

e:Medium flash NEWSLETTER

June 2025

Dear Reader,

Welcome to the June edition of e:Medium Flash, where we spotlight the latest achievements from the e:Med research network. Explore cutting-edge publications and findings that first advance the field of systems medicine. Our refreshed format continues to promote visibility, knowledge sharing and collaboration within the e:Med community. Remember to submit your latest publications through the [e:Med website!](#)

Enjoy reading!

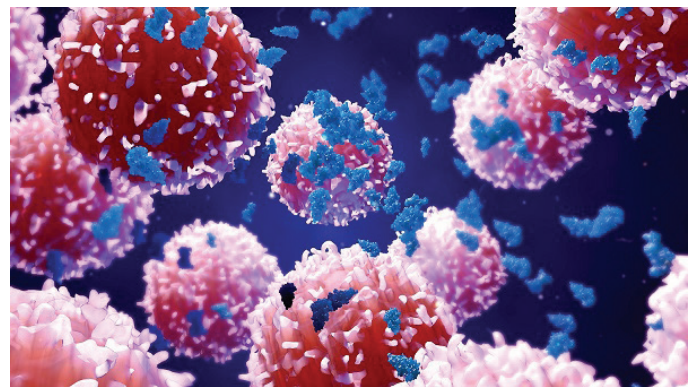
Your e:Med Management Office



TWO IS BETTER THAN ONE Hope for Drug-Resistant Pneumonia

Multidrug-resistant bacteria are a major threat in ventilator-associated pneumonia (VAP). Since phage therapy alone showed limited success, Martin Witzenrath and team (e:Med alliances SYMPATH & CapSYS) with French colleagues tested a combination of phages and antibiotics. Their findings suggest that this approach improves treatment effectiveness and reduces side effects in drug-resistant VAP.

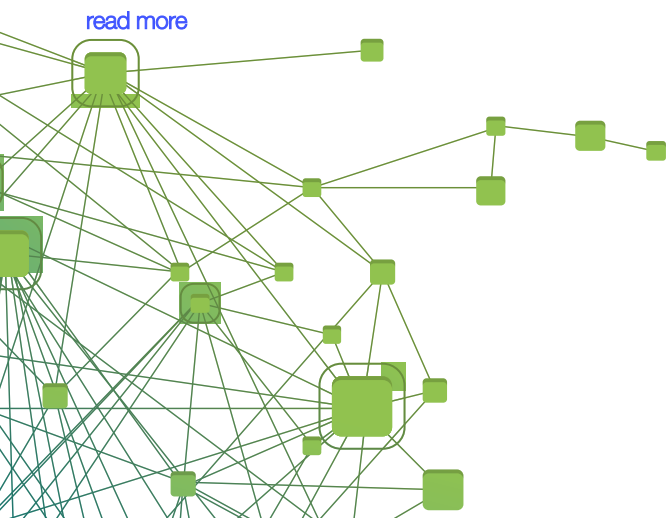
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HOW TO TRAIN T-CELLS To Spot Cancer

How do scientists train T-cells against tumors with low cell count and few mutations? Researchers of e:Med alliance PANC-STRAT around Andreas Trumpp and Martin Sprick, in particular Rienk Offringa and Michael Volkmar, combined enhanced mutanome analysis with epitope selection for T-cells to increase the chance of recognizing relevant epitopes. Their method will support personalized treatment of pancreatic cancer.

[read more](#)

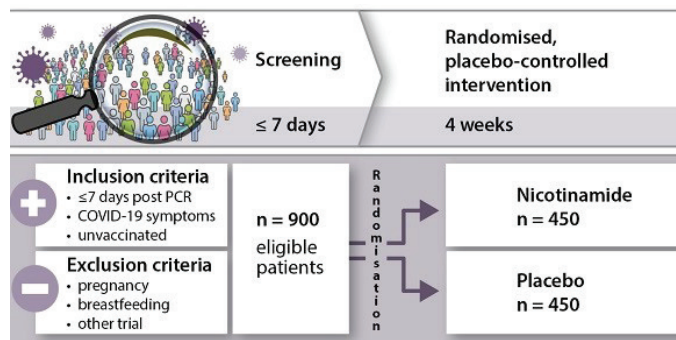
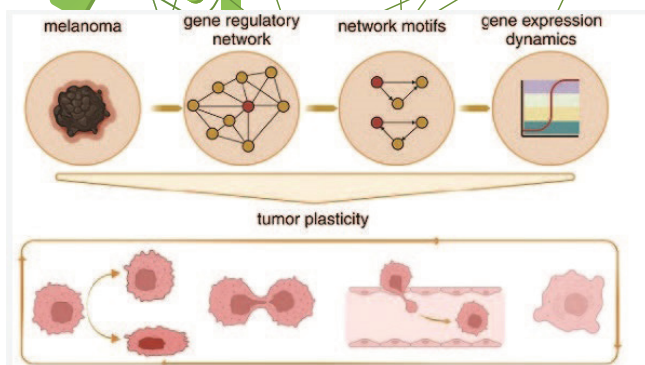


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MELANOMA'S MOLECULAR DANCE

Circuitry behind the disease

How do melanoma cells adapt and resist treatment? At the heart of this plasticity lies a complex dance between transcription factors SOX10, MITF and microRNAs. This review from e:Med alliance MelAutim under the collaboration of Prof. Xin Lai (Tampere University) and Prof. Julio Vera-González (University Hospital of Erlangen) expands on the intricate regulatory interactions of these motifs. Applying control theory and network biology, the study emphasizes how miRNA-mediated control may unlock new strategies for targeted melanoma therapies.

[read more](#)

A GUT FEELING

Nicotinamide Aids COVID Recovery

A 4-week trial with 900 COVID-19 outpatients shows that nicotinamide (a vitamin B3 form) speeds up recovery, as scientists around Stefan Schreiber, Helena Zacharias, Philip Rosenstiel and Konrad Aden of the e:Med alliances iTREAT, Guide-IBD, Try-IBD, and CKDNapp have discovered in a collaborative effort. More patients regained normal physical performance by week 2 compared to placebo. It also helped them return to daily activities and reduced long COVID symptoms. The treatment influenced gut microbiome changes linked to the disease. No safety concerns were found.

[read more](#)

StructMan

StructMAN 2.0 WEB

Structure Analysis Made Easy

Genetic variants can change protein structure and function. Researchers of e:Med alliance Sys_CARE around Olga Kalinina and Alexander Gress offer now an update of StructMan, a tool that maps how each amino acid in a protein affects its 3D structure and interactions. It uses known and predicted protein structures to analyze sequences and mutations. StructMAN 2.0 Web now offers an easy interface and clear visualizations, helping researchers explore protein variants and generate features for machine learning. Try it at: <https://tools.helmholtz-hips.de/structman>.

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ONLINE SEMINAR SERIES

Modelling approaches for disease processes

We are looking forward to meet you again in the next semester! The seminar restarts in November 2025

Location: ZOOM

Time: Every 1st or 2nd Wednesday of the month, 2 p.m. CET

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