IACC Committee Business

IACC Full Committee Meeting July 26, 2017



Susan A. Daniels, Ph.D.

Director, Office of Autism Research Coordination Executive Secretary, IACC National Institute of Mental Health

Thanks to OARC Staff



- Susan Daniels, Ph.D., Director
- Oni Celestin, Ph.D., Science Policy Analyst
 - Jamie Kleiner, Science Policy Intern
- Rebecca Martin, M.P.H., Public Health Analyst
- Angelice Mitrakas, B.A., Management Analyst
 - Karen Mowrer, Ph.D., Science Policy Analyst
- Julianna Rava, M.P.H., Science Policy Analyst
- Jeff Wiegand, B.S., Web Development Manager

New OARC Newsletter



OFFICE OF MATERIAL OF THE AUTISM RESEARCH COORDINATION

We are pleased to introduce OARC's new quarterly newsletter! This newsletter will share the latest updates on meetings, news, and new publications. We hope you enjoy it and welcome your <u>feedback</u>.

Autism Meetings & Events



IACC Full Committee Meeting

July 26, 2017

The agenda for the upcoming meeting includes presentations on wandering by the National Autism Association and the Interactive Autism Network, an update from Madison House Autism Foundation on their new initiative, Autism After 21 (check out #Imagine21 on social medial), a discussion of the 2016-2017 IACC Strategic Plan. and more.

Past Meeting Highlights



IMFAR: OARC and IACC Members in Action

May 10-13, 201

IMFAR, the annual conference of the International Society for Autism Research (INSAR), took place this year in San Francisco, CA in May. Exciting science advances were shared, and several IACC members and the OARC team participated. Over the summer, INSAR is hosting a free webinar series to share autism science updates from top researchers.



IACC Full Committee Meeting Highlight

April 26, 2017

Check out the recent IACC Meeting presentation (minute mark 12:50) by Member of Parliament from Canada, Mike Lake, a father of a young adult son on the autism spectrum and dedicated advocate for people with disabilities.



As One Screening

April 25, 2017

In April NIMH and OARC hosted a screening of the documentary *As One:*The Autism Project for Autism Awareness Month. The film shows the struggles and triumphs of ten children with autism and their families who

- Quarterly, before IACC meeting
- Highlights work of IACC and partners
- Provides latest autism news and publications
- Future editions will include exclusive features, such as videos and interviews

Feedback welcome!

Upcoming Event: Autism in Girls and Women Seminar



- Joint seminar sponsored by OARC and the NIMH Office for Research on Disparities and Global Mental Health
- Tentative date: September 19, 2017
- Place: NIMH Neuroscience Center, Rockville, MD and webcast
- Panel discussion on issues related to autism in women and girls
 - Underlying biology of ASD in girls Dr. Kevin Pelphrey, George Washington University
 - Clinical phenotype of ASD in girls Dr. Pamela Ventola, Yale Child Study Center
 - Social Context of ASD in girls Ms. Zoe Gross, Autistic Self Advocacy Network
 - More information will be posted on the IACC website:

www.iacc.hhs.gov

IACC Portfolio Analysis Update

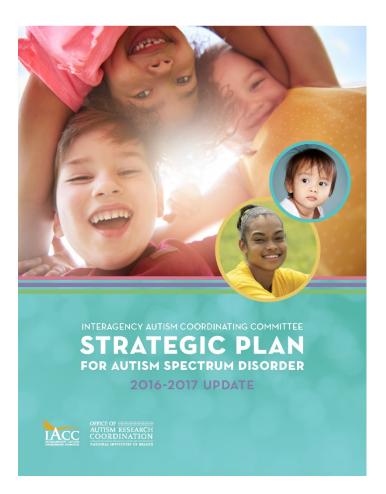




- Preparation of the 2014-2015 IACC ASD Research Portfolio Analysis Report is underway – expected publication in 2017
- Preparation of the data call for 2016 data set is underway
- Request: 3-4 IACC members to serve as volunteer consultants on issues such as addition of new funders

2016-2017 IACC Strategic Plan





- The IACC Strategic Plan (SP) provides a blueprint to guide autism-related efforts across federal agencies and partner private organizations.
- The IACC SP is organized around 7 consumer-based questions.
- The first IACC SP was developed in 2009 and focused on research efforts.
- Under the Autism CARES Act, the new IACC Strategic Plan will address both research and services activities.

