germany

Sourindra N. Maiti  Division of Pediatrics, Department of Immunology, MD Anderson Cancer Center, Houston, TX, USA

Isabella W. Y. Mak  Department of Surgery, Hamilton Health Sciences, Juravinski Cancer Centre, McMaster University, Hamilton, ON, Canada

N. K. Mak  Department of Biology, Hong Kong Baptist University, Kowloon Tong, Hong Kong, China

Jennifer Makalowski  Tumor Genetics, Clinic I Internal Medicine, University Hospital Cologne, and Center for Molecular Medicine Cologne, University of Cologne, Cologne, Germany

Cédric Malicet  INSERM, Stress Cellulaire, Parc Scientifique et Technologique de Luminy, Marseille Cedex, France

Alessandra Mancino  Department of Immunology, Fondazione Humanitas per la Ricerca, Rozzano, Milan, Italy

Evelyne Manet  CIRI-International Center for Infectiology Research, INSERM U1111, Université Lyon 1, ENS de Lyon, Lyon, France

Sridhar Mani  Department of Medicine, Oncology and Molecular Genetics, Albert Einstein College of Medicine, New York, NY, USA
Marcel Mannens  Academic Medical Centre, University of Amsterdam, Amsterdam, The Netherlands

Alberto Mantovani  Department of Immunology, Fondazione Humanitas per la Ricerca, Rozzano, Milan, Italy

Ashley A. Manzoor  Department of Radiation Oncology, Duke University, Durham, NC, USA

Selwyn Mapolie  Department of Chemistry and Polymer Science, Stellenbosch University, Matieland, South Africa

Lucia Marcocci  Department of Biochemical Sciences “A. Rossi Fanelli”, Sapienza University of Rome, Rome, Italy

Maurie Markman  Department of Medical Oncology, Eastern Regional Medical Center, Philadelphia, PA, USA

Dieter Marmé  Tumor Biology Center, Institute of Molecular Oncology, Freiburg, Germany

Marie-Claire Maroun  Department of Internal Medicine, Division of Rheumatology, Wayne State University, Detroit, MI, USA

Deborah J. Marsh  Kolling Institute of Medical Research and Royal North Shore Hospital, University of Sydney, Sydney, NSW, Australia

John L. Marshall  Lombardi Comprehensive Cancer Center, Georgetown University, Washington, DC, USA

Angela Märten  National Centre for Tumour Diseases; Department of Surgery, University Hospital Heidelberg, Heidelberg, Germany

Francis L. Martin  Centre for Biophotonics, Lancaster University, Lancaster, Lancashire, UK

Olga A. Martin  Division of Radiation Oncology and Cancer Imaging, Molecular Radiation Biology Laboratory, Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

The Sir Peter MacCallum Department of Oncology, The University of Melbourne, Melbourne, VIC, Australia

Victor D. Martinez  British Columbia Cancer Research Centre, Vancouver, BC, Canada

Gaetano Marverti  Department of Biomedical Sciences, Metabolic and Neural Sciences, University of Modena and Reggio Emilia, Modena, Italy

Edmund Maser  Institute of Toxicology and Pharmacology for Natural Scientists, University Medical School, Kiel, Germany

Thomas E. Massey  Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, ON, Canada

Noriyuki Masuda  Department of Respiratory Medicine, Kitasato University School of Medicine, Sagamihara, Kanagawa, Japan
Atsuko Masumi  Department of Safety Research on Blood and Biological Products, National Institute of Infectious Diseases, Tokyo, Japan

Yasunobu Matsuda  Department of Medical Technology, Niigata University Graduate of Health Sciences, Niigata, Japan

Sachiko Matsuhashi  Department of Internal Medicine, Saga Medical School, Saga University, Saga, Japan

Takaya Matsuzuka  Department of Anatomy and Physiology, Kansas State University, Manhattan, KS, USA

Malgorzata Matusiewicz  Department of Medical Biochemistry, Wroclaw Medical University, Wroclaw, Poland

Warren L. May  Department of Health Administration, School of Health Related Professions, University of Mississippi Medical Center, Jackson, MS, USA

Arnulf Mayer  Department of Radiooncology and Radiotherapy, University Medical Center Mainz, Mainz, Germany

Matthew A. McBrian  Department of Biological Chemistry, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA

Joseph H. McCarty  MD Anderson Cancer Center, Houston, TX, USA

Molliane McGahren-Murray  Department of Systems Biology, Unit 1058, University of Texas MD Anderson Cancer Center, Houston, TX, USA

Katherine A. McGlynn  Division of Cancer Epidemiology and Genetics, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA

W. Glenn McGregor  University of Louisville, Louisville, KY, USA

Iain H. McKillop  Department of General Surgery, Carolinas Medical Center, Charlotte, NC, USA

Margaret McLaughlin-Drubin  Brigham and Women’s Hospital, Boston, MA, USA

Roger E. McLendon  Department of Pathology, Duke University Medical Center, Durham, NC, USA

Donald C. McMillan  University Department of Surgery, Royal Infirmary, Glasgow, UK

David W. Meek  Division of Cancer Research, Jacqui Wood Cancer Centre/CRC, University of Dundee, Dundee, UK

Annette Meeson  Institute of Genetic Medicine and North East Stem Cell Institute, Newcastle University, International Centre for Life, Newcastle upon Tyne, UK

Kamiya Mehla  The Eppley Institute for Research in Cancer and Allied Diseases, University of Nebraska Medical Center, Omaha, NE, USA
Arianeb Mehrabi  Department of General, Visceral and Transplantation Surgery, University of Heidelberg, Heidelberg, Germany

Mohammad Mehrmohammadi  Department of Biomedical Engineering, Wayne State University, Detroit, MI, USA

Anil Mehta  Division of Cardiovascular Medicine, University of Dundee, Dundee, UK

Kapil Mehta  The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Rekha Mehta  Regulatory Toxicology Research Division, Bureau of Chemical Safety, Food Directorate, HPFB, Health Canada, Ottawa, ON, Canada

Yaron Meirow  The Lautenberg Center for Immunology and Cancer Research, Israel-Canada Medical, Research Institute Faculty of Medicine, The Hebrew University, Jerusalem, Israel

Bar-Eli Menashe  Department of Cancer Biology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Wenbo Meng  Special Minimally Invasive Surgery, Hepatopancreatobiliary Surgery Institute of Gansu Province, Clinical Medical College Cancer Center, First Hospital of Lanzhou University, Lanzhou University, Lanzhou, Gansu, China

Deepak Menon  Department of Biological Sciences, Hunter College of the City University of New York, New York, NY, USA

Heather Mernitz  Alverno College, Milwaukee, WI, USA

Karl-Heinz Merz  Department of Chemistry, Division of Food Chemistry and Toxicology, University of Kaiserslautern, Kaiserslautern, Germany

Enrique Mesri  Viral Oncology Program, Sylvester Comprehensive Cancer Center and Development Center for AIDS Research, Department of Microbiology and Immunology, University of Miami Miller School of Medicine, Miami, FL, USA

Roman Mezencev  Georgia Institute of Technology, School of Biology, Atlanta, GA, USA

Jun Mi  Department of Therapeutic Radiology and Oncology, University of Virginia School of Medicine, Charlottesville, VA, USA

Dennis F. Michiel  Biopharmaceutical Development Program, Leidos Biomedical Research, Inc., Frederick National Laboratory for Cancer Research, Frederick, MD, USA

Josef Michl  Departments of Pathology, Molecular and Cell Biology, State University of New York, Downstate Medical Center, New York, NY, USA

Stephan Mielke  Abteilung Hämatologie und Onkologie, Medizinische Klinik und Poliklinik II, Zentrum Innere Medizin (ZIM), Universitätsklinikum Würzburg, Würzburg, Germany
Oleg Militsakh  Head and Neck Surgery, Nebraska Medical Center, Nebraska Methodist Hospital, Omaha, NE, USA

Mark Steven Miller  Department of Cancer Biology, Comprehensive Cancer Center, Wake Forest School of Medicine, Winston-Salem, NC, USA

Takeo Minaguchi  Department of Obstetrics and Gynecology, University of Tsukuba, Tokyo, Japan

Nagahiro Minato  Department of Immunology and Cell Biology, Graduate School of Medicine, Kyoto University, Kyoto, Japan

Rodney F. Minchin  School of Biomedical Sciences, University of Queensland, St Lucia, QLD, Australia

Lucas Minig  Gynecologic Department, Valencian Institute of Oncology (IVO), Valencia, Spain

John D. Minna  Hamon Center for Therapeutic Oncology Research and Departments of Pathology, Internal Medicine and Pharmacology, University of Texas Southwestern Medical Center, Dallas, TX, USA

Claudia Mitchell  Institut Cochin, Université Paris Descartes, CNRS, Paris, France

Kazuo Miyashita  Faculty of Fisheries Sciences, Department of Bioresources Chemistry, Hokkaido University, Hakodate, Hokkaido, Japan

Eiji Miyoshi  Department of Molecular Biochemistry and Clinical Investigation, Osaka University Graduate School of Medicine, Suita, Japan

Jun Miyoshi  Department of Molecular Biology, Osaka Medical Center for Cancer and Cardiovascular Diseases, Osaka, Japan

Toshihiko Mizuta  Department of Internal Medicine, Imari Arita Kyoritsu Hospital, Saga, Japan

Omeed Moaven  Department of Surgery, Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA

K. Thomas Moesta  Klinik für Chirurgie und Chirurgische Onkologie, Charité Universitätmedizin Berlin, Berlin, Germany

Seyed Moein Moghimi  Nanomedicine Research Group, Centre for Pharmaceutical Nanotechnology and Nanotoxicology, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark

Sunish Mohanan  Baker Institute for Animal Health, Department of Biomedical Sciences, School of Veterinary Medicine, Cornell University, Ithaca, NY, USA

Sonia Mohinta  Department of Medical Microbiology, Immunology and Cell Biology, Southern Illinois University, School of Medicine, Springfield, IL, USA
Jan Mollenhauer  Molecular Oncology Group, University of Southern Denmark, Odense, Denmark

Michael B. Møller  Department of Pathology, Odense University Hospital, Odense, Denmark

Bruno Mondovi  Department of Biochemical Sciences “A. Rossi Fanelli”, Sapienza University of Rome, Rome, Italy

Alessandra Montecucco  Istituto di Genetica Molecolare CNR, Pavia, Italy

Ruggero Montesano  International Agency for Research on Cancer, Lyon, France

Wolter J. Mooi  Department of Pathology, VU Medical Center, Amsterdam, The Netherlands

Amy C. Moore  Georgia Cancer Coalition, Atlanta, GA, USA

Malcolm A. S. Moore  Department of Cell Biology, Memorial-SloanKettering Cancer Center, New York, NY, USA

Cesar A. Moran  Department of Pathology, MD Anderson Cancer Center, Houston, TX, USA

Jan S. Moreb  Department of Medicine, Division of Hematology/Oncology, College of Medicine, University of Florida, Gainesville, USA

Sergio Moreno  Instituto de Biología Molecular y Celular del Cáncer, CSIC/Universidad de Salamanca, Salamanca, Spain

Fabiola Moretti  Institute of Cell Biology and Neurobiology, National Council Research of Italy, Rome, Italy

Eiichiro Mori  Department of Radiation Oncology, School of Medicine, Nara Medical University, Kashihara, Nara, Japan

Akira Morimoto  Department of Pediatrics, Kyoto Prefectural University of Medicine, Kyoto, Japan

