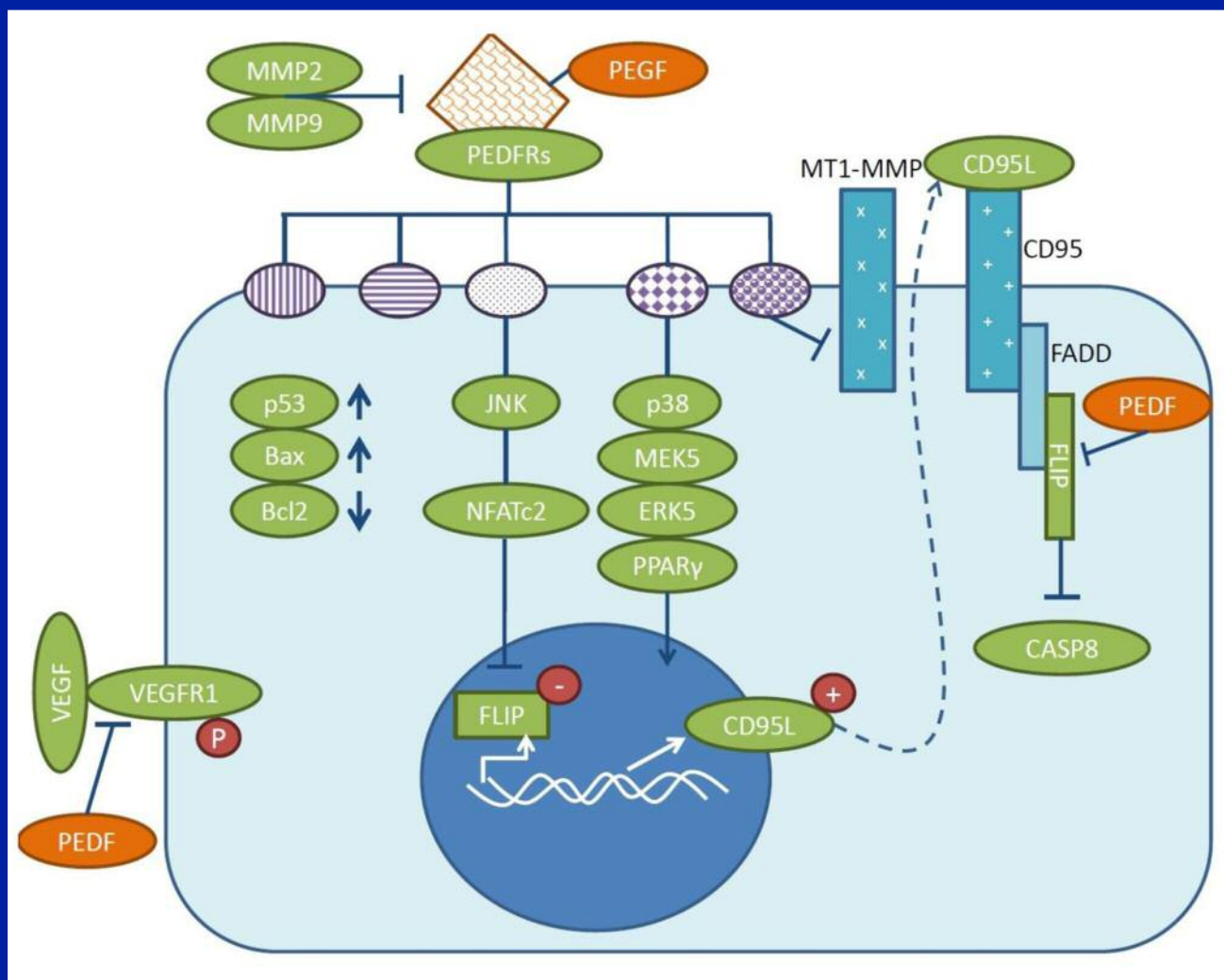


CANCER GENOMICS & PROTEOMICS

Volume 15, Number 4, July-August 2018

ISSN (online): 1790-6245



CANCER GENOMICS & PROTEOMICS

Online ISSN: 1790-6245

Editor-in-Chief:

ARUN SETH, *Sunnybrook Research Institute, University of Toronto, Toronto, ON, Canada*

Managing Editor:

G.J. DELINASIOS, *International Institute of Anticancer Research (IIAR), Kapandriti, Attiki, Greece*

Managing Editor (2004-2016):

J.G. DELINASIOS, *International Institute of Anticancer Research (IIAR), Kapandriti, Attiki, Greece*

