If networks are the answer, what is the question?
Rethinking networks.

Networks Leadership Symposium 2013

“…organizations need to go beyond their isolated boundaries and hierarchical structures and move towards models that facilitate broader engagement with multiple stakeholders across disciplines, industries, and sectors.”
Hoberecht, Joseph, Spencer, and Southern, 2011

November 12 and 13, 2013
Royal Roads University
Victoria, British Columbia
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We dedicate this report in memory of our friend and colleague, Keith Provan, who passed away on February 16, 2014. To so many of us he was a mentor and leader – bringing evidence and experience to our understanding of networks. Keith had very much wanted to be with us at this Networks Leadership Symposium, but his struggle with a brain tumour prevented him from doing so at the last minute. A number of our past symposiums were enriched by his contributions for which we are very grateful. While we will do our best to take Keith’s wisdom with us into future events, his insights, dry wit and friendship will be greatly missed.
Introduction

This report provides highlights from the fifth Networks Leadership Symposium held in Canada since July 2007. As with past events, this Symposium was organized by a loosely affiliated group of people, a group bound by a shared interest in advancing the thinking and knowledge about networks through the intersection of network research and practice and through the opportunity for lively conversations and debates.

The focus for this fifth symposium was on “rethinking networks”. Our planning committee landed on this theme as we began to talk about the frequency with which inter-organizational networks are popping up in the public service sector. We wondered if networks are becoming the default option for public sector organizations when faced with difficult, let alone intractable, problems – and if so, is this something about which to be concerned. Are networks simply in vogue or are they generally the right approach? Under what circumstances are networks the optimal organizational form? And are we using the term network in the public sector with enough specificity?

Given the questions above, it seemed timely, then, to rethink and question networks on a number of levels. What do theory and practice tell us about the value of networks? What should we be thinking about when considering a network? What do we know about creating and managing networks, whether networks are working, and whether and/or when to sustain or wind them down? These are the kinds of questions we addressed at the symposium (see the Appendices for the program).

This Networks Leadership Symposium, held in Victoria in November 2013, attracted more than 90 participants involved in managing and leading a variety of different kinds of networks, as well as researchers. These two days were filled with thought provoking presentations based on both network research and practice, and great discussion between and among the panellists and participants. We hope that this report, in which we endeavoured to capture highlights of these rich discussions, is helpful to you in your ongoing work in leading, working in, evaluating and/or researching networks. Thank you for being part of this ongoing effort to advance our collective knowledge of networks.

Ron Lindstrom, Symposium Co-Chair
Janice Popp, Symposium Co-Chair
Highlights

The questions articulated in the introduction guided the development of the symposium program. Two days of panel sessions were divided into four general topics for discussion.

1. Should we be rethinking networks?
2. What do we know about creating and managing networks?
3. How do we know if networks are working?
4. How do we sustain networks over time or wind them down?

Each topic area was organized similarly in order to maximize interaction among the panellists, between the panellists and the participants, and among the participants. More specifically, following each panel presentation there were opportunities for the participants to make comments and ask questions of the panellists. This was followed by a brief panel discussion, which involved both the panellists and participants. Participants then had the opportunity to spend time at their tables having a more focused conversation. As part of this conversation, they entertained the following questions. What information really caught your attention? What was the biggest surprise in what you heard? How does this information challenge or affirm current network practices and research? What key research areas or essential questions require further exploration? Then, participants were invited to engage the panellists in an interactive dialogue by bringing forward ideas and questions that had emerged from these table conversations.

This report is structured into five sections corresponding with the four topics above and the final ‘bear pit’ session. Each section attempts to identify key themes that emerged in the panel presentations and discussion, and through the interactive discussion with the participants. More emphasis is put on the discussion, rather than content details, as much of the content is available in the material referenced in the list of resources included at the end of this report. In the bear pit session section, which was titled – “so what and where to next?” – many of the highlights from the other sections are reiterated and built upon.

1. Should we be rethinking networks?

This panel presentation and discussion explored what has changed in the field; theory and practice of the ‘network way of working’; the value proposition that networks offer; and why and how networks are key to the future of organizational change.

Moderator: Ann Casebeer
Panelists: Michael McGuire, Brint Milward, Siv Vangen

Michael McGuire: “Rethinking the way we think about networks: The Red Wine Theory”

Michael McGuire kicked off this panel by wondering whether, given the questions we get about why we are so excited about networks, we should be rethinking our expectations of networks. He provocatively proposed a red wine theory of networks – that is, perhaps like red wine networks are good for you in moderation. He defined networks basically as a number of nodes with connections, and noted that organizations generally develop
networks to achieve something that they cannot do on their own. He recognized that a number of different terms are used to describe working together collaboratively (e.g., task forces, partnerships, collaboration).

He went on to argue that some network proclamations may overstate the benefits of networks; proclamations such as, it’s a brave new world and older forms of organizations like hierarchies are now inapplicable and the boundaries that served us so well can no longer solve either our political or government needs. McGuire went on to describe the benefits of red wine including: it is good in moderation; there is a key beneficial ingredient (i.e., Resveratrol); and wine ages or evolves (in both good and bad ways). He described the benefits of moderation, as well as some of the key ingredients of networks – or what is it that makes your network optimal.

McGuire wrapped up his presentation by suggesting that moderating our enthusiasm for networks may be good, so to both temper expectations by practitioners of what networks can achieve and to provide more critical examinations of networks by scholars. Both practitioners and scholars should work at isolating the key ingredient that stimulates beneficial network activity, suggesting that this key ingredient may differ across networks.

_Brint Milward: “Neither Networks nor Organizations: A Guide to Organizational Structure for the Perplexed”_

Brint Milward began his presentation by commenting on how he was finding it harder and harder to give affirming talks about how wonderful networks are. Reflecting on the network value proposition (i.e., bringing organizations together to address a policy problem that they cannot address on their own), it is important to recognize that the problems that bring organizations together in networks tend to be ‘big hairy problems’ that are multi-faceted. Thus, expecting even a well-functioning inter-organizational network to be able to address these problems (particularly quickly) may be unrealistic. Based on his more recent research studying dark networks, Milward proposes that when we think from the perspective of a public management leader, “organizations and networks are really arrows in your quiver.” That is, leaders need to be strategic and think broadly about what kind of organizing makes sense for the problem or issue at hand. As the nature of the problems change, the kinds of organizational activity that you would use to address that problem would change as well.

Milward noted that one of the weaknesses of network research is that most research presents just a snapshot in time. To help address this gap, one can look historically at how well-known networks have evolved. For example, the African National Congress (ANC) led by Nelson Mandela was a dark network initially, and it evolved from being a network to more of an organizational form. There are reasons for this evolution, as networks are weaker forms of social action. With the Calgary floods, Milward questioned, “Did you send in a network? NO – we send in more organized in groups (e.g., army, Red Cross).” The advantages of networks are that they are flexible and adaptive, but there is a range of network structures as well, with some being more integrated and less
differentiated (i.e., more like an organization), and others less integrated and more differentiated. Research to date has shown that more successful networks tend to be more highly organized.

Given all this, let us think about the process of organizing as something that leaders do, but not pre-suppose what organizational forms works best. Governance is simply a set of rules and customs, and at some point in your organizations you may switch from a network to a single organization as the nature of the problems to be addressed evolves.

**Siv Vangen: “Understanding collaborations as a paradoxical phenomena”**

Siv Vangen began her presentation by clarifying language, noting that she tends to use the term collaboration (i.e., rather than networks) to discuss organizations working together to address a common issue/problem. Her focus has been on building practice-oriented theory for people involved in governing, leading and working in networks. Through this work she has become increasingly interested in the role of paradox in understanding, investigating and theorizing about the governance, leadership and management of inter-organizational collaborations.

Although there is a lot of talk about the “collaborative advantage” (i.e., something is achieved that could not have been achieved without the collaboration), something that both McGuire and Milward highlighted as well, the complaints about making collaborations succeed in practice are endemic. Collaborative advantage requires the creation of working relationships that simultaneously protect and integrate the resources partners bring – not an easy thing to do. Collaborative inertia, then, is common. That is, the rate of output is slow and even successful outcomes involve pain and hard grind.

Vangen has found that grappling with paradoxical tensions is inevitable for those who those lead, govern, and manage networks. Researchers are now overtly looking at paradox and tensions in networks. Paradoxical tensions may help individuals understand the nature of what needs to be managed in order to optimize networks. Accepting the pain is important: “it is a relief and reassurance” that others struggle with developing good partnerships...”I’m not alone.” Although paradoxes can emphasize feelings of being stuck, they can also help people recognize tensions and complexity. If we are to help network managers benefit from this recognition of paradoxes we need to go beyond simply labeling them to the kind of in-depth exploration that enhances understanding.

In the spirit of collaboration, network managers want to embrace, empower, involve, and mobilize; but they also may need to engage in a little collaborative thuggery (e.g., manipulating the agenda, playing the politics) to achieve the collaborative advantage. Some people are surprised to see the “thuggery” end of the spectrum, but research is showing that you usually need engagement in both these kinds of activities.
Vangen described a couple of paradoxes in more depth. For example, in the collaboration - culture paradox, both similarity and diversity in culture influence the success of collaboration. There is a similarity and diversity tension, meaning that what is really needed is a balance of both. Another example was in the accommodation - management tension, where managers are faced with having to both embrace diversity and exercise control. Either end of the extreme is likely not implementable in practice, meaning that managerial judgment requires tradeoffs and compromises.

Vangen concluded that this work is not easy. Paradoxes and tensions highlight intrinsic challenges of being involved in networks (i.e., managing, leading, governing, working in). Increased understanding of paradoxes may lead to consideration of more realistic rather than idealistic expectations of what can be achieved through inter-organization collaborations.

**Interactive dialogue**

In the dialogue there was some question about whether we should, in rethinking networks, be focusing more on the ultimate beneficiaries of networks (e.g., patients, homeless people). Initially, there was agreement that perhaps beneficiaries do not really care about the organizing structure as long as services are delivered in a way that meets their need. If we start with the premise of optimizing how we work together to achieve collaborative advantage, then if that advantage is achieved, the recipients of the services provided through the collaboration should see benefits. On the other hand, others believe it will be critical to look at networks through the eyes of beneficiaries. It was suggested that networks may provide opportunities for beneficiaries to connect in with a softer-edged, more flexible boundary rather than a firmer organizational boundary.