Pat J. Morin  Laboratory of Molecular Biology and Immunology, National Institute on Aging, Baltimore, MD, USA

Department of Pathology, Oncology and Gynecology and Obstetrics, Johns Hopkins Medical Institutions, Baltimore, MD, USA

American Association for Cancer Research, Philadelphia, PA, USA

Christine M. Morris  Cancer Genetics Research, University of Otago, Christchurch, New Zealand

Cynthia C. Morton  Department of Pathology, Brigham and Women’s Hospital, Boston, MA, USA

Gabriela Mösllein  Helios Klinik, Allgemein- und Viszeralchirurgie, Bochum, Germany
Justin L. Mott  Department of Biochemistry and Molecular Biology, University of Nebraska Medical Center, Omaha, NE, USA

Spyro Mousses  Cancer Genetics Branch, National Human Genome Research Institute, NIH, Bethesda, MD, USA

Pavlos Msaouel  Jacobi Medical Center, Albert Einstein College of Medicine, Bronx, NY, USA

Sebastian Mueller  Centre of Alcohol Research (CAR), University of Heidelberg, Heidelberg, Germany

Susette C. Mueller  Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, Washington, DC, USA

Subhajit Mukherjee  Albert Einstein College of Medicine, New York, NY, USA

Hans K. Müller-Hermelink  Institute of Pathology, University of Würzburg, Würzburg, Germany

Gabriele Multhoff  Klinikum rechts der Isar, Department Radiation Oncology, TU München and CCG – “Innate Immunity in Tumor Biology”, Helmholtz Zentrum München, Munich, Germany

Julia Münzker  Division of Endocrinology and Diabetology, Department of Internal Medicine, Medical University of Graz, Graz, Austria

Ramachandran Murali  Department of Biomedical Sciences, Cedars-Sinai Medical Center, Los Angeles, CA, USA

Kenji Muro  Department of Neurological Surgery, Robert H. Lurie Comprehensive Cancer Center, Northwestern University Feinberg School of Medicine, Chicago, IL, USA

Mandi Murph  Department of Pharmaceutical and Biomedical Sciences, Georgia Cancer Coalition Distinguished Cancer Scholar, University of Georgia and College of Pharmacy, Athens, GA, USA

Edward L. Murphy  University of California, School of Medicine, San Francisco, CA, USA

Paul G. Murray  CRUK Institute for Cancer Studies, Molecular Pharmacology, Medical School, University of Birmingham, Birmingham, UK

Ruth J. Muschel  Radiation Oncology and Biology, University of Oxford, Oxford, UK

Markus Müschen  Leukemia and Lymphoma Program, Norris Comprehensive Cancer Center, University of Southern California, Los Angeles, CA, USA

Antonio Musio  Institute for Genetic and Biomedical Research, National Research Council, Pisa, Italy

Istituto Toscano Tumori, Firenze, Italy
Akira Naganuma  Laboratory of Molecular and Biochemical Toxicology, 
Graduate School of Pharmaceutical Sciences, Tohoku University, Sendai, 
Japan

Shigekazu Nagata  Osaka University Medical School, Osaka, Japan

Christina M. Nagle  Cancer and Population Studies, Queensland Institute of 
Medical Research, Royal Brisbane Hospital, Brisbane, QLD, Australia

Rita Nahta  Department of Pharmacology, Emory University, Atlanta, GA, 
USA

Akira Nakagawara  Saga Medical Center KOSEIKAN, Tosu, Japan

Tetsuya Nakatsura  Division of Cancer Immunotherapy, Exploratory Oncol-
ology Research and Clinical Trial Center, National Cancer Center, Kashiwa City, 
Chiba Prefecture, Japan

Harikrishna Nakshatri  IU Simon Cancer Center, Indiana University School 
of Medicine, Indianapolis, IN, USA

Patrizia Nanni  Laboratory of Immunology and Biology of Metastasis, 
Department of Experimental, Diagnostic and Specialty Medicine, University 
of Bologna, Bologna, Italy

Zvi Naor  Department of Biochemistry and Molecular Biology, The George 
S. Wise Faculty of Life Sciences, Tel Aviv University, Tel Aviv, Israel

Mohd W. Nasser  Department of Pathology, Comprehensive Cancer Centre, 
The Ohio State Medical Centre, Columbus, OH, USA

Christian C. Naus  Department of Cellular and Physiological Sciences, The 
University of British Columbia, Vancouver, BC, Canada

Tim S. Nawrot  Division of Lung Toxicology, Department of Occupational 
and Environmental Medicine (T.S.N.) and the Studies Coordinating Centre 
(J.A.S.), Division of Hypertension and Cardiovascular Rehabilitation, Depart-
ment of Cardiovascular Diseases, University of Leuven, Leuven, Belgium

David F. Nellis  Biopharmaceutical Development Program, SAIC-Frederick, 
Inc., National Cancer Institute-Frederick, Frederick, MD, USA

Kenneth P. Nephew  School of Medicine, Indiana University, Bloomington, 
IN, USA

David M. Neskey  Department of Otolaryngology and Head and Neck Sur-
gery, Medical University of South Carolina, Charleston, SC, USA

Klaus W. Neuhaus  School of Dental Medicine, Department of Preventive, 
Restorative and Pediatric Dentistry, University of Bern, Bern, Switzerland

Kornelia Neveling  Department of Human Genetics, Radboud University 
Nijmegen Medical Centre, Nijmegen, The Netherlands

Brad Neville  Head and Neck Tumor Program, Hollings Cancer Center, 
Medical University of South Carolina, Charleston, SC, USA
Calvin S. H. Ng  Division of Cardiothoracic Surgery, Chinese University of Hong Kong, Hong Kong, China

Irene O. L. Ng  Department of Pathology, The University of Hong Kong, Hong Kong, China

Duc Nguyen  Howard Hughes Medical Institute, Yale University School of Medicine, New Haven, CT, USA

Carole Nico  Faculté de Médecine Paris – Descartes, UPRES 18-33, Groupe Hospitalier Cochin – Saint Vincent de Paul, Paris, France

Santo V. Nicosia  H. Lee Moffitt Cancer Center, Tampa, FL, USA

Anne T. Nies  Dr. Margarete Fischer-Bosch-Institut für Klinische Pharmakologie, Stuttgart, Germany

M. Angela Nieto  Instituto de Neurociencias de Alicante CSIC-UMH, Sant Joan d’Alacant, Spain

Omgo E. Nieweg  Melanoma Institute Australia, North Sydney, NSW, Australia

Jonas Nilsson  Department of Clinical Chemistry and Transfusion Medicin, Institute of Biomedicine, Sahlgrenska Academy at Göteborg University, Göteborg, Sweden

Ewa Ninio  INSERM UMRS, Université Pierre et Marie Curie-Paris, Paris, France

Douglas Noonan  University of Insubria, Varese, Italy

Larry Norton  Breast Cancer Medicine Service, Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

Francisco J. Novo  Department of Biochemistry and Genetics, University of Navarra, Pamplona, Spain

Ruslan Novosialy  Department of Cancer Immunobiology, Eli Lilly and Company, New York, NY, USA

Noa Noy  Department of Cellular and Molecular Medicine, Lerner Research Institute, Cleveland Clinic and Case Western Reserve University, Cleveland, OH, USA

Hala H. Nsouli  Department of Epidemiology and Biostatistics, The George Washington University School of Public Health and Health Services, Washington, DC, USA

Lauren M. Nunez  Department of Biological Science, College of Pharmacy, Touro University-CA, Vallyo, CA, USA

John P. O’Bryan  Department of Pharmacology, University of Illinois College of Medicine, Chicago, IL, USA

Jesse Brown VA Medical Center, Chicago, IL, USA
James P. B. O’Connor  Institute of Cancer Sciences, University of Manchester, Manchester, UK

Sarah T. O’Dwyer  Colorectal and Peritoneal Oncology Centre, The Christie NHS Foundation Trust, University of Manchester, Manchester, UK

John O’Leary  Departments of Obstetrics and Gynaecology/Histopathology, Trinity College Dublin, Trinity Centre for Health Sciences, Dublin, Ireland

Ruth M. O'Rega  Winship Cancer Institute, Emory University, Atlanta, GA, USA

Sharon O’Toole  Departments of Obstetrics and Gynaecology/Histopathology, Trinity College Dublin, Trinity Centre for Health Sciences, Dublin, Ireland

André Oberthür  Department of Pediatric Oncology and Hematology, Children’s Hospital, University of Cologne, Cologne, Germany

Takahiro Ochiya  Division of Molecular and Cellular Medicine, National Cancer Center Research Institute, Tokyo, Japan

Stefan Offermanns  Department of Pharmacology, Max-Planck-Institute for Heart and Lung Research, Bad Nauheim, Germany

Anat Ohali  Cancer Vaccine Section, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA

Takeo Ohnishi  Department of Radiation Oncology, School of Medicine, Nara Medical University, Kashihara, Nara, Japan

Hitoshi Ohno  Department of Internal Medicine, Faculty of Medicine, Kyoto University, Kyoto, Japan

Kevin R. Oldenburg  MatriCal, Inc., Spokane, WA, USA

Magali Olivier  Group of Molecular Mechanisms and Biomarkers, International Agency for Research on Cancer, World Health Organization, Lyon, France

Egbert Oosterwijk  Laboratory of Experimental Urology, University Medical Centre Nijmegen, Nijmegen, The Netherlands

Gertraud Orend  Department of Clinical and Biological Sciences, Institute of Biochemistry and Genetics, Center for Biomedicine, DKBW, University of Basel, Basel, Switzerland

Makoto Osanai  Department of Pathology, Kochi University School of Medicine, Kochi, Japan

Eduardo Osinaga  Departamento de Inmunobiologia, Facultad de Medicina, Universidad de la República, Montevideo, Uruguay

German Ott  Department of Clinical Pathology, Robert-Bosch-Krankenhaus, Stuttgart, Germany
Christian Ottensmeier  CRC Wessex Oncology Unit, Southampton General Hospital and Tenovus Laboratory, Southampton University Hospital Trust, Southampton, UK

Sai-Hong Ignatius Ou  Chao Family Comprehensive Cancer Center, University of California, Irvine, CA, USA

Iwata Ozaki  Health Administration Center, Saga Medical School, Saga University, Saga, Japan

Shuji Ozaki  Department of Hematology, Tokushima Prefectural Central Hospital, Tokushima, Japan

Mónica Pérez-Ríos  Department of Preventive Medicine and Public Health, School of Medicine, University of Santiago de Compostela, Santiago de Compostela, Spain

Helen Pace  Department of Molecular Virology, Immunology and Medical Genetics, Ohio State University Comprehensive Cancer Center, Columbus, OH, USA

Simon Pacey  Cancer Research UK Center for Cancer Therapeutics, The Institute of Cancer Research, Sutton, Surrey, UK

Mabel Padilla  Molecular Biology and Lung Cancer Program, Lovelace Respiratory Research Institute, Albuquerque, NM, USA

Sumanta Kumar Pal  Department of Medical Oncology and Experimental Therapeutics, City of Hope Comprehensive Cancer Center, Duarte, CA, USA

Viswanathan Palanisamy  Department of Oral Health Sciences, Medical University of South Carolina, Charleston, SC, USA

Pier Paolo Pandolfi  Division of Genetics, Beth Israel Deaconess Medical Center, Boston, MA, USA

Klaus Pantel  Universitäts-Krankenhaus Eppendorf, Hamburg, Germany

Melissa C. Paoloni  National Cancer Institute, Center for Cancer Research, Comparative Oncology Program, Bethesda, MD, USA