2016-17 IACC Strategic Plan Status



- ✓ The IACC formed 7 Working Groups to address the 7 chapters of the Strategic Plan.
- ✓ Drafts of the 7 chapters have been completed by the Working Groups and reviewed by the committee
- ✓OARC staff has edited the 7 chapters and prepared other Strategic Plan sections

Today's goal:

IACC will review and approve the 2016-17 Strategic Plan

2016-17 IACC Strategic Plan Sections



- Introduction
- Vision, Mission, and Core Values Statement
- Overview of ASD Research Funding Progress
- Question 1: Screening and Diagnosis
- Question 2: Underlying Biology of ASD
- Question 3: Risk Factors
- Question 4: Interventions
- Question 5: Services
- Question 6: Lifespan
- Question 7: Infrastructure, Surveillance, Workforce, Outreach
- Duplication of Effort Statement
- Budget Recommendation
- Conclusion

2016-17 IACC Strategic Plan



Introduction

Vision, Mission, and Core Values Statement



Vision Statement

The Strategic Plan will accelerate and inspire research, and enhance service provision and access, that will profoundly improve the health and quality of life of every person on the autism spectrum across the lifespan. The Plan will provide a blueprint for ASD research and services efforts, engaging the participation and input of government agencies, private organizations, and the broader autism community.

<u> Mission Statement</u>

The purpose of the Strategic Plan is to focus, coordinate, and accelerate innovative research and foster development of high-quality services in partnership with stakeholders to address the urgent questions and needs of people on the autism spectrum and their families.

Vision, Mission, and Core Values Statement



Core Values

- Sense of Urgency: We will focus on what steps we can take to respond rapidly and efficiently to the needs and challenges of people and families affected by ASD.
- **Excellence:** We will pursue innovative scientific research of the highest quality and development and dissemination of evidence based services and practices to maximize the quality of life for people on the autism spectrum.
- **Spirit of Collaboration:** We will treat others with respect, listen to diverse views with open minds, thoughtfully consider public input, and foster discussions where participants can comfortably offer opposing opinions.

Vision, Mission, and Core Values Statement



Core Values

- Consumer Focus: We will focus on making a difference in the lives of people affected by ASD, including people with ASD, their families, medical practitioners, educators, and scientists. It is important to consider the impact of research on the human rights, dignity, and quality of life of people with ASD, from prenatal development forward.
- Partnerships in Action: We will value cross-disciplinary approaches, data sharing, teamwork, and partnerships to advance ASD research and service activities.
- **Equity:** We will prioritize improved access to detection, intervention, and other services and supports for individuals with ASD, and commit to the goal of reducing disparities across the lifespan, spectrum of ability and disability, sex and gender, racial and cultural boundaries, socioeconomic status, and geographic location to improve the health and quality of life of all individuals with ASD.

2016-17 IACC Strategic Plan



Overview of ASD Research Funding Progress

Question 1: Screening and Diagnosis



How can I recognize the signs of ASD, and why is early detection so important?

Objective 1: Strengthen the evidence base for the benefits of early detection of ASD.

- Implement innovative designs to evaluate the benefit of universal screening for ASD, including research that addresses the specific research gaps noted by the USPSTF report.
- Ensure that studies take into account differences and needs of special populations such as girls and intellectually delayed individuals

Question 1: Screening and Diagnosis



Objective 2: Reduce disparities in early detection and access to services

- Improve family engagement and help build an awareness of healthy developmental milestones and warning signs of concern.
- Demonstrate the validity of different screening and diagnostic tools for culturally-diverse communities.
- Increase services in high poverty and under-served regions; improve inclusion of these populations in research.
- Address differences in state policy requirements for Medicaid and the requirement of a diagnosis to receive services.
- Develop a culturally competent and more culturally diverse workforce.

