# GAMES FOR HEALTH EUROPE 2025

# DISCLOSURE SLIDE

for presentations at the

# GAMES FOR HEALTH EUROPE 2025 CONFERENCE

I herewith confirm that there is not any conflict of interest with the conference organization or any of its sponsors.

GFHEU Version 250327

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# Mission & Vision

## Everyone knows someone

who's life was touched by cancer.



# Help players to find a cure for every disease on earth



#### We turn players into scientists

Science is a puzzle. We turn the scientific puzzle into a game.

When they play the puzzle, players contribute to the study.

As such, they contribute to finding a cure for a disease



#### Why?

There is more data than scientists can process Today's Artificial Intelligence is either not trained or not yet capable to process this data. Players can be trained to process data By playing, players can train Artificial Intelligence.

Together we can solve everything!









#### **Core Team**

#### Dr. Menno van Pelt-Deen

**Social Impact game designer** at Super Menno Monster & Games for Health. Expert in building bridges between domains by translating scientific queries into playful solutions.

#### **Berry Hermans**

Lead developer at Games for Health. Expert in understanding creative and scientific teams involved in developing citizen science games.

#### Mark van Kuijk

Game producer and co-founder of Games for Health. Expert in leading complex projects with multiple stakeholders.

#### Jurriaan van Rijswijk

**Co founder and sales** at Games for Health. Building bridges between industries (Health and Gaming), expert in building professional networks.



It's a proven solution Citizen Science Games

#### FoldIT

In six weeks, 10.000 players found a solution to fold proteins that eluded scientists for over a decade.





## What is the problem we try to solve? The science behind Unmask





How do cells grow?

#### Meet micro RNA150



#### Find a match!



Core game mechanic



#### Making it simple



#### Even better!







#### Gathering data

Launched through the network of Azerion eg. Jetzspiele.de

- Over 7.5k players
- Over 30k levels played
- Average playtime 3:22 per level



## Analyzing data

- JSON
- Excel/Sheets can't handle it
- Importing in Bigquery and analyse with Lookerstudio
- In progress, but is a game in itself

id: ObjectId('673b66f6816d7551044feaec'), microToMessengerMatch: [ -1, 1019, 1020, -1, -1, 1021, 1022, 1023, 1026, -1, 1028, 1029, 1030, 1032, -1, 1033, 1035, 1036, 1037, -1, 1038, 1039 ], gameMode: 'RESEARCH', isFinished: true, score: 61. duration: 79. resets: 0. playerId: '8f817134-dd79-444d-8812-a02c2ed9acee', timestamp: ISODate('2024-11-18T16:10:30.013Z'), messengerName: 'MYB transcript variant 1',

messengerName: MYB transcript Variant 1 , messengerRna: 'aaatacgtgaatgcattctcagcccggacgctggtcat microName: 'miR-150', microRna: 'cactggtacaagggttgggaga',

messengerSegment: 'ttttataatttgggagttctgcatttgatccgca messengerSegmentStartIndex: 1000,

\_v: 0

#### What are we looking for?

- We test with proven data in the lab
- Initial pass was a string that had too many proven bindings
- added a string with almost no bindings

#### Homo sapiens zinc finger DHHC-type containing 11B (ZDHHC11B), transcript variant 1, mRNA

NCBI Reference Sequence: NM\_001351303.1

OenBank Graphics

>6M\_001351303.1 Homo sapiens sinc finger DHEC-type containing 11B (ZDHHC11B), transcript variant 1, mRNA ATGGACACCODCTCC09GGAGCCRSTGTTCC0TCACCCCCAGAR9CCATAC9CAACAATGAAGA IGCOSCOCCGCATCTCCAGAGTGAACGGCTGGTCGTTACCCCTGCACTACTTCOGGGTGGTGA IGTCTTOSTT990CTTT0CTT990CLACCTTCA93ATCTTCATT0CCCT0CT30CTCACT0ST ACCOGGCOGACTCCAATGTCAGACTCATGAAGAACTATTCTCAGCCCATGCCCCTCTTCGA ACATGCACGTGATCCRGAATCRGTTCTGCCACCTGTGCARGTCACCGTGARCRAGAR IGCATTTCCT9CAATAASTSTGTGTGTCCGGCTTC5ACCACCACT9CAAATG5ATCAA AATTATT9GTTCTTCTTCA9CACT9T9GCCTC9GCCACA9CT CCTGCTGTATGTCCTCGTCCAGTACCTCGTGAACCCCCAGGGTGCTCCGCACGGACCCCAGGT GTCAAGAATATGAACACGTGGCTGCTGCTCCCCCCCTGTTCCCGGTGCAGGTGCAGA TGATCATCAGGATGCTCFT9CTCCT9GACCTTCTT99CTT99TGCA9CT999CC CCACATCTACCTGAAGGCCAAGGAGGAGGACCACCTTTGAGTATCTCATTAATACCCOGCAA ATCANGCAGTGAGGAAAGATCCATACGTGCAAATGGACAAAGGATTTCTCCAS CTG99CTCATCT9C&CA99GA9TCAA99CCAA9A9CTCCCT9CT9ATTTACAAAT TTCT9CACTTCA9TAAACCA0GAC0996GATTC9AA99CACA95AA6CA6ATGAT OCCAGCACAGAGTACTGOGGAATAGGAGCI CACASTACTORMAA USA TICACA CACAGTACTOGGAALOGOGLOGOGLOGOCACL GTTGAGAAATIKKAAPOTCACAGTACTGGGGAAATIGGAGCACAGTAT CATAGCATTOS OGAOCTCACAGTACT998GAAA AGAGGCATCCTCTGTATTTTAATGAACTCTGCGTTTTAGTCTGTTTAGTAGT ATAATCAGTTTTCTAAATATATCTATAAGTTACTACATGCA

#### Potential scenarios

- We see overlap. Great!!
- We see more than overlap. Hmm, let's try that in the lab
- we don't see overlap. Hmmm...

#### Mitigations

- goalseeking and validate (without replay)
- change the game rules (needs replay)





# Keep critical

• Test if we can write a bot that plays the game



# That's not all



# **Meet Madelief**

She is a unique individual, with a unique immune system. Just like anyone else.

Madelief is suffering from lymphoma.









#### Research of Dr. Marianne Boes

#### Binding prediction of current algorithms is not correct.

Her work has shown for 6 patients just like Madelief, that certain unpredicted proteins would cause t-cell production that could kill the cancerous B-cells.

By creating a puzzle game we can:

- Train the algorithm
- Have players create personalized medicine



Our current challenge....



# Funding!





Come play at our booth Collect all six cards to win a game ready workshop



# GAMES FOR HEALTH

# EUROPE

2025