Evangelia Papadimitriou  Laboratory of Molecular Pharmacology, Department of Pharmacy, School of Health Sciences, University of Patras, Patras, Greece

Philippe Paparel  Department of Urology, Lyon Sud University Hospital, Pierre Benite, France

Athanasios G. Papavasiliou  Department of Biological Chemistry, Medical School, University of Athens, Goudi, Athens, Greece

Sabitha Papineni  Department of Veterinary Physiology and Pharmacology, Texas A&M University, College Station, TX, USA
Juha Peltonen  Department of Anatomy, Institute of Biomedicine, University of Turku, Turku, Finland

Sirkku Peltonen  Department of Dermatology, University of Turku, Turku, Finland

Josef M. Penninger  Institute of Molecular Biotechnology of the Austrian Academy of Sciences, Vienna, Austria

Richard T. Penson  Division of Hematology Oncology, Massachusetts General Hospital, Boston, MA, USA

Maikel P. Peppelenbosch  Erasmus Medical Center, University Medical Center Rotterdam, Rotterdam, The Netherlands

Carlos Perez-Stable  Geriatric Research, Education, and Clinical Center Research Service, Bruce W. Carter Veterans Affairs Medical Center, Miami, FL, USA

Francisco G. Pernas  National Institute on Deafness and Other Communication, Disorders and National Cancer Institute, NIH, Bethesda, MD, USA

Silverio Perrotta  Department of Pediatrics, Second University of Naples, Naples, Italy

Godefridus J. Peters  Department of Medical Oncology, VU University Medical Center, Amsterdam, The Netherlands

Marleen M. R. Petit  Department of Human Genetics, University of Leuven, Leuven, Belgium

Peter Petzelbauer  Department of Dermatology, Division of General Dermatology, Medical University of Vienna, Vienna, Austria

Claudia Pföhler  Department of Dermatology, Saarland University Medical School, Homburg/Saar, Germany

Michael Pfreundschuh  Klinik für Innere Medizin I, Universität des Saarlandes, Homburg, Germany

Philip A. Philip  Karmanos Cancer Institute, Wayne State University, Detroit, MI, USA

Marco A. Pierotti  Molecular Genetics of Cancer, Fondazione Istituto FIRC di Oncologia Molecolare, Milan, Italy

Paola Pietrangeli  Department of Biochemical Sciences “A. Rossi Fanelli”, Sapienza University of Rome, Rome, Italy

Torsten Pietsch  Institut für Neuropathologie, Kinderchirurgie, Universitätskliniken Bonn, Bonn, Germany

Sreeraj G. Pillai  Department of Surgery, Washington University School of Medicine, St. Louis, MO, USA

Lorenzo Pinna  Department of Biological Chemistry, University of Padua, Padua, Italy
Michael Pishvaian  Lombardi Comprehensive Cancer Center, Georgetown University, Washington, DC, USA

Ellen S. Pizer  Laboratory of Cellular and Molecular Biology, National Institute on Aging, NIH, Baltimore, MD, USA

Kristjan Plaetzer  Laboratory of Photodynamic Inactivation of Microorganisms, Division of Physics and Biophysics, University of Salzburg, Salzburg, Austria

Christoph Plass  German Cancer Research Center (DKFZ), Heidelberg, Germany

Jeffrey L. Platt  Departments of Microbiology and Immunology and Department of Surgery, University of Michigan, Ann Arbor, MI, USA

Mark R. Player  Johnson & Johnson Pharmaceutical Research and Development, Spring House, PA, USA

Isabelle Plo  INSERM, U1170, Hématopoièse et cellules souches, Gustave Roussy–PR1, Villejuif, France

Stephen R. Plymate  Department of Medicine, Division of Gerontology and Geriatric Medicine, University of Washington, Seattle, WA, USA

Klaus Podar  Medical Oncology, National Center for Tumor Diseases (NCT), University of Heidelberg, Heidelberg, Germany

Beatriz G. T. Pogo  Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai, New York, NY, USA

Jeffrey W. Pollard  MRC Centre for Reproductive Health, Queen’s Medical Research Institute, The University of Edinburgh, Edinburgh, UK
Department of Developmental and Molecular Biology, Albert Einstein College of Medicine, New York, NY, USA

Simona Polo  University of Milan, Medical School, Milan, Italy

Satyanarayana R. Pondugula  Department of Anatomy, Physiology, and Pharmacology, Auburn University, Auburn, AL, USA
Auburn University Research Initiative in Cancer, Auburn University, Auburn, AL, USA

Sreenivasan Ponnambalam  Endothelial Cell Biology Unit, School of Molecular and Cellular Biology, University of Leeds, Leeds, UK

Mirco Ponzoni  Experimental Therapies Unit, Laboratory of Oncology, Istituto Giannina Gaslini, Genoa, Italy

Beatrice L. Pool-Zobel  Nutritional Toxicology, Friedrich-Schiller-University of Jena, Jena, Germany

Annemarie Poustka  Division of Molecular Genome Analysis, DKFZ, Heidelberg, Germany
Contributors

Marissa V. Powers  Cancer Research UK Cancer Therapeutics Unit, The Institute of Cancer Research, Sutton, London, UK

Garth Powis  NCI-Designated Cancer Center, Sanford Burnham Prebys Medical Discovery Institute, La Jolla, CA, USA

Graziella Pratesi  Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy

George C. Prendergast  Department of Pathology, Anatomy and Cell Biology, Jefferson Medical School, Lankenau Institute for Medical Research, Wynnewood, PA, USA

Victor G. Prieto  Department of Pathology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Sharon Prince  Department of Human Biology, Health Science Faculty, Division of Cell Biology, University of Cape Town, Rondebosch, South Africa

Kevin M. Prise  Centre for Cancer Research and Cell Biology, Queen’s University Belfast, Belfast, UK

Kathy Pritchard-Jones  Institute of Cancer Research/Royal Marsden Hospital, Sutton, Surrey, UK

Tassula Proikas-Cezanne  Autophagy Laboratory, Department of Molecular Biology, Interfaculty Institute for Cell Biology, Faculty of Science, Eberhard Karls University Tübingen, Tübingen, Germany

Ching-Hon Pui  St. Jude Children’s Research Hospital, Memphis, TN, USA

Karen Pulford  Nuffield Division of Clinical Laboratory Sciences, University of Oxford, John Radcliffe Hospital, Oxford, UK

Teresa Gómez Del Pulgar  Instituto de Investigaciones Biomedicas, CSIC, Madrid, Spain

Vinee Purohit  The Eppley Institute for Research in Cancer and Allied Diseases, and Department of Pathology and Microbiology, University of Nebraska Medical Center, Omaha, NE, USA

Keith R. Pye  Cell ProTx, Aberdeen, UK

Chao-Nan Qian  Department of Nasopharyngeal Carcinoma, Sun Yat-sen University Cancer Center, Guangzhou, People’s Republic of China

Jiahua Qian  Qiagen, Frederick, MD, USA

Liang Qiao  Storr Liver Centre, Westmead Millennium Institute for Medical Research, The University of Sydney at Westmead Hospital, Westmead, NSW, Australia

Hartmut M. Rabes  Institute of Pathology, University of Munich, Munich, Germany

Bar-Shavit Rachel  Department of Oncology, Hadassah-University Hospital, Jerusalem, Israel
Ronny Racine  Department of Urology, University of Miami – Miller School of Medicine, Miami, FL, USA

Dirk Rades  Department of Radiation Oncology, University Hospital Schleswig-Holstein, Campus Luebeck, Germany

Jerald P. Radich  Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA, USA

Norman S. Radin  Department of Psychiatry, University of Michigan, Ann Arbor, MI, USA

Fulvio Della Ragione  Department of Biochemistry and Biophysics, Second University of Naples, Naples, Italy

Ryan L. Ragland  Department of Human Genetics, University of Michigan, Ann Arbor, MI, USA

Gilbert J. Rahme  Departments of Pediatrics and of Genetics, Norris Cotton Cancer Center, Geisel School of Medicine at Dartmouth, Hanover, NH, USA

Nino Rainusso  Department of Pediatrics, Section of Hematology-Oncology, Baylor College of Medicine, Texas Children’s Cancer and Hematology Centers, Houston, TX, USA

Ayyappan K. Rajasekaran  Nemours Center for Childhood Cancer Research, Alfred I duPont Hospital for Children, Wilmington, DE, USA

Jayadev Raju  Regulatory Toxicology Research Division, Bureau of Chemical Safety, Food Directorate, HPFB, Health Canada, Ottawa, ON, Canada

Sundaram Ramakrishnan  Department of Pharmacology, University of Minnesota, Minneapolis, MN, USA

Kota V. Ramana  Department of Biochemistry and Molecular Biology, University of Texas Medical Branch, Galveston, TX, USA

Praneela Rameshwar  Medicine-Hematology/Oncology, Rutgers, New Jersey Medical School, Newark, NJ, USA

Santiago Ramón y Cajal  Department of Pathology, Vall d’Hebron University Hospital, Barcelona, Spain

Giorgia Randi  Department of Epidemiology, Institute for Farmacological Research Mario Negri, Milan, Italy

Ramachandran Rashmi  Department of Radiation Oncology, Washington University School of Medicine, St. Louis, MO, USA

Mariusz Z. Ratajczak  Stem Cell Institute at James Graham Brown Cancer Center, University of Louisville, Louisville, KY, USA

Anke Rattenholl  Applied Biotechnology Division, Department of Engineering and Mathematics, University of Applied Sciences Bielefeld, Bielefeld, Germany
Cocav A. Rauwerdink  Lahey Center for Hematology/Oncology at Parkland Medical Center, Salem, NH, USA

Alberto Ravaioli  Department of Oncology, Instituto Scientifico Romagnolo per lo s, Infermi Hospital, Rimini, Italy

Mira R. Ray  The Prostate Centre at Vancouver General Hospital, University of British Columbia, Vancouver, BC, Canada

Roger Reddel  Children’s Medical Research Institute, The University of Sydney, Westmead, NSW, Australia

May J. Reed  Department of Medicine, Division of Gerontology and Geriatric Medicine, University of Washington, Seattle, WA, USA

Eduardo M. Rego  Medical School of Ribeirão Preto, University of São Paulo, Ribeirão Preto, Brazil

Reuven Reich  Institute for Drug Research, School of Pharmacy, Faculty of Medicine, The Hebrew University of Jerusalem, Jerusalem, Israel

Jean-Marie Reimund  Université de Strasbourg, Faculté de Médecine, INSERM U1113 and Fédération de Médecine Translationnelle de Strasbourg (FMTS), and, Hôpitaux Universitaires de Strasbourg, Hôpital de Hautepierre, Service d’Hépato-Gastroentérologie et d’Assistance Nutritive, Strasbourg, France

Celso A. Reis  Institute of Molecular Pathology and Immunology, University of Porto, Porto, Portugal

Ling Ren  Pediatric Oncology Branch, National Cancer Institute, Center for Cancer Research, Bethesda, MD, USA

Andrew G. Renehan  Colorectal and Peritoneal Oncology Centre, The Christie NHS Foundation Trust, University of Manchester, Manchester, UK

Marcus Renner  Division of Molecular Genome Analysis, DKFZ, Heidelberg, Germany

Paul S. Rennie  The Prostate Centre at Vancouver General Hospital, University of British Columbia, Vancouver, BC, Canada

Domenico Ribatti  Department of Basic Medical Sciences, Neurosciences and Sensory Organs, University of Bari Medical School, Bari, Italy