Editorial Board

L. A. Aaltonen, *Helsinki, Finland*

R. Abagyan, *La Jolla, CA, USA*

F. Ahmed, *Greenville, NC, USA*

D.-T. Bau, *Taichung, Taiwan, ROC*

R. Clarke, *Washington, DC, USA*

T. Efferth, *Mainz, Germany*

N. A. Ellis, *Tucson, AZ, USA*

J. A. Fernandez-Pol, *Chesterfield, MO, USA*

C.V. Forst, *New York, NY, USA*

D. S. Gerhard, *Bethesda, MD, USA*

G. Glinsky, *San Diego, CA, USA*

T.R. Golub, *Cambridge, MA, USA*

J. Gordon, *Philadelphia, PA, USA*

C.-H. Heldin, *Uppsala, Sweden*

J. D. Hoheisel, *Heidelberg, Germany*

T. H. M. Huang, *San Antonio, TX, USA*

S. C. Jhanwar, *New York, NY, USA*

W.G. Jiang, *Cardiff, UK*

J. Ju, *Stony Brook, NY, USA*

A. Kallioniemi, *Tampere, Finland*

O. P. Kallioniemi, *Turku, Finland*

K. Khalili, *Philadelphia, PA, USA*

D. G. Kieback, *Schleswig, Germany*

S. D. Kottaridis, *Athens, Greece*

Y. T. Kwon, *Seoul, Republic of Korea*

B. Léyland-Jones, *Sioux Falls, SD, USA*

P. Lichter, *Heidelberg, Germany*

A. Lindblom, *Stockholm, Sweden*

G. Lubec, *Vienna, Austria*

J. Lyons-Weiler, *Pittsburgh, PA, USA*

P. J. McCormick, *Rensselaer, NY, USA*

F. Mitelman, *Lund, Sweden*

C. Nicot, *Kansas City, KS, USA*

L. O'Driscoll, *Dublin, Ireland*

C. D. Platsoucas, *Norfolk, VA, USA*

J. Quackenbush, *Boston, MA, USA*

J. S. Rader, *Milwaukee, WI, USA*

R. H. Reeves, *Baltimore, MD, USA*

K. L. Reichelt, *Oslo, Norway*

T. Ried, *Bethesda, MD, USA*

G. Rimbach, *Kiel, Germany*

K. D. Rodland, *Richland, WA, USA*

C. Sansom, *London, UK*

N. A. Saunders, *Queensland, Australia*

B.W. Schäfer, *Zurich, Switzerland*

J. Schneider, *Madrid, Spain*

O. J. Semmes, *Norfolk, VA, USA*

G. V. Sherbet, *Newcastle-upon-Tyne, UK*

S. Smith, *Duarte, CA, USA*

J. C. Strefford, *Southampton, UK*

J. M. Trent, *Phoenix, AZ, USA*

G. Tsangaris, *Athens, Greece*

U.H. Weidle, *Penzberg, Germany*

A. T. Yeung, *Philadelphia, PA, USA*

H. Zhang, *New Haven, CT, USA*

Editorial Office: International Institute of Anticancer Research

1st km Kapandritiou-Kalamou Rd.,

P.O. Box 22, Kapandriti, Attiki 19014, Greece.

Tel: +30 22950 52945, Fax: +30 22950 53389

U.S. Branch: Anticancer Research USA, Inc., 111 Bay Avenue, Highlands, NJ 07732, USA.

E-mails: journals@iiar-anticancer.org (Editorial Office)

editor@iiar-anticancer.org (Managing Editor)

www.iiar-anticancer.org

http://cgp.iiarjournals.org

Front cover photograph: Figure 1, page 228.

Editorial Policy. CANCER GENOMICS & PROTEOMICS (CGP) welcomes the submission of high quality original articles and reviews on all aspects of the application of genomic and proteomic technologies to experimental and clinical cancer research. The Journal's scientific spectrum includes: (a) molecular causes of carcinogenesis, cancer progression and metastasis; (b) structural and functional aspects of genes in the cancer cell; (c) advances in genomic and proteomic technologies applicable to cancer research; (d) anticancer drug design and drug development.

CGP will also accept abstracts and proceedings of scientific meetings for publication, following consideration and approval by the Editorial Board.

A main aim of CGP is to ensure the prompt and confidential review, and rapid publication of original works and reviews, generally within 1-2 months from acceptance.

For more information about CANCER GENOMICS & PROTEOMICS, IIAR and the Conferences, please visit the IIAR website: www.iiar-anticancer.org

Publication Data: CANCER GENOMICS & PROTEOMICS (CGP) is published bimonthly online-only and open access by the International Institute of Anticancer Research. Each annual volume comprises of six issues. Annual Author and Subject Indexes are included in the sixth issue of each volume. CANCER GENOMICS & PROTEOMICS Vol. 1 (2004) and onwards appears online with Stanford University HighWire Press. All published articles are deposited in PubMed Central.

Open Access Policy: CGP appears bimonthly as an online-only open access journal through the Stanford University HighWire Press. Upon acceptance, Authors will be asked to pay an online publication fee of US\$ 700.00 for articles up to 8 online pages (including figures and tables). Each additional excess page will be charged US\$ 60.00. Color will not be charged. Authors from developing countries may apply for a 25% discount after the acceptance of their paper. CGP online will keep the volume and issue numbers, as well as page numbering.

Copyright: Authors retain copyright. The unrestricted *non-commercial* use, distribution and reproduction in any medium of CGP articles for academic reasons is allowed, provided that the original work is properly cited. The Authors grant the permanent right to the publisher to use any articles published in this journal without any restriction, including academic advertising purposes. PDF, XML and HTML files of all articles published in CGP are the property of the publisher.

Manuscripts and correspondence should be addressed to: Dr. George J. Delinasios, Managing Editor, Editorial Office, Cancer Genomics & Proteomics, 1st km Kapandritiou-Kalamou Rd., P.O. Box 22, Kapandriti, Attiki 19014, Greece. Tel: +30 22950 52945, Fax: +30 22950 53389, e-mail: editor@iiar-anticancer.org

Manuscripts from North America may be sent to the Editor-in-Chief, Prof. A. Seth, CGP, Laboratory of Molecular Pathology, Sunnybrook Research Institute, University of Toronto, 2075 Bayview Avenue, Room S112a, Toronto, ON, Canada M4N 3M5. Fax: 416 480 5737. E-mail: genomics.proteomics@utoronto.ca

The Editors and Publishers of CANCER GENOMICS & PROTEOMICS accept no responsibility for the opinions expressed by the contributors or for the content of advertisements appearing therein.

Copyright© 2018, International Institute of Anticancer Research (Dr. George J. Delinasios). All rights reserved

