

The Artemis Project: A patient-led global research consortium advancing prevention-focused breast cancer innovation

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CONTEXT

The National Breast Cancer Coalition (NBCC) is made up of activists, survivors, grassroots organizations, and national partners united to end breast cancer through advocacy and action.

Despite advances in prevention and treatment, breast cancer incidence continues to rise globally, and progress in reducing mortality remains uneven. Critically, effective strategies to prevent breast cancer and its most lethal outcome—metastasis—remain severely limited.

In response, NBCC launched the Artemis Project in 2010—an advocate-led, mission-driven research initiative designed to challenge conventional paradigms and accelerate solutions for breast cancer prevention.



NBCC & THE ADVOCATE MODEL

- Develops a highly trained advocate community through programs such as Project LEAD[®], supporting high-risk, high-reward research
- Advocates serve as leaders and informed partners in:
 - Research design
 - Priority setting
 - Peer review and funding decisions
- Brought about the DoD Breast Cancer Research Program, integrating advocates into the research process
- **Advocates accelerate progress by bringing urgency, accountability, and focus on outcomes that matter to patients**

THE ARTEMIS PROJECT

- A durable, advocate-led breast cancer research collaboration focused on primary prevention and prevention of metastasis
- Artemis integrates advocates as equal partners in:
 - Defining research priorities
 - Shaping research questions
 - Designing studies
 - Ongoing oversight
- **The Artemis Project is a safe space for bold, visionary ideas**
- It does not focus on participants' own work but new ideas
- The Project promotes interdisciplinary collaboration, breaks down silos, and drives solution-oriented research leading to **bold, non-incremental innovation**
- This approach has potential to be applied across other disease areas

THE ARTEMIS PROJECT: FROM CHALLENGE TO ACTION

Annual Meeting (4 days)

- ~25–30 researchers and trained advocates convene
- Participants selected for their **visionary, creative perspectives and approaches**
- Two focus areas
 - Primary prevention
 - Prevention of metastasis
- Discussion among participants to frame key challenges and new technologies
 - Consensus around which questions to take on
 - Breakout work groups define new solutions and develop actionable workplans
 - Develop concrete research strategies and collaborations
 - Produce 12–24-month action plans



Artemis Process (12 months)

- Proceedings of the annual meeting are made publicly available
- Participants set up and continue collaborations; and provide updates on progress and project refinements
- Artemis participants also continue general scientific exchanges (seminars, etc.) throughout the year
- Quarterly meetings to update on progress, evaluate the landscape and identify possible participants

Overall, the work is focused on outcomes: by challenging conventional assumptions and moving beyond incremental advances.

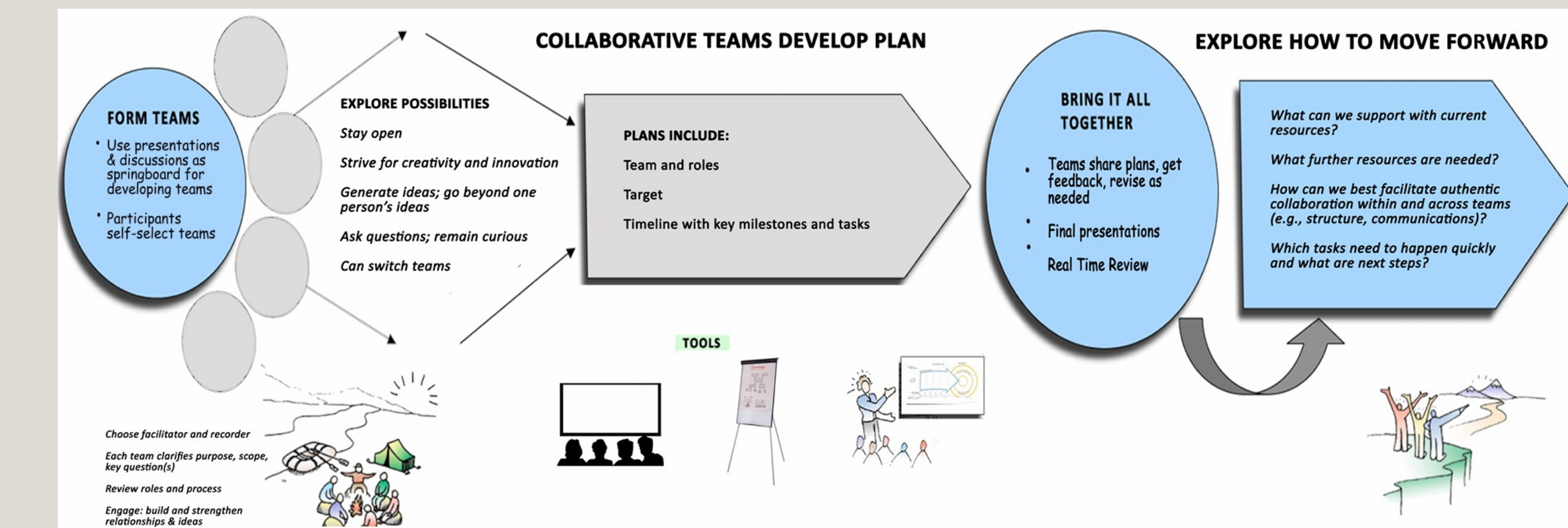
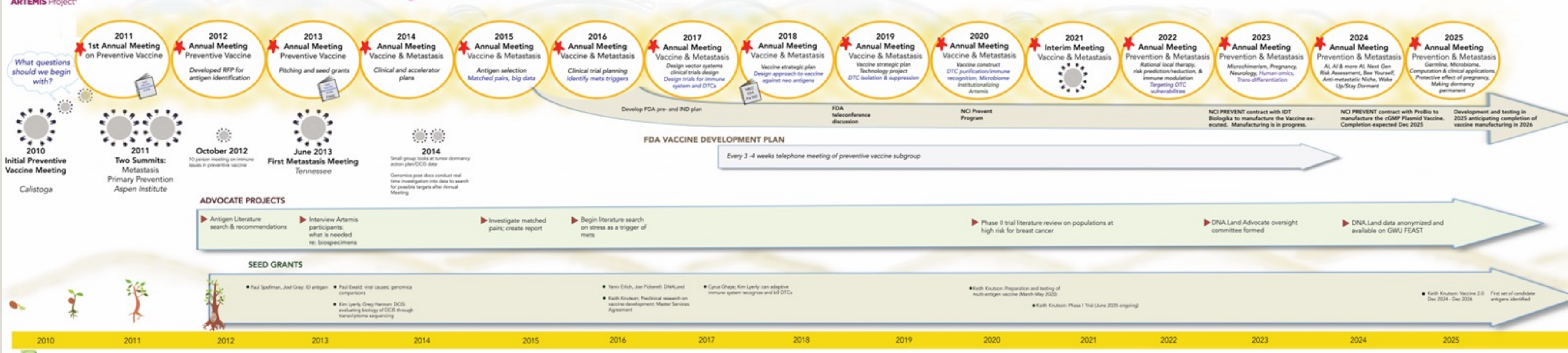
We ask:

