Canada - United States Inter-Parliamentary Group Canadian Section



Groupe interparlementaire Canada - États-Unis Section canadienne

Report of the Canadian Parliamentary Delegation respecting its participation at the Annual Meeting of the Southern Governors' Association (SGA)

Canada–United States Inter-Parliamentary Group

Little Rock, Arkansas, United States of America 14–17 August 2014

Report

DELEGATION MEMBERS AND STAFF

From 14–17 August 2014, Senator Dennis Dawson, Senator Percy Downe and Mr. Brad Trost, M.P. represented the Canadian Section of the Canada–United States Inter-Parliamentary Group (IPG) at the 2014 annual meeting of the Southern Governors' Association (SGA) in Little Rock, Arkansas. The delegation was accompanied by Ms. June Dewetering, the Canadian Section's Senior Advisor.

THE EVENT

Founded in 1934, the SGA is the oldest of the regional governors' associations and has a long history of promoting the common interests of the governors of the 16 U.S. southern states (see the Appendix), as well as the U.S. Virgin Islands and Puerto Rico. The SGA provides a bipartisan forum in which to help shape and implement national policy, as well as to solve regional problems, improve the quality of life of residents of the U.S. South, and secure an economically vibrant and prosperous American South.

Each year, the SGA holds an annual meeting. The 2014 annual meeting was focused on the theme of "Lab to Market: Accelerating the American South's R&D Network," and was chaired by Arkansas Governor Mike Beebe.

DELEGATION OBJECTIVES FOR THE EVENT

The Canada–United States IPG aims to find points of convergence in respective national policies, to initiate dialogue on points of divergence, to encourage the exchange of information, and to promote better understanding among legislators on shared issues of concern. In addition to regular meetings with their federal counterparts, members of the Canadian Section of the IPG attend national and regional meetings of governors.

At the event, Canadian delegates spoke to governors about a range of issues, and communicated the nature and scope of the bilateral relationship between Canada and their state, as well as between Canada and the United States.

ACTIVITIES DURING THE EVENT

During the 2014 annual meeting, the SGA held the following sessions:

- Keynote Address
- Creating Communities of Innovation
- Arkansas' Experience with the "Private Option" and Healthcare Transformation
- R&D Impacts on Healthcare
- Natural Gas Leveraged Economic Development in the South

- How Big Data Is Transforming Our World
- Entrepreneurship and Access to Capital
- Connecting Science to State Policymaking.

This report summarizes the presentations that were made at the 2014 annual meeting.

KEYNOTE ADDRESS

Honorable Bill Clinton, Former President of the United States

- Governance should occur on the basis of experience and facts, rather than ideology.
- Research and development "changes everything."
- Networks are important; for example, networks of cooperation among academia, businesses, communities, faith-based organizations, etc. "make good things happen."
- Online learning is "the answer" for some individuals who have limited time and funds.
- Broadband is important in rural areas.

CREATING COMMUNITIES OF INNOVATION

Jay Williams, U.S. Department of Commerce

- Governors play a critical leadership role, and make decisions about issues that affect the quality of life of states' residents.
- The federal government plays a role in research and development networks, innovation and entrepreneurship; federal funds should be used to leverage private investment.
- Economies exist within regions.
- In the U.S. South, there have been significant investments in the manufacturing sector for almost 20 years.

Dan Berglund, State Science & Technology Institute

- The importance of "place," including the existence of networks, should be realized.
- It is important to consider the commercialization of university research, any existing skills gap and workforce development.

Brian Darmody, University of Maryland

- States can use universities to create "communities of innovation."
- The keys to creating a "community of innovation" include the following:
 - physical location;
 - supportive public policies;
 - ➢ funding; and
 - > people.
- While states are the laboratories of democracies, universities are the laboratories of innovation.
- Universities produce knowledge capital.

Randy Woodson, North Carolina State University

- Universities can play a role in "communities of innovation."
- Universities need to take a "long view," and answer two questions: at what are you going to be the best in the world, and how does it link to the state's economy?
- Clusters are attractive to companies and researchers.
- Public policies regarding technology and commercialization are important.

Adam Klein, The American Underground

- Entrepreneurs are job creators; as well, they are a "magnet" for youth and other risk-takers.
- Entrepreneurs want to be in dynamic, "24/7" places with artistic and other cultural assets.
- Large companies are drawn to locations that have a thriving entrepreneurial community.