Question 1: Screening and Diagnosis



Objective 3: Improve/validate existing, or develop new tools, methods, and service delivery models for detecting ASD in order to facilitate timely linkage of individuals with ASD to early, targeted interventions and supports.

- Continue research on the potential translation of biomarker findings into feasible and valid screening or diagnostic tools.
- Increase coordination and personalization of screening, diagnosis and early intervention services through use of the medical home model, person centered planning, or other service models.
- Conduct research to better understand and develop strategies to address reasons for lack of compliance with screening recommendations; address barriers to universal screening.
- Analyze the impact of insurance reform and national policy on coverage for screening, diagnosis and intervention for children with ASD and their families.
- Evaluate innovative service delivery methods (e.g., use of technology) to improve detection methods and increase access.



What is the biology underlying ASD?

Objective 1: Foster research to better understand the processes of early development, molecular and neurodevelopmental mechanisms, and brain circuitry that contribute to the structural and functional basis of ASD.

- Identify one or more neural circuits that are impaired in significant groups of ASD individuals.
- Understand the role of the immune system and metabolic processes in ASD, including aspects such as the fever effect.
- Identify quantitative and reproducible biomarkers or behavioral monitors for ASD of use for assessing effectiveness of future therapeutic or behavioral intervention trials.



Objective 2: Support research to understand the underlying biology of co-occurring conditions in ASD and to understand the relationship of these conditions to ASD.

- Determine the relationship between seizures and ASD.
- Determine the impact of GI dysfunction on ASD related behaviors and cognitive performance.
- Determine the impact of sleep disorders on ASD related behaviors and cognitive performance.
- Determine the relationship of co-occurring psychiatric disorders to ASD and their impact of co- on the health and well-being of people with ASD.



Objective 3: Support large scale longitudinal studies that can answer questions about the development of ASD from pregnancy through adulthood and the natural history of ASD across the lifespan.

 Support creation of large cohorts, characterized both phenotypically and genetically with complete health records from early embryogenesis through adulthood.



Proposed Cross-cutting Objective CC1:

Support research to understand the underlying biology of sex differences in ASD, possible factors that may be contributing to underdiagnosis, unique challenges that may be faced by girls/women on the autism spectrum, and develop strategies for meeting the needs of this population.

- Conduct research on the underlying biology of ASD in girls/women (differences in brain structure, function, physiology) and how this may create differences in phenotype.
- Identify risk and resilience factors that contribute to sex differences.
- Develop, adapt or validate screening and diagnostic tools to detect ASD in girls.
- Develop strategies to meet the intervention, service and support needs of girls/women with ASD.

Question 3: Risk Factors



What causes ASD, and can disabling aspects of ASD be prevented or preempted?

Objective 1: Strengthen understanding of genetic risk and resilience factors for ASD across the full diversity and heterogeneity of those with ASD, enabling development of strategies for reducing disability and comorbidities in ASD.

- Understand the contribution of regulatory and other genomic regions to ASD risk. Whole genome sequencing will begin to illuminate the role of non-gene coding regions of the genome.
- Identify additional autism risk genes but also contribute to an understanding of the common variant patterns that enable expression of the mutations.
- Understand the causal relationship between identified ASD risk genes and clinical outcomes so that guidelines for genetic counseling can be illuminated. Understand parental concerns and attitudes when communicating complex genetic information.

Question 3: Risk Factors



Objective 2: Understand the effects on ASD risk and resilience of individual and multiple exposures in early development, enabling development of strategies for reducing disability and comorbidities in ASD.

- Understand the timing of exposures relative to the cascade of events that unfold during brain development to identify and understand the molecular basis of exposure-associated ASD risk.
- Conduct multiple studies in different populations and settings, with high quality measures of exposure and adequate controls, to reconcile disparate findings and establish robust linkages of environmental exposure to ASD risk.
- Refine more targeted, conventional exposure assessment tools to characterize the exposome.