- Will the work make a difference?
- Will the work matter to people?
- Will the work materially improve people's lives?

NBCC ARTEMIS Project Artemis rules and expectations

- Think big, weird, and wild
- Don't worry about embarrassment
- Open minded to all ideas
- Be engaged throughout
- Bring everything you have and are
- Not just what you get, but what you give
- All discussion confidential
- Everyone step up...get out of the weeds
- Consensus on priorities identified at meeting
- Develop plans (blue sky/specific)
- Inform your own transformative research

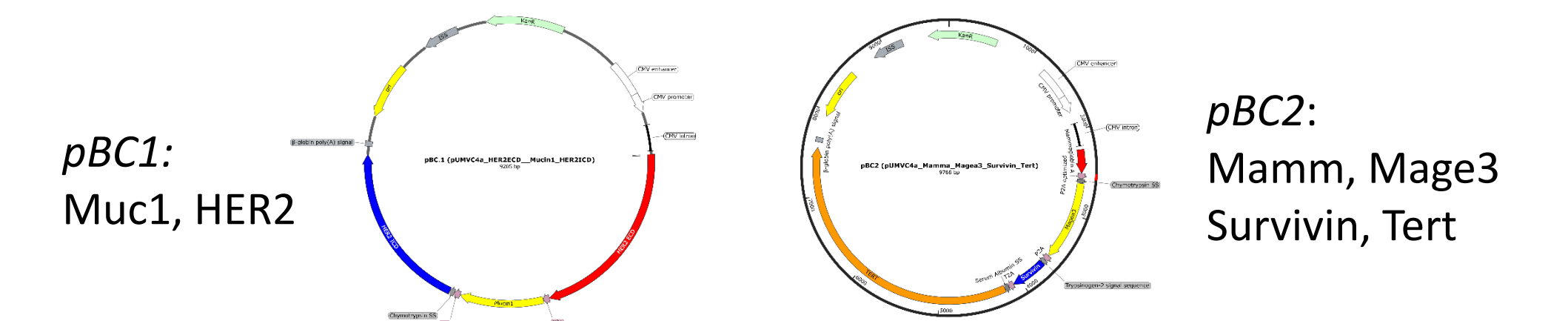
NBCC Artemis Project Timeline



EXAMPLES OF ARTEMIS IN ACTION

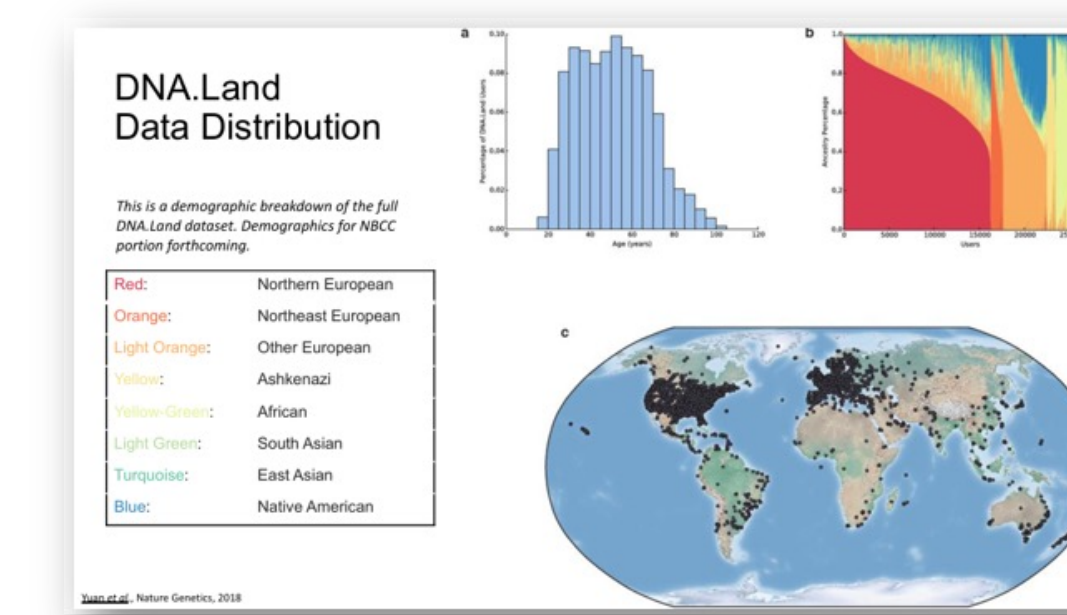
Preventive Vaccine Initiative

- Concept originated at the first Artemis meeting
- Now in development under contract with NCI PREVENT
- Targets 6 tumor-associated antigens
- Phase 1 clinical trial anticipated in 2026

