Great privilege to be with you. My thanks to Peter Høngaard Andersen, and my regards to your Canadian leadership team whom I met in Toronto last week.

My assignment is to contribute to your “Vision of Value” by way of a Canadian perspective on the advancement of mental health in the contemporary workplace.

Peter and I met at a Canada/Europe Forum he and a prominent Canadian neuroscientist, Dr. Anthony Phillips, co-hosted in Toronto mid-January. I am glad it worked out that I was able to accept Peter’s most generous invitation to join you here.

The Toronto Forum focused on collaboration – particularly that to be fostered between industry and science. A concept near and dear to my heart and to the work of the Global Business and Economic Roundtable on Addiction and Mental health.

The Roundtable was founded nearly 15 years ago by myself and Canada’s former Ambassador to the United States as well as a core group of senior Canadian business leaders.
Mental Disorders Driving Global Transition

The Roundtable was created when we learned that disability not mortality had become the principal cause of the global burden of disease and that mental disorders – specifically depression and forms of anxiety – drove this transition.

By definition – in this light – mental health and mental illnesses became a business and economic issue of strategic importance for these reasons:

First, these conditions were – are – concentrated in the labor force and, therefore, represent a significant business and economic cost.

In fact, due to the lack of awareness and hard information for so long, these costs became, for corporations whose shares were traded on the open market, an unfunded liability – unfunded, undisclosed and, therefore, unmanaged yet pervasive.

In fact, economic costs outpace the costs of treatment of these conditions largely because treatment rates are low. At the same time, we now know that both the economic and health care cost estimates that we do have are incomplete.

I will come back to this.

The second reason depression is a business and economic issue is because it has become the leading and fastest-growing cause of workforce disability particularly among long-serving employees.

On average in North America, employees disabled by depression, have 14 years of continuous service with the same employer. This reflects the low levels of recognition, diagnosis and treatment. One-in-eight get the treatment they need.

This illustrates a central fact of the depression experience where treatment is generally scarce and inconsistent: employees living with depression – that they work hard to work through their illness. Then they hit the wall.

Advent of Brain-Based Economy

The third reason depression is a business and economic issue is the shift we are experiencing in the nature of the world economy.

Today, 85% of all new jobs that are coming on stream in North America – and, no doubt, Europe and the rest of the developed world – demand cerebral not manual skills.
Our former Ambassador to the US, Michael Wilson, describes this as the advent of the brain-based global economy converging, as it has, with the advent of a particularly-invasive brain-based disorder – depression – as the leading cause of disability in the working population. In this brain-based economy, **Cognition Has Become the Ignition** of productivity and innovation, while at the same time, it is under attack by depression targeting this very specific area of brain function.

Meanwhile, the public health of nations is facing a mighty shift from infectious or communicable diseases to a new era of non-communicable, chronic disorders as the principal constituent of risk confronting world public health.

**Depression Matrix: (Roundtable Final Report)**
This shift has empowered depression even further as an historic risk to the health and productive capacity of hundreds of millions of breadwinners. The reason: co-occurring depression alters the course and outcome of a wide range of chronic disorders.

**Heart Attack, Diabetes**
Depression increases the risk of sudden death by heart attack – depression increases the risk of stroke among women – depression complicates the course of diabetes and can implicate the risks of blindness (retinopathy).

**Cancer**
Depression has been linked to the accelerated progression of tumors among some forms of cancer – those living with depression have four times the incidence of cardiovascular disease – and those living with diabetes experience excessively high rates of depression.

**Lundbeck: Resolving Destructive Force**

**The Suicide Crisis**
Therefore, by bringing a new treatment for depression to market, Lundbeck is helping to resolve a particularly destructive force acutely relevant to economic growth through the health and wellbeing of the mainstream populations of a brain-based economy.

By treating depression more effectively – by achieving, one day, a pathway to the ultimate remission of symptoms, a de facto sure – you will save the lives of close to 100,000 people in North America and Europe who take their own lives each year and the injuries of 20 times that number among those make the attempt.

Suicide today is the leading cause of violent death in the world. More US soldiers die from their own hand now than at the hand of enemy combatants. In my country, the number of 11-14 years olds who kill themselves each year could fill a jumbo jet to capacity.
Early Age of Onset

Depression, we now know, can have a young face. The average age of onset of depression is age 21. The average age of onset of substance abuse is age 18. And the average age of onset of anxiety is age 12 – and so, it becomes clear: when you invest in the development of medications to arrest depression, you invest in our future.

These ‘age of onset’ statistics were produced by the world-famous epidemiologist Dr. Ron Kessler for the World Health Organization.

And while those I have cited are specifically Canadian, the range is consistent across the world, noting, however, that the face of mental illness in North America is, marginally, the youngest of all.