Question 3: Risk Factors

Objective 3: Expand knowledge about how multiple environmental and genetic risk and resilience factors interact through specific biological mechanisms to manifest in ASD phenotypes.

- Develop low-burden exposure measures that can be incorporated in large-scale genetic studies, perhaps leveraging innovations in exposomics or epigenomics.
- Move beyond identification of genetic and environmental risk factors to reveal functional biological consequences associated with these risk factors.
- Integrate methylation, exposure, and phenotype data in the same population.

Question 4: Treatments and Interventions



Which treatments and interventions will help?

Objective 1: Develop and improve pharmacological and medical interventions to address both core symptoms and comorbidities in ASD.

- Identify biomarkers that can help inform decisions about appropriate interventions and provide objective assessments of treatment response.
- Recruit more individuals for clinical trials testing pharmacological treatments for ASD.

Question 4: Treatments and Interventions



Objective 2: Create and improve psychosocial, developmental, and naturalistic interventions for the core symptoms and comorbidities in ASD.

- Identify "active ingredients" of interventions in order to ensure sustained responses to treatments.
- Adapt interventions so that they can be deployed in a range of community settings.

Question 4: Treatments and Interventions



Objective 3: Maximize the potential for technologies and development of technology-based interventions to improve the lives of people on the autism spectrum.

- Develop tools allowing individuals with ASD to track and direct their own treatment.
- Develop technology-based interventions that help people with ASD improve their social and communication skills, increase their independence, and in many other ways help improve their quality of their lives.
- Increase access to interventions by developing technology-based treatments that can be deployed outside of primary care or clinical settings.

Question 5: Services



What kinds of services and supports are needed to maximize quality of life for people on the autism spectrum?

Objective 1: Scale up and implement evidence-based interventions in community settings.

- Identify best practices, including systematic evidence-based collaborative approaches, to scale up existing services and increase access to evidencebased interventions in communities.
- Test and implement cost-effective healthcare services that increase the supply of care
- Develop approaches that scale up the use of evidence-based practices in the educational setting that address the gaps between research and practice
- Funding for provider training is a part of Question 7 Objective 2, but is crossreferenced here because successfully growing the service workforce is necessary to achieve this objective to successfully scale-up and delivery of evidence-based ASD interventions.

Question 5: Services



Objective 2: Reduce disparities in access and outcomes for underserved populations.

- Support research to understand and develop strategies to address health disparities, health inequity, and disparities in services access and utilization for underserved populations. Underserved communities include families with low socio-economic resources, youth and adults with severe intellectual impairment, those who are racial/ethnic minorities, and women.
- Develop culturally competent service provision strategies, improve the quality of care and perception of quality of care to encourage utilization, and increase family centered care as well as other best practices to reduce disparities.

Question 5: Services



Objective 3: Improve service models to ensure consistency of care across many domains with the goal of maximizing outcomes and improving the value that individuals get from services.

- Develop better metrics and measurement tools for health outcomes for people with ASD across the lifespan should be properly investigated and documented.
- Develop, test, and implement metrics and measurements for ASD services, as well as federal, state and local programs.
- Quantify outcomes in order to inform effective service models.
- Continue research into determinants of service quality, including accessibility, continuity and flexibility of services.

Question 6: Lifespan Issues



How can we meet the needs of people with ASD as they progress into and through adulthood?

Objective 1: Support development and coordination of integrated services to help youth make a successful transition to adulthood and provide supports throughout the lifespan.

- Use population-level data to understand unmet needs, disparities in access and outcomes, emerging usage trends, cost issues and the effectiveness of services in achieving their desired outcomes.
- Conduct research to determine the prevalence of autism in adults and the scope and distribution of service needs among the population to inform policy and program planning.
- Develop strategies for reducing socio-economic or racial/ethnic disparities in service access and related outcomes for adults with ASD.
- Investigate social capital, the network of supports, and community integration provided by families, service providers, and others to understand the range of formal and informal supports needed to achieve successful adult outcomes.
- Develop additional service coordination across agencies (e.g. educational and vocational rehabilitation; mental health and vocational rehabilitation).