PHOTOCOMPOSITION BY IIAR

CANCER GENOMICS & PROTEOMICS

Print ISSN (2004-2012): 1109-6535
Online ISSN: 1790-6245

VOLUME 15, No 4
2018

Editorial Board

- A. Seth** Editor-in-Chief
Laboratory of Molecular Pathology, Sunnybrook Research Institute, Sunnybrook Health Sciences Centre and University of Toronto, Toronto, Ontario, Canada
- G.J. Delinasios** Managing Editor and Executive Publisher
International Institute of Anticancer Research, Athens, Greece
- L.A. Aaltonen** Department of Medical Genetics, University of Helsinki, Finland
R. Abagyan The Scripps Research Institute, La Jolla, CA, USA
F. Ahmed Department of Radiation Oncology, East Carolina University School of Medicine, Greenville, NC, USA
D.-T. Bau Terry Fox Cancer Research Lab, China Medical University Hospital, Taichung, Taiwan, ROC
R. Clarke Vincent T. Lombardi Cancer Center, Georgetown University School of Medicine, Washington, DC, USA
T. Efferth Department of Pharmaceutical Biology Institute of Pharmacy and Biochemistry, University of Mainz, Germany
N.A. Ellis Department of Cellular and Molecular Medicine, University of Arizona Cancer Center, Tucson, AZ, USA
J.A. Fernandes-Pol Metalloproteomics, LLC, Chesterfield, MO, USA
C.V. Forst Department of Genetics and Genomic Sciences, Institute for Genomics and Multiscale Biology, Icahn School of Medicine at Mount Sinai, New York, NY, USA
D.S. Gerhard NIH / NCI, Office of Cancer Genomics, Bethesda, MD, USA
G. Glinsky Institute of Engineering in Medicine, University of California, San Diego, CA, USA
T.R. Golub Pediatric Oncology, Dana-Farber Cancer Institute, Cambridge, MA, USA
J. Gordon Department of Neuroscience, Center for Neurovirology, Temple University School of Medicine, Philadelphia, PA, USA
C.-H. Heldin Ludwig Institute for Cancer Research, Uppsala, Sweden
J.D. Hoheisel Deutsches Krebsforschungszentrum, Genome Research and Bioinformatics, Heidelberg, Germany
T.H.M. Huang Department of Molecular Medicine/Institute of Biotechnology, University of Texas Health Science Center at San Antonio, San Antonio, TX, USA
S.C. Jhanwar Departments of Pathology and Medicine, Memorial Sloan Kettering Cancer Center, New York, NY, USA
W.G. Jiang Metastasis and Angiogenesis Research Group, Department of Surgery, Cardiff University School of Medicine, Cardiff, UK
J. Ju Translational Research Laboratories, State University of New York, School of Medicine, Stony Brook, NY, USA
A. Kallioniemi Laboratory of Cancer Genetics, Institute of Medical Technology, Tampere University Hospital, Finland
O.P. Kallioniemi Medical Biotechnology Group, VTT Technical Research Centre of Finland, Turku, Finland
K. Khalili College of Science and Technology, Center for Neurovirology and Cancer Biology, Temple University, Philadelphia, PA, USA
D.G. Kieback Helios Medical Center Schleswig, Schleswig, Germany
S.D. Kottaridis Department of Virology, Hellenic Anticancer Institute, Athens, Greece
Y. T. Kwon Department of Biomedical Sciences, College of Medicine, Seoul National University, Seoul, Republic of Korea
B. Léylund-Jones Avera Cancer Institute, Sioux Falls, SD, USA
P. Lichter Deutsches Krebsforschungszentrum, Heidelberg, Germany
A. Lindblom Karolinska Hospital, Department of Molecular Medicine and Surgery, Stockholm, Sweden
G. Lubec Department of Pediatrics, University of Vienna, Austria
J. Lyons-Weiler Department of Pathology, Center for Oncology Informatics, University of Pittsburgh, PA, USA
P.J. McCormick The Center for Functional Genomics, Gen*NY*Sis Center for Excellence in Cancer Genomics, University of Albany, SUNY, Rensselaer, NY, USA
F. Mitelman Department of Clinical Genetics, University Hospital, Lund, Sweden
C. Nicot Department of Microbiology, Immunology and Molecular Genetics, University of Kansas Medical Center, Kansas City, KS, USA
L. O'Driscoll School of Pharmacy and Pharmaceutical Sciences, Trinity College, Dublin, Ireland
C.D. Platsoucas College of Sciences, Old Dominion University, Norfolk, VA, USA
J. Quackenbush Department of Biostatistics and Computational Biology, Dana-Farber Cancer Institute, Boston, MA, USA

J.S. Rader	Department of Obstetrics and Gynecology, Medical College of Wisconsin, Milwaukee, WI, USA
R.H. Reeves	Department of Physiology, Johns Hopkins University, School of Medicine, Baltimore, MD, USA
K.L. Reichelt	Institute of Pediatric Research, The National Hospital, University of Oslo, Norway
T. Ried	Center for Cancer Research, Genetics Branch, NCI, NIH, Bethesda, MD, USA
G. Rimbach	Institute for Human Nutrition and Food Science, Christian-Albrechts-University, Kiel, Germany
K.D. Rodland	Biological Sciences Division, Pacific Northwest National Laboratory, Richland, WA, USA
C. Sansom	The School of Crystallography, Birbeck College, University of London, UK
N.A. Saunders	Centre for Immunology and Cancer Research, Princess Alexandra Hospital, University of Queensland, Australia
B.W. Schäfer	Department of Oncology, University Children's Hospital, Zurich, Switzerland
J. Schneider	Universidad Rey Juan Carlos, Facultad de Ciencias de la Salud, Alcorcón (Madrid), Spain
O.J. Semmes	Department of Microbiology and Molecular Cell Biology, Eastern Virginia Medical School, Norfolk, VA, USA
G.V. Sherbet	University of Newcastle, Merz Court, Department of Electrical and Electronic Engineering, Newcastle-upon-Tyne, UK
S. Smith	City of Hope Cancer Center, Department of Cell and Tumor Biology, Duarte, CA, USA
J.C. Strefford	Cancer Science Division, Southampton General Hospital, Southampton, UK
J.M. Trent	Tgen, Phoenix, AZ, USA
G. Tsangaris	Foundation of Biomedical Research of the Academy of Athens, Central Unit of Genomics-Proteomics, Athens, Greece
U.H. Weidle	Roche Pharma Research and Early Development (pRED), Roche Diagnostics GmbH, Penzberg, Germany
A.T. Yeung	Fox Chase Cancer Center, Philadelphia, PA, USA
H. Zhang	Department of Epidemiology and Public Health, Yale University School of Medicine, New Haven, CT, USA

Articles in CANCER GENOMICS & PROTEOMICS are regularly indexed in the following bibliographic services: PUBMED, MEDLINE, CAS (Chemical Abstracts Service); BIOLOGICAL ABSTRACTS; EMBASE and BIOBASE; Compendex, GEOBASE; EMBiology; FLUIDEX; Scopus (Elsevier Bibliographic Databases); BIOSIS PREVIEWS; Science Citation Index Expanded (Web of Science); Google Scholar; LEEDS MEDICAL INFORMATION; CSA ILLUMINA (Cambridge Scientific Abstracts, including: Oncogenes & Growth Factors, Genetics, Medical & Pharmaceutical Biotechnology, Bioengineering); All-Russian Institute of Scientific and Technical Information – VINITI Abstracts Journal; PubsHub; Sociedad Iberoamericana de Información Científica (SIIC) Data Bases.

