

pushing the boundary of what
is possible on quantum hardware
now and for years to come

$\langle b | e^{it}$

Team

Paulina Mazurek



Co-founder & Chief Executive Officer

- ex Head of Google for Entrepreneurs Poland
- ex Google Program Manager in GoogleTV and Chromecast
- Bitspiration Booster VC co-founder

PhD Wojciech Burkot



Co-founder & Chief Physics Officer

- ex-Google Engineering Director & Site Lead
- PhD Physics, Jagiellonian University CERN & DESY, MIT
- physics motivated paradigms of computation 1993-'99

PhD Witold Jarnicki



Co-founder & Chief Mathematics Officer

- ex-Google SWE
- PhD Pure Mathematics, Jagiellonian University winner of multiple programming and algorithm design contests

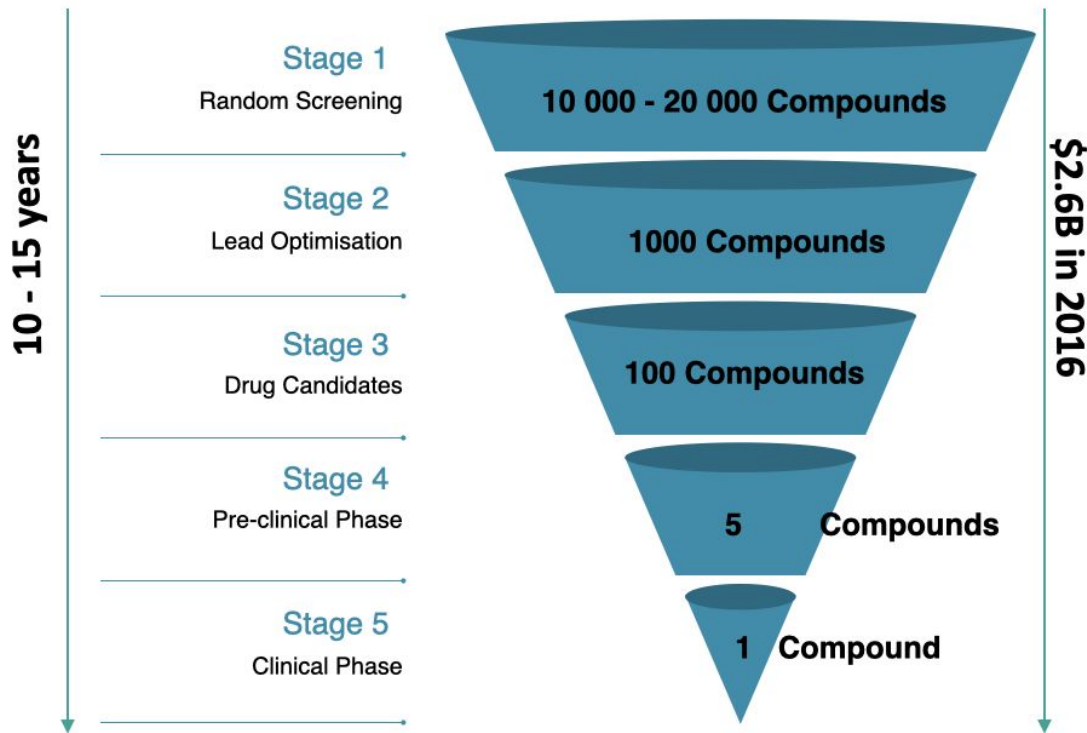
Problem

Drug discovery process

- Expensive (~\$2.6B)
- Time-consuming (10 - 15 years)

Our customers:

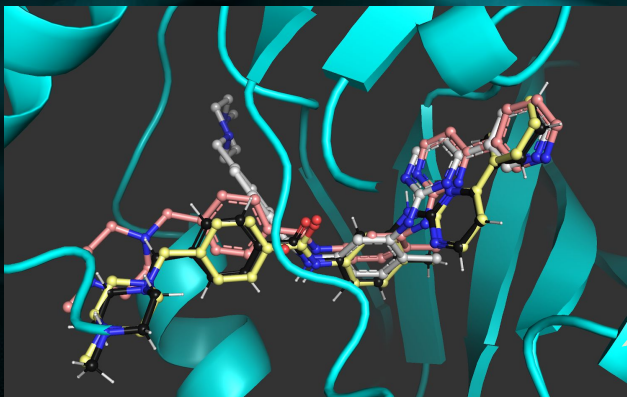
- Pharmaceutical Companies
- Biotech Solutions Providers



