

## Editorial

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# A.L. Copley Best Paper Prize 2019

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The Editor-in-Chief and Editorial Board of *Clinical Hemorheology and Microcirculation* (CHM), as well as the Publisher (IOS Press) have decided to set an annual prize, named the **A.L. Copley Best Paper Prize**, to recognize the best article published every year in CHM beginning in 2016. This prize has been named in honor of the Journal’s founding editor, Professor Alfred Lewin Copley. AL Copley was a German-American medical scientist who introduced the term “Hemorheology” and defined this area of science.

First of all, the editorial team carefully read and noted all original articles published in 2019 and we wish to thank all authors. The criteria for selection include: originality and innovation, theoretical contribution, clarity of writing and presentation, and expected impact. A group of three editors was elected by the editorial board to select the best paper in a multistage process. Each of the three editors listed the best 10 papers published in 2019 of his choice. From these 30 papers the editors looked for manuscripts which have been nominated independently by more than one editor (first stage). This was the case for 3 out of the 30 papers. Out of these 3 papers each editor chose what he considered the best three papers and allocated 5 points to the best of the three, 3 points to the second best and 1 point to the third. The total points were added for each paper, thus allowing the papers to be ranked. The three highest ranked papers were:

1. Dinarelli S, Girasole M, Misiti F. Amyloid  $\beta$  peptide affects erythrocyte morphology: Role of intracellular signaling pathways. *Clin Hemorheol Microcirc.* 2019;71(4):437-449. doi: 10.3233/CH-199007. PMID: 31156152
2. Rohm I, Grün K, Müller LM, Bäß L, Förster M, Schreppe A, Kretzschmar D, Pistulli R, Yilmaz A, Bauer R, Jung C, Berndt A, Schulze PC, Franz M. Cellular inflammation in pulmonary hypertension: Detailed analysis of lung and right ventricular tissue, circulating immune cells and effects of a dual endothelin receptor antagonist. *Clin Hemorheol Microcirc.* 2019;73(4):497-522.
3. Lee S, Ganesan R, Krüger-Genge A, Kratz K, Franke RP, Lendlein A, Jung F. Substrate-enzyme affinity-based surface modification strategy for endothelial cell-specific binding under shear stress. *Clin Hemorheol Microcirc.* 2019 Dec 26. doi: 10.3233/CH-190736.

The highest ranked paper was the work from S. Dinarelli and colleagues (Rome/Cassino, Italy) and received the AL Copley Best Paper Award. Two further papers shared second place.

S. Dinarelli and colleagues received the Prize for their prospective study about the relationship between amyloid  $\beta$  treatment and erythrocyte morphology and the role of intracellular pathways. The study revealed that amyloid  $\beta$  treatment accelerated the occurrence of morphological and biochemical aging markers in human red blood cells and influenced the cell metabolism. Biochemical data demonstrated that contemporaneously to morphological alterations, A $\beta$  triggers: (i) metabolic alterations and (ii) a complex signaling pathway involving caspase 3, protein kinase C and nitric oxide derived metabolites. The study provides an insight how amyloid  $\beta$  treatment of RBC induced changes in specific cell signalling events and/or metabolic pathways, in turns affecting the membrane-cytoskeleton interaction and the membrane integrity.

The committee sincerely wishes full success to the authors in their future research and all other authors for the next AL Copley Best Paper Prize 2020.