

INFORMAZIONI PERSONALI

BRIGUGLIO GIUSI

Giusi Briguglio



OCCUPAZIONE PER LA QUALE SI CONCORRE POSIZIONE RICOPERTA OCCUPAZIONE DESIDERATA TITOLO DI STUDIO OBIETTIVO PROFESSIONALE

Medico-chirurgo Specialista in Medicina del Lavoro

ESPERIENZA PROFESSIONALE

- Dal Novembre 2020 attività di Medico competente
- Iscrizione all'albo dei Medici Competenti in data 27 Ottobre 2020
- Attività di tutorato di numerosi studenti afferenti a corsi di laurea di I e II livello.
- attività didattica integrativa, seminari e laboratori didattici specifici del SSD MED/44.
- attività didattica nel corso di perfezionamento in "Rischi e patologie nel lavoro" approfondendo l'argomento "stress lavoro correlato"
- attività didattica nel Master in "Occupational and environmental risk management" approfondendo l'argomento sui "Fitosanitari".
- Dal 2014 Medico di continuità assistenziale
- Dal 2014 Medico sostituto di medicina generale

ISTRUZIONE E FORMAZIONE

2005 Diploma di Maturità Classica

Liceo Classico "Luigi Valli", Barcellona Pozzo di Gotto (italia)

25/07/2013 Laure in Medicina e Chirurgia

Università degli Studi di Messina, Messina (Italia)

Dipartimento di Medicina Clinica e Sperimentale Medicina e Chirurgia

Votazione finale: 110/110



Tesi: Recenti acquisizioni terapeutiche dell'edema maculare diabetico

02/2014 Abilitazione all'esercizio della professione Votazione finale di 270/270

26/10/2020 Specializzazione In Medicina del Lavoro

Università degli Studi di Messina, Messina (Italia)

Votazione finale: 50/50 Lode

Tesi sperimentale: BIOMARCATORI E STRESS NEI LAVORATORI TURNISTI

COMPETENZE PERSONALI					
Lingua madre	Italiano				
Altre lingue	COMPRENSIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Produzione orale	
Inglese	B1	B1	A2	A2	B1
Competenze comunicative Competenze organizzative e gestionali	Livelli: A1/A2: Utente base - B1/B2: Utente intermedio - C1/C2: Utente avanzato Quadro Comune Europeo di Riferimento delle Lingue Capacità di interfacciarsi con i colleghi, disponibilità e flessibilità nel pieno rispetto della collaborazione professionale. Buona attitudine alla gestione ed organizzazione del lavoro.				
Competenze digitali	AUTOVALUTAZIONE				
	Elaborazione delle informazioni	Comunicazione	Creazione di Contenuti	Sicurezza	Risoluzione di problemi
	avanzato	avanzato	avanzato	intermedio	intermedio
	Livelli: Utente base - Ut Competenze digitali - Sc	ente intermedio - Utente heda per l'autovalutazione	avanzato	1	1
Patente di guida	А, В				
ULTERIORI INFORMAZIONI					



DATA: Ottobre 2020

Pubblicazioni

International Journal of Functional Nutrition https://doi.org/doi:10.3892/ijfn.2020.9 AUTORI: Giusi Briguglio, Chiara Costa, Manuela Pollicino, Federica Giambò, Stefania Catania, Concettina Fenga

TITOLO: Polyphenols in cancer prevention: New insights (Review)

ABSTRACT: A huge volume of literature data suggests that a diet rich in fruits and vegetables, mostly due to the contribution of natural polyphenols, could reduce the incidence of specific cancers. Resveratrol, epigallocatechin gallate and curcumin are among the most extensively studied polyphenols: The majority of the effects attributed to these compounds are linked to their antioxidant and anti-inflammatory properties. The multiple mechanisms involved include the modulation of molecular events and signaling pathways associated with cell survival, proliferation, differentiation, migration, angiogenesis, hormonal activities, detoxification enzymes and immune responses. Notwithstanding their promising role in cancer prevention and treatment, polyphenols often have a poor bioavailability when administered as pure active principles, representing an important limit to their use. However, the bioavailability and thus the efficacy of these compounds can be improved by their administration in combination with other phytochemicals, with anticancer drugs or in polyphenol-loaded nanotechnology-based delivery systems. The possibility of combining conventional drugs with polyphenols offers very valuable advantages, such as the building of more efficient anticancer therapies with less side-effects on the health of patients. The present review focuses on current knowledge regarding the interactions between natural polyphenols and cancer development in order to gain a clearer comprehension of the potential mechanisms through which individual foods and food components may be exploited to reduce cancer risk.

