

## *Industrial Keynote*

# Medical device research and innovation – status quo, challenges and opportunities to drive global healthcare innovation

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Stryker, a global medical technology company, is constantly faced with the challenge to create innovative products that make healthcare better. In this industry perspective presentation, I will share insights on the novel strategic approach on innovation road mapping at Stryker to align technological advancements with business goals, enabling research to anticipate and navigate future challenges. In a three-dimensional approach, the view on medical innovation is broadened by regarding user groups, patient journey and levels of innovativeness.

The holistic character of this approach enables innovativeness beyond incremental product evolution. The three-dimensional innovation process plays a crucial role in identifying emerging trends, regulatory changes, and market demands. By incorporating forefront research, this disruptive methodology ensures to remain at the cutting edge of innovation, from device design to regulatory approval and commercialization. The three-dimensional innovation process fosters collaboration across multidisciplinary teams, driving R&D investments, and ensuring that products meet both patient needs and business needs.

Through collaborations with academic institutions, patient advocacy groups, industry forums, and cross-sector partnerships, I will share insights on challenges, risks, and successes from an industry perspective on the potential and future of 3D printed biodegradable patient-specific implants. The advancements in additive manufacturing in this fields pose a promising “technology-push” setting, in which careful identification and assessment of opportunities to solve clinical challenges are crucial to ensure long-term success – for patients, clinicians and the industry.

### **AUTHOR'S STATEMENT**

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