Should there be an “X-year” rule for all networks? That is, as the balance starts to tend toward stability and unity vs. flexibility and diversity perhaps it is time to wind the network down because it is becoming more institutionalized. Is it possible to be a mature, dynamic network instead of an institution? It was suggested that not all networks that mature evolve into bureaucracy. As people become part of different collaborations, they learn these collaborative skills, so begin to work together differently. Networks can also bring in others, with the goal of keeping the network diverse and flexible, as they develop these skills in collaboration.

Questions and discussion took place on a variety of topics occurred, including:

- How do we protect network values as the structure evolves from network to organization?
- Is inter-sectoral collaboration the best strategy to pursue if the desire is to get health integrated into all government policies?
- Is increasing the diversity in networks that seem to have stalled likely to help them achieve their collaborative advantage?
- How do we nurture and train future leaders in a variety of fields to work in networks?
- Where do resources fit into the ability of networks to achieve their collaborative advantage?
- You do need a big vision to attract people and organizations to a network, but how do you marry that with goals that are potentially achievable?

An important part of network management is to be able to take those big visions and break them down into smaller achievable pieces. It is the ability to execute toward attainment of vision that keeps people involved and
excited. There is also a need to think about whose vision and goals are being addressed, meaning that managing goals is a hugely important issue in networks. The espoused goals to obtain funding are often not the real goals of the network members. If vision and goals are not determined by the network it will be challenging to get buy-in. Of equal importance is being aware of the potentially conflicting goals of the member organizations and the network.

The notion of relationship budgeting was introduced. Relationships take time. If you find you are spending a lot of time on relationships that are either unsuccessful or unrewarding, then you need to stop investing in these. Everyone at the table is representing their own organization and the network, and if there are some people who are always putting their organization’s goals ahead of the network goals – then you may need to jettison them. Networks come together for different reasons. Some people may be at the table because they actually want to keep you from creating a successful network and protect privileged positions. Thus another potentially key question for networks is, “are the people you need to get the collaboration going there, and are the people who want to prevent you from collaborating not there?”

Finally, networks are not in and of themselves better than other forms of organizing. Rather, it depends on what you want to do or what you are trying to achieve. It is important to be strategic and think about what you need to manage in order to be able to achieve what you want. With respect to the unity-diversity paradox, again it is a question of balance. Every time you bring in a new partner you want introduce new perspectives and/or resources, but you also have to renegotiate shared goals and vision. Once again it is critical to be clear about the advantage you are trying to create. Also, some of this is about stakeholder analysis and stakeholder management trying to temper expectations about the networks, rather than about collaborative management.

2. What do we know about creating and managing networks?

This panel presentation and discussion addressed collaborative governance; leadership, management and orchestration; how neuroscience can help us understand leadership of and in networks; and lessons from ‘dark networks’.

Moderator: Ronald Lindstrom
Panelists: Brint Milward, Raymond Paquin, Joan King

_Brint Milward (based on work done collaboratively with Keith Provan): Collaborative Network Governance_

In their work together on the concept of network governance over the years, Brint Milward indicated that he and Keith Provan have experienced considerable “push back from people who are resistant to the idea of governing networks”. Some people have the view that you cannot govern networks, that in trying to do so you will destroy everything that is good about them. Through their research, however, they have learned that appropriate governance is one contributing factor to network effectiveness.

Networks consist of nodes and the connections between them; “the webs of relationships connecting individuals and/or organizations.” Network science, then, is the science of the structure of relationships. How do certain groups come together and stay together and why? It is more than who is connecting to whom and how.
We know from research that there are four general patterns in effective networks:

1. Birds of a feather flock together – Clusters tend to form around common attributes. Proximity explains a lot (i.e., you are more likely to have a tie with someone who has an office across the hall than someone in another building).
2. Opposites attract – Diversity maximizes innovation in the network, meaning that you need to find a balance between “birds of a feather” and diversity. This is a major management task.
3. Redundancy is a virtue in a network, but only up to a point – An overly connected network has incredibly high transaction costs (e.g. spend all your time in meetings and nothing gets done). If you have conflict in one corner of an overly connected network, it spans the network. That is why loose coupling in networks is important, as you need to be able to get things done.
4. Hubs, brokers, and boundary spanners are critical to network health – These are Malcolm Gladwell’s connectors in his book “The Tipping Point”. This illustrates the strength of weak ties.

Given that we are talking about the science of relationships, Milward argues that in any network you create there should be someone that is able to do some social network analysis (SNA). Through SNA you develop a better understanding of the relationships between and among network members, such as: Who is connected to whom? Through what types of activities are members connected? What is the extent of their interactions? What is the quality of their relationships?

There is a considerable body of research and theory supporting the logic of inter-organization collaboration, and a variety of different types of inter-organizational networks (e.g., service implementation, information diffusion, community capacity building and problem-solving). A significant finding of Milward and Provan’s work is that both management in and management of networks is important. To date we know little about how to manage an organization in the context of a network, and how to balance the interests of the network with the interests of the organization. Given this challenge, and other tensions described in the “rethinking networks” panel discussion, it can be more efficient to use a single organization unless you are trying to solve a problem that cannot be solved within a single organization’s boundary.

Research on inter-organizational networks suggests that some form of governance is necessary to sustain the network.¹ The three main forms of network governance seen to date are briefly described below in Table 1.

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¹ Refer to these resources that are listed in the reference list at the end of this document for a more in-depth discussion of network governance.
### Table 1: Forms of network governance

<table>
<thead>
<tr>
<th>Governance form</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-governed [most common]</strong></td>
<td>Operated on basis of consensus; people are there because they want to be there; passion++. This is often the starting point for a new network. Consensus is very difficult to achieve. Most of power can go to recalcitrant members of the network.</td>
</tr>
<tr>
<td><strong>Lead agency</strong></td>
<td>Often see a self-governed network evolve to this state. There is often one agency in the community that is more responsible for this problem than others, and they often have more resources. Key challenge is that the lead agency can focus more on their organizational goals than the network goals; making it critically important that all successes are shared by the network.</td>
</tr>
<tr>
<td><strong>Network Administrative Organization (NAO)</strong></td>
<td>Sometimes it is determined that it is difficult or impossible to have a lead agency due to power imbalance issues and a decision is to make to develop a network administration organization. This generally involves having some form of a Governance Board and paid staff, including a CEO. A challenge here can be preventing the network from becoming more like a hierarchy.</td>
</tr>
</tbody>
</table>

There are often hybrid network governance forms as well, and an ongoing research and evaluation focus is to identify these other governance models. It was suggested that having something like a network facilitator who could provide technical expertise, lend a sympathetic ear to and help in addressing emerging issues, might be a helpful. Network facilitators could be imbedded in both the lead agency model and the NAO model.

Milward moved on to talk about network management, describing the importance of bounding the network(s), managing both internal and external legitimacy, and developing a network that has stability at its core but maintains flexibility at its periphery. Through ongoing network research and practice, we are beginning to create a narrative about this network way of working, a narrative characterized by: a passion for sharing the credit; collective entrepreneurship; a comfort with loyalty to both your organization and the network; and soft governance (e.g., a team of network facilitators; terms of reference, incentives like paying for conference attendance – i.e., things that make people feel really good but don’t cost a lot).

He also provided some tips on effective network management, as follows:
- Manage the agenda (take notes and do the first draft);
- Accommodate and adjust while maintaining purpose;
- Be creative, and shameless in the appropriation of knowledge;
- Be patient and use interpersonal skills;
- Recruit constantly and selectively (look for people with key skills you don’t have);
- Emphasize incentives (often have carrots but not sticks);
- Relationships are key but you do need to pay attention to spending your relationship budget wisely.

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2 Refer to the book “Blink” by Malcolm Gladwell.
Milward concluded his presentation by comparing good network management to how a border collie herds sheep. All good border collies maintain borders (e.g., separate sheep from the wolves); they do some nudging and get the herd to stay together, and occasionally nip when they need to get the herd moving in a particular direction.

“Summing up, Molly’s [the Border Collie] goal is to keep all of us together and to keep the wolves away from the herd.”

Raymond Paquin: Assembling networks
Raymond Paquin brought to this panel discussion his experience with creating and managing networks, drawing from his research looking at industrial symbiosis networks. He set the context by explaining a little about industrial symbiosis, which is about how we manage our trash at an industrial level or how to transform waste into something useful (e.g., spent brewer’s yeast is used to produce Marmite). “It (i.e., industrial symbiosis) is the essence of environmental, collaborative practice in firms”. Both business and policy-makers view this as a tool for low-carbon, environmentally responsible economic development.

More specifically, his research has involved studying the UK National Industrial Symbiosis (IS) Program. This program, started in 2005, develops regional IS networks and is still the only national-level IS program in the world. These UK-based IS networks have been shown to create value both economically and environmentally; for each one million pounds invested over 60 million pounds is created in economic activity, 388K tons of landfill is diverted and 342K tons of carbon emissions are reduced. These networks create value, but also create access to resources outside of a particular organization’s boundaries. Paquin noted that networks can arise serendipitously or be intentionally developed; his interest is in the later. Through the UK program IS networks are intentionally assembled to create both individual organization level (e.g., increased profit) and network level (e.g., diverted carbon) value.

How do we go about assembling networks intentionally? It is important to have a network orchestrator whose role is to act as a broker to plan and coordinate the activities of the network as a whole. Paquin stated that this was more than a brokerage role, and involved recruiting network members and paying attention to the creation of both individual organization and network level value. Key orchestration tasks include developing norms of action and legitimizing network goals and activities. Network orchestration in the IS networks has led to
considerable network growth. In 2003 there was no meaningful IS activity in the UK; in 2005 there were 111 firms involved doing 249 projects; and by 2009 this had grown to 264 firms and 299 projects.

Paquin explained that the nature of the growth of these intentionally assembled networks changes over time, and described three phases of growth, briefly described in Table 2 below.