Pubblicazioni

DATA: Maggio 2020

Toxicology Reports: https://doi.org/doi:10.1016/j.toxrep.2020.05.003 AUTORI: Costa C, Teodoro M, Rugolo C.A, Alibrando C, Giambo' F, Briguglio G, Fenga C. TITOLO: MicroRNAs alteration as early biomarkers for cancer and neurodegenerative diseases: New challenges in pesticides exposure

ABSTRACT: This review summarizes the current knowledge linking cancer and neuro-degenerative diseases to dysregulation of microRNA network following pesticide exposure. Most findings revealed differential miRNA expression targeting biomolecules and pathways involved in various neoplastic localizations and neurodegenerative diseases. A growing body of evidence in recent literature indicates that alteration of specific miRNAs can represent an early biomarker of disease following exposure to chemical agents, including pesticides. Different miRNAs seem to regulate cell proliferation, apoptosis, migration, invasion, and metastasis via many biological pathways through modulation of the expression of target mRNAs. The evaluation of miRNA expression levels may be used to develop new non-invasive strategies for the prediction and prognosis of many diseases, including cancer. However, the application of miRNAs as diagnostic and therapeutic biomarkers in the clinical field is extremely challenging.

Pubblicazioni

DATA: Aprile 2020

TITOLO: Night shift work in resident physicians: does it affect mood states and cognitive levels?

AUTORI: Costa Chiara, Mondello Stefania, Micali Elvira, Indelicato Giuliano, Licciardello Antonino Andrea, Vitale Ermanno, Briguglio Giusi, Teodoro Michele, Fenga Concettina. JOURNAL OF AFFECTIVE DISORDERS: Impact Factor: 3.892

ABSTRACT: BACKGROUND: The effects of night shift work on health status have been widely studied. Night

workers seem to smoke more, eat badly and show a low propensity to physical activity. Night work can be associated with an increase in cardiovascular and gastrointestinal disorders, alterations in immune response, diabetes, aging, hormonal imbalance, and premature death; alteration of circadian rhythm is also regarded as a risk factor for breast cancer and neuropsychiatric disorders. Moreover, several studies have highlighted the effects of sleep deprivation on clinical performance, quality of care and personal safety of healthcare personnel. No studies have investigated the effects of night work on Italian resident physicians and compared its effect across specialties. This study aims to assess the prevalence of sleep disorders, possible cognitive impairment and mood states, in relation to night shift work among resident physicians.

METHODS: 80 resident physicians, attending the postgraduate training into an Hospital located in the South of Italy, were divided into 4 areas (medical, surgical, services and anaesthesia). They were recruited from July 2017 to June 2018 and participated to a survey consisting of 4 questionnaires to investigate the presence of sleep deprivation and sleep quality (Epworth Sleepiness Scale,



Pittsburgh Sleep Quality Index), their cognitive status (Mini Mental State examination) and mood profiles (Profile of Mood States, POMS). Analysis of variance was used for comparison of questionnaires scores across specialties.

RESULTS: Authors reported no sleep deprivation, no sleep disorders and their outcomes, no changes in intellectual efficiency and no cognitive impairment in this population, neither in the areas performing night shifts nor in those involving only day shifts. Mood states measured by POMS showed a borderline level of Anger-Hostility (A) value among the residents of the medical area and services, and an increase slightly beyond the physiological levels of the T-score 50 of Fatigue-Inertia (F) always in the same groups. An increase in the Vigour-Activity (V) value beyond T-score 50 levels was also observed among residents of all the areas considered.

CONCLUSIONS: Emotional involvement could be attributed to the gap between high professional demand and lack of experience and knowledge among trainees. Tutors should help their students in order to identify earlier changes in the mood. Improvement in the organization of the trainee's activity could reduce the emotional overload.

