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ACCESS TO CAPITAL: FOSTERING JOB CREATION AND INNOVATION THROUGH HIGH-GROWTH STARTUPS

HEARING

BEFORE THE

SUBCOMMITTEE ON
ECONOMIC POLICY

OF THE

COMMITTEE ON
BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

ON

EXAMINING POTENTIAL STARTUPS TO CREATE JOBS AND SPUR ECONOMIC GROWTH AND INNOVATION

JULY 20, 2011

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C O N T E N T S

WEDNESDAY, JULY 20, 2011

ACCESS TO CAPITAL: FOSTERING JOB CREATION AND INNOVATION THROUGH HIGH–GROWTH STARTUPS

WEDNESDAY, JULY 20, 2011

U.S. SENATE,
SUBCOMMITTEE ON ECONOMIC POLICY,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Subcommittee met at 10 a.m., in room SD–538, Dirksen Senate Office Building, Hon. Jon Tester, Chairman of the Subcommittee, presiding.

OPENING STATEMENT OF CHAIRMAN JON TESTER

Chairman TESTER. I call to order this hearing of the Economic Policy Subcommittee. The title of this hearing is "Access to Capital: Fostering Job Creation and Innovation Through High-Growth Startups." I want to welcome the witnesses. We will get into a description of them very, very soon here.

I look forward to hearing from you folks this morning about the potential startups to create jobs and spur economic growth and innovation, provided that they have an essential resource for growth, and that resource is access to capital.

Capital provides new opportunities for Main Street businesses and families in Montana and across the Nation. It creates jobs and it boosts local economies. Clearly, we have work to do to rebuild our economy and to make sure that we strong investments. Smart investments foster innovation and pay dividends into the future for us, our kids, and our grandkids.

The role of startups in creating jobs and driving innovation has been well documented, provided that they have access to financing to scale and grow their firms, and to make sure capital markets are in reach for startups. Understanding this potential, it is critical that we empower these businesses with the tools that they need to survive and thrive, creating new jobs and growing our economy. We must respond to the unique challenges that small businesses face in accessing financing, giving the relative risks associated with new and innovative firms and the difficulty in collateralizing assets. And we must ensure that these young companies are able to access the long-term capital that they need to bring innovative ideas and products to the markets.

Today I hope that we can examine the challenges and opportunities that face innovative startups and their ability to access capital in various stages of their development, the significance of capital to the success or failure of these startups, and what public policies we can better facilitate the formation of innovative startups and enhance their ability to access capital.

I look forward to hearing from all of our witnesses this morning. I am particularly pleased that we have two Montana witnesses here with us. I know they will be able to address some of the unique challenges and opportunities facing startups in rural communities. They are entrepreneurs, and they clearly reflect America's entrepreneurial spirit, which is part of what keeps rural America strong and makes our economy the most innovative in the world.

Senator Vitter is due to come, and when he comes, we will kick it over to him, as well as some other potential Subcommittee Members if, in fact, they did not get tied up with something like debt limit conversations.

So with that, I think we will start with our witness introductions, and once again I'd like to welcome all three of you. I am going to start with Ted Zoller, and we will just go from my left to right.

Ted is vice president of entrepreneurship of the Ewing Marion Kauffman Foundation, where he guides the foundation entrepreneurship programs. He also serves as executive director of the Center of Entrepreneurial Studies at the University of North Carolina, Kenan-Flagler Business School, and the founder of Commonwealth Ventures, a private equity and venture accelerator firm. I want to welcome you, Dr. Zoller.

Elizabeth Marchi hails from Polson, Montana, currently served as the fund coordinator of the Frontier Angel Fund, Montana's first angel fund, and is cofounder of Northfork Strategies. She is also working with the Governor's Office of Economic Development to build the Montana Angel Network and Innovate Montana and is an entrepreneur herself, selling all natural Montana-raised Kobe beef from a ranch outside Polson.

Finally, last but not least, Dr. Robert Bargatze joins us from Bozeman, Montana, and is founder and executive vice president and chief scientific officer of LigoCyte Pharmaceuticals, which is developing innovative vaccine products, including a product to prevent norovirus. He has 27 years of experience in immunological research and also serves as chairman of the Montana Bioscience Alliance, the public–private partnership to grow and sustain the biotech industry in Montana.

I welcome you all. Before we get to your testimony, I want to kick it over to the Ranking Member, Senator Vitter, for his opening statement.

Senator VITTER. Thank you, Mr. Chairman. I am going to save my time. I want to hear the witnesses, and I would rather save my time for discussion and questions.

Chairman TESTER. Absolutely.

We will start with you, Dr. Zoller. Thank you for being here.

STATEMENT OF TED D. ZOLLER, VICE PRESIDENT OF ENTREPRENEURSHIP, EWING MARION KAUFFMAN FOUNDATION

Mr. ZOLLER. Chairman Tester, Ranking Member Vitter, and other Members of the Subcommittee, I am Ted Zoller. I am vice president of entrepreneurship at the Kauffman Foundation. I am also a business faculty member at the University of North Carolina at Chapel Hill. I am a business owner, I am an investor. I just wish I was a Montanan. That would round it out.

[Laughter.]

Mr. ZOLLER. I would invite Members of the Subcommittee this morning to put yourself in the shoes of a founder of an American firm, and I am guessing with all the deficit wrangling going on right about now, that sounds pretty good.

As a promising entrepreneur, your business concept solves a problem and fills a customer need. As you know, starting any new enterprise requires capital. The investment period every business experiences until it reaches cash-flow—a concept called the "J-curve"—is a perennial issue to any startup. This need for investment is precipitated by capital requirements, labor costs, and the negative cash-flow you will experience until your business is established in its market. The J-curve can only be remedied by access to capital, and when capital is not forthcoming, this represents a substantial barrier to new firm starts. While a small percentage of firms can be "bootstrapped" or self-financed, the vast majority of all new enterprises—and in particular high-growth firms that rely on innovation and capital investment—require outside funding in the form of equity and debt to shoulder the J-curve.

The picture I paint for you this morning is that, unfortunately, your job is harder today than it has been prior to the financial crisis because both equity and debt financing are not as readily available. The J-curve is now a barrier to your entry as opposed to simply a hurdle in becoming a going concern.

Why is it harder today to finance your startup? Well, there are three reasons:

First, venture capital and other forms of private equity have largely abandoned early-stage investing, opting instead to pursue more reliable returns in later-stage ventures.

Second, while angel and friends and family investors have entered to fill the gap, they are not as adept in connecting to later-stage capital partners that will fuel the firms' growth, and angel capital availability is a fraction of the equity that we have enjoyed in the past.

Third, the consolidation of the banking institutions and their current conservative posture toward risk precipitated by the Wall Street crisis has choked off needed debt financing. If you cannot access equity financing, you can no longer start a business today without collateralizing the debt against your personal assets, and the line of credit that you need to smooth your cash-flows now comes with higher interest rates, more punitive terms, and generally not at the limits needed to finance your firm. So I am sorry to say today large banks are simply no longer a partner to small business. This is a bleak picture that we all face as entrepreneurs.

While we have seen a clear resurgence of angel investors and are hopeful by innovation occurring in the community and commercial banking sector, our early-stage pipeline is under unprecedented stress. This has staggering implications on our economic future. Since the recession in 2008, Kauffman data indicate that more firms than ever are being formed. That is the good news. The bad news is that this result is hollow—as the new firms that are largely being formed today are sole proprietorships as opposed to job-creating firms. New firms with employees during this same period, in fact, have been dropping—a troubling indicator suggesting a slowdown in the formation of potential scale companies.

Contrast this fact to another study published by our foundation that up until the financial crisis, U.S. job and output growth was driven by the formation of new firms and startups, and firms younger than 5 years old were responsible for virtually all the net new job creation. We have concluded from our research that if the U.S. were to consistently generate between 30 and 60 new companies whose annual revenues eventually reach $1 billion, our country would enjoy permanently a 1-percentage-point increase in its growth rate. So guess what? This promises a solution to our fiscal future.

So if our goal is to motivate our economy and create new jobs, we have to focus on job-creating, early-stage firms—especially focus on those firms that have the potential to achieve high growth and scale.

Yesterday, the president of the Kauffman Foundation, Carl Schramm, presented a solution we are calling the Startup Act. This proposal speaks to many of the dilemmas faced in my testimony providing access to capital, by:

First, modifying the tax code to facilitate the financing of small business, with a permanent capital gains exemption on investments in startups held for at least 5 years. This is an idea supported by the National Advisory Council on Innovation and Entrepreneurship.

Second, reducing corporate tax burdens for new companies in the first 3 years they have taxable income with a phased exclusion on taxable profits. Again, an idea supported by the National Council.

Third, making it easier for growing private companies to go public, by allowing shareholders who invest in firms with a market cap of $1 billion or less to decide whether to comply with the requirements of Sarbanes-Oxley. If the IPO window is opened, investors will be a lot more willing to finance early-stage companies when they have at least the option of going public after they have reached scale, rather than simply selling out to larger firms.

So these proposals, among others, are needed to undertake the course correction required to make the United States once again the best place to found, grow, and scale an entrepreneurial venture in the United States. Putting us back on course will require the creativity of our Government and business leaders and, of course, our entrepreneurs. I am confident we will achieve these aims and look from to the leadership in making America's entrepreneurial future again possible.

Thank you very much for the opportunity.

Chairman TESTER. Thank you, Dr. Zoller, for your testimony, and thank you. I did not point out the 5-minute time limit, but you were almost right on the money.

Mr. ZOLLER. Thank you very much.

Chairman TESTER. Liz Marchi, you are up next.

STATEMENT OF ELIZABETH MARCHI, FOUNDER AND FUND COORDINATOR, FRONTIER ANGEL FUND, LLC

Ms. MARCHI. Thank you. Mr. Chairman, distinguished Members of the Subcommittee, Ranking Member Vitter, my name is Liz Conner Marchi. I am the coordinator of the Frontier Angel Fund, Montana's first angel investment fund; a former economic development executive in Flathead County, which I might say is about the size of the State of Connecticut; the coordinator for Innovate Montana; and a business consultant with Northfork Strategies. I live on a working cattle ranch in the Mission Valley of northwest Montana near Glacier National Park.

I am honored to have the opportunity to speak before you today with a voice informed by 10 years of work in economic and business development in Montana. I want to thank my great fellow Montanan, Senator Jon Tester, for offering this privilege to me today. Prior to moving to Montana, I worked in business and economic development in North Carolina where I was a constituent of Senator Hagan's.

The most interesting people I have ever met in my life live in rural America. Most of them are innovators and entrepreneurs because they have had to be to survive. As my business partner at Northfork Strategies, Diane Smith, author of TheNewRural.Com says, "When I worked in Washington, DC, I knew a hundred patent lawyers and not one innovator. Within months of moving to Montana, I knew dozens of inventors and only one patent lawyer." That speaks volumes about the challenges and opportunities we face in America to retool an economy deeply impacted by globalization and technology.

I want to speak today to three issues that I think merit your attention as we focus on new job creation: financial capital must be available to entrepreneurs; innovation and discovery are everywhere; and telecommunications infrastructure and regulatory policy are critical to this effort.

Today's capital environment is incredibly difficult for entrepreneurs. Before the recession, many entrepreneurs bootstrapped startups with personal credit cards. Banks would just ask you to mortgage your house for a business loan, and, frankly, that was a pretty significant barrier to entrepreneurship even before the economy went south. In today's climate, it is hard to know what your house is worth, so lending on an asset is pretty rare. Most bankers will tell you today that they are working for regulators, not for customers. So bank lending today is driven by cash-flow, and most startups have no cash-flow, and some do not have any liquid assets. Banks look at history. As a result, bank debt is a very unlikely source of capital for entrepreneurial ventures which rely on a forward-looking opportunity.

Angel investors look forward at opportunities. In 2005, we initiated a conversation with a number of high-net-worth individuals who were living in Montana. In addition to investment capital, they had deep skill sets in starting and building successful businesses. So in 2006, the Frontier Angel Fund closed with 33 investors who put in $50,000—and some put in $100,000—each to invest in early-stage businesses located in our region. So what is an angel investor? It is an accredited investor, according to the SEC definition, that is generally the first professional money in a business after family, friends, and fools. I want to thank all of you responsible for the compromise on the accredited investor definition in the Dodd-Frank bill. Without the compromise, more than two-thirds of the potential angel investors in Montana would no longer have been accredited.

Angel investors differ from venture capitalists in that they are investing their own money, not other people's money. And most angels have a double bottom line: they want to make money, but they also want to see their communities and regions prosper. Many angels are successful entrepreneurs, and they share a real affinity for mentoring and coaching others. The estimated size of the angel and VC markets in the U.S. are roughly the same amount, $20 to $30 billion annually. But in 2009, venture capital went to 3,800 companies in the entire United States while angels funded almost 56,000 new startups. Two-thirds of all VC investments were in California, Boston, and New York, and half of all States had only one or no VC deals. Angel investments happen in every State in America.

The Frontier Fund is easy to find. We have an online application process. We screen deals every other month; we meet every other month. We have looked at over 300 companies since inception and have investments in 10 regional startups, most of which have a proprietary product or service.

Government policy and investment play a critical role in enabling the kind of telecommunications infrastructure required for businesses to operate today. In last-mile locations like Livingston, Montana, companies like Printing for Less have developed sophisticated business platforms for serving global markets, telecommunication infrastructure is critical. Bandwidth and speed are their lifelines.

Bandwidth supports many new enterprises throughout Montana. TeleTech has 900 employees in the Flathead. Bandwidth and a trainable workforce brought them there. Profitability keeps them there.

Innovation and discovery are everywhere, but we must find better ways to connect capital to ideas and to entrepreneurs. This is the recipe for new jobs in all of America.

We need Federal policy that does all it can to minimize regulations, provide essential telecommunications infrastructure, encourage angels, provide real-world business education and strategy to entrepreneurs, and does not lose site of the incredible talent and ambition we find today all over America.

I have never regretted bringing my children to Montana to be educated there in public schools. In addition to a great education, they have learned values like thrift and self-reliance that are part of the fabric of life in rural America. We cherish our landscape, and with your continued vigilance, rural America will be an important part of the path to economic prosperity and national renewal.

Thank you very much.

Chairman TESTER. Thank you, Liz.

Dr. Bargatze, I will need you to turn on your microphone, if you can, or bring it closer to your mouth.

STATEMENT OF ROBERT F. BARGATZE, EXECUTIVE VICE PRESIDENT, CHIEF SCIENTIFIC OFFICER, LIGOCYTE PHARMACEUTICALS, INC.

Mr. BARGATZE. Good morning, Chairman Tester, Ranking Member Vitter, and Members of the Committee. My name is Rob Bargatze, and I am the founder and vice president and chief scientific officer of LigoCyte Pharmaceuticals and chairman of the Montana Bioscience Alliance. I want to thank you for the opportunity to speak with you today about the unique hurdles to accessing capital that innovative biotech startups face today.

Biotechnology has an incredible potential to unlock the secrets to curing devastating disease and helping people to live longer, healthier, and more productive lives, but barriers that small biotech companies encounter on a daily basis raise some important questions: Would we rather see the next generation of breakthrough cures discovered by researchers in Bozeman or Beijing? Do we want the jobs associated with this groundbreaking science to go to workers in Missoula or Malaysia? If we want more scientific breakthroughs that allow us to enjoy a high quality of life, then shouldn't we be putting in place policies that encourage innovation through private investment?

