**WHAT IS PRECISION HEALTH?**

**Precision Health** combines data about an individual’s genes, environment, and lifestyle with innovation and diverse partnerships to more precisely predict and diagnose disease, target therapies, and personalize health and wellness plans.

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**Innovation**

- **Analytics**
  - Data analytics, AI, and digital health to enhance clinical prediction, tailor treatments, improve quality, and optimize resource utilization.

- **Life Science Innovation**
  - End-to-end support of Precision Health: discovery research, product development, translation, delivery and impact.

- **Clinical Research**
  - Clinical and pragmatic trials on subpopulations to increase intervention effectiveness and safety, new indications, and generate real-world evidence.

- **Targeted Therapies**
  - Targeted therapies based on multiple data, including an individual’s or population’s genetic makeup and disease subtype.

- **Pharmacogenomics**
  - Right patient, right dose, right drug, right time: greatest impact with integrated clinical decision support.

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**Diverse Partnerships**

- **Healthcare Providers**
  - Engage patients, and utilize precision health tools and bioinformatics, for point-of-care personalized medicine.

- **Hospitals/Clinics**
  - Implement precision health technologies, including clinical decision support, to more precisely stratify and treat patients.

- **Public Health**
  - Apply precision health tools to target disease prevention and improve population health: right intervention, right time, to right population.

- **Policy Influencers**
  - Work with regulators, industry, payers and policy influencers to advance precision health innovation through impact and reimbursement.

- **Healthcare Purchasers**
  - Involve employers and consumers of healthcare in actionable precision population health strategies for improved outcomes.

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**Outcomes:**

- Precise Prediction and Diagnosis of Disease
- Targeted Therapies
- Personalized Care Plans

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**Data on Individual Variability**

- Genetic Predisposition
- Socioeconomic Factors
- Environmental Exposures
- Genomics/Omics/Microbiome
- Health/Meds Profile
- Drug Response
- Demographics/Ancestry
- Family Health History
- Behavioral Health
- Molecular Diagnostics
- Clinical Labs & Scans
- Mobile Device and Sensor Data
- Medical History
- Environmental Exposures

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**NC Precision Health Collaborative**

powered by NCBIOTECH in partnership with DHIT

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**Outcomes:**

- Precise Prediction and Diagnosis of Disease
- Targeted Therapies
- Personalized Care Plans

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North Carolina: a global leader in precision health

Leading research and health care institutions. Top-tier medical and pharmacy schools. Long-standing biomanufacturing expertise. And training specific to evolving jobs.

It’s how North Carolina transforms your precision health idea into reality.

NCBiotech transforms life science in North Carolina, and North Carolina through the life sciences. We nurture this statewide community by investing in technology development through grants, in company development through loans, and in economic development through infrastructure grants. Our activities also target the convergence points of life-science related sectors, including precision health.

Our many programs and activities are designed to leverage public and private dollars to achieve our vision: North Carolina, a global life science leader.

More at ncbiotech.org