Editorial Office: International Institute of Anticancer Research, 1st km Kapandritiou-Kalamou Road, P.O. Box 22, Kapandriti, Attiki, 19014, Greece. Tel: +30 22950 52945, Fax: +30 22950 53389. Web: www.iiar-anticancer.org; www.cgp.iiarjournals.org.

Editorial Office in U.S.A.: Anticancer Research USA, Inc., 111 Bay Avenue, Highlights, NJ 07732, USA.

E-mail: journals@iiar-anticancer.org. Managing Editor: editor@iiar-anticancer.org.

Web: www.iiar-anticancer.org; www.cgp.iiarjournals.org.

Manuscripts and correspondence should be addressed to: Dr. George J. Delinasios, Managing Editor, Editorial Office, Cancer Genomics & Proteomics, 1st km Kapandritiou-Kalamou Road, P.O. Box 22, Kapandriti, Attiki, 19014, Greece. Tel: +30 22950 52945, Fax: +30 22950 53389, e-mail: editor@iiar-anticancer.org

Manuscripts from North America may be sent to the Editor-in-Chief, Prof. A. Seth, CGP, Laboratory of Molecular Pathology, Sunnybrook Research Institute, 2075 Bayview Avenue, Room S112a, Toronto, ON, Canada M4N 3M5. Fax: +1 416 480 5737, e-mail: genomics.proteomics@utoronto.ca

CANCER GENOMICS & PROTEOMICS

Volume 15, Number 4, July-August 2018

* Review: Potential of Protein-based Anti-metastatic Therapy with Serpins and Inter α -Trypsin Inhibitors. U.H. WEIDLE, F. BIRZELE, G. TIEFENTHALER (<i>Penzberg, Germany; Basel, Switzerland</i>)	225
The Dual PI3K/mTOR Inhibitor Omipalisib/GSK2126458 Inhibits Clonogenic Growth in Oncogenically-transformed Cells from Neurocutaneous Melanocytosis. D. BASU, C.M. SALGADO, B. BAUER, Y. KHAKOO, J.R. PATEL, R.M. HOEHL, D.M. BERTOLINI, J. ZABEC, M.R. BRZOZOWSKI, M. REYES-MÚGICA (<i>Pittsburgh, PA; Northbrook, IL; New York, NY, USA</i>)	239
Effects of Sepantronium Bromide (YM-155) on the Whole Transcriptome of MDA-MB-231 Cells: Highlight on Impaired ATR/ATM Fanconi Anemia DNA Damage Response. E.A. MAZZIO, C.A. LEWIS, R. ELHAG, K.F. SOLIMAN (<i>Tallahassee, FL, USA</i>)	249
Frequency of Mismatch Repair Protein Deficiency in a Puerto Rican Population with Colonic Adenoma and Adenocarcinoma. D. REVERÓN, C. LÓPEZ, S. GUTIÉRREZ, Z.E. SAYEGH, T. ANTONIA, J. DUTIL, M. MALAFA, D. COPPOLA (<i>Ponce, PR; Tampa, FL, USA</i>)	265
Glioblastoma Multiforme: Fewer Tumor Copy Number Segments of the <i>SGK1</i> Gene Are Associated with Poorer Survival. S. LEHRER, P.H. RHEINSTEIN, K.E. ROSENZWEIG (<i>New York, NY, USA</i>)	273
Comparative Secretome Profiling and Mutant Protein Identification in Metastatic Prostate Cancer Cells by Quantitative Mass Spectrometry-based Proteomics. O.K. KWON, J.M. JEON, E. SUNG, A.-Y. NA, S.J. KIM, S. LEE (<i>Daegu, Republic of Korea</i>).....	279
Comparing Clonality Between Components of Combined Hepatocellular Carcinoma and Cholangiocarcinoma by Targeted Sequencing. J. JEON, L.-S. MAENG, Y.J. BAE, E.-J. LEE, Y.C. YOON, N. YOON (<i>Incheon, Republic of Korea</i>)	291
Identification and Quantification of Heterogeneously-methylated DNA Fragments Using Epiallele-sensitive Droplet Digital Polymerase Chain Reaction (EAST-ddPCR). M. MENSCHIKOWSKI, C. JANDECK, M. FRIEDEMANN, S. RICHTER, D. THIEM, B.S. LANGE, M. SUTTORP (<i>Dresden, Germany</i>)	299
Overexpression of <i>FGFR1</i> Promotes Peritoneal Dissemination Via Epithelial-to-Mesenchymal Transition in Gastric Cancer. D. SHIMIZU, T. SAITO, S. ITO, T. MASUDA, J. KURASHIGE, Y. KURODA, H. EGUCHI, Y. KODERA, K. MIMORI (<i>Tsurumihara; Nagoya; Kumamoto, Japan</i>)	313
Pre-operative Plasma miR-21-5p Is a Sensitive Biomarker and Independent Prognostic Factor in Patients with Pancreatic Ductal Adenocarcinoma Undergoing Surgical Resection. P. KARASEK, N. GABLO, J. HLAVSA, I. KISS, P. VYCHYTILOVA-FALTEJSKOVA, M. HERMANOVA, Z. KALA, O. SLABY, V. PROCHAZKA (<i>Brno, Czech Republic</i>)	321
Leptin Receptor Antagonists' Action on HDAC Expression Eliminating the Negative Effects of Leptin in Ovarian Cancer. E. FIEDOR, K. ZAJDA, E.L. GREGORASZCZUK (<i>Krakow, Poland</i>)	329
Proteomic Analysis of Pelvic Autonomic Nerve in Nerve-sparing Radical Hysterectomy for Cervical Carcinoma. Y.H. LEE, M.K. KIM, H.Y. MOON, G.O. CHONG, H.J. LEE, Y.S. LEE, J.Y. PARK, C.H. LEE, M.C. BAEK, D.G. HONG (<i>Daegu, Republic of Korea</i>)	337
A Comprehensive Method for Detecting Fusion Genes in Paediatric Brain Tumours. A. KONDO, Y. SHIMIZU, S. ADACHI, I. OGINO, M. SUZUKI, O. AKIYAMA, H. ARAI (<i>Tokyo, Japan</i>)	343

Instructions for Authors 2018

General Policy. CANCER GENOMICS & PROTEOMICS (CGP) welcomes the submission of high quality original articles and reviews on all aspects of the application of genomic and proteomic technologies to experimental and clinical cancer research. The journal's scientific spectrum includes: (a) molecular causes of carcinogenesis, cancer progression and metastasis; (b) structural and functional aspects of genes in the cancer cell; (c) advances in genomic and proteomic technologies applicable to cancer research; (d) rational anticancer drug design and drug development. CGP will also accept abstracts and proceedings of scientific meetings for publication, following consideration and approval by the Editorial Board.