While the biotech industry faces significant challenges, we nonetheless are uniquely positioned to deliver the next generation of cures and treatments to the bedsides of patients who desperately need them, at the same time creating a healthier American economy.

The leash that holds our industry back from helping more people is, in large part, the devastating effect that a lack of access to necessary capital that can help grow our biotech companies. Today Congress has the opportunity to help speed lifesaving cures and treatments to patients by bolstering capital formation in our industry.

My company, LigoCyte, is a private biopharmaceutical company based in Bozeman, Montana, with 38 employees. When I cofounded LigoCyte in 1998, we were the quintessential small business. My four cofounders and I each gave the new company $5,000 to get things off the ground—our first round of financing. With our start-up funds, we bought kitchen cabinets from the local home improvement store down the street and installed them ourselves, giving ourselves our first laboratory in the Montana State University Technology Park. Our first contracts for service were with large pharmaceutical companies which gave us enough income to cover overhead while we wrote SBIR grant proposals. We were able to use the SBIR funds to advance our research enough to be awarded a contract with the Department of Defense for our vaccine pipeline. Our success there led to venture capital financing, the true lifeblood of the biotech industry.

We currently are entirely privately funded with the exception of ongoing contracts with DOD. Getting to this point was not easy. There is no "beaten path" for small companies like ours to follow. Instead, we have to break new ground, both in our science and in our search for funding.

Biotechnology R&D is a long and difficult road. It takes more than a decade and upwards to $1 billion to bring a new medicine from discovery through clinical trials and on to FDA for approval. Due to this capital-intensive process, companies lacking research and development funds turn to private sector investors to finance the early stages of development.

Montana startups are at a particular disadvantage due to the dearth of venture capital firms in and around our State. Venture fundraising continues to be on the decline, and small companies have borne the brunt of the investors' reluctance.

The shift in the economy has also harmed companies like mine that already have venture financing. Historically, venture capitalists receive a return on their investment when a company goes public through an IPO. However, IPO markets are closed. Investors are not able to exit and companies do not have access to large public markets necessary to fund late-stage clinical trials. This hampers critical research, forces companies to stay private for longer, and depresses values of later-stage venture rounds.

The breadth of the financing problem in the biotech industry calls for comprehensive solutions to ease capital formation. In addition to the difficult financing landscape and struggling public markets, growing biotech companies also face regulatory burdens which further hinder capital formation in our industry. One such burden is the financial reporting standards of Sarbanes-Oxley Section 404(b). Dodd-Frank made permanent exemptions for small businesses with market caps under $75 million do not have to comply, but most biotechs are valued much higher than that due to successive rounds of financing. Because we have no product revenue, we do not have the resources needed to focus on complex reporting. By raising the exemption ceiling to $700 million and adding a revenue test to Section 404(b) and SEC Rule 12b-2, Congress could allow cash-poor companies, small, innovative biotechs, to focus on speeding cures and treatments to patients rather than Sarbanes-Oxley compliance.

There is already an avenue for these small companies to raise funds and avoid unnecessary burdens in the form of SEC Regulation A, which allows for companies to undergo a direct public offering valued at less than $5 million without observing traditional disclosures requirements. However, the $5 million limit was set in 1980 and no longer provides a real view of small companies looking for access to public markets. I believe Regulation A could have a positive impact for biotech companies if its eligibility threshold was increased from $5 million to $50 million while maintaining the same disclosures. This a result of the increased company valuations and higher levels of capital needed all driven by the impact of inflation on the cost of development.

Although SEC policies like Rule 12b-2 and Regulation A are designed to monitor public companies and offerings, the agency also keeps tabs on private companies when they reach a certain size. Currently the limit is 500 shareholders. However, most biotech companies provide employees with stock options during that decade that it takes to develop a single treatment. Employee turnover pushes the shareholder number to over 500. Increasing the shareholder limit from 500 to 1,000 and exempting employees from the count would relieve a small biotech company from unnecessary costs and burdens to grow.

These measures I recommend have no burden on the taxpayer, but would have a substantial impact on the viability of our biotech industry.

The U.S. biotech industry remains committed to developing a healthier American economy, creating high-quality jobs in every State, and improving the lives of Americans. While there is no single solution to the challenges facing our industry, the portfolio of options I have presented will help biotech companies in Montana and across the Nation weather the current economic storm and continue working toward delivering the next generation of medical breakthroughs—and, one day, cures—to patients who need them.

Thank you.

Chairman TESTER. Thank you for your testimony. I am going to kick it over to Senator Vitter for his comments and questions at this point in time. Could you put 7 minutes on the clock, please.

Senator VITTER. Thank you, Mr. Chairman. I do have another hearing, as you know, and I appreciate the courtesy. And thank you all for your testimony and, more importantly, thank you all for your work.

Dr. Bargatze, let me start with you on one of the topics you mentioned near the end, which is the mandate under Sarbanes-Oxley. As you mentioned, the SEC Small Business Advisory Board suggested an exemption of $700 million, but Congress instead, through Dodd-Frank, passed an exemption of $75 million—obviously a big difference.

I take it from your testimony you support more reasonable robust exemption like $700 million. Why don't you put a little bit more meat on the bone of what that would mean and what burden that would lift?

Mr. BARGATZE. Sure, certainly. Where we are as a company in our stage of development, we are only entering into Phase II clinical trials now, and we have a long way to go. We have already raised in excess of $80 million in that process, so we actually are approaching that point where Sarbanes-Oxley is going to be a major issue for us. Our valuation is not yet that high, but I feel that, you know, as we move forward, we begin to talk with pharma companies, and we are valued, I think we are going to be dealing with Sarbanes-Oxley, and this could make a significant difference in the cash resources that we have to actually move forward our products rather than putting that into essential accounting.

Senator VITTER. And how major a burden and a drain would that requirement be?

Mr. BARGATZE. It makes the difference between being able to hire a critical person who is necessary for our vaccine development to move forward. Not being able to hire that person, having to meet these SEC regulations is something that essentially is an incredible burden in terms of us getting the job done.

Senator VITTER. Right. Would you all also like to comment on that Sarbanes-Oxley issue?

Ms. MARCHI. I would. I know I have had another Montana company, not in the biotechnology space, say it cost them between half a million and a million dollars a year to comply. You know, I do not know if the number is $700 million or the number is $250 million, but it is higher than $70 million.

Senator VITTER. OK. Thank you.

Mr. ZOLLER. I would also argue that in the case of Sarbanes-Oxley it represents more or less a new barrier for mid-cap companies that are on their way up. I think that more attention should be placed on that transition. So if you were to look at the life cycle of a firm as it grows, Sarbanes-Oxley is designed ultimately for a company that is quite established. I do not think we were thinking at the time when we did Sarbanes-Oxley about the implications on growth companies, what we are calling "gazelles." And what we have found is that gazelles are our employers; whereas, as large companies, more mature companies, actually become so productive that they destroy jobs. Emerging companies, young companies, small-cap companies, mid-cap companies grow jobs. So if we are looking to grow jobs, we should not be selling the golden cow that is ultimately the great tool we have.

Senator VITTER. Great. Thank you.

Ms. Marchi, in your testimony you say, "We need Federal policy that does all it can to minimize regulations." How would you grade Washington the last few years on that central core statement?

Ms. MARCHI. With all due respect, I think you need to go back to school.

[Laughter.]

Senator VITTER. Good. I agree. I appreciate that. And, specifically, how do you think Dodd-Frank addresses that issue?

Ms. MARCHI. Well, certainly, on the accredited investor definition, I submitted, in addition to my written testimony, the net worths of individuals who tend to be angels, and, frankly, the preponderance of them are in the $2 to $3 million category. And I will submit to you that somebody in Polson, Montana, who has got a $2 or $3 million net worth is doing pretty well and is not real excited about the U.S. Congress telling them that they cannot make an investment in their local technology company that is trying to create jobs. So in that respect, we appreciate the compromise, but we were not happy about any change, frankly, in the accredited definition. And the same thing with Regulation D, we appreciate your help on that. That had some very unintended consequences for small startups.

Senator VITTER. Right. Mr. Zoller, I would invite your reaction with regard to Dodd-Frank generally.

Mr. ZOLLER. Well, as a matter of fact, there is a trend occurring now that I am not sure we are totally recognizing in the policy arena, and that is, you know, we are seeing a democratization of capital and equity, and we are seeing that a number of small investors can be crowd-sourced to actually accomplish things that would have otherwise been only in the domain of people with high net worth. And what we are seeing in the case of even someone with $1 million net worth is the capability to actually fund extraordinarily high growing companies given the advances we have had and the scale of new businesses and the development of cloud computing, things of that nature that have lowered the barrier to entry.

So the fit of capital to firm has changed fundamentally, and we should be encouraging everything we can do to bring private net worth into capital investment, especially when it comes to building new growing concerns that will grow jobs. So the Kauffman Foundation would advocate for, you know, policy to actually focus on the democratization of equity.

Senator VITTER. OK. And, Mr. Zoller, also to follow up on that, you make a major point about bank consolidation and other trends hurting traditional bank financing. In your opinion, has that in recent months, in the last year or so, been getting better or worse?

Mr. ZOLLER. Hard to say. I do not have any data that would reflect it, but I will give you a personal anecdote that I think will bring some illumination to it.

I own a small business myself, and I recently called one of the three largest banks that will remain nameless for the sake of this testimony, and they could not even find my account, and I have been doing business there for over 3 years. This is a good example of how, you know, scale I think affects the performance of our banking institutions, and I am quite excited about the innovations I have seen in the community banking environment where, you know, folks are recognizing the relevance in regional banking settings. But we need to focus very carefully on how large banks are working with our small business sector because right now I would argue that it is completely broken.

Senator VITTER. Well, I share that gut feel. Let me say in closing I share the gut feel. I am very concerned that what Washington has done in this sector recently not only enshrines, does not dismantled too big to fail. I think it simply adds a new category on the other end of the spectrum, which is too small to cope, and it is creating more consolidation and moving the trend in the wrong direction, not the opposite direction in terms of size and consolidation.

Thank you all very much.

Chairman TESTER. Thank you, Senator Vitter.

I am going to kick it over to Senator Toomey from Pennsylvania for his comments and questions, and 7 minutes on the clock again, please.

Senator TOOMEY. Thank you very much, Mr. Chairman and Ranking Member Vitter. I also want to thank you for allowing me to kind of crash this party. Since I am not on your Subcommittee, it is kind——

Chairman TESTER. We appreciate you being here.

Senator TOOMEY. Well, it is kind of you to do this, and I just want to assure you that I have a great interest in this topic generally. I am somewhat of a serial entrepreneur myself. I have been through the process of raising capital. I have been an investor. And I have seen how difficult it is for small, growing firms to access the capital that they need. And so I really want to give you all the credit I can for raising this very, very important issue.

This is about economic growth and job creation, and the way I look at it is there are two categories that I really hope that this Congress will make some progress on, and I know you are both interested in doing that. One is making it easier to raise capital privately because that is how things get started and how that initial growth occurs.

And the other part that is equally important to me is accessing capital in public markets. We can lower the burdens and obstacles in both of these categories, and if we do, we are going to have more startups. We are going to have more growth. We are going to have more jobs. And it is very, very encouraging to me that you are addressing this.

One of the things that I wanted to invite anybody to comment on is in the life cycle, the early life cycle of startup companies, we often have a, often, a fairly predictable sequence of capital raises for a growing company. It often starts with maybe angel investors, moves on to venture capitalists, then maybe an expanded private offering before ultimately a public offering. If we made substantial progress in facilitating capital raises at any point along that sequence, does that not help all along the sequence?

Even, for instance, the liquidity event of an IPO. The mere fact that that becomes more achievable, more doable, less costly, does that encourage the earlier scale investment? Does that do something to encourage angel investors or venture capitalists because they see a more realistic exit strategy? Would each of you comment on that.

Mr. BARGATZE. Yes, I would be pleased to comment on that. Essentially, our company has raised capital a variety of ways, actually. A critical part of that is in addition to the traditional private markets, certainly SBIR is a very important aspect. It is our seed capital in Montana. We really do not have a significant number of other sources. I think Liz's angel efforts fairly recently have made a huge difference in providing some early-stage capital, but when we look at what can be provided through SBIR, where you have phases of funding—for example, one of the programs that we funded, we have raised over $8 million in SBIR funds to develop a product, and that is significant in terms of resources that help you move forward to the point where you have proof of concept.

I think the other aspect you asked about, with regard to IPO, I think this is really critical for our investors now that we have venture investors on board. They are looking for an exit in which they get a multiplier, and right now in biotech, it is very difficult to do, simply because of the long time for development, and actually, at this point, very low returns on investment that we are seeing in terms of what investors are getting. The deals that are happening seem to be driven down right now by the Pharma industry. They are trying to get cheap products. Essentially, they are bidding low on what these products are in terms of what it has cost to develop them. And so that is really driving down the deals and driving down the multiple investment that the investors are getting as a consequence of being in for 8 or 10 years before they actually see a return on their investment.

Ms. MARCHI. And I would like to speak to that. Angels very rarely invest in life science or biotechnology, simply because of the amount of capital required to product development—even though we did invest in Bob's company, because we think it is an awesome company.

But we encourage "bootstrapping" to begin with, without a doubt, and as angels, we are looking more and more at companies that do not ever need venture capital because it is such expensive money right now. But the IPO markets are critical for exits and I think our whole notion of scale is changing. When we look at a company like Facebook, with the kind of market cap it has, it is still a small company.

Senator TOOMEY. Yes.

Ms. MARCHI. You know, it is a very different world we live in in terms of adding value.

Mr. ZOLLER. Mr. Toomey, I think it is an outstanding question in a lot of ways because it occurs to me that when a new firm begins, it begets another new firm, right. There is a champion effect. And I would argue that when a firm goes through an M and A or an IPO, that would beget a new trade sale or IPO.

But to a certain extent, getting it right will involve kind of solving on a quadratic equation. What I mean by that is you have to solve at every level for it to occur, and I would submit to you right now, as we speak, while we have new starts, improving our capitalization engine at the early stage is broken so that any chain in the link, at some point, if it is broken, will actually have an effect throughout the entire life cycle, as you suggest.

So a focus on each of the life cycles is going to be critical to maintain kind of critical mass and ultimately the momentum that will keep our economy surging forward. And at this moment, we have got two of the four key stages, I think, in distress.

Senator TOOMEY. Right. And one other question, Mr. Chairman. You know, Pennsylvania is a home to a very large number of very, very successful bio companies. The life sciences are a booming sector in various parts of Pennsylvania and it is a very, very encouraging area for us for job growth, for quality of health care.

Dr. Bargatze made a very interesting observation in your suggestions about the cost of compliance with Sarbanes-Oxley. You are suggesting that, in many cases, not only is it very costly to comply, but it is not very useful information because the nature of the business, there are other activities that are more interesting and more useful to investors than the items that are demanded by Sarbanes-Oxley. I was wondering if you could elaborate on that a little bit and share with us the importance of diminishing this burden.