Raul C. Ribeiro  Department of Oncology, St. Jude Children’s Research Hospital, Memphis, TN, USA

Des R. Richardson  Department of Pathology, University of Sydney, Sydney, NSW, Australia

Victoria M. Richon  Merck Research Laboratories, Boston, MA, USA

Justin L. Ricker  Merck Research Laboratories, Boston, MA, USA

Thomas Ried  Genetics Branch, Center for Cancer Research, National Cancer Institute, NIH, Bethesda, MD, USA
Jörg Ringel  Department of Medicine A, University of Greifswald, Greifswald, Germany

Carrie Rinker-Schaffer  Department of Surgery, Section of Urology, The University of Chicago, Chicago, IL, USA

Francisco Rivero  Centre for Cardiovascular and Metabolic Research, The Hull York Medical School, University of Hull, Hull, UK

Tadeusz Robak  Department of Hematology, Medical University of Lodz, Lodz, Poland

Rita Roberti  Department of Experimental Medicine, University of Perugia, Perugia, Italy

Fredika M. Robertson  The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Angelo Rodrigues  Department of Pathology, Portuguese Oncology Institute-Porto, Porto, Portugal

Delvys Rodriguez-Abreu  Hospital Universitario Insular, Las Palmas de Gran Canaria, Spain

Jose Luis Rodríguez-Fernández  Departamento de Microbiología Molecular y Biología de las Infecciones, Centro de Investigaciones Biológicas, Madrid, Spain

Carlos Rodriguez-Galindo  Dana-Farber Cancer Institute, Boston, MA, USA

Florian Roka  Department of Surgical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Cleofé Romagosa  Department of Pathology, Vall d’Hebron University Hospital, Barcelona, Spain

Ze’ev Ronai  Signal Transduction Program, Burnham Institute for Medical Research, La Jolla, CA, USA

Luca Roncucci  Department of Diagnostic and Clinical Medicine, and Public Health, University of Modena and Reggio Emilia, Modena, Italy

Igor B. Roninson  Department of Drug Discovery and Biomedical Sciences, South Carolina College of Pharmacy, Columbia, SC, USA

Jatin Roper  Tufts Medical Center, Boston, MA, USA

Rafael Rosell  Instituto Oncológico Dr. Rosell, Quiron-Dexeus University Hospital, Barcelona, Spain

Pangaea Biotech, Barcelona, Spain

Cancer Biology and Precision Medicine Program, Catalan Institute of Oncology, Hospital Germans Trias i Pujol, Badalona, Spain

Molecular Oncology Research (MORe) Foundation, Barcelona, Spain
Eliot M. Rosen  Department of Oncology, Georgetown University School of Medicine, Washington, DC, USA
Department of Biochemistry, Molecular and Cellular Biology, Georgetown University School of Medicine, Washington, DC, USA
Department of Radiation Medicine, Georgetown University School of Medicine, Washington, DC, USA

Carol L. Rosenberg  Boston Medical Center and Boston University School of Medicine, Boston, MA, USA

Steven A. Rosenzweig  Department of Cell and Molecular Pharmacology and Experimental Therapeutics, Medical University of South Carolina, Charleston, SC, USA

Angelo Rosolen  Department of Pediatrics, Hemato-oncology Unit, University of Padua, Padova, Italy

Jeffrey S. Ross  Albany Medical College, Albany, NY, USA

Theodora S. Ross  Department of Internal Medicine, University of Texas, Southwestern Medical Center, Dallas, TX, USA

Catalina A. Rosselló  University of the Balearic Islands, Palma de Mallorca, Spain

Anita De Rossi  Viral Oncology Unit and AIDS Reference Center, Section of Oncology and Immunology, Department of Surgery, Oncology and Gastroenterology, University of Padova, Padova, Italy

Alberto Ruano-Ravina  Department of Preventive Medicine and Public Health, School of Medicine, University of Santiago de Compostela, Santiago de Compostela, Spain

Tami Rubinek  Tel Aviv Medical Center and Tel Aviv University, Tel Aviv, Israel

Luca Rubino  Department of Oncology, Humanitas Research Hospital, Humanitas Cancer Center, Rozzano, Milan, Italy

Marco Ruggiero  Dream Master Laboratory, Chandler, AZ, USA

Francisco Ruiz-Cabello Osuna  UGC Laboratorio Clínico Hospital Universitario Virgen de las Nieves Facultad de Medicina, Universidad de Granada, Granada, Spain

María Victoria Ruiz-Pérez  Department of Microbiology, Tumor and Cell Biology (MTC), Karolinska Institutet, Stockholm, Sweden

Zoran Rumboldt  Department of Radiology and Radiological Science, Medical University of South Carolina, Charleston, SC, USA

Erkki Ruoslahti  Cancer Research Center, Sanford Burnham Prebys Medical Discovery Institute, La Jolla, CA, USA
Center for Nanomedicine and Department of Molecular Cellular and Developmental Biology, University of California, Santa Barbara, Santa Barbara, CA, USA

**Dario Rusciano** Friedrich Miescher Institute, Basel, Switzerland

**Giandomenico Russo** Istituto Dermopatico dell’Immacolata, Istituto di Ricovery e Cura a Carattere Scientifico, Roma, Italy

**Irma H. Russo** Breast Cancer Research Laboratory, Fox Chase Cancer Center, Philadelphia, PA, USA

**Jose Russo** Breast Cancer Research Laboratory, Fox Chase Cancer Center, Philadelphia, PA, USA

**James T. Rutka** The Arthur and Sonia Labatt Brain Tumour Research Centre, The Hospital for Sick Children, The University of Toronto, Toronto, ON, Canada

**James Ryan** Head and Neck Tumor Program, Hollings Cancer Center, Medical University of South Carolina, Charleston, SC, USA

**Venkata S. Sabbisetti** Renal Division, Department of Medicine, Brigham and Women’s Hospital, The Harvard Clinical and Translational Science Center, Boston, MA, USA

**Anne Thoustrup Saber** National Institute of Occupational Health, Copenhagen, Denmark

**Gauri Sabnis** University of Maryland School of Medicine, Baltimore, MD, USA

**Mohamad Seyed Sadr** Montreal, QC, Canada

**Guillermo T. Sáez** Department of Biochemistry and Molecular Biology, Faculty of Medicine and Odontology-INCLIVA, University of Valencia, Valencia, Spain

Service of Clinical Analysis, Dr. Peset University Hospital, Valencia, Spain

**Stephen Safe** Department of Veterinary Physiology and Pharmacology, Texas A&M University, College Station, TX, USA

**Xavier Sagaert** Department of Pathology, University Hospitals of K.U. Leuven, Leuven, Belgium

**Asim Saha** University of Cincinnati and The Barrett Cancer Center, Cincinnati, OH, USA

**Emine Sahin** Institute for Physiology, Center for Physiology and Pharmacology, Medical University of Vienna, Vienna, Austria

**Kunal Saigal** National Institute on Deafness and Other Communication, Disorders and National Cancer Institute, NIH, Bethesda, MD, USA
Toshiyuki Sakai  Department of Molecular-Targeting Cancer Prevention,
Graduate School of Medical Science, Kyoto Prefectural University of Medi-
cine, Kyoto, Japan

Bodour Salhia  Cancer and Cell Biology Division, The Translational Geno-
mics Research Institute, Phoenix, AZ, USA

Helmut Rainer Salih  Department of Internal Medicine II, University Hos-
pital of Tübingen, Eberhard-Karls-University, Tübingen, Germany

Beth A. Salmon  Department of Pharmacology and Therapeutics, University
of Florida, Gainesville, FL, USA

Howard W. Salmon  Department of Radiation Oncology, North Florida
Radiation Oncology, Gainesville, FL, USA

Raed Samar  Cancer Vaccine Section, National Cancer Institute, National
Institutes of Health, Bethesda, MD, USA

Julian R. Sampson  Institute of Medical Genetics, Cardiff University, Heath
Park, Cardiff, UK

Nianli Sang  Department of Biology, Drexel University College of Arts and
Sciences, Philadelphia, PA, USA

Manoranjan Santra  Neurology Research, Henry Ford Health System,
Detroit, MI, USA

Ehsan Sarafraz-Yazdi  Division of Gynecologic Oncology, Department of
OB/GYN, State University of New York, Downstate Medical Center, New
York, NY, USA

Frank Saran  Department of Radiotherapy and Paediatric Oncology, Royal
Marsden Hospital NHS Foundation Trust, Sutton, Surrey, UK

Devanand Sarkar  Department of Human and Molecular Genetics, Virginia
Commonwealth University, VCU Medical Center, School of Medicine, Rich-
mond, VA, USA

Fazlul H. Sarkar  Karmanos Cancer Institute, Wayne State University,
Detroit, MI, USA

Debashis Sarker  Cancer Research UK Center for Cancer Therapeutics, The
Institute of Cancer Research, Sutton, Surrey, UK

Ken Sasaki  Department of Cancer Biology, University of Kansas Cancer
Center, The University of Kansas Medical Center, Kansas City, KS, USA

Hiroyuki Sasaki  Division of Epigenomics and Development, Medical Insti-
tute of Bioregulation, Kyushu University, Fukuoka, Japan

Tomikazu Sasaki  Department of Chemistry, University of Washington, Seattle,
WA, USA

A. Kate Sasser  Department of Pediatrics, Columbus Children’s Research
Institute, The Ohio State University, Columbus, OH, USA
Aaron R. Sasson  Department of Surgery, University of Nebraska Medical Center, Omaha, NE, USA

Robert L. Satcher  Orthopaedic Oncology, University of Texas MD Anderson Cancer Center, Houston, TX, USA

Leonard A. Sauer  Bassett Research Institute, Cooperstown, NY, USA

Christobel Saunders  School of Surgery and Pathology, QEII Medical Centre, University of Western Australia, Crawley, WA, Australia

Constance L. L. Saw  Department of Pharmaceutics, Rutgers, The State University of New Jersey, Ernest Mario School of Pharmacy, Piscataway, NJ, USA

Anurag Saxena  Department of Pathology and Laboratory Medicine, Royal University Hospital, Saskatoon Health Region/University of Saskatchewan, Saskatoon, SK, Canada

Reinhold Schäfer  Comprehensive Cancer Center, Charité Universitätsmedizin Berlin, Berlin, Germany

Amanda Schalk  University of Illinois at Chicago, Chicago, IL, USA

Manfred Schartl  Physiologische Chemie I, Biozentrum, Universität Würzburg, Würzburg, Germany

Huub Schellekens  Department of Innovation Studies, Department of Pharmaceutical Sciences, Utrecht University, TD Utrecht, The Netherlands

Detlev Schindler  Department of Human Genetics, Biozentrum University of Würzburg, Würzburg, Germany

Peter M. Schlag  Comprehensive Cancer Center, Charité Campus Mitte, Berlin, Germany

Peter Schlosshauer  Department of Pathology, The Mount Sinai School of Medicine, New York, NY, USA

Martin Schlumberger  Department of Nuclear Medicine and Endocrine Oncology, Referral Center for Refractory Thyroid Tumors, Institut National du Cancer, Institut Gustave Roussy, Villejuif, France

Peter Schmezer  Division Epigenomics and Cancer Risk Factors, German Cancer Research Center (DKFZ), Heidelberg, Germany

Annette Schmitt-Graeff  Department of Pathology, University hospital Freiburg, Freiburg, Germany

Marc Schmitz  Institut für Immunologie, Technische Universität Dresden, Dresden, Germany