Question 6: Lifespan Issues



Objective 2: Support research and implement approaches to reduce disabling co-occurring physical and mental health conditions in adults with ASD, with the goal of improving safety, reducing premature mortality, and enhancing quality of life.

- Conduct large-scale longitudinal studies across adulthood into older age to examine trajectories of physical and mental health conditions, and address the additive and interactive effects of biological, cognitive, behavioral, and environmental factors that lead to co-occurring conditions.
- Conduct studies of approaches to treatments to reduce mental health conditions, including anxiety, depression, and/or suicidality.
- Engage adults on the autism spectrum and their families, through collaborative and participatory research, to be involved in the development of ecologically valid measures of quality of life, which can be used to understand the factors associated with positive quality of life throughout adulthood.
- Create programs to recruit and train more general physical and mental health providers to be knowledgeable about and willing to treat adults with ASD. This applies to primary care providers, community mental health providers as well as specialists.

Question 6: Lifespan Issues

Objective 3: Support research, services activities, and outreach efforts that facilitate and incorporate acceptance, accommodation, inclusion, independence, and integration of people on the autism spectrum into society.

- Examine factors and support strategies that promote successful participation and retention in post-secondary education, employment, and/or community living activities across the spectrum of ASD and across the adult lifespan.
- Develop reliable outcome measures that take into account the desires of the individual and his/her family, as well as the match of the activity with the interests, skills, and abilities of the adult.
- Conduct long-term follow-up studies examining the effects of interventions and services delivered in childhood on later adult outcomes.
- Conduct large-scale studies of programs to improve the skills that may underlie many aspects of community integration (e.g., adaptive behavior, executive function)
- Better understand the needs of adult service providers, as well as the characteristics of effective providers.
- Encourage more skilled workers to enter and remain in the adult disability service provider field, which is critical to improving self-determination of adults with ASD.



How do we continue to build, expand, and enhance the infrastructure system to meet the needs of the ASD community?

Objective 1: Promote growth, integration, and coordination of biorepository infrastructure.

- Promote biological sample donation to ensure that demand for research studies is met.
- Develop and expand programs and outreach campaigns to encourage families from diverse backgrounds to participate in ASD research, join registries and donate biological samples.
- Create incentives to encourage standardization and sample sharing across data and biorepository banks.



Objective 2: Develop, enhance and link data repositories.

- Adopt a de-identified research participant/subject identifier, such as the GUID, across all research initiatives in order to reduce the likelihood of sample duplication.
- Use common data definitions in order to standardize data collection, and responsibly share all the data supporting any findings when those findings are announced.



Objective 3: Expand and enhance the research and services workforce and accelerate the pipeline from research to practice.

- Expand and enhance programs that provide funds to train current and future researchers on innovative research techniques.
- Provide service providers with training in evidence-based ASD services across multiple settings from clinics to communities.
- Develop programs to translate and disseminate ASD research findings into actionable recommendations and real-world practice.



Objective 4: Strengthen ASD surveillance systems to further understanding of the population of individuals with ASD, while allowing comparisons and linkages across systems as much as possible.

- Expand surveillance efforts to include the adult population in order to gain a better understanding of needs and concerns over the lifespan.
- Expand surveillance efforts to collect more descriptive data regarding co-occurring conditions, including cognitive disability, seizure disorders, anxiety and depression to increase understanding of the prevalence of these conditions in the ASD population.



Duplication of Effort Statement



ASD Research Budget Recommendation

Lost Potential Due to Autism



Autism is a lifelong condition:

- **Lifetime cost** for an individual with autism including what was spent and productivity loss across the family was estimated at **\$2.4 million** when involving intellectual disability, and **\$1.4 million** when it does not.
- Another study estimated the additional costs of healthcare, education, therapy, services, and caregiver time associated with caring for a child with ASD aged 3 to 17 years is about \$17,000 per year.
- The estimated annual cost of ASD, including combined medical, non-medical, and lost productivity costs, was in the range of **\$162-\$367 billion**, or 0.89-2.0% of the U.S. gross domestic product.
- IACC portfolio data showed total 2015 autism research funding from major government and non-government funders was \$343 million: 0.09-0.21% of the estimated total annual cost of autism.