Mr. BARGATZE. Yes. Certainly, I think, in limiting this activity, it certainly frees us up to do a lot of activities that are much more important in terms of generating clinical data, providing that data in a context where we can take it out to investors to raise more capital. It is also important to be able to generate this kind of data to partners that we potentially could bring online that brings more resources as a consequence of their interest in codevelopment that may associate with this data.

And so it is really a distraction from our main focus. In a company, in a biotech, I mean, you are not profitable until you actually have a product that reaches the market. And now we are looking at a life cycle of, in our case, it is something in excess of 14 years, and this is not atypical from the time you start on a particular product until the time it either makes it or fails.

And so I think that just simply because it is a capital-intensive activity, anything that distracts us from being able to focus on the activity that is providing the value, is of no value to us.

Senator TOOMEY. And also, as you point out in your testimony, it is not very useful to investors to have the reams of data about Sarbanes-Oxley for a firm that has no revenue yet. What is much more important is the actual—the tests, the trials, the development of the science, and the application——

Mr. BARGATZE. Precisely. That is where the interest is. We do accounting at a level that is sufficient for our investors to be quite happy with how their investment is being managed. Accounting is certainly something that we put in place and have had in place for a number of years as a consequence of our DOD contracts. And so we can certainly pass a DOD audit. There is no reason why that should not be sufficient for investors.

Senator TOOMEY. Thank you. Thanks very much, Mr. Chairman.

Chairman TESTER. Absolutely, Senator Toomey. There will be another round. If you have got one more, I would let you do it, but otherwise, I am going to continue with more.

Senator TOOMEY. I have got to run, but I appreciate your having me.

Chairman TESTER. Absolutely. I appreciate you being here and I appreciate your line of questions.

And with that, I want to thank the panel for being here. The first question I have, you have all three addressed it in one way or another, but I would like you to address it again, and that is from your perspective, is the biggest challenge out there for startups in rural and urban areas, and some of you have had experience in both, is it capital alone? Is it expertise? Is it infrastructure? And could you kind of give me an idea, if you could rank them, and it is probably going to be pretty tough to do that, but we will start with you, Dr. Zoller.

Mr. ZOLLER. So a lot has been said about the concept of champions. Serial entrepreneurs are a critical element to creating an ecosystem that ultimately is going to be high-performance, people who have done it, who have been there, who have had experience and are facile in developing their understanding of the market, being able to bring their ideas to the market in the form of a venture.

You know, I am very bullish on what I am seeing now because I think many people are now understanding the impact of entrepreneurship and now entering as founders into the market. We have a very healthy kind of culture that is evolving now, especially among our young people. I see a young generation that gets it and are really driving into entrepreneurship.

Unfortunately, enthusiasm is not enough. It might be a necessary but not sufficient condition, because you need to solve on several parts of the equation. The other part would ultimately be the environment in which they operate. Are the barriers high? And I would submit to you that under the current economic climate, there is tough sledding now. So as a consequence, it is harder to build your venture into a going concern in today's environment.

All that being said, there are some natural opportunities that are coming about as a consequence of technology development that are dropping the barriers at the same time to certain aspects of building your firm from a technical standpoint.

Then the pieces that I have outlined in my testimony regarding capital. I think that, unfortunately, debt partners are not as readily available today. I think it is harder to access debt capitalization. And, frankly, debt capitalization in particular, when you are talking about line of credit, is really critical to an early-stage company because you are trying to smooth out and use your assets as carefully as you possibly can.

One of the challenges you have in accessing a credit facility easily is that you lose control of your own resources, and as a consequence, it becomes inefficient. What we found is that this equity scenario has turned out to be the only solution, but equity is very, very precious, and in order to use your equity efficiently, you need to understand how to use debt. So banking has got to be a critical element to solving this challenge.

And then we have all outlined the challenges in accessing early-stage equity. You know, fortunately, we have got angels coming to the rescue now and I think it is becoming a little bit more systematic, which is exciting. But that also takes the same leadership that I mentioned at the very beginning. The serial entrepreneurs become the angel investors. So it is a virtual cycle and you have to have health at every level of that cycle for ultimately us to maintain that critical mass.

Chairman TESTER. Thank you, Dr. Zoller.

Liz, do you want to address this.

Ms. MARCHI. And I certainly echo, and I think the key word is “ecosystem” here. I just want to give the example of Avail TVN, a company that was born in Kalispell, Montana, with a native Montanan who had put $50,000 on his credit card. Married him with an experienced corporate executive who had done a couple of startups, some angel investors, and we have a company today in Montana that had $150 million in revenue. One of their employees from Belt, Montana, has actually probably become kind of a rich kid when the company exits.

But it is all of those things. It is the expertise. It is the ecosystem. It is the entrepreneur. It is the enthusiasm. But the guidance—building a company is not easy and we confuse—we have not embraced that business development is economic development. We get distracted by a lot of other things. But if you want jobs, you have got to have new companies.

Chairman TESTER. Rob.

Mr. BARGATZE. To address the issues you brought up, I think certainly what we find is there is really an incredible amount of expertise in Montana. Our schools are graduating kids with incredible experience and biotechnology capabilities. So we really are well stocked in terms of that.

The thing we have learned is that location in Montana is just outstanding. I mean, we have all the resources that we need to run the facility from the standpoint of the connection with information. The University provides us with the necessary expertise and facilities that we do not have within the company that are very expensive that we can get through contracting through them and working with them closely.

I think that one of the things that we are missing, is a business infrastructure that really helps us to provide the necessary expertise to provide our entrepreneurs with the ability to navigate the business world. We have a lot of scientists at the universities that would really like to spin out companies, but in fact, with few sources of this type of schooling, so to speak, it is very difficult for these folks to move forward.

One of the things that truly is limiting is capital, because in the State of Montana, getting VCs from the coasts to come and see what we are doing there is very difficult. Once we get them there, they are really excited because they actually see that we have great things going on and we have great technologies coming out of the universities and there is a lot of opportunity for startups within the State. So getting our round of VC funding is a consequence of a summit a couple of years ago. As a consequence we have more people that are now looking at opportunities in the State. But because of the economic climate, it has been a lot more difficult to get the deals done there, but they are slowly happening and we are getting help in starting.

Chairman TESTER. I want to follow up on that just a little bit. As far as access to capital in rural America, is the issue distance from available capital, or is it knowing where to look for the available capital? Which is the bigger impediment?

Mr. BARGATZE. Well, OK. It is sort of a two-step problem. One, we traveled to all these sites for 10 years to try to raise venture capital, and it really was not until the sixth or seventh year of this effort that we were able to bring in capital from outside of the State. Part of that was the fact that these guys do not want to travel. They have got deals going on right in their local areas and if they do not have to get on an airplane to go somewhere, that is a much better deal for them. However, once you get them to Montana and they see the fly fishing, they see the skiing, all the opportunities there, they think it is a really good place to visit and so we actually have a bunch of really dedicated investors that are now strongly supporting us.

So that plus the fact that we found that you really need to get into the clinic with the biotech company. You have to have human clinical data at this point to get an investment in Montana. This is not the case on the coasts, where people can be at earlier stages to get VC investment. So we have a hurdle to overcome there, but I think we are getting there, and if we continue to be successful with the companies that we have been able to start, I think we are going to get more folks to the State that are going to be looking at deals.

Chairman TESTER. Thank you.

We have been joined by Senator Hagan from North Carolina. You can go ahead, Kay. Seven minutes on the clock.

Senator HAGAN. Thank you, Mr. Chairman, and I really do appreciate you holding this hearing today because I think that small businesses, new firms, are really the job creators in our Nation today, and it certainly is proof positive in my State in North Carolina.

And I do want to welcome Dr. Zoller here today, Vice President of Entrepreneurship of the Ewing Marion Kaufmann Foundation. I have looked at a lot of your work and I actually cite it, so I do appreciate the great work you are doing. Also the Executive Director for the Center for Entrepreneurial Studies at the Kenan-Flagler Business School at UNC–Chapel Hill, which has definitely spun off a number of thriving companies from the University.

One of my children graduated from Chapel Hill about 2 years ago under the business school and Chinese and got a great education there, and I know, Ms. Marchi, you, too, have North Carolina connections. Although you are in a great State in Montana, come to the beaches in North Carolina. Fly fishing is great in both places.

[Laughter.]

Senator HAGAN. But, Dr. Zoller, you mentioned that certain changes to the tax code would be useful in facilitating the financing of small businesses, and you suggested that exemptions from capital gains taxes for small businesses could have a beneficial impact on growth. And I have heard that other tax changes suggested for this purpose, such as allowing partnership structures to pass through tax assets or providing credits for angel investors. Can you discuss the effectiveness of these types of tax changes and the associated risk.

Mr. ZOLLER. Well, first off, I am glad to have you here, Senator Hagan. We were outnumbered by Montanans three to two now——

[Laughter.]

Mr. ZOLLER. ——and we are Tarheels, so I think we can make up for the difference——

Senator HAGAN. Right.

Mr. ZOLLER. ——but it is a tough act. These are tough people. Good people.

Senator HAGAN. I agree.

Mr. ZOLLER. I have got to admit, we were having this conversation right before the hearing, and it is not altogether clear, frankly, that incentives on the investment side or the equity side have as much effect as perhaps tax relief on the founder side or the entrepreneur side.

I have been involved in a number of investments, for instance, where the investors were not aware that tax credits might be available both at the State and Federal level, are available to them. So it is an untested question as to whether or not a tax credit on the equity side would, in fact, have an impact.

I think part of it is because Government really has a hard time marketing those opportunities. What investor would not take advantage of that credit if they knew about it? So I think it is worthwhile to present as an experiment, and I think that experiment is something that I think would be critical to investors.

But I honestly think the most important solution would be reducing corporate tax burdens on the entrepreneur side, and the idea that we are proposing is a phased exclusion of taxable profits. So the problem is the investment period of an early-stage company, negative cash-flow period. That is one of the key challenges in getting a company started, and survival rates are a key problem. Companies fail during that negative cash-flow period. So if we can give tax relief during the building of a firm to the founding team and entrepreneurial venture, I think it will pay huge dividends. So I think you should solve on both sides, not just on the investor side, but on the entrepreneur side. We are suggesting both.

Senator HAGAN. Can you discuss why you would target the investors and small businesses rather than changing tax policies for the businesses themselves? And also, I have heard it suggested that we could change the way the net operating losses are calculated or how intangibles are amortized to achieve a similar effect for small firms.

Mr. ZOLLER. I think that those would be outstanding solutions, because there are differences in the ways companies scale. Some companies are very capital-intense. Others can be brought to high growth without a lot of capital investment. So solutions that would help use, for instance, a capitalization or amortization of investments that are made both in tangibles and in intangibles, I think, would have a pretty substantial benefit as you are building a company.

You know, Dr. Bargatze was talking a little bit about the notion of bootstrapping and how you bring valuation to a certain point so it is attractive to an equity investor. These tools would allow the entrepreneur to actually build a stronger case for their valuation prior to going out to the market for equity, and that would actually put them in a much stronger position to actually be able to lead the firm through time and maybe even retain more of the equity as time goes on. And, frankly, I would rather have the equity in the form of the founder and the entrepreneur than in the form of professional investors.

Senator HAGAN. You know, I talk with a lot of different companies and some of the new, I think, some of the biotech, biomedical companies that I was speaking to recently said they were actually going to Ireland to start some of their businesses. And I was just curious if any of you have seen the fact that we are not doing this type of taxation policy here, that we are, in fact, losing companies that either had started here or would have planned to start here and then we have lost them to other companies.

Mr. ZOLLER. One thing I will mention just briefly, and cede the time to the rest of my panel, is that we have been working with the Start-Up Peru Group. This is a group that just has put out a simple proposal. In order to bring companies to Peru, we will give you $25,000 and provide a space. And Americans are flocking in hoards there.

I have been shocked by the differences in early-stage capital available in Europe relative to the U.S. It is easier to form a $5 million premoney evaluation type of equity investment for a venture that is started in Denmark than it is in the United States. So this is something we need to really focus on. The money is not getting to where it is needed most, and that is among early-stage companies that can actually take this opportunity to market and to growth.

Mr. BARGATZE. Although I do not have any direct experience, I do have anecdotal experience in terms of knowing that there are a number of Asian companies that are creating biotech centers and then offering the opportunity for companies to move there with incentives. So there are certainly deals there that are providing companies with less cost in terms of infrastructure and incentives in terms of investment to help move the firm and establish the firm, and then most likely, I would think, providing them capital for operations. So that is something that certainly I have seen. I have been approached, but we have not had any details in terms of discussions, because we want to stay in Montana.

Senator HAGAN. Well, I will tell you, with unemployment rates where they are around the Nation, and in North Carolina, about 9.7 percent, we have got to be forward-thinking in our policies to be sure that small niche companies can grow and create jobs, have access to capital, and, in my case, employ more people in North Carolina and around the country, certainly without losing these companies overseas.

Thank you, Mr. Chairman.

Chairman TESTER. Thank you, Senator Hagan. I appreciate your comments.

It is interesting, what you said about Peru and potentially Ireland. It would be great to sit down and figure out what we could do that could actually make a difference, and I think back to when I first got in the State legislature. I went to a farm convention and there was an economic developer there that said—now, this was in 1998—that said, it is evident to me that with the incentives that are out there—this is the other end of the spectrum—that you could make a good living just fleecing the Government and not do one doggone thing when it comes to economic development. So there must be some middle ground there, where we can stop the fleecers but yet allow the bona fide companies to really grow, and we could have another hearing on that at some point in time.

But I want to talk about community banks, because community banks are something you talked about, Dr. Zoller, with your experience with the big guys, and I have always looked at them as being a supporter of established businesses, particularly in rural America, for operating loans and those kind of things. Can they play a role, or would they play a role, or do you see even a possibility of them playing a role when it comes to startups?

Mr. ZOLLER. You know, as a matter of fact, I am quite enthusiastic about what I am seeing in community banks. You know, that simple relationship between the founder and the banker is the relationship that helped build our country and we have to go back to that simple concept. Because of the Internet and because of the scale of our enterprises and the scale, frankly, of banks today, it is difficult for that relationship between the regional banker or the local banker and the business owner to actually be established, and community banks offer the opportunity to reduce the scale so that the bankers understand the business impact of capital to the growth of that business.

A banker can understand the risk that is being placed on the part of the founder, can understand the promise of that business, and actually can position debt in such a way to help fuel the dreams of that individual. I honestly think that that is risk taking that we cannot afford not to be doing. That is exactly the kind of risk taking that built our country to what it is today.

I think back even to the very first days of Standard Oil. When John D. Rockefeller outlined the opportunity, he turned to the banks to actually open up the opportunity. Without that partnership between the banks and John D. Rockefeller, Exxon would not exist today. Now, that is a very strange example to bring up, but in the day, it was an entrepreneurial company, right? That dyad of the banker with the founder is something we have to come back to, and by going through a five-level CRM system through a telephone-based menu is not the way to get there.

Chairman TESTER. I appreciate that. Would anybody else like to comment? Liz.

Ms. MARCHI. I would. We have watched in Montana our banks literally live in fear of regulators. They are completely risk averse. And one of the big issues that we have, as you well know, is we do not do comps very well. The nearest comp is 100 miles away, and that just does not work in this system today. So I could not agree with you more, and the sad thing in Montana is that we still have that relationship, but hands are tied. They are just tied.

