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# Research success stories compiled by the German Biobank Node (GBN)



### **INTRODUCTION AND OBJECTIVE**

Biobanks rely on constant support by patients and healthy persons, who are voluntarily donating biosamples. However, even sample donors have minor knowledge on biobanks and their work although they have been informed on the subject – this was demonstrated by interviews conducted by the German Biobank Node (GBN).

Furthermore, there is a strong need among researchers for information about using professional biobanks. A GBN survey showed that about half of the scientists questioned did not know about the biobank services at their location. The biobanks' profile must therefore be raised and their importance explained with comprehensible success stories...

#### **METHOD**

"Success stories" allow to explain the work and value of biobanks in a vivid way. Originally a marketing tool, the "success story" is now frequently used in science communication. With exemplary stories the success of certain procedures or institutions can be easily illustrated for laypersons. Where general descriptions remain abstract, "storytelling" also creates greater emotional closeness.

#### **EXAMPLE: COMBATTING BRAIN TUMOURS WITH IMMUNOTHERAPY**

As part of a clinical trial in Frankfurt/Main, glioblastoma patients who have suffered a relapse are being treated with genetically modified natural killer cells. The Interdisciplinary Biomaterial and Database Frankfurt (iBDF) is responsible for the logistics, storage and preparation of the samples. More information offers Dr. Daniel Brucker's presentation in the EBW session "Biobanking and personalized medicine in oncology success stories" (17 November 2020).

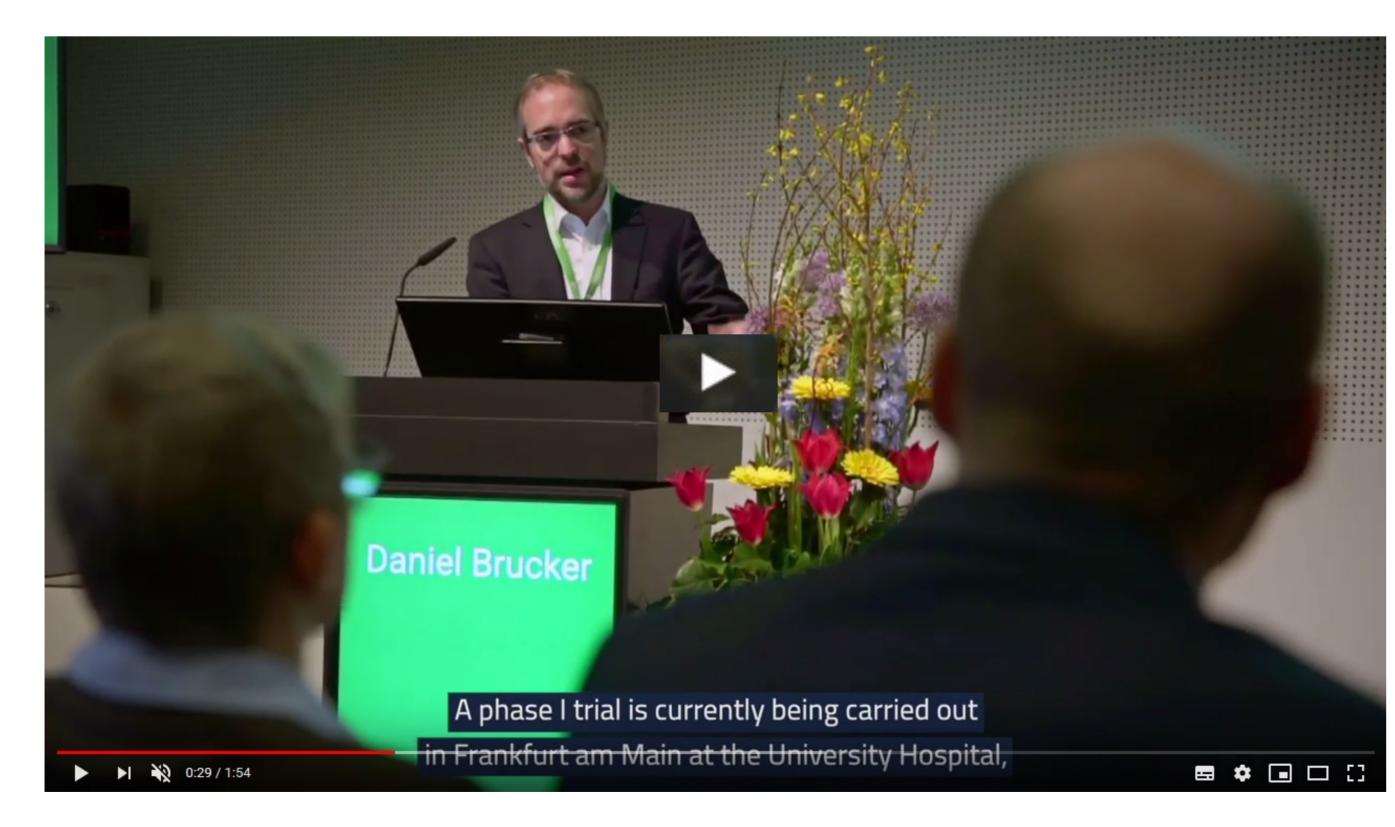


Figure 2: GBN has produced films about this success story and further ones and published them on YouTube and its websites.