DATA: MARZO 2020

TITOLO: Association Between Oxidative Stress Biomarkers And PON And GST Polymorphisms As A Predictor For Susceptibility To The Effects Of Pesticides. AUTORI: Costa C, Briguglio G, Giambò F, Catanoso R, Teodoro M Caccamo D, Fenga C. Int J Mol Med. 2020 Mar 16. doi: 10.3892/ijmm.2020.4541. Impact Factor: 2.1

ABSTRACT: Low levels of pesticides persist in the environment and can affect the health of exposed subjects. Oxidative stress is considered as one of the mechanisms responsible for the adverse effects on human health and some molecules may represent useful biomarkers for the evaluation of this physiological balance. This study investigated the role of these biomarkers, such as advanced oxidation protein products (AOPP), advanced glycation end-products (AGE) and reactive oxygen metabolites (ROMs) in relation to genetic polymorphisms of paraoxonase (PON)1. PON2. glutathione S-transferase pi 1 (GSTP1), glutathione S-transferase theta 1 (GSTT1) and glutathione S-transferase mu 1 (GSTM1). An increase in the levels of these biomarkers is usually inversely associated with the depletion of the biological antioxidant potential (BAP). The results revealed a statistically significant difference in the sex-dependent variation of AGE, BAP, AOPP and ROM protein levels. Furthermore, an association between the PON2 S331C gene polymorphism and the serum levels of AOPP, ROMs and BAP was found. Thus, compared with AGE, the levels of AOPP and ROMs provided a more sensitive biomarker, with an improved association with the PON2 genotype. Such an association strengthen the importance of PON in the occurrence of oxidative stress. According to these results, an individual's genetic background may be taken into account for the health surveillance of individuals occupationally exposed to pesticides, in order to define a cluster of highly susceptible workers so as to guarantee greater protection.

DATA: FEBBRARIO 2020

Pubblicazioni

Pubblicazioni

Teodoro Concettina Fenga TITOLO: New perspectives on cytokine pathways modulation by pesticide exposure. Current Opinion in Toxicology

AUTORI: Chiara Costa Giusi Briguglio Rosaria Catanoso Federica Giambò Irene Polito Michele

Abstract: Immune cells are able to release a variety of inflammation mediators, activating proinflammatory and antiinflammatory processes and regulating intracellular pathways. Consequences of chronic or early-life exposure to pesticides may be extended beyond innate immune dysfunction to the increased risk of late-life chronic inflammatory-based diseases. This study aims to summarize some of the most recent advancements in occupational toxicology, focusing on biological mechanisms linking environmental exposure to pesticides, inflammation, and cytokine modulation, as well as genetic polymorphisms or epigenetic modifications which can represent factors of vulnerability for exposed workers. Choosing appropriate toxicity biomarkers is also one of the main concerns in the field of immunotoxicology; for this purpose, new technologies have been introduced for the monitoring of pesticides blood levels along with molecular alterations. These approaches will allow the assessment of the actual body burden of environmental pollutants associating it with a screening for the early diagnosis of pathologies.

Pubblicazioni DATA: 2019

AUTORI: TEODORO, MICHELE BRIGUGLIO, Giusi FENGA, Concettina COSTA, Chiara TITOLO: Genetic polymorphisms as determinants of pesticide toxicity: Recent advances RIVISTA: TOXICOLOGY REPORTS



Pubblicazioni

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Occupational and environmental exposure to pesticides may induce harmful effects on human health by promoting the development of a wide range of disorders. Some of the most recently hypothesized mechanisms are oxidative stress and epigenetic modifications, however biological effects seem to be modulated mainly by the occurrence of genetic polymorphisms. The susceptibility to exposure can be evaluated by studying the most common polymorphisms of genes involved in the metabolism of organophosphorus compounds (cytochrome P450, glutathione transferase, acetyltransferases or paraoxonase 1). The aim of this article is to review recent literature data concerning the influence of genetic polymorphisms on pesticides-induced oxidative damage.