The principal aim of CGP is to provide for the prompt online publication of original works of high quality, generally within 1-2 months of final acceptance. Manuscripts will be accepted on the understanding that they report original unpublished works that are not under consideration for publication by another journal (print or online), and that they will not be published again in the same form. All authors should sign a submission letter confirming the approval of their article contents. All material submitted to CGP will be subject to peer-review by two members of the Editorial Board and by one suitable outside referee. All manuscripts submitted to CGP are urgently treated with absolute confidence, with access restricted to the Editor-in-Chief, the Managing Editor, the journal's secretary, the reviewers and the printers. The Editors reserve the right to improve manuscripts in terms of grammar and style.

The Editors and Publishers of CGP accept no responsibility for the contents and opinions expressed by the contributors. Authors should warrant due diligence in the creation and issuance of their work.

Open Access Policy. CGP appears bimonthly as an online-only open access journal through the Stanford University HighWire Press. Upon acceptance, Authors will be asked to pay an online publication fee of USD 700.00 for articles up to 8 online pages (including figures and tables). Each additional excess page will be charged USD 60.00. Color will not be charged. Authors from developing countries may apply for a 25% discount after the acceptance of their paper. CGP online will keep the volume and issue numbers, as well as page numbering.

Copyright. Authors retain copyright. The unrestricted non-commercial use, distribution and reproduction in any medium of CGP articles for academic reasons is allowed, provided that the original work is properly cited. The Authors grant the permanent right to the publisher to use any articles published in this journal without any restriction, including academic advertising purposes. PDF, XML and html files of all articles published in CGP are the property of the publisher.

Format. Two types of papers may be submitted: (i) full papers containing completed original work, and (ii) review articles concerning fields of recognizable progress. Papers should contain all the essential data in order to make the presentation clear. Papers should be written in clear, concise English. Spelling should follow that of the "Oxford English Dictionary".

Manuscripts. All manuscripts should be divided into the following sections: (a) *First page* including the title of the presented work [not exceeding fifteen (15) words], full names and full postal addresses of all Authors, name of the Author to whom proofs are to be sent, key words, an abbreviated running title and the date of submission. (Note: The order of the Authors is not necessarily indicative of their contribution to the work. Authors may note their individual contribution(s) in the appropriate section(s) of the presented work); (b) *Abstract* not exceeding 150 words, organized according to the following headings: Background - Materials and Methods or Patients and Methods - Results - Conclusion; (c) *Introduction*; (d) *Materials and Methods* or *Patients and Methods*; (e) *Results*; (f) *Discussion*; (g) *Acknowledgements* and (h) *References*. All pages must be numbered consecutively. Footnotes should be avoided. Review articles may follow a different style according to the subject matter and the Author's preference. Review articles should not exceed 35 pages (approximately 250 words per double-spaced page) including all tables, figures and references.

Figures. All figures should appear at the end of the submitted document file. Once a manuscript is accepted all figures and graphs should be submitted separately in either jpg, tiff or pdf format and at a minimum resolution of 300 dpi. Graphs must be submitted as pictures made from drawings and must not require any artwork, typesetting, or size modifications. Symbols, numbering and lettering should be clearly legible. The number and top of each figure must be indicated.

Tables. All tables should appear at the end of the submitted document file. Once a manuscript is accepted, each table should be submitted separately, typed double-spaced. Tables should be numbered with Roman numerals and should include a short title.

References. Authors must assume responsibility for the accuracy of the references used. Citations for the reference section of submitted works should follow the standard form of "Index Medicus" and must be numbered consecutively in the order that they appear in the text. Examples: 1 Sumner AT: The nature of chromosome bands and their significance for cancer research. *Anticancer Res* 1: 205-216, 1981. 2. McGuire WL and Chamness GC: Studies on the oestrogen receptor in breast cancer. In: *Receptors for Reproductive Hormones*. O' Malley BW and Chamness GC (eds.). New York, Plenum Publ Corp, pp.133-136, 1973. In the text, references should be denoted as: (1), (2-5), (6, 7) etc.

Nomenclature and Abbreviations. Nomenclature should follow that given in “Chemical Abstracts”, “Index Medicus”, “Merck Index”, “IUPAC-IUB”, “Bergey’s Manual of Determinative Bacteriology”, The CBE Manual for Authors, Editors and Publishers (6th edition, 1994), and MIAME Standard for Microarray Data. Human gene symbols may be obtained from the HUGO Gene Nomenclature Committee (HGNC) (<http://www.gene.ucl.ac.uk/>). Approved mouse nomenclature may be obtained from <http://www.informatics.jax.org/>. Standard abbreviations are preferable. If a new abbreviation is used, it must be defined on first usage.

Clinical Trials. Authors of manuscripts describing clinical trials should provide the appropriate clinical trial number in the correct format in the text. For International Standard Randomised Controlled Trials (ISRCTN) Registry (a not-for-profit organization whose registry is administered by Current Controlled Trials Ltd.) the unique number must be provided in this format: ISRCTNXXXXXXXX (where XXXXXXXX represents the unique number, always prefixed by ‘ISRCTN’). Please note that there is no space between the prefix ‘ISRCTN’ and the number. Example: ISRCTN47956475. For Clinicaltrials.gov registered trials, the unique number must be provided in this format: NCTXXXXXXXX (where XXXXXXXX represents the unique number, always prefixed by ‘NCT’). Please note that there is no space between the prefix ‘NCT’ and the number. Example: NCT00001789.

