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**ACADEMIC  
QUALIFICATIONS:**

- 2003:** Ph.D. in Biology, Faculty of Biology, School of Sciences, NKUA
- 1994:** B.Sc Degree In Biology, Faculty of Biology, School of Sciences, NKUA

**APPOINTMENTS:**

- 2013:** Lecturer of Cell Biology (**2011:** election), Faculty of Biology, NKUA
- 2007-2008:** Visiting Lecturer (degree-law 407/80), Faculty of Biology, NKUA
- 2003-2013:** Post doctoral research scientist, Collaborative Researcher and Teaching Assistant, Dept. of Cell Biology & Biophysics, Faculty of Biology, NKUA

**EDUCATIONAL  
ACTIVITIES:**

*Teaching in undergraduate courses (NKUA)*

- **Cell Biology** (Faculty of BIOLOGY) (compulsory) **1996-today**
- **Advanced Cell Biology** (Faculty of BIOLOGY) (elective) **1996-today**
- **Developmental Biology and Histology** (Faculty of BIOLOGY) (elective) **2012-today**
- **Current issues on Biology of the Cell** (Faculty of PHYSICS) (elective) **2007-today**
- **Current issues on Cell Biology** (Faculty of CHEMISTRY) (elective) **2007-today**

*Teaching in postgraduate courses (NKUA)*

- **Cell Biology and Biophysics**, Postgraduate course for Ph.D. students, Faculty of Biology, **1999-2010**
- **Cell Biology-Electron Microscopy**, M.Sc. Applications of Biology in Medicine, (Faculty of Biology and Medical School), **1998-today**
- **Image Analysis and Processing in Biomedicine**, **1998-2004**
- **Aging and age-related diseases**, **2013-today**
- **Biology I**, M.Sc. Didactics of Biology (Faculty of Biology), **2010-2014**
- **Biology II**, **2010-2014**
- **New Technologies**, **2004-2012**
- **Biology and Experiment I**, **2014-today**

*Supervisor of:* **7** undergraduate Diploma Theses and **1** MSc Diploma Thesis

*External examiner to:* **4** PhD Theses (**2014-2015**) and **11** MSc Diploma Theses (**2013-2015**)

## RESEARCH INTERESTS/ACTIVITIES

- Aging and death signaling in erythrocytes
- Storage lesions in blood labile products used for transfusion
- Secondary anemia in aging and diseases
- Extracellular vesicular compartment
- Blood biomarkers of aging and diseases
- Hereditary red blood cell membrane disorders
- Ultrastructure of cell and sub-cellular components

## HONORS & AWARDS:

**1996-1999** PhD Fellowship, GSRT of Greece  
**2005, 2007, 2008, 2009** Special distinctions and awards for research announcements in congresses organized by the Hellenic Society of Haematology  
**2010** Award for scientific contribution in the XXXIst Congress of the International Society of Blood Transfusion (ISBT) and the Deutsche Gesellschaft für Transfusionmedizin und Immunhämatologie (DGTI)  
**2011:** “Arkagathos Gouttas” award of the year, Hellenic Society of Haematology  
**2011:** Research grant, Hellenic Society of Blood Transfusion

## MEMBER OF

**1996:** Hellenic Society of Biological Sciences  
**2011:** Hellenic Society of Biochemistry and Molecular Biology  
**2013:** Hellenic Society of Blood Transfusion

## FUNDED RESEARCH PROJECTS

Collaborative researcher and member and of the Main Coordinating Research Team in **18 scientific proposals** (YPER 1996, PENED 1999, PYTHAGORAS I, PENED 2006, HSBT 2011, ARCHIMEDES III etc) (**1996-today**)

## SCIENTIFIC PUBLICATIONS

4 invited papers  
>530-730 citations  
h-index: **12-13**  
i10-index: **19**  
(last 5 years =**16**)