Dominik T. Schneider  Clinic of Pediatrics, Klinikum Dortmund, Dortmund, Germany

Katrina J. Schneider  Research Service, Veterans Administration Medical Center, Omaha, NE, USA
Stefan W. Schneider  Hauttumorzentrum Mannheim (HTZM), Universitätsmedizin Mannheim, Mannheim, Germany

Maria Schnelzer  Department of Radiation Protection and Health, Bundesamt für Strahlenschutz (Federal Office for Radiation Protection), Oberschleissheim, Germany

Nathalie Scholler  Center for Cancer, SRI Biosciences, Menlo Park, CA, USA

Axel H. Schönthal  University of Southern California, Keck School of Medicine, Los Angeles, CA, USA

Bart H. W. Schreuder  Department of Orthopaedics, Radboud University Medical Centre, Nijmegen, The Netherlands

Morgan S. Schrock  Department of Molecular Virology, Immunology and Medical Genetics, Ohio State University Comprehensive Cancer Center, Columbus, OH, USA

Laura W. Schrum  Department of Biology, The University of North Carolina at Charlotte, Charlotte, NC, USA

Wolfgang A. Schulz  Department of Urology, Heinrich Heine University, Düsseldorf, Germany

Manfred Schwab  German Cancer Research Center (DKFZ), Heidelberg, Germany

Markus Schwaiger  Department of Nuclear Medicine, Technical University of Munich, Munich, Germany

Edward L. Schwartz  Department of Medicine (Oncology), Albert Einstein College of Medicine, Bronx, NY, USA

Julie K. Schwarz  Department of Radiation Oncology, Washington University School of Medicine, St. Louis, MO, USA

Rony Seger  Department of Biological Regulation, The Weizmann Institute of Science, Rehovot, Israel

Gail M. Seigel  Center for Hearing and Deafness, University at Buffalo, Buffalo, NY, USA

Hiroyuki Seimiya  Division of Molecular Biotherapy, Cancer Chemotherapy Center, Japanese Foundation for Cancer Research, Koto-ku, Tokyo, Japan

Paule Seite  UMR CNRS 6187 Pôle Biologie Santé, University of Poitiers, Poitiers cedex, France

Helmut K. Seitz  Centre of Alcohol Research (CAR), University of Heidelberg, Heidelberg, Germany

Periasamy Selvaraj  Department of Pathology, Emory University School of Medicine, Atlanta, GA, USA
Wolfhard Semmler  Department of Medical Physics in Radiology, German Cancer Research Center, Heidelberg, Germany

Subrata Sen  Department of Molecular Pathology (Unit 951), The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Suvajit Sen  Department of Obstetrics and Gynecology, Jonsson Comprehensive Cancer Center, David Geffen School of Medicine, University of California at Los Angeles, Los Angeles, CA, USA

Vitalyi Senyuk  Department of Medicine (M/C 737), College of Medicine Research Building, University of Illinois at Chicago, Chicago, IL, USA

Nedime Serakinci  Medical Genetics, Near East University, Nicosia, Northern Cyprus

Christine Sers  Institute of Pathology, University Medicine Charité, Berlin, Germany

Marta Sesé  Department of Pathology, Vall d’Hebron University Hospital, Barcelona, Spain

Vijayasaradhi Setaluri  Department of Anatomy, Kasturba Medical College, Manipal University, Manipal, Karnataka, India

John F. Seymour  Haematology Department, Peter MacCallum Cancer Centre, East Melbourne, VIC, Australia

University of Melbourne, Parkville, VIC, Australia

Girish V. Shah  Department of Pharmacology, University of Louisiana College of Pharmacy, Monroe, LA, USA

Rabia K. Shahid  Department of Medicine, University of Saskatchewan, Saskatoon, SK, Canada

Sharmila Shankar  Department of Pathology and Laboratory Medicine, The University of Kansas Medical Center, Kansas City, KS, USA

Anand Sharma  Head and Neck Tumor Program, Hollings Cancer Center, Medical University of South Carolina, Charleston, SC, USA

Narinder Kumar Sharma  Department of Pharmacology, Toxicology and Therapeutics, and Medicine, The University of Kansas Medical Center, Kansas City, KS, USA

Jerry W. Shay  University of Texas Southwestern Medical Center, Dallas, TX, USA

Shijie Sheng  Department of Pathology and Oncology, Wayne State University School of Medicine, Karmanos Cancer Institute, Detroit, MI, USA

James L. Sherley  Asymmetrex, LLC, Boston, MA, USA

Donna Shewach  Department of Pharmacology, University of Michigan Medical School, Ann Arbor, MI, USA
Ie-Ming Shih  Department of Pathology, Johns Hopkins University School of Medicine, Baltimore, MD, USA

Kentaro Shikata  Department of Environmental Medicine, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan

Yosef Shiloh  Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel

Hyunsuk Shim  Department of Hematology/Oncology, Winship Cancer Institute, Emory University, Atlanta, GA, USA

Yutaka Shimada  Department of Surgery, Graduate School of Medicine, Kyoto University, Kyoto, Japan

Masahito Shimojo  School of Medicine, Osaka Medical College, Takatsuki, Osaka, Japan

Yong-Beom Shin  BioNanotechnology Research Center, Korea Research Institute of Bioscience and Biotechnology, Yuseong, Daejeon, Republic of Korea

Toshi Shioda  Massachusetts General Hospital Center for Cancer Research, Charlestown, MA, USA

Janet Shipley  The Institute of Cancer Research, Sutton, Surrey, UK

Girja S. Shukla  Department of Surgery, Vermont Comprehensive Cancer Center, College of Medicine, University of Vermont, Burlington, VT, USA

Arthur Shulkes  Department of Surgery, Austin Health, The University of Melbourne, Heidelberg, VIC, Australia

Antonio Sica  Department of Immunology, Fondazione Humanitas per la Ricerca, Rozzano, Milan, Italy

Gene P. Siegal  Department of Pathology, University of Alabama at Birmingham, Birmingham, AL, USA

Dietmar W. Siemann  Department of Radiation Oncology, University of Florida, Gainesville, FL, USA

Christine L. E. Siezen  National Institute of Public Health and Environment, Bilthoven, The Netherlands

Alexandra Silveira  Ocular Molecular Genetics Institute, Harvard Medical School, Massachusetts Eye and Ear Infirmary, Boston, MA, USA

Martin J. Simard  Le Centre de recherche du CHU de Québec-Université Laval: axe Oncologie, Le Centre de recherche sur le cancer de l’Université Laval, Québec, QC, Canada

Diane M. Simeone  Department of Physiology, University of Michigan Medical Center, Ann Arbor, MI, USA

Hans-Uwe Simon  Department of Pharmacology, University of Bern, Bern, Switzerland
Bryan Simoneau  Le Centre de recherche du CHU de Québec-Université Laval: axe Oncologie, Le Centre de recherche sur le cancer de l’Université Laval, Québec, QC, Canada

Ajay Singh  Department of Oncologic Sciences, Mitchell Cancer Institute, University of South Alabama, Mobile, AL, USA

Amrik J. Singh  Department of Pathology, Harvard Medical School, Beth Israel Deaconess Medical Center, Boston, MA, USA

Harprit Singh  De Montfort University, Leicester, UK

Kamaleshwar Singh  The Institute of Environmental and Human Health (TIEHH), Texas Tech University, Lubbock, TX, USA

Narendra P. Singh  Departments of Bioengineering, University of Washington, Seattle, WA, USA

Pankaj K. Singh  The Eppley Institute for Research in Cancer and Allied Diseases, and Department of Pathology and Microbiology, and Department of Biochemistry and Molecular Biology, and Department of Genetic Cell Biology and Anatomy, University of Nebraska Medical Center, Omaha, NE, USA

Shalini Singh  Department of Surgery, McMaster University, Hamilton, ON, Canada

Shree Ram Singh  Basic Research Laboratory, National Cancer Institute at Frederick, Frederick, MD, USA

Vineeta Singh  School of Surgery and Pathology, QEII Medical Centre, Sir Charles Gairdner Hospital, Nedlands, WA, Australia

Lillian L. Siu  Department of Medical Oncology and Hematology, Robert and Maggie Bras and Family New Drug Development Program, Princess Margaret Hospital, Toronto, ON, Canada

Anita Sjölander  Cell and Experimental Pathology, Department of Laboratory Medicine, Lund University, Malmö University Hospital, Malmö, Sweden

Judith Skoner  Head and Neck Tumor Program, Hollings Cancer Center, Medical University of South Carolina, Charleston, SC, USA

Keith Skubitz  Division of Hematology, Oncology and Transplantation, University of Minnesota Medical School, Minneapolis, MN, USA

Christopher Slape  Genetics Branch, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA

Keiran S. M. Smalley  The Wistar Institute, Philadelphia, PA, USA

Lubomir B. Smilenov  Department of Radiation Oncology, Columbia University, New York, NY, USA

Bruce F. Smith  Scott-Ritchey Research Center, College of Veterinary Medicine, Auburn University, Auburn, AL, USA
Russell Spencer Smith  Department of Pharmacology, University of Illinois College of Medicine, Chicago, IL, USA

Josef Smolle  Department of Dermatology, Medical University Graz, Graz, Austria

Jimmy B. Y. So  Department of Surgery, National University of Singapore, National University Hospital, Singapore, Singapore

Robert W. Sobol  University of South Alabama Mitchell Cancer Institute, Mobile, AL, USA

Alexander S. Sobolev  Department of Molecular Genetics of Intracellular Transport, Institute of Gene Biology, Russian Academy of Sciences, Moscow, Russia

Eric Solary  Inserm Unité Mixte de Recherche (UMR) 1009, Institut Gustave Roussy, University Paris-Sud 11, Villejuif, France

Graziella Solinas  Department of Immunology, Fondazione Humanitas per la Ricerca, Rozzano, Milan, Italy

Toshiya Soma  Department of Surgery, Graduate School of Medicine, Kyoto University, Kyoto, Japan

Guru Sonpavde  Texas Oncology and Veterans Affairs Medical Center and the Baylor College of Medicine, Houston, TX, USA

Anil K. Sood  Departments of Gynecologic Oncology and Reproductive Medicine and Cancer Biology and The Center for RNA Interference and Non-Coding RNAs, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Henrik Toft Sørensen  Department of Clinical Epidemiology, Aarhus University Hospital, Aarhus C, Denmark

Pavel Soucek  Toxicogenomics Unit, Center for Toxicology and Health Safety, National Institute of Public Health, Prague, Czech Republic

Lorenzo Spaggiari  University of Milan School of Medicine, Milan, Italy

Ulrich Specks  Division of Pulmonary and Critical Care Medicine, Department of Internal Medicine, Mayo Clinic College of Medicine, Rochester, MN, USA

David W. Speicher  The Wistar Institute, Philadelphia, PA, USA

Valerie Speirs  Leeds Institute of Molecular Medicine, University of Leeds, Leeds, UK

Dietmar Spengler  Max-Panck-Institut für Psychiatrie, Munich, Germany

Phillippe E. Spiess  Department of Genitourinary Oncology, Moffitt Cancer Center, Tampa, FL, USA

Melanie Spotheim-Maurizot  Centre de Biophysique Moleculaire, CNRS, Orleans, France
Cynthia C. Sprenger  Department of Medicine, Division of Gerontology and Geriatric Medicine, University of Washington, Seattle, WA, USA

Lakshmaiah Sreerama  Department of Chemistry and Biochemistry, St. Cloud State University, St. Cloud, MN, USA
Department of Chemistry and Earth Sciences, Qatar University, Doha, Qatar

