

Editorial

A.L. Copley Best Paper Prize 2022

Friedrich Jung^a, Philippe Connes^{b,c,d} and Christian Lehmann^{e,f,g,h}

^a*Institute of Biotechnology, Molecular Cell Biology, Brandenburg University of Technology, Senftenberg, Germany*

^b*Laboratoire Interuniversitaire de Biologie de la Motricité (LIBM) EA7424, Equipe “Biologie vasculaire et du globule rouge”, Université Claude Bernard Lyon 1, COMUE, Lyon, France*

^c*Laboratoire d’Excellence sur le globule rouge (Labex GR-Ex), Paris, France*

^d*Institut Universitaire de France, Paris, France*

^e*Department of Anesthesia, Pain Management and Perioperative Medicine, Dalhousie University, Halifax, NS, Canada*

^f*Department of Microbiology and Biophysics, Dalhousie University, Halifax, NS, Canada*

^g*Department of Pharmacology, Dalhousie University, Halifax, NS, Canada*

^h*Department of Physiology and Biophysics, Dalhousie University, Halifax, NS, Canada*

The Editor-in-Chief and the 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 2022. 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 1 out of the 30 papers. This paper was the work from A. Koutsiaris and colleagues (University of Thessaly, Biopolis, Larissa, Greece) which now receives the **A.L. Copley Best Paper Prize** of the year 2022:

Koutsiaris AG, Riri K, Boutlas S, Panagiotou TN, Kotoula M, Daniil Z, Tsironi EE. **COVID-19 hemodynamic and thrombotic effect on the eye microcirculation after hospitalization: A quantitative case-control study**. *Clin Hemorheol Microcirc*. 2022;82(4):379-390. doi: 10.3233/CH-221554. PMID: 35912735.

Aristotle Koutsiaris and colleagues received the **A.L. Copley Best Paper Prize 2022** for their study about “**COVID-19 hemodynamic and thrombotic effect on the eye microcirculation after hospitalization: A quantitative case-control study**”. The authors investigated the hemodynamic and thrombotic effect of COVID-19 on the eye microcirculation of patients with thromboprophylaxis,

shortly after hospital discharge. This case-control study included 17 COVID-19 survivors (named “COVID-19 Group”) and 17 apparently healthy volunteers (named “Control Group”). Axial blood velocity (V_{ax}) and percentage of occluded vessels (POV) were quantified by Conjunctival Video Capillaroscopy (CVC). Microvessels were identified and classified as “capillaries” (CAP), “postcapillary venules of size 1” (PC1), and “postcapillary venules of size 2” (PC2). The COVID-patients showed a statistically significant ($p < 0.001$) reduction of V_{ax} (39%, 49% and 47%, for CAP, PC1, and PC2, respectively) in comparison to the Control Group and a sizeable ($p < 0.001$) increase of POV (600%) in comparison to the Control Group. The authors conclude that COVID-19 not only reduced significantly axial blood velocity in the capillaries and postcapillary venules of the eye but had also a devastating effect on microthrombosis (POV) despite thromboprophylaxis treatment. This gives a possible explanation for long COVID and a hint about the existence of a possibly unknown coagulation factor.

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 2023**.