Ethical Policies and Standards. CGP agrees with and follows the “Uniform Requirements for Manuscripts Submitted to Biomedical Journals” established by the International Committee of Medical Journal Editors in 1978 and updated in October 2001 (www.icmje.org). Microarray data analysis should comply with the “Minimum Information About Microarray Experiments (MIAME) standard”. Specific guidelines are provided at the “Microarray Gene Expression Data Society” (MGED) website. Presentation of genome sequences should follow the guidelines of the NHGRI Policy on Release of Human Genomic Sequence Data. Research involving human beings must adhere to the principles of the Declaration of Helsinki and Title 45, U.S. Code of Federal Regulations, Part 46, Protection of Human Subjects, effective December 13, 2001. Research involving animals must adhere to the Guiding Principles in the Care and Use of Animals approved by the Council of the American Physiological Society. The use of animals in biomedical research should be under the careful supervision of a person adequately trained in this field and the animals must be treated humanely at all times. Research involving the use of human foetuses, foetal tissue, embryos and embryonic cells should adhere to the U.S. Public Law 103-41, effective December 13, 2001.

Submission of Manuscripts. Please follow the Instructions for Authors regarding the format of your manuscript and references. Manuscripts must be submitted only through our online submission system at: <http://www.iar-submissions.com/login.html>
In case a submission is incomplete, the corresponding Author will be notified accordingly.
Questions regarding difficulties in using the online submission system should be addressed to: email: journals@iar-anticancer.org

Editorial Office: International Institute of Anticancer Research, 1st km Kapandritiou-Kalamou Rd., Kapandriti, P.O. Box 22, Attiki 19014, Greece. Tel / Fax: +30-22950-53389.

Editorial Office in U.S.A.: Anticancer Research USA, Inc., 111 Bay Avenue, Highlands, NJ 07732, USA.

E-mails: Editorial Office: journals@iar-anticancer.org. Managing Editor: editor@iar-anticancer.org.

Galley Proofs. Galley proofs will be sent by e-mail to the corresponding Author. Corrections of galley proofs should be limited to typographical errors. Galley proofs should be returned corrected to the Editorial Office by email within two days.

Specific information and additional instructions for Authors

1. Cancer Genomics & Proteomics (CGP) will consider the publication of conference proceedings and/or abstracts provided that the material submitted fulfils the quality requirements and instructions of the journal, following the regular review process by two suitable referees.
2. An acknowledgement of receipt, including the article number, title and date of receipt is sent to the corresponding author of each manuscript upon receipt. If this receipt is not received within 20 days from submission, the author should call or write to the Editorial Office to ensure that the manuscript (or the receipt) was not lost in the mail.
3. Each manuscript submitted to CGP is sent for review in confidence to two suitable referees with the request to return the manuscript with their comments to the Editorial Office within 12 days from receipt. If reviewers need a longer time or wish to send the manuscript to another expert, the manuscript may be returned to the Editorial Office with a delay. All manuscripts submitted to CGP, are treated in confidence, without access to any person other than the Managing Editor, the journal’s secretary, the reviewers and the printers.
4. All accepted manuscripts are peer-reviewed and carefully corrected in style and language, if necessary, to make presentation clear. (There is no fee for this service). Every effort is made (a) to maintain the personal style of the author’s writing and (b) to avoid change of meaning. Authors will be requested to examine carefully manuscripts which have undergone language correction at the pre-proof or proof stage.

5. Authors should pay attention to the following points when writing an article for CGP:
- The Instructions to Authors must be followed in every detail.
 - The presentation of the experimental methods should be clear and complete in every detail facilitating reproducibility by other scientists.
 - The presentation of results should be simple and straightforward in style. Results and discussion should not be combined into one section, unless the paper is short.
 - Results given in figures should not be repeated in tables.
 - Figures (graphs or photographs) should be prepared at a width of 8 or 17 cm with legible numbers and lettering.
 - Photographs should be clear with high contrast, presenting the actual observation described in the legend and in the text. Each legend should provide a complete description, being self-explanatory, including technique of preparation, information about the specimen and magnification.
 - Statistical analysis should be elaborated wherever it is necessary. Simplification of presentation by giving only numerical or % values should be avoided.
 - Fidelity of the techniques and reproducibility of the results, should be points of particular importance in the discussion section. Authors are advised to check the correctness of their methods and results carefully before writing an article. Probable or dubious explanations should be avoided.
 - Authors should not cite results submitted for publication in the reference section. Such results may be described briefly in the text with a note in parenthesis (submitted for publication by... authors, year).
 - The References section should provide as complete a coverage of the literature as possible including all the relevant works published up to the time of submission.
 - By following these instructions, Authors will facilitate a more rapid review and processing of their manuscripts and will provide the readers with concise and useful papers.
6. Following review and acceptance, a manuscript is examined in language and style, and galley proofs are rapidly prepared. Second proofs are not sent unless required.
7. Authors should correct their galley proofs very carefully and preferably twice. An additional correction by a colleague always proves to be useful. Particular attention should be paid to chemical formulas, mathematical equations, symbols, medical nomenclature etc. Any system of correction marks can be used in a clear manner, preferably with a red pen. Additions or clarifications are allowed provided that they improve the presentation but do not bring new results (no fee).
8. Articles submitted to CGP may be rejected without review if:
- they do not fall within the journal's policy.
 - they do not follow the instructions for authors.
 - language is unclear.
 - results are not sufficient to support a final conclusion.
 - results are not objectively based on valid experiments.
 - they repeat results already published by the same or other authors before the submission to CGP.
 - plagiarism is detected by plagiarism screening services.
- (Rejection rate (2016): 67%).
9. Authors who wish to prepare a review should contact the Managing Editor of the journal in order to get confirmation of interest in the particular topic of the review and to allow programming of space availability. The expression of interest by the Managing Editor does not necessarily imply acceptance of the review by the journal.
10. Authors may inquire information about the status of their manuscript(s) by calling the Editorial Office at +30-22950-53389, Monday to Friday 9.00-16.00 (Athens time), or by sending an e-mail to journals@iiar-anticancer.org.
11. Authors who wish to edit a special issue on a particular topic should contact the Managing Editor.

(This text is a combination of advice and suggestions contributed by Editors, Authors, Readers and the Managing Editor of CGP).

Copyright© 2018 - International Institute of Anticancer Research (G.J. Delinasios). All rights reserved (including those of translation into other languages). No part of this journal may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher.

