

# The Future of Nuclear Medicine Depends on the Quality of Its Research: Researchers at the University of Heidelberg Receive the Award for Best Article of the Year

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**A**t the *JNM* editors' strategic planning meeting in February, the associate editors selected the best clinical article and best basic science article for 2019. Of those two, they selected the article of the year.

The award for best clinical article went to Clemens Kratochwil et al. from the Heidelberg group for their paper entitled, "<sup>68</sup>Ga-FAPI PET/CT: Tracer Uptake in 28 Different Kinds of Cancer" (1). The award for best basic science article went to Carola Focke et al. from the Ludwig Maximilians University of Munich for their paper entitled, "Early and Longitudinal Microglial Activation but Not Amyloid Accumulation Predicts Cognitive Outcome in PS2APP Mice" (2).

The top 3 clinical investigations also included an international study first-authored by Julian Betancur addressing a deep learning approach in cardiac SPECT imaging (3), and a study by Chanwoo Kim et al. from Asan Medical Center at the University of Ulsan College of Medicine on imaging of acute venous thromboembolism (4).

The top 3 basic science investigations included one by Frederik Giesel et al. from the Heidelberg group focusing on the biodistribution and preliminary dosimetry of fibroblast activation protein (FAP)-targeting agents (5); and one by Zohreh Varasteh et al. from the Technical University of Munich in collaboration with the University of Heidelberg reporting on FAP-targeted molecular imaging in myocardial infarction (6).

Theranostics has remained the driving force in reshaping the field of nuclear medicine. Novel targets such as FAP have raised high interest in academia and industry (7). The currently awarded papers still focus on the diagnostic aspects, but ongoing studies suggest that initial preclinical and clinical experiences with therapeutic applications will be published in the future.

The paper by Varasteh et al. (6) demonstrating that FAP expression is not specific to cancer opens new diagnostic possibilities for

conditions such as cardiac diseases but also emphasizes that target expression in nonmalignant diseases and normal tissues needs to be studied carefully to better understand and avoid potential off-target effects of FAP-targeted therapies.

The future of nuclear medicine encompasses more than theranostics. It includes novel diagnostic assays as introduced by Kim et al. to better visualize thromboembolic events (4), fundamental insights into the course of neurodegenerative diseases (2), and artificial intelligence applications (3).



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## REFERENCES

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