**Table 2: Three phases of growth in intentionally assembled networks**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Phase 1: early growth** | - You need to address: motivation, individual value and network value  
- Network value is of particular importance for this phase, as it is this aggregate value of impactful projects that support the creation of the Network  
- The focus is on meeting people and learning what needs to be done  
- The dilemma here is balancing recruitment and project development. Organizations come to the table because of their interest in the idea, but you can only keep them at the table by creating value (i.e., developing projects) |
| **Phase 2: value creation** | - You need to address the balance between recruitment and project development, and (re)engaging firms in the network through successful projects  
- The focus starts to shift from bringing people together, to quick wins and deepening relationships with key firms  
- The dilemma here is balancing the development of new projects with making existing projects successful (i.e., need to move beyond simply bringing people together). You need continued commitment to both relationship development and bringing projects to fruition. |
| **Phase 3: building infrastructure** | - You need to address balancing the need for big projects (i.e., to meet short term, network-level goals) vs. planning for long term future needs  
- As the orchestrator becomes more skilled at developing projects in the Network, the focus could be on replicating high value projects as one strategy for seeing benefits quickly  
- Building network capacity around key concerns [more of a long term perspective]. What are the important projects that are NOT the low-hanging fruit?  
- The dilemma here is balancing current project development (or short term performance) vs. future project potential  
- Think about what in the life span of a network is important |

In conclusion, managing a network means delivering both individual and network level values, and this involves the ongoing management of the dilemmas that emerge through a network’s growth. Managing one dilemma seems to set you up for the next, which is another type of paradox. Orchestration action needs to co-evolve with network development. Over time orchestration takes an increasingly focused, more goal-
directed approach, moving from an introducing and facilitating role into a more active management role. There
is a cautionary tale of an over-engineered network, in that more focus on goal-directed projects may lead to less
innovation.

**Joan King: Neural networks**

Joan King brought a neuroscience perspective to the discussion of the creation and management of networks,
talking about neural networks and what can be learned from them to inform our thinking about inter-
organizational networks. In neural networks, neurons are the ‘actors’. A single neuron is unable to do anything
by itself; if there is no network there is no action. A single neuron must communicate with another neuron to
generate action. Neurons have to migrate to find connections, or they will die. Without networks neurons
cannot survive.

This leads us to the first question that King posed for us to consider: “**what conditions are required for effective
communication between neurons that could be relevant to effective communication between people?**” These
conditions include that the neurons must be in close proximity and must communicate frequently (i.e., if you
don’t use it you lose it). In complex interactions it is difficult to tell where one neuron ends and the other begins,
perhaps the ultimate collaborative working relationship! King provided some examples of different kinds of
neural networks. She explained that the simplest of neuron network is a reflex arc, using the example of the
reflex that occurs when putting your hand on a hot stove.

An example of a specific function network, where neurons have become highly specialized to perform a specific
function, is the visual system. The world that you see is unique in that nobody else sees the same 10,000 bits out
of the 6 million bits of information that you take in. This is a great illustration of synthesis, as no one can process
6 million bits of information. This leads us to the second question that King posed for consideration: “**How might
people in a network interact if they knew that everyone was accessing only a small fraction [and different
pieces] of external info?**” What influences how we see the 10% of the real world that we even have the
opportunity to see?³

Another reality of neural networks is that, while some neurons serve specific functions (e.g., sight, taste,
perception of pain, movement), the majority do not. The third question posed for us to consider, drawing from
our understanding of neural networks, is: “**What is the key to an organization embracing and leveraging the
broad range of behavioural responses inherent in complex organizations?**” An even larger neural network has
been identified more recently called the default mode network. It consists of several layers; individual cell to
individual cell, cells to individual function. This default mode network is going on in the background all the time
and the interactions are not related to any external event.⁴

In conclusion, it took cells a million years to figure out how to not try to do things alone. They have produced a
complex multi-layered system that includes circuits devoted to specific function, specialized groups of neurons,

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³ Refer to YouTube clip on perceptual blindness for more information
http://www.youtube.com/watch?v=vJG698U2Mvo

and a default mode going on in the background all the time. How do individual cells interact within this layered organization of circuits devoted to specific function, the flexibility brought by interneurons within these systems (the intermediate layer), and the default mode network across multiple systems in the brain to optimize functionality? Can increasing our knowledge about these naturally occurring networks perhaps also help to inform the development of effective inter-organizational networks?

**Brint Milward: Dark Networks**

Brint Milward, in his second presentation for this panel discussion, talked about his research on dark networks, focusing on those aspects likely to be most applicable to the networks represented in the room. He raised the question of what happens when you try to break a network (i.e., how do they respond to shocks – unforeseen, huge events)? Historically, dark networks have been shown to be remarkably resilient in the face of shocks and attacks, and very difficult to defeat. This realization led to the following research question: "How do dark networks over time sustain shocks to, and attacks on, their existence?"

A key dilemma in dark networks is whether to act or to exist. To act you must come together in some way and expose yourself to your enemy. This demonstrates your capacity for striking your foe. However, your existence is contingent on remaining hidden from your foe, demonstrating your persistence. The dilemma is that the more you act, the more you threaten your existence. The less you act the more irrelevant you become in the eyes of those who potentially share your grievance.

Research on dark networks has identified three patterns of network resilience: non-resilient; rebounding; and robust. In a non-resilient network the network ceases to exist in any form (e.g., Liberian tigers of the Tamil Eelam in Sri Lanka). In a rebounding network, the network seems to have disappeared, but it continues to exist in some form and is able to re-generate; over time it recovers (e.g., Armed wing of the African National Conference). How did they all end up in jail? It demonstrates the terrorist dilemma: they decided they needed to come together (act) and, as a result, were all arrested together. It took from 1963 to 1976 before one could really see them to beginning to rebound. Without the time dimension, you would think they were non-resilient. Finally, in a robust network shock generally does not affect the network at all.

Factors that affect resilience include: internal and external legitimacy; resources; ability to maintain and replace nodes and linkages (networked capacity); and appropriate balancing of integration and differentiation (networked capability). All of these factors have been shown to affect resilience in both dark and bright networks. Milward described a number of policy implications from the research on dark networks, including the following:

- The capability to maintain, replace or substitute nodes and linkages is key to understanding the resilience of dark networks;
- Dark networks have to balance differentiation and integration very skillfully;
- Resources are important (including physical space);
- For grievance driven networks, legitimacy constitutes the stakes of the game;
- The key to resilience is how rapidly a dark network can adapt to changes in its networked capability after a shock has occurred;
- To successfully combat dark networks, it is helpful to analyze them in a broader organizational, societal and political context; and,
- Ultimately, the key is to get to dark networks quickly. If you can delay their ability to adapt, you will delay their development.

**Interactive dialogue**

The dialogue featured excellent questions and discussion. The audience felt that the linking of these three panellists provided a wealth of opportunity to help us increase our understanding of networks and what they do. Considering King’s presentation on neural networks and possible similarities between neural and inter-organizational networks, there was a question about whether a toxic stressor early in network development can affect how the network responds to stressors later on in its development. Are they less resilient? Also, are there similar milestone developmental phases that are particularly critical in network development?

There was discussion about redundancy in networks, and whether this was a good or a bad thing. Throughout the nervous system there is lots of redundancy (e.g., in “knock out” experiments in mice – remove a gene to see what the influence is and another gene takes over the function; or if you create a lesion in the brain, another part of the brain takes over that function). Redundancy is part of the key to resiliency. In a network some redundancy is a good thing (e.g., a node is killed, and another can take over the function). But too much redundancy is sometimes not a good thing. Regarding the relationship between redundancy and resiliency, there could be a role for planned processes for redundancy (e.g., network leader got ill, but another person was being mentored and was able to step up).

Reflecting on the ‘dark energy’ in our brain, there was some discussion that we pick up many bits and pieces of information that do not come through consciously. Do some of these come through in bits when we are asleep? Do networks then also need time to reflect/sleep (i.e., don’t just keep doing things)? King indicated that the neuron has to be quiet two to three times the amount it has been active in order to re-calibrate so that it can function.

One participant commented that some networks are designed to innovate; but then what happens is that the innovation replaces something else that may also be of value. How do you help networks cope with some of the side effects of innovation? External and internal legitimacy are key here. You need to manage legitimacy internally, so that creation is seen as greater than destruction. This requires considering what is of value externally, which may be different from what is valued internally, and also realizing that value is socially created.

We know very little about what happens when we destroy networks. Someone commented that it would be good to understand how the skills people gain through involvement in networks are then used in other ways of working. Creative destruction can be a good thing.

Following up on Paquin’s presentation about the economic and environmental value created in the IS networks, there was a question raised about whether societal value is slower to develop and also likely more difficult to quantify. This is an important area for discussion given the talk in business circles about the triple bottom line.
A question arose about the term “network facilitator” used by Milward in his presentation. Rarely is it anybody’s sole job to tend to the network; sometimes this can be done through a network administration organization. Milward saw one place where there were network facilitators whose sole function was to facilitate the development and success of the network. If you look at the distinction between efficiency and effectiveness, we might be well advised to create these facilitator positions within the network.

We have heard about the network way of working, but in thinking about dilemmas and managing paradoxes, would not bureaucracies and firms be better managed if they also adopted different ways of leading as well? Is thinking about leadership differently unique to networks? One of the panellists responded that they were perfectly willing to think they might work beyond the boundaries of a network. It is a fairly interchangeable set of skills, but one needs to be very aware of context. “These are arrows in your quiver that you can use in many different kinds of organizational structures.” Another of the panellists commented that one of the puzzles that struck him is that the position in networks is much less relevant than the action. We have been hobbled by our methodological limitations in looking at change over time. It is the actions that the actor undertakes that are much more important than position; and indeed it is the actions that actors take that determine their positions. Is there anything unique about network practice? The suggestion was made that perhaps there is an overlap of 60-70% with practice in other organizational forms, but the 30% that is different is critical to try and understand.

A closing comment from King was that she hoped that by raising the idea that the brain may be a model for human networks, it might offer a different perspective for asking questions and thinking about networks. Just as the level of complexity in the brain is huge, we do not really yet understand the level of complexity of human networks.

3. How do we know if networks are working?

This panel presentation and discussion focused on the importance of network evaluation, and included an overview and online demonstration of the ‘Program to Analyze, Record, and Track Networks to Enhance Relationships (PARTNER)’ software tool for network data collection, analysis and mapping.

Moderator: Janice Popp
Panelists: Janice Popp; Jessica Retrum

Janice Popp: Toward a Model of Network Evaluation

Drawing on the work of a number of researchers, including Keith Provan for whom she was standing in; a recently completed literature review; and on her own network evaluation experience Janice Popp tackled the important question of “how do we know if networks are working” by presenting an overview of the field of network evaluation and how it is evolving. She started with going back to the initial value proposition, describing inter-organizational networks as a structure for addressing complex issues. This value proposition in and of itself means that the evaluation of networks can be challenging. The very characteristics of networks, for example, make them difficult to evaluate. Network nebulosity, varying levels of connectedness, role confusion, divergence in defining success criteria, and identifying measureable outcomes all contribute to the challenge of evaluating networks. There are no specific outcomes unique to networks; that is, because every network will have different purposes and goals, what you evaluate will look different across networks. Practice has shown that it can be difficult to attribute positive outcomes back to a network. More specifically, how do you share attribution
between the network and the member organizations? This becomes particularly difficult when funders and supporters are expecting to see outcomes at the individual client level.