Chairman TESTER. Yes. Rob.

Mr. BARGATZE. Actually, we have had some very good experiences with local banks in Bozeman. It has really been a result of a track record we developed locally as a consequence of federally guaranteed loans that we got from the city. We were able to borrow over $600,000 over a number of years. As a result of us being able to pay those back, we developed relationships with local banks that have given us lines of credit of up to a million dollars, and so that has been very instrumental in us being able to make it through gap periods where we have needed to borrow and then repay when we had additional funds we were able to bring in to move the company forward.

Chairman TESTER. That is good.

I would like to start with Dr. Zoller again, but I would like you to talk broadly about the shift away from IPOs to mergers and acquisitions and its impact upon jobs.

Mr. ZOLLER. It is a very troubling type of barrier that has been placed. You know, there are only two exit windows, and when you look at it from the investor's standpoint, they are looking ultimately to return capital for their investment and they look, quite frankly, at the exit opportunities. The only two exit opportunities that are available to a firm—well, I guess there are three exit opportunities—one is M and A, or a trade sale. The second one would be an IPO. And the third would be failure, which is not an exit opportunity that people look for.

For all intents and purposes, the last several years, the IPO window has been closed, and while we have seen some, perhaps, recent examples of things that make us optimistic, I am just as nervous about those opportunities because I think we are dealing with an inflated valuation scenario in most cases.

We really need to think about build-to-last companies, not build-to-sell companies. Entrepreneurs can build companies that will employ millions, and if you think about the companies just after the bubble, for instance, that have really made our economy—I am talking about the Ciscos and the NetApps and the Genentechs and different sectors—these were build-to-last companies, not build-to-sell companies. And, frankly, an IPO is the best way to deliver on a build-to-last opportunity.

Chairman TESTER. Would either of you want to comment? It is up to you.

Ms. MARCHI. And what we have seen in Montana, actually, is a couple of companies go into Canada and doing sort of the reverse shell market, and the real reticence on the part of a lot of companies to pursue the IPO market is just the expense is just enormous. It is absolutely enormous to be a public company today.

Chairman TESTER. OK. You talked about firms that were ready to go public, and Dr. Bargatze, you have a firm like LigoCyte who has been, I would say, reasonably successful, if not very successful. How does a firm know when it is ready to go public? I can start with you, Rob, or I can start with Dr. Zoller. It does not matter. Go ahead, Rob.

Mr. BARGATZE. Yes, I think that there are some critical elements in terms of, at least in biotech, what stage you are at with regard to your clinical development. Have you got a proof of concept? Have you gotten to the point where you have shown that your product is actually working and it is safe? We actually have reached that point, and I think if we were looking at earlier times, you know, before the economic downturn, there is a very high likelihood with the IPO markets open, with additional things that we have had in our pipeline that we have had to shelve as a result of difficult access to capital, we would have been in a position to actually move to potentially go to an IPO. But because of the current conditions, you know, that IPO window is not open, and certainly mergers and acquisitions are not as attractive as an IPO in terms of both the founders and VC investment group, because frequently these mergers/acquisitions are staged events, and they pay out over a long period of time. There is essentially no return on investment that comes back to our investors.

Chairman TESTER. OK. All right.

Mr. ZOLLER. One thing I would add is that there is an interesting psychology when you are preparing a firm for an IPO, and usually it is the run-up in understanding how to position it for that event. The investment bankers will signal, you know, what is the best outcome for the firm, both from the standpoint of its future market takedown as well as its valuation, and will literally shop the opportunity among potential acquirers at the time when they are preparing an IPO.

I would submit to you, however, that in most cases when the first is acquired, fundamentally the structures are upset because the acquirer will integrate the company into its own, you know, identity, its own body. In many cases there is radical downsizing. In most cases there are innovations that are left on the table because they do not synchronize with the acquirer's goals; whereas, in the case of the IPO, the founding team can maintain its strategy, preserve its employees, and ultimately develop the capacities to actually take it to the next level. There is no question in my mind, if you are looking for employment growth, IPO is definitely the way to preserve it.

Chairman TESTER. OK.

Ms. MARCHI. And, frankly, at the level—we are usually the first money in. What we are finding is we are having to start working with our companies much earlier in order to coach them to exit so that we retain our investment value.

Chairman TESTER. I got you. In parting, I would like to have you share with me what you see out there that is very exciting that gives you hope and that we should know about. Who wants to go first? I hope there is an answer. Liz, do you want to go first?

Ms. MARCHI. Never a problem.

Chairman TESTER. I did not think so.

Ms. MARCHI. I actually think that it is an incredibly exciting time in Montana and across the United States. I love that this audience today has so many young people in it. We have smart kids. They have a global perspective. They have grown up with technology. And, frankly, I think the opportunity that technology gives us is amazing.

We are going to soon be in a business world where it is not about your résumés or your referrals. It is going to be about the product that you have produced because everybody can see it. I love in Montana, I am watching software developers work from Yemen and Estonia and Arlee and Bigfork. And we talk about clusters. It is not clusters geographically anymore. It is communities of interest, and they are building them online.

So I see the opportunity to create value and discovery and solve problems within this country unprecedented because of our ability to connect and communicate. And I want to thank you very much for holding this hearing.

Chairman TESTER. Thank you for being here, Liz.

Rob.

Mr. BARGATZE. I think there are two factors that I think are very promising. One is that Montana is ripe, actually for development of industries like biotechnology. One of the things that I have not talked about that is really critical is the cost of doing business there is far lower than doing business on the coast. So our venture capitalists have actually made note of the fact that it takes a third more money to get to the same place in a clinical development plan on the coast than it does in Montana. So we really offer a great economic equation in terms of efficiency of what we do with that dollar and how far we can go with it.

The other thing that collides with that and provides a great opportunity is the big pharma companies are downsizing their research and development groups. Those groups are no longer producing the products internally. Biotech is really the source of innovation. And so when you look at those two things together, it is basically saying if we bolster the biotech community in Montana, we potentially are going to be providing the solutions that the big pharma companies need to build their pipelines to continue to make products. And with that we will actually be able to have a huge impact on health, and particularly with vaccines, because the best preventative way to lower costs and prevent disease is really to create vaccines that prevent diseases that can otherwise be quite devastating and quite costly for the health care system.

Thanks for the opportunity.

Chairman TESTER. Thank you, Rob.

Dr. Zoller.

Mr. ZOLLER. Senator Tester, I really appreciate you putting together this panel today. This is one of the most critical issues, I think, facing our country, and we have got one heck of an opportunity, and it is because of the people that are behind you and the people that are behind us on the panel, the young people that are here. They really get it. Fundamentally why I am bullish is the young people are taking charge of the situation, and they see the opportunity, I think, to leverage entrepreneurship as a tool to really make progress in our society. They realize that the promise of a large enterprise is in the future. They know that they are going to try to solve a problem and they are not going to take no for an answer. So I am very bullish on the opportunity.

To a certain extent, clusters have been an abstraction. I think now we have to talk about networks, and ultimately what the young people do not realize and what I would kind of suggest they should be focused on today is that they will need some of us gray hairs to kind of help unlock some of the potential. My hope is that we are seeing a democratization among our entrepreneurs, and that democratization is also flowing on the equity side. If we can bring the two communities together, investors and entrepreneurs, I think we are going to unlock a potential that will be a great opportunity for the United States.

Chairman TESTER. Well, thank you, and I thank all three of you for being here. Just to kind of give you my perspective on this, I could not agree with you all three more. I get the opportunity to meet with a lot of young people in this job, and it gives me incredible hope for the future. They do have it figured out very, very well. They understand this world in a way that gives me hope for the future in a very positive way.

I want to thank you all for testifying today. I very much appreciate your insight and your knowledge about how to create jobs and how to grow the economy. I think you are right. The companies that you folks work with every day, the startups, the entrepreneurs, is really how we are going to get out of the economic downturn that we are in, and I look forward to working with all of you into the future on the issues we discussed here today.

For the record, the record will remain open for 7 days, and any additional comments and any questions that might be submitted will be in that record for the next 7 days.

With that, I once again thank the panelists, and this hearing is adjourned.

[Whereupon, at 11:09 a.m., the hearing was adjourned.]

[Prepared statements and responses to written questions supplied for the record follow:]

PREPARED STATEMENT OF TED D. ZOLLER

VICE PRESIDENT OF ENTREPRENEURSHIP, EWING MARION KAUFFMAN FOUNDATION

JULY 20, 2011

Chairman Johnson, Ranking Member Shelby, and other Members of the Committee, my name is Ted Zoller, and I serve as Vice President of Entrepreneurship at the Ewing Marion Kauffman Foundation, am a faculty member in the business school at the University of North Carolina at Chapel Hill, and an entrepreneur. I appreciate the opportunity to share some perspectives on capital access to start-up and scale businesses in the United States.

The Entrepreneur's Dilemma

I would invite Members of the Subcommittee this morning to put yourself in the shoes of a founder of a new firm in the United States—this is perhaps one job more exciting than being a United States Senator. As a promising entrepreneur, your business concept solves a problem, fills a customer need, and fulfills what the market demands. However, starting any new enterprise requires capital. The investment period every business experiences until it reaches cash flow break even—a concept termed the "J-curve"—is a perennial issue to any start-up. This natural need for investment is precipitated by capital requirements, labor costs, and the negative cash flow you will experience until your business is established in its market and has gained a loyal set of customers. The "J-curve" can only be remedied by access to capital, and when capital is not forthcoming, represents a substantial barrier to new firm starts. While a small percentage of firms can be "bootstrapped" or self-financed and can achieve break even through their own cash flows, the vast majority of all new enterprises—and in particular high-growth firms that rely on innovation and capital investment—require outside funding in the form of equity and debt to shoulder the J-curve.

Pressure on Early-Stage Capital Access

The picture I will paint for you this morning is that your job is harder today than it has been prior to the financial crisis and recession in the United States, because both equity and debt financing are not as readily available. The J-curve is now a barrier to your entry as opposed to simply a hurdle in becoming a going concern. Why is it harder today to finance the start-up? Three reasons:

First, venture capital and other forms of private equity have largely vacated early-stage investing, opting instead to form syndicates to pursue more reliable returns in later-stage ventures, largely abandoning early-stage concerns.

Second, while angel and friends and family investors have entered the early-stage financing market to fill the gap, these angels are not as adept in connecting to later-stage capital partners to continue the financing needs of the venture over its lifecycle to fuel the firms' growth, and angel capital availability is a fraction of equity investment that was available in the past.

Third, the consolidation of banking institutions and their current conservative posture toward risk precipitated by the Wall Street financial crisis has choked off needed debt financing. If you cannot access equity financing, you no longer can start a business without collateralizing the debt against your personal assets and signing a "personal guarantee," and the line of credit that you need to smooth your cash flows now comes with higher interest rates, more punitive terms, and generally not at the limits needed to finance your firm. The large banks are no longer a partner to small business. Indeed, I have personally operated a family business now for 3 years and recently contacted my bank for service—one of the three largest banks in the United States that for the sake of my testimony will remain nameless—and they could not even find my account, claiming on the phone that I was not their customer. This is a bleak picture that we all face as entrepreneurs.

Macroeconomic Relevance of the Start-Up

While we have seen a clear resurgence of angel investors and the trend toward democratization of equity investing and are hopeful by innovation occurring in our community and commerce banks, our early-stage pipeline is under unprecedented stress. This has staggering implications on our economic future. Since the recession began in 2008, Kauffman data indicate that more firms than ever are being formed each year. Unfortunately our research reveals that this result is hollow—as the new firms are largely sole proprietorships and "consultancies" as opposed to job-creating firms. New firms with employees during this same period in fact have been dropping—a troubling indicator suggesting a slowdown in the formation of potential scale companies.

Contrast this fact to another series of studies published by the Foundation—that up until the financial crisis and subsequent recession, United States job and output growth was driven by the formation of new firms or start-ups, and firms younger than 5 years old were responsible for all net new job creation. Moreover, we have concluded from our research that if the United States economy could consistently generate 30–60 new companies whose annual revenues eventually reach $1 billion, the United States would enjoy permanently a 1-percentage-point increase in its growth rate. This promises a solution to our fiscal future. So if our goal is to motivate our economy and create new jobs, then we must focus on job-creating, early-stage firms—especially those firms that will achieve high-growth and scale and require long-range financing. Achieving this goal will require a continuous stream of new, bold entrepreneurs, fewer roadblocks to the formation of new enterprises, and low-cost capital available to finance startup and growth.

A Solution to Our Entrepreneurial Future

How can we do this in light of the looming budget austerity at all levels of government? We must do this, as our fiscal future is at stake. Yesterday, the President of the Kauffman Foundation, Carl Schramm, presented a solution we are calling the Startup Act. This proposal speaks to many of the dilemmas faced by the entrepreneur that I have framed in my testimony and are the subject of this hearing—providing access to capital, by:

- First, modifying the tax code to facilitate the financing of small business, with a permanent capital gains exemption on investments in start-ups held for at least 5 years. There is a strong case, given the job creation and innovation benefits of start-ups, for exempting from any capital gains tax patient investing in early-stage companies—an idea supported by the National Advisory Council on Innovation and Entrepreneurship.
- Second, reducing corporate tax burdens for new companies in the first 3 years they have taxable income. To ease the pressure on start-ups precipitated by the J-curve and initial cash flow, the National Advisory Council has also suggested a full exclusion on corporate taxable income earned by qualified small business on the first year of taxable profit, followed by a 50-percent exclusion in the subsequent 2 years—an idea our research would support.
- Third, making it easier for growing private companies to go public, allow shareholders who invest in firms with a market cap of $1 billion or less and are in the best position to judge the cost-benefit of financial auditing mandates to decide whether to comply with the requirements of the Sarbanes-Oxley Act. If the IPO window is opened, investors will be a lot more willing to finance early-stage companies and their continued growth when those companies have at least the option of going public after they have reached scale, rather than simply selling out to a large firm, thereby retaining the entrepreneurial energy of the scale enterprise as a long-term business venture and employer.
- Fourth, reforming Federal regulation by sunsetting all major rules after 10 years, requiring all new major rules to pass a benefit-cost test, and collecting data on regulation at the State and local levels to allow for the objective evaluation of how regions can promote business-friendly climates.

These proposals, among others, are needed to undertake the course correction required to make the United States once again the best place to found, grow, and scale an entrepreneurial venture. The economic shocks of the financial crisis coupled with the challenges of our debt have fundamentally changed our direction. Putting us back on course will require the creativity of our Government policy makers and business leadership and, of course, our entrepreneurs. I am confident we will achieve these aims and look to your leadership in making our entrepreneurial future again possible.

Thank you.

PREPARED STATEMENT OF ELIZABETH MARCHI

FOUNDER AND FUND COORDINATOR, FRONTIER ANGEL FUND, LLC

JULY 20, 2011

Mr. Chairman, Distinguished Members of the Subcommittee, my name is Liz Conner Marchi and I am the Coordinator of the Frontier Angel Fund, Montana's first angel investment fund, a former economic development executive for Flathead County, the Coordinator for Innovate Montana and a business consultant with

Northfork Strategies. I live on a working cattle ranch in the Mission Valley of Northwest Montana near Glacier National Park.

