



*Dr. Victoria Franchetti
Haynes*

Victoria Franchetti Haynes, Ph.D., became RTI International's third president in 1999. Her career spans 31 years of technology leadership, management, and new business development.

Dr. Haynes began her career at Monsanto Company in 1977, and held a number of senior management positions, including Director of Technology in the company's Plastics Division until 1992. Prior to joining RTI, she worked for seven years at Goodrich Corporation as Vice President of Research and Development, and later, as Chief Technical Officer and Vice President of the company's Advanced Technology Group. Dr. Haynes currently serves as a Corporate Board Member for Archer Daniels Midland Company, Nucor Corporation, PPG Industries, Inc., and Ziptronix, Inc.

RTI International was established in 1958 as the nonprofit Research Triangle Institute, the founding tenant of North Carolina's Research Triangle Park. RTI was founded as part of a larger effort to harness the intellectual capital of the area's three major universities – North Carolina State University, University of North Carolina at Chapel Hill, and Duke University.

It is one of the world's leading research institutes, with a mission of improving the human condition by turning knowledge into practice. It has 2,800 employees worldwide, 2,200 of which are based on its 180-acre campus in Research Triangle Park, N.C. RTI has a total of eight US offices and eight international offices, as well as ongoing projects in more than 40 countries.



Placing Innovation at the Forefront of Global Economic Development

Interview with Dr. Victoria Franchetti Haynes, President and Chief Executive Officer of RTI International

Can you tell us a little about the history of RTI and its goals and objectives?

RTI International was founded as part of an economic development strategy by the state of North Carolina about 50 years ago when it established Research Triangle Park. The governor, bankers and university folks were great visionaries that wanted to replace North Carolina's textile and traditional tobacco industries with a higher level knowledge and technology base.

Our academic institutions were educating these young men and women, granting many with Masters and Ph.D.s, and yet many of our graduates were leaving North Carolina. The goal of Research Triangle Park was to bring technology and pharmaceutical companies to our region in order to retain and leverage the talent that was being produced by these universities and to support the state's economic and social development.

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RTI International was established as the Research Triangle Institute within Research Triangle Park so that companies that came to the park could enlist our services for their research needs. RTI was a result of collaboration between North Carolina State University, the University of North Carolina at Chapel Hill and Duke University, and was set up as a tax exempt non-profit organization.



However, we still must operate as a business. The mission and purpose of RTI is to improve the human condition, with economic development as a part of this, by turning knowledge into practice. The whole concept of North Carolina's research park was quite visionary. Other research institutes, such as Stanford Research Institute (SRI), were set up before RTI's inception with the same goal of hastening economic development. As a matter of fact, our founding president, George Herbert, came from SRI. However, SRI did not have RTI's overall focus on improving the human condition.

Can you provide some insight into how RTI has evolved under your leadership?

I joined RTI in July of 1999 as President and CEO and at the end of that year we had revenues of close to \$200MM. At the end of our fiscal year in 2010, RTI's revenues were approximately \$760MM and next year we expect to achieve in excess of \$780MM, so we have certainly experienced tremendous growth.

Has that revenue growth been accompanied by geographic expansion?

Yes. Today RTI spans 45 countries around the world. In addition to our US headquarters and offices, we also have operations in Latin America, Asia, the Middle East, Africa and Europe. Approximately one-third of our revenue now comes from our international operations and approximately two-thirds from domestic operations.

What research initiatives has RTI been involved with?

RTI has been involved in a wide array of research programs and disciplines: social science, microelectronics, microbiology, medicinal chemistry, nanotechnology, and solid state lighting, to name a few. We have embarked on very interesting research initiatives in energy, such as coal sequestration and biofuels. In the pharmaceutical arena, several of the leading drug compounds that are used in humans were discovered in our labs.

There are so many important discoveries that have occurred in our research laboratories that go a long way toward improving the human condition in a vast number of areas.

RTI is now one of the leading research, technology, and policy organizations internationally and you sit at the nexus where government and the private sector intersect. Does this position give RTI greater insight into emerging trends?

RTI certainly is unique in that we work on behalf of both the public and private sectors, so we are ahead of the curve in terms of seeing trends – not only in technology,

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but also in the broader economy. Even though we are a research institute, we are very focused on translating our research into applications that work in industry. Our research is not the outcome; it is the solution and how this works in the field is what matters most.

Given RTI's unique position, what do you think are the economic and development issues challenging societies today?

We are facing many issues, ranging from the lack of adequate sources of quality water to the challenges posed by a world population that will grow to be eight to 10 billion people by the year 2050. Energy is another issue that we need to address.

We are dealing with very complex issues here. What concerns me is that we don't seem to be applying our resources in a holistic way to address those problems as a society. At RTI, we are actually bringing together multi-disciplinary teams to solve these societal problems, such as the production of clean water and energy, with both technological as well as behavioral science solutions.