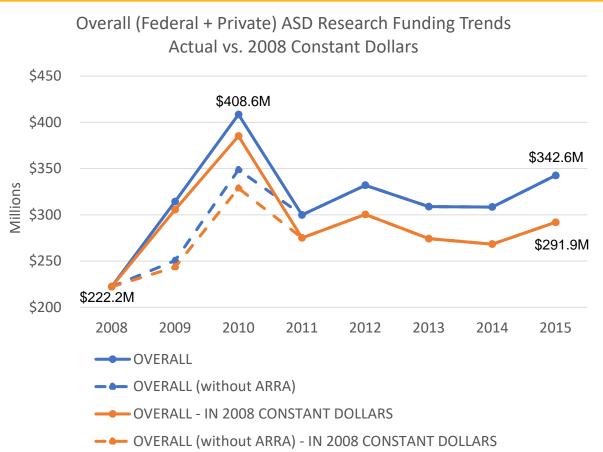
Lost Potential Due to Autism



- Four of every ten youth with autism do not transition into a job in the first years after high school and those with jobs tend to work part-time in low-wage jobs.
- Research to better understand the nature of ASD and the needs of children, adolescents and adults on the autism spectrum is important to help build the evidence base for efficacious and cost-effective strategies to address the complex challenges associated with ASD.
- Studies suggest that the costs of research and services that enable delivery of
 effective early intensive behavioral interventions in childhood can result in cost
 savings over the lifespan by reducing the need for costly long-term care and
 support. This suggests that investment in research to improve early detection
 and intervention could reduce long-term service costs.
- It is likely that more investment in research to improve adolescent and adult services and supports would improve the economic productivity of individuals over their entire lifetime, while also improving their sense of purpose and quality of life.

Autism Research Funding Trends





- •Combined federal and private autism research funding was 54% higher in 2015 compared to 2008, an annual growth rate of 7.7%.
- •When adjusted for inflation by using constant 2008 dollars, the growth in the combined federal and private autism research budget from 2008 to 2015 was 31%, an annual growth rate of 4.5%.
- The highest annual percentage increase was 41% between 2008 and 2009 (including ARRA funding).
- •The highest combined budget was \$408.6 million in 2010 (including ARRA funding).

Inflation rate source:

https://officeofbudget.od.nih.gov/pdfs/FY18/BRDPI%20Table%20FY%20195 0%20to%202022_Jan%202017.pdf

2016-17 IACC Strategic Plan Objectives

- Q1: Strengthen the evidence base for benefits of screening; reduce disparities; improve tools, access, and service delivery models
- **Q2:** Advance research on development and neurobiology of autism; understand biology of co-occurring conditions; undertake longitudinal studies that cover the full lifespan
- Q3: Continue to identify genetic risk and resilience factors; advance research on environmental risk and resilience factors; understand how genetic and environmental factors interact
- **Q4:** Develop medical and pharmacological interventions; improve psychosocial and naturalistic interventions; advance technological interventions
- **Q5:** Scale up evidence based interventions; reduce disparities in access and outcomes; improve service models
- **Q6:** Develop and coordinate transition services; reduce comorbid conditions and premature mortality; promote acceptance, accommodation, inclusion, independence, and integration
- Q7: Encourage tissue donation, data standardization, and data sharing; train researchers and service providers; expand surveillance to cover adults and comorbid conditions
- **Cross-cutting**: Expand research to understand autism in girls to ensure we are meeting the needs of this population.

Potential Rationales for Overall Budget Recommendation



Propose an overall (federal + private) ASD research budget, with a justification, considering historical funding trends.