I am honored to have the opportunity to speak before you today with a voice informed by 10 years of economic and business development work in Montana. I want to thank my fellow Montanan, Senator Jon Tester for extending this privilege to me. Prior to moving to Montana, I worked in economic development in North Carolina where I was a constituent of Senator Hagan.

The most interesting people I have ever met live in rural America. Most of them are innovators and entrepreneurs, because they have had to be to survive. As my business partner at Northfork Strategies, Diane Smith, author of TheNewRural.Com says, "When I worked in Washington, DC, I knew plenty of patent lawyers but not a single inventor. Within months of moving to Montana, I knew dozens of inventors but only one patent lawyer." This speaks volumes about the challenges and opportunities we face in America to retool an economy deeply impacted by globalization and technology.

I want to speak to three issues that merit your attention if new jobs are to be created:

- Financial capital must be made available to entrepreneurs
- Innovation and discovery is everywhere
- Telecommunications infrastructure and regulatory policy are critical to this effort

Today's capital environment is very difficult for entrepreneurs. Before the recession, many entrepreneurs bootstrapped startups with personal credit cards. Banks once would just ask you to mortgage your house for a business loan. This, frankly, was a significant obstacle to entrepreneurship when the economy was good. In today's climate, it's hard to know what a house is worth, so lending on an existing asset is rare. Most bankers will tell you they are working for regulators today, not customers. Bank lending today is driven by cash flow. Most startups have no cash flow, and some don't have many liquid assets. Banks look at history. As a result, bank debt is a very unlikely source of capital for entrepreneurial ventures which rely on a forward looking opportunity.

Angel investors look forward at the opportunity. In 2005, we initiated a conversation with a number of high net worth individuals who were living in Montana. In addition to investment capital, they had deep skills sets in starting and building successful businesses. In 2006, the Frontier Angel Fund, LLC closed with 33 investors who put in $50,000 each to invest in early-stage businesses located in the region. What is an angel investor? An "Accredited Investor" that is the first "professional" money in a business after family, friends and fools. I want to thank all of you responsible for the compromise on the Accredited Investor definition in the Dodd-Frank bill. Without the compromise, more than two thirds of potential angel investors in Montana could no longer be "accredited." Angel investors differ from Venture Capitalists in that they are investing their own money, not other people's money. Most angels have a double bottom line: they want to make money but they also want to see their community or region prosper. Many angels are successful entrepreneurs and they share a real affinity for mentoring and coaching others. The estimated size of the angel and VC markets are roughly the same, $20–$30 billion annually. In 2009 Venture Capital money went to 3,800 companies in the United States while angels invested in almost 56,000 companies. Two thirds of all VC investments were in California, Boston and New York and half of all States had only one or no VC deals. Angel investments happen in every State in America. [1]

The Frontier Fund is easy to find—we have an online application process, we screen deal submissions every other month, and we meet in person every other month. We have looked at over 300 companies since inception and have investments in 10 regional startups, most of which have a proprietary product or service. Frontier Fund conducts a monthly call with 18 other groups in the inland Pacific Northwest to share investment opportunities and to learn from each other. Angels are very important, and we need more of them. In that regard, I would encourage your support of a Federal angel tax credit. And as you consider capital gains, think about the importance of that capital for angel investing.

Included in my submission today is a map of angel groups in the U.S. provided by the Angel Capital Association of which the Frontier Angel Fund is a founding member. They are now in every State in the union. Compare that to Venture Cap-

[1] PricewaterhouseCoopers Money Tree Survey, 2006–2009 and Jeffrey Sohl, Center for Venture Research, University of New Hampshire, "The Angel Investor Market in 2007: Mixed Signs of Growth", 2008.

ital which is concentrated on the east and west coasts. I would encourage your focus on ways to support the growth of angel networks and funds.

Government policy and investment plays a critical role in enabling the kind of telecommunications infrastructure required for businesses to operate today. In last mile locations like Livingston, Montana (population 7,300), where entrepreneurs like Andrew Field with Printing for Less.com have developed sophisticated businesses printing platforms serving a global market, telecommunication infrastructure is critical. For his company, bandwidth and speed are lifelines. And in the case of PrintingforLess, which employs 160 highly trained workers, initial funding came from a Montana based early-stage seed fund, Glacier Venture Fund, and other local angels. Debt sources allowed the business to grow, but equity got it off the ground.

Bandwidth supports scores of new enterprises throughout rural America. TeleTech, a customer contact center, located in Northwest Montana employs 900 people. Bandwidth and a trainable workforce attracted this company. Profitability keeps it in Montana. You can build and scale a technology based enterprise from anywhere if you have the right business model, employees, and pipes. Avail TVN, the largest provider of digital media services in North America, was born in Kalispell, Montana, in 2005. A team of technologists, guided by an experienced former corporate executive, built a company that last year had $150 million in revenue, employs over 100 with 20 in Kalispell. As an employee of Avail-TVN, a former University of Montana student from Belt, Montana (population 589), has a real chance at becoming wealthy through stock options if the company is sold or goes public. The initial seed funding for Avail came from local angels and a local rural telco. The local talent is as good as it gets, they just need the teaching and sophistication that comes from experience.

Many of the programs designed here in Washington, DC, are built for clusters of industries. This doesn't translate well to rural innovators. A team in Montana is likely to include someone using open source software in Estonia working with software developers in Bozeman, Bigfork, and Arlee. It's a virtual community of interest, not necessarily a geographic one. We often get a one-size-fits-all approach, and it often doesn't fit for rural areas.

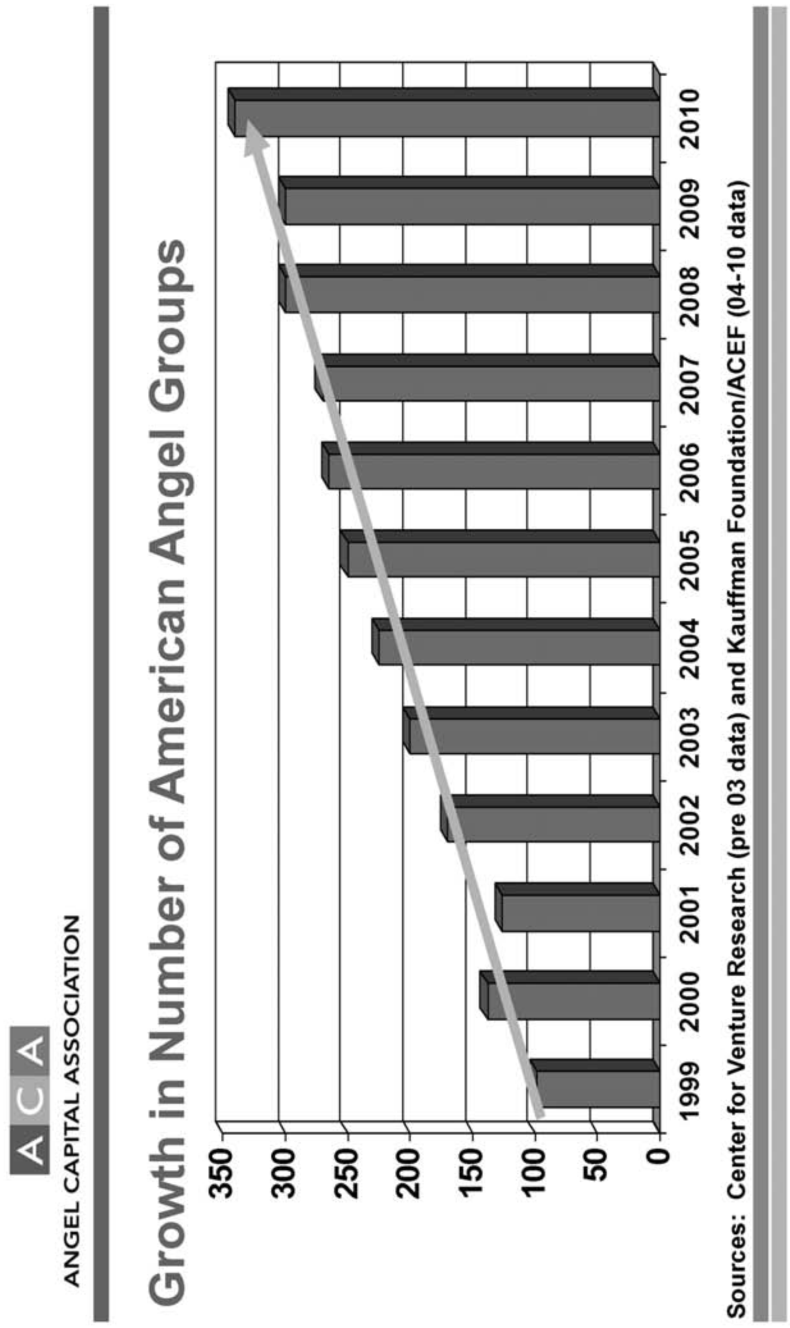
Innovation and discovery are everywhere. But we must find better ways to connect capital to ideas and to entrepreneurs. This is the recipe for new jobs in all of America. Innovate Montana is a new initiative to not only tell our growing number of entrepreneurial success stories, but to build a virtual community of interest around businesses in IT, Cleantech, and Life Science. It's a low overhead collaboration led by CEO's in the private sector, Governor Schweitzer's Office of Economic Development, Tech Link, and the Tech Transfer offices of our Montana universities. Too much money, time, and energy is spent trying to create jobs without a business perspective in the mix.

We need Federal policy that does all it can to minimize regulations, provide essential telecommunications infrastructure, encourage angels, provide real world business education and strategy to entrepreneurs, and doesn't lose site of the incredible talent and ambition that you find in rural America. Federal policy is often made in Washington, DC, where you have 11,000 residents per square mile. It doesn't always translate effectively to a place like Montana where we have 6.8 people per square mile.

I have never regretted bringing my children to Montana to be educated there in public schools. In addition to a fine education, they have learned values like self-reliance, being thrifty and being innovative—all a part of the fabric of life in rural communities. We cherish our landscape and with your continued vigilance, rural America will be an important part of the path to economic prosperity and national renewal.

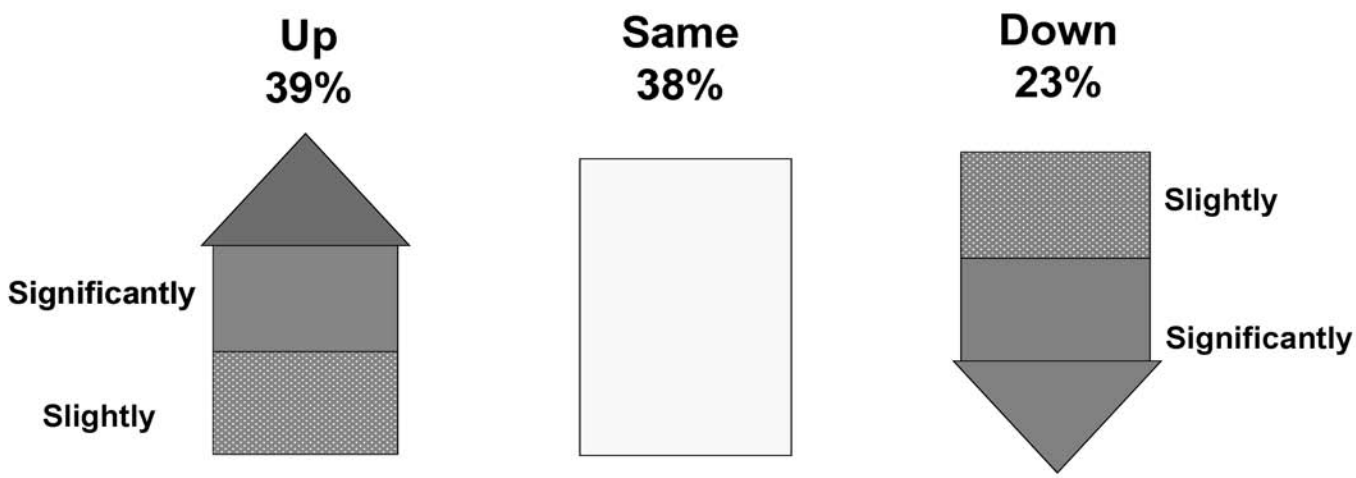
Thank you.

ADDENDUM 1


ACA
ANGEL CAPITAL ASSOCIATION
Growth in Number of American Angel Groups
350
300
250
200
150
100
50
0
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Sources: Center for Venture Research (pre 03 data) and Kauffman Foundation/ACEF (04-10 data)

ANGEL CAPITAL ASSOCIATION

Angel Groups Membership Changes Mixed in 2010



Source: ACA-SVB Confidence Survey – March, 2010

ACA
ANGEL CAPITAL ASSOCIATION

Why Angels Join Groups

- Experience of Bill Payne:
  - 50 deals since 1980
    - ¾ as solo angel, ¼ as member of group
  - Board experience on most deals
  - Several awesome exits
  - Many lifelong friendships

ANGEL CAPITAL ASSOCIATION

Payne: *"I will not make new solo angel investments"*

- Deal sourcing is difficult as solo investor
  - Stay under radar
  - Use trusted sources
- Due diligence is time-consuming & difficult
  - Reading business plans
  - Inadequate vertical experience
  - Difficult to validate IP
- Lonely and risky experience

ANGEL CAPITAL ASSOCIATION

Investing through Angel Groups

- Dividing the work eases the pain
- Variety of vertical experience available
- Standardized processes & term sheets
- Deal flow encouraged – entrepreneur-friendly
- Pick and choose the deals you like
- Greater potential to diversify angel portfolio
- Great camaraderie among like-minded

ANGEL CAPITAL ASSOCIATION

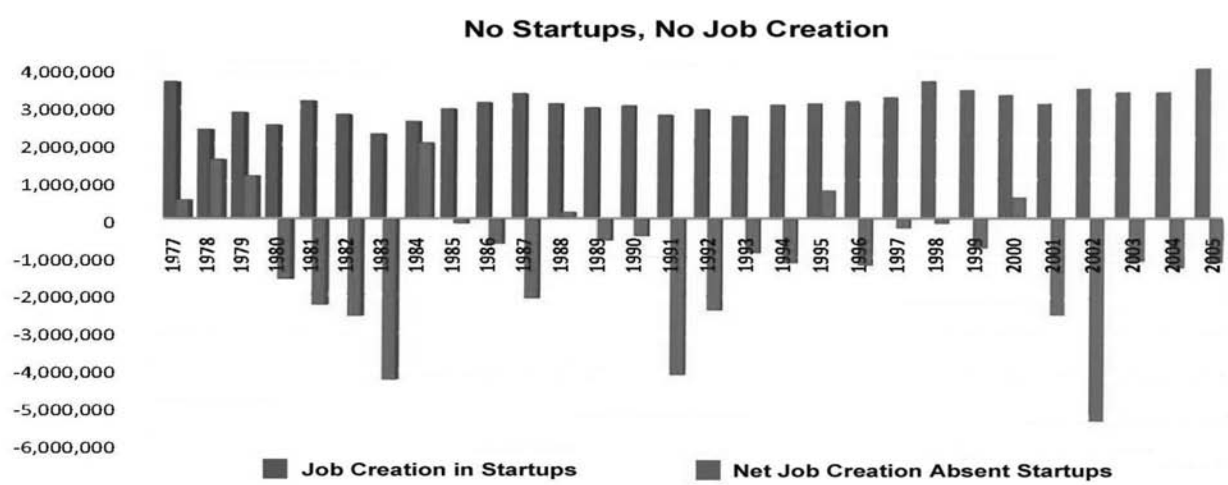
Angel Groups Good for Entrepreneurs

- Angel investors can be found!
  - (Web site, community marketing)
- Pitch many angels at same time
- Angels pool their capital, invest on same terms
- Many investors, but one or two represent group
- Likelihood of better investors
  - Angels in group learn from each other, share ideas
- More angels means more pockets for follow-on funding or connections to other investors