#### **RESULTS**

In cooperation with the German Biobank Alliance (GBA), GBN has formulated six different success stories so far that present projects conducted with GBA biobanks. The topics of the stories are diverse to reflect the range of work of biobanks.



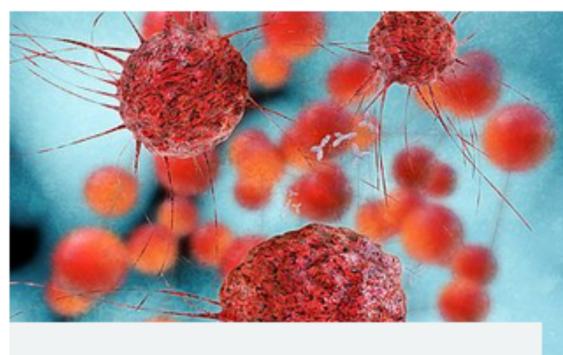
causes of heart defects

Scientists have discovered that the cell powerhouses influence the arrangement of organs.



A promising new approach to treating cancer using natural killer cells has been discovered.

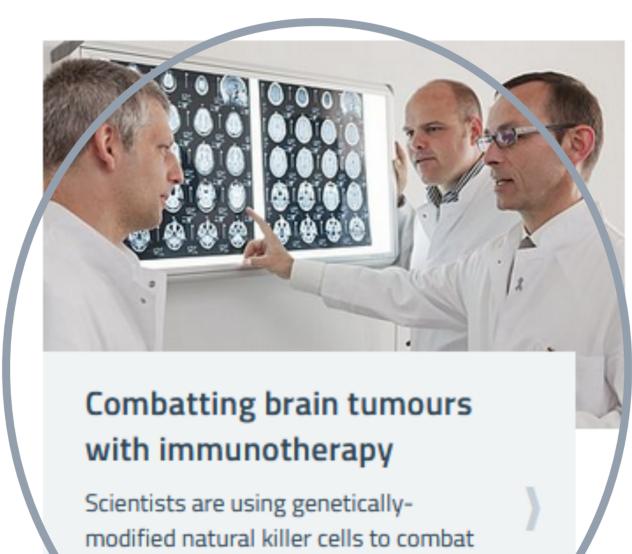
cancer

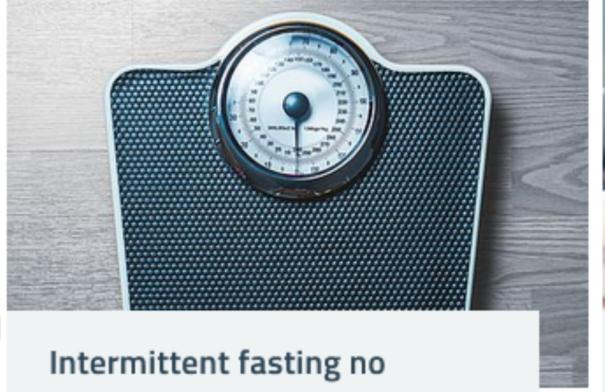


Genome atlas for pancreatic cancer

A team of scientists has successfully created a "roadmap" of gene changes in cancer cells.

Figure 1: The six success stories are published on GBN's donor website as well as in the research section of the GBN website.





more successful than conventional dieting

Is there any truth to all the hype? A research team has proven that intermittent fasting can help people to lose weight.



Obesity affects our DNA

Scientists have been able to prove that an increased body mass index leads to changes in the DNA.

#### CONCLUSION

brain tumours.

In order to identify suitable projects, biobanks must maintain a close exchange with their users, which also contributes to stronger "customer loyalty". GBN has succeeded in "professionalising" the writing of success stories and thereby supports its partner biobanks in their communications work. Finding more channels and forums to publicise such stories would be important for the future.

#### REFERENCES

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- GBN YouTube channel

 Zhang C et al. ErbB2/HER2-Specific NK Cells for Targeted Therapy of Glioblastoma. J Natl Cancer Inst. 2015 Dec 6;108(5). doi: 10.1093/jnci/ djv375. Print 2016 May.

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