Given these challenges, if you are interested in evaluating your network, where do you begin? What does network research tell us about network evaluation? There are different levels of network operation and impact; therefore also different levels of evaluation. The different levels of impact most commonly defined in the research done to date are: community; network; organizational; and, individual. At each of these levels there are different kinds of outcomes.

At the organizational level, for example, do organizations achieve: some improved status in the community as a result of participating in a network; an increased efficiency in their service costs; increased client satisfaction with their services; smoother referrals between organizations; and/or the development of a culture of collaboration in the organization? At the individual level, for example, is there improved capacity to do the work (i.e., whatever the work the network organizations are involved in); improved staff satisfaction with their work; improved services provided to clients; and/or ultimately improved outcomes for clients?

The ultimate desirable outcomes are often found at the community level; where you should see the collaborative advantage. That is: have you actually seen movement on solving the problem that the network came together to address? A key factor to keep in mind is that the network will only be a contributing factor to achieving these community-level outcomes; there is no direct cause and effect relationship. An effective network, however, should be seen as a strong contributing factor to achieving these outcomes.

Ultimately, network effectiveness is about: “the attainment of positive network level outcomes that could not normally be achieved by individual organizational participants acting independently.” Provan & Kenis (2008)

This makes it important to pay attention to developing effective networks. There are characteristics of effective networks described in the literature (Provan & Milward, 2001). Some questions to ask to assess network effectiveness include: Does your network have more strong than weak ties? Do you have the right form of network governance? Do you have strong internal and external legitimacy? Do you have the appropriate balance of flexibility and stability? Many of these questions focus on achieving the right balance for a particular network, something discussed at length on Day 1 of the symposium.

There are two additional key factors to consider when developing an evaluation plan for a network. The first is that the process is just as important as the outcome; that is, evaluating how results are achieved may be just as important as what is achieved. For example, generating knowledge about the status of network relationships, so
that they can be repaired and shaped, is critical to network effectiveness (Gilchrist, 2006). The second is that it is important to consider the network’s state of evolution when planning a network evaluation, as the particular life stage that a network is at will influence the kinds of milestones you want to be evaluating. Early on in the life of a network your emphasis is likely to be far more on process than outcome evaluation. That is, you will want to focus on whether network structures and processes are being implemented effectively before trying to assess whether the network is achieving desired outcomes.

Finally, pulling together what we have learned about network evaluation over the past two decades, Popp presented a key proposition for testing, which is that: “Effectiveness at the network level is a necessary prerequisite for positive outcomes at other levels.” People were referred to “a model for action to guide the evaluation of inter-organizational networks”, which was developed for discussion purposes as part of a recent critical review of the literature on inter-organizational networks (see Figure 1).
Figure 1: Toward a model of action to guide the evaluation of inter-organizational networks

**Network processes and structures**
- Preliminary vision is established
- Organization member identification and recruitment
- Selection of appropriate governance structure
- Attending to important management of network tasks
- Attending to important management in network tasks
- Creating a culture of shared leadership
- Guiding development and monitoring of the network structure (i.e., structure of relationships)
- Appropriate resourcing of the network

**Network level outcomes**
- Vision is understood and supported by all members
- Effective governance structure
- Core stability
- Effective network leadership
- Existence of trusting relationships
- Strong internal legitimacy
- Strong external legitimacy

**Outcomes at other levels (examples)**

**Community level**
- Coordinated, cost-effective, high quality services being delivered
- Improved population level outcomes

**Organizational level**
- Agency survival
- Enhanced legitimacy
- Resource acquisition
- Enhanced capacity

**Individual level**
- Enhanced capacity
- Increased job satisfaction
- Increased satisfaction of individual clients

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Jessica Retrum led a practical session on PARTNER (Program to Analyse, Record, and Track Networks to Enhance Relationship), which is a social network analysis (SNA) tool. Retrum works at the University of Colorado’s School of Public Affairs, with Dr. Danielle Varda who is the original developer of PARTNER. Retrum has a keen interest in relationships and relational practice. She described the network way of working as characterized by moving from an expert model to a model where everyone knows something. She believes that working across boundaries is a core function for organizations in order to have a collective system. She went on to describe how network stakeholders are asking a number of questions, the biggest of which is: how do we balance our organization’s needs/goals with evolving network processes?

Through her research, Dr. Varda asked public health practitioners how they knew their partnerships were working – they said they had more and more partners (i.e., counting noses); yet we know that this is not necessarily an indication of effective partnerships or an effective network (i.e., more is not always better). An alternative assumption is that “less can be more”; so an effective partnership is not based on the numbers of partners you have but rather how they are connected. The concept of relationship ‘budgeting’ was introduced here; the idea that given limited time, networks need to use their relationship budget strategically. This led to the development of the PARTNER tool for practitioners to use to increase their understanding of how their actors/partners are connected. Retrum went on to talk about the elements of SNA, why you might use SNA, and then how SNA can be used in practice.

**Elements of SNA**

The main focus of SNA is analyzing how actors are connected, and the quality of those interactions. In inter-organizational networks these actors are the member organizations that constitute the network. A key component of SNA then are the ties, or how people are connected; for example, how are the ties: directed (i.e., are they one-way or two-way); undirected (i.e., as in being physically proximate); dichotomous (i.e., present or absent, as in whether two people are friends or not); and/or valued (i.e., measured on a scale, as in strength of friendship). Through the PARTNER tool one is able to look at network data at three different levels (i.e., whole network level, organization/individual level, and the dyad level).
Why use SNA?
An advantage of SNA is that you can think like a network scientist. If you ask someone who is the most important person in the network, the answer is that it all depends. Depending on the purpose of the connection, the most important person will differ. With SNA you can begin to answer unique questions, such as:
- Are more diverse networks more effective? Again this is a matter of balance. There are some advantages, but the more diversity the more difficult it is to manage.
- How much agreement is there among reported outcomes and successes? Given the importance of collaborative decision-making in networks, the more disagreement there is among reported outcomes and successes the less effective the network is.
- Do leaders keep turning to the same people over and over again? If leaders are turning to the same people over and over again, this can be problematic in a network. Leaders that take a more systems approach are more successful.

The reasons that communities are using PARTNER as an SNA survey and evaluation tool include:
- To evaluate the existing structure and processes of the collaborative leadership team;
- To discover gaps or inefficiencies in collaboration that may prevent programs from developing to their best potential; and,
- To measure their network’s effectiveness, improve their processes, and increase their efficiency.

Overall, many more communities are using what they learn about their network through the PARTNER tool to actively improve their network practice.

How can SNA be used in practice?
SNA can help you to examine your network processes. It can help you demonstrate to partners, stakeholders, funders, etc. how your collaborative is working, and why working together is leading to tangible results. PARTNER is being used by a number of community partnerships to evaluate the existing structures and processes of their collaborative leadership team, and to discover gaps or inefficiencies.

The PARTNER team at the University of Colorado works with communities in a variety of ways along a continuum. At one end are communities who just find the tool online and use it, and they really have no interaction with the PARTNER team. At the other end are those that come to the PARTNER team and want them to work with them at every step of the way. This is about using SNA to implement quality improvement (QI) initiatives (i.e., strategic network management is a QI process). The goal here is to try to compare the ideal network with what your network looks like now, identify gaps between the actual and the ideal, and then create action steps to get closer to the ideal network.6

An example of the latter is the work they did with the Early Childhood Councils in Colorado. The PARTNER team worked with twelve councils to implement the PARTNER quality improvement methodology. They did site visits, collected and analysed the SNA data, and then created action steps to assist Councils to reach their goals (i.e., to help them move to a more systems-focused approach).

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case, these councils are charged with building a system, so the emphasis was on trying to get them to think more like systems practitioners.

**How does PARTNER work?**

Basically, PARTNER involves requiring having members of your coalition/network complete a survey. Most people now start with doing some SNA, and then use this information to plan where they want to go next (i.e., rather than define the ideal network up front). The basic steps are summarized below in Table 3. Retrum concluded her presentation by stepping through a practical demonstration of how to use the PARTNER tool. For more information about PARTNER please refer to [http://www.partnertool.net](http://www.partnertool.net).

**Table 3: Basic steps in the PARTNER process**

<table>
<thead>
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<th>Step</th>
<th>Description and comments</th>
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| **Step 1: Identify the actors in your network** | - Members are organizations or individuals who represent members of a coalition or partnership  
- Sometimes it is difficult to identify the members, particularly when you’re just starting out  
- May not ask all members to take the survey, particularly those not as involved with the network |
| **Step 2: Customize the survey questions** | - There are 19 standard questions  
- The survey is based on qualitative research done by Dr. Varda, so some things can be modified but not others  
- Relational questions help with understanding frequency of interaction, type of relationship (e.g., how people are related, as well as what things different actors are working on together) as well as perceptions of value and trust between partners |
| **Steps 3 & 4: Collect, manage and analyse the data** | - Send the survey out and get people to complete them. The general rule is that if you can get over a 70% response rate you are doing great.  
- Analyzing the results includes generating network scores and visualizations. |

**Interactive dialogue**

The dialogue featured symposium participants sharing examples of their own network evaluations, and considerable discussion about the variety of evaluation methods that can be used. One participant described how their network evaluation looked at three criteria: sense of community, readiness for focused action, and a capacity for mobilization. There was agreement from the panellists that these were important factors to consider, particularly if you are conducting an evaluation at the early stages of network development. Both a sense of community and readiness for action were seen as critically important to assess and ensure before you ask a community to mobilize.
There was interest expressed in both the metrics of success and the metrics of failure. It was felt that there is a lot to learn from networks that do not survive as well as those that do. What are the critical failure factors, and how do they compare with critical success factors? Regarding network failure, it was suggested that if you are not paying attention to vision, structure, and processes then networks will not survive. Others added that it is critical to understand the components that are required for making network members feel part of the work. It also was noted that there are shocks that networks just will not survive, even if you are paying attention to all of these things.

SNA, using tools like PARTNER, was acknowledged as providing valuable information to evaluate some aspects of networks. There was also recognition, however, about some of the challenges inherent in surveys, which is the data collection method used in SNA. There was also some wondering about whether sometimes we focus on this one component of network functioning at the expense of looking at other important evaluation components. A number of participants described a mixed methods approach to evaluating networks; that is, using SNA along with other methods. For example, doing key informant interviews with key stakeholders and network members can be most helpful for interpreting and fleshing out the terrain. It can also be very useful to look at archival data (e.g., meeting minutes; strategic planning documents).

