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SVAN

SPIN-OFF FELLOWSHIP, 2. AUSSCHREIBUNG, 2. EINREICHFRIST (SEPT. 2023)

Projektkurztitel:	**SVAN**
Projektlangtitel:	**Safe Vascular Access Needle for Neonatal and Small Animal Emergency**
Antragstellende Organisation:	**Medizinische Universität Wien**
Fellow:	**Dr. Gunpreet Oberoi, PhD**
Host:	**Univ. Prof. Wolfgang Drexler**
Projektstandort:	**Wien**
Laufzeit:	**01.03.2024 – 31.08.2025**

PROJEKTZIEL:

The aim of the fellowship is to enable the transition of the innovative neonatal medical emergency device SVAN (Safe Vascular Access Needle) from research phase into mass production. Motivated by the increasing demand for reliable bone/Intraosseous (IO) access in newborns and the veterinary field (e.g., small animals), an initial functional prototype was successfully developed in a preliminary public-funded project. With the support of this Fellowship, the goal is to adapt the device SVAN for delivering life-saving emergency drugs directly into the bone of newborn babies and small animals in the safest, and fastest way by undergoing clinical trials and preparing all the technical documentation for CE Mark in compliance with the Medical Device Regulation. This endeavour seeks to enhance patient safety and survival rates significantly while also providing training opportunities for medical professionals to refine their skills.

To ensure safe and fast access to the central circulatory system of via bone, SVAN system comes with a unique safety feature—a self-stop mechanism for the needle that stops as soon as the bone marrow is reached. Additionally, its ergonomic design with a pinch grip enables high precision work to access very small, delicate and softer bones of babies and small animals. This innovation aims to address the specific needs of this special cohort of patients and enhances patient safety and efficacy of IO access in newborn and animal healthcare. Moreover, SVAN provides comprehensive training solution for healthcare professionals via high-fidelity 3D printed newborn and animal simulation models (JIO trainers).

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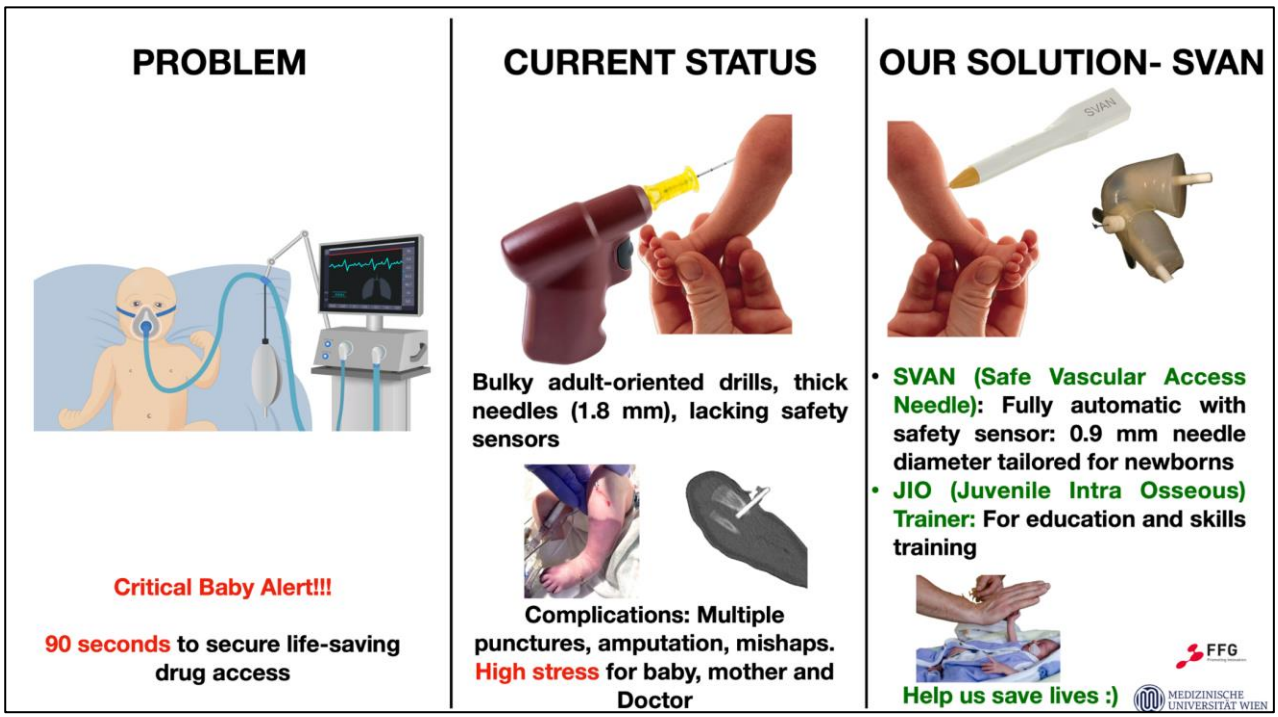

VISION SPIN-OFF:

In the landscape of healthcare, SVAN emerges as a beacon of progress, designed to empower those entrusted with the delicate task of caring for newborns medical emergencies accounting to 1.4 million per year. Neonatologists, paediatricians, obstetricians, veterinarians, and an array of medical professionals find their ally in SVAN, alongside emergency responders and military personnel confronting crisis situations. SVAN, accompanied by the JIO trainer, signifies a leap forward in the realm of critical newborn care, enabling swift and secure medication administration during life-threatening emergencies. This advancement promises to mitigate long-term complications like leg amputations, cerebral palsy and lessening the burden of subsequent therapies. SVAN's presence is envisaged in maternity wards, paediatric units, and ambulances, ready to respond to unforeseen crises. Beyond human medicine, SVAN extends its reach to veterinary care, catering to small animal healthcare providers and pharmaceutical laboratories.

Weitere **Information zum Spin-off Fellowship** finden Sie auf der FFG-Homepage.