

ANNALI

dell'Istituto Superiore di Sanità
A SCIENCE JOURNAL FOR PUBLIC HEALTH

Publication

Annali dell'Istituto Superiore di Sanità is published quarterly and in special issues.
Freely available online at www.iss.it/anna - www.annali-iss.eu

Annali dell'Istituto Superiore di Sanità is indexed in

- CAB
- CHEMABS
- EMBASE/Excerpta Medica
- FSTA
- MEDLINE
- SCIELO
- SCOPUS
- WEB OF SCIENCE

Annali Editorial Office

Publishing Unit, Servizio Conoscenza e Comunicazione Scientifica,
Istituto Superiore di Sanità
Viale Regina Elena, 299 00161 Rome, Italy
Tel.: +39 06 49902945 Fax: +39 06 49902253
E-mail: annali@iss.it
www.iss.it/anna - www.annali-iss.eu

Papers to be presented for publication should be submitted online
to www.annali-iss.eu.

Instructions to Authors are available online at www.iss.it/anna.

Publishing support

Il Pensiero Scientifico Editore, Rome
Via San Giovanni Valdarno 8, 00138 Rome, Italy
www.pensiero.it

Subscription information & terms

Il Pensiero Scientifico Editore
Tel.: +39 06 86282324 Fax: 06 86282250
E-mail: abbonamenti@pensiero.it

Year 2017

Italy individual subscription € 57,00 | Italy institutional subscription € 67,00.

Other countries € 67,00

Each quarterly issue € 21,00

Responsibility for the contents and opinions expressed on this journal
rests solely with the author(s).

ISSN 0021-2571 (print), 2384-8553 (online)

Coden: AISSAW 53 (No. 1)

©Istituto Superiore di Sanità 2017.

Some rights reserved.



Reg. Stampa - Tribunale di Roma, n. 482 del 29 ottobre 1985 (cartaceo); n. 121 del 16 maggio 2014 (online)



Printed in March 2017 by Ti Printing s.r.l.
Via Case Rosse 23, 00131 Rome, Italy

ANNALI

dell'Istituto Superiore di Sanità
A SCIENCE JOURNAL FOR PUBLIC HEALTH

President of the Istituto Superiore di Sanità

Gualtiero Ricciardi

Responsible Director

Paola De Castro

Editor-in-chief

Enrico Alleva

Istituto Superiore di Sanità

Assistant Editor

Federica Napolitani Cheyne

Istituto Superiore di Sanità

Editorial Committee

Enrico Alleva, Luca Busani, Pietro Comba, Paola De Castro, Paola Fattibene,
Alessandro Giuliani, Giovanni Rezza, Emanuele Scafato, Stefano Vella

Istituto Superiore di Sanità

Editing and graphics

Maria Cristina Barbaro, Alessandra Fuglieni, Federica Napolitani Cheyne,
Ilaria Palazzesi, Laura Radiciotti

Istituto Superiore di Sanità

Editorial Advisory Board

Dino Amadori

Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori, Meldola, Italy

Jacqueline N. Crawley

Laboratory of Behavioral Neuroscience, NIMH, NIH, Bethesda, USA

Jean-François Delfraissy

Agence Nationale de Recherches sur le sida et les hépatites virales, Paris, France

Chris Beyrer

Johns Hopkins Bloomberg School of Public Health, Baltimore, USA

Tony Fletcher

London School of Hygiene & Tropical Medicine, London, UK

Sui Huang

Institute for Systems Biology, Seattle, USA

Ana Marušić

Dept of Research in Biomedicine and Health, University of Split School of Medicine, Croatia

Stefania Maggi

CNR Aging Branch Institute of Neuroscience, Padova, Italy

Francesco M. Marincola

Infectious Disease and Immunogenetics Section, NIH, Bethesda, USA

Juana Martín de las Mulas González-Albo

Dpto de Anatomía y Anatomía Patológica Comparada, Facultad de Veterinaria, UCO, Córdoba, Spain

Patrick Smeesters

Université Catholique de Louvain, Louvain-La-Neuve, Belgium

David Vlahov

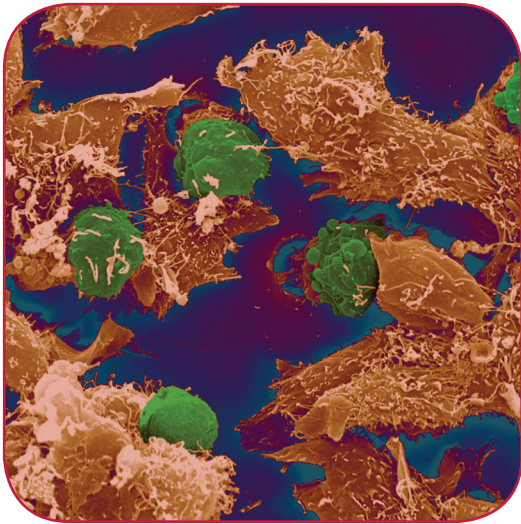
School of Nursing, University of California, San Francisco, CA, USA

Bernard Zalc (Boris)

Centre de Recherche de l'Institut du Cerveau et de la Moelle épinière, UPMC, Paris, France

Graphic design of the cover: Massimo Delle Femmine, Istituto Superiore di Sanità

The photograph on the cover is a SEM image of brain tumor cells during the migration process, provided by Giuseppina Bozzuto, Centro Nazionale per la Ricerca e la Valutazione Clinica e Preclinica dei Farmaci, Istituto Superiore di Sanità and elaborated by Cosimo Curianò, Istituto Superiore di Sanità, Rome, Italy.