### Research Articles

1. The frequency of the allele  $\alpha$ LELY, a low expression allele of the gene encoding erythroid spectrin  $\alpha$ -chain, in the Greek population.  
*Haematologica*, 84(8): 754-755, **1999**.  
Papassideri I, **Antonelou M**, Karababa F, Loutradi–Anagnostou A, Delaunay J, Margaritis LH.
2. A novel case of a haemoglobin H disease associated with clinical and morphological characteristics of congenital dyserythropoetic anaemia type I  
*European Journal of Haematology*, 68(4): 247-252, **2002**.  
**Antonelou M**, Papassideri IS, Karababa F, Gyparaki M, Loutradi–Anagnostou A, Margaritis LH.
3. Ultrastructural characterization of the erythroid cells in a novel case of congenital anaemia.  
*Blood Cells, Molecules & Diseases*, 30(1):30-42, **2003**.  
**Antonelou MH**, Papassideri IS, Karababa FJ, Loutradi A, Margaritis LH.
4. Defective organization of the erythroid cell membrane in a novel case of congenital anemia.  
*Blood Cells, Molecules & Diseases*, 30(1): 43-54, **2003**.  
**Antonelou MH**, Papassideri IS, Karababa FJ, Stravopodis DJ, Loutradi A, Margaritis LH.

5. Membrane protein carbonylation in non-leukodepleted CPDA-preserved red blood cells.  
*Blood Cells Molecules & Diseases* 36(2): 279-282, **2006**.  
Kriebardis AG, **Antonellou MH**, Stamoulis KE, Economou-Petersen E, Margaritis LH, Papassideri IS.
6. The dual role of chorion peroxidase in *Bactrocera oleae* chorion assembly.  
*International Journal of Developmental Biology*, 50(6):543-552, **2006**.  
Konstandi OA, Papassideri IS, Stravopodis DJ, **Antonellou MH**, Kenoutis CA, Stefanidou DC, Margaritis LH
7. Physiologically important secondary modifications of red cell membrane in hereditary spherocytosis-evidence for in vivo oxidation and lipid rafts protein variations.  
*Blood Cells Molecules & Diseases*, 38(3):210-220, **2007**.  
Margetis P, **Antonellou M**, Karababa F, Loutradi A, Margaritis L, Papassideri I
8. Structural alterations of the erythrocyte membrane proteins in diabetic retinopathy.  
*Graefe's Archive for Clinical and Experimental Ophthalmology*, 245(8): 1179-1188, **2007**.  
Petropoulos IK, Margetis PI, **Antonellou MH**, Koliopoulos JX, Gartaganis SP, Margaritis LH, Papassideri IS
9. Progressive oxidation of cytoskeletal proteins and accumulation of denatured hemoglobin in stored red cells.  
*Journal of Cellular and Molecular Medicine*, 11(1):148-155, **2007**.  
Kriebardis AG, **Antonellou MH**, Stamoulis KE, Economou-Petersen E, Margaritis LH, Papassideri IS
10. Storage-dependent remodeling of the red blood cell membrane is associated with increased immunoglobulin G binding, lipid raft rearrangement and caspase activation.  
*Transfusion*, 47(7) 1212-1220, **2007**.  
Kriebardis AG, **Antonellou MH**, Stamoulis KE, Economou-Petersen E, Margaritis LH, Papassideri IS
11. RBC-derived vesicles during storage. Ultrastructure, protein composition, oxidation and signalling components.  
*Transfusion*, 48(9): 1943-1953, **2008**.  
Kriebardis AG, **Antonellou MH**, Stamoulis KE, Economou-Petersen E, Margaritis LH, Papassideri IS
12. Intracellular clusterin inhibits mitochondrial apoptosis by suppressing p53-activating stress signals and stabilizing the cytosolic Ku70-Bax protein complex.  
*Clinical Cancer Research*, 15(1):48-59, **2009**.  
Trougakos IP, Lourda M, **Antonellou MH**, Kletsas D, Gorgoulis VG, Papassideri IS, Zou Y, Margaritis LH, Boothman DA, Gonos ES
13. Increased protein carbonylation of red blood cell membrane in diabetic retinopathy.  
*Experimental and Molecular Pathology*, 87(1):76-82, **2009**.  
Margetis PI, **Antonellou MH**, Petropoulos IK, Margaritis LH, Papassideri IS