ANGEL CAPITAL ASSOCIATION

HAIL TO THE JOB CREATORS

ENTREPRENEURS ARE KEY TO JOB CREATION

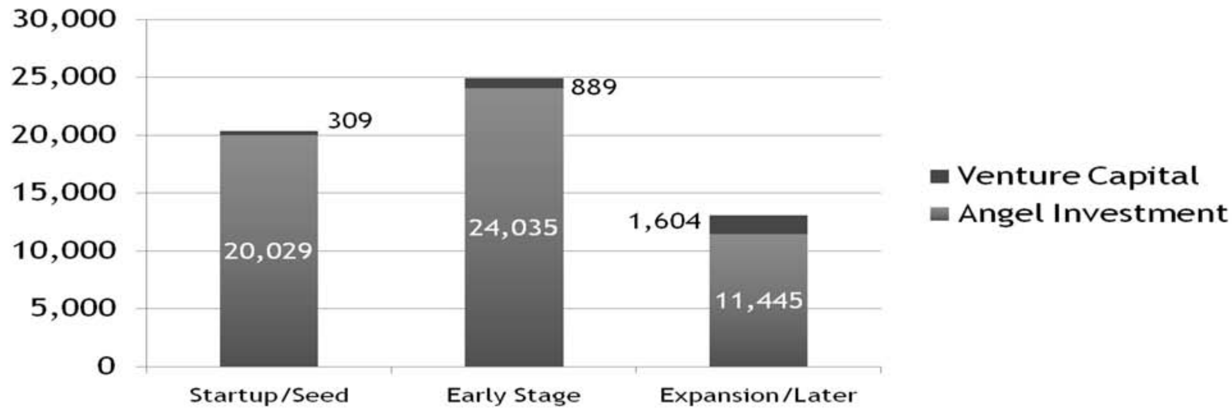


Source: Business Dynamics Statistics Briefing: Jobs Created from Business Startups in the United States. Kauffman Foundation, January 2009.

ANGEL CAPITAL ASSOCIATION

Angels Invest in the Majority of Startup & Early Stage Deals

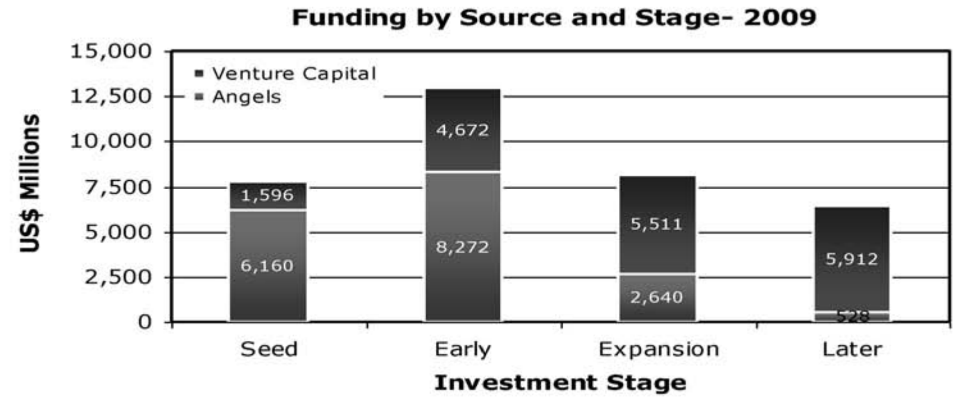
Number of Deals in 2009: Angel Investment and Venture Capital



Source: Jeffrey E. Sohl, Center for Venture Research and 2010 NVCA Yearbook

ANGEL CAPITAL ASSOCIATION

Angels Invest in Startups and Early Stage Businesses



Sources: Center for Venture Research and PwC MoneyTree

Angel Investing 2009	Venture Capital 2009
• $17.60 billion • ~57,000 deals • 35% seed/startup • 47% early stage • ~ 259,500 individuals	• US$ 17.69 billion • ~2,800 deals • 9% seed/startup • 65% later/expansion capital • Total 794 firms (not all active)

ANGEL CAPITAL ASSOCIATION

Average Group Investment Activity by Year

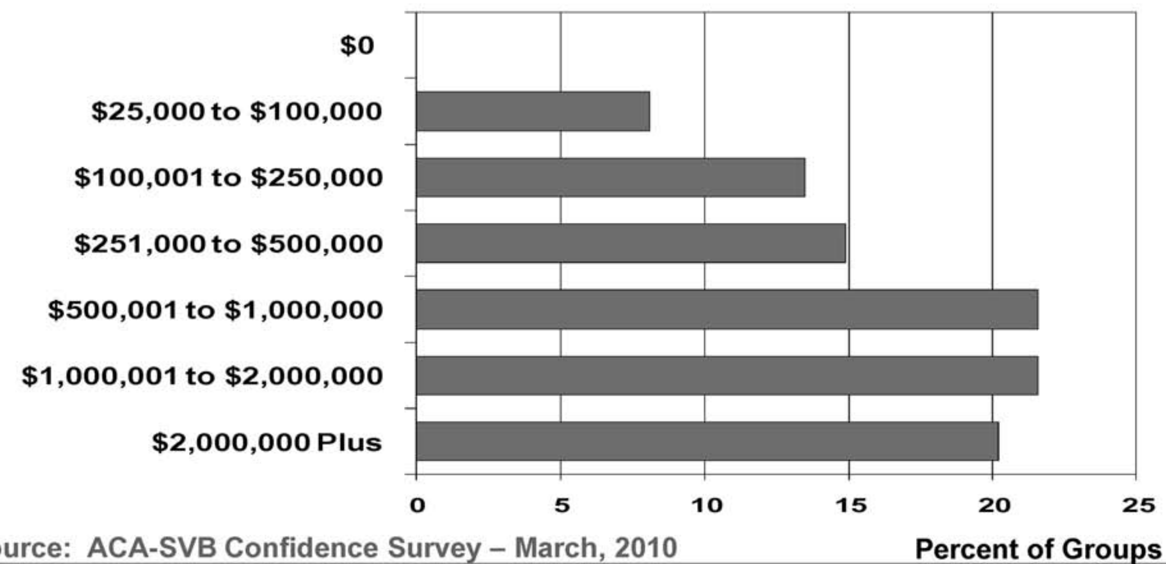
	2009	2008	2007
Number of investments	6.3	6.3	7.3
Total dollars invested	\$1.38 mil	\$1.77 mil	\$1.94 mil
Dollars invested per round	\$218,131	\$276,918	\$265,926
Number of new companies	3.5	3.7	4.5

- Note: Investment numbers reflect investments per group, which is not the same as total deal size (lots of syndication)
- In 2009, 60.8% had follow-on or co-investments with VC firms

Source: ACA Member Confidence Surveys - 2008, 2009, and 2010

ANGEL CAPITAL ASSOCIATION

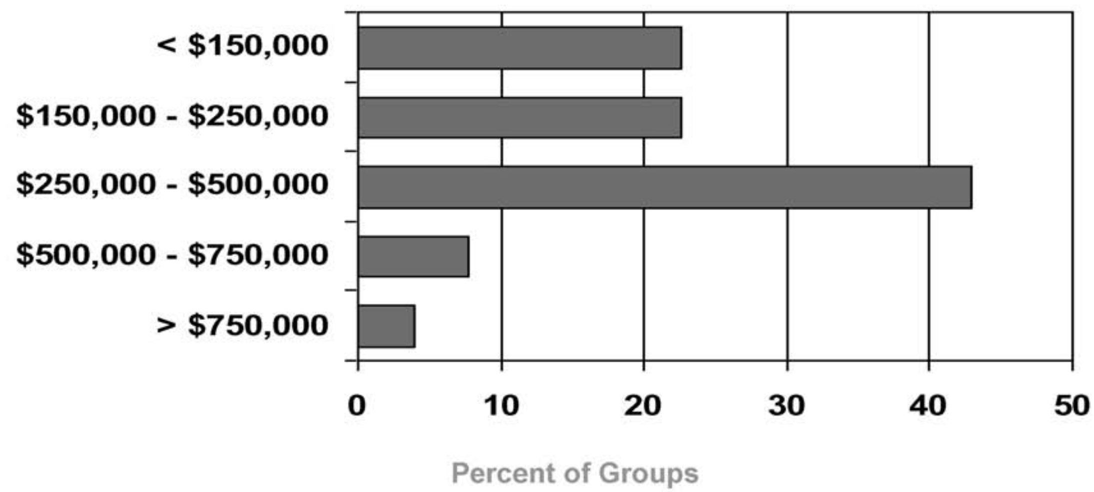
Average Total Investments Per Group – 2009