DATA: 2017

TITOLO: New insights on 'old' toxicants in occupational toxicology (Review) AUTORI: Costa C,Miozzi E,Teodoro M,Briguglio G,Rapisarda V,Fenga C, RIVISTA: Molecular Medicine Reports. Impact Factor: 2.1

In order to deliver the best possible working environment, it is essential to identify professional conditions that could be harmful for worker's health and prevent (or limit) the occurrence of such conditions. The appropriate use of personal protective equipment and the development of appropriate regulations allowed to reduce the prevalence of 'classic' occupational diseases, such as occupational hearing loss or asbestosis, just to name a few. Nowadays, environmental pollution seems to be one of the most relevant concerns for human and animal health, and toxicology is becoming one of the most prominent fields of interest in occupational settings. An increasing number of studies demonstrate that the presence of toxicants in the workplace could be responsible for the development of chronic diseases, even at doses that were considered 'safe'. The present review summarizes some of the most recent advancements in occupational toxicology, focusing on topics that have long been debated in the past and that have recently returned to the fore.

EDITORE: spandidos publications

SCHEDA: www.spandidos-publications.com/mmr/15/5/3317

Pubblicazioni DATA: 2017

RIVISTA: Food and Chemical Toxicology: Impact Factor: 4.679

TITOLO: Current evidence on the effect of dietary polyphenols intake on chronic diseases. AUTORI: Costa C,Tsatsakis A,Mamoulakis C,Teodoro M,Briguglio G,Caruso E,Tsoukalas Editore: Josè L. Domingo (elsevier)

ABSTRACT: Polyphenols are secondary metabolites of plants. They comprise several antioxidant compounds and they are generally considered to be involved in the defense against human chronic diseases. During the last years, there has been growing scientific interest in their potential health benefits. In this comprehensive review, we focus on the current evidence defining the position of their dietary intake in the prevention/treatment of human chronic diseases, including prostate cancer and other types of cancer, cardiovascular diseases, diabetes mellitus and neurodegenerative diseases such as Alzheimer's and Parkinson's disease; we also discuss their ability to modulate multiple signalling transduction pathways involved in the pathophysiology of these diseases. Despite the fact that data regarding the biological functions of polyphenols can be considered exhaustive, evidence is still inadequate to support clear beneficial effects on human chronic diseases. Currently, most data suggest that a combination of phytochemicals rather than any single polyphenol is responsible for health benefit. More studies investigating the role of polyphenols in the prevention of chronic human diseases are needed, especially for evaluating factors such as gender, age, genotype, metabolism and bioavailability

Pubblicazioni

DATA: Mol Med Rep. 2016 Nov;14(5):4475-4488. doi: 10.3892/mmr.2016.5817. Impact Factor: 2.1 TITOLO: Occupational exposure to pesticides as a possible risk factor for the development of chronic diseases in humans (Review).

AUTORI: Gangemi S, Miozzi E, Teodoro M, Briguglio G, De Luca A, Alibrando C, Polito I, Libra M

ABSTRACT: It is well known that pesticides are widely used compounds. In fact, their use in agriculture, forestry, fishery and the food industry has granted a huge improvement in terms of productive efficiency. However, a great number of epidemiological surveys have demonstrated that these toxic compounds can interact and exert negative effects not only with their targets (pests, herbs and fungi), but also with the rest of the environment, including humans. This is particularly relevant in the case of workers involved in the production, transportation, preparation and application of these toxicants. Accordingly, a growing body of evidence has demonstrated the correlation between



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occupational exposure to pesticides and the development of a wide spectrum of pathologies, ranging from eczema to neurological diseases and cancer. Pesticide exposure is often quite difficult to establish, as many currently used modules do not take into account all of the many variables that can occur in a diverse environment, such as the agricultural sector, and the assessment of the real risk for every single worker is problematic. Indeed, the use of personal protection equipment is necessary while handling these toxic compounds, but education of workers can be even more important: personal contamination with pesticides may occur even in apparently harmless situations. This review summarises the most recent findings describing the association between pesticide occupational exposure and the development of chronic diseases.

DATA: International Journal of Molecular Medicine 2016. Impact Factor: 3.098 EDITORE: Spandidos publications

TITOLO: Occutational and environmetal exposure to pesticides and cytokine pathways in Diseases (Review).

AUTORI: Gangemi S, Gofita E, Costa C, Teodoro M, Briguglio G, Nikitovic D, Tzanakakis ABSTRACT: Pesticides can exert numerous effects on human health as a consequence of both environmental and occupational exposures. The available knowledge base suggests that exposure to pesticides may result in detrimental reproductive changes, neurological dysfunction and several chronic disorders, which are defined by slow evolution and long-term duration. Moreover, an ever increasing amount of data have identified an association between exposure to pesticides and the harmful effects on the immune system. The real impact of alterations in humoral cytokine levels on human health, in particular in the case of chronic diseases, is still unclear. To date, studies have suggested that although exposure to pesticides can affect the immune system functionally, the development of immune disorders depends on the dose and duration of exposure to pesticides. However, many of the respective studies exhibit limitations, such as a lack of information on exposure levels, differences in the pesticide administration procedures, difficulty in characterizing a prognostic significance to the weak modifications often observed and the interpretation of obtained results. The main challenge is not just to understand the role of individual pesticides and their combinations, but also to determine the manner and the duration of exposure, as the toxic effects on the immune system cannot be separated from these considerations. There is a clear need for more well-designed and standardized epidemiological and experimental studies to recognize the exact association between exposure levels and toxic effects and to identify useful biomarkers of exposure. This review focuses on and critically discusses the immunotoxicity of pesticides and the impact of cytokine levels on health, focusing on the development of several chronic diseases.

health effects of pesticides [1]. Oxidation generates several molecules, such as advanced oxidation

ATTI DI CONVEGNO	DATA: 2019 AUTORI: C.Fenga, M.Teodoro, G.Briguglio, C.Costa, TITOLO: gene-environment interactions and pesticide toxicity in exposed workers Organizzazione: 24th World Congress on Advances in Oncology and 24th International Symposium on Molecular Medicine
ATTI DI CONVEGNO	DATA: 2019 AUTORI: M.Teodoro, D.Caccamo, G.Briguglio, C.Costa, C.Fenga, TITOLO: Relationship between genetic polymorphisms and pesticide-induced oxidative damage in exposed workers Organizzazione: 24th World Congress on Advances in Oncology and 24th International Symposium on Molecular Medicine
ATTI DI CONVEGNO	DATA: 2019 AUTORI: C. Fenga, M. Teodoro, G. Briguglio, I. Polito, F. Giambò, D. Caccamo, C. TITOLO: Are PON and GST polymorphisms associated with advanced oxidation protein products in pesticide-exposed subjects? RACCOLTA: Official journal of EUROTOX Organizzazione: 55th Congress of the European Societies of Toxicology (Helsinki) Purpose: Recent studies have suggested oxidative stress as one of the mechanisms for the adverse



protein products (AOPP), which could represent useful biomarkers of oxidative stress. Glutathione Stranferases (GSTs) and PON family genes are enzymes involved in the detoxification of xenobiotics, sharing antioxidant effect; genetic differences in expression and activity of these enzymes are often due to polymorphic alleles. These polymorphism alter enzyme activity and consequently susceptibility towards many toxic compounds. The present study was aimed to assess the contribution of genetic polymorphisms of pesticides-metabolizing enzymes on AOPP production as a biomarkers of oxidative stress

