

President's Letter

Society for Research in Child Development: Taking Aim On An Exciting Future

Dear Friends and Colleagues, past, present, and future:

I am pleased to share some updates regarding the launch and initial implementation of SRCD's new strategic plan, and more generally, the sense of excitement about our vision for growth, adaptation, and innovation over the coming years.

The strategic planning process—under the leadership of President Lynn Liben, the SRCD Governing Council, and the SRCD Executive Staff, and with facilitation from consultants from Cambridge Concord Associates—began in February 2014 and continued for more than a year. As we started, we wanted to build on SRCD's existing strengths—the rich history of excellence in research focused on children and our strong set of values and traditions. At the same time, we wanted to identify ways we could adapt to meet new challenges, particularly the need to become more innovative, interdisciplinary, international, and impactful.

This planning process was completed in March 2015, concurrent with the Biennial Meeting in Philadelphia. The strategic plan, including descriptions of the process, can be found here: 2015 SRCD Strategic Plan. This plan articulates a mission and a vision—one that affirms and strengthens many of our longstanding values and traditions, and also highlights key principles and guidelines for moving forward.

The crucial next phase, however, is to begin turning this vision into an actionable plan. Accordingly, on May 27 – 28, 2015, the SRCD Governing Council, Executive Staff, and our consultants from Cambridge Concord Associates met once again, to discuss implementation priorities—including pragmatic next steps. In the rest of this letter, I would like to share some highlights from those discussions. In particular I want to emphasize the reasons we will be exploring innovation in a number of ways—through new types of small meetings, summer institutes, exploring new partnerships, by forming new committees and task forces, and plans for a new website to make it easier to follow these changes.

We want your feedback, ideas, and most importantly, your participation. Please tell us what you think. We have set up a special portal [click here] on our website to get your input. Please share your thoughts, ideas, and suggestions. Even better, find new ways to get involved. Help us to shape and energize this exciting period of growth and development in our organization.

SRCD: Past, Present, & Future

The Society for Research in Child Development was founded in 1933 to "stimulate and support research, to encourage cooperation among individuals engaged in the scientific study of child development, and to encourage applications of research findings". In the ensuing eight decades SRCD has remained at the forefront of developmental science, providing leadership for the field amid changing scientific and social contexts. The Society has maintained its commitment to the developing child as the primary focus of scientific inquiry (within a larger developmental science framework and lifespan perspective) and to the use of that science to improve child, family, and community well-being.

Today, SRCD faces a rapidly changing environment. Technological advances, the growth of interdisciplinary research in developmental science, and increased opportunities for international collaboration open promising new avenues for scientific discovery and application. Capitalizing on these opportunities to forge an integrative developmental science will require better bridging across several disciplinary silos and national borders, and will require increased diversity in research foci and in the scientific work force. Changes in funding structures, university systems, and research processes will likewise require adaptation and innovation if the research is to remain cutting-edge, vibrant, and impactful in improving the lives of children, families, and communities.

The Future of SRCD: A Case for Innovation

In our most recent discussion of the goals and implementation priorities of a tenyear strategic plan (2015-2025), we focused on this question:

If we want **SRCD in 2025** to be effectively supporting the best developmental science globally, and helping to advance the most exciting and high-impact research on child development, then, what are the crucial steps we should take **now** to best chart that course?

Two important themes emerged from these discussions:

1) SRCD must attract, engage, and provide valuable support for the brightest students and early career scholars *across several disciplines relevant to developmental science*.

2) SRCD must embrace the exciting opportunities and challenges of a rapidly changing future (as described below), in a number of important ways.

On one hand, this emphasis on change must be balanced with a strong adherence to our organization's longstanding values and traditions. On the other hand, this appears an opportune time for some boldness in embracing innovation.

CONTEXT

The rapidly-changing face of children's daily experiences around the globe...

This is one of the greatest challenges facing our field and our organization: *the world is changing in many ways at a pace that is historically unprecedented.*For children born today, who will be transitioning to adulthood around 2035 - 2040, we have surprisingly little ability to predict what kind of world they will find.

If that sounds like hyperbole, let us look back. For young adults, age 25 today, consider just a few of the changes that have occurred since they were born in 1990.

In 1990: the first SMS message had not yet been sent. Now: Most U.S. adolescents own a mobile phone and send 60 text messages per day on average.

In 1990: one of the most popular video games was Super Mario Brothers and most gaming occurred in arcades. Now: electronic games, often played on mobile devices and cell phones, are a ubiquitous part of almost all adolescents' lives in the U.S., with 97% playing for at least one hour per day.

In the 1990s: "Deep Blue," the huge IBM supercomputer best known for victory against world chess champion Garry Kasparov, boasted a performance figure of 11.4 GFLOPS. Now: that performance figure is exceeded by several smartphones.

In 1990: The world's largest-ever biomedical collaboration began a multi-billion dollar 13-year odyssey to identify the first human genome. Now: Sequencing a full human genome can be performed commercially for about \$1,000; and we are quickly moving into understanding questions at the level of how developmental processes mechanistically influence gene expression.

In 1990: The first cell phone call was made using the new digital technology connection system that came to be known as the 'second generation' (2G) network. Now: Cell phones are ubiquitous; 3G and 4G networks cover much of the globe. More people on earth have access to cell phones (6 billion), than have access to working toilets (4.5 billion). The human species is now almost fully interconnected.

