# iGIANT – Virginia Bio Roundtable

September 25, 2017
Falls Church Marriott Fairview Park
Falls Church, Virginia

### **Attendees:**

Saralyn Mark, MD - Founder & President, iGIANT: Facilitator

Peggy Agouris, Dean, College of Science, George Mason University
Laurence Bray, Associate Chair, Dept. of Bioengineering, George Mason University
Tracy Mason, Assistant Dean, Strategic Communications, George Mason University
Sameen Yusuf, Student, George Mason University
Lauren Breithapt, Student, George Mason University
Joanne Duncan, President, Membership and Business Operations, BIO
Jessica Foley, CSO, Focused Ultrasound Foundation

Crystal Icenhour, CEO, Aperiomics

Cynda Johnson, President and Founding Dean of Virginia Tech-Carilion School of Medicine Sharon Krueger, Director of Innovation Grants, School of Medicine, University of Virginia Ann Powell, Director of Healthcare Policy and Advocacy, Johnson & Johnson

Liz Powell, Founder and President, G2G Consulting

Cynthia Rancourt, CEO, Polymer Solutions

Marsha Rappley, CEO, VCU Health System and VP of Health Sciences, Virginia Commonwealth University Cathy Howard, Associate Professor, Vice Provost Community Engagement, VCU

Janine Stevens, Director of Scientific Programs, HHMI

Joanne Theurich, Chief of Operations Services, HHMI

Denise Toney, Director, Virginia Division of Consolidated Laboratory Services

Rosemarie Truman, Founder and CEO, The Center for Advanced innovation

Jeff Gallagher, CEO, VA Bio

Sherri Halloran, VP Membership and Programs, VA Bio

Casandra Isley, Director of Business Development and Strategic Growth, VA Bio

Caron Trumbo, Director of Operations, VA Bio

#### **Initial Goals**

Establish a common lexicon. Share best practices. Ambassadors.

# Bullet Points from iGIANT- VA Bio Roundtable

- 1) It's both relieving and empowering to hear "I'm not the only one" who had a difficulty with a product or service and blamed it on themselves, or settled for less than the satisfaction others appeared to get. Be an advocate and speak up in order to make a change.
- 2) In biomedicine, consciously embracing a sex/gender lens aligns and enriches the revolution to precision medicine. It created an understanding in discovery, development, prescription and adherence that patients are different and will react to therapeutic interventions differently.

- 3) Differences can be identified and understood scientifically over time and creating an increasingly good fit of therapy to individual patient in practice over time.
- 4) There are tools now which are upending conventional wisdom science and data science has advanced and enables us to make the distinctions and examine the data to look at such gender/sex differences more readily and more intelligently.
- 5) Recognizing the imperfect fit of diagnoses and therapy created by the male only paradigm and the global benefits of improving the fit for all patients, empowers individuals to be a champion of her own health, and disrupt the paradigm from the clinical grass roots up.

# **Examples highlighted:**

- Flat gym equipment and poorly fitting diagnostic machines intended for male use and not considering smaller female body structure.
- Lab coats are large and bulky creating an improper fit for women potentially risking safety protection.
- Women generally metabolize drugs differently and therefore prescribed dosages are an issue.
- The same disease can present differently in women than men.
- Complex public health issues, such as opioid overuse crisis, also can be mined for additional important insights by examination using the sex/gender lens, mindful, for example, that women tend to seek care in different ways and circumstances than men and that women's brains react differently to such drugs than to men's brains.
- Experimental design with difficulty of science, time and financial constraints, the urge to avoid confounding variable historically, and even now, can eliminate including a female study arm; the iGIANT perspective shows this is an important variable to explore differences, in experiments ranging from cellular to human clinical to social and consumer.
- The collection of knowledge, is frequently shaped by funders investors, grant providers, as well as regulators. Is a sex/gender analysis required, incentivized, allowed or ignored in the form for applying for a grant or other funding application?
- Health care is systematically impacted by reimbursement policies; if such policies are blind and dumb to the distinctions in treatment outcomes, patients will suffer, and needed innovation will be thwarted. Our strides in precision medicine allow physicians in advance to know which chemotherapies will and won't be effective for a particular patient's cancer, eliminating the try and see and move on approach of past years. The advances in understanding gained from the analysis of sex and gender differences should similarly

enable faster selection of an effective therapy, saving time to effective treatment and avoiding unnecessary therapeutic suffering and expense.

- The women in health care profession education fields noted the importance to introduce these concepts early and effectively into training, making sure they were required learning objectives and involved clinical as well as classroom treatment.

# Call to Action:

Ensure diversity in leadership teams: the power of multiple perspectives.

At Virginia Bio, will keep gender/sex in mind as we think of the very structure, implementation and goals of our conferences.

Within R&D, reviewing protocols to ensure that gender/sex was considered with the creation of testing, devices, pharmaceuticals, etc.

Looking through the gender/sex lens through all aspects of profession.