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Dutkowski's research on preservation-reperfusion injury of hepatic grafts (Editorial)

Kukan M. Emeritus Slovak Medical University, Bratislava Slovakia

Professor Dr. Phillip Dutkowski comes from Germany. At present, he works in University of Zurich.

His research started with oscillating liver perfusion, where he showed that ATP can be replenished prior to liver transplantation in the rat model (1-2). In acellular model of rat liver reperfusion, he showed that oscillating perfusion downregulated superoxide anion release (3). This suggests that Kupffer cells were downregulated by oscillating perfusion.

Then he introduced a model of hypothermic oxygen perfusion (HOPE) (4, see 5-7 for his reviews), in Professor PA Clavien's Laboratory.

Finally, he was successful in machine perfusion of human hepatic grafts, where he showed that HOPE saved graft failure and a need for liver retransplantation (8).

In conclusion, Professor Dr. Phillip Dutkowski belongs to one of world leading scientists in preservation-reperfusion injury of hepatic grafts.

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