There were some lessons learned and shared about how to increase survey response rate, if you are including SNA as part of our evaluation. These included:

- Building up expectation that being a good network member requires being part of the evaluation;
- Have partners collectively complete the survey at a specified time, either through a webinar or at a network meeting;
- Offer incentives for completing the survey;
- Do a meeting halfway through the data collection period to share preliminary evaluation results, and then encourage those who have not had the opportunity to respond yet to complete the survey; and
- Selecting the right people to promote the survey (e.g., people with power, and people that everyone likes and trust).

There were some questions, specifically related to the presentation on PARTNER, on how to help network members shift from an organization-centred to a system-centred world-view. For example: Does a higher score with respect to taking a system-centred view, mean that the network is likely to be successful? Can you actually build this kind of capacity? As it is only recently that we have been able to explore these things using SNA, although there is hope that you can build this kind of capacity there is not yet really any demonstrative research. It was suggested that it is helpful to find a way of talking about this type of system-centred capacity, and finding a metaphor that works. Using the term the “network way of working”, for example, might resonate. Overall, it was agreed that it is important to pay close attention to the language you are using, which can be a way of building capacity for taking a system-centred (rather than an organization-centred) world-view.
4. How do we sustain networks over time or wind them down?

This panel presentation and discussion explored the role of networks in creating, using and exchanging knowledge; how to nurture and sustain networks in the short and long term; and whether we need to think about winding down networks or transforming them into new entities and, if so, how and when to do so.

Moderator: Dennise Albrecht
Panellists: Michael McGuire, Raymond Paquin, Bill Tholl, Siv Vangen

*Siv Vangen: Nurturing inter-organizational collaboration*

Siv Vangen's central argument is that ongoing nurturing is important when managing inter-organizational collaboration. She has been working with people directly involved with collaborative research since 1982, usually involved with collaborations where there are organizations from multiple sectors, including from both the private and public sector, which are working together to address complex social issues. She has worked with purely private sector networks, and the issues seem to be similar.

A key overarching research question of interest over decades of work has been: Why does inertia rather than collaborative advantage happen? This involves trying to understand underpinning issues that create anxiety and reward. What they have learned is that nurturing inter-organizational collaborations requires attention to managing goals, managing cultures and managing trust. Each of these is briefly discussed here.

In *managing goals*, the importance of having agreed upon and shared goals for the collaborative is common wisdom; yet in practice this is very difficult to achieve, in part because organizations often have different agendas. This “goals paradox” grows from the tension between goal congruence and goal diversity inherent in inter-organizational networks and has led to a more recent research focus on trying to understand more about different levels of goals. Frequently the goals of the collaboration are community level goals, but the organizational goals are still critically important to member organizations and there are often the goals for the beneficiaries as well.

In addition to the level of goals, other dimensions of goals potentially important to consider when managing goals include: origin, authenticity, relevance, content and overtness (see inset box). Another practice reality is that often goals are not explicitly stated. Genuine goals tend to exist in a tangled web, with goal diversity being far more prevalent than goal unity. Any one individual will likely only see some of these goals. Managing goals then has less to do with the tension between congruent and diverse.
goals, but more on managing the balancing of them. On the one hand if there is no goal clarity this can create confusion, but on the other hand trying to nail down goals can create conflict. As one manager of a collaboration stated: “We have to write a statement of our aims to justify our existence...my job is to find a way of writing it so that none of the parties involved can disagree.” Sometimes it may be better to get started on some action without fully agreeing on goals; that is start where there is some agreement. Often goal congruence that can provide momentum for collaboration can emerge through working together on something.

Another important consideration in nurturing collaborations is managing culture. It is common wisdom that if you are going to work collaboratively with another organization you need to have shared values and culture. Yet in practice, partners within the collaboration will bring with them different ways of interacting and working. Cultural awareness is necessary to understand the issues affecting collaboration, something that can be difficult to do without stereotyping. An inter-organizational network may have to contend with different professional, organizational and national cultures. Vangen talked, for example, about how terminology may not readily translate across organizational and cultural boundaries. She described the example of a community representative who had been sitting on a network board for a number of years, and still really struggled to understand what they were talking about.

The last consideration in nurturing collaborations described by Vangen in her presentation was managing trust. The research literature would argue that trust is essential, and thus we need to focus on building trust. In practice, however, what is often the case is that you start with some modest gains and build trust through the work. Collaborations tend to be dynamic, meaning that trusting relationships are difficult to maintain as people leave; building trust then is an ongoing focus.

To conclude, understanding collaboration requires focusing on issues recognized by those involved as causing both anxiety and reward. Achieving collaborative advantage requires compromise, commitment, energy and care. Managing collaboration involves understanding the complexity, accepting the pain inherent in this work, using the available tools as conceptual handles to aid thinking, and knowing what to nurture.

Michael McGuire: Managing transformation in networks by changing perceptions
Michael McGuire argued that if we are to make headway in solving the complex problems that networks are formed to address, we need to be able to think differently; that is, managing transformation involves
getting people to become aware of the thinking traps we fall into, and overtly shift our thinking together. The highlights of his argument are described here.

Blockages in networks operations are not always due to conflict, but rather to the perceptions of the actors involved. They see and talk past each other. How can the actors begin to actually develop some mutual adjustment or agreement of perceptions (i.e., this is the way we see the situation)? King’s presentation about neural networks informs this challenge, as our brains can only take in small bits of available information and each of us takes different bits. Fixations are a good way to think about this. Fixations arise when network actors take their perceptions so much for granted, that they no longer reflect on them. An important network task then becomes to create opportunities for members to ask, why do we think the way we do and why we do things this way?

McGuire stated that there were two main types of fixations, cognitive and social. In cognitive fixation: “Actors in the network have already dealt with the same problem definition for a long time and none of them want to change it.” In social fixation: “Mutual relations and interaction rules are no longer subjects of reflections, and introducing new ways of handling problems is no longer considered.” Given these common fixations, how do you go about creating change? It is only a confrontation with other perceptions that can create the opportunity for change. Three necessary steps along this pathway to change are that actors must:

1. Recognize the differences between their own perceptions and those of others;
2. Experience the differences and the problematic nature of the differences; and,
3. Be willing to reflect on their own perceptions.

Managing perceptions is about creating at least a minimum of consensus in order to facilitate collective decision-making and joint action. The overall goal is to achieve at least some mutual change of perceptions. Strategies for managing perceptions involve facilitation of thinking about the network, which requires pausing for reflection. Sometimes in networks there is so much focus on action that we do not take the time to reflect. The point with these strategies is to create cognitive variation by creating some social variation. Offering new solutions may not work, as problem definitions may differ among actors. In other cases it is possible to create new procedures, rules, and contracts in order to create some predictability and stability. When managers and actors can come together to agree on ways of operating, they can begin to think about joint action and collective decision-making.

One way to create social variation is to introduce new actors. That is, by arranging “confrontation with a third party”, existing actors may be jolted into reflecting on their own perceptions. A network manager can bring in new people, including brokers, facilitators, mediators, to help break through fixation and stimulate interactions that may result in mutual adjustments of perception.

Actors prefer to talk with other actors with whom they share perceptions. Within these interactions, a common language is usually developed. With respect to creating cognitive variation, the way we think about something, network managers can enable this by furthering a common language. If a network is made up of people who can speak the same language, a setting can be created where network members can create social configurations.
Finally, in order to prevent cognitive fixation, a network needs to be open to new ideas. Actors have the tendency to exclude unwanted information, yet if certain ideas are systematically excluded then there is an increased chance that fixation will occur. A network manager must be constantly aware of this danger of excluding ideas, and devote special attention to the formulation of criticism (e.g., initiating research, organizing brainstorming sessions, initiating debates, etc.).

To conclude, McGuire reinforced that the key to changing network actors’ perceptions is not to tell actors this is the way they should think, but rather to develop strategies for them to experience a different way of seeing something. Such strategies work by creating a climate in which doubt, inconsistency, and time for reflection are not seen as being negative. One way to change the perception of reality is to encourage network actors to experience a new perspective on the problem at hand, with the transformation of networks based largely on the ability to manage the changing perceptions. It is the rigidity and the lack of ability to adapt and change that kills networks; and the inability of network managers and leaders to bring together perceptions (i.e., achieve some mutual change of perceptions) that leads to this.

Ray Paquin: Emergent and assembled networks – Success and resilience
Ray Paquin talked about what he had learned through his research on industrial networks in Europe about their success, growth and impact, and resilience; and whether success factors are different in emergent versus assembled networks. He defined assembled networks as those with a network administration organization (NAO) and emergent networks as those that were self-organized.

Paquin outlined four factors that contribute to network success: connections; norms; embeddedness (i.e., how closely you are tied to the network); and value. With respect to connections, in emergent networks connections were primarily between actors and in the assembled network there were more connections with the NAO. Norms of action were determined by the actors in emergent networks, and in assembled networks the NAO worked with the actors to develop norms that became the shared foundation for network action. Successful networks tend to a have a profile of mixed embeddedness, and this is seen more in assembled networks, whereas emergent networks are likely to be more decentralized. This relates back to the structure of connections in the network. Paquin noted that his research also demonstrates that value is created at multiple levels, as has been discussed throughout the symposium. In emergent networks there is more focus on value created at the individual organization and project levels, with any network level value a by-product of, but incidental, to the network. In assembled networks, the focus is on values at the individual organization and network levels, with network level value driving NAO actions.

In considering assembled versus emergent networks, is there a difference in their success if we consider growth and impact at the project level to be indicators of success? Paquin described research findings from two industrial networks: an assembled network in the UK West Midlands where it took eight years to get 264 firms involved and 399 projects off the ground; and, an emergent network in Kalundborg in the Netherlands, where it has taken more than 40 years to get 20-30 firms involved and 15-25 projects
started (see inset box). Assembled networks then are likely to be more successful in the short term, but a question is whether this comes at some cost with respect to resiliency.

Resilience is a dynamic, rather than a static, equilibrium. In engineering, resilience is defined as “how fast a system returns to equilibrium after a disturbance”; whereas ecological resilience is defined as “how far a system can be pushed before it changes to a new, potentially irreversible, equilibrium” (Holling, 1996). What does it mean to be resilient in the context of networks? Paquin believes that the concept of network resilience is more aligned with engineering resilience. Three tests of resiliency are the bus test (survive losing an actor), the funding test (survive losing funding), and the succession test (survive losing a key leader). Even when networks have shown promise, performance and impact; stakeholders, and in particular funders, keep asking if you can do the same thing with fewer and fewer resources.