Source: ACA-SVB Confidence Survey – March, 2010

ACA
ANGEL CAPITAL ASSOCIATION

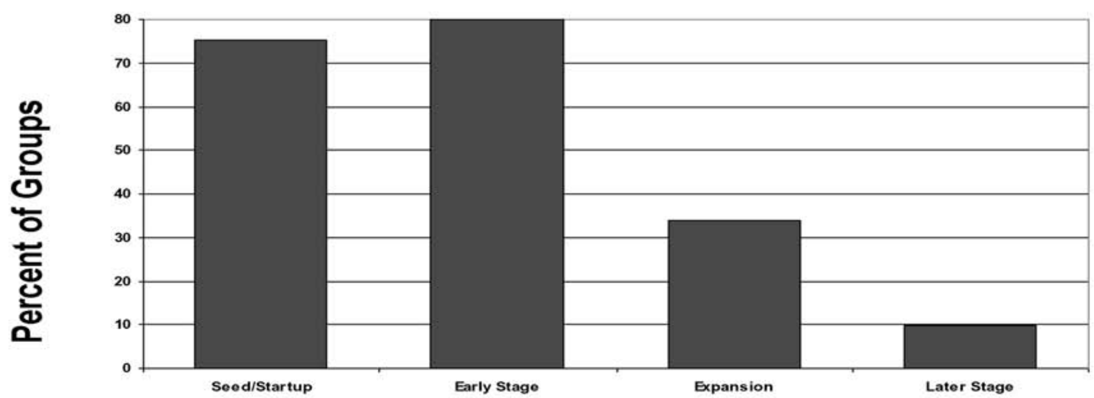
Preferred Investment Per Round



Source: 2009 Confidence Survey and 2008 Member Directory

ANGEL CAPITAL ASSOCIATION

Preferred Investment/Company Stage

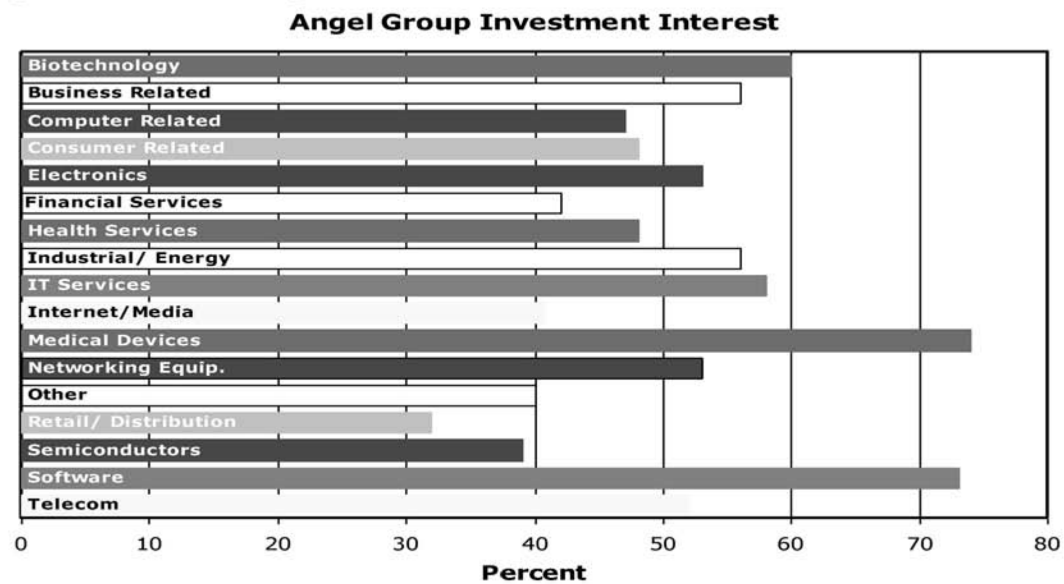


Seed/ Startup | **Early Stage** | **Expansion** | **Later Stage**

Source: 2009 ACA Angel Group Confidence Survey and 2008 Member Directory

ANGEL CAPITAL ASSOCIATION

Angel Industry Preference

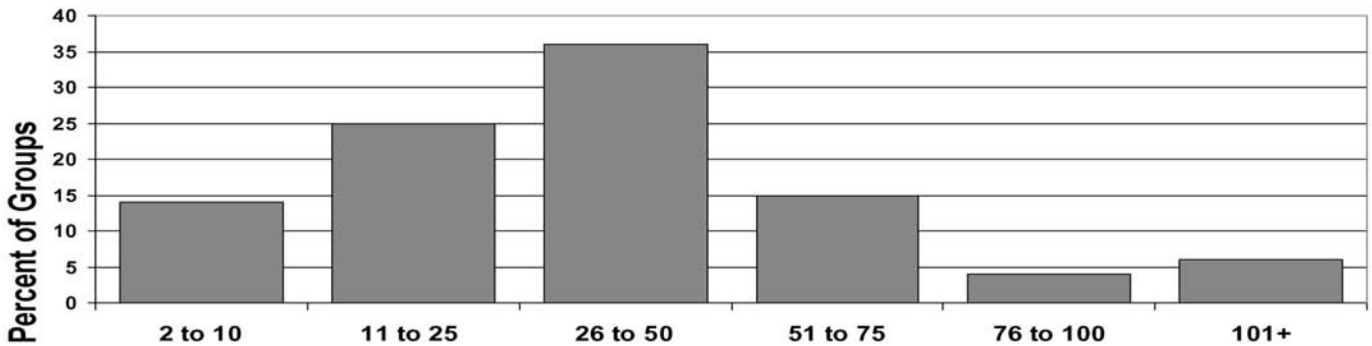


Data: ACA

ANGEL CAPITAL ASSOCIATION

Investors Per Group – 2010

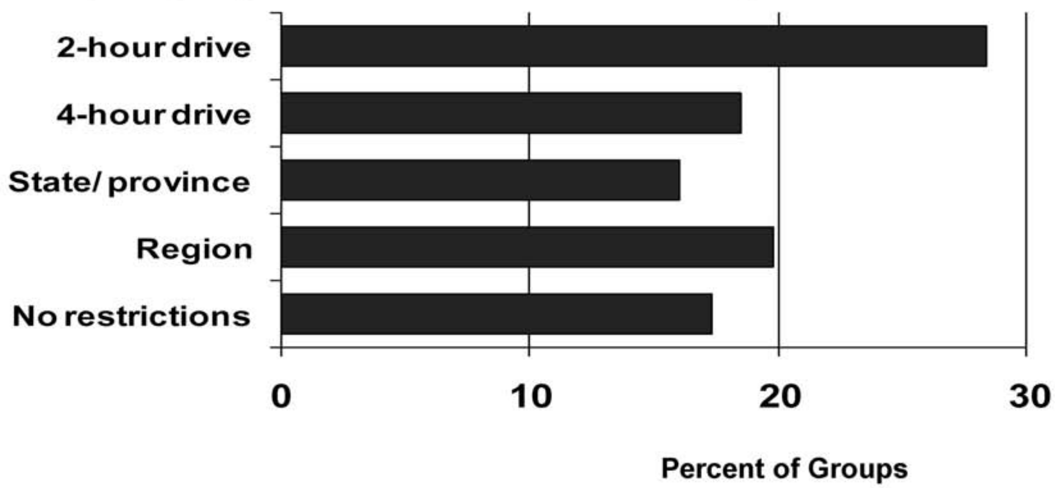
Average = 43.1
Median = 34.5



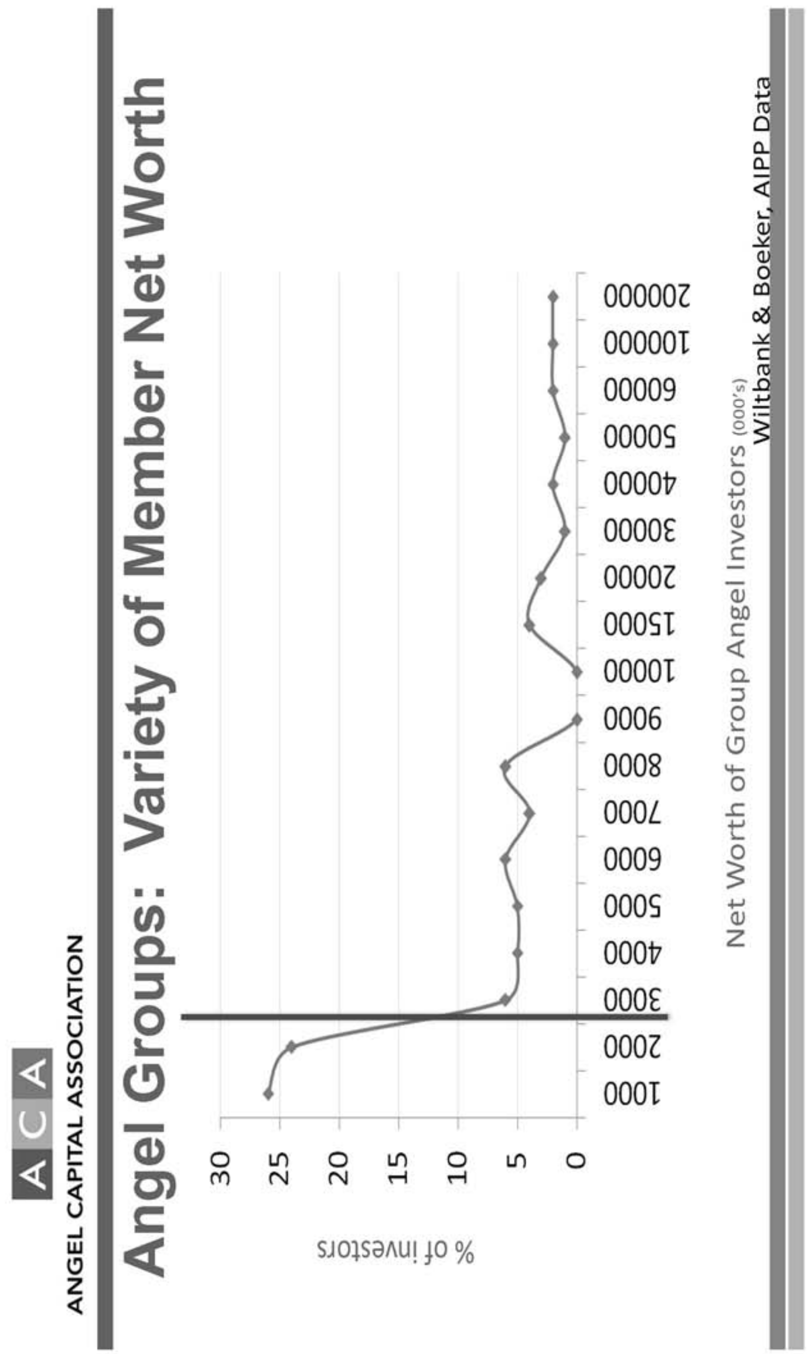
Source: 2010 ACA Confidence Survey and 2010 Member Directory

ANGEL CAPITAL ASSOCIATION

Geography – Where do Groups Invest?



Source: 2008 ACA Angel Group Confidence Survey



ACA
ANGEL CAPITAL ASSOCIATION
Angel Groups: Variety of Member Net Worth
% of investors
30
25
20
15
10
5
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
15000
20000
30000
40000
50000
60000
100000
200000
Net Worth of Group Angel Investors (000's)
Wiltbank & Boeker, AIPP Data

ADDENDUM 2

Who Are These Angel Investors

By Bill Payne

For several months, we have been discussing sources of startup capital for businesses. Entrepreneurs first use their own cash and resources as they germinate the idea of the business. As the venture idea germinates and personal resources are depleted, entrepreneurs turn to Friends and Family to continue work towards defining a product or service. Federal and local grants can also become important capital sources at this stage.

Once the entrepreneur begins to engage customers in the testing and validation of the product, the timing is right to engage with angel investors. OK, so angel investors provide funding and advice for startup companies at the time these ventures begin interactions with customers...but who are these angels?

Business angels are wealthy businessmen and entrepreneurs who have the time and inclination to invest in and mentor startup entrepreneurs. Most angels are part-time investors, dividing time between other business interests, family and personal interests such as golf, tennis and traveling. Angels commit only a small fraction (3-10%) of their wealthy to angel deals because investing in startups is very risky business. Angels who engage with entrepreneurs also tend to commit a significant fraction of their available time to portfolio companies.

The average angel is in his or her late fifties but active angels can be found in all age groups. Angel investors tend to invest close to home, say within an hour or two drive of their residence, for several reasons: Most angels have had their fill of business travel and would prefer investing close to home. Furthermore, investing in their region can boost the local economy – a motivation for some investing close to home. Angels tend to enjoy working with entrepreneurs, feeling that give-back to the community is a personal responsibility. Most want to stay engaged in business as they retire from their full-time positions. Angel investors have varied motivations for investing in startup companies, but all pursue a substantial return on investment, considering the risk of this asset class. Angels invest both time and money in startup ventures. While several angels may invest in a single company, one or two will step forward to serve as mentors for the company and/or directors of the company. In these roles, angels normally spend a few hours a week with the entrepreneur and the management team, on the tactics and strategy of managing and growing the company. If several angels invest at the same time, those with the most experience in the business sector likely step to the plate to assist the company.

As a group, angels generally invest $250,000 to $1,000,000 per round of investment per company. Each angel may commit $25,000 to $100,000, with six to twelve angels contributing to fill the round of investment. Mentors and directors are then selected from among those investors. If needed by the company, investors may commit to multiple, sequential rounds of investment of this size, spread over 2-4 years.

As was mentioned above, angel investing is highly risky. About 50% of angel investments do not return the capital invested to angels. About 10% of angel-funded startups are highly successful, returning perhaps 20X invested capital to early angel investors in 6-8 years. The remaining 40% of ventures provide more modest returns to investors. Considering this profile of returns, angels must invest in a rather large portfolio of companies to provide some assurance of reasonable performance. Ten to fifteen angel investments over a lifetime of angel investing is considered the minimum necessary for success. The skewed returns of angel investments suggest that angel investors must surely have high risk tolerance and the patience necessary for successful investments to mature.

If you are an entrepreneur, stay tuned next month for more information on soliciting capital from angel investors.

If you are interested on becoming an angel investor, look around for an angel group near you. Kalispell/Whitefish, Montana is home for the Frontier Angel Group (to be featured in a future column). The Big Sky Angels are forming just now in Missoula. The Montana Angel Network, in collaboration with the Governor's Office of Economic Development, is organizing educational opportunities and support angel investors during the year ahead. Please contact Liz Marchi, liz@frontierangels.com for more information.

ADDENDUM 3

Account Name	Ciy	ST	Website	Type	ACA Member	Year established	# Angels	Fund?	Investment Structure
Birmingham Angel Network	Birmingham	AL	http://www.birminghamangels.com	Angel Group	Full	2008		No	Network
Gulf Coast Angel Network LLC	Mobile	AL	www.gulfcoastangelnetwork.com	Angel Group	Provisional	2010		No	Network
Huntsville Angel Network	Huntsville	AL	www.biztech.org	Angel Group	Full	2005	65	No	Network
Shoals Angel Network	Florence	AL	www.shoalsec.com	Angel Group	Provisional	2008	40	No	Network
Auburn Angel Network	Auburn	AL	jim@cormanfoundation.org	Possible Angel	Provisional	2011	31	No	
Fund for Arkansas' Future	Little Rock	AR	www.arkansasfund.com	Angel Group	Full	2004	50	Yes	Fund
Natural State Angels	Fayettevile	AR	www.technicallaw.net	Possible Angel	Provisional	2011	6	No	
Arizona Angels Venture Group, Inc.	Phoenix	AZ	www.arizona-angels.org	Angel Group	No	1999	30	No	Network
Arizona Technology Investor Forum	Tempe	AZ	http://atif.asu.edu	Angel Group	Full	2006	45	No	Network
Desert Angels	Tucson	AZ	www.desertangels.org	Angel Group	Full	2000	65	No	Network with a Sidecar Fund
Thunderbird Angel Network	Glendale	AZ	www.thunderbirdangelnetwork.com	Angel Group	Provisional	2010		No	Network
WBTangels	Scottsdale	AZ	www.wbtangels.com	Possible Angel	Provisional	2011	0	No	Network
12 Angels	Los Angeles	CA	www.12angels.org	Angel Group	No	2005	5	Yes	Network
Acorn Angels	Cupertino	CA	www.acornangels.com	Angel Group	No				
Angels Corner	Santa Clara	CA	www.angelscorner.com	Angel Group	No				
AngelVision Investors, LLC	Los Angeles	CA	www.angelvisioninvestors.com	Angel Group	Full	2010	5	No	
Band of Angels	Menlo Park	CA	www.bandangels.com	Angel Group	Full	1994	124	Yes	Network with a Sidecar Fund
CalCEF Clean Energy Angel Fund	San Francisco	CA	www.calcefangelfund.com	Angel Group					
European American Angel Club	San Francisco	CA	http://www.euroamericanangels.com	Angel Group		2006	11	No	Other
Family Media Angels	Pebble	CA	In Process	Angel Group	Provisional	2008	6	No	Network
Foothills Angels	Sacramento	CA	www.foothillsangels.com	Angel Group					
Golden Gate Angels	San Francisco	CA	www.ggangels.com	Angel Group		2001	50	No	Network
Harvard Angels of Northern California	San Francisco	CA	http://www.hbsanc.org/article.html?aid=328	Angel Group					
HealthTech Capital	Los Altos Hills	CA	www.healthtechcapital.com	Angel Group	Full	2010	50	No	Network
Icon Angels	Los Angeles	CA	www.iconangels.com	Angel Group					
Imporium Angels	San Diego	CA	www.imporiumangels.com	Angel Group	Inactive	2005	10	No	Network
Investors' Circle	San Francisco	CA	www.investorscircle.net	Angel Group	Full	1992	225	No	Network with a Sidecar Fund
Keiretsu Forum - East Bay	Lafayette	CA	www.istrategies.com	Angel Group	No				
Keiretsu Forum - Los Angeles	Los Angeles	CA	www.keiretsuforum.com	Angel Group					
Keiretsu Forum - North Bay		CA	www.keiretsuforum.com	Angel Group					
Keiretsu Forum - San Diego	San Diego	CA	www.keiretsuforum.com	Angel Group					
Keiretsu Forum - San Francisco	San Francisco	CA	www.keiretsuforum.com	Angel Group					
Keiretsu Forum - Silicon Valley		CA	www.keiretsuforum.com	Angel Group					
Keiretsu Forum - SoCal	Costa Mesa	CA	www.keiretsuforum.com/orangecounty	Angel Group		2005	38	No	Network
Kodiak Ventures	Arcadia	CA	www.kodiakventures.com	Angel Group					
Life Science Angels	Palo Alto	CA	www.lifescienceangels.com	Angel Group	Full	2005	85	No	Network
Maverick Angels	Agoura Hills	CA	www.maverickangels.com	Angel Group	Full	2006	29	No	Network
MIT Angels	San Francisco	CA	www.mitcnc.org/mitangels	Angel Group					
Monterey Investor Roundtable	Monterey	CA		Angel Group					
North Angels	Oakland	CA	www.northangels.com	Angel Group		2008	50	No	
North Bay Angels	Healdsburg	CA	www.northbayangels.com	Angel Group	Full	1998	49	No	Network
Pasadena Angels	Altadena	CA	www.pasadenaangels.com	Angel Group	Full	2000	100	No	Network
Plug and Play Angels	Sunnyvale	CA	www.plugandplaytechcenter.com/funding/p	Angel Group					
Private Capital Network	Huntington Beach	CA	www.privatecapitalnetwork.net	Angel Group		2006	140	No	Network
Sacramento Angels	Roseville	CA	http://www.sacangels.com/	Angel Group	Full	1998	45	No	Network
San Joaquin Angels	Stockton	CA	www.sanjoaquinangels.com	Angel Group	Full	2008	25	No	Network
Sand Hill Angels	Menlo Park	CA	www.sandhillangels.com	Angel Group	Full	2000	55	No	Network
Silicom Ventures	Los Altos	CA	www.silicomventures.com	Angel Group	No				
Silicon Valley Angels	Los Gatos	CA	http://thesiliconvalleyangels.com	Angel Group		2008	15	No	
Stanford Business School Angels Fund	Palo Alto	CA		Angel Group	No				
Tech Coast Angels	5 Chapters in Southern	CA	www.techcoastangels.com	Angel Group	Full	1997	263	Yes	Network with a Sidecar Fund
The Angels' Forum LLC	Mountain View	CA	www.angelsforum.com	Angel Group	Full	1997	25	Yes	Network with a Sidecar Fund
Top Brass Investments	La Mirada	CA		Angel Group	Provisional	2010	6	No	Network
Traverse Angels	Carlsbad	CA	www.traverseangels.com	Angel Group	No			Yes	