Jeff Amerine, University of Arkansas

- New business creation is equivalent to job creation; 85% of net new jobs are created by start-up companies.
- There is a "global race" to attract and retain the "best of the best."
- To achieve economic development, combine education, innovation, capital and entrepreneurship.

Justin Fishkin, *Local Motors*

• Challenges can be overcome when a multitude of minds are brought together.

ARKANSAS' EXPERIENCE WITH THE "PRIVATE OPTION" AND HEALTHCARE TRANSFORMATION

Joseph Thompson, Arkansas Center for Health Improvement

- With the enactment of the *Affordable Care Act*, Arkansas is experiencing "on-theground" benefits for patients and hospitals.
- Having the private sector involved in the "Medicaid space" has benefits.
- A patient-centred medical care model should be implemented.
- The inappropriate use of antibiotics should be reduced.

Tom Latkovic, *McKinsey & Company*

- Over time, it is expected that there will be increasing divergence among states in terms of the performance of their health care systems.
- There are significant opportunities for health care innovation, and most of it will happen in the private sector.
- Service providers should be rewarded for providing better health outcomes, improving patient health and solving patient problems; they should not be rewarded for ordering more tests.
- There is no "right way" to pay for health care, and identifying the proper payment method may be easier than measuring performance.

Barbara Lyons, The Henry J. Kaiser Family Foundation

- The *Affordable Care Act* allows states to develop a state-specific approach to health care, within the requirements and parameters of the Act.
- Arkansas is one of 26 U.S. states that are using Medicaid funds to expand coverage.
- Providing broad health care coverage enables states to focus on reforms to the delivery of health care.
- A team approach and the sharing of information are beneficial.
- Patients should be served in the most appropriate setting and in the most appropriate way.
- Key questions include the following:
 - > Are people getting coverage?
 - Is the coverage affordable?
 - > Are people retaining their coverage?
 - > Are hospitals better financed?

R&D IMPACTS ON HEALTHCARE

Peter MacLeish, Morehouse School of Medicine

- In 2013, the National Institutes of Health's Brain Research through Advancing Innovative Neurotechnologies – or BRAIN – Initiative was launched; it is equivalent in magnitude to landing on the moon and sequencing the human genome.
- Each brain is different; even identical twins do not have the same brain connections.
- It is possible to produce dynamic pictures of the brain that show the manner in which individual brain cells and complex neural circuits interact.
- Although it is possible to learn about humans by conducting research on animals, there are differences.
- One or more mechanisms for sharing the data resulting from the work of a number of laboratories should be developed.
- Federal investments in the genomic revolution have had significant economic impacts.

Gareth Morgan, University of Arkansas for Medical Sciences

- A focus on translational research can improve economic and health outcomes, and should receive investments; this type of research is likely to cure melanoma and reduce the side effects of chemotherapy.
- It is possible to cure cancer by understanding its biology.
- As the chemicals used in chemotherapy and the resulting side effects can leave the patient feeling worse than before the treatment, less toxic and more effective alternatives are needed.
- Personalized medicine, where treatment is matched to the patient, is on the horizon.
- High-performance computing and data storage systems are key for the future.

Husseini Manji, Janssen Research & Development, LLC

- The paradigm must shift from "diagnose and treat" to "predict and prevent."
- Biologic illnesses need biologic treatments.
- People should work collectively in order to make real differences.
- There is an impending "tsunami" of Alzheimer's disease, with its attendant personal and economic costs; it is the most common type of dementia, and a vaccine may be developed.

- With Alzheimer's disease, behavioural rather than cognitive symptoms typically lead to care being provided in a nursing home; technology should be leveraged to facilitate independent living.
- With Alzheimer's disease, abnormal molecules begin to exist 10-20 years before symptoms are manifested; there is a need to develop diagnostic and screening tools.
- It is important to predict those who are at risk of Alzheimer's disease so that appropriate and timely interventions can occur.

David Glass, Novartis Institutes for BioMedical Research

- As people age, they lose muscle mass and strength, as well as the ability to regenerate muscle; some patients lose so much muscle while they are in hospital that they need rehabilitation before being released.
- The loss of muscle mass and strength is a major contributor to frailty and to an end to independent living; at present, therapeutic possibilities are limited.
- It is important to identify "what goes wrong" in the muscle, and then to identify drugs that can be used as treatments.