Paquin spoke about how we might measure resilience in networks, making the following points:
- Focus on system, rather than actors in the system;
- Explore quality and types of connections, multidimensionality of relationships;
- Examine structural/positional characteristics; and,
- Combine both quantitative and qualitative insights.

Networks inherently have the potential to be resilient, but how might we enhance this potential for resilience in networks? Using what is known from network research to date, Paquin argued that resilience is likely enhanced through: medium centrality – not too many critical hubs; medium density – a balance of strong and weak ties; the existence of many paths; and, having a diversity of actors involved in the network. This aligns well with McGuire’s red wine theory of networks.

If these ideas hold true, then emergent networks can potentially be more resilient (i.e., don’t have an NAO that can be destroyed) even though assembled networks can be more successful in the short term, in terms of action. A question to ponder is whether an assembled network with a NAO can continue to exist in a form more like an emergent network, and under what conditions this might happen.
Bill Tholl: Building and sustaining value networks – Deriving ought from is?

Bill Tholl took us through a case study of building and sustaining a value network, the Canadian Health Leadership Network (CHLNet). He started with stating that he had a strong belief that to be successful, and to sustain a successful value network over time, the focus should be on creating new value and then constantly shifting from one value curve to the next. He felt that when this initiative first started at Royal Roads University, the health sector took leadership for granted and/or assumed good leadership.

CHLNet’s basic rationale is that better leadership leads to better organizational and system performance. Canada’s healthcare system performance continues to languish relative to other systems, and there is no venue for healthcare leaders to have crucial conversations about how best to identify, develop and support future leaders. Leadership in healthcare is seen as fundamentally a social good. Accordingly, CHLNet’s driving force is “leadership without ownership”. Having grown from just 12 launch partners in 2009 to over 40, CHLNet is now at a tipping point; they have a strong value proposition but now need to evolve to become a going concern. Jim Collin’s hedgehog concept may be helpful to consider in the context of network evolution: identify what you as an individual or organization could be best in class in; an issue or cause that you can really get passionate about and get others equally passionate about; and, finally, one that can garner the necessary resources to sustain it over time.

What is the value of a network? If there is trust everyone gives a little bit more than they take (i.e. principle of reciprocity), the network will continue to grow over time. CHLNet started off with a lot of good will and intangible value (i.e., research and dialogue sessions), and then moved to develop more tangible “by health, for health” support services and activities. They began by looking for the “blue-ocean” or white space for increasing leadership capacity in the health system thinking, creating new values to guide the work of CHLNet. Out of this thinking, four main value streams were developed: dialogue and engagement; framework and tools; research and evaluation; and advocacy. One of the key tangible benefits to network partners was the development of a “by health, for health” leadership capabilities framework known as LEADS, an acronym standing for: Lead self; Engage others; Achieve results; Develops coalitions and System transformation. A basic premise for the framework is that leadership states with self and is distributed or shared throughout an organization.

Tholl described the evolution of CHLNet value network by using the metaphor of car-pooling to establish some “rules of the road” for guiding the building and growth of networks over time (see inset slide). CHLnet started with some Ottawa-based partners and with a shared interest in building health leadership capacity. They shared the same “destination”; shared the same values (working together toward a better health system; shared in the risks
(financial, legal and reputational); shared information routinely; and, when the network became a "going concern" they shared the credit for having built the network.

Based on the key learning through this CHLNet case study, Tholl outlined some key takeaways regarding how to build and sustain networks; these are:

- Having a burning platform and a clear/compelling vision are important;
- Leadership is not about ownership, and networks are facilitated and not managed;
- Values-based decision-making requires trust and reciprocity, and once trust it broken it is very difficult to earn it back;
- Intangible benefits are necessary but not sufficient; and,
- Handling hand-offs in terms of network leadership is very important, but no one is indispensable.

Tholl ended his presentation by welcoming any interested researchers who might want to work together to evaluate CHLNet as a case study to get in touch with him and/or to join as a "friend of CHLNet". He concluded by indicating his experience with building and sustaining CHLNet over more than five years underscores the old African Proverb: "If you want to go fast, travel alone, but if you want to go far, travel together.”

Interactive dialogue

This series of panel presentations sparked wide-ranging discussion about growing, sustaining and transforming networks. The importance of developing good partnerships between research and practice was highlighted, and it was agreed that this can be facilitated when people involved in network leadership positions are knowledgeable about the importance of using research to inform their practice.

The concept of ecological resilience sparked considerable interest. For example, when looking at the downside of funders reducing support, it was suggested that networks need to evolve to a point where they make more complex decisions, that is moving to a higher level of competence and resilience in order to survive. This thinking supports putting a positive lens on ecological resilience.

There were several reflections on McGuire’s presentation on the importance of the mutual changing of perceptions in networks. There was agreement that in order to begin to address the complex problems that networks come together to solve, you often do need to shake things up, including current ways of thinking and acting. Thinking along this line, there seems to be a role for ‘positive deviance’ at the network level, even though a deviant act may threaten the civility of the existing system.

With respect to success factors for networks, and the concept of embeddedness as described by Paquin, participants wondered if there is a threshold for inclusivity? More is not necessarily merrier, said Tholl. Paquin responded that there is strong evidence for an inverted U, with a sweet spot in the middle. But rather than being numerical, the precise sweet spot is likely contextual and temporal.

Connecting McGuire’s and Paquin’s presentations, one participant commented that the concept of adaptive resilience might also be an important contributing factor to network success and resilience. By adaptive resilience, we mean that every day we encounter something that is contrary to what we
thought and/or were doing. There is a day-to-day adaptive resilience. One cannot afford to be fixated, as you would get behind. There was general agreement that “adapting is everything,” and although it is tough in research to follow ongoing adaption, the concept of adaptive resilience is a very good one.

This dialogue session concluded with conversation about what makes a good network manager and/or leader? Points discussed include:
- People attracted to this work often come from a mental health background with skills in group therapy, group process;
- Most of the skills required for managing people in single organizations also apply to managing people in networks, but there are also some things that are different in networks with respect to the kinds of management or leadership skills required; and,
- In a single organization you have fear at your disposal, and this will not work at a network level (e.g., you cannot “fire” a network member), but then fear does not always work in organizations either – particularly in the long term.

5. The “bear pit” session: So what and where to next?

The Symposium concluded with a highly interactive ‘bear pit’ session in which all the panellists revisited the question of whether we should be rethinking networks, and offered up some final thoughts for discussion with each other and the participants. Outlined below are the brief opening comments given by the panellists to kick off this final session, and then the highlights of the ensuing discussion.

Brief opening comments by panellists

**Bill Tholl**
- Coming from a network practice perspective, I encourage the group to put all this together in a handbook to help folks to build networks. This collected wisdom could contribute to an accelerated rate of network development and improve subsequent effectiveness.

**Jessica Retrum**
- A lot of collaboratives come to us because we have this tool (PARTNER) and it’s easy to use. However, sometimes people rush to use the tool before really thinking about the questions they are trying to answer, and whether the data obtained through SNA will contribute to the answer. So my advice would be to really think through first what you’re trying to get out of this and whether using this tool will help you.

**Mike McGuire**
- We’ve talked a lot about process, about what’s going on in networks. I wonder if it is possible to have a positive network (i.e., when thinking about network level outcomes) and still have bad outcomes at the community and other levels, and vice versa. I speculate that in most cases, network level outcomes will lead to positive client level outcomes, but this is really an assumption at this point. We likely need more information going forward.

**Siv Vangen**
- I wonder if we should rethink networks? Or, just accept that networks and collaborations are here to stay. They aren’t the same, but they are more the same than different. Do we need a closer
connection between different types of networks, and how we manage and lead them? What type of leadership applies in different types of networks? What does success look like in different types of networks, etc.?

**Brint Milward**
- What isn’t here that should be? I think we’ve made great progress. If I was going to put anything on the table next time, it is: where is power and conflict? We have moved beyond the Kumbaya of networks. Some networks are really nasty, and there is literature on this. How do you develop reasonable outcomes for people who have very different goals? Political networks are really now only beginning to look at power and politics and conflict. It’s an area to explore further.

**Joan King**
- One of the things I’d like to offer you is a sense of validation or Zeitgeist (i.e., spirit of the time) – when the same things occur in multiple disciplines at the same time. Neuroscience is looking at connectomes; looking at ways to stimulate networks is to disturb these nodes and see what happens.

**Ray Paquin**
- The issue of value was something that we kept coming back to in our discussions. Deming built a line of thinking around “what business am I in?” This question is about generating value and is a core issue of how we conceive of networks. I think our discussion around understanding the multi-dimensional and relational aspects of value creation within networks is a key part to our being able to build and manage them.

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**Open discussion**

Some highlights from the bear pit discussion are outlined as a series of questions. They are posed here in the hope that they encourage further questioning and collective reflection and action towards enhancing our understanding of how networks function and when and why they help us “do good things better.”

- **Can we further develop the concept of adaptive resilience, and even theorize about it and see where we get?** The idea of adaptation does fit somewhere; and it seems to be distinct from ecological resilience. Abstracting the ecological away from natural environment is about understanding the system that you are in. Perhaps networks need an “ing” at the end; the hard work to developing these relationships is the work of networks.

- **How do we get actors to get more excited about recognizing the importance of contributing to, rather than simply reaping the benefits of networks, (i.e., give up time to be involved in a network)?** First you have to have a strong belief that what you are doing as part of this network is really important. Second, having some sort of program rationale, where you are thinking about the whole and not just your organization is important. There also have to be tangible incentives.

- **If people are lurking do you cut them off, especially considering the importance of relationship budgeting?** The term collaborative thuggery that Vangen used was borrowed from an effective
leader of a particular collaboration; in this collaboration if someone was not contributing they would kick him or her out. Perhaps sometimes you want to be a bit of a thug. If network members are not bringing even a small amount of net value to the table, is this violating one of the fundamental pillars of networks, that of reciprocity? If everyone takes and no one gives, a network is not sustainable.

