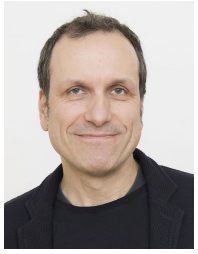
Prof. Igor Sauer, MD

1 | General information



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Current position: Professor of Experimental Surgery and Regenerative Medicine (W2), Head of Experimental Surgery, Deputy Director of the Department of Surgery, Charité – Universitätsmedizin Berlin, CCM|CVK

Researcher unique identifier: ORCID-ID: 0000-0001-9355-937X, ResearcherID AAM-4217-2021

2 | Academic education

1989 – 1996	Medical School, Freie Universität Berlin
1993	Research fellowship at Baylor College of Medicine, Department of Surgery (Prof. Nosé's artificial heart research group, Houston, USA)

3 | Advanced academic qualifications:

2008	Habilitation and venia legendi, Surgery, "*Innovative therapeutic strategies in liver failure – artificial, bioartificial and biological liver support concepts*", Charité – Universitätsmedizin Berlin (Mentor: Peter Neuhaus)
1998	MD thesis "*A totally implantable artificial heart: Development and in vitro evaluation of a new type of electromechanical energy converter based on the principle of a unidirectional moving motor*", Surgery, Universitätskrankenhaus Rudolf Virchow, Freie Universität Berlin (Supervisor: Emil S. Bücherl)

4 | Postgraduate professional career:

Since 2019	Deputy Director of the Department of Surgery, Campus Charité Mitte | Campus Virchow-Klinikum, Charité – Universitätsmedizin Berlin
2018	Full Professorship (W2) for Experimental Surgery and Regenerative Medicine at Charité – Universitätsmedizin Berlin
2016 – 2019	Chief consultant (Leitender Oberarzt) at the Department of Surgery, Campus Charité Mitte | Campus Virchow Klinikum, Charité – Universitätsmedizin Berlin
2014	Professorship (APL), Charité – Universitätsmedizin Berlin
2011 – 2016	Consultant (Oberarzt) at the Department of General, Visceral and Transplantation Surgery, Campus Virchow Klinikum, Charité – Universitätsmedizin Berlin
2007	German board certification *General Surgery*
1998 – 2011	Resident Surgeon, Department of General, Visceral and Transplantation Surgery, Charité – Universitätsmedizin Berlin, Campus Virchow Klinikum, Germany
1997 – 1998	Resident Surgeon, Department of Abdominal and Transplantation-Surgery, Medizinische Hochschule Hannover, Germany

5 | Other:

Other professional activities:

- Director of the BIH Charité Digital Clinician Scientist Program (DFG 413521708) (since 2021)
- Member of Steering Committee BIH Translation Hub "Organoids and Cell Engineering" (since 2020)
- Principal Investigator within Cluster of Excellence "Matters of Activity" (DFG EXC2025), Humboldt-Universität zu Berlin (since 2019)

6 | Selected publications:

1. Everwien H, Keshi E, Hillebrandt KH, Ludwig B, Weinhart M, Tang P, Beierle AS, Napierala H, Gassner JM, Seiffert N, Moosburner S, Geisel D, Reutzel-Selke A, Strücker B, Pratschke J, Haep N, **Sauer IM**. Engineering an endothelialized, endocrine Neo-Pancreas: Evaluation of islet functionality in an ex vivo model. **Acta Biomater** 2020; 117: 213-225
2. Daneshgar A, Klein O, Nebrich G, Weinhart M, Tang P, Arnold A, Ullah I, Pohl J, Moosburner S, Raschzok N, Strücker B, Bahra M, Pratschke J, **Sauer IM**, Hillebrandt K. The human liver matrisome - Proteomic analysis of native and fibrotic human liver extracellular matrices for organ engineering approaches. **Biomaterials** 2020; 257:120247
3. Claussen F, Gassner JMGV, Moosburner S, Wyrwal D, Nösser M, Tang P, Wegener L, Pohl J, Reutzel-Selke A, Arsenic R, Pratschke J, **Sauer IM**, Raschzok N. Dual versus single vessel normothermic ex vivo perfusion of rat liver grafts using metamizole for vasodilatation. **PLoS One** 2020; 15(7): e023563
4. Elomaa L, Keshi E, **Sauer IM**, Weinhart M. Development of GelMA/PCL and dECM/PCL resins for 3D printing of acellular in vitro tissue scaffolds by stereolithography. **Mater Sci Eng C Mater Biol Appl** 2020; 112:110958
5. Nösser M, Gassner JMGV, Moosburner S, Wyrwal D, Claussen F, Hillebrandt KH, Horner R, Tang P, Reutzel-Selke A, Polenz D, Arsenic R, Pratschke J, **Sauer IM**, Raschzok N. Development of a rat liver machine perfusion system for normothermic and subnormothermic conditions. **Tissue Eng Part A** 2020; 26(1-2):57-65
6. Moosburner S, **Sauer IM**, Gassner JMGV, Schleicher C, Bösebeck D, Rahmel A, Pratschke J, Raschzok N. Macrosteatosis is a huge problem in liver transplantation-however, not the only one we face. **Am J Transplant** 2019; 19(9): 2661-2266
7. Gassner JMGV, Nösser M, Moosburner S, Horner R, Tang P, Wegener L, Wyrwal D, Claussen F, Arsenic R, Pratschke J, **Sauer IM**, Raschzok N. Improvement of normothermic ex vivo machine perfusion of rat liver grafts by dialysis and Kupffer cell inhibition with glycine. **Liver Transpl** 2019; 25(2):275-287
8. Napierala H, Hillebrandt KH, Haep N, Tang P, Tintemann M, Gassner J, Noesser M, Everwien H, Seiffert N, Kluge M, Teegen E, Polenz D, Lippert S, Geisel D, Reutzel Selke A, Raschzok N, Andreou A, Pratschke J, **Sauer IM**, Struecker B. Engineering an endocrine Neo-Pancreas by repopulation of a decellularized rat pancreas with islets of Langerhans. **Sci Rep** 2017; 7:41777
9. **Sauer IM**, Goetz M, Steffen I, Walter G, Kehr DC, Schwartlander R, Hwang YJ, Pascher A, Gerlach JC, Neuhaus P. In vitro comparison of the molecular adsorbent recirculation system (MARS) and single-pass albumin dialysis (SPAD). **Hepatology** 2004; 39(5):1408-1414
10. **Sauer IM**, Zeilinger K, Pless G, Kardassis D, Theruvath T, Pascher A, Goetz M, Neuhaus P, Gerlach JC. Extracorporeal liver support based on primary human liver cells and albumin dialysis--treatment of a patient with primary graft non-function. **J Hepatol** 2003; 39(4): 649-53