NATURAL GAS LEVERAGED ECONOMIC DEVELOPMENT IN THE SOUTH

David Dismukes, Louisiana State University

- Prior to the Great Recession, many U.S. manufacturing jobs were offshored, partly because of high energy costs; after the Great Recession, economic activity increased in unexpected sectors, including energy manufacturing.
- States that have shale were relatively less harmed by the Great Recession.
- Considerations when deciding where to locate include the following:
 - the regulatory environment;
 - the legal environment;
 - access to low-cost energy; and
 - ➤ the skills of the workforce.
- Energy is an important production input.
- Natural gas resources are distributed throughout the United States, and growth in this supply has contributed to the expectation of U.S. energy independence.
- Factors that are leading to increased competitiveness for the U.S. manufacturing sector include the following:
 - Iow-cost energy;
 - rising wages in China;
 - > a relatively stable regulatory environment;

- > protection of intellectual property rights; and
- > a skilled workforce.
- More fertilizer will be needed as the developing world continues to increase its demand for food.
- For energy development, a "friendly" business environment, stable policies, and a willingness to support investments in and development of infrastructure to move energy resources to other locations are needed.

HOW BIG DATA IS TRANSFORMING OUR WORLD

Rod Ford, *nGage Labs*

- Mobile interactions are "exploding" and mobile devices have become utilitarian; you can do more things with mobile phones, leading to the generation of an increasing amount of data.
- Every 60 seconds, there are more than 98,000 tweets, 695,000 status updates and 11 million instant messages.
- Mobile devices enable targeted marketing, as viewing and/or pushing on something reveals preferences and behaviours.
- The challenge with big data is that scientists have not yet figured it out; the analytics aspect is lagging behind data collection systems, and there is a need to "ingest" and operationalize the information that is collected.
- The data being generated are increasing in volume, velocity and types.
- Cloud computing has been a "game changer."
- More "ideators," incubators and accelerators are needed.

Scott Howe, Acxiom

- Data should be harnessed to create progress for the future; big data is a tool to enable progress.
- Big data is "motivated" by the following:
 - media fragmentation;
 - data creation; and
 - Iow-cost storage and processing.
- Data are merely a tool that can be useful when they are used properly.
- The use of data leads to better decisions.
- Data are the world's greatest enabler of free speech, but there is a cost in terms of possible data breaches and other negative events.
- Data about "who we are" and "what we do" creates value.

Glendon Schuster, Centene Corporation

- Big data provides insights.
- Data can be used to improve health care and outcomes.
- As big data produces a lot of "noise," it is important to identify the useful information and insights.
- Once a pattern in data has been identified, it can be used to make predictions.

ENTREPRENEURSHIP AND ACCESS TO CAPITAL

Jim Phillips, NanoMech, Inc.

- Inside the word "innovation" is the word "no"; entrepreneurs hear the word "no" and ignore it.
- Entrepreneurism is like being a state's governor: each day, you wake up both excited and terrified.
- In order to be a country, you need to "make things," and these things should be things in which it is important to be self-sufficient.
- The nano sector has become like the "moon race," and the United States cannot be left behind.
- New companies are significant job creators.

Paul Singh, Disruption Corporation

- Start-up costs for businesses are now lower than at any other time in history; almost anyone can start a company now, and from virtually any location.
- Companies can target U.S. customers from anywhere in the world; the world is getting smaller, and companies can start in any country.
- Although technology companies will never be major job creators, they have a disproportionately positive impact on the economy.

Tom Rogers, Oak Ridge National Laboratory

- Governments are investing billions of dollars in basic research; it is important to determine how this basic research can be "converted" into companies and jobs.
- Most researchers who work at national laboratories or universities want to do research; often, they lack the skills and/or interest to focus on the commercialization of their research.

Christopher Masingill, Delta Regional Authority

- It is important to create a "pipeline" of educated entrepreneurs.
- Regulatory environments should be optimized.
- Rural opportunities should be promoted and advanced.

- Access to affordable capital is important.
- Businesses that are owned by women and/or minorities face barriers in certain areas.

CONNECTING SCIENCE TO STATE POLICYMAKING

Governor Mike Beebe, Governor of Arkansas

- In order to get the public to care about science, entertain them; for example, consider a science channel.
- Governors need to understand the role of science in economic development and in improving the quality of life of states' residents.

Gregory Symmes, National Research Council

- Pressing issues include the following:
 - the impacts of hydraulic fracturing;
 - invasive species;
 - drought; and
 - genetically engineered crops.
- Science informs the development of policy.
- In order to get the public to care about science, consider user-friendly reports, specialized documents that are targeted to particular groups, and a focus on issues that have a public dimension.
- The future is likely to be characterized by personalized medicine.