- **Who do you want to become?** Our brains and neural networks are being constantly shaped by the decisions we make. We are responsible then for creating our own mental landscapes. Difficult decisions do need to be made so that you can understand and then shape what you are becoming. This was talked about as being both individual and network carrying capacity; if there are too many commitments, an actor just will not be able to produce. Returning to the idea of relationship budgeting: What is your passion? Where can you make a difference? This relates to one of Stephen Covey’s seven habits: “Balancing the urgent and not important with the important and not urgent”. We tend to be largely shaped by the former, but we really should be spending much more time on the latter.⁷

- **Would it be helpful if at some point we could collectively unpack the “it depends”?** Taking us back to the first panel on rethinking networks, Vangen talked a lot about “it depends”. So much of organizational and management thought has been based on an understanding of: given this, then that. The “given this’s” are inherent to practitioners and to other elements of context. In one participant’s practical experience with emergent networks, no network emerges without a network entrepreneur or “champion” (e.g., radiologist started battling child abuse as a result of seeing unexplained injuries on x-ray after x-ray, which led to the creation of a network to raise awareness of, and address, child abuse). One participant’s experience is that the internal threats of not working together often exceed the external threats of working together. Things line up and things align, and the exogenous environment lines up in a way that enables you to make a viable difference. Networks need to be ready to take advantage of these exogenous opportunities quickly.

- **What do we think the risks are in relation to where we are at with networks, and what can we do to mitigate these risks?** As networks become increasingly popular with various levels of government, and more get funded, there was some concern expressed that perhaps more will fail, potentially turning people off funding and being involved in networks. What we know from network research is that networks have been around forever and they have always been emerging and they have also been dying, it is part of the lifecycle. Collaborations are very dynamic; they may fail in one shape, but then re-emerge in another shape. Maybe the ultimate collaborative goal(s) may not have been achieved, but there may have been other goals achieved. When a network dies, it may create a great research opportunity to explore how people continue to maintain these relationships, even without a formal network structure. What happens to people in networks when the official structure

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has ended? Relationships have a very long half-life if the relationships are strong, meaning that new
ways of working together may be sustained.

- **How do we celebrate networks and collaborations?** If someone is a really good collaborator, they
often don’t get celebrated. Through celebrating the small and big wins you can recognize the people
that contribute to these wins. Although it is good to celebrate a network’s success, it often may be
more important to give credit to organizational actors. Sometimes it is wise not to celebrate success
too loudly, so that you decrease the risk of making others look bad (e.g., can’t trumpet policy change
made as a result of your advocacy).

- **There was some discussion about the network difference or “network way of working”; what does
this mean?** There is a huge continuum of networks, so what does this look like? Ask what is this
‘network’, and the question will come up – why are you calling this a network? If you are defining an
entity as a network, what does this mean? It is important that the actors involved in a particular
network define their terms, and define the purpose of the network, including whether it is emergent
or assembled or mandated or not.

**Closing comments**

As is true of any report that attempts the impossible – to capture two exciting days full of equally
energizing ideas – we fall far short of giving all of the collective thinking and action full justice. We offer
this attempt as a challenge to readers to push for fuller understanding and to add their ideas and energy
to fleshing out answers, and indeed more questions for future symposiums to tackle. In keeping with
our hope and as a last recommendation from this symposium for the next symposium, consider sharing
your stories. A valuable way to reflect and to learn is through stories. Give us a story about a paradox
you overcame, or other stories about networks. Stories by their very nature are rich in context and
rooted in practice, and yet through exposure can become a valuable part of our evidence base as well.
This brings us nicely back to the overarching goal of our symposium series – to bring network
researchers together with network practitioners to learn together in support of network understanding,
effectiveness and impact.
## Appendices

### Network Symposium Program

#### MONDAY, NOVEMBER 11, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>6.00pm - 8.00pm</td>
<td><strong>Evening Welcome Reception</strong></td>
<td>Hotel Grand Pacific, Pender Ballroom</td>
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#### TUESDAY, NOVEMBER 12, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Details</th>
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<tbody>
<tr>
<td>8.00am – 8.45am</td>
<td><strong>Continental Breakfast</strong></td>
<td>Royal Roads University – Quarterdeck, Grant Building</td>
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<tr>
<td>8.45am – 9.00am</td>
<td><strong>Welcome and symposium overview</strong></td>
<td>Janice Popp, Symposium Co-Chair</td>
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<td>Ronald Lindstrom, Symposium Co-Chair</td>
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<td>Allan Cahoon, President, Royal Roads University</td>
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<td>9.00am – 11.00am</td>
<td><strong>Should we be re-thinking networks?</strong></td>
<td>This panel will address what has changed in the field; theory and practice of the ‘network way of working’; the value proposition that networks offer; and, why and how networks are key to the future of organizational change.</td>
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<td><strong>Moderator:</strong> Ann Casebeer</td>
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<td><strong>Panelists:</strong> Michael McGuire, Brint Milward, Siv Vangen</td>
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<td>11.00am - 12.00pm</td>
<td><strong>Interactive dialogue reflecting on panel content (what? so what?)</strong></td>
<td>and roll up of dialogue high points and insights from participants and panellists (includes morning break refreshments)</td>
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<tr>
<td>12.00pm - 1.00pm</td>
<td><strong>Lunch</strong></td>
<td>(Hatley Castle Drawing Room)</td>
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<td>1.00pm - 3.00pm</td>
<td><strong>What do we know about creating and managing networks?</strong></td>
<td>This panel will address collaborative governance; leadership and management; how neuroscience can help us understand leadership of and in networks and lessons from ‘dark networks’.</td>
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<td><strong>Moderator:</strong> Ronald Lindstrom</td>
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<td><strong>Panelists:</strong> Brint Milward, Keith Provan, Raymond Paquin, Joan King</td>
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<tr>
<td>3.00pm – 4.00pm</td>
<td><strong>Interactive dialogue reflecting on panel content (what? so what?)</strong></td>
<td>and roll up of dialogue high points and insights from participants and panellists (includes afternoon break refreshments)</td>
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<tr>
<td>4.00pm - 4.15pm</td>
<td><strong>Summary of day and introduction of day two themes</strong></td>
<td>Janice Popp, Symposium Co-Chair</td>
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<tr>
<td>Time</td>
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| 8.00am – 8.30am | Continental Breakfast  
Royal Roads University – Quarterdeck, Grant Building  |
| 8.30am – 8.35am | Welcome to symposium day two  
Ronald Lindstrom, Symposium Co-Chair  |
| 8.35am - 10.45am | **How do we know if networks are working?**  
Panelists will address the importance of network evaluation complemented with an overview and online demonstration of the ‘Program to Analyze, Record, and Track Networks to Enhance Relationships (PARTNER)’ software tool for network data collection, analysis and mapping.  
**Moderator:** Janice Popp  
**Panelists:** Keith Provan, Jessica Retrum  |
| 10.45am - 11.45am | Interactive dialogue reflecting on panel content (what? so what?) and roll up of dialogue high points and insights from participants and panelists  
(includes morning break refreshments)  |
| 11.45pm – 12.45pm | Lunch (Hatley Castle Drawing Room)  |
| 12.45pm - 2.45pm | **How do we sustain networks over time or wind them down?**  
Panelists will address the role of networks in creating, using and exchanging knowledge; how to nurture and sustain networks in the short and long term; whether we need to think about winding down networks or transforming them into new entities and, if so, how and when to do this.  
**Moderator:** Dennise Albrecht  
**Panelists:** Michael McGuire, Raymond Paquin, Bill Tholl, Siv Vangen  |
| 2.45pm - 3.30pm | Interactive dialogue reflecting on panel content (what? so what?) and roll up of dialogue high points and insights from participants and panelists  
(includes afternoon break refreshments)  |
| 3.30pm - 4.20pm | **BEAR PIT: Re-thinking networks redux**  
In a final energetic, highly interactive 'bear pit' session panelists will revisit the question of whether we should be rethinking networks and offer up key messages or controversies; the audience will have an opportunity to challenge the panelists and offer additional insights from their perspectives.  
All panelists  |
| 4.20pm – 4.30pm | **Wrap up and closing remarks**  
Janice Popp, Symposium Co-Chair  
Ronald Lindstrom, Symposium Co-Chair  |
| 4:30pm | Symposium adjourns  |
Symposium Speakers (listed alphabetically)

**Joan King, PhD**
Joan King’s life path embodies the blending of the hard and noetic sciences. At the tender age of seventeen, she stepped into life at the Dominican convent in her hometown of New Orleans, Louisiana. Eleven years later she left that religious training to become a chemist, then received a Ph.D. in neuroscience and psychology. Her twenty-year tenure as a professor of Neuroscience, Chair of the Department of Anatomy and Cellular Biology, Director of an NIH Research Center of Excellence, and Director of her research lab at Tufts University School of Medicine led her to a dynamic crossroads of personal self-discovery. She left academia. Her new found “inner knowing” ignited the writing of her books in the *Cellular Wisdom Series*. It became the foundation in understanding how our bodies model the teachings of our inner wisdom. Joan King’s blending of science and spirituality birthed her professional speaking and coaching business, Beyond Success LLC, in 1998. Today, Joan is helping others apply these same dynamics for women and men in relationships and business as a Master Certified Coach, Board Certified Coach and Coach trainer. As an author, Joan has published 3 books in her cellular wisdom series: *A Code of Authentic Living – Cellular Wisdom; Cellular Wisdom for Women – An Inner Work Book, A Life on Purpose - Wisdom at work*. Joan is working on her next book in the series “The Fire of Relationships – the Wisdom of love.” She currently speaks in a series “Create Your New Story” broadcast from Colorado around the world via her Ustream channel.

**Michael McGuire, PhD**
Michael McGuire is Professor of Public and Environmental Affairs at Indiana University, International Scholar at Kyung Hee University, and Managing Editor of *Public Administration Review*. He has expertise in public management networks, collaboration, and intergovernmental relations, focusing on how public managers operate, facilitate, and lead collaborative networks of organizations. He has published more than 50 articles, chapters, reports, and reviews, as well as a co-authored (with Robert Agranoff) award-winning book, *Collaborative Public Management: New Strategies for Local Governments*. He has also won numerous teaching awards.
H. Brinton Milward, PhD

H. Brinton (Brint) Milward is the Director of the School of Government and Public Policy at the University of Arizona. He holds the Providence Service Corporation Chair in Public Management. He was Director of the National Institute for Civil Discourse, which is co-chaired by President George Herbert Walker Bush and President Bill Clinton. He has been president of two national associations: the Public Management Research Association and the National Association of Schools of Public Administration and Affairs. He is a Fellow of the National Academy of Public Administration and in 2010 won the Distinguished Research Award given by the National Association of Schools of Public Affairs and Administration and the American Society for Public Administration for a "coherent body of work over a career." Dr. Milward's research interests revolve around networks and collaboration. The focus of his work has been on understanding how to efficiently and effectively manage networks of organizations that jointly produce public services like health and human services. He has conducted studies of what happens when governments privatize public services, which he terms "governing the hollow state." In addition, since 9/11 he has studied illegal and covert networks that pursue grievances or greed. His articles on "Dark Networks," have been widely cited for their application of network analysis and management theory to terrorist networks, human trafficking, drug smuggling, and other illegal activities. His particular foci have been the governance of dark networks, their trajectories, and accounting for their relative degrees of effectiveness and resilience. Milward received his B.A. from University of Kentucky and his MA and Ph.D. from Ohio State University.