Rakesh Srivastava  Department of Pathology and Laboratory Medicine, The University of Kansas Medical Center, Kansas City, KS, USA

Satish K. Srivastava  Department of Biochemistry and Molecular Biology, University of Texas Medical Branch, Galveston, TX, USA

M. Sharon Stack  Northwestern University Medical School, Chicago, IL, USA

Jan A. Staessen  Division of Lung Toxicology, Department of Occupational and Environmental Medicine (T.S.N.) and the Studies Coordinating Centre (J.A.S.), Division of Hypertension and Cardiovascular Rehabilitation, Department of Cardiovascular Diseases, University of Leuven, Leuven, Belgium

Eric Stanbridge  Department of Microbiology and Molecular Genetics, University of California, Irvine, CA, USA

Barry Staymates  Department of Pathology, Henry Mayo Newhall Memorial Hospital, Valencia, CA, USA

Stacey Stein  Center for Advanced Biotechnology and Medicine, UMDMJ – Robert Wood Johnson Medical School, Piscataway, NJ, USA

Martin Steinhoff  UCD Charles Institute of Dermatology, University College Dublin, Belfield, Ireland
Department of Dermatology School of Medicine and Medical Sciences, University College Dublin, Dublin, Ireland

Alexander Steinle  Institute for Molecular Medicine, Centre for Molecular Medicine, Goethe University, Frankfurt am Main, Germany

Carsten Stephan  Department of Urology, Charité, Universitätsmedizin, Campus Charité Mitte, Berlin, Germany

Peter L. Stern  Cancer Research UK Manchester Institute, University of Manchester, Manchester, UK

William G. Stetler-Stevenson  Extracellular Matrix Pathology Section, Cell and Cancer Biology Branch, National Cancer Institute, Bethesda, MD, USA

Richard G. Stevens  University of Connecticut Health Center, Farmington, CT, USA

Freda Stevenson  CRC Wessex Oncology Unit, Southampton General Hospital and Tenovous Laboratory, Southampton University Hospital Trust, Southampton, UK
Contributors

William P. Steward  Department of Cancer Studies, University of Leicester, Leicester, UK

Constantine A. Stratakis  Program on Developmental Endocrinology of Genetics, NICHD, NIH, Bethesda, MD, USA

Alex Y. Strongin  Burnham Institute for Medical Research, La Jolla, CA, USA

Deepa S. Subramaniam  Georgetown University Hospital, Washington, DC, USA

Garnet Suck  Health Sciences Authority, Centre for Transfusion Medicine, Singapore, Singapore

Paul H. Sugarbaker  Washington Cancer Institute, Washington Hospital Center, Washington, DC, USA

Baocun Sun  Department of Pathology, Tianjin Cancer Hospital and Tianjin Cancer Institute, Tianjin, People’s Republic of China

Duxin Sun  Department of Pharmaceutical Sciences, University of Michigan, Ann Arbor, MI, USA

Shi-Yong Sun  School of Medicine and Winship Cancer Institute, Emory University, Atlanta, GA, USA

Zhifu Sun  Department of Health Sciences Research, Mayo Clinic College of Medicine, Rochester, MN, USA

Saul Suster  Department of Pathology, Medical College of Wisconsin, Milwaukee, WI, USA

Russell Szmulewitz  The University of Chicago Medicine, Chicago, IL, USA

Thomas Tüting  Laboratory for Experimental Dermatology, Department of Dermatology, University of Bonn, Bonn, Germany

Dirk Taeger  Institute for Prevention and Occupational Medicine of the German Social Accident Insurance (IPA), Ruhr-University Bochum, Bochum, Germany

Masatoshi Tagawa  Division of Pathology and Cell Therapy, Chiba Cancer Center Research Institute, Chiba, Japan

Stanley Tahara  Keck School of Medicine, Department of Molecular Microbiology and Immunology, University of Southern California, Los Angeles, CA, USA

Yoshikazu Takada  UC Davis School of Medicine, Sacramento, CA, USA

Akihisa Takahashi  Heavy Ion Medical Center, Gunma University, Maebashi, Gunma, Japan

Tsutomu Takahashi  Department of Environmental Health, School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, Tokyo, Japan
Yoshimi Takai Faculty of Medicine, Osaka University Graduate School of Medicine, Suita, Japan

Tamotsu Takeuchi Department of Pathology, Kochi Medical School, Kochi, Japan

Constantine S. Tam Haematology Department, Peter MacCallum Cancer Centre, East Melbourne, VIC, Australia
University of Melbourne, Parkville, VIC, Australia

Luca Tamagnone Department of Oncology, University of Turin, Candiolo, Italy
Candiolo Cancer Center-IRCCS, University of Turin, Candiolo, Italy

Harald Tammen PXBioVisioN GmbH, Hannover, Germany

Masaaki Tamura Department of Anatomy and Physiology, Kansas State University, Manhattan, KS, USA

David S. P. Tan Department of Medical Oncology, National University Cancer Institute, Singapore (NCIS), National University Hospital, and Cancer Science Institute, National University of Singapore, Singapore, Singapore

Takuji Tanaka Department of Oncologic Pathology, Kanazawa Medical University, Kanazawa, Japan

Dean G. Tang Department of Carcinogenesis, Science Park-Research Division, The University of Texas MD Anderson Cancer Center, Smithville, TX, USA

Ya-Chu Tang Department of Life Sciences, College of Science, National Central University, Jhongli City, Taiwan

Nizar M. Tannir Department of Genitourinary Medical Oncology, University of Texas MD Anderson Cancer Center, Houston, TX, USA

Weikang Tao Department of Cancer Research, Merck Research Laboratories, West Point, PA, USA

Chi Tarn Department of Medical Oncology, Fox Chase Cancer Center, Philadelphia, PA, USA

Clive R. Taylor Department of Pathology, University of Southern California Keck School of Medicine, Los Angeles, CA, USA

Jennifer Taylor Committee on Cancer Biology, The University of Chicago, Chicago, IL, USA

Andrew R. Tee Institute of Medical Genetics, Cardiff University, Heath Park, Cardiff, UK

Ayalew Tefferi Division of Hematology, Mayo Clinic College of Medicine, Rochester, MN, USA

Bin T. Teh Cancer and Stem Cell Biology (CSCB), Duke-NUS, Graduate Medical School, Singapore, Singapore
Marie-Hélène Teiten  Laboratoire de Biologie Moléculaire et Cellulaire du Cancer (LBMCC), Hôpital Kirchberg, Luxembourg, Luxembourg

Joseph R. Testa  Fox Chase Cancer Center, Philadelphia, PA, USA

John Thacker  Medical Research Council, Radiation and Genome Stability Unit, Harwell, Oxfordshire, UK

Rajesh V. Thakker  Academic Endocrine Unit, Radcliffe Department of Medicine, Oxford Centre for Diabetes, Endocrinology and Metabolism (OCDEM), Churchill Hospital, University of Oxford, Oxford, UK

Nicholas B. La Thangue  Department of Oncology, University of Oxford, Oxford, UK

Dan Theodorescu  Department of Surgery, Urology, School of Medicine, University of Colorado Cancer Center, Aurora, CO, USA

Panayiotis A. Theodoropoulos  Department of Basic Sciences, The University of Crete, School of Medicine, Heraklion, Crete, Greece

Frank Thévenod  Private Universität Witten/Herdecke gGmbH, Witten, Germany

Karl-Heinz Thierauch  Berlin, Germany

Megan N. Thobe  University of Cincinnati College of Medicine, Cincinnati, OH, USA

Natalie Thomas  Clinical Network Services Pty Ltd, St Albans, UK

Peter Thomas  Departments of Surgery and Biomedical Sciences, Creighton University, Omaha, NE, USA

Sufi M. Thomas  Departments of Otolaryngology-Head and Neck Surgery, University of Kansas Medical Center, Kansas City, KS, USA

Sven Thoms  University of Göttingen, Göttingen, Germany

Magnus Thörn  Department of Surgery (MT), Karolinska Institutet, Stockholm, Sweden

Anna Tiefenthaller  Clinic for Radiotherapy and Radiation Oncology, LMU Munich, Munich, Germany

Derya Tilki  Martini-Klinik, Prostatakrebszentrum, Universitätsklinikum Hamburg-Eppendorf, Hamburg, Germany

Donald J. Tindall  Department of Urology Research, Department of Biochemistry and Molecular Biology, Mayo Clinic College of Medicine, Rochester, MN, USA
Umberto Tirelli  Department of Medical Oncology, National Cancer Institute, Aviano, PN, Italy

Martin Tobi  Section of Gastroenterology, Detroit VAMC, Detroit, MI, USA

Philip J. Tofilon  Radiation Oncology Branch, National Cancer Institute, Bethesda, MD, USA

Masakazu Toi  Department of Surgery (Breast Surgery), Graduate School of Medicine, Kyoto University, Kyoto, Japan

Amanda Ewart Toland  Division of Human Cancer Genetics, The Ohio State University, Columbus, OH, USA

Massimo Tommasino  Infections and Cancer Biology Group, International Agency for Research on Cancer, Lyon, France

Antonio Toninello  Department of Biological Chemistry, University of Padua, Padua, Italy

Jeffrey A. Toretsky  Department of Oncology and Pediatrics, Lombardi Comprehensive Cancer Center, Georgetown University, Washington, DC, USA

Jorge R. Toro  National Institutes of Health, Bethesda, MD, USA

Manuel Torres  University of the Balearic Islands, Palma de Mallorca, Spain

Tibor Tot  Department of Pathology and Clinical Cytology, Central Hospital Falun, Uppsala University, Falun, Sweden

Mathilde Touvier  UMR U1153 INSERM, U1125 INRA, CNAM, Université Paris 13, Centre de Recherche Epidémiologie et Statistique Sorbonne Paris Cité, Bobigny, France

Philip C. Trackman  Department of Molecular and Cell Biology, Boston University Henry M. Goldman School of Dental Medicine, Boston, MA, USA

Tiffany A. Traina  Breast Cancer Medicine Service, Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York, NY, USA

Luba Trakhtenbrot  Molecular Cytogenetics Laboratory, Institute of Hematology, The Chaim Sheba Medical Center, Tel Hashomer, Israel

Janeen H. Trembley  Minneapolis VA Health Care System and University of Minnesota, Minneapolis, MN, USA

Pierre-Luc Tremblay  Le Centre de recherche du CHU de Québec-Université Laval: axe Oncologie, Le Centre de recherche sur le cancer de l’Université Laval, Québec, QC, Canada

Matthew Trendowski  Department of Biology, Syracuse University, Syracuse, NY, USA

Edward L. Trimble  Department of Health and Human Services, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA
Jörg Trojan  Universitätsklinikum Frankfurt, Medizinische Klinik 1, Frankfurt am Main, Germany

Alisha M. Truman  Northeastern University, Boston, MA, USA

Gregory J. Tsay  Department of Medicine, Institute of Immunology, Chung Shan Medical University, Taichung, Taiwan

Apostolia-Maria Tsimberidou  Department of Investigational Cancer Therapeutics, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Kunihiro Tsuchida  Division for Therapies Against Intractable Diseases, Institute for Comprehensive Medical Science (ICMS), Fujita Health University, Toyoake, Japan

Nobuo Tsuchida  Department of Molecular Cellular Oncology and Microbiology, Tokyo Medical and Dental University, Bunkyo-ku, Tokyo, Japan

Florin Tuluc  Department of Pediatrics, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA
The Children’s Hospital of Philadelphia, Philadelphia, PA, USA