Option 1: Maintain a Steady Rate of Growth in Research Budget

Extrapolate annual rate of growth to 2020 or another target year in the future

Option 2: Recoup Dollars Lost to Inflation Since 2008

Adjust for the loss of purchasing power due to inflation

Option 3: Return to the Historical High of 2010

Identify a target date/timeframe for returning to the 2010 peak funding level

Option 4: Significantly Grow the Autism Research Budget

Identify a target date/timeframe for doubling the 2015 overall budget level

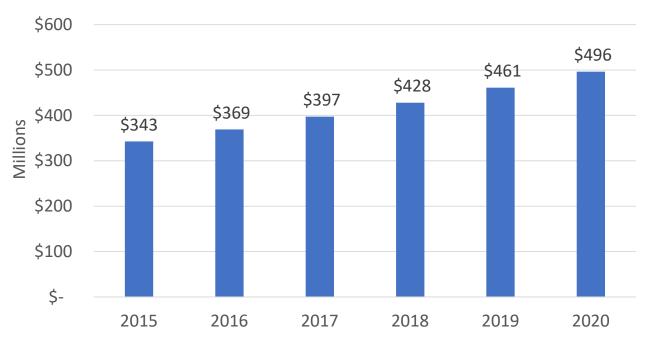
Option 1: Maintain a Steady Rate of Growth in Research Budget



Extrapolate annual rate of growth to 2020 or another target year in the future

Projected Overall (Federal + Private) Autism Research Budget Levels

Based on Continued 7.7% Annual Growth Rate Until 2020



All funding levels are in actual dollars and do not account for future inflation

Option 2: Recoup Dollars Lost to Inflation Since 2008



Adjust for the loss of purchasing power due to inflation

Overall (Federal + Private) ASD Research Funding Trend





 To negate the loss of purchasing power at the 2015 funding level, a funding level of about \$402 million would be equivalent to \$343 million in 2008 constant dollars.

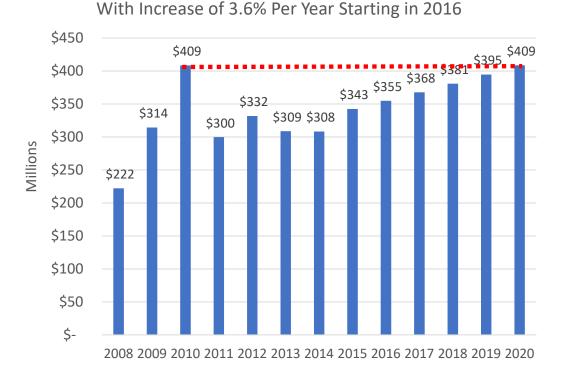
- OVERALL
- -- OVERALL (without ARRA)
- OVERALL IN 2008 CONSTANT DOLLARS
- ── OVERALL (without ARRA) IN 2008 CONSTANT DOLLARS

Option 3: Return to the Historical High of 2010



Identify a target date/timeframe for returning to the 2010 peak funding level

Returning Overall (Federal + Private) Autism Research
Budget to 2010 level by 2020



All funding levels are in actual dollars and do not account for future inflation

Examples of Science Advances Enabled by 2009-2010 ARRA Investment

- Brain imaging technology to distinguish between individuals with ASD and those serving as controls.
- An accurate method to assess the risk of ASD in infancy through the analysis of older affected siblings as predictors of ASD recurrence.
- The JobTIPS website to provide young people with ASD and their families with helpful tips and information on developing job skills.