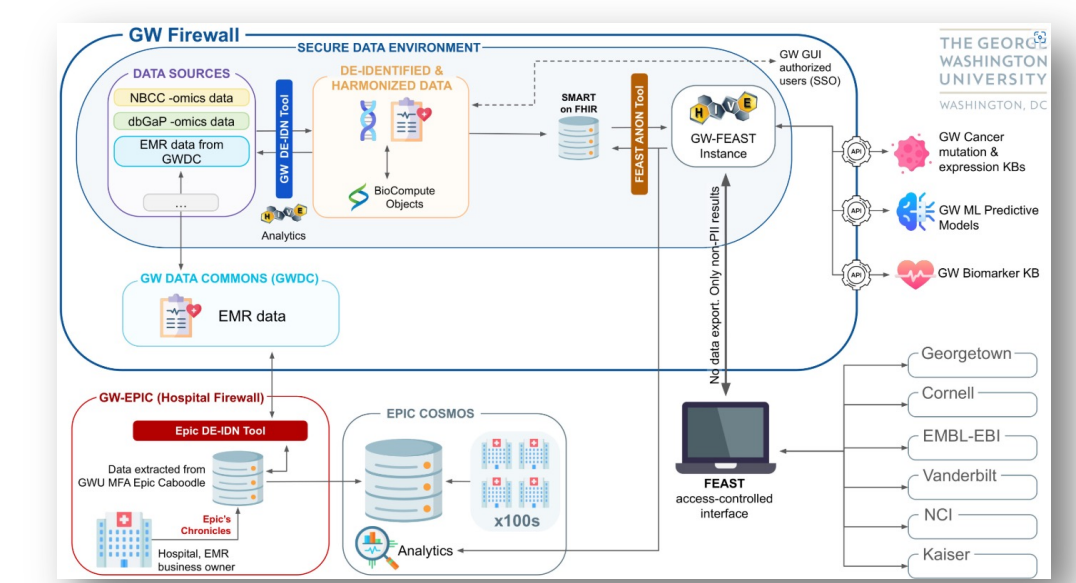


DNA.Land

- Proposed through Artemis collaboration
- Large-scale, consented genomic and phenotypic data resource
- Integrates data from multiple consumer DNA platforms
- Supports breast cancer and broader biomedical research



Data distribution in the DNA.Land database



GW-Federated Ecosystems for Analytics and Standardized Technologies (FEAST) platform

FURTHER INFORMATION

1. National Breast Cancer Coalition, Artemis Project: <https://www.stopbreastcancer.org/what-we-do/research/artemis-project/>
2. Yuan et al. 2018. DNA.Land is a framework to collect genomes and phenomes in the era of abundant genetic information. <https://www.nature.com/articles/s41588-017-0021-8>
3. Weller, N. 2020 NBCC: Evaluation of work over the Breast Cancer Deadline 2020 period. https://cdn.cancerhistoryproject.com/media/2021/04/06163630/Assessment-Final_Public-Version.pdf