Instructions for Authors 2018

General Policy. CANCER GENOMICS & PROTEOMICS (CGP) welcomes the submission of high quality original articles and reviews on all aspects of the application of genomic and proteomic technologies to experimental and clinical cancer research. The journal's scientific spectrum includes: (a) molecular causes of carcinogenesis, cancer progression and metastasis; (b) structural and functional aspects of genes in the cancer cell; (c) advances in genomic and proteomic technologies applicable to cancer research; (d) rational anticancer drug design and drug development. CGP will also accept abstracts and proceedings of scientific meetings for publication, following consideration and approval by the Editorial Board.

The principal aim of CGP is to provide for the prompt online publication of original works of high quality, generally within 1-2 months of final acceptance. Manuscripts will be accepted on the understanding that they report original unpublished works that are not under consideration for publication by another journal (print or online), and that they will not be published again in the same form. All authors should sign a submission letter confirming the approval of their article contents. All material submitted to CGP will be subject to peer-review by two members of the Editorial Board and by one suitable outside referee. All manuscripts submitted to CGP are urgently treated with absolute confidence, with access restricted to the Editor-in-Chief, the Managing Editor, the journal's secretary, the reviewers and the printers. The Editors reserve the right to improve manuscripts in terms of grammar and style.

The Editors and Publishers of CGP accept no responsibility for the contents and opinions expressed by the contributors. Authors should warrant due diligence in the creation and issuance of their work.

Open Access Policy. CGP appears bimonthly as an online-only open access journal through the Stanford University HighWire Press. Upon acceptance, Authors will be asked to pay an online publication fee of USD 700.00 for articles up to 8 online pages (including figures and tables). Each additional excess page will be charged USD 60.00. Color will not be charged. Authors from developing countries may apply for a 25% discount after the acceptance of their paper. CGP online will keep the volume and issue numbers, as well as page numbering.

Copyright. Authors retain copyright. The unrestricted non-commercial use, distribution and reproduction in any medium of CGP articles for academic reasons is allowed, provided that the original work is properly cited. The Authors grant the permanent right to the publisher to use any articles published in this journal without any restriction, including academic advertising purposes. PDF, XML and html files of all articles published in CGP are the property of the publisher.

Format. Two types of papers may be submitted: (i) full papers containing completed original work, and (ii) review articles concerning fields of recognizable progress. Papers should contain all the essential data in order to make the presentation clear. Papers should be written in clear, concise English. Spelling should follow that of the "Oxford English Dictionary".

Manuscripts. All manuscripts should be divided into the following sections: (a) *First page* including the title of the presented work [not exceeding fifteen (15) words], full names and full postal addresses of all Authors, name of the Author to whom proofs are to be sent, key words, an abbreviated running title and the date of submission. (Note: The order of the Authors is not necessarily indicative of their contribution to the work. Authors may note their individual contribution(s) in the appropriate section(s) of the presented work); (b) *Abstract* not exceeding 150 words, organized according to the following headings: Background - Materials and Methods or Patients and Methods - Results - Conclusion; (c) *Introduction*; (d) *Materials and Methods* or *Patients and Methods*; (e) *Results*; (f) *Discussion*; (g) *Acknowledgements* and (h) *References*. All pages must be numbered consecutively. Footnotes should be avoided. Review articles may follow a different style according to the subject matter and the Author's preference. Review articles should not exceed 35 pages (approximately 250 words per double-spaced page) including all tables, figures and references.

Figures. All figures should appear at the end of the submitted document file. Once a manuscript is accepted all figures and graphs should be submitted separately in either jpg, tiff or pdf format and at a minimum resolution of 300 dpi. Graphs must be submitted as pictures made from drawings and must not require any artwork, typesetting, or size modifications. Symbols, numbering and lettering should be clearly legible. The number and top of each figure must be indicated.

Tables. All tables should appear at the end of the submitted document file. Once a manuscript is accepted, each table should be submitted separately, typed double-spaced. Tables should be numbered with Roman numerals and should include a short title.

References. Authors must assume responsibility for the accuracy of the references used. Citations for the reference section of submitted works should follow the standard form of "Index Medicus" and must be numbered consecutively in the order that they appear in the text. Examples: 1 Sumner AT: The nature of chromosome bands and their significance for cancer research. *Anticancer Res* 1: 205-216, 1981. 2. McGuire WL and Chamness GC: Studies on the oestrogen receptor in breast cancer. In: *Receptors for Reproductive Hormones*. O' Malley BW and Chamness GC (eds.). New York, Plenum Publ Corp, pp.133-136, 1973. In the text, references should be denoted as: (1), (2-5), (6, 7) etc.

Nomenclature and Abbreviations. Nomenclature should follow that given in “Chemical Abstracts”, “Index Medicus”, “Merck Index”, “IUPAC-IUB”, “Bergey’s Manual of Determinative Bacteriology”, The CBE Manual for Authors, Editors and Publishers (6th edition, 1994), and MIAME Standard for Microarray Data. Human gene symbols may be obtained from the HUGO Gene Nomenclature Committee (HGNC) (<http://www.gene.ucl.ac.uk/>). Approved mouse nomenclature may be obtained from <http://www.informatics.jax.org/>. Standard abbreviations are preferable. If a new abbreviation is used, it must be defined on first usage.

Clinical Trials. Authors of manuscripts describing clinical trials should provide the appropriate clinical trial number in the correct format in the text. For International Standard Randomised Controlled Trials (ISRCTN) Registry (a not-for-profit organization whose registry is administered by Current Controlled Trials Ltd.) the unique number must be provided in this format: ISRCTNXXXXXXXX (where XXXXXXXX represents the unique number, always prefixed by ‘ISRCTN’). Please note that there is no space between the prefix ‘ISRCTN’ and the number. Example: ISRCTN47956475. For Clinicaltrials.gov registered trials, the unique number must be provided in this format: NCTXXXXXXXX (where XXXXXXXX represents the unique number, always prefixed by ‘NCT’). Please note that there is no space between the prefix ‘NCT’ and the number. Example: NCT00001789.

