# **Inventory of Precision Medicine Assets in California**<sup>1</sup>

An important goal of CIAPM is to develop an inventory of public and private precision medicine assets in the state and to identify strategic areas for future development across California.

California's strength in high-tech and life-science entrepreneurship makes it an ideal place to drive innovation and capacity in precision medicine. Equally important, California's world-class public and private universities and research institutes represent an invaluable asset for data-driven medicine. Within the UC system alone are 10 campuses that encompass expansive scientific, clinical and computational expertise and 5 medical centers that collectively hold over 13 million electronic health records, representing one of the nation's largest and most diverse patient populations. This rich resource is further augmented by other health care providers in California, with a socioeconomically diverse patient base. This confluence of high tech innovation with scientific and clinical capability places California in a unique position to accelerate precision medicine efforts toward improving medical outcomes for individuals from all walks of life.

### The purpose of the California precision medicine asset inventory is to:

- inform the state government of the extent and quality of California's resources and the state's role in leading advances in precision medicine
- coordinate the use of the enormous resources that exist in California
- map collaboration and development opportunities
- engage healthy and patient participants

We anticipate that coordinating efforts will strengthen California's precision medicine capabilities and attract additional funding for initiative activities.

The development of the California Precision Medicine Asset Inventory is currently in progress.

### Examples of assets include:

### Projects

- Ongoing or planned precision medicine projects (basic, pre-clinical, clinical, health outcomes, social / behavioral, ethics research etc.) in academia, non-profits, industry
- Technologically innovative companies that enable precision medicine efforts
- Analysis platforms (mathematics and computer sciences to create new algorithms)

## Databases and infrastructure

- Databases electronic health records (EHR), scientific, clinical, environmental, mobile health etc.
- Patient/well participant cohorts

<sup>&</sup>lt;sup>1</sup> http://www.ciapm.org/inventory-precision-medicine-assets-california

- Computational infrastructure
- Experimental validation models

#### **Clinical implementation**

- Physician / patient support for precision medicine-based decision making
- Physician / patient education
- Regulatory expertise
- Life science companies that operate in precision medicine space

### Expertise

- Faculty / technology experts
- Diverse and engaged patient groups
- Patient advocacy groups
- Legal, ethical and social science expertise to anticipate and address the bioethical implications of a world with precision medicine

### Funding

- Venture capital
- Non-profit funding sources