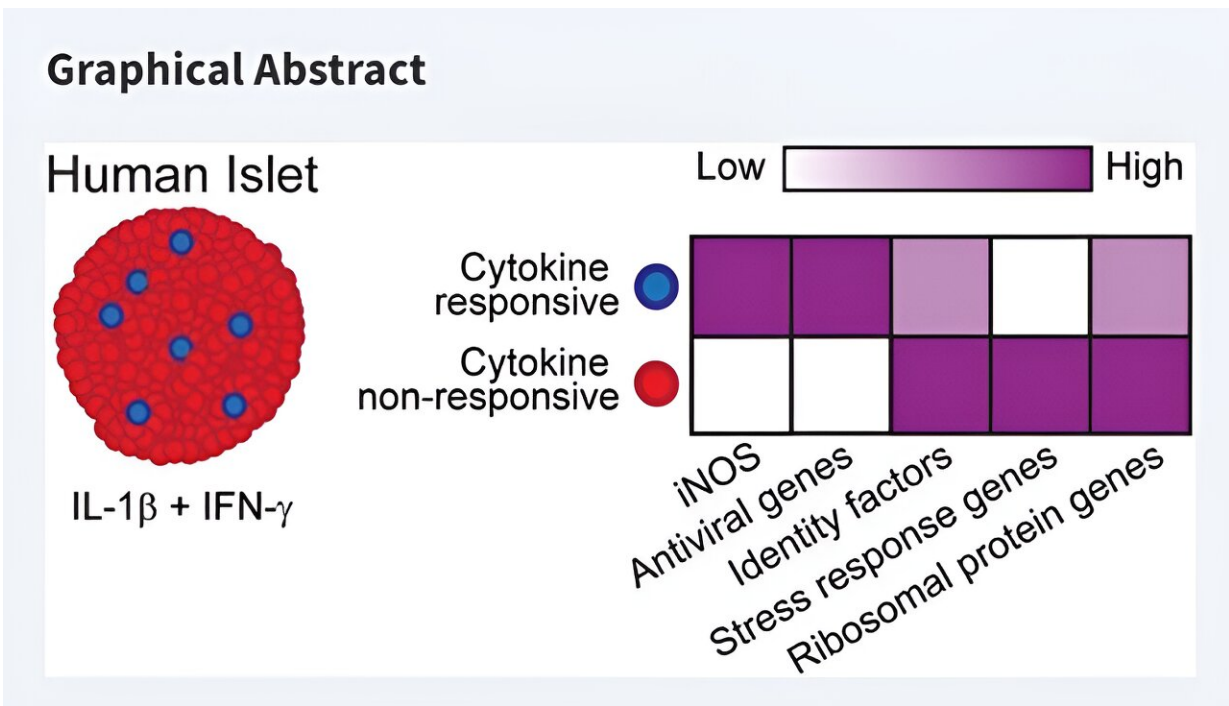


Pancreas cells in people who have died show significant signs of stress

April 2 2024



Credit: *Function* (2024). DOI: 10.1093/function/zqae015

People with type 1 diabetes require daily insulin shots to regulate their blood sugar levels. This is because their immune system kills beta cells found in islets in the pancreas. Beta cells release and disburse insulin to cells throughout the body. Insulin is needed to break down sugar.

It is common for researchers to use islets from deceased people to study

type 1 diabetes, but these islets are often stressed. The findings of this study suggest islets from those who have died are so stressed they do not function normally. This means the impaired islets cannot help physiologists better understand type 1 diabetes.

"We need to find ways to reduce the stress of islets from deceased patients to improve type 1 [diabetes](#) research," said Jennifer S. Stancill, Ph.D., of the Medical University of South Carolina, and a lead author of the study.

The [paper](#), "Single cell RNAseq analysis of cytokine-treated human islets: association of cellular stress with impaired cytokine responsiveness" is published ahead of print in the journal *Function*.

More information: Jennifer S Stancill et al, Single Cell RNAseq analysis of cytokine-treated human islets: Association of cellular stress with impaired cytokine responsiveness, *Function* (2024). [DOI: 10.1093/function/zqae015](#)

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