Mehmet Kemal Tur  Institute of Pathology, University Hospital, Justus-Liebig-University Giessen, Giessen, Germany

Greg Turenchalkb  454 Life Sciences, Branford, CT, USA

Andrew S. Turnell  Cancer Research UK Institute for Cancer Studies, The Medical School, The University of Birmingham, Edgbaston, Birmingham, UK

Jeffrey Turner  Prostate Oncology Specialists, Los Angeles, CA, USA

Michelle C. Turner  McLaughlin Centre for Population Health Risk Assessment, University of Ottawa, Ottawa, ON, Canada
ISGlobal, Centre for Research in Environmental Epidemiology (CREAL), Barcelona, Spain
Universitat Pompeu Fabra (UPF), Barcelona, Spain
CIBER Epidemiologia y Salud Pública (CIBERESP), Madrid, Spain

Guri Tzivion  Cancer Institute, Department of Biochemistry, University of Mississippi Medical Center, Jackson, MS, USA

Salvatore Ulisse  Department of Experimental Medicine, University of Rome “Sapienza”, Rome, Italy

Nick Underhill-Day  School of Biosciences, Swift Ecology Ltd, Warwickshire, UK

Rosemarie A. Ungarelli  Boston Medical Center and Boston University School of Medicine, Boston, MA, USA

Gretchen M. Unger  GeneSegues Inc., Chaska, MN, USA
Motoko Unoki  Division of Epigenomics and Development, Medical Institute of Bioregulation, Kyushu University, Fukuoka, Japan

Markus Vähä-Koskela  Molecular Cancer Biology Research Program, University of Helsinki, Helsinki, Finland

Antti Vaheri  Medicum, Faculty of Medicine, University of Helsinki, Helsinki, Finland

Kedar S. Vaidya  Global Pharmaceutical Research and Development, Abbott Laboratories, North Chicago, IL, USA

Ilan Vaknin  The Lautenberg Center for Immunology and Cancer Research, Israel-Canada Medical, Research Institute Faculty of Medicine, The Hebrew University, Jerusalem, Israel

Anne M. VanBuskirk  Takeda Oncology, Cambridge, MA, USA

Wim Vanden Berghe  Epigenetic Signaling Lab PPES, Department Biomedical Sciences, University Antwerp, Antwerp, Belgium

Marry M. van den Heuvel-Eibrink  Princess Maxima Center for Pediatric Oncology/Hematology, Utrecht, The Netherlands

Michael W. Van Dyke  Department of Chemistry and Biochemistry, Kennesaw State University, Kennesaw, GA, USA

Casper H. J. van Eijck  Department of Surgery, Erasmus MC, Rotterdam, The Netherlands

Manon van Engeland  Department of Pathology, GROW-School for Oncology and Developmental Biology, Maastricht University Hospital, Maastricht, The Netherlands

Wilhelmin M. U. van Grevenstein  Department of Surgery, Erasmus MC, Rotterdam, The Netherlands

Ad Geurts van Kessel  Department of Human Genetics, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands

Ron H. N. van Schaik  Department of Clinical Chemistry, Erasmus University Medical Center, Rotterdam, The Netherlands

Viggo Van Tendeloo  Vaccine and Infections Disease Institute (VAXINFECTIO) Laboratory of Experimental Hematology, Faculty of Medicine and Health Sciences, University of Antwerp, Edegem, Belgium

Alex van Vliet  Department of Cellular and Molecular Medicine, Cell Death Research and Therapy Lab, KU Leuven Campus Gasthuisberg, Leuven, Belgium

Carter Van Waes  National Institute on Deafness and Other Communication Disorders and National Cancer Institute, NIH, Bethesda, MD, USA

Sakari Vanharanta  Department of Medical Genetics, Biomedicum Helsinki, University of Helsinki, Helsinki, Finland
Contributors

Roberta Vanni  Department of Biomedical Science and Technology, University of Cagliari, Monserrato (CA), Italy

Judith A. Varner  Moores UCSD Cancer Center, University of California San Diego, La Jolla, CA, USA

Aikaterini T. Vasilaki  University Department of Surgery, Royal Infirmary, Glasgow, UK

Peter Vaupel  Department of Radiooncology and Radiotherapy, University Medical Center Mainz, Mainz, Germany

Guillermo Velasco  Department of Biochemistry and Molecular Biology I, School of Biology, Complutense University, Madrid, Spain

Marcel Verheij  Department of Radiotherapy, The Netherlands Cancer Institute–Antoni van Leeuwenhoek Hospital, Amsterdam, The Netherlands

Mukesh Verma  Division of Cancer Control and Population Sciences, National Cancer Institute (NCI), National Institutes of Health (NIH), Rockville, MD, USA

Rakesh Verma  Prescient Healthcare Group, London, UK

Srdan Verstovsek  Leukemia Department, University of Texas MD Anderson Cancer Center, Houston, TX, USA

René P. H. Veth  Department of Orthopaedics, Radboud University Medical Centre, Nijmegen, The Netherlands

G. J. Villares  Department of Cancer Biology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Akila N. Viswanathan  Brigham and Women’s/Dana-Farber Cancer Center, Boston, MA, USA

Kris Vlemingcx  Department of Biomedical Molecular Biology and Center for Medical Genetics, Ghent University, Ghent, Belgium

Israel Vlodavsky  Anatomy and Cell Biology, Technion Israel Institute of Technology, Cancer and Vascular Biology Research Center, Haifa, Israel

Martina Vockerodt  Department of Pediatrics I, Children’s Hospital, Georg-August University of Gottingen, Gottingen, Germany

Charles L. Vogel  Sylvester Cancer Center, School of Medicine, University of Miami, Plantation, FL, USA

Tilman Vogel  Department of Surgery, Krankenhaus Maria Hilf, Mönchengladbach, Germany

Ulla Vogel  National Institute of Occupational Health, Copenhagen, Denmark

Daniel D. von Hoff  Arizona Cancer Center, Tucson, AZ, USA

Silvia von Mensdorff-Pouilly  Department of Obstetrics and Gynaecology, Vrije Universiteit Medisch Centrum (VUmc), Amsterdam, The Netherlands
Ingo Kausch von Schmeling  Klinik für Urologie und Kinderurologie, Ammerland Klinik GmbH, Westerstede, Germany

Dietrich von Schweinitz  Klinikum der Universität München, Kinderchirurgische Klinik im Dr. von Haunerschen Kinderspital, München, Germany

Alireza Vosough  Department of Radiotherapy, Royal Marsden Hospital NHS Foundation Trust, Sutton, Surrey, UK

George F. Vande Woude  Van Andel Research Institute, Grand Rapids, MI, USA

Tom Waddell  GI/Lymphoma Research Unit, Royal Marsden Hospital, Surrey, UK

Christoph Wagener  University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Sabine Wagner  Department of Pediatrics, Klinik St. Hedwig, Krankenhaus der Barmherzigen Brüder, Regensburg, Germany

Kristin A. Waite  Genomic Medicine Institute, Lerner Research Institute, and Taussing Cancer Institute, Cleveland Clinic Foundation, Cleveland, OH, USA

Toshifumi Wakai  Division of Digestive and General Surgery, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan

Heather M. Wallace  University of Aberdeen, Aberdeen, UK

Håkan Wallin  National Institute of Occupational Health, Copenhagen, Denmark

Susan E. Waltz  Cancer and Cell Biology, University of Cincinnati College of Medicine, Cincinnati Veteran’s Administration Hospital, Cincinnati, OH, USA

Jack R. Wand  Division of Gastroenterology, Liver Research Center, Rhode Island Hospital and Warren Alpert Medical School of Brown University, Providence, RI, USA

Bo Wang  The Ohio State University, Columbus, OH, USA

Gang Wang  Feil Brain and Mind Research Institute, Weill Cornell Medicine, Cornell University, New York, NY, USA

Helen Y. Wang  Center for Inflammation and Epigenetics, Houston Methodist Research Institute, Houston, TX, USA

Hwa-Chain Robert Wang  Molecular Oncology, Department of Biomedical and Diagnostic Sciences, The University of Tennessee, College of Veterinary Medicine, Knoxville, TN, USA

Jianghua Wang  Department of Pathology, Baylor College of Medicine, Houston, TX, USA

Mingjun Wang  Center for Inflammation and Epigenetics, Houston Methodist Research Institute, Houston, TX, USA
Rong-Fu Wang  Center for Inflammation and Epigenetics, Houston Methodist Research Institute, Houston, TX, USA

Xianghong Wang  Department of Anatomy, The University of Hong Kong, Hong Kong, China

Xiang-Dong Wang  Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, Boston, MA, USA

Yu Wang  Department of Pharmacology and Pharmacy, The University of Hong Kong, Hong Kong, China

Zhu A. Wang  Department of Genetics and Development, Columbia University Medical Center, Herbert Irving Comprehensive Cancer Center, New York, NY, USA

Patrick Warnat  Department of Theoretical Bioinformatics, German Cancer Research Center, Heidelberg, Germany

Kounosuke Watabe  Department of Medical Microbiology, Immunology and Cell Biology, Southern Illinois University, School of Medicine, Springfield, IL, USA

School of Medicine, Department of Cancer Biology, Wake Forest University, Winston-Salem, NC, USA

Dawn Waterhouse  Experimental Therapeutics, BC Cancer Agency, Vancouver, BC, Canada

Catherine Waters  The Ohio State University College of Medicine, Columbus, OH, USA

Valerie M. Weaver  Department of Surgery, University of California, San Francisco, San Francisco, CA, USA

Lau Weber  Department of Urology, Singapore General Hospital, Singapore, Singapore

Daniel S. Wechsler  Pediatric Hematology-Oncology, Duke University Medical Center, Durham, NC, USA

Scott A. Weed  Department of Neurobiology and Anatomy, Mary Babb Randolph Cancer Center, West Virginia University, Morgantown, WV, USA

Oliver Weigert  Department of Internal Medicine III, University of Munich, Großhadern, Munich, Germany

Eugene D. Weinberg  Biology and Medical Sciences, Indiana University, Bloomington, IN, USA

I. Bernard Weinstein  Columbia University, New York, NY, USA

Ellen Weisberg  Department of Medical Oncology, Dana Farber Cancer Institute, Boston, MA, USA

Lawrence M. Weiss  Division of Pathology, City of Hope National Medical Center, Duarte, CA, USA
Danny R. Welch  Department of Cancer Biology, University of Kansas Cancer Center, The University of Kansas Medical Center, Kansas City, KS, USA

Thilo Welsch  Department of Visceral, Thoracic and Vascular Surgery, TU Dresden, Dresden, Germany

Sarah J. Welsh  Harris Manchester College, University of Oxford, Oxford, UK

Tania M. Welzel  Universitätsklinikum Frankfurt, Medizinische Klinik 1, Frankfurt am Main, Germany

Tamra E. Werbowetski-Ogilvie  Regenerative Medicine Program, Biochemistry and Medical Genetics and Physiology and Pathophysiology, College of Medicine, Faculty of Health Sciences, University of Manitoba, Winnipeg, MB, Canada

Frank Westermann  DKFZ, German Cancer Research Center, Heidelberg, Germany

Linda C. Whelan  UCD School of Biomolecular and Biomedical Science, UCD Conway Institute, University College Dublin, Dublin, Ireland

Bruce A. White  Department of Cell Biology, UConn School of Medicine, UConn Health, Farmington, CT, USA