In 2000 (when today's 25-year-old was turning 10) *none of these yet existed*: Wikipedia, Facebook, Twitter, Instagram, or YouTube. Now: Wikipedia contains 13

million articles in 200 languages; YouTube has more than 1 billion users worldwide and more than 300 hours of new video are uploaded to YouTube every minute.

Most importantly: The rate of change looking forward 25 years is most likely to be *much* greater. In almost every measureable way, the pace of change is *accelerating*. For infants born today, the social, technological, and global contexts they will navigate—as children, adolescents and young adults—will be drastically different, in ways we cannot currently predict. This raises compelling questions for developmental science. It creates compelling challenges for the goals of understanding today's child, growing up in tomorrow's contexts.

Moreover, the sources of relevant change involve multiple interacting dimensions—including, for example, the effects of global warming, unprecedented globalization, immigration, urbanization, social and economic inequalities, and growing demands for food, clean water, and energy. Compounding the impact of these issues is the fact that more that 80% of the world's youth are growing up in emerging and developing economies, particularly in the Middle East, Asia, and Africa.

On one hand, the core principles of understanding child development—and advancing that understanding through research—are likely to continue relatively unchanged over the coming decades. On the other hand, the foundational core of this understanding emphasizes an unfolding set of *interactions* between children and their social context. Thus, as the social contexts and daily experiences of the developing child are changing rapidly, so too are these core developmental processes. The implications are profound. Particularly from a global perspective, the need for innovative research that contributes to understanding these changes has never been greater.

The Rapidly Changing Face of Developmental Science

The challenges created by the rapidly changing world in which children are developing can appear daunting. Yet the pace of advances in science, including rapid progress in the tools and capabilities for meeting these challenges, can be inspiring. Importantly, the relevant science is exploding in breadth as well as depth.

There are a multitude of exciting advances that span *a multitude of disciplines*. These include developmental psychology, education, learning science, sociology, developmental neuroscience (spanning several sub-disciplines), genetics and epigenetics, pediatrics, child psychiatry, adolescent medicine, robotics and human-computer interface, as well as research addressing child-relevant questions in public health, social policy, social justice, and a broad range of legal and ethical issues relevant to infants, children, adolescents, and their lifespan trajectories.

The rapid advances in many of these fields are creating changes and opportunities that are breathtaking. Consider just a few examples of startling scientific headlines from a brief one-month period:

Neurobiologists re-create a critical juvenile period in the brains of adult mice, reactivating brain plasticity [Neuron 5/19/2015]

Engineers develop next-generation prosthetic: A robotic arm with 26 joints, that can curl 45 pounds and is controlled with a person's mind just like a regular arm [NY Times 5/20/2015]

Chinese scientists edit genes of human embryos [NY Times 4/30/2015]

Gene activation therapy prevents liver damage in mice [Science 4/30/2015]

In a striking example of how 3-D printers could customize medical care, doctors turn powdered plastic into tiny devices custom-fitted into airway tubes that save infant lives [Science 4/29/2015]

Neuroscientists have perfected a chemical-genetic remote control for brain circuitry and behavior. This evolving technology can now sequentially switch on and off, in mice, the neurons and the behaviors they mediate [NIH Press Release 4/30/2015]

It is important to acknowledge that some of these capabilities may raise as many fears as hopes. And most of these advances would not be considered within the traditional boundaries of research on child development. Yet, these examples illustrate the *rate* of advances, and the range of disciplines creating progress that impact children's lives—and the world in which children are developing. Also, they highlight opportunities for SRCD members to participate in dialogues about how best to use and integrate scientific advances into efforts to improve children's lives, and more broadly, the need to bring a strong child-development perspective to important policy relevant discussions stemming from such scientific advances.

Challenges and Opportunities Posed by these Advances

The breadth and depth of these advances create enormous challenges and opportunities for the field of developmental science relevant to SRCD's goals and mission. If we are going to be an organizational home for cutting-edge and integrative developmental science that both deepens our understanding of developmental process and contributes to the lives and wellbeing of children, we need to acknowledge, engage, and in some ways, embrace innovation. We need to find creative approaches for bridging across approaches and fields—in ways that help to integrate disparate and often fragmenting disciplines and sub-disciplines; and in ways that help to create a new, more comprehensive field of developmental science—one that truly integrates perspectives from multiple disciplines, approaches, and methods.

We need to experiment with innovation in ways that attract pioneering scientists and early career scholars, not only to the Biennial Meeting every two years but also to summer institutes, smaller specialized meetings, and training and networking

opportunities. We want to obtain more input from innovators, students, and early career scholars in shaping the course and future priorities of the Society.

We seek to create a research society that leads in advancing our understanding of *today's* child—with a full appreciation of the diversity, global perspective, rapid rate of change, and innovation that this entails. Over the next year—and subsequently at the 2017 Biennial—we hope to be providing a good deal more information about our ideas and specific plans to advance these goals. We certainly will need a great deal of help and input from many of you. Please join us in this important venture. You can provide your thoughts and suggestions here.

We look forward to continuing to communicate—and to make additional requests for your input and help—as we begin to implement our new strategic plan.

Thank you,

Ron Dahl

President, SRCD

Director, Institute of Human Development & Center on the Developing Adolescent http://developingadolescent.berkeley.edu/ University of California, Berkeley