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Editorial

A.L. Copley Best Paper Prize 2020

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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, Alfred Lewin Copley. Dr. A.L. Copley was a German American medical scientist who introduced the term "Hemorheology" and defined this area of science.

First of all, the editorial team wish to thank all authors for their valuable contributions in 2020. A group of three editors was elected by the editorial board to select the best paper in a multistep process. The criteria for prize selection included: originality and innovation, theoretical contribution, clarity of writing and presentation, and expected impact. In the first step, each of the three editors listed the 10 best papers separately. From these 30 papers the prize committee looked for manuscripts which have been nominated independently by more than one editor (second step). This was the case for 6 out of the 30 papers. Out of these 6 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 (third step). The total points were added for each paper, thus allowing the papers to be ranked. The highest-ranked paper was the work from S. Ghanem and colleagues (Debrecen, Hungary), which now receives the **A.L. Copley Best Paper Prize 2020**:

Ghanem S, Lesznyak T, Fazekas L, Tanczos B, Barath B, Nasser M, Horvath L, Bidiga L, Szabo B, Deak A, Peto K, Nemeth N. **Microrheology, microcirculation and structural compensatory mechanisms of a chronic kidney disease rat model. A preliminary study.** Clin Hemorheol Microcirc. 2020;75(1):47–56. doi: 10.3233/CH-190763.

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Five further papers shared second place:

1. Bizjak DA, Grolle A, Urena, JAN, Bloch W, Deitenbeck R, Grau M. **Monitoring of RBC rheology after cryopreservation to detect autologous blood doping *in vivo*? A pilot study.** Clin Hemorheol Microcirc. 2020;76(3):367–379. doi: 10.3233/CH-200887.
2. Bruno RR, Schemmelmann M, Wollborn J, Kelm M, Jung C. **Evaluation of a shorter algorithm in an automated analysis of sublingual microcirculation.** Clin Hemorheol Microcirc. 2020;76(2):287–297. doi:10.3233/CH-209201
3. Konschake W, Lutze S, Haase H, Jünger M, Arnold A. **Analysis of pigmented skin lesions and malignant melanoma by Laser Doppler flowmetry – Report of different cases and further analysis by a neuronal network.** Clin Hemorheol Microcirc. 2020;76(4):525–533. doi: 10.3233/CH-200876.
4. Vosseler M, El Shazly A, Parker JD, Münzel T, Gori T. **Resting and recruitable endothelial function – Evidence of two distinct circadian patterns.** Clin Hemorheol Microcirc. 2020;74 (2):139–146. doi: 10.3233/CH-190587.
5. Raberin A, Nader E, Ayerbe JL, Mucci P, Connes P, Durand F. **Evolution of blood rheology and its relationship to pulmonary hemodynamic during the first days of exposure to moderate altitude.** Clin Hemorheol Microcirc. 2020;74(2):201–208. doi: 10.3233/CH-190671.

S. Ghanem and colleagues received the **A.L. Copley Best Paper Prize** for their study about "Microrheology, microcirculation and structural compensatory mechanisms of a chronic kidney disease rat model." The authors studied two groups of female Sprague-Dawley rats: one subjected to nephrectomy and one sham-operated group where no intervention was made. The study revealed that serum creatinine increased in the nephrectomy group ($p = 0.008$), accompanied with a decrease of red blood cell count ($p = 0.028$) and hemoglobin concentration ($p = 0.015$). Erythrocyte aggregation parameters slightly increased in nephrectomy group, while red blood cell deformability did not show any significant changes. The microcirculation remained intact in the remnant kidney of the nephrectomy group. However, in comparison with the sham-operated group, the diameter of glomeruli increased significantly ($p < 0.01$). The authors concluded that erythrocyte mass was influenced more than microrheological properties in this model. The main compensation mechanism was rather structural than at microcirculatory level.

The committee sincerely wishes full success to the authors in their future research and all other authors for the next **A.L. Copley Best Paper Prize 2021**.