Robert P. Whitehead  Nevada Cancer Institute, Las Vegas, NV, USA

Theresa L. Whiteside  University of Pittsburgh Cancer Institute and University of Pittsburgh School of Medicine, Pittsburgh, PA, USA

Christophe Wiart  University of Nottingham, Nottingham, UK

Andreas Wicki  Department of Medical Oncology, University Hospital, Basel, Switzerland

Carol Wicking  Institute for Molecular Bioscience, The University of Queensland, St Lucia, QLD, Australia

Lisa Wiesmüller  Department of Obstetrics and Gynaecology, University of Ulm, Ulm, Germany

Edwin van Wijngaarden  Department of Public Health Sciences, University of Rochester School of Medicine and Dentistry, Rochester, NY, USA

Kandace Williams  Department of Biochemistry and Cancer Biology, Health Science Campus, UT College of Medicine, Toledo, OH, USA

Elizabeth D. Williams  Australian Prostate Cancer Research Centre – Queensland (APCRC-Q), Brisbane, QLD, Australia

Elizabeth M. Wilson  Department of Pediatrics and Biochemistry and Biophysics, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA
Shiyong Wu  Edison Biotechnology Institute and Department of Chemistry and Biochemistry, Ohio University, Athens, OH, USA

Wen Jin Wu  Division of Monoclonal Antibodies, Office of Biotechnology Products, Office of Pharmaceutical Science, Center for Drug Evaluation and Research, U.S. Food and Drug Administration, Bethesda, MD, USA

Xiaosheng Wu  Department of Immunology, Mayo Clinic, College of Medicine, Rochester, MN, USA

Xifeng Wu  Department of Epidemiology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Yi-Long Wu  Guangdong Lung Cancer Institute, Guangdong General Hospital and Guangdong Academy of Medical Sciences, Guangzhou, China

Christopher Xiao  Department of Otolaryngology-Head and Neck Surgery, Medical University of South Carolina, Charleston, SC, USA

Guang-Hui Xiao  Fox Chase Cancer Center, Philadelphia, PA, USA

Huajiang Xiong  Department of Zoophysiology, Zoological Institute, Christian-Albrechts-University of Kiel, Kiel, Germany

Jianming Xu  Department of Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX, USA

Tian Xu  Howard Hughes Medical Institute, Yale University School of Medicine, New Haven, CT, USA

Zhengping Xu  Zhejiang University School of Medicine, Hangzhou, China

Jing Xue  Stanford University School of Medicine, Stanford, CA, USA

Judy W. P. Yam  Department of Pathology, The University of Hong Kong, Hong Kong, China

Sho-ichi Yamagishi  Department of Pathophysiology and Therapeutics of Diabetic Vascular Complications, Kurume University School of Medicine, Kurume, Japan

Michiko Yamamoto  Department of Respiratory Medicine, Kitasato University School of Medicine, Sagamihara, Kanagawa, Japan

Wei Yan  Department of Cancer Biology, Beckman Research Institute of City of Hope, Duarte, CA, USA

Haining Yang  University of Hawaii Cancer Center, Honolulu, HI, USA

Hong Yang  Cancer Vaccine Section, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA

Jia-Lin Yang  Adult Cancer Program, Lowy Cancer Research Centre, Prince of Wales Clinical School, Faculty of Medicine, University of New South Wales, Sydney, NSW, Australia
Ping Yang  Department of Health Sciences Research, Mayo Clinic College of Medicine, Rochester, MN, USA

Rongxi Yang  Molecular Epidemiology Unit, German Cancer Research Center, Heidelberg, Germany

Libo Yao  Department of Biochemistry and Molecular Biology, The Fourth Military Medical University, Xi’an, Shananxi, China

Masakazu Yashiro  Department of Surgical Oncology, Osaka City University Graduate School of Medicine, Osaka, Japan

Nelson Yee  Penn State Hershey Cancer Institute, Hershey, PA, USA

Yerem Yeghiazarians  Department of Medicine, Division of Cardiology, Translational Cardiac Stem Cell Program, Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research, Cardiovascular Research Institute, University of California San Francisco (UCSF), San Francisco, CA, USA

W. Andrew Yeudall  Department of Oral Biology, College of Dental Medicine, Georgia Regents University, Augusta, GA, USA

Maksym V. Yezhelyev  Winship Cancer Institute, Emory University, Atlanta, GA, USA

Ömer H. Yilmaz  The David H. Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology, Cambridge, MA, USA

Açelya Yilmazer Aktuna  Biomedical Engineering Department, Engineering Faculty, Ankara University, Golbasi, Ankara, Turkey

Anthony P. C. Yim  Division of Cardiothoracic Surgery, Chinese University of Hong Kong, Hong Kong, China

John H. Yim  Department of Surgery, City of Hope, Duarte, CA, USA

Chengqian Yin  Department of Biology, Drexel University College of Arts and Sciences, Philadelphia, PA, USA

Helen L. Yin  Department of Physiology, University of Texas Southwestern Medical Center, Dallas, TX, USA

Min-Jean Yin  Oncology Research, Pfizer Worldwide R&D, San Diego, CA, USA

Xiao-Ming Yin  Department of Pathology and Laboratory Medicine, Indiana University, Indianapolis, IN, USA

Zhimin Yin  College of Life Science, Nanjing Normal University, Nanjing, People’s Republic of China

George Wai-Cheong Yip  Department of Anatomy, National University of Singapore, Singapore, Singapore

Kenneth W. Yip  Princess Margaret Cancer Centre, University Health Network, Toronto, ON, Canada
Harry H. Yoon  Mayo Clinic Comprehensive Cancer, Rochester, MN, USA

Jung-Hwan Yoon  Department of Internal Medicine, Seoul National University College of Medicine, Chongno-gu, Seoul, South Korea

Kazuhiro Yoshida  Department of Surgical Oncology, Gifu University School of Medicine, Gifu, Japan

Tatsushi Yoshida  Department of Molecular-Targeting Cancer Prevention, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Kyoto, Japan

Kouichi Yoshimasa  Department of Hygiene, School of Medicine, Wakayama Medical University, Wakayama, Japan

Anas Younes  Lymphoma Service, Department of Medicine, Memorial Sloan Kettering Cancer Center, New York, NY, USA

Graeme P. Young  Flinders Cancer Control Alliance, Flinders University, Adelaide, SA, Australia

Ken H. Young  Department of Hematopathology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Dihua Yu  Departments of Molecular and Cellular Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Jian Yu  Department of Pathology, University of Pittsburgh Cancer Institute, University of Pittsburgh School of Medicine, Pittsburgh, PA, USA

Yan Ping Yu  Department of Pathology, University of Pittsburgh, Pittsburgh, PA, USA

Yu Yu  Department of Pathology, University of Sydney, Sydney, NSW, Australia

Xiao Yuan  Research and Development Center, Wuhan Botanical Garden, Chinese Academy of Science, Wuhan, Hubei, People’s Republic of China

Anthony Po-Wing Yuen  Division of Otorhinolaryngology, Department of Surgery, The University of Hong Kong, Hong Kong, SAR, China

Zhong Yun  Department of Therapeutic Radiology, Yale School of Medicine, New Haven, CT, USA

Stefan K. Zöllner  Department of Pediatric Hematology and Oncology, University Childrens Hospital Münster, Münster, Germany

Leo R. Zacharski  VA Hospital, White River Junction, VT, USA

Gerard P. Zambetti  Department of Biochemistry, Dana-Farber Cancer Institute, Boston, MA, USA

Behrouz Zand  UT MD Anderson Cancer Center, Houston, TX, USA

Laura P. Zanello  Department of Biochemistry, University of California-Riverside, Riverside, CA, USA
Uwe Zangemeister-Wittke  Department of Pharmacology, University of Bern, Bern, Switzerland

Andrew C. W. Zannettino  Myeloma Research Laboratory, School of Medicine, Faculty of Health Sciences, University of Adelaide, Adelaide, SA, Australia

Kamran Zargar-Shoshtari  Department of Urology, Moffitt Cancer Center and Research Institute, Tampa, FL, USA

Laura Zavala-Flores  Redox Biology Center, School of Veterinary Medicine and Biomedical Sciences, University of Nebraska-Lincoln, Lincoln, NE, USA

Berton Zbar  Laboratory of Immunobiology, NIH – Frederick, Frederick, MD, USA

Herbert J. Zeh III  UPMC/University of Pittsburgh Schools of the Health Sciences, Pittsburgh, PA, USA

Jason A. Zell  Cancer Prevention Program, Division of Hematology/Oncology and Epidemiology, Department of Medicine, School of Medicine, Chao Family Comprehensive Cancer Center, University of California, Irvine, CA, USA

Danfang Zhang  Department of Pathology, Tianjin Cancer Hospital and Tianjin Cancer Institute, Tianjin, People’s Republic of China

Fengrui Zhang  Michigan State University, East Lansing, MI, USA

Hao Zhang  The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Hong Zhang  Biogen Idec, San Diego, CA, USA

Hui Zhang  Department of Chemistry and Biochemistry, University of Nevada, Las Vegas, NV, USA

Jinping Zhang  Departments of Pathology and Immunology, Center for Cell and Gene Therapy, Baylor College of Medicine, Houston, TX, USA

Ji-Hu Zhang  Lead Discovery Center, Novartis Institute for Biomedical Research, Cambridge, MA, USA

Lin Zhang  Biogen Idec, San Diego, CA, USA

Lin Zhang  Department of Pharmacology and Chemical Biology, University of Pittsburgh Cancer Institute, University of Pittsburgh School of Medicine, Pittsburgh, PA, USA

Ruiwen Zhang  University of Alabama at Birmingham, Birmingham, AL, USA

Shiwu Zhang  Department of Pathology, Tianjin Cancer Hospital and Tianjin Cancer Institute, Tianjin, People’s Republic of China

Yong Zhang  Department of Neuroscience, Johns Hopkins University School of Medicine, Baltimore, MD, USA
Xin A. Zhang  Departments of Medicine and Molecular Sciences, Vascular Biology Center, Cancer Institute, University of Tennessee Health Science Center, Memphis, TN, USA

Xuefeng Zhang  Duke Pathology, Duke University School of Medicine, Durham, NC, USA

Yu-Wen Zhang  Department of Oncology, Georgetown University Medical Center, Washington, DC, USA

Yuesheng Zhang  Roswell Park Cancer Institute, Buffalo, NY, USA

Liang Zhong  Le Centre de recherche du CHU de Québec-Université Laval: axe Oncologie, Le Centre de recherche sur le cancer de l’Université Laval, Québec, QC, Canada

Guang-Biao Zhou  State Key Laboratory of Membrane Biology, Institute of Zoology, Chinese Academy of Sciences, Beijing, China

Jerry Zhou  School of Molecular and Microbial Biosciences, University of Sydney, Sydney, NSW, Australia

Zeng B. Zhu  Departments of Medicine, Pathology, Surgery, Obstetrics and Gynecology and the Gene Therapy Center, Division of Human Gene Therapy, University of Alabama at Birmingham, Birmingham, AL, USA

M. Zigler  Department of Cancer Biology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Margot Zoeller  DKFZ, Heidelberg, Germany

Massimo Zollo  Department of Molecular Medicine and Medical Biotechnology, University Federico II of Naples, Naples, Italy

Roberto T. Zori  University of Florida, Gainesville, FL, USA

Enrique Zudaire  NCI Angiogenesis Core Facility, National Cancer Institute, National Institutes of Health, Advanced Technology Center, Gaithersburg, MD, USA

Carsten Zwick  Klinik für Innere Medizin I, Universität des Saarlandes, Homburg, Germany