Tribe of Angels	San Francisco	CA	www.tribeofangels.com	Angel Group					
Central Coast Investors Roundtable	Salinas	CA	www.barbeauassociates.com	Possible Angel		2008	2	No	
Stanford Angels & Entrepreneurs	Atherton	CA	www.stanfordalumni.org	Possible Angel	Affiliate	2010	2	No	Network
Chattanooga Renaissance Fund		Chatt	http://www.chattanoogarenaissancefund.co	Angel Group				Yes	
Angel Investors of the Rockies	Fort Collins	CO	www.angelinvestorsoftherockies.com	Angel Group					
Ansel Capital Partners, LLC	Boulder	CO	www.anselcapitalpartners.com	Angel Group	Full	2007	23	No	Network
NoCo Angels	Fort Collins	CO	www.nocoangels.com	Angel Group					
Angel Investor Forum	East Hartford	CT	www.angelinvestorforum.com	Angel Group	Full	2004	48	No	Network
Connecticut Angel Guild	Fairfield	CT	www.cvg.org	Angel Group		2006	40	No	Network
Landmark Angels Inc	Greenwich	CT	www.landmarkangels.com	Angel Group	Full	2008	60	No	Network
FSI Angel Network	Wilmington	DE	www.firststateinnovation.org/angels	Angel Group					
Angel Investment Forum of Florida	Stuart	FL	http://www.aiffl.org/	Angel Group	No				
Emergent Growth Fund LLC	Gainesville	FL	www.emergentgrowth.com	Angel Group	No	2003	40	Yes	Fund
Go Beyond Angel Network	Naples	FL	www.go-beyond-network.com	Angel Group	Full	2009	10	Yes	Network with a Sidecar Fund
New World Angels Inc	Boca Raton	FL	www.newworldangels.com	Angel Group	Full	2004	50	No	Fund
South Florida Angels	Coral Springs	FL	www.sflangels.com	Angel Group		2008	4	No	Network
Springboard Capital LLC	Jacksonville	FL	www.springboardcapllc.com	Angel Group	Full	2002	53	Yes	Fund
Tamiami Angel Fund I	Naples	FL	www.tamiamiangels.com	Angel Group	Full	2010	31	Yes	
Winter Park Angels	Winter Park	FL	www.winterparkangels.com	Angel Group		2006	36	No	Network
Women Angels LLC	Miami	FL	http://womenangelsllc.com/	Angel Group	No				
Angel Investors - Orlando		FL		Possible Angel					
Central Florida Technology Ventures	Orlando	FL	http://www.cftechventures.com/	Possible Angel	Provisional	2011	3	Yes	Fund
Space Coast Angels	Melbourne	FL	www.trda.org	Possible Angel	Provisional	2010	15	No	Network
Ariel Southeast Angel Partners, LLC	Savannah	GA	www.Savannahangelpartners.com	Angel Group	Full	2005	47	No	Network
Atlanta Technology Angels	Atlanta	GA	www.angelatlanta.com	Angel Group	Full	1998	35	No	Network
CEO Ventures	Atlanta	GA	www.ceoventures.com	Angel Group	Full	2000	10	Yes	Fund
Global Angel Investment Network	Savannah	GA	georgiaangelcapital.com	Angel Group	Provisional	2009	6	No	Network
Network of Business Angel & Investors	Atlanta	GA	http://www.nbai.net	Angel Group		1994	15	No	
Northwest Georgia Regional Angel	Rome	GA	www.nwgrain.com	Angel Group		2010	6	No	Network
Seraph Group	Atlanta	GA	www.seraphgroup.net	Angel Group		2004	135	Yes	Network
Progressive Investor Network	Atlanta	GA		Possible Angel					
Hawaii Angels	Kailua	HI	http://www.hawaiiangels.org	Angel Group	Full	2002	64	Yes	Network with a Sidecar Fund
Rock River Capital	Rock Rapids	IA	http://rockrivercapital.angelgroups.net	Angel Group		2006	15	Yes	Fund
Spirit Lake Angels	Spirit Lake	IA		Angel Group					
Boise Angel Alliance	Boise	ID	www.boiseangelalliance.com	Angel Group	Full	2004	45	No	Network
Delta Angel Group	Post Falls	ID	www.deltaangelgroup.org	Angel Group	No				
Keiretsu Forum - Boise	Boise	ID	www.keiretsuforum.com	Angel Group					
BioAngels	Lake Bluff	IL	www.bioangels.com	Angel Group	No		21	No	
Central Illinois Angels	Peoria	IL	www.centralillinoisangels.com	Angel Group	Full	2009	48		Network
Cornerstone Angels	Northbrook	IL	www.cornerstoneangels.com	Angel Group	Full	2006	20	Yes	Network
Heartland Angels Inc	Skokie	IL	www.heartlandangels.com	Angel Group	No				
Highland Park Angels	Northbrook	IL	http://hp-funding.com/default.aspx	Angel Group					
Hyde Park Angel Network	Chicago	IL	www.hydeparkangels.com	Angel Group	Full	2007	65	No	Network
Illinois Institute of Technology Angel	Chicago	IL	http://knappcenter.iit.edu/angels/about-us-	Angel Group	Full	2008	50	No	Network
Stateline Angels Inc NFP	Rockford	IL	www.statelineangels.com	Angel Group	Full	2005	25	No	Network
Sustainably Local Food Investment	Winnetka	IL	NA	Angel Group	Provisional	2011		No	
Urbana-Champaign Angel Network	Champaign	IL	not active yet	Angel Group	Full	2010	15	No	Network
Wildcat Angels	Evanston	IL	www.wildcatangels.com	Angel Group	Provisional	2010	5	No	Network
Clark Angel Network - CAN	Fort Wayne	IN	www.clarkangelnetwork.com	Angel Group					
Hoosier Angels Looking for	Indianapolis	IN	www.halocapitalgroup.com	Angel Group					
Intellectus Consortium	Indianapolis	IN	www.intellectus.net	Angel Group		2007	7	No	Network
Main Street Venture Fund	Fort Wayne	IN	www.mainstreetventurefund.com	Angel Group	Full	2006	18	Yes	Fund
P3 Alliance (Purdue Angel Network)	Indianapolis	IN	www.purdueresearchpark.com	Angel Group	Full	2010	42	No	Network
StepStone Angels	Indianapolis	IN	www.stepstonebusinesspartners.com	Angel Group	Full	2009	25	No	Network
Kokomo Angels	Kokomo	IN		Possible Angel					

Keiretsu Forum - Westlake	Westlake Village	KS	www.keiretsuforum.com	Angel Group					
Mid-America Angels	Lenexa	KS	www.midamericaangels.com	Angel Group	Full	2006	102	No	Network
Midwest Venture Alliance	Wichita	KS	www.midwestventure.com	Angel Group		2005	48	No	Network
Southeast Kansas Venture Alliance	Pittsburg	KS	www.sekansasventure.com	Angel Group					
Women's Capital Connection	Lenexa	KS	www.kansaswbc.com/WomensCapitalConn	Angel Group	Full	2007	36	No	Network
Anchorage Angels LLC	Anchorage	KY		Angel Group	No				
Bluegrass Angels	Lexington	KY	www.bluegrassangels.com	Angel Group	No	2005	48	Yes	Network with a Sidecar Fund
Louisville Angel Investor Network	Louisville	KY	http://louisvilleangelnetwork.angelgroups.ne	Angel Group	Full	2007	15	No	Network
Louiville's Enterprise Angels	Louisville	KY	http://angelsoft.net/angel-group/louisvilles-	Angel Group					
Northern Kentucky Angel Investment	Covington	KY	www.northernkentuckygrowthfund.com	Angel Group	Full	2009	10	Yes	
Louisiana Angel Network	Baton Rouge	LA	www.louisianaangelnetwork.com	Angel Group	No				Network
South Coast Angel Fund	New Orleans	LA	www.southcoastangelfund.com	Angel Group	Full	2010	18	Yes	Fund
Angel Healthcare Investors LLC	Newton	MA	www.hcangels.com	Angel Group		1999	48	No	Network
Bay Angels	Waquoit	MA	www.bayangels.net	Angel Group	Full	2003	10	No	Network
Beacon Angels LLC	Boston	MA	http://beaconangels.com	Angel Group	Full	2006	18	Yes	Fund
Boston Harbor Angels	Brighton	MA	BostonHarborAngels.com	Angel Group	Full	2004	40		Network
Boynton Angels	Westborough	MA	www.boyntonangels.com	Angel Group	Full	2006	25	No	Network
Clean Energy Venture Group	Boston	MA	http://www.cleanenergyvg.com/	Angel Group	Full	2005	10	No	
CommonAngels	Waltham	MA	www.commonangels.com	Angel Group	Full	1998	70	Yes	Network with a Sidecar Fund
Hub Angels Investment Group LLC	Cambridge	MA	www.hubangels.com	Angel Group	Full	2000	75	Yes	Fund
Launchpad Venture Group, LLC	Wellesley	MA	www.launchpadventuregroup.com	Angel Group	Full	2000	60	No	Network
Mass Medical Angels	Boston	MA	www.massmedangels.com	Angel Group					
Race Point Capital Group LLC	Newton	MA	www.racepointcapital.com	Angel Group	Full	2009	15	No	Network
River Valley Investors	South Hadley	MA	www.rivervalleyinvestors.com	Angel Group	Full	2003	31	No	Network
TiE Angels	Boston	MA		Angel Group					
Walnut Venture Associates	Westwood	MA	www.walnutventures.com	Angel Group	Full	1997	12	No	Network
Capital Access Network	College Park	MD	www.rhsmith.umd.edu/dingman/programs/	Angel Group	Full	2005	30	No	Network
Chesapeake Emerging Opportunities	Columbia	MD	www.ceopportunities.com	Angel Group	No	2001	32	Yes	
Angel Venture Forum	Baltimore	MD	http://www.angelventureforum.com	Possible Angel	Provisional	2011	12	No	
MCN Angels	Baltimore	MD		Possible Angel					
ECS Angels	Bar Harbor	ME	www.ecs-angels.com	Angel Group	Full	2007	10		Network
Maine Angels	Bar Harbor	ME	www.maineangels.org	Angel Group	Full	2003	47	Yes	Network
Ann Arbor Angels	Ann Arbor	MI	www.annarborangels.org	Angel Group	No				
Aurora Angels	Harbor Springs	MI	www.auroraangels.com	Angel Group	No				
BELLE Capital, LP	Douglas	MI	www.bellevc.com	Angel Group	Full	2011	30	Yes	Fund
Blue Water Angels	Midland	MI	http://midmichiganinnovationcenter.org/web	Angel Group	Full	2008	28	No	Network
Capital Community Angels Inc	East Lansing	MI	www.capitalcommunityangels.org	Angel Group	Inactive	2007	15	No	Network
First Angels	Kalamazoo	MI	www.southwestmichiganfirst.com	Angel Group		2007	20	No	Network
Grand Angels	Holland	MI	www.grandangels.com	Angel Group	Full	2004	20	No	Network
Great Lakes Angels	Detroit	MI	www.glangels.org	Angel Group		2002	40	No	Network
3C Capital Partners	Northfield	MN	http://3ccapital.angelgroups.net	Angel Group	No	2007	32	Yes	Fund
Central Minnesota Growth and	Willmar	MN	http://centralminnesotagrowthfund.angelgro	Angel Group		2005	15	Yes	Fund
Lakes Ventures II LLC	Miltona	MN	http://lakesventuregroup.angelgroups.net	Angel Group	Inactive	1997	25	Yes	Fund
North Star Fund	Grand Rapids	MN	http://northstarfund.angelgroups.net	Angel Group	No				
Prairie Capital LLC	Worthington	MN	http://prairiecapital.angelgroups.net	Angel Group		2001	12	Yes	Fund
RAIN Source Capital	St. Paul	MN	www.rainsourcecapital.com	Angel Group	Affiliate	2003		Yes	
River Valley Capital	Montevideo	MN	http://rivervalleycapital.angelgroups.net	Angel Group	Inactive	2006	11	Yes	Fund
Sofia Angel Fund	Minneapolis	MN	http://sofiaangelfund.angelgroups.net	Angel Group		2006	31	Yes	Fund
South Metro Investors	Burnsville	MN	http://southmetroinvestors.angelgroup.net	Angel Group		2007	10	Yes	Fund
St. Cloud RAIN Fund	St. Cloud	MN	http://stcloud.angelgroups.net	Angel Group					
Twin Cities Angels	Minneapolis	MN	www.tcangels.com	Angel Group					
Two Rivers Angel Investment Network	Mankato	MN	http://tworivers.angelgroups.net/	Angel Group	Inactive	2006	16	Yes	Fund
Wellspring Investor Alliance	Mankato	MN	http://www.greatermankato.com/business-	Angel Group		2008	21	No	Network
Billiken Angels	St. Louis	MO	www.billikenangels.com	Angel Group	Full	2008	23	No	Network
Centennial Investors	Columbia	MO	www.centennialinvestors.com	Angel Group	Full	2006	49	No	Network

Show Me Angels	Lee's Summit	MO	www.showmeangels.com	Angel Group	Full	2008	26	No	Network
Springfield Angel Network	Springfield	MO	http://www.drury.edu/multinl/story_ejc.cfm?	Angel Group	Full	2008	23	No	Network
St. Louis Arch Angels	St. Louis	MO	www.stlouisarchangels.com	Angel Group	Full	2005	44	No	Network
Mississippi Angel Network	Ridgeland	MS	www.mta.ms	Angel Group	Full	2005	90		Network
South Mississippi Angel Network	Hattiesburg	MS	not active - www.southmsangels.org	Angel Group					
Big Sky Angels	Missoula	MT	http://bigskyangels.org/	Angel Group					
Bridger Private Capital Network	Bozeman	MT	www.techranch.org	Angel Group	No	2002	42	No	
Eastern Montana Angel Investor		MT		Angel Group					
Frontier Angel Fund LLC	Polson	MT	www.frontierangels.com	Angel Group	Full	2004	33	Yes	Fund
Blue Ocean Fishing Club	Cary	NC	blueoceanfishingclub.com	Angel Group	Provisional	2009	86	No	Network
Blue Ridge Angel Investor Network	Fletcher	NC	www.blueridgeangels.org	Angel Group		2002	40		Network with a Sidecar Fund
Eastern NC - Investor Network	Greenville	NC	www.ecu.edu/rds/ei	Angel Group		2005	40	No	Network
Inception Micro Angel Fund Charlotte	Charlotte	NC	http://imafcharlotte.com/	Angel Group					
Inception Micro Angel Fund East	Winston-Salem	NC	www.imafeast.com	Angel Group					
Inception Micro Angel Fund Family of	Winston-Salem	NC	www.inceptionmicroangelfund.com	Angel Group		2002	60	Yes	Fund
Inception Micro Angel Fund Western	Fletcher	NC	www.imafwestern.com	Angel Group					
Piedmont Angel Network Two	Summerfield	NC	www.piedmontangelnetwork.com	Angel Group	Full	2005	50	Yes	Fund
RTP Capital Associates, Inc.	Research Triangle Park	NC	www.rtpcapital.org	Angel Group	Full	2010	5	No	
Triangle Accredited Capital Forum	Wake Forest	NC	www.capital-forum.com	Angel Group	Inactive	2004	80	No	Network
WED3	Charlotte	NC	www.wed3.org	Angel Group					
Wilmington Investor Network