Ethical Policies and Standards. CGP agrees with and follows the “Uniform Requirements for Manuscripts Submitted to Biomedical Journals” established by the International Committee of Medical Journal Editors in 1978 and updated in October 2001 (www.icmje.org). Microarray data analysis should comply with the “Minimum Information About Microarray Experiments (MIAME) standard”. Specific guidelines are provided at the “Microarray Gene Expression Data Society” (MGED) website. Presentation of genome sequences should follow the guidelines of the NHGRI Policy on Release of Human Genomic Sequence Data. Research involving human beings must adhere to the principles of the Declaration of Helsinki and Title 45, U.S. Code of Federal Regulations, Part 46, Protection of Human Subjects, effective December 13, 2001. Research involving animals must adhere to the Guiding Principles in the Care and Use of Animals approved by the Council of the American Physiological Society. The use of animals in biomedical research should be under the careful supervision of a person adequately trained in this field and the animals must be treated humanely at all times. Research involving the use of human foetuses, foetal tissue, embryos and embryonic cells should adhere to the U.S. Public Law 103-41, effective December 13, 2001.

Submission of Manuscripts. Please follow the Instructions for Authors regarding the format of your manuscript and references. Manuscripts must be submitted only through our online submission system at: <http://www.iar-submissions.com/login.html>
In case a submission is incomplete, the corresponding Author will be notified accordingly.
Questions regarding difficulties in using the online submission system should be addressed to: email: journals@iar-anticancer.org

Editorial Office: International Institute of Anticancer Research, 1st km Kapandritiou-Kalamou Rd., Kapandriti, P.O. Box 22, Attiki 19014, Greece. Tel / Fax: +30-22950-53389.

Editorial Office in U.S.A.: Anticancer Research USA, Inc., 111 Bay Avenue, Highlands, NJ 07732, USA.

E-mails: Editorial Office: journals@iar-anticancer.org. Managing Editor: editor@iar-anticancer.org.

Galley Proofs. Galley proofs will be sent by e-mail to the corresponding Author. Corrections of galley proofs should be limited to typographical errors. Galley proofs should be returned corrected to the Editorial Office by email within two days.

Specific information and additional instructions for Authors

1. Cancer Genomics & Proteomics (CGP) will consider the publication of conference proceedings and/or abstracts provided that the material submitted fulfils the quality requirements and instructions of the journal, following the regular review process by two suitable referees.
2. An acknowledgement of receipt, including the article number, title and date of receipt is sent to the corresponding author of each manuscript upon receipt. If this receipt is not received within 20 days from submission, the author should call or write to the Editorial Office to ensure that the manuscript (or the receipt) was not lost in the mail.
3. Each manuscript submitted to CGP is sent for review in confidence to two suitable referees with the request to return the manuscript with their comments to the Editorial Office within 12 days from receipt. If reviewers need a longer time or wish to send the manuscript to another expert, the manuscript may be returned to the Editorial Office with a delay. All manuscripts submitted to CGP, are treated in confidence, without access to any person other than the Managing Editor, the journal’s secretary, the reviewers and the printers.
4. All accepted manuscripts are peer-reviewed and carefully corrected in style and language, if necessary, to make presentation clear. (There is no fee for this service). Every effort is made (a) to maintain the personal style of the author’s writing and (b) to avoid change of meaning. Authors will be requested to examine carefully manuscripts which have undergone language correction at the pre-proof or proof stage.

5. Authors should pay attention to the following points when writing an article for CGP:
 - The Instructions to Authors must be followed in every detail.
 - The presentation of the experimental methods should be clear and complete in every detail facilitating reproducibility by other scientists.
 - The presentation of results should be simple and straightforward in style. Results and discussion should not be combined into one section, unless the paper is short.
 - Results given in figures should not be repeated in tables.
 - Figures (graphs or photographs) should be prepared at a width of 8 or 17 cm with legible numbers and lettering.
 - Photographs should be clear with high contrast, presenting the actual observation described in the legend and in the text. Each legend should provide a complete description, being self-explanatory, including technique of preparation, information about the specimen and magnification.
 - Statistical analysis should be elaborated wherever it is necessary. Simplification of presentation by giving only numerical or % values should be avoided.
 - Fidelity of the techniques and reproducibility of the results, should be points of particular importance in the discussion section. Authors are advised to check the correctness of their methods and results carefully before writing an article. Probable or dubious explanations should be avoided.
 - Authors should not cite results submitted for publication in the reference section. Such results may be described briefly in the text with a note in parenthesis (submitted for publication by... authors, year).
 - The References section should provide as complete a coverage of the literature as possible including all the relevant works published up to the time of submission.
 - By following these instructions, Authors will facilitate a more rapid review and processing of their manuscripts and will provide the readers with concise and useful papers.
6. Following review and acceptance, a manuscript is examined in language and style, and galley proofs are rapidly prepared. Second proofs are not sent unless required.
7. Authors should correct their galley proofs very carefully and preferably twice. An additional correction by a colleague always proves to be useful. Particular attention should be paid to chemical formulas, mathematical equations, symbols, medical nomenclature etc. Any system of correction marks can be used in a clear manner, preferably with a red pen. Additions or clarifications are allowed provided that they improve the presentation but do not bring new results (no fee).
8. Articles submitted to CGP may be rejected without review if:
 - they do not fall within the journal's policy.
 - they do not follow the instructions for authors.
 - language is unclear.
 - results are not sufficient to support a final conclusion.
 - results are not objectively based on valid experiments.
 - they repeat results already published by the same or other authors before the submission to CGP.
 - plagiarism is detected by plagiarism screening services.(Rejection rate (2016): 67%).
9. Authors who wish to prepare a review should contact the Managing Editor of the journal in order to get confirmation of interest in the particular topic of the review and to allow programming of space availability. The expression of interest by the Managing Editor does not necessarily imply acceptance of the review by the journal.
10. Authors may inquire information about the status of their manuscript(s) by calling the Editorial Office at +30-22950-53389, Monday to Friday 9.00-16.00 (Athens time), or by sending an e-mail to journals@iiar-anticancer.org.
11. Authors who wish to edit a special issue on a particular topic should contact the Managing Editor.

(This text is a combination of advice and suggestions contributed by Editors, Authors, Readers and the Managing Editor of CGP).

Copyright© 2018 - International Institute of Anticancer Research (G.J. Delinasios). All rights reserved (including those of translation into other languages). No part of this journal may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher.