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## Curriculum Vitae

**Name:****Nationality****Address:****PAPAPETROPOULOS, Andreas**

Greek

Laboratory of Pharmacology  
Faculty of Pharmacy  
School of Health Sciences  
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**EDUCATION:****University**School of Pharmacy, University of Patras, Patras, Greece; 1985-1989. Degree: B. Pharm**Graduate:**Department of Pharmacology and Toxicology, Medical College of Georgia, USA; 1990-1994; Degree: Ph.D. in Pharmacology**Postdoctoral:**

Vascular Biology Center, Medical College of Georgia, USA; 1994-1995

Boyer Center for Molecular Medicine &amp; Department of Pharmacology, Yale University School of Medicine; 1995-1998

**ACADEMIC APPOINTMENTS:**

- 1999-2003: Assistant Professor of Pharmacology, School of Nursing, National and Kapodistrian University of Athens, Greece
- 2003-2009 Associate Professor of Molecular Pharmacology, Department of Pharmacy, University of Patras, Greece
- 2009-2013 Professor of Pharmacology, Department of Pharmacy, University of Patras, Greece
- 2013-present Professor of Pharmacology, Faculty of Pharmacy, National and Kapodistrian University of Athens, Greece

**SECONDARY AND ADJUNCT APPOINTMENTS:**

- 2000-2008: Group Leader, "G. P. Livanos" Laboratory, Dept of Critical Care and Pulmonary Services, National and Kapodistrian University of Athens School of Medicine, Greece
- 2008-2017: Adjunct Professor, Department of Medicine, McGill University, Canada
- 2011-2013: Honorary Professor, Department of Pharmacology, University of Maastricht, The Netherlands
- 2011-present Adjunct Professor, Department of Anesthesiology University of Texas Medical Branch, Galveston, USA
- 2012-present: Affiliated Investigator, Biomedical Research Foundation of the Academy of Athens, Greece

2014-present Professor, Faculty of Medicine, 1<sup>st</sup> Department of Critical Care and Pulmonary Services, Evangelismos Hospital, National and Kapodistrian University of Athens, Greece

#### **VISITING PROFESSORSHIPS:**

1999-2001: Department of Pharmacology, Yale University School of Medicine, USA  
2007: Department of Surgery, University of Dentistry and Medicine New Jersey, USA (July-August)  
2011: Biomedical Research Foundation of the Academy of Athens, Greece (February-June)  
2014-2016 Department of Pharmacy, University of Patras, Greece  
2017 Cardiovascular Center of Excellence, Louisiana State University Health Sciences Center, New Orleans, USA (July-December)

#### **SCIENTIFIC ADVISORY BOARDS**

2020-present Bioactive Natural Products Steering Center of Excellence, National and Kapodistrian University of Athens, Greece, Member of the Steering Committee  
2020-present Scientific Board, Biomedical Research Foundation of the Academy of Athens, Member  
2021-present Research Unit, Onassis Cardiac Surgery Center, Scientific Committee, Member

**LICENSURES:** Board Certified in Pharmacy, Athens, Greece, 1990

**CERTIFICATIONS:** Open and Distance Learning, Hellenic Open University, 2018

#### **PROFESSIONAL ACTIVITIES**

##### **Institutional Committees:**

2005-2016 Curriculum Committee, Hellenic Open University  
2010-2013 Internal Accreditation and Evaluation Committee, Department of Pharmacy, University of Patras  
2009-2011 Member (substitute) of the University of Patras Research Committee Governing Body  
2014-2018 Curriculum Committee, Faculty of Pharmacy, National and Kapodistrian University of Athens  
2015-2018 Internal Accreditation and Evaluation Committee, Faculty of Pharmacy, National and Kapodistrian University of Athens  
2020-now Head of the Curriculum Committee, Faculty of Pharmacy, National and Kapodistrian University of Athens

##### **Administrative appointments and other activities:**

###### *Intramural*

2006-2013 Director, Lab for Molecular Pharmacology, University of Patras  
2005-2009 and 2011-2013 Vice Chairman (elected), Department of Pharmacy, University of Patras  
2010-2013 Graduate Program Director, Department of Pharmacy, University of Patras  
2016-present Director, Lab of Pharmacology, National and Kapodistrian University of Athens  
2020-2024 Vice Chairman (elected), Department of Pharmacy, National and Kapodistrian University of Athens  
2020-2024 Director of Postgraduate Studies, Department of Pharmacy, National and Kapodistrian University of Athens

*National*

- 2003-2007 Elected Member of the Board, Greek Society for Pharmacology  
2009-2013 Pharmacopoeia Committee, National Organization for Medicines  
2013-2017 Greek Society for Basic and Clinical Pharmacology, President  
2015-2023 National Pharmacy Board Examination Committee, Examiner

*International*

- 2007 National Delegate, European Medicines Agency, Pediatric Committee  
2007-present European Medicines Agency expert  
2011-present European Network on Gasotransmitters, Chair  
2014-2015 International Union of Pharmacology (IUPHAR) General Assembly member  
(National Delegate)  
2014-2016 European Federation of Pharmacological Societies General Assembly member  
(National Delegate)  
2014-present NC-IUPHAR Co-chair for gasotransmitters  
2016-2022 Secretary General, EPHAR (European Federation of Pharmacological Societies)  
2022-2024 President, EPHAR

**International jury and board positions**

- 2015 LifePharm Award Committee, Italian Society of Pharmacology  
2016-2020 Expert Advisory Board, Innovative Training Network Horizon2020, “European Vascular Interventions and Therapeutic Innovation Network”  
2018-present Prix Galien (Greece), Member of the Awards Committee, member  
2018-present ASPET Cardiovascular Pharmacology Awards Committee, member

**Editorial boards**

Editorial board member

- 1998-2010 Vascular Pharmacology  
2009-2018 British Journal of Pharmacology  
2019-2023 British Journal of Pharmacology, Reviews Editorial Board  
2010-present Arteriosclerosis, Thrombosis and Vascular Biology  
2012-2022 Journal of Pharmacology & Experimental Therapeutics  
2015-present Nitric Oxide Biology and Chemistry  
2020-present Antioxidants  
2021-present Frigid Zone Medicine  
2021-present Pharmacology  
2022-present Frontiers in Pharmacology, Reviews Editor

Associate/Senior Editor

- 2023-present British Journal of Pharmacology, Senior Editor  
2022-present Pharmacological Research, Associate editor

**Guest Editor**

- 2015 Themed Issue on “Gasotransmitters” *Br. J. Pharmacol.* (Papapetropoulos, Ferdinand, Foresti)  
2016 Special Issue on “Drugs and druggable targets in angiogenesis” *Pharmacol Res.* (Papapetropoulos, Morbidelli)  
2018 Themed Issue on “Drug Repurposing” *Br. J. Pharmacol.* (Papapetropoulos, Szabo)  
2020 Themed Issue on “Hydrogen Sulfide in Biology & Medicine” *Br. J. Pharmacol.* (Papapetropoulos, Wallace, Wang)

2021	Research Topic Issue on "Interplays and Functions of Gaseous Mediators: From Underlying Mechanisms to Therapeutic Approaches in Cardiovascular Diseases, <i>Front Pharmacol</i> , (Brancaleone, Papapetropoulos, Mitidieri)
2021	Special Issue on “E-Cigarettes and Health” <i>Toxics</i> (Topouzis, Papapetropoulos)

**MEMBERSHIP IN SOCIETIES (year joined):**

American Heart Association (2007)  
American Society for Biochemistry and Molecular Biology (2004)  
American Society for Pharmacology and Experimental Therapeutics (1993)  
American Physiological Society (2010)  
British Society for Pharmacology (2003)  
European Society for Cardiology, Heart Failure Association (2014)  
European Vascular Biology Organization (2011)  
North American Vascular Biology Organization (1996)  
Nitric Oxide Society (2014)  
Southeastern Pharmacology Society (1991)  
Greek Pharmacological Society (1998)  
Greek Union of Pharmacists (1998)

**REVIEWER in peer reviewed journals:**

Acta Pharmacologica Sinica	Expert Opinion on Drug Discovery
American Journal of Pathology	FASEB Journal
American Journal of Physiology	FEBS Letters
American Journal of Respiratory and Critical Care Medicine	Free Radicals Biology & Medicine
American Journal of Respiratory Cell and Molecular Biology	Frontiers in Oncology
Antioxidants and Redox Signaling	General Pharmacology
Arteriosclerosis, Thrombosis, Vascular Biology	Hepatology
Biochemical Biophysical Acta	International Journal of Cardiology
Biochemical Pharmacology	International Journal of Biochemistry and Cell Biology
Biochemistry and Cell Biology	Journal of Applied Physiology
BMC Cell Biology	Journal of Biological Chemistry
British Journal of Anesthesia	Journal of Cellular and Molecular Medicine
British Journal of Pharmacology	Journal of Clinical Investigation
Cancer Letters	Journal of Medicinal Chemistry
Cardiovascular Drugs and Therapy	Journal of Molecular Endocrinology
Cardiovascular Research	Journal of Molecular Medicine
Cell and Tissue Research	Journal of Pharmacology and Experimental Therapeutics
Cellular Biochemistry and Biophysics	Journal of Pharmacy and Pharmacology
Circulation	Journal of Thrombosis and Haemostasis
Circulation Research	Journal of Vascular Research
Chemistry and Medicinal Chemistry	Life Sciences
Current Medicinal Chemistry	Medicinal Chemistry Communications
Current Pharmaceutical Design	Mitochondrion
Cytokine	Molecular Medicine
European Respiratory Journal	Molecular Neurobiology
European Journal of Pharmacology	Molecular Pharmacology
Experimental Physiology	Nature Chemical Biology
Expert Opinion on Investigational Drugs	Nature Reviews Drug Discovery

Nature Reviews Cardiology  
Nitric Oxide  
Oncogene  
Oxidative Medicine and Cellular Longevity  
Pediatric Allergy and Immunology  
Pharmacological Research  
Pharmacology  
PLOSone

Proceedings of the Society for Experimental Biology and Medicine  
Proteins  
Redox Biology  
Respiratory Research  
Scientific Reports  
Science Advances  
Singal Transduction and Targeted Therapy  
Trends in Immunology

### **REVIEWER (granting agencies)**

General Secretariat of Research and Technology (Greece), 2003, 2010, 2017, 2020  
Associazione Italiana per la Ricerca sul Cancro (Italy), 2004  
National Medical Research Council (Singapore), 2005-2007, 2009  
Health Research Board (Ireland), 2005  
State Scholarship Foundation IKY (Greece), 2006  
Medical Research Council (UK), 2006  
University of Gent (Belgium), 2009  
French National Research Agency 2011-2012  
Romanian National Council for Scientific Research, 2012  
Czech Science Foundation, 2012  
Research Foundation-Flanders (Belgium), 2013  
National Centre for Research and Development (Poland), 2014  
Biotechnology and Biological Sciences Research Council (UK), 2014  
Diabetes UK, 2015  
Northcott Devon Medical Foundation (UK), 2015  
European Union, Cooperation in Science and Technology, 2015  
Slovak Academy of Sciences (VEGA)/Ministry of Education, Science, Research and Sport, Slovak Republic, 2016  
Hellenic Ministry of Education, 2017  
Onassis Foundation (Greece), 2017-present  
United States Army Research Office, 2017  
Chilean National Science and Technology Commission, 2017  
National Science Center (Poland), 2018, 2020  
Medical Research Council (UK), 2018  
Israel Science Foundation, 2019  
Patras Science Park (Greece), 2019  
University of Timisoara (Romania), 2019  
Medical Research Council (UK), 2019  
St Barts Hospital Trust funded clinical PhD studentships (UK), 2020  
British Heart Foundation (UK), 2021  
State Scholarship Foundation IKY (Greece) 2022  
Swiss National Science Foundation, 2017, 2022  
“La Caixa” Foundation, 2023

### **CONFERENCE CHAIR AND MEMBER OF SCIENTIFIC OR LOCAL COMMITTEE (international meetings)**

1. 1<sup>st</sup> European Conference on hydrogen sulfide, Smolenice, Slovakia 2012, **International Advisory Board**
2. 5<sup>th</sup> BBBB International Conference, From Drug Discovery and Formulation Strategies to Pharmacokinetic-Pharmacodynamics, Athens Greece 2013, **Local Organizing Committee**

3. 2<sup>nd</sup> European Conference on the biology of hydrogen sulphide, Exeter, UK 2013, **International Advisory Board**
4. 3<sup>rd</sup> Science On Conference on Drug Discovery and Development, Dubai 2014 **Program Technical Committee**
5. 8<sup>th</sup> Biannual Hellenic Society of Basic and Clinical Pharmacology, Athens, Greece, 2014, **Conference Chair**
6. 3<sup>rd</sup> European Conference on the Biology of H<sub>2</sub>S, Athens, Greece, 2015, **Conference Chair**
7. 7<sup>th</sup> European congress of Pharmacology, EPHAR2016, Istanbul, Turkey, **International Scientific Advisory Board**, 2016
8. 4<sup>th</sup> International Conference on the biology of hydrogen sulfide, Naples, Italy 2016, **International Advisory Board**
9. 1<sup>st</sup> International Summit on Tobacco Harm Reduction: Novel products, research and policy, Athens 2018, **Scientific Organizing Committee**
- 10.
11. 5<sup>th</sup> International Conference on the biology of hydrogen sulfide, Toronto, Canada 2018, **International Advisory Board**
12. 15th Congress of the European Association for Clinical Pharmacology and Therapeutics, Athens, Greece, 2022, **Local Organizing Committee**
13. 6<sup>th</sup> International Conference on the Biology of hydrogen sulphide, Budapest, Hungary, 2022, **International Advisory Board**
14. 8<sup>th</sup> European Congress of Pharmacology, EPHAR2020, Prague, Czech Republic, **Organizing Committee**, 2022
15. 9<sup>th</sup> European Congress of Pharmacology, EPHAR2024, Athens, Greece, **Chairman**

#### **SYMPOSIUM ORGANIZER AND SESSION CHAIR (international meetings)**

1. 3<sup>rd</sup> International Conference on cGMP, cGMP: generators, effectors and therapeutic implications, Dresden, 2007, **Session Chair**
2. 4<sup>th</sup> International Conference on cGMP, cGMP: generators, effectors and therapeutic implications, Regensburg, 2009, **Poster Session Moderator**
3. 5<sup>th</sup> International Conference on cGMP, cGMP: generators, effectors and therapeutic implications, Halle, 2011, **Session Chair**
4. British Pharmacological Society, 2011 Winter Meeting, London, **Symposium Co-organizer**, “Gasotransmitters as physiological mediators and therapeutic agents: the challenges ahead”
5. 6<sup>th</sup> International Conference on cGMP, cGMP: generators, effectors and therapeutic implications, Erfurt, 2013, **Session Chair**
6. Heart Failure 2014, European Society for Cardiology, Athens, Basic Science 1 **Session Chair** and Young Investigators Award **Judge**
7. British Pharmacological Society, Pharmacology 2014, London, **Symposium Co-organizer** “Advances and challenges for cardioprotection: getting to the heart of the matter”
8. European Council for Cardiovascular Research, Lake Garda, 2014, **Session Chair** and poster **Judge**
9. 7<sup>th</sup> International Conference on cGMP, cGMP: generators, effectors and therapeutic implications, Trier, 2015, **Session Chair**
10. American Society for Experimental Biology and Medicine, EB16, “The Biology and Translational Potential of Hydrogen Sulfide: One Person's Trash is Another Person's Treasure” **Symposium co-organizer**, April 2016
11. American Heart Association Sessions 2017, Anaheim, California, **Session moderator**
12. 7<sup>th</sup> European congress of Pharmacology, EPHAR2016, Istanbul, Turkey, **Session co-organizer**, June 2016
13. American Society for Experimental Biology and Medicine, EB18, “Update on the Gaseous Signaling Molecules NO, H<sub>2</sub>S, and CO” **Symposium co-organizer**, April 2018

**REVIEWER (book publishers)**

Springer Science and Business Media  
Royal Society of Chemistry Books

**AWARDS & HONORS**

1988	Award from the Greek National Scholarship Foundation
1992-94	Scholarships from the American Hellenic Education Progressive Association
1994	PhD in Pharmacology with Distinction, Medical College of Georgia
1996-98	Fellow of the Patrick and Catherine Weldon Donaghue Medical Foundation
2011	Fellow of the American Heart Association
2012	Fellow of the British Pharmacological Society
2014	Most influential Greek Scientist list (published by Prof. Ioannidis, ISBN 978-960-04-4489-6)
2023	Honorary member of the Hungarian Pharmacological Society

**Teaching activities**

1. 2013-present: Course Director for the courses “Pharmacology I” and “Pharmacology II” for pharmacy students, Faculty of Pharmacy, School of Health Sciences, National and Kapodistrian University of Athens (fifth and sixth semesters)
2. 2003-2013: Course co-director for “Molecular Pharmacology I” and “Molecular Pharmacology II” for Pharmacy students (ninth and tenth semesters), at the University of Patras. In 2008, the two courses were merged and taught as one (Molecular Pharmacology)
3. 2015-present: Molecular Pharmacology, Elective course for third year Pharmacy students, at the National and Kapodistrian University of Athens
4. 2004-2013: Course Director, “Pharmacology I” and “Pharmacology II” for pharmacy students, Department of Pharmacy, University of Patras (fifth and sixth semesters)
5. 1998-2003: Course Director for the courses “Pharmacology I” and “Pharmacology II” for students of the School of Nursing (second and third semesters), at the National and Kapodistrian University of Athens (1998-2003)
6. Lectures on anti-coagulant drugs to third year students in the School of Nursing at the Medical College of Georgia (1994-1995)

**Graduate**

1. 2003-2013: Department of Pharmacy, University of Patras, Graduate Studies Program; Lectures for the following courses (total 50 hours annually): “Biochemical basis of drug action”, “Advanced molecular pharmacology”, “Advanced Pharmacology”, “Pathophysiology and pharmacology of angiogenesis”, “In vitro and In vivo systems used to study the mechanisms of drug actions”.
2. 2007-2010: Course Director, “Pharmacology for Nursing graduates”, National and Kapodistrian University of Athens and Athens Technological Institute
3. 2011-2013: Introduction to cellular singaling (4hr) MSc in Bioinformatics, National and Kapodistrian University of Athens
4. 2013-2015: Molecular Medicine, Medical School National and Kapodistrian University of Athens, Experimental Thesis supervision
5. 2015-present, MSc in “Design and Synthesis of New Pharmaceutical Compounds”, Faculty of Pharmacy, National and Kapodistrian University of Athens, Course Director “Advanced Pharmacology”, “Biochemical and Molecular Pharmacology”

**INVITED SPEAKER (Academic Institutions and Research Centers)**

Department of Medicine, Royal Victoria Hospital, McGill University, Canada, 1999  
Department of Intensive Care, University of Athens, Greece, 2001  
Institute for Biochemistry II, University of Frankfurt, Germany, 2004  
Foundation for Biomedical Research of the Academy of Athens, Greece, 2004  
Department of Pharmacological Sciences, University of Siena, Italy, 2005  
Institute for Biotechnology, Greek Research Foundation, Greece, 2006  
4<sup>th</sup> Department of Internal Medicine, University of Athens, Greece, 2006  
Institute for Organic Chemistry, University of Leipzig, Germany, 2007  
Instituto de Tecnologia Química e Biológica, Universidade Nova de Lisboa, Portugal, 2008  
University of Medicine and Dentistry New Jersey, Dept of Pharmacology & Physiology, USA 2008  
Meakins-Christie Laboratories, McGill University, Canada, 2008  
Department of Pharmacy, Aristotelian University of Thessaloniki, Greece, 2009  
Department of Experimental Pharmacology, School of Pharmacy, University of Naples, Italy, 2009  
Department of Medicine, University of Patras, Greece, 2010  
Vascular Biology Center, Medical College of Georgia, Georgia, USA, 2010  
Faculty of Pharmacy, Ege University, Izmir, Turkey, 2012  
Center for Sepsis Control and Care, Universitätsklinikum Jena, Germany, 2013  
Institute of Vascular Signalling, Goethe University, Germany, 2013  
Jagiellonian Centre for Experimental Therapeutics, Jagiellonian University, Poland, 2014  
Department of Pathology and Mecidal Biology, University of Groningen, Netherlands, 2014  
Oxford Group of Translational Cardiovascular Research, Oxford University, UK, 2014  
Molecular Cardiology, University of Mainz, Germany, 2015  
School of Pharmacy, Texas Tech Health Sciences University Center, Amarillo, TX, USA, 2016  
Cardiovascular Center of Excellence, LSU Health Science Center, Louisiana, ,USA, 2016  
Department of Biology, Laurentian University, Ontario, Canada, 2016  
Department of Physiology and Pharmacology, Karolinska Institutet, Sweden, 2016  
Center for Diagnostics and Therapeutics, Georgia State University, Atlanta, GA, 2017  
Vascular Biology & Therapeutics, Yale University School of Medicine, New Haven, CT, 2017  
cGMP Forum, Novartis Institute for Biomedical Research, Boston, MA, 2018  
Department of Pharmacology, University of Fribourg, Switzerland, 2018  
Institute of Vascular Signalling, Goethe University, Germany, 2021  
Institute of Molecular Medicine, Dept of Cardiovascular and Renal Research, Odense, Denmark, 2021

#### **INVITED SPEAKER (International Meetings)**

NATO Advanced Study Institute: Vascular endothelium: Mechanisms of cell signalling", Crete, 1998  
3<sup>rd</sup> State of the Art, Interdisciplinary Review Course, Athens, 1999  
NATO Advanced Study Institute: "Vascular Endothelium: Source and Target of Inflammatory mediators", Crete, 2000  
NATO Advanced Study Institute: "Disease markers in exhaled breath: basic mechanism and clinical applications" Crete 2001  
Vascular Endothelium: Translating Discoveries into public health practice, Crete, 2005  
8<sup>th</sup> International conference: Angiogenesis: Basic Sciences and Clinical Applications, Corfu 2006  
Nitric oxide and nitrosative stress in the cardiovascular system, Budapest, 2006  
3<sup>rd</sup> International Conference on cGMP, cGMP: generators, effectors and therapeutic implications, Dresden, 2007  
9<sup>th</sup> International Angiogenesis Conference: Basic Science and Clinial Applications, Patras, June 22-26, 2008  
XXVIII European Section Meeting, International Society for Heart Research, Athens, 2008  
7<sup>th</sup> European Association of Clinical Pharmacology and Therapeutics Summer School, Alexandroupolis, 2009

4<sup>th</sup> International Conference on cGMP, cGMP: generators, effectors and therapeutic implications, Regensburg, 2009  
3<sup>rd</sup> Master Class in Oncology Pharmacy, Athens, 2009  
International Symposium on Nitric Oxide-Cyclic GMP signal Transduction in Brain, Valencia, 2010  
European Society for Cardiology, Heart Failure 2010 Berlin, 2010  
5<sup>th</sup> International Conference on cGMP, cGMP: generators, effectors and therapeutic implications, Halle, 2011  
6<sup>th</sup> European Vascular Biology Meeting, Krakow, 2011  
1<sup>st</sup> European Conference on the Biology of H<sub>2</sub>S, Smolenice, Slovakia, 2012  
VIII<sup>th</sup> Joint Meeting on Medicinal Chemistry, Lublin, Poland, 2013  
6<sup>th</sup> International Conference on cGMP, cGMP: generators, effectors and therapeutic implications, Erfurt, 2013  
2<sup>nd</sup> European Conference on the Biology of H<sub>2</sub>S, Exeter, UK, 2013  
3<sup>rd</sup> International Conference on H<sub>2</sub>S Biology and Medicine, Kyoto, Japan, 2014  
International Symposium on NO and H<sub>2</sub>S in health and disease, Naples, Italy, 2014  
3<sup>rd</sup> Congress of Physiological Sciences of Serbia, Belgrade, 2014  
Nitric Oxide – Nitrite/Nitrate Conference, Cleveland, Ohio, USA, 2014  
18<sup>th</sup> European Council on cardiovascular Research, Lake Garda, Italy, 2014  
Heart Failure Association Winter Research Meeting, Les Diablerets, Switzerland, 2015  
British Physiological Society, Cardiff, 2015  
Experimental Biology 16, San Diego, 2016  
9<sup>th</sup> International Conference on Heme Oxygenases Prague, 2016  
4<sup>th</sup> International Conference on the Biology of H<sub>2</sub>S, Naples, Italy, 2016  
Society for Free Radical Research-Europe 2016, Budapest, Hungary, 2016  
43<sup>rd</sup> FEBS Congress, Prague, 2018  
1<sup>st</sup> Meeting in Translational Pharmacology, Spanish Society of Pharmacology, Spain, 2018  
5<sup>th</sup> International Conference on the biology of hydrogen sulphide, Toronto, Canada, 2018  
Therapeutic Applications of Nitric Oxide in Cancer and Inflammatory-related Disorders, Siena, 2018  
44<sup>th</sup> FEBS Congress, Krakow, 2019  
14<sup>th</sup> Serbian Congress of Pharmacology, Novi Sad, Republic of Serbia), 2019  
6<sup>th</sup> International Conference on the Biology of hydrogen sulphide, Budapest, Hungary, 2022

## List of publications

### Chapters (Books and meeting proceedings)

1. A. Papapetropoulos and J.D. Catravas. Endothelial cell functions. In "8<sup>th</sup> European Congress of Intensive Care Medicine", Monduzzi Editore S.p.A, Bologna, Italy, pp349-354, 1995.
2. A. Papapetropoulos and W.C. Sessa. Regulation of the nitric oxide synthase gene family. In "Biology of Nitric Oxide", Eds S.S. Gross, M.S. Goligorski, Chapman and Hill, New York, pp.66-85, 1997.
3. A. Papapetropoulos, V. Zachariou and W.C. Sessa. NO synthase biology: Insights gained from knockout mice. In "The haemodynamic effects of nitric oxide". Eds. R.T. Mathie and T.M. Griffith. Imperial College Press, London UK pp 96-110, 1999.
4. A. Xagorari, A. Kotanidou, Ch. Roussos and A. Papapetropoulos. Luteolin reduces LPS-induced TNF-α production and protects mice against LPS toxicity. In "Disease markers in exhaled breath: basic mechanism and clinical applications" Eds N. Marczin and M. Yacoub, IOS Press, Amsterdam, pp 366-368 , 2002.
5. S. Tsiklos and A Papapetropoulos. The angiopoietins: linking angiogenesis and inflammation Eds: M.E. Maragoudakis and E. Papadimitriou. In: "Angiogenesis: Basic Science and Clinical Applications", Eds: M. E. Maragoudakis and E. Papadimitriou, Transworld Research Network, Singapore, pp 79-93, 2007.

6. A. Pyriochou, A. Koukaliotis and **A. Papapetropoulos**. Atrial natriuretic peptide is a positive regulator of angiogenesis. In "5th Hellenic Peptide Forum" Eds: P. Cordopatis, E. Manesi-Zoupa, G. Pairas, Typorama, Patras, pp235-243, 2010.

7. C. Kevil, M.M. Cortese-Krott, P. Nagy, **A. Papapetropoulos**, M. Feelisch, C. Szabo. Cooperative Interactions Between NO and H<sub>2</sub>S: Chemistry, Biology, Physiology, Pathophysiology. In "Nitric Oxide Biology and Pathbiology, 3<sup>rd</sup> Edition". Eds L. J. Ignarro and B. A. Freeman. Academic Press, London, pp57-83, 2017, ISBN: 978-0-12-804273-1

### **Peer-reviewed journals**

#### Editorials & commentaries

1. **A Papapetropoulos** A ginseng-derived ER $\beta$  agonist (Rb1 ginsenoside) attenuates capillary morphogenesis. *Br. J. Pharmacol.* 152:172-174, 2007
2. **A Papapetropoulos**, R Foresti, P Ferdinand. Pharmacology of the 'gasotransmitters' NO, CO and H<sub>2</sub>S: translational opportunities. *Br J Pharmacol.* 172:1395-6, 2015.
3. I Andreadou, EK Iliodromitis, C Szabo, **A Papapetropoulos**. Hydrogen sulfide and PKG in ischemia-reperfusion injury: sources, signaling, accelerators and brakes *Basic Res Cardiol.* 110:52, 2015
4. **A Papapetropoulos**, C Szabo. Inventing new therapies without reinventing the wheel: the power of drug repurposing. *Br J Pharmacol.* 175:165-167, 2018.
5. **A Papapetropoulos**, Wallace JL, Wang R. From Primordial Gas to the Medicine Cabinet. *Br J Pharmacol.* 177: 715–719, 2020.
6. V. Brancaleone, E. Mitidieri, **A Papapetropoulos**. Interplay and Functions of Gaseous Mediators: From Underlying Mechanisms to Therapeutic Approaches in Cardiovascular Diseases *Front. Pharmacol.* 13: 925561; 2022

#### Review articles

1. **A Papapetropoulos**, RD Rudik, WC Sessa. Molecular and cellular control of nitric oxide synthases in the cardiovascular system. *Cardiovasc Res* 43:509-520, 1999
2. S Andreopoulos and **A Papapetropoulos**. Molecular aspects of soluble guanylyl cyclase regulation. *Gen Pharmacol* 34: 147-157, 2000.
3. S Tsikagos, M Koutsilieris, **A Papapetropoulos**. Angiopoietins in angiogenesis and beyond. *Expert Opin Investig Drugs* 12:933-941, 2003.
4. A Pyriochou and **A. Papapetropoulos**. Soluble guanylyl cyclase: more secrets revealed. *Cell Signal* 17:407-13, 2005.
5. C Szabo and **A Papapetropoulos**. Hydrogen sulfide and angiogenesis: mechanisms and applications *Br J Pharmacol* 164:853-65, 2011.
6. K Módis, E Bos, E Calzia, H van Goor, C Coletta, **A Papapetropoulos**, M Hellmich, P Radermacher; F Bouillaud, C Szabo. Regulation of Mitochondrial Function by Hydrogen Sulfide. Part II. Pathophysiological and Therapeutic Aspects *Br J Pharmacol* 171:2123-46, 2014.

7. A Papapetropoulos, M Whiteman, C Giuseppe. Pharmacological tools for hydrogen sulfide research: a brief, introductory guide for beginners *Br J Pharmacol* 172:1633-7, 2015.
8. A Papapetropoulos, AJ Hobbs, S Topouzis. Extending the translational potential of targeting nitric oxide/cGMP-regulated pathways in the cardiovascular system *Br J Pharmacol* 172:1397-414, 2015.
9. I Andreadou, E Iliodromitis, T Rassaf, R Schulz, A Papapetropoulos, P Ferdinand. The role of gaseous transmitters NO, H<sub>2</sub>S, CO in myocardial ischemia/reperfusion injury and cardioprotection by preconditioning, postconditioning, and remote conditioning *Br J Pharmacol* 172:1587-606, 2015.
10. SI Bibli, G. Yang, Z. Zhou, R. Wang, S. Topouzis, A.Papapetropoulos. Role of cGMP in hydrogen sulfide signalling *Nitric Oxide* 46:7-13, 2015.
11. R Wang, C. Szabo, F. Ichinose, A. Ahmed, M. Whiteman, A Papapetropoulos. The role of H<sub>2</sub>S bioavailability in endothelial dysfunction. *Trends Pharmacol. Sci* 36:568-578, 2015.
12. A Katsouda, SI Bibli, A. Pyriochou, C. Szabo, A. Papapetropoulos. Regulation and role of endogenously produced hydrogen sulfide in angiogenesis. *Pharmacol Res* 113(A):175-185, 2016.
13. N Kanagy, C Szabo, A Papapetropoulos. Vascular Biology of Hydrogen Sulfide. *Am J Physiol Cell Physiol* 312:C537-C549, 2017.
14. J Egea, I Fabregat, YM Frapart, [143 others], A Papapetropoulos, T Grunecn, S Lamas, HHH W Schmidt, F Di Lisa, A Daiber. European contribution to the study of ROS: A summary of the findings and prospects for the future from the COST action BM1203 (EU-ROS). *Redox Biol* 13:94-162, 2017.
15. C Szabo and A Papapetropoulos. Pharmacological modulation of hydrogen sulfide (H<sub>2</sub>S) levels: H<sub>2</sub>S donors and H<sub>2</sub>S biosynthesis inhibitors. *Pharmacol Rev* 69:497-564, 2017.
16. SP Alexander, E Kelly, NV Marrion, JA Peters, E Faccenda, SD Harding, AJ Pawson, JL Sharman, C Southan, OP Buneman, JA Cidlowski, A Christopoulos, AP Davenport, D Fabbro, M Spedding, J Striessnig, JA Davies; CGTP Collaborators. The concise guide to pharmacology 2017/18: Overview. *Br J Pharmacol* 174 (Suppl 1):S1-S16, 2017.
17. SP Alexander, D Fabbro, E Kelly, A Mathie, JA Peters, EL Veale, JF Armstrong, E Faccenda, SD Harding, AJ Pawson, JL Sharman, C Southan, JA Davies; CGTP Collaborators. The concise guide to pharmacology 2019/20: Enzymes *Br J Pharmacol.* 176 Suppl 1:S297-S396, 2019.
18. I Andreadou, R Schulz, A Papapetropoulos, B Turan, K Ytrehus, P Ferdinand, A Daiber, F Di Lisa. The role of mitochondrial reactive oxygen species, NO, and H<sub>2</sub>S in ischemia/reperfusion injury and cardioprotection. *J Cell Mol Med.* 24:6510-6522, 2020.
19. N Dilek, A Papapetropoulos, T Toliver-Kinsky, C Szabo. Hydrogen sulfide: an endogenous regulator of the immune system. *Pharmacol Res* 161:105119, 2020.
20. M Peleli, A Moustakas, A Papapetropoulos. Endothelial-Tumor Cell Interaction in Brain and CNS Malignancies. *Int. J. Mol. Sci.* 21:7371, 2020.
21. SP Alexander, D Fabbro, E Kelly, A Mathie, JA Peters, EL Veale, JF Armstrong , E Faccenda, SD Harding, AJ Pawson , C Southan, JA Davies, A Beuve, P Brouckaert, C Bryant, JC Burnett, RW

Farndale, A Fribe, J Garthwaite, AJ Hobbs, GE Jarvis, M Kuhn, D MacEwan, TP Monie, **A Papapetropoulos**, LR Potter, HHHW Schmidt, C Szabo, SA Waldman. The concise guide to Pharmacology 2021/22: Catalytic receptors. *Br J Pharmacol* 178 Suppl 1:S264-S312. 2021

22. M Peleli, P Zampas, **A Papapetropoulos**. Hydrogen Sulfide and the Kidney: Physiological Roles, Contribution to Pathophysiology and Therapeutic Potential. *Antioxid, Redox Signal* 36:220-243, 2022.

23. G Cirino, C Szabo, **A Papapetropoulos**. Physiological roles of hydrogen sulfide in mammalian cells, tissues and organs. *Physiol Rev.* 103:31-276, 2023

#### Research Papers

1. **Papapetropoulos A**, Burch SE, Topouzis S, Catravas JD Radiation induced alterations in angiotensin converting enzyme activity in cultured bovine pulmonary arterial endothelial cells. *Toxicol. Appl. Pharmacol.* 120: 96-105, 1993.
2. Marcin N, **Papapetropoulos A**, Catravas JD Prevention of nitric oxide synthase induction in vascular smooth muscle cells by microtubule depolymerizing agents. *Br. J. Pharmacol.* 109: 603-605, 1993.
3. Marcin N, **Papapetropoulos A**, Catravas JD Tyrosine kinase inhibitors suppress endotoxin and IL-1 $\beta$ -induced NO synthesis in aortic smooth muscle cells. *Am. J. Physiol. (Heart Circ. Physiol.* 34) 265:H1014-H1018, 1993.
4. **Papapetropoulos A**, Marcin N, Snead MD, Cheng C, Milici A, JD Catravas Smooth muscle cell responsiveness to nitrovasodilators in hypertensive and normotensive animals. *Hypertension* 23: 476-484, 1994.
5. Snead MD, **Papapetropoulos A**, Carrier GO, Catravas JD Isolation and culture of endothelial cells from mesenteric vascular bed. *Meth. Cell Sci.* 17: 257-262, 1995.
6. **Papapetropoulos A**, Marcin N, Mora G, Milici A, Murad F, Catravas JD Regulation of vascular smooth muscle soluble guanylate cyclase activity, mRNA and protein levels by cAMP-elevating agents. *Hypertension* 26: 696-704, 1995.
7. Ramamoorthy JD, Ramamoorthy S, **Papapetropoulos A**, Catravas JD, Leibach FH, Ganapathy V Cyclic AMP-independent upregulation of the human serotonin transporter by staurosporine in choriocarcinoma cells. *J. Biol. Chem.* 270: 17189-17195, 1995.
8. Mohamed G, **Papapetropoulos A**, Caldwell RW, Ulrich D, Catravas JD, Tuttle RR HP-228, a novel synthetic peptide inhibits the induction of nitric synthase. *J. Pharm. Exp. Ther.* 275: 584-591, 1995.
9. Ryan JW, **Papapetropoulos A**, Ju H, Denslow ND, Antonov A, Vrmani R, Kolodgie FD, Gerrity RG, Catravas JD. Aminopeptidase P is disposed on human endothelial cells. *Immunopharmacology*. 32: 149-152, 1996.
10. **Papapetropoulos A**, G Y Go, Murad F, Catravas JD Mechanisms of tolerance to sodium nitroprusside in rat cultured aortic smooth muscle cells. *Br. J. Pharmacol.* 117: 147-155, 1996.
11. **Papapetropoulos A**, Cziraki A, Rubin JW, Stone CD, Catravas JD cGMP accumulation and gene expression of soluble guanylate cyclase in human vascular tissue. *J. Cell Physiol.* 167: 213-221, 1996.

13. **Papapetropoulos A**, Ryan JW, Antonov A, Virmani R, Kolodgie FD, Gerrity RG, Catravas JD Human aortic endothelial cell aminopeptidase N. *Immunopharmacology* 32: 153-156, 1996.
14. **Papapetropoulos A**, Abou-Mohamed G, Marczin N, Murad F, Caldwell RW, Catravas JD Downregulation of nitrovasodilator-induced cGMP accumulation in smooth muscle cells exposed to endotoxin or interleukin-1 $\beta$ . *Br. J. Pharmacol.* 118:1359-1366, 1996.
14. **Papapetropoulos A**, Antonov A, Virmani R, Kolodgie FD, Munn DH, Marczin N, Ryan JW, Gerrity RG, Catravas JD Monocyte and cytokine-induced downregulation of angiotensin converting enzyme activity in cultured human and porcine endothelial cells. *Circ. Res.* 79: 512-523, 1996.
15. Marczin N, Jilling T, **Papapetropoulos A**, Go C, Catravas JD Cytoskeleton-dependent activation of the inducible nitric oxide synthase in cultured rat aortic smooth muscle cells. *Br. J. Pharmacol.* 118: 185-194, 1996.
16. Marczin N, Antonov, **Papapetropoulos A**, Munn DH, Virmani R, Kolodgie FD, Gerrity RG, Catravas JD Monocyte-induced downregulation of nitric oxide synthase in cultured aortic endothelial cells. *Arterioscler. Thromb. Vasc. Biol.* 16: 1095-1103, 1996.
17. **Papapetropoulos A**, Elmore LA, Catravas JD Relationship between volume of bathing medium and ectoenzyme activity in monolayers of cultured bovine pulmonary arterial endothelial cells. *Am. J. Physiol.* 271: L464-L469, 1996.
18. **Papapetropoulos A**, Desai KM, Rudic RD, Mayer B, Zhang R, Ruiz-Torres MP, Garcia-Cardena G, Madri JA, Sessa WC . Nitric oxide synthase inhibitors attenuate transforming growth factor  $\beta$ 1-stimulated capillary organization in vitro. *Am. J. Pathol.*,150:1835-1844, 1997.
19. **Papapetropoulos A**, G García-Cardeña, JA Madri WC Sessa. Nitric oxide production contributes to the angiogenic properties of vascular endothelial growth factor in human endothelial cells. *J. Clin. Invest.* 100:3131-3139, 1997.
20. **Papapetropoulos, A**, N Marczin JD Catravas. Cross-tolerance between endogenous nitric oxide and exogenous nitrovasodilators. *Eur. J. Pharmacol.* 344:313-321, 1998
21. Marczin, N, CY Go, **A. Papapetropoulos** JD Catravas. Induction of nitric oxide synthase by protein synthesis inhibition in aortic smooth muscle cells. *Br. J. Pharmacol.* 123:1000-1008, 1998.
22. Abou-Mohamed G, **A Papapetropoulos**, JD Catravas, RW Caldwell. Zinc inhibits nitric oxide formation in response to lipopolysaccharides: implication in its anti-inflammatory activity. *Eur. J. Pharmacol.* 341: 265-272, 1998.
23. **Papapetropoulos A**, P Piccardoni, G Cirino, M Bucci, R Sorrentino, C Cicala, K Johnson, V Zachariou, WC Sessa, DC Altieri. Hypotension and inflammatory gene expression triggered by factor Xa-nitric oxide signalling. *Proc. Natl. Acad. Sci USA* 95:4738-4742, 1998.
24. García-Cardeña G, R Fan, V Shah, R Sorrentino, G Cirino, **A Papapetropoulos**, WC Sessa. Dynamic activation of nitric oxide synthase by Hsp90. *Nature* 392:821- 824, 1998.

25. Hoque, AM, **A Papapetropoulos**, RC Venema, JD Catravas and LC Fucks. Effects of antisense oligonucleotide to iNOS on hemodynamic and vascular changes induced by LPS. *Am. J. Physiol.* 275: H1078-1083, 1998
26. Sierra-Honigmann MR, AK Nath, C Murakami, G Garcia-Cardeña, **A Papapetropoulos**, WC Sessa, LA Madge, JS Schechner, MB Schwabb, PJ Polverini and J Flores-Riveros. Biological action of leptin as an angiogenic factor. *Science* 281: 1683-1686, 1998.
27. Wang, XH, M Lu, Y Gao, **A Papapetropoulos**, WC Sessa, WH Wang. Neuronal nitric oxide synthase is expressed in principle cell of collecting duct. *Am. J. Physiol.* 275: F395-399, 1998.
28. **Papapetropoulos A**, G García-Cardeña, TJ Dengler, PC Maisonpierre, GD Yancopoulos and WC Sessa. Direct actions of angiopoietin-1 on vascular endothelium: evidence for modulation of angiogenesis. *Lab. Invest.* 79:213-223, 1999
29. Fulton D, JP Gratton, TJ McCabe, J Fontana, Y Fujio, K Walsh, TF Franke, **A Papapetropoulos**, WC Sessa. Regulation of endothelium-derived nitric oxide production by Akt. *Nature* 399:597-601, 1999
30. Sowa G, J Liu, **A Papapetropoulos**, M Rex-Haffner, TE Hughes, WC Sessa. Trafficking of endothelial nitric oxide synthase in living cells. Quantitative evidence supporting the role of palmitoylation as a kinetic trapping mechanism limiting membrane diffusion. *J. Biol. Chem.* 274:22524-22531, 1999
31. Shah V, M Toruner, F Haddad, G Cadelina, **A Papapetropoulos**, K Choo, WC Sessa, RJ Groszmann. Impaired endothelial nitric oxide activity associated with increased caveolin binding in experimental liver cirrhosis. *Gastroenterology* 117: 1222-1228, 1999
32. Fulton D, **A Papapetropoulos**, X Zhang, JD Catravas, TH Hinze, WC Sessa. Quantification of eNOS mRNA levels in the canine cardiac vasculature by competitive PCR. *Am. J. Physiol.* 278: H658-665, 2000
33. SE Orfanos, JB Parkerson, X Chen, EL Fisher, C Glynnos, **A Papapetropoulos**, JD Catravas. Pulmonary endothelial angiotensin converting enzyme dysfunction in Watanabe heritable hyperlipidemic rabbits in vivo. *Am. J. Physiol. Lung Cell Mol Physiol* 278: L1280-L 1288, 2000.
34. **A Papapetropoulos**, D Fulton, K Mahboubi, D O' Connor, F Li, DC Altieri, WC Sessa. Angiopoietin-1 inhibits endothelial cell apoptosis via Akt/survivin expression. *J. Biol. Chem.* 275:9102-9105, 2000
35. A Xagorari, **A Papapetropoulos**, A Mavromatis, M Economou, T Fotsis, C Roussos. Luteolin Inhibits an Endotoxin-Stimulated Phosphorylation Cascade and Proinflammatory Cytokine Production in Macrophages. *J. Pharmacol. Exp. Ther.* 296:181-187, 2001.
36. I Kosmidou, A Xagorari, C Roussos, **A Papapetropoulos**. Reactive oxygen species stimulate VEGF production from C2C12 skeletal myotubes through a PI3K/Akt pathway. *Am J Physiol Lung Cell Mol Physiol* 280:L585-L592, 2001.
37. **A Papapetropoulos**, S Andreopoulos, CY Go, A Hoque, LCFuchs, JD Catravas. Regulation of the nitric oxide synthase-nitric oxide-cGMP pathway in rat mesenteric endothelial cells. *J Appl Physiol* 91:2553-2560, 2001.

38. A Kotanidou, A Xagorari, E Bagli, P Kitsanta, T Fotsis, **A Papapetropoulos**, C Roussos. Luteolin reduces lipopolysaccharide-induced lethal toxicity and expression of proinflammatory molecules in mice. *Am J Respir Crit Care Med* 165:818-823, 2002
39. I Kosmidou, T Vassilakopoulos, A Xagorari, S Zakynthinos, **A Papapetropoulos**, C Roussos. Production of interleukin -6 by skeletal myotubes:role of reactive oxygen species *Am. J. Resp. Cell Mol. Biol.*. 26:587-593, 2002
40. A Xagorari, C Roussos,, **A Papapetropoulos**. Inhibition of LPS-stimulated pathways in macrophages by the flavonoid luteolin *Br. J. Pharmacol.* 136:1058-1064, 2002
41. L Pizurki, Z Zhou, K Glynnos, C Roussos, **A. Papapetropoulos**. Angiopoietin-1 inhibits endothelial permeability, neutrophil adherence and IL-8 production. *Br. J. Pharmacol.* 139:329-336, 2003.
42. **A Papapetropoulos**, D Fulton, J Fontana, TJ McCabe, S Joellner, G Garcia-Cardena, Z Zhou, J-P Gratton, WC Sessa. Vanadate is a potent activator of endothelial nitric oxide synthase: evidence for the role of the serine/threonine kinase Akt and hsp90. *Mol. Pharmacol.* 65: 407-415, 2004
43. Z Zhou, S Gross, Ch Roussos, S Meurer, W Müller-Esterl, **A Papapetropoulos**. Structural and functional characterization of the dimerization region of soluble guanylyl cyclase. *J. Biol. Chem.* 279:24935-24943, 2004
44. N Papapetropoulos, Z Zhou, C Roussos, P Goumas, **A Papapetropoulos**. Effects of modulation of the NO/cGMP pathway in tumor cell lines derived from the upper airway tract. *Pharmacology* 72: 167-176, 2004
45. H Loutrari, M Hatziapostolou, V Skouridou, E Papadimitriou, C Roussos, FN Kolisis, **A. Papapetropoulos**. Perillyl alcohol inhibits angiogenesis *in vitro* and *in vivo*. *J. Pharmacol. Exp. Ther.* 311: 568-575, 2004
46. Roviezzo F, Tsikagos S, Kotanidou A, Bucci M, Brancaleone V, Cirino G, **A. Papapetropoulos** Angiopoietin-2 causes inflammation *in vivo* by promoting vascular leakage. *J Pharmacol Exp Ther.* 314: 738-744, 2005
47. **Papapetropoulos A**, Zhou Z, Gerassimou C, Yetik G, Venema RC, Roussos C, Sessa WC, Catravas JD. Interaction between hsp90 and soluble guanylyl cyclase: physiological significance and mapping of the domains mediating binding. *Mol Pharmacol.* 68:1133-41, 2005.
48. **Papapetropoulos A**, Simoes DC, Xanthou G, Roussos C, Gratziosi C. Soluble guanylyl cyclase expression is reduced in allergic asthma. *Am J Physiol Lung Cell Mol Physiol.* 290:L179-84, 2006
49. Kalomenidis I, Kollintza A, Sigala I, **Papapetropoulos A**, Papiris S, Light RW, and Roussos CR. Angiopoietin-2 levels are elevated in exudative pleural effusions. *Chest* 129:1259-66, 2006.

50. Tsikos S, Zhou Z, Kotanidou A, Fulton D, Zakynthinos S, Roussos C, **A. Papapetropoulos A.** Regulation of Ang2 release by PTEN/PI3-kinase/Akt in lung microvascular endothelial cells. *J Cell Physiol* 207:506-11, 2006
51. Psarras S, Volonaki E, Skevaki CL, Xatzipsalti M, Bossios A, Pratsinis H, Tsikos S, Gourgiotis D, Constantopoulos AG, **Papapetropoulos A**, Saxon-Papageorgiou P, Papadopoulos NG. Vascular endothelial growth factor-mediated induction of angiogenesis by human rhinoviruses. *J Allergy Clin Immunol*. 117:291-7, 2006
52. A Kotanidou, H Loutrari, E Papadomichelakis, K Glynnos, A Armaganidis, **A Papapetropoulos**, C. Roussos, SE Orfanos. Inhaled activated protein C attenuates lung injury induced by (aerosolised) endotoxin in mice. *Vasc. Pharmacol.* 45:134-40, 2006
53. H Loutrari, S Magkouta, A Pyriochou, V Koika, FN Kolisis, **A Papapetropoulos**, C Roussos. Mastic oil from *Pistacia lentiscus var. chia* inhibits growth and survival of human K562 leukemia cells and attenuates angiogenesis *Nutr Cancer* 55:86-93, 2006
54. A Pyriochou, D. Beis, V. Koika, C. Potyarchou, E. Papadimitriou, Z. Zhou, **A. Papapetropoulos**. Soluble guanylyl cyclase activation promotes angiogenesis. *J. Pharmacol. Exp. Ther* 319:663-71, 2006
55. CN Doukas, I Maglogiannis, A Chatzioannou, **A Papapetropoulos**. Automated angiogenesis quantification through advanced image processing techniques. *Conf Proc IEEE Eng Med Biol Soc*. 1:2345-8, 2006.
56. SE Orfanos, A Kotanidou, C Glynnos, C Athanasiou, S Tsikos, I Dimopoulou, C Sotiropoulou, S Zakynthinos, A Armaganidis, **A Papapetropoulos**, C. Roussos. Angiopoietin-2 is increased in severe sepsis: correlation with inflammatory mediators. *Crit. Care Med.* 35:199-206, 2007
57. A Pyriochou, Z. Zhou, V. Koika, C. Petrou, P. Cordopatis, W. C. Sessa, **A. Papapetropoulos**. The phosphodiesterase 5 inhibitor sildenafil stimulates angiogenesis through a protein kinase G/MAPK pathway *J Cell. Physiol* 211:197-204, 2007.
58. C Glynnos, A Kotanidou, SE Orfanos, Z Zhou, DC Simoes, C Magkou, C Roussos, **A Papapetropoulos**, Soluble Guanylyl Cyclase Expression is Reduced in LPS-induced Lung Injury. *Am J Physiol Regul Integr Comp Physiol*. 292: R1448-55, 2007.
59. C Gerassimou, A Kotanidou, Z Zhou, DC Simoes, C Roussos, **A Papapetropoulos** Regulation of soluble guanylyl cyclase expression by reactive oxygen species. *Br. J. Pharmacol.* 150: 1084-1091, 2007
60. A Pyriochou , S Tsikos , T Vassilakopoulos , T Cottin , Z Zhou, E Gourzoulidou, C Roussos, H Waldmann, A Giannis, **A Papapetropoulos** Anti-angiogenic properties of a sulindac analogue *Br. J. Pharmacol* 152:1207-1214, 2007
61. A Pyriochou, T Vassilakopoulos, Z Zhou, **A. Papapetropoulos**. cGMP-dependent and -independent angiogenesis-related properties of nitric oxide. *Life Sci* 81: 1549-1554, 2007
62. C Li, L Ruan, SG Sood, **A Papapetropoulos**, D Fulton, RC Venema. Role of eNOS phosphorylation at Ser-116 in regulation of eNOS activity in endothelial cells. *Vasc Pharmacol* 47:257-264, 2007

63. T Xia, C Dimitropoulou, G Antonova, C Snead, RC Venema, D Fulton, S Qian, C Patterson, **A Papapetropoulos**, JD Catravas. The chaperone-dependent E3 ligase, chip, ubiquitinates and mediates proteasomal degradation of soluble guanylyl cyclase. *Am. J. Physiol. Heart Circ Physiol.* 293: H300-3087, 2007
64. N Rovina, **A Papapetropoulos**, A Kollintza, M Michailidou, DCM Simoes, C Roussos, C Gratziou. Vascular endothelial growth factor: an angiogenic factor reflecting airway inflammation in healthy smokers and in patients with bronchitis type of chronic obstructive pulmonary disease? *Resp. Res.* 8:53, 2007
65. DC Simoes, T Vassilakopoulos, D Toumpanakis, K Petrochilou, C Roussos, **A Papapetropoulos**. Angiopoietin-1 Protects Against Airway Inflammation and Hyperreactivity in Asthma. *Am J Respir Crit Care Med.* 177:1314-21, 2008
- 66 . T Fotopoulou, EK Iliodromitis, M Koufaki, A Tsotinis, A Zoga, V Gizas, A Pyriochou, **A Papapetropoulos**, I Andreadou, DT Kremastinos. Design and synthesis of nitrate esters of aromatic heterocyclic compounds as pharmacological preconditioning agents. *Bioorg Med Chem.* 16:4523-31, 2008
67. A Pyriochou, G Olah, EA Deitch, C Szabó C, **A Papapetropoulos**. Inhibition of angiogenesis by the poly(ADP-ribose) polymerase inhibitor PJ-34. *Int J Mol Med.* 22:113-8, 2008.
68. Z Zhou, A Pyriochou, A Kotanidou, G Dalkas, MV Eickels, G Spyroulias, C Roussos, **A Papapetropoulos**. Soluble guanylyl cyclase (sGC) activation by HMR-1766 (ataciguat) in cells exposed to oxidative stress. *Am J Physiol Heart Circ Physiol.* 295:H1763-71, 2008
69. G Haramis, Z Zhou, A Pyriochou, M Koutsilieris, C Roussos C, **A Papapetropoulos**. cGMP-independent anti-tumour actions of the inhibitor of soluble guanylyl cyclase, ODQ, in prostate cancer cell lines. *Br J Pharmacol.* 155:804-13, 2008
70. Z Zhou, N Sayed, A Pyriochou, C Roussos, D Fulton, A Beuve, **A Papapetropoulos**. Protein Kinase G Phosphorylates Soluble Guanylyl Cyclase on Serine 64 and Inhibits Its Activity. *Arterioscler Thromb Vasc Biol.* 28:1803-10, 2008
71. C Gratziou, N Rovina, M Makris, DC Simoes, **A Papapetropoulos**, C. Roussos. Breath markers of oxidative stress and airway inflammation in Seasonal Allergic Rhinitis *Int J Immunopathol. Pharmacol.* 21:949-57, 2008
72. Papapetropoulos S, Glynnos K, Zhou Z, Orfanos SE, Mitsi G, **Papapetropoulos A**. The insertion/deletion polymorphism of the angiotensin converting enzyme (ACE) in Parkinson's disease. *Open Neurol J.* 2:66-70, 2008.
73. C Moschos, I Psallidas, A Kollintza, S Karabela, **A Papapetropoulos**, S Papiris, RW Light, C Roussos, GT Stathopoulos, I Kalomenidis. The angiopoietin/Tie2 axis mediates malignant pleural effusion formation. *Neoplasia.* 11:298-304, 2009.
74. M Sharma, Z Zhou, H Miura, **A Papapetropoulos**, ET McCarthy, R Sharma, VJ Savin, EA Lianos. ADMA Injures Glomerular Filtration Barrier: Role of Nitric Oxide and Superoxide. *Am J Physiol Renal Physiol.* 296:F1386-95, 2009

75. D Toumpanakis, MH Karatza, P Katsaounou, C Roussos, S Zakynthinos, **A Papapetropoulos**, T Vassilakopoulos. Antioxidant Supplementation Alters Cytokine Production From Monocytes. *J Interferon Cytokine Res.* 29:741-8, 2009.
76. K Spyridonidou, M Fousteris, A Marazioti, A Chatzianastasiou, **A Papapetropoulos**, S Nikolopoulou. Tricyclic indole and dihydroindole derivatives as new inhibitors of soluble guanylate cyclase. *Bioorg Med Chem Lett.* 19:4810-3, 2009
77. H Kranidioti, SE Orfanos, I Vaki, A Kotanidou, M Raftogiannis, I Dimopoulou, A Kotsaki, A Savva, **A Papapetropoulos**, A Armaganidis, EJ Giannarellos-Bourboulis. Angiopoietin-2 is increased in septic shock: evidence for the existence of a circulating factor stimulating its release from human monocytes. *Immunol Lett.* 125:65-71, 2009.
78. Magkouta S, GT Stathopoulos, I Psallidas, **A Papapetropoulos**, FN Kolisis, C Roussos, H. Loutrari. Protective effects of mastic oil from Pistacia lentiscus variation chia against experimental growth of lewis lung carcinoma. *Nutr Cancer.* 61:640-8; 2009.
79. **A Papapetropoulos**, Pyriochou A, Altaany Z, Yang G, Marazioti A, Zhou Z, Jeschke MG, Branskid L.K., Herndon D.N., Wang R Szabo C. Hydrogen sulfide is an endogenous stimulator of angiogenesis. *Proc Natl Acad Sci USA* 106:21972-7, 2009
80. von Wantoch Rekowski M, A Pyriochou, N Papapetropoulos, A Stößel, **A Papapetropoulos**, A Giannis. Synthesis and biological evaluation of oxadiazole derivatives as inhibitors of soluble guanylyl cyclase. *Bioorg Med Chem.* 18:1288-1296, 2010.
81. Makris AC, Y Sotzios, Z Zhou, M Makropoulou, N Papapetropoulos, P Zacharatos, A Pyriochou, C Roussos, **A Papapetropoulos**, T Vassilakopoulos. Nitric Oxide Stimulates Interleukin-6 Production in Skeletal Myotubes. *J Interferon Cytokine Res.* 30:321-7, 2010.
82. Morbidelli L, A Pyriochou, S Filippi, I Vasileiadis, C Roussos, Z Zhou, H Loutrari, J Waltenberger, A Stössel, A Giannis, M Ziche, **A Papapetropoulos**. The soluble guanylyl cyclase inhibitor NS-2028 reduces vascular endothelial growth factor-induced angiogenesis and permeability. *Am J Physiol Regul Integr Comp Physiol.*; 298:R824-32, 2010.
83. Church JE, J Qian, S Kumar, SM Black, RC Venema, **A Papapetropoulos**, DJ Fulton. Inhibition of endothelial nitric oxide synthase by the lipid phosphatase PTEN. *Vascul Pharmacol.* 52:191-8, 2010
84. **A Papapetropoulos\***, M Bucci\*, V Vellecco, Z Zhou, A Pyriochou, C Roussos, F Roviezzo, V Brancaleone, G Cirino. Hydrogen Sulfide Is an Endogenous Inhibitor of Phosphodiesterase Activity *Arterioscler Thromb Vasc Biol.* 30:1998-2004, 2010 \* contributed equally
85. V Koika, Z Zhou, I Vasileiadis, C Roussos, F Finetti, M Monti, L Morbidelli, **A Papapetropoulos**. PKG-I inhibition attenuates vascular endothelial growth factor-stimulated angiogenesis. *Vascul Pharmacol.*, 53:215-222, 2010
86. I Sigala, P Zacharatos, D Toumpanakis, T Michailidou, O Noussia, S Theocharis, C Roussos, **A Papapetropoulos**, T Vassilakopoulos. MAPKs and NF-κB differentially regulate cytokine expression in the diaphragm in response to resistive breathing. The role of oxidative stress. *Am J Physiol Regul Integr Comp Physiol.* 300:R1152-62, 2011

87. K Suzuki, G Olah, K Modis, C Coletta, GA Kulp, D Gerö, P Szoleczky, T Chang, Z Zhou, L Wu, R Wang, **A Papapetropoulos**, C Szabo. Hydrogen sulfide replacement therapy protects the vascular endothelium in hyperglycemia by preserving mitochondrial function. *Proc Natl Acad Sci USA.*, 108:13829-34, 2011
88. A Marazioti, M Bucci M, C Coletta, V Vellecco, P Baskaran, C Szabo, G Cirino, AR Marques, B Guerreiro, AM Gonçalves, JD Seixas, A Beuve, CC Romão, **A Papapetropoulos**. Inhibition of nitric oxide-stimulated vasorelaxation by carbon monoxide-releasing molecules. *Arterioscler Thromb Vasc Biol.* 31:2570-2576, 2011
89. Loutrari H, Magkouta S, Papapetropoulos A, Roussos C. Mastic oil inhibits the metastatic phenotype of mouse lung adenocarcinoma cells. *Cancers.* 3:789-801, 2011.
90. GM Palmer, Z Tiran, Z Zhou, ME Capozzi, W Park, C Coletta, A Pyriochou, Y Kliger, O Levy, I Borukhov, MW Dewhirst, G Rotman, JS Penn, **A. Papapetropoulos**. A Novel Angiopoietin-derived Peptide Displays Anti-angiogenic Activity and Inhibits Tumor-induced and Retinal Neovascularization *Br. J. Pharmacol.* 165:1891-903, 2012
91. Z Zhou\*, M von Wantoch Rekowski\*, C Coletta, C Szabo, M Bucci, G Cirino, S Topouzis, **A Papapetropoulos\***, A Giannis\*. Thioglycine and L-thiovaline: biologically active H<sub>2</sub>S-donors. *Bioorg. Med. Chem.* 20:2675-8, 2012 \* contributed equally.
92. I Andreadou, D Farmakis, E Prokavas, F Sigala, A Zoga, K Spyridaki, **A Papapetropoulos**, M Anastasiou-Nana, D Th Kremastinos, EK Iliodromitis. Short-term statin administration in hypercholesterolemic rabbits resistant to postconditioning: effects on infarct size, endothelial nitric oxide synthase and nitro-oxidative stress. *Cardiovasc Res.* 94:501-9, 2012
93. C Coletta, **A Papapetropoulos**, K Erdelyi, G Olah, K Modis, P Panopoulos, D Gero, C Szabo. Hydrogen sulfide and nitric oxide are mutually dependent in the regulation of vascular function. *Proc Natl Acad Sci USA* 109:9161-6, 2012.
94. P-A Crassous, S Couloubaly, Z Zhou, P Baskaran, D Kim, **A Papapetropoulos**, X Fioramonti, W Duran, A Beuve. Soluble guanylyl cyclase is a target of Angiotensin II-induced nitrosative stress in a hypertensive rat model. *Am. J. Physiol. (Heart & Circ. Physiol.)* 303:H597-604, 2012.
95. IM Tzepi, EJ Giambarellos-Bourboulis, DP. Carrer, T Tsaganos, R Claus, I Vaki, A Pelekanou, A Kotsaki, V Tziortzioti, S Topouzis, M Bauer, **A Papapetropoulos**. Angiopoietin-2 enhances survival in experimental sepsis induced by multidrug-resistant *Pseudomonas aeruginosa*. *J. Pharmacol. Exp. Ther.* 343:278-87, 2012.
96. I Sigala, P Zacharatos, S Boulia, D Toumpanakis, T Michailidou, D Parthenis, C Roussos, **A Papapetropoulos**, SN Hussain, T Vassilakopoulos. Nitric oxide regulates cytokine induction in the diaphragm in response to inspiratory resistive breathing. *J.Appl. Physiol.* 113:1594-603, 2012.
97. M Bucci, **A Papapetropoulos**, V Vellecco, Z Zhou, A Zaid, P Giannogonas, A Cantalupo, S Dhayade, KP Karalis, R Wang, R Feil, G Cirino. cGMP-dependent protein kinase contributes to hydrogen sulfide stimulated vasorelaxation. *PLOS One* 7:e53319. doi: 10.1371/journal.pone.0053319, 2012
98. K Módis, C Coletta, K Erdélyi, **A Papapetropoulos**, C Szabo. Intramitochondrial hydrogen sulfide production maintains mitochondrial electron flow and supports cellular bioenergetics. *FASEB J.* 27:601-11, 2013.

99. I Kyriazis, GC Kagadis, P Kallidonis, I Georgopoulos, A Marazioti, A Geronasiou, D Liourdi, G Loudos, V Schinas, D Apostolopoulos, H Papadaki, C Flordellis, GC Nikiforidis, **A Papapetropoulos**, E M Liatsikos. PDE5 inhibition against acute renal ischemia reperfusion injury 3 in rats: does vardenafil offer protection? *World J. Urol.* 31:597-602, 2013.
100. A Asimakopoulou, P Panopoulos, CT Chasapis, C Coletta, Z Zhou, G Cirino, A Giannis, C Szabo, GA Spyroulias, **A Papapetropoulos**. Selectivity of commonly used pharmacological inhibitors for cystathionine beta synthase (CBS) and cystathionine gamma lyase (CSE). *Br. J. Pharmacol.* 169: 922–932, 2013.
101. K Módis, A Asimakopoulou, C Coletta, **A Papapetropoulos**, C Szabo. Oxidative stress suppresses the positive bioenergetic effect of the 3-mercaptoproprylate/3-mercaptoproprylate sulfurtransferase / hydrogen sulfide pathway. *Biochem. Biophys. Res. Commun.* 433:401-7, 2013.
102. DP Carrer, K Kotzampassi, B Fyntanidou, V Grosomanidis, **A Papapetropoulos**, M Lympéri, E Giamarellos-Bourboulis, Modulation of the release of Ang-2 in experimental endotoxic shock by a species-specific circulating factor. *Injury* 44: 935–940, 2013
103. C Glynnos, LL Dupont, T Vassilakopoulos, **A Papapetropoulos**, P Brouckaert, A Giannis, GF Joos, KR Bracke, GG Brussels. The role of soluble guanylyl cyclase in Chronic Obstructive Pulmonary Disease. *Am. J. Respir Crit. Care Med.* 188:789-99, 2013
104. C Szabo, C Coletta, C Chao, K Módis., B Szczesny, **A Papapetropoulos**, MR Hellmich. Tumor-derived H<sub>2</sub>S, produced by cystathionine-β-synthase, stimulates bioenergetics, cell proliferation and angiogenesis in colon cancer. *Proc Natl Acad Sci USA* 110:12474-9, 2013
105. K Módis, P Panopoulos, C Coletta, **A Papapetropoulos**, C Szabo. Hydrogen sulfide-mediated stimulation of mitochondrial electron transport involves inhibition of the mitochondrial phosphodiesterase 2A, elevation of cAMP and activation of protein kinase A. *Biochem. Pharm.* 86:1311-9, 2013
106. M von Wantoch Rekowski, V Kumar, Z Zhou, J Moschner, A Marazioti, M Bantzi, GA Spyroulias, F van den Akker, A Giannis, **A Papapetropoulos**. Insights into soluble guanylyl cyclase activation derived from improved heme-mimetics. *J. Med. Chem.* 56, 8948-52, 2013
107. M Bucci, V Vellecco, A Cantalupo, V Brancaleone, Z Zhou, S Evangelista, V Calderone, **A Papapetropoulos**, G Cirino. Hydrogen sulfide accounts for the peripheral vascular effects of S-zofenopril independently of ACE inhibition. *Cardiovasc Res.* 102:138-47, 2014
108. K Módis, C Coletta , A Asimakopoulou, B Szczesny, C Chao, **A Papapetropoulos**, MR Hellmich, C Szabo. Effect of S-adenosyl-l-methionine (SAM), an allosteric activator of cystathionine-β-synthase (CBS) on colorectal cancer cell proliferation and bioenergetics in vitro. *Nitric Oxide*. 41:146-56, 2014
109. A Ghosh, J-P Stasch, **A Papapetropoulos**, DJ Stuehr. Nitric oxide and heat shock protein 90 activate heme-free soluble guanylate cyclase by a novel mechanism. *J. Biol. Chem.* 289:15259-71, 2014.
110. D Gerö, P Szoleczky, A Chatzianastasiou, **A Papapetropoulos**, Csaba Szabo. Modulation of poly(ADP-ribose) polymerase-1 (PARP-1) mediated oxidative cell injury by ring finger protein 146 (RNF146) in cardiac myocytes. *Mol. Med.* 20:313-28, 2014

111. E Panza, P De Cicco, C Armogida, G Scognamiglio, V Gigantino, G Botti, D Germano, M Napolitano, A **Papapetropoulos**, M Bucci, G Cirino, A Ianaro. Hydrogen sulfide as an endogenous “controller” of human melanoma progression *Pigment Cell Melanoma Res* 28:61-72, 2015.
112. C Glynnos, D Toumpanakis, C Loverdos, V Karavana, Z Zhou, C Magkou, SE Theocharis, M Dettoraki, F Perlikos, A Pavlidou, V Kotsikoris, S Topouzis, P Brouckaert, A Giannis, A **Papapetropoulos**, T Vassilakopoulos. Guanylyl cyclase activation reverses resistive breathing-induced lung injury and inflammation. *Am J Resp Cell Mol Biol* 52:762-71, 2015
113. C Coletta, K Módis, B Szczesny, A Brunyánszki, G. Oláh, ECS Rios, K Yanagi, A Ahbar, A **Papapetropoulos**, C. Szabo. Regulation of vascular tone, angiogenesis and cellular bioenergetics by the 3-mercaptoproprylate sulfurtransferase/H<sub>2</sub>S pathway: functional impairment by hyperglycemia and restoration by α-lipoic acid. *Mol. Med.* 21:1-14, 2015
114. S-I Bibli, I Andreadou, A Chatzianastasiou, C Tzimas, D Sanoudou, E Kranias, P Brouckaert, C Coletta, C Szabo, DT Kremastinos, EK Iliodromitis., A **Papapetropoulos**. H<sub>2</sub>S induces pharmacological post-conditioning through a cGMP-dependent protein kinase/phospholamban pathway. *Cardiovasc Res.* 106: 432-442, 2015
115. B Umaru, A Pyriochou, V Kotsikoris, A **Papapetropoulos**, S Topouzis. ATP-Sensitive Potassium Channel Activation Induces Angiogenesis in vitro and in vivo. *J. Pharmacol. Exp Ther.* 354:79-87, 2015
116. M Whiteman, A Perry, Z Zhou, M Bucci, A **Papapetropoulos**, G Cirino, ME Wood. Phosphorodithioate hydrogen sulfide donors. *Handb Exp Pharmacol.* 230:337-63, 2015.
117. N Lougiakis, A **Papapetropoulos**, E Gikas, S Toumpas, P Efentakis, R Wedmann, A Zoga, Z Zhou, EK Iliodromitis, AL Skaltsounis, MR Filipovic, N Pouli, P Marakos, I Andreadou. Synthesis and pharmacological evaluation of novel adenine-hydrogen sulfide slow release hybrids designed as multi-target cardioprotective agents *J. Med. Chem.* 59:1776-90, 2016.
118. V Brancaleone, I Esposito, A Gargiulo; V Vellecco, A Asimakopoulou, V Citi, V Calderone, T Gobbetti, M Perretti, A **Papapetropoulos**, M Bucci, G Cirino. D-penicillamine modulates hydrogen sulfide (H<sub>2</sub>S) pathway through selective inhibition of cystathione-γ-lyase (CSE). *Br. J. Pharmacol.* 173:1556-65, 2016.
119. C Chao, JR Zatarain, Y Ding, C Coletta, A Mrazek, N Druzhyna, P Johnson, H Chen, JL Hellmich, A Asimakopoulou, K Yanagi, G Olah, P Szoleczky, G Törö, FJ Bohanon, M Cheema, R Lewis, D Eckelbarger, A Ahmad, K Módis, A Untereiner, B Szczesny, A **Papapetropoulos**, J Zhou MR Hellmich, C Szabo. Cystathionine-beta-synthase inhibition for colon cancer: Enhancement of the efficacy of aminoxyacetic acid via the prodrug approach. *Mol Med.* 22: 361-379, 2016
120. A Chatzianastasiou, SI. Bibli, I Andreadou, P Efentakis, N Kaludercic, ME Wood, M Whiteman, F Di Lisa, A Daiber, VG Manolopoulos, C Szabo, A **Papapetropoulos** Cardioprotection by H<sub>2</sub>S donors: nitric oxide-dependent and -independent mechanisms *J. Pharmacol. Exp Ther.* 358:431-40, 2016
121. Z Zhou, E Martin, I Sharina, I Esposito, C Szabo, M Bucci, G Cirino, A **Papapetropoulos**. Regulation of soluble guanylyl cyclase redox state by hydrogen sulfide *Pharmacol. Res.* 111:556-562, 2016.
122. N Druzhyna, G Olah, B Szczesny, K Módis, A Asimakopoulou, A Pavlidou, P Szoleczky, D Gerö, K Yanagi, V Myrianthopoulos, E Mikros, JR Zatarain, C Chao, A **Papapetropoulos**, M.R. Hellmich, Csaba

Szabo. Screening of a composite library of clinically used drugs and well-characterized pharmacological compounds for cystathionine  $\beta$ -synthase inhibition identifies benserazide as a drug potentially suitable for repurposing for the experimental therapy of colon cancer *Pharmacol. Res.* 113:18-37, 2016

123. SI Bibli, I Andreadou, C Glynos, A Chatzianastasiou, D Toumpanakis, S Zakynthinos, T Vasilakopoulos, EK Iliodromitis, **A Papapetropoulos**. Exposure to cigarette smoke abrogates the beneficial effect of ischemic postconditioning. *Am. J. Physiol. Heart Circ Physiol.* 311:H1321-H1332, 2016

124. II Alexandropoulos, AI Argyriou, KD Marousis, S Topouzis, **A Papapetropoulos**, GA Spyroulias.  $^1\text{H}$ ,  $^{13}\text{C}$ ,  $^{15}\text{N}$  backbone and side-chain resonance assignment of Nostoc sp. C139A variant of the heme-nitric oxide/oxygen binding (H-NOX) domain. *Biomol NMR Assign* 10:395-400, 2016

125. F Sigala, P Efentakis, D Karageorgiadi, K Filis, P Zampas, E Iliodromitis, G Zografos, **A Papapetropoulos**, I Andreadou. Reciprocal regulation of eNOS, H<sub>2</sub>S and CO-synthesizing enzymes in human atheroma: correlation with plaque stability and effects of simvastatin *Redox Biol.* 12:70-81, 2017

126. SI Bibli, Z Zhou, S Zukunft, B Fisslthaler, I Andreadou, C Szabo, P Brouckaert, I Fleming, **A Papapetropoulos**. Tyrosine phosphorylation of eNOS regulates myocardial survival after an ischemic insult: role of PYK2 *Cardiovasc Res.* 113:926-937, 2017.

127. SI Bibli, C Szabo, A Chatzianastasiou, B Luck, S Zukunft, I Fleming, **A Papapetropoulos**. Hydrogen sulfide preserves eNOS function by inhibiting PYK2: implications for cardiomyocyte survival and cardioprotection. *Mol. Pharm.* 92:718-730, 2017.

128. E Giannakopoulou, F Konstantinou, G Ragia, A Tavridou, M Karaglani, E Chatzaki, **A Papapetropoulos**, D Mikroulis, VG Manolopoulos Epigenetics-by-sex interaction for coronary artery disease risk conferred by the Cystathionine  $\gamma$ -lyase (CTH) gene promoter methylation. *OMICS*, 21:741-748, 2017.

129. A Katsouda, C Szabo, **A Papapetropoulos**. Reduced adipose tissue H<sub>2</sub>S in obesity. *Pharmacol Res.* 128:190-199, 2018

130. A Untereiner, A Pavlidou, N Druzhyna, **A. Papapetropoulos**, M Hellmich, C Szabó. Drug resistance induces the upregulation of H<sub>2</sub>S-producing enzymes in HCT116 colon cancer cells. *Biochem. Pharmacol.* 149:174-185, 2018.

131. B Szczesny, M Marcatti, A Ahmad, A Brunyánszki, SI Bibli, M Montalbano, **A Papapetropoulos**, C Szabo. Active release of oxidatively damaged mitochondrial DNA induces inflammation via activation of Z-DNA binding protein 1. *Sci Rep.* 8:914, 2018.

132. J Ha, Y Xu, T Kawano, T Hendon, L Baki, S Garai, **A Papapetropoulos**, G Thakur, LD Plant, DE Logothetis. Hydrogen sulfide inhibits Kir2 and Kir3 channels by decreasing sensitivity to the phospholipid PIP2 *J. Biol. Chem.* 293:3546-3561, 2018

133. E Mitidieri, T Tramontano, D Gurgone, V Citi, V Calderone, V Brancaleone, A Katsouda, N Nagahara, **A Papapetropoulos**, G Cirino, R d'Emmanuele di Villa Bianca, R Sorrentino. Mercaptopyruvate acts as endogenous vasodilator independently of 3-mercaptopyruvate sulfurtransferase activity. *Nitric Oxide* 2018 75:53-59, 2018

134. SI Bibli, B Luck, S Zukunft, J Wittig , W Chen, M Xian, **A Papapetropoulos**, J Hu, I Fleming. A selective and sensitive method for quantification of endogenous polysulfide production in biological samples. *Redox Biol* 18: 295-304, 2018.
135. C Glynnos, SI Bibli, P Katsaounou, A Pavlidou, C Magkou, V Karavana, S Topouzis, I Kalomenidis, S Zakynthinos, **A Papapetropoulos**. Comparison of the effects of e-cigarette vapor with cigarette smoke on lung function and inflammation in mice. *Am J Physiol Lung Cell Mol Physiol* 315:L662-L67, 2018. (Altmetric: 204)
136. SI Bibli, **A Papapetropoulos**, EK Iliodromitis, A Daiber, V Randriamboavonjy, S Steven, P Brouckaert, A Chatzianastasiou, KE Kypreos, DJ Hausenloy, I Fleming, I Andreadou Nitroglycerin limits infarct size through S-nitrosation of Cyclophilin D: A novel mechanism for an old drug. *Cardiovasc Res* 115:625-636, 2019.
137. SI Bibli, J Hu, F Sigala, I Wittig, J Heidler, S Zukunft, D Tsilimigras, V Randriamboavonjy, J Wittig, B Kojonazarov, C Schürmann, M Siragusa, D Siuda, B Luck, R Abdel Malik, K Filis, G Zografos, C Chen, D Wang, J Pfeilschifter, R Brandes, C Szabo, **A Papapetropoulos**, I Fleming. Cystathione- $\gamma$  lyase sulphydrates the RNA binding protein HuR to preserve endothelial cell function and delay atherosclerosis. *Circulation* 39:101-114, 2019
138. E Giannakopoulou, F Konstantinou, G Ragia, Z Gerontitis, A Tavridou, A Papapetropoulos, D Mikroulis, VG Manolopoulos. Association study of the CTH 1364 G>T polymorphism with coronary artery disease in the Greek population. *Drug Metab Pers Ther*. 34 pii:/j/dmpt.2019.34.issue-1/dmpt-2018-0033/dmpt-2018-0033.xml. doi: 10.1515/dmpt-2018-0033, 2019
139. PE Nikolaou, K Boengler, P Efentakis, K Vougiogianopoulou, A Zoga, N Gaboriaud-Kolar, V Myrianthopoulos, P Alexakos, N Kostomitsopoulos, I Rerras, ATsantil-Kakoulidou, AL Skaltsounis, **A Papapetropoulos**, EK Iliodromitis, R Schulz, I Andreadou. Investigating and re-evaluating the role of GSK3beta kinase as a molecular target for cardioprotection by using novel pharmacological inhibitors. *Cardiovasc Res* 115: 1228–1243, 2019
140. A Abdollahi-Govar, G Törő, P Szaniszlo, A Pavlidou, SI Bibli, K Thanki, V A. Resto, C Chao, MR Hellmich, C Szabo, **A Papapetropoulos**, K Módis. 3-mercaptoproprate sulfurtransferase supports endothelial cell angiogenesis and bioenergetics. *Br J Pharmacol* 177:866-883, 2020
141. P Efentakis, A Varela, E Chavdoula, F Sigala, D Sanoudou, R Tenta, K Gioti, N Kostomitsopoulos, **A Papapetropoulos**, A Tasouli, D Farmakis, CH Davos, A Klinakis, T Suter, DV Cokkinos, EK Iliodromitis, P Wenzel, I Andreadou. Levosimendan prevents doxorubicin-induced cardiotoxicity in time- and dose dependent manner: Implications for inotropy. *Cardiovasc Res*. 116:576-591, 2020
142. SI Bibli, J Hu, MS Leisegang, J Wittig, A Kapasakalidi, S Zukunft, B Fisslthaler, D Tsilimigras, G Zografos, K Filis, R Brandes, **A Papapetropoulos**, F Sigala, I Fleming. Shear stress regulates cystathione gamma lyase expression to preserve endothelial redox balance and reduce membrane lipid peroxidation. *Redox Biol*. 28:101379, 2020.
143. M Peleli, SI Bibli, Z Li, A Chatzianastasiou, A Varela, A Katsouda, S Zukunft, M Bucci, V Vellecco, CH Davos, N Nagahara, G Cirino, I Fleming, DJ Lefer, **A Papapetropoulos**. Cardiovascular phenotype of mice lacking 3-mercaptoproprate sulfurtransferase. *Biochem. Pharmacol.* 176:113833, 2020.

144. A Katsouda, M Peleli, A Asimakopoulou, **A Papapetropoulos**, D Beis. Generation and characterization of a CRISPR/Cas9 -induced 3-mst deficient zebrafish. *Biomolecules* 10(2). pii: E317, 2020
145. S Nasi, D Ehirchiou, A Chatzianastasiou, N Nagahara, **A Papapetropoulos**, J Bertrand, G Cirino, A So, N Busso The protective role of the 3-mercaptopyravate sulfurtransferase (3-MST)-hydrogen sulfide ( $H_2S$ ) pathway against experimental osteoarthritis. *Arthritis Res Ther* 22:49, 2020.
146. AM Fantel, V Myrianthopoulos, A Georgoulis, N Lougiakis, I Zantza, G Lamprinidis, F Augsburger, P Marakos, CE Vorgias, S Csaba, N Pouli, **A Papapetropoulos**, E Mikros. Screening of heteroaromatic scaffolds against Cystathionine beta-synthase enables identification of substituted pyrazolo[3,4-c]pyridines as potent and selective orthosteric inhibitors. *Molecules* 25:3739, 2020.
147. SI Bibli, J Hu, M Looso, A Weigert, C Ratiu, J Wittig, MK Drekolia, L Tombor, V Randriamboavonjy, MS Leisegang, P Goymann, FD Lagos, B Fisslthaler, S Zukunft, A Kyselova, AFO Justo, J Heidler, D Tsilimigras, RP Brandes, S Dimmeler, **A Papapetropoulos**, S Knapp, S Offermanns, I Wittig, SL Nishimura, F Sigala, I Fleming. Mapping the endothelial cell S-sulphydrome highlights the crucial role of integrin sulfhydration in vascular function. *Circulation* 143:935-948, 2021
148. GI Makryniitsa, AI Argyriou, G Dalkas, DA Georgopoulou, M Bantzi, A Giannis, **A Papapetropoulos**, GA Spyroulias. Backbone and side chain NMR assignments of the H-NOX domain from Nostoc sp. in complex with BAY58-2667 (cinaciguat). *Biomol NMR Assign.* 15:53-57, 2021.
149. M Tsoumani, A Georgoulis, PE Nikolaou, I Kostopoulos, T Dermintzoglou, I Papatheodorou, A Zoga, P Efentakis, M Konstantinou, E Gikas, N Kostomitsopoulos, **A Papapetropoulos**, A Lazou, AL Skaltsounis, DJ Hausenloy, O Tsitsilonis, I Tseti, EK Iliodromitis, I Andreadou. Acute cardioprotective effects of the olive constituent, oleuropein, *in vivo* reveals additional protection when combined to postconditioning through modulation of the oxidative defense in cardiomyocytes. *Free Rad Biol Med.* 166:18-32, 2021
150. IM Orfanou, O Argyros, **A Papapetropoulos**, S Tseleni-Balafouta, K Vougas, C Tamvakopoulos. Discovery and pharmacological evaluation of STEAP4 as a novel target for HER2 overexpressing Breast cancer. *Front Oncol* 11:608201, 2021.
151. G Renieris, DE Droggi, K Katrini, P Koufaryris, T Gkavogianni, E Karakike, N Antonakos, GDamoraki, A Karageorgos, L Sabracos, A Katsouda, E Jentho, S Weis, R Wang, M Bauer, C Szabo, K Platoni, V Kouloulias, **A Papapetropoulos**, EJ Giamarellos-Bourboulis. Host cystathionine- $\gamma$  lyase derived hydrogen sulfide protects against pseudomonas aeruginosa sepsis. *PLOS Pathog* 17: e1009473, 2021.
152. E Mitidieri, V Vellecco, V Brancaleone V, D Vanacore, OLManzo, E Martin, I Sharina, Y Krutsenko, MC Monti, E Morretta, **A Papapetropoulos**, G Caliendo, F Frecentese, G Cirino, R Sorrentino, R d'Emmanuele di Villa Bianca, M Bucci. Involvement of 3',5'-cyclic inosine monophosphate in cystathionine  $\gamma$ -lyase-dependent regulation of the vascular tone. *Br J Pharmacol.* 178:3765-3782, 2021
153. AI Argyriou, GI Makryniitsa, G Dalkas, D Georgopoulou, K Salagiannis, V Vazoura, **A Papapetropoulos**, S Topouzis, GA Spyroulias. Replacement of heme by soluble guanylate cyclase (sGC) activators abolishes Heme-Nitric oxide/Oxygen (H-NOX) domain structural plasticity. *Curr Res Struct Biol.* 3:324-336, 2021

154. A Katsouda, D Valakos, VS Dionellis, SI Bibli, I Akoumianakis, S Karaliota, K Zuhra, I Fleming, N Nagahara, S Havaki, VG Gorgoulis, D Thanos, C Antoniades, C Szabo, **A Papapetropoulos**. MPST maintains mitochondrial protein import and cellular bioenergetics to attenuate obesity. *J. Exp. Med.* 219: e20211894, 2022
155. G Makryniitsa, AI Argyriou, AA Zompra, K Salagiannis, V Vazoura, **A Papapetropoulos**, S Topouzis, GA Spyroulias. The redox state of the heme regulates the binding of sGC stimulators to the H-NOX domain: structural and functional perspectives. *Front Cell Dev Biol* 10:925457, 2022
156. B Lagu, X Wu, S Kulkarni, R Paul, J D Becherer, L Olson, S Ravani , A Chatzianastasiou, **A Papapetropoulos**, S Andrzejewski. An Orally Bioavailable Enzymatic Inhibitor Of CD38 Protects Against Ischemia Reperfusion Injury In The Murine Heart. *J Med Chem* 65:9418-944, 2022
157. P Siatra, G Vatsellas, A Chatzianastasiou, E Balafas, T Manolakou, **A Papapetropoulos**, A Agapaki, ET Mouchtouri, PJ Ruchaya, AG Korovesi, M Mavroidis, D Thanos, D Beis, I Kokkinopoulos. Return of the Tbx5; lineage-tracing reveals ventricular cardiomyocyte-like precursors in the injured adult mammalian heart. *NPJ Regen Med*. In press
158. J Hu, MS Leisegang, M Looso, G Dumbovic, J Wittig, M-K Drekolia, S Guenther, D John, M Siragusa, S Zukunft, J Oo, I Wittig, S Hille, A Weigert, S Knapp, RP Brandes, OJ Müller, **A Papapetropoulos**, F Sigala, G Dobreva, I Fleming, S-I Bibli. A novel role for cystathionine  $\gamma$  lyase in the control of p53: impact on endothelial senescence and metabolic reprogramming. *Circ Res*.
159. Z Li, H Xia, TE Sharp III, KB LaPenna, A Katsouda, JW Elrod, J Pfeilschifter, KF Beck, S Xu, M Xian, TT Goodchild, **A Papapetropoulos**, DJ Lefer. Endothelium-Derived Hydrogen Sulfide Modulates 3 Endothelial-Mesenchymal Transition in Heart Failure. *Circ Res*. In press.
160. A Katsouda, M Markou, P Zampas, A Varela, CH Davos, V Vellecco, G Cirino, M Bucci, A Papapetropoulos. CTH/MPST double ablation results in enhanced vasorelaxation and reduced blood pressure via upregulation of the eNOS/sGC pathway. *Front Pharmacol*. In Press

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