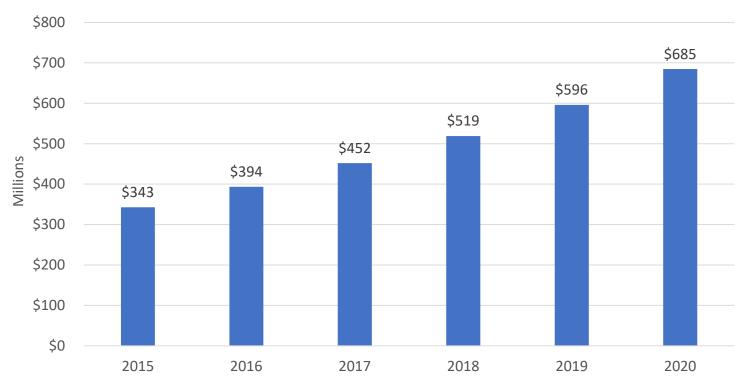
Option 4: Significantly Grow the Autism Research Budget



Identify a target date/timeframe for doubling the 2015 overall budget level

Doubling of 2015 Overall (Federal + Private) Autism Research Budget by 2020

With Increase of 14.85% Per Year



All funding levels are in actual dollars and do not account for future inflation

Budget Recommendation Discussion



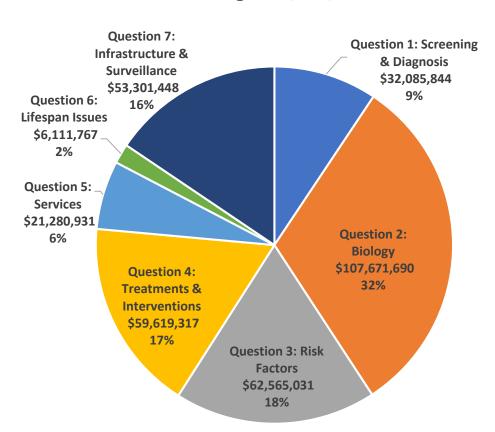
- Which of the options or methods does the IACC want to use to develop the budget recommendation?
- To what target date and/or timeline does the IACC want to apply the budget recommendation?

Considering Portfolio Balance



2015 ASD Research Combined Federal and Private Funding by *IACC Strategic Plan* Question

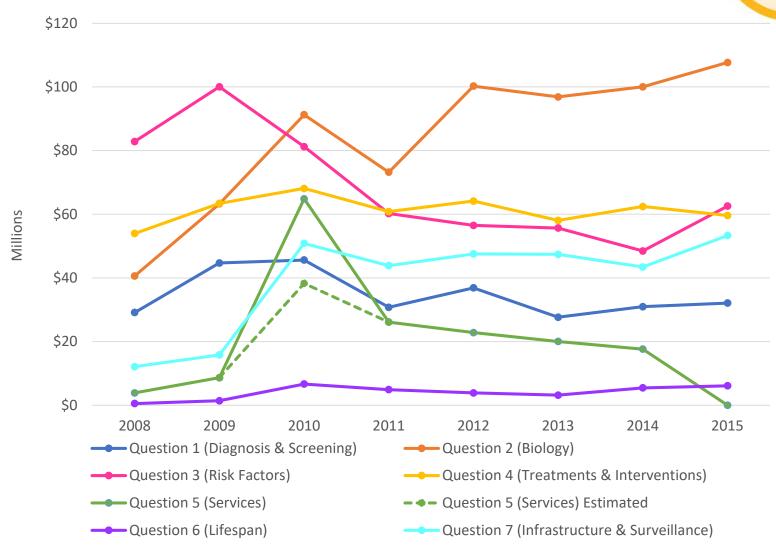
Total Funding: \$342, 636, 029



- Is this the appropriate balance of funding across SP questions? If not, what should it be?
- Should any additional funds that become available be distributed across the questions with the goal of shifting the balance?
- In 5 years, what should the distribution among Question areas look like?

2008-2015 ASD Research Funding by Strategic Plan Question







Conclusion



Any other comments?

Written comments due to OARC by

Friday, August 4, 2017

IACC Working Groups



- In 2016, the IACC agreed to form three working groups (WGs) on the following topics:
 - Housing
 - Safety
 - Improving Health Outcomes (including co-occurring conditions/mental health)
- The IACC also agreed to convene these WGs after the completion of the Strategic Plan.
- OARC will be sending a request for WG member nominations and begin arranging WG meetings this fall (some members have already volunteered to participate).