Do you see government and the private sector working in a united way to address these issues?

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You cannot expect the private sector to invest in and develop technologies with their own capital that are not subsequently supported by the government. In energy, for example, the US is still heavily dependent on foreign oil. We need a policy that aligns the efforts and resources of the private sector with government to advance our progress in addressing energy challenges.

« Feeding the world's population is another area where government and the private sector can work hand-in-hand to improve the human condition. In underdeveloped and emerging nations in particular, we have significant knowledge that can be leveraged, not only to feed these populations, but to improve their nutrition and health.

What role do you see the private sector playing with respect to sustainability?

Corporations are trying to do the right thing. As you know, I sit on the Board of several leading companies. Archer Daniels Midland (ADM), for example, has cocoa operations in Ghana and took the initiative to invest its capital with a group of other companies to improve the overall transportation infrastructure in that country. There are many companies that are involved in similar efforts to promote economic development in a sustainable way.

As President of RTI and a Board member of several Fortune 500 companies, how do you rate the innovation of US corporations?

Companies are moving into emerging markets like China, Brazil and India. They are investing in research and manufacturing facilities, as well as developing new and more innovative products, and they are customizing the products that they have sold in the western world to these new markets.

P&G, for example, has been very successful in China, where it has operated for years. The company offers its traditional products in smaller sizes to make them more affordable to consumers in emerging markets, and as the wealth of emerging market consumers continues to grow, more of the population will be able to afford P&G products.

What advice would you give to CEOs who wish to succeed in China, India, Africa or the Middle East?

Many of the successful American and European companies that have been working in China for years have done so through joint ventures with Chinese companies. In fact, the legal framework in China means that joint ventures are often required in order to bring new products to the domestic marketplace. The same goes for India.

I also see significant opportunities in the Gulf States, which want to diversify their economies away from oil by investing in other sectors and technologies. They are very forward looking and are seeking out novel ways to develop

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these new technologies and to facilitate their transfer. Places such as Abu Dhabi, for example, have created biotechnology centers and free-trade zones to spur this sort of innovation.

RTI has worked in the Middle East for over seven years. Can you talk about the work you are doing in Iraq?

Since 2003, RTI's Local Governance Project has been working to create the foundation of a democratic government at the provincial and local level throughout Iraq. Previously, municipal services were delivered largely based on a group's relation to the central government, often based on tribal or religious affiliation. There was little relation between the central government's priorities and needs at the provincial level.

As the government has become more decentralized, RTI has played an important role in training local government officials and helping them learn how to budget, prioritize and allocate resources for services to support the people.

We have made substantial progress working with these local governments. There now is better control, for example, around how funds for initiatives such as new schools and sewage systems are allocated and managed. As a result, many provinces today are getting services that are critical to improving the daily lives and human condition of the Iraqis.

Are you leveraging this expertise in other parts of the developing world?

Absolutely. RTI is also helping to establish stronger local governments in Morocco and to increase the participation of women in government. The Moroccan government recently passed a law that stated that a certain percentage of local representatives have to be women, so we are examining what this means for local women and what their role will be. These are just a handful of the substantive matters that RTI is working to address.

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Does RTI work with the private sector through public-private partnerships?

Yes, the public-private partnership concept is very important. For example, in many countries, we help local governments with the development of education and healthcare systems and facilitate discussions between the public sector and private industry to assist that development.

In Guatemala, we actually got private industry to invest in our project supporting the educational development of the country and encouraged companies to donate time, money and materials to upgrade schools or to work in other areas that require investment.

We can help the private sector with other economic development issues as well, but companies also want to build plants where they have access to a healthy and educated workforce and to a transportation infrastructure that is reliable. That is what companies look for when they invest capital in an emerging economy.

Our US-based clients say that developing public-private partnerships around the world is challenging and can be time consuming. Is there a role that RTI can play?

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We have relationships with foreign governments and we also work closely with many of the ministries involved in projects that are financed by the US government. RTI has great relationships that could be leveraged by private corporations that are interested in building public-private partnerships in new markets. We certainly need more private sector involvement and for many more consortia to come together.

«« *Our clients take their products in developed markets and customize them for emerging markets. Could they innovate in emerging markets and export new ideas back to the US?*

Absolutely. Saudi Arabia is developing the technology infrastructure to do this.

Back at home, what domestic education policies would you like to see to promote sustainable economic growth?

I believe very strongly that a greater emphasis on science and math needs to be a cornerstone of early education. More role models are also required to encourage our young students to pursue the science and engineering disciplines. For me, the US Space program and NASA were inspirational.

Although the US still leads the world in medical research, we really need to expose children to the wonders of science at a much earlier age.