Defeating Depression, Making History

By fighting depression to a standstill - by thwarting its expansionist reach into the lives of so many people in so many places at such great social and economic cost -- Lundbeck will help make history. That is your quest. That is your opportunity. And that is the task at hand.

A task to which you must – we must – attract the active support and engagement of global corporations and governments as employers in their own right – in fact, the biggest employers of all.

The incentive for employers to help fund needed research and development to improve the care and treatment of depression is clear:

• Protecting the investments of major employers in their principal asset and – in the digital age – greatest source of competitive differentiation – their people;

• Helping dismantle the barriers to innovation – because, yes, innovation is the result of cognitive and creative brain function, not merely the inanimate process of R&D.

• Remember this: innovation – claimed by governments and economists and corporations to be the key to the door of future prosperity – is a “deliverable” of mental health in the working population.

Aside from financial investments, we have proposed the investment of the time, populace and energy of work sites as settings for clinical trials to mitigate cost and simplify the organization of these often prohibitively expensive and critical ventures.

On purely economic grounds, the case for international cooperation between business and science is inarguable. Led by depression – and concentrated as it is in the working populations – mental disorders annually cost Europe and North America $1.2 TRILLION.
This means that mental disorders -- led by depression -- wipe out four per cent of the gross domestic product of these huge economic blocs. But even at that, as I noted earlier, these costs are incomplete.

There are cost impacts we have yet to calculate. One is the impact of depression on the course of the major chronic conditions. Dr. Tom Insel, Director of US National Institute of Mental Health tells us this:

“The evidence is increasing that the leading costs of mental illnesses suggests that the leading costs if mental illnesses are in the extra costs of (chronic disorders) that become so much worse in people suffering serious mental illness.”

The London School of Economics, in a major report early last year, says this: “Nearly a third of all people with long-term physical conditions have co-morbid mental health problems like depression and anxiety.”

And this:

“These mental health conditions (read ‘depression’) raise the costs of physical health care by 45% for a wide range of conditions including cardiovascular disease, diabetes and COPD at each level of severity.”

The London School of Economics says untreated mental illnesses add more than ten billion pounds a year to the UK’s National Health System and translated, that is $150-$200 Billion US dollars a year of unfunded costs superimposed on the US health care system.

**Employer Legal Liabilities**

The stake that the wider business community has in the work you do has another dimension. Earlier, I spoke of unfunded liabilities. Now, I speak of legal liabilities.

Studies in 2002 (Roundtable) and 2007 (Workforce Advisory Committee, Mental Health Commission of Canada) found that the courts and human rights tribunals were consistently ruling in favor of employee complainants ---

That is, in the face of evidence that working conditions were injurious to employee mental health – causing ’mental injury.’

**Canadian Standards for Psychologically-Healthy Workplaces**

This established, in Canadian case law, an employers’ “duty to care” and these studies led directly to the recent introduction in Canada of voluntary National Standards for Psychologically Healthy Workplaces -- the first of their kind in the world.
Several major corporations announced right off the bat their intention to use these standards – after all, they were designed more as tools not rules. Your colleagues at Lundbeck Canada are among those who stepped forward and I applaud them for that.

(Refer: GWL – ‘Mental Health in the Workplace’) (Mental Health Commission of Canada)

And it is well that that the response by employers has been so forthcoming. After all, chronic job stress is a psycho-social workplace health and safety hazard as dangerous as unsafe equipment, polluted air and criminally poor maintenance.

Chronic Job Stress: Treacherously invasive

And when chronic job stress is experienced on the closing edge of the work day – and taken home – it presents as significant a risk to the cardiac health of employees as smoking (Institute of Work and Health).

Once again, given the links between cardiovascular disease and depression, we see the treacherously invasive nature of chronic job stress as it winds its way into the bloodstream, cognitive well-being and functional capacity of millions.

In my humble estimate, chronic job stress is the most vivid illustration of the brain-body connection - a roaring rush of disruptive pressure through a hormonal explosion that cascades through our physical selves and sense of self like an emotional Niagara.

Offending Management Practices

We published a slate of management practices most likely to cause, exacerbate or complicate emotional distress or symptomatic mental illness -- principally depression and anxiety. A sampling of these offending practices:

Unreasonable demands day-in and day-out, withholding employee discretion, rejecting ‘out of hand’ workload concerns, randomly changing priorities, the treadmill effect at work, and perceived unfairness on a perpetuated scale.

These management practices constitute the breeding ground for chronic job stress that can affect brain function similar to how a serious knock on the head can inflict a concussion.

The Brain, the Environment and Social Climate Change

The brain is plastic. We know that. The brain changes itself. We know that. And the brain reacts to environments and experiences. We know that.

All manifestations of social climate change. As a result, chronic job stress is a dynamic amalgam of environment, experience and brain response that pose a risk to mental health.