ANNALI

dell'Istituto Superiore di Sanità

Vol. 53, No. 1 2017

Contents

EDITORIAL

- 1 Why research on Endocrine Disrupting Chemicals is still worthwhile
Alberto Mantovani
- 3 Knowledge and participation. Moving towards scientific citizenship
Fabrizio Rufo

COMMENTARY

- 6 Research on biological materials of human origin. Jurists and scientists face to face
Carlo Petrini and Walter Ricciardi

ORIGINAL ARTICLES AND REVIEWS

- 9 Do I need training in public health ethics? A survey on Italian residents' beliefs, knowledge and curricula
Massimiliano Colucci, Martina Chellini, Paola Anello, Benedetto Arru, Glenda Tettamanti and Elena Marcon
- 17 The product of the human AHI-1 (Abelson helper integration site) gene: experimental *in vitro* data point to its involvement in tumor cell invasion
Giuseppina Bozzuto and Agnese Molinari
- 25 Uterus transplants and their ethical implications
Carlo Petrini and Assuntina Morresi
- 30 Molecular characterization of *Babesia* and *Theileria* species in ticks collected in the outskirts of Monte Romano, Lazio Region, Central Italy
Luciano Toma, Marco Di Luca, Fabiola Mancini, Francesco Severini, Carmela Mariano, Giancarlo Nicolai, Valentina Laghezza Masci, Alessandra Ciervo, Anna Maria Fausto and Simone Mario Cacciò

- 35 Illicit drugs in Emergency Department patients injured in road traffic accidents
Pietro Papa, Loretta Rocchi, Laura Maria Rolandi, Marcello Di Tuccio, Marco Biffi and Antonella Valli
- 40 Risk adjusted mortality after hip replacement surgery: a retrospective study
Gabriele Messina, Silvia Forni, Daniele Rosadini, Manuele Falcone, Francesca Collini and Nicola Nante
- 46 Hospital efficiency: how to spend less maintaining quality?
Paolo Campanella, Elena Azzolini, Alessio Izzi, Ferruccio Pelone, Concetta De Meo, Daniele La Milia, Maria Lucia Specchia and Walter Ricciardi
- 54 Association between serum vitamin D and metabolic syndrome in middle-aged and older adults and role of supplementation therapy with vitamin D
Walter Verrusio, Paola Andreozzi, Alessia Renzi, Marco Musumeci, Nicolò Gueli and Mauro Cacciafesta
- 60 The Italian reference sites of the European innovation partnership on active and healthy ageing: Progetto Mattone Internazionale as an enabling factor
Maddalena Illario, Vincenzo De Luca, Giovanni Tramontano, Enrica Menditto, Guido Iaccarino, Lorenzo Bertorello, Ernesto Palummeri, Valeria Romano, Giuliana Moda, Marcello Maggio, Mirca Barbolini, Lisa Leonardini, and Antonio Addis for the Italian EIP-AHA Working Group
- 70 Appropriateness and efficacy of Spa therapy for musculoskeletal disorders. A Delphi method consensus initiative among experts in Italy
Marco Paoloni, Andrea Bernetti, Ovidio Brignoli, Daniela Coclite, Antonio Fraioli, Stefano Masiero, Antonello Napoletano, Nicola Quirino, Franco Rengo, Carlo Ruosi, Ugo Viora, Marco Vitale and Valter Santilli

BRIEF NOTES

- 77 Association of non-alcoholic fatty liver disease and cardiometabolic risk factors with early atherosclerosis in an adult population in Southern Italy
Carmelo Antonio Caserta, Alfonso Mele, Pasquale Surace, Luigina Ferrigno, Angela Amante, Arianna Messineo, Carmelo Vacalebre, Fulvia Amato, Damiano Baldassarre, Mauro Amato, Fabrizio Marcucci and Massimo Zuin
- 82 Educational action in the rehabilitation of severe acquired brain injuries: the role of self-awareness
Daniela Silvestro, Maria Mazzetti, Chiara Melia, Maria Teresa Stagno, Giovanni Augusto Carlesimo, Umberto Bivona and Rita Formisano
- 86 **Book Reviews, Notes and Comments**
Edited by *Federica Napolitani Cheyne*
- 88 **Publications from International Organizations on Public Health**
Edited by *Anna Maria Rossi*