The cost of healthcare in the US has risen to 17% of GDP. What do you think needs to happen to improve access yet control costs?

We have the best technology in the world, so we should focus on prevention and healthy habits, as opposed to treating disease. For example, it is partly because of poor nutritional habits that Type 2 diabetes poses a significant burden on the healthcare system. Obesity, substance abuse, alcoholism and smoking are all health issues in which behavioral interventions can go a long way toward reducing their impact and lowering total healthcare costs.

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You sit on the Board of a silicon oxide bonding technology company, Ziptronix, which was RTI's first spinoff. What are some of the challenges and opportunities faced by early stage enterprises today?

Ziptronix is doing well. We have already received our first license, so we are self-supporting now, and the company will continue to grow. Some day we will have the opportunity to sell it or launch an IPO.

However, what makes an early stage company successful is having the right management team and hitting the market right, as many come to market either too early or too late. You also need to be very careful on how your money is spent and you really need to be patient. Venture capitalists are not usually patient individuals!

You have dealt with VCs for decades. Are they changing now?

During the dot.com era, when you could start up a company without a product and sell it for millions, investors expected a return in three to five years. Now VCs are looking at 10 year timeframes. We have had some patient investors, although others have left. We have learned a lot in the process, but it is not easy and it is very risky.

However, I love working with venture capitalists because a lot of them are helping to develop the market for new technologies. I am a materials scientist, but what excites me is the emerging technology side – finding the future game changers. For example, Post-it® Notes were a very simple technology, but they revolutionized the way we all worked.

You say that having the right management team is critical. How do you select RTI's management team?

At RTI we have a great team. I have been at RTI for 11 years and so has my CFO, but over time, I am consistently adjusting the dynamics of the team and view this as work-in-progress as it takes time to get it exactly right. Since I have been at RTI, I have created three new executive level positions for operations, international development, and Human Resources.

How do you encourage the appropriate team dynamics?

Executives need to realize that however good the executive team is, it will never be as good as the executives own business teams, because executives spend most of their time running their own business. The executive team may work together on corporate issues such as strategy and investment priorities, but often that only represents 10 percent of their time.

What makes the RTI Board work so well?

It is our unique mix of academics, business people and investment professionals, because the Board is comprised of executives from the energy industry, the pharmaceutical industry and from venture capital, along with all of RTI's

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heads of research and development. The academic members really bring a different point of view and I must say that one of them has great financial investment skills.

When I came on board, we needed to formalize committees in the areas of audit, compensation and so on, and when you are building something like this, it makes people bond. We also have our Board Retreat every May where all Board members review and contribute to RTI's strategy.

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Our Board really does work well together. They are dedicated to RTI, they work hard together towards one common goal, and they enjoy their time serving. They also take their fiduciary responsibilities very seriously.

«« This has been a deep and difficult downturn for both public and private sectors, yet RTI continues to grow the top and bottom line. How would you advise leaders in other organizations?

We have invested in the future, so I am a big advocate of knowing what you need to invest now in order to generate business later. If you have smart people in your organization, you also need to listen to them. If their case makes business sense, then you go with it.

We have listened to the people that know their markets, the business, the science and technology, we have invested in their ideas and it has really paid off. We have a very entrepreneurial culture that encourages taking initiative and thinking outside of the box.

Within RTI, we have a 'Strategic Investment Fund,' which has been set up to encourage new ideas, risk taking, and to build long-term creativity. Our goal is to reinvest money from the fund back into the company so that RTI can continue to grow.

Where do you see RTI in five to 10 years from now?

I see us doing more innovative, interdisciplinary work, so that we can tackle serious issues such as healthcare and water. For example, we are conducting a Gulf Coast study

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examining the impact of temporary FEMA trailers on the health of local children, which will combine laboratory work, engineering and social science to collect the data, to monitor the children and to assess the results.

I see us developing more compounds to use in healthcare and working more in the area of personalized medicine. I also think we will continue expanding internationally so that we can become even more involved in economic development, in assisting foreign governments and in encouraging technology transfer.

We need to bring more innovation to all our businesses and we need more innovative ways to make economic development work, whether that is helping to make the education of girls in Egypt more effective or encouraging government contractors to generate new ideas, not just delivering services for a set cost.



What has been your greatest accomplishment at RTI?

We have done many great things at RTI, essentially by renewing scientific stature and bringing it to the forefront of business. I think that establishing RTI's Health Solutions group was my greatest win from a financial perspective, because it has achieved an incredible return on investment for our institute. However, I think my greatest accomplishment is yet to come!

This interview was conducted by John W. Brennan, Managing Director of Arthur D. Little Americas and Diana M. Bolick, Director of Americas Marketing & Business Development.

Arthur D Little