ATTI DI CONVEGNO	 DATA: 2019 AUTORI: C. Costa, E. Micali, M. Teodoro, G. Briguglio, I. Polito, G. Nutile, TITOLO: Low-dose exposure to lead and neurobehavioral effects RACCOLTA: Official journal of EUROTOX Organizzazione: 55th Congress of the European Societies of Toxicology (Helsinki) Exposure to inorganic lead (Pb) in the environmental and occupational settings continues to be a serious public health problem. At high exposure levels, lead is known to cause encephalopathy, kidney
	damage, anaemia and toxicity to the reproductive system. This survey was conducted to evaluate the association between occupational exposure to low-dose Pb and mood states using biological markers and a validated and standardized test
ATTI DI CONVEGNO	DATA: 2017 AUTORI: Costa, C.; Teodoro, M.; Briguglio, G.; Gangemi, S.; Catania, S.; Rapisarda, V. TITOLO: ASSESSMENT OF OXIDATIVE DAMAGE IN WORKERS EXPOSED TO LOW-DOSE BENZENE
	RACCOLTA: 10TH INTERNATIONAL SYMPOSIUM ON BIOLOGICAL MONITORING IN
	10TH INTERNATIONAL SYMPOSIUM ON BIOLOGICAL MONITORING IN OCCUPATIONAL AND ENVIRONMENTAL HEALTH (ISBM-10)
ATTI DI CONVEGNO	DATA: 2017 TITOLO: Immunotoxicity of pesticides: Potential health effects on exposed subjects AUTORI: COSTA Chiara, TEODORO MICHELE, MIOZZI EDOARDO, BRIGUGLIO Giusi, FENGA
	Concettina RACCOLTA: INTERNATIONAL JOURNAL OF MOLECULAR MEDICINE 22nd World Congress on Advances in Oncology & the 20th Symposium on Molecular Medicine
ATTI DI CONVEGNO	DATA: 2019 AUTORI: C.Costa, G.Briguglio, S.Catania, C.Alibrando, R Catanoso, M.Teodoro, C, Fenga, TITOLO: Biomarkers di stress ossidativo in lavoratori esposti a glifosate:dati preliminari RACCOLTA: Giornale Italiano di Medicina del Lavoro ed Ergonomia Organizzazione: 82°congresso nazionale SIML 2019
ATTI DI CONVEGNO	DATA: 2017 TITOLO: INDAGINE CONOSCITIVA SULL'ESPOSIZIONE A FORMALDEIDE IN AMBITO SANITARIO AUTORI: Costa C.,Licciardello A.,Rugolo C.A.,Briguglio G.,Teodoro M.,Polito Organizzazione: 80° Congresso SIMLII Padova SCHEDA: iris.unime.it/handle/11570/3131300?mode=full.233#.XItmDyhKh
ATTI DI CONVEGNO	DATA: 79° CONGRESSO SIMLII ROMA 2016 TITOLO: DESCRIZIONE DI UN INSOLITO CASO DI INFORTUNIO SUL LAVORO IN ASSISTENTE DI BATTITORI DI CACCIA AUTORI: Polito I.,Romeo S.,Mellino V.,Briguglio G.,Pellegrino M.G.

• "How to Write an Effective Research Paper (Advanced)" 15 Aprile 2020, Enago Accademy,



seminari

Curriculum Vitae

Enago Learn

Partecipazione a convegni e

 "How to Submit a Journal Article and Get it Published (Advanced)" 17 Aprile 2020, Enago Accademy, Enago Learn

- "Sicurezza sul lavoro. Procedure telematiche e non solo" Convegno INAIL, 19 Dicembre 2019 Messina.
- "Il burnout" Convegno 31 Maggio 2019.
- "Ambienti confinati: Rischi per la salute e la sicurezza" Seminario CdS TPALL. Ruolo: Relatore. 25 Maggio 2017 Università degli Studi di Messina.
- "Sindrome Delle Apnee Ostruttive E Performance Lavorativa", 01 Dicembre 2017, Messina, Italia.
- 80° Congresso Nazionale, SIMLII Società Italiana di Medicina del Lavoro e Igiene Industriale, 20-22 Settembre 2017, Padova, Italia.
- Esposizione A Formaldeide In Ambito Sanitario. Normativa Di Riferimento E Strategie Preventive, 10 Novembre 2016, Messina, Italia.
- "Innovazione Tecnologica: Brevetti E Spin Off Negli Atenei", 31 Maggio 2016, Messina, Italia.
- "Eziologia dei vari tipi di linfoma con particolare riguardo alle esposizioni occupazionali e ambientali", 21 Maggio 2016, Messina, Italia.
- "Valutazione dei rischi e sorveglianza sanitaria nella produzione di acque minerali per uso umano" Seminario CdS TPALL. Ruolo: Relatore. 11 Febbraio 2016 Università degli Studi di Messina
- "Salute e Ambiente: Aria, Acqua E Alimentazione" Piattaforma Multimediale Interattiva Via Web (Wbt) E-Learning, Ottobre 2014.

ALLEGATI