Working Group 2 – Conference Call #1 September 7, 2016; 4:00pm EDT

Welcome and Introductions

Working Group Members in Attendance:
Louis Reichardt – Co-Chair
James Battey
Kevin Pelphrey
Nicole Williams
Katarzyna Chawarska
Graeme Davis
Guoping Feng
Heather Hazlett
Shafali Jeste
Eric Klann
James McPartland
Christine Nordhal
Flora Vaccarino

Unknown Attendee:

Pamela High (Brown University)

Working Group Members Absent: Walter Koroshetz – Co-Chair David Amaral Robert Ring Elizabeth Redcay

Summary of 2013 Portfolio Analysis – Group Discussion (Pages 1-4, Data Analysis Slides)

- 1. Comments/observations on the overall portfolio?
 - It seems like scientists did not follow some aspects of the aspirational goal.

Analysis of Question 2 Objectives (Multiyear Funding Table and 2013 Project List)

- 1. Has there been an adequate number of projects for each objective?
 - The objectives focused on research on regression and females with ASD were not fully met.
- 2. For each objective, do the funded projects cover the scope of the objective? Any noted areas of progress or gaps?
 - The existing objectives seem to represent a previous state of the science and that the field has advanced from these.
 - Working group members mentioned the following as areas that need further study:

- The longitudinal, biological aspects of ASD; using improved animal models that are now in existence to investigate the neurodevelopmental process
- o The epigenetic changes associated with ASD (but that may be covered in Question 3)
- o the possibilities of genome editing, especially given the advances that have been made with this new technology, and its implications for potential use in gene therapy
- o The reversibility of genetic factors
- The development of models that assess the impact of genetic and environmental risk factors together at a biological level
- The contribution of somatic, germline genetics; while this may be covered somewhat in Question 3, the molecular pathways affected would fall within Question 2
- o Translational projects that follow up on genetic findings
- o Focused investigation of different regions of the brain known to be involved in ASD, as well as research on the alterations in these regions
- It may be helpful for the plan to be adaptable to research advances as they arise; annual reassessments can be done.
- 3. Was the recommended budget for each objective reached? If less was spent, but the number/scope of projects was appropriate, should the objective be considered completed but accomplished with less than the expected budget? In cases where more was spent than the recommended budget, was it because many more projects were funded in that area or because projects were more costly than originally projected? Are there any concerns with regard to funding associated with objectives?
 - Budgets are largely driven by opportunity, and science has changed significantly in the last five years.
- 4. Does the working group observe any areas of this question or specific projects that appear to be duplicative? Does the working group have suggestions about how duplication of effort can be avoided in this area?
 - Working group members requested the ability to look at the complete list of grants coded under the other Question areas.
 - Working group members expressed a need to be cautious about being too diligent about avoiding duplication, as reproducibility is important in science.
 - It is difficult to determine if something is truly duplicative, or rather a replication of findings, which is beneficial to the advancement of science.
- 5. Are there areas of emerging research that do not appear to be represented strongly in the portfolio that should be considered for mention in the new Strategic Plan?
 - Working group members suggested that they could send in examples of recent advances and emerging research for consideration prior to the next Working Group 2 conference call.

Wrap up and preview of next call

• The consensus of the group was that it is striking to realize how far science has advanced since the creation of the previous Strategic Plan objectives.