名古屋大学 大学院 創薬科学研究科 卓越大学院 GTR-CIBoG 共催





Nagova University



先端薬科学特論:単位認定講義

第146回創薬科学セミナー

日時: 2021年12月21日(火曜日) 17:00~ 18:30

対象: 大学院生 開催方法: Zoom (右2Dバーコード)

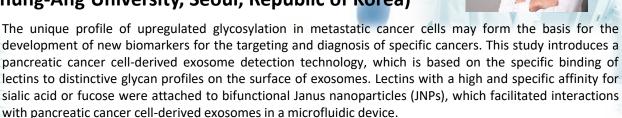
※ 参加方法はHPにも詳細情報があります!

Zoom参加

講演タイトル:

Lectin-glycan affinity in nanobio theragnostics:The specific capture of pancreatic cancer exosomes and the targeted therapy of tumor cells. ■

講師: Associate Professor Jonghoon Choi, Ph.D (Chung-Ang University, Seoul, Republic of Korea)



Here, we show that pancreatic cancer cell-derived exosomes from two cell lines and plasma samples collected from patients diagnosed with pancreatic cancer were successfully captured on the lectin-conjugated JNPs with affinities that were comparable to those of CA19-9, a conventional antibody. In addition, exosome detection using our platform could differentiate between metastatic and nonmetastatic pancreatic cancer cells. The lectin affinity to surface glycan of cancer cells can also be the strategy to target tumor with lectin-nanoparticles in photothermal therapy. This study opens the possibility to achieve a new early diagnosis marker and targeting moiety based on the glycan properties of pancreatic cancer cells.

BIOGRAPHY:

Dr. Jonghoon Choi is an Associate Professor in the School of Integrative Engineering at Chung-Ang University. He is also holding an affiliation as an adjunct professor at the School of Dentistry at Yonsei University. Dr. Choi's research aims to develop novel nanobiosensors and smart nanobiomaterials for their applications in nanomedicine. Dr. Choi has authored more than 110 SCI(E) journal articles and other numerous publications, patent/disclosure applications. His work has been published in top journals, including Nature Nanotechnology, Journal of Controlled Release, and Journal of the American Chemical Society, which has been cited >3200 times with the h-index over 30 to date. Dr. Choi has been serving as an editorial board member for SCI(E) Journals, including PLoS ONE, Analytical Sciences and Biotechnology & Bioprocess Engineering.

ナノバイオ分子の合成と応用を牽引するBiomedical Engineeringの 若きRising starのお一人です。皆様ぜひ奮ってご参加ください。

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