Therefore, the prevention of the disabling and even deadly effects of depression singly or in a co-morbid combination cannot rely on medical treatments or psychological care alone.
The reduction and dismantling of key sources of chronic job stress are a necessary component of the ultimately-effective response to the rising rates of depression including the prevention of disablement and premature death.

**International Anti-Depression Campaign**

This is the heartbeat of the argument for psychologically healthy workplaces in the defense of the health and wellbeing of working populations and operational integrit of hundreds of thousands work sites throughout free market economies worldwide.

Therefore, I would suggest this:

The introduction of a significant new compound with such great medical promise might advisedly be accompanied by the first-ever international campaign to promote the strategic value and practical benefits of psychologically healthy workplaces.

**THIS -- to supplement the effective medical care you are bringing to market.**

And there is urgency to this: the prevalence of workplace depression is closing in on 18-25% of employees in the US and Canada - and edging upward in the general populations from 20% to 25% lifetime. It is now reported at 30% in Europe.

All these estimates of the prevalence of depression rise above the conservative epidemiology of the past 20 years

**New Hard Skills of Management**

Creating and sustaining workplaces thus imbued will require managers and executives to learn a slate of new hard skills to lessen and eventually nullify the effects of chronic job stress as a major health risk for working populations.

This means training managers to stimulate and respect the strategic importance of the cognitive capacity of their employees and, in a brain-based economy, to work with this formulation: 'brain health + brain skills = brain capital'

**New Workplace of 21st Century**

We visualize a New Workplace and ‘model of leadership’ where CEOs recognize the link between a healthy culture and healthy employees.

We visualize a New Workplace where CEOs bring mental health-related disabilities from 30%-40% of their total disability experience to 10% and render long-term disabilities due to depression virtually obsolete.

We visualize a New Workplace where CEOs see employee mental health in a brain-based economy as fundamentally as a matter of asset management, promotion and protection.
The industrial age was about capital investment in plants and equipment. The digital age is about investing in the cognitive capacity of workers.

Once again, we make the point: cognition is the ignition of productivity in this brain-based economy.

**Minds of Employees Do The Heavy Lifting of Business Now**

And human software – brain function – has replaced the hardware of the industrial economy as the principal instrument of comparative advantage in the global economy.

A steel company CEO once said this during a Roundtable CEO Summit: “The minds not the backs of people do the heavy lifting in my business.” This reflects the transition business has made from deploying manual skills to putting a premium on cerebral ones.

*All part of the transition to – and advent of -- a brain economy where cerebral not manual skills have a premium*

In this brain-based economy, investors will buy into companies that are able to attract and retain good people and top talent, and will reward healthy workplaces based on human decency and the intelligent management of human performance.

**The best-run firms** – to sharpen their competitive edge – will promote emotional ties and well-being in the workplace and, as an operating principle, adopt the axiom that a compelling place to invest must be a compelling place to work.

In this brain-based economy, the **building blocks of productive capacity** will be ideas, inclusion, productive engagement, trust, loyalty and motivation not the inanimate objects of equipment, glass and steel of the old economy.

Successful companies will create **environments in which human capital grows**. There will be implications of this for purposes of measuring financial value.

*Current accounting rules assign future value to the costs of bricks and mortar and treat them as a capital investment. Human beings are treated as a present cost with no future value. This will change in time.*

Mr. Wilson and I have called for – and will work toward --

**An ‘International Public/Private Partnership of Employers and Science’** to neutralize depression as the leading course of disability in the workforce and, as part of that, nullifying the widespread risks of chronic job stress.

**The Designation of 2014-2022 as the ‘Workplace Decade of the Brain’** to galvanize public and private sector employers behind a ‘defeat depression’ campaign.
On November 19/20, we are convening our 5th US/Canada Forum in Mental health and Productivity in Toronto and the focus – “Epigenetics and Business” – will aim to:

Explore how to build a business and economic agenda to reduce, even eradicate chronic job stress as a depression trigger.

**Future Landscape: Mental Health in the Workplace**

In this, we will move from the landscape of 2013 toward a new landscape where:

- Mental health promotion and protection strategies in the workplace are publically advertised and common knowledge.

- Internationally coordinated research studies have identified the pathway that leads to depression and thus advanced treatment success (the ‘cure’ scenario).

- Diagnosis is more scientific and thus accurate, and treatment plans are timely, customized and accessible.

- Depression co-morbidity is a diagnostic priority and depression research is done in tandem with other chronic illnesses such as heart disease, cancer and diabetes.

- Psychological health and safety standards are common-place and workplaces value employee mental health as a competitive advantage.

Lundbeck is a world-class pharmaceutical research, development and manufacturing organization with an ownership structure inherently geared toward reinvestment and public purpose.

Therefore, you have a powerful platform upon which to engage employers in the manner I have discussed. Canada is an example that major employers are ready to listen, and to act.

*(Closing Delivery Text Only)*