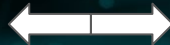
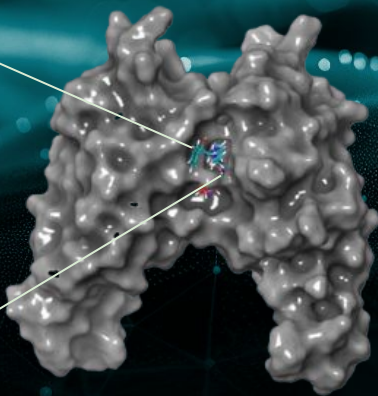
Our solution

BDocker

$$\langle b | e^{it}$$



*Our in-house
Simulated Annealer*



*Classical & Quantum
computer*

Classical computer

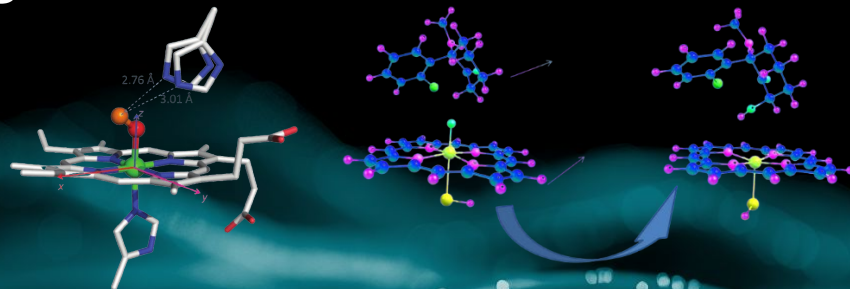
Future

Today

*Outperforms best classical optimization software
and the quantum - classical hybrid DWAVE machine*

Next steps

$$\langle b | e^{it}$$



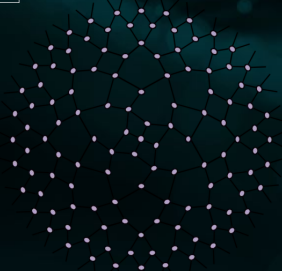
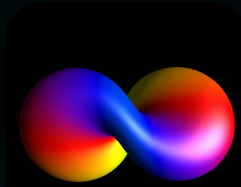
Cytochrome P450

$$\hat{H}^{(el.)} = \sum_{ij\sigma} h_{ij} a_{i\sigma}^\dagger a_{j\sigma} + \sum_{ijkl\tau} g_{ijkl} a_{i\sigma}^\dagger a_{j\sigma} a_{k\tau}^\dagger a_{l\tau},$$



With the most advanced **quantum** algorithms...

... We use Nature's own symmetries and tensor network decompositions with our in-house powerful optimization engine



With the current pricing pharmaceutical companies would save... $\langle b | e^{it}$

2.5 Billion Quantum Gates

Millions of \$ per simulation

With our innovative algorithm...

...breakthrough discoveries
in human metabolism
and pharmacokinetics

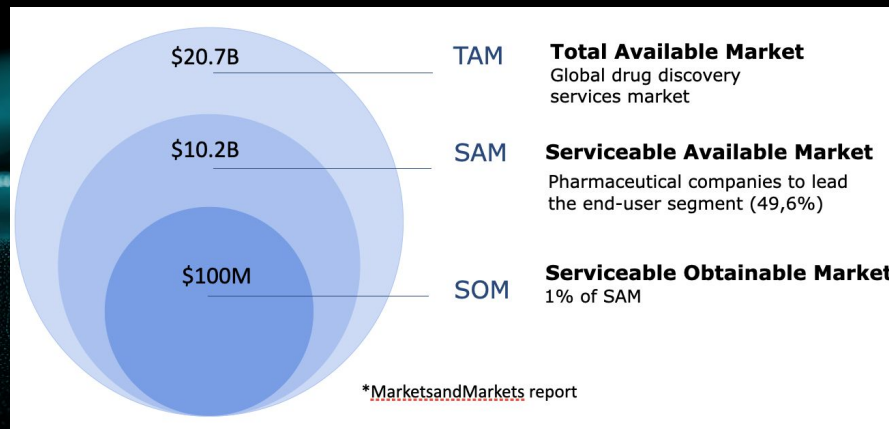
come sooner ...

... at a lower cost

Business model

Pricing model

Classical solutions	Quantum solutions
Free trial	Free trial
Pay as you go (~\$12K per customer per month)	10-15 % from saving generated



Targeted customers

Pharma companies	
Intermediaries	

Currently raising the seed round of \$3M led by Tensor Ventures

Seeking **\$1.5M** to close and:

- Expand patent portfolio in medtech solutions (3 new patent applications)
- Get at least 2 paying customers
- Benchmark (100x better than competition)
- Prepare for the A round of ~\$20M backed by the EIB

Thank you



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