Raymond Paquin, PhD

Dr. Paquin joined the John Molson School of Business, Concordia University in June 2008 and is currently an associate professor. His research focuses on the intersection of business and society and includes issues such as environmental strategy, sustainability, industrial ecology and inter-organizational relations. Within Concordia, Raymond is a research affiliate with the David O'Brien Centre for Sustainable Enterprise and an academic fellow with the Loyola College for Sustainability and Diversity (formerly Loyola International College). Raymond has published in Organization Studies, Business and Society, Journal of Industrial Ecology, Project Management Journal, and EDI Quarterly and contributed to a number of books on business and the environment. His research has been funded through the Social Sciences and Humanities Research Council of Canada, Center for International Business at JMSB, and David O'Brien Centre for Sustainable Enterprise at JMSB. Raymond has also been featured in Le Devoir and The Globe and Mail on sustainability matters. Dr. Paquin previously taught at the Lundquist College of Business-University of Oregon (USA) and Boston University School of Management (USA). Before joining academia, Raymond worked in technology and interactive media,
and founded Hope Interactive, an educational media firm. Raymond earned his doctorate from Boston University, master of arts in education from Virginia Tech, and bachelor of music from North Carolina School of the Arts. He can be followed on twitter @ProfPaquin.

Keith Provan, PhD

Keith G. Provan, Ph.D., is McClelland Professor, Eller College of Management, University of Arizona. He holds joint appointments in the Management and Organizations Department and the School of Government and Public Policy. He is also a Senior Research Fellow at Tilburg University. Professor Provan's research interests focus on interorganizational and network relationships, including network structure, evolution, governance, and effectiveness. He has published over 70 journal articles and scholarly book chapters and is one of only 33 members of the Academy of Management's "Journals Hall of Fame." Professor Provan currently serves on the editorial review board of Academy of Management Journal and is co-editor for Journal of Public Administration Research and Theory. He received his Ph.D. from the State University of New York, Buffalo.

Jessica Retrum, PhD

Dr. Jessica Retrum is currently an Assistant Professor in Metro State University Denver Department of Social Work. Dr. Retrum has eight years of clinical experience in health related social work; hospice, home care, inpatient care, and developmental disabilities. She has also provided mental health care to children in residential and in-home settings. Her doctoral research interests were in social work in the field of gerontology with a particular focus on the psychosocial, health, and mental health needs of community dwelling older adults with chronic illness and their social supports. Over the years Dr. Retrum has worked with many community non-profit organizations that serve the social, health and mental health needs of older adults and their families. Dr. Retrum has experience teaching undergraduate and graduate level course at University of Wisconsin-Milwaukee, University of Denver, University of Colorado Denver, and Metro State University of Denver. She has taught many courses including Methods for Evaluation of Practice & Programs, Applied Practice Program & Evaluation Research, and social statistics courses at the undergraduate as well as introductory and intermediate graduate levels. Prior to her current Assistant Professor appointment Dr. Retrum served for three years as a Post Doc Fellow and Research Associate at the University of Colorado Denver, School of Public Affairs with Dr. Danielle Varda. During this time Dr. Retrum provided support to PARTNER (www.partner tool.net), a social network analysis survey and tool funded by Robert Wood Johnson Foundation. She engaged in research in the areas of inter-organizational public health partnerships and
collaboration using the primary the method of social network analysis. Dr. Retrum also performed community outreach and education, training and technical assistance, data management and analysis, scholarly work, and grant writing. Dr. Retrum’s education includes PhD, University of Denver, 2010; MSSW, University of Wisconsin-Madison, 1997; and BSW, Illinois State University, 1996.

Bill Tholl, MA
Bill Tholl currently serves as the Founding Executive Director, Canadian Health Leadership Network (CHLNet), a “value network” formally started in September 2009. Its vision is: Better Leadership. Better Health. Together”. Its goal: to grow exemplary leadership capacity across the Canadian health system. His consulting practice has also recently included working for: Council of the Federation; Alberta Health Minister; the Mental Health Commission of Canada; and Health Action Lobby. Before taking on his current assignment, Bill served as CEO and Secretary General, Canadian Medical Association (2001-2008), and CEO of the Heart and Stroke Foundation of Canada (1995- 2001). The Globe and Mail has described Bill as “Medicare’s Mr. Fix-it”, having played an instrumental role in many of Canada’s major health policy initiatives over the past thirty years, including the framing of the Canada Health Act. He currently holds an academic appointment as an associate faculty member at Royal Roads University and has held appointments at Queen’s University, University of Ottawa and Carleton University. He holds a graduate degree in health economics and has written on many topics, most recently as the lead author of “Twenty Tips for Surviving and Prospering in the Association World” and co-author of “LEADS: The DNA of Exemplary Leadership” (in print). He is the recipient of numerous national awards and is a Certified Corporate Director (ICD.D). Born and raised in Saskatchewan, Bill and his wife, Paula, live in Ottawa and have three children and three grandchildren.

Siv Vangen, PhD
Dr Siv Vangen is Head of the Department of Public Leadership and Social Enterprise at The Open University Business School, UK. The Open University is one of the world’s largest universities and a world leader in delivering modern distance learning. Siv has a background in management science and her award winning research focuses on developing practice oriented theory about the management of inter-organisational collaboration. In the course of her research, spanning two decades, she has worked as a facilitator, consultant, advisor and trainer with policy makers and managers involved in partnerships and alliances in the public, private and not-for-profit sectors. She has authored many journal publications, book chapters and reports on collaboration and is co-author with Chris Huxham of Managing to Collaborate: The Theory and Practice of
Co-Chairs and Moderators (listed alphabetically)

Dennise Albrecht, MHA
Dennise Albrecht is a member of the Executive Team at the Children’s Hospital of Eastern Ontario (CHEO) and Director, Partnerships and Advocacy. A key initiative for which she was recruited was the development of the Child and Youth Health Network for Eastern Ontario, which brings together partners from across the disciplines and sectors to focus on child health and well-being and system integration. In addition, Dennise supports the Board's Health Advocacy Committee and is the lead for its strategic planning and program development. She represents the hospital on a number of initiatives and committees looking at system integration and collaborations. Before coming to CHEO, she was the Executive Director of the Sandy Hill Community Health Centre (CHC) in Ottawa for nearly 20 years. During this time, she contributed to the development of the CHC model at provincial and national levels, and to the development of related policies from community health promotion to strategic planning. She is active in a number of community initiatives, giving presentations and speeches, and has sat on Boards at the local, provincial and national levels. Dennise has a Masters in Health Administration from the Telfer School of Management, University of Ottawa, receiving the Father Danis Award, the Robert Woods Johnson Award, and the Trudeau Medal for academic excellence and leadership.

Ann Casebeer, PhD
Ann Casebeer is an Associate Professor in the Department of Community Health Sciences, and has a lead role for capacity building in the Calgary Institute for Population and Public Health, located at the University of Calgary. She is also Site Director for the Western Regional Training Centre and was Associate Director of the Centre for Health and Policy Studies for eight years. She combines an applied practice background with an academic grounding in organizational learning and systems change. Her understanding of innovation and broad social policy mechanisms for change within complex environments is grounded by 10 years in the UK National Health Service, and 15 years with SEARCH (a public service organization targeting knowledge development for health gain). Research expertise includes the use of qualitative and mixed methods in action-oriented contexts and for knowledge generation, exchange and use.
Ronald Lindstrom, PhD

Ronald Lindstrom is a Professor and Director, Centre for Health Leadership and Research, and Henri M. Toupin Research Fellow in Health Systems Leadership in the School of Leadership Studies, Royal Roads University. His areas of interest include health leadership and management, health systems and policy, action research, knowledge translation, complex adaptive systems and inter-organizational networks. As director of the Centre, he develops the applied research agenda and conducts research in health systems leadership and change management. He is co-investigator for a Canadian Institutes of Health Research and Michael Smith Foundation for Health Research pan-Canadian project exploring leadership and health system redesign, and the principal investigator for the B.C. node of the project. He is the principal investigator of a project exploring leadership during the development and implementation of the BC Sepsis Network. Lindstrom has extensive experience in the B.C. health system. He has been a director, VP and CEO with responsibilities including strategic, operational and facilities planning; and implementation and management of a broad variety of initiatives in health service delivery settings. He also worked as a consultant for several years with provincial health organizations and has sat on a number of boards. Lindstrom holds a Master of Science in health services planning and administration and a PhD from the University of B.C., and is a fellow of the Canadian College of Health Leaders.

Janice Popp, MSW, RSW

Janice has a keen interest in the use of inter-organizational networks to seed innovation and create and mobilize knowledge to improve public service systems. For the past twelve years she has been involved in leading a number of provincial and national networks including as: Director of the Southern Alberta Child & Youth Health Network; Chair of Child and Youth Health Networks of Canada and Co-Chair as it evolved to a broader focus on all networks in the public interest; and Co-Chair of the National Infant, Child and Youth Mental Health Consortium. Her career has encompassed clinical, administrative, research and policy related roles. In her current position in Calgary, Janice is facilitating the amalgamation of three separately funded provincial programs of health related supports and services for children and youth into one collaborative governance structure and service delivery model. Janice is an Adjunct Assistant Professor, Faculty of Social Work at the University of Calgary and she has been a principal organizer of the Network Leadership Symposia and Summits held in western Canada over the past six years, bringing together international researchers and practitioners to advance the understanding and evaluation of public sector networks.
2013 Symposium Planning Committee Members

Ron Lindstrom (Co-chair), Royal Roads University
Janice Popp (Co-chair), University of Calgary
Diane Van der Gucht (Coordinator), Royal Roads University
Dennise Albrecht, Children’s Hospital of Eastern Ontario
Donna Angus, Alberta Innovates - Health Solutions
Ann Casebeer, University of Calgary
Bev Holmes, Michael Smith Foundation for Health Research
Sharon Matthias, Matthias Inc: Connecting for Innovation
Gail MacKean, University of Calgary
Paddy Meade, Government of Yukon
Grace Mickelson, Provincial Health Services Authority
Brint Milward, University of Arizona
Paul Watson, Alberta Rural Development Network
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