Dan Berglund, State Science & Technology Institute

- The U.S. states that are challenged economically have not recognized the importance of research and development, innovation, science and technology.
- Science is increasingly integrated into the economy and our lives; now, everything that is done has a connection to science.
- There are nine areas of activity for states seeking to use science for economic benefit; they are:
 - > expanding public and private research capacity;
 - commercializing research;
 - ensuring the existence of capital to help support growth;
 - having entrepreneurs lead organizations;
 - ensuring the existence of a technically skilled workforce;
 - > ensuring the right quantity and quality of infrastructure;

- supporting education;
- > ensuring the existence of a favourable tax policy; and
- supporting entrepreneurs.
- In order to get the public to care about science, it is important to help people understand the scientific process and to find ways in which to "bridge" the scientific community and the public.
- Incentives are important, and it does not take much money to incent people to act.
- The future is likely to be characterized by better battery storage, and a younger generation that is more open to and accepting of science.

John Ahlen, Arkansas Science and Technology Authority

- Once science-related advice has been given to legislators, policy makers should then become the leaders who make the decisions.
- Competition is global, and the United States' "secret weapon" is its children.
- The future is likely to be characterized by "smaller, more sophisticated and farther away."

Tim Atkinson, Arkansas Science and Technology Authority

- Informal science education is very important; ask questions, rather than tell people things.
- Today's manufacturing sector is not "your father's" manufacturing sector.
- There is a need to focus on children and the adaptability of the existing workforce.
- The future is likely to be characterized by the convergence of biology and technology, such as brain mapping.

Michael Cassidy, Georgia Research Alliance

- Mechanisms are needed to bring businesses, governments, academia and other stakeholders together.
- Companies want to know that there are "smart people" in the state.
- There is a need to identify aligned interests, and then to ensure coordination.
- It is important to keep the topic of research and development "alive."
- The future is likely to be characterized by biomedical research.

John Hardin, North Carolina Board of Science and Technology

- One way in which to increase interest in science is to identify "success stories."
- The long term should be emphasized to the same extent as the short term.
- People should be willing to take "smart" risks.
- The future is likely to be characterized by more inclusive economic and science "communities."

Leonard Peters, Kentucky Energy and Environment Cabinet

- Efforts should be directed to ensuring that the scientific process is understood.
- Interactions among a large number of people can lead to greater developments.
- The future is likely to be characterized by big data, the emergence of China as a science leader, and vehicles that are almost exclusively electric or hybrid.

Tom Rogers, Oak Ridge National Laboratory

- States should identify their comparative advantage, identify the partners needed to be more effective, and "skate to where the puck will be."
- The future is likely to be characterized by "smaller, more precise and faster."

Grant Tennille, Arkansas Economic Development Commission

- "Pipelines" from research in universities to commercialization must be built.
- There is a need to identify what other states are doing and then to build cooperative partnerships.
- Economic developers understand incentivized behaviours; offer "carrots," and collaboration will happen.
- The future is likely to be characterized by "bigger, smaller and convergence."

Respectfully submitted,

Hon. Janis G. Johnson, Senator, Co-Chair Canada–United States Inter-Parliamentary Group Gord Brown, M.P. Co-Chair Canada–United States Inter-Parliamentary Group

Appendix

STATES IN THE SOUTHERN GOVERNORS' ASSOCIATION

Alabama	Missouri
Arkansas	North Carolina
Florida	Oklahoma
Georgia	South Carolina
Kentucky	Tennessee
Louisiana	Texas
Maryland	Virginia
Mississippi	West Virginia

Travel Costs

ASSOCIATION	Canada–United States Inter-Parliamentary Group	
ACTIVITY	Annual Meeting of the Southern Governors' Association (SGA)	
DESTINATION	Little Rock, Arkansas, United States of America	
DATES	14–17 August 2014	
DELEGATION		
SENATE	Hon. Dennis Dawson, Senator Hon. Percy Downe, Senator	
HOUSE OF COMMONS	Mr. Brad Trost, M.P.	
STAFF	Ms. June Dewetering, Senior Advisor	
TRANSPORTATION	\$2,879.90	
ACCOMMODATION	\$ 920.13	
HOSPITALITY	\$ 0.00	
PER DIEMS	\$ 783.05	
OFFICIAL GIFTS	\$ 0.00	
MISCELLANEOUS / REGISTRATION FEES	\$1,879.32	
TOTAL	\$6,462.40	