14. Red blood cell aging markers during storage in citrate-phosphate-dextrose–saline-adenine-glucose-mannitol.  
*Transfusion*, 50(2):376-389, **2010**.  
**Antonelou MH**, Kriebardis AG, Stamoulis KE, Economou-Petersen E, Margaritis LH, Papassideri IS
15. Oxidative stress-associated shape transformation and membrane proteome remodeling in erythrocytes of end stage renal disease patients on hemodialysis.  
*Journal of Proteomics*, 74:2441-2452, **2011**.  
**Antonelou MH**, Kriebardis AG, Velentzas AD, Kokkalis AC, Georgakopoulou S-C, Papassideri IS
16. Apolipoprotein J/Clusterin is a novel structural component of human erythrocytes and a biomarker of cellular stress and senescence.  
*PLoS ONE* 6(10): e26032, **2011**.  
**Antonelou MH**, Kriebardis AG, Stamoulis KE, Trougakos IP, Papassideri IS
17. Apolipoprotein J/Clusterin in human erythrocytes is involved in the molecular process of defected material disposal during vesiculation.  
*PLoS ONE* 6(10): e26033, **2011**.  
**Antonelou MH**, Kriebardis AG, Stamoulis KE, Trougakos IP, Papassideri IS
18. Brain proteome response following whole body exposure of mice to mobile phone or wireless DECT base radiation.  
*Electromagnetic Biology and Medicine* 31(4):250-274, **2012**.  
Fragopoulou A, Samara A, **Antonelou M**, Xanthopoulou A, Papadopoulou A, Vougas K, Koutsogiannopoulou E, Anastasiadou E, Stravopodis D, Tsangaris G, Margaritis L
19. Effects of pre-storage leukoreduction on stored red blood cells signaling: a time-course evaluation from shape to proteome.  
*Journal of Proteomics*, 76:220-238, **2012**.  
**Antonelou MH**, Tzounakas VL, Velentzas AD, Stamoulis KE, Kriebardis AG, Papassideri IS
20. Detrimental effects of proteasome inhibition activity in *Drosophila melanogaster*: implication of ER stress, autophagy and apoptosis.  
*Cell Biology and Toxicology*, 29:13-37, **2013**.  
Velentzas PD, Velentzas AD, Mpakou VE, **Antonelou MH**, Margaritis LH, Papassideri IS, Stravopodis DJ
21. Blood modifications associated with end stage renal disease duration, progression and cardiovascular mortality: a 3-year follow-up pilot study.  
*Journal of Proteomics*, 101: 88-101, **2014**.  
**Antonelou MH\***, Georgatzakou HT\*, Tzounakas VL, Velentzas AD, Kokkalis AC, Kriebardis AG, Papassideri IS [\*Equal first authors]
22. Uric acid variation among regular blood donors is indicative of red blood cells susceptibility to storage lesion markers: a new hypothesis tested.  
*Transfusion*, **2015 IN PRESS**.  
Tzounakas VL, Georgatzakou HT, Kriebardis AG, Papageorgiou EG, Stamoulis KE, Foudoulaki-Paparizos LE, **Antonelou MH\***, Papassideri IS

### Review Articles

1. Aging and death signaling in mature red cells: from basic science to transfusion practice.  
*Blood Transfusion*, 8(s3):39-47, **2010**.  
**Antonelou MH**, Kriebardis AG, Papassideri IS
2. Cell-derived microparticles in stored blood products: innocent-bystanders or effective mediators of post-transfusion reactions?  
*Blood Transfusion* 10 (SUPPL. 2):s21-s34, **2012**.  
Kriebardis AG\*, **Antonelou MH\***, Stamoulis KE, Papassideri IS. [IF: 1.858] [\*Equal first authors
3. An update on red blood cell storage lesions, as gleaned through biochemistry and omics technologies.  
*Transfusion* 55(1):205-219, **2015**.  
D’Alessandro A, Kriebardis A, Rinalducci S, **Antonelou M**, Hansen K, Papassideri I, Zolla L

**24** Referred conference publications (**1998-2015**)

**2** Review Articles in Hellenic Peer Review Journals (**2010, 2011**)

### CONFERENCES

**1998-today: 33** announcements in **International conferences** organized by the International Society of Hematology (ISH), International Society of Blood Transfusion (ISBT), Deutsche Gesellschaft für Transfusionsmedizin und Immunhämatologie (DGTI), European Hematology Association (EHA), European Federation of Endocrine Societies (EFES), Federation of European Biochemical Societies (FEBS), International Union of Biochemistry and Molecular Biology (IUBMB), American Association of Blood Banks (AABB), Polish Radiation Research Society (PRRS), Society for Free Radical Research International (SFRR).

**1994-today: 74** announcements in **National conferences** organized by the Hellenic Society of Biological Sciences, Hellenic Society of Haematology, Hellenic Society for Clinical Chemistry-Clinical Biochemistry, Hellenic Society of Biochemistry and Molecular Biology, Hellenic Society of Neuroscience, Hellenic Society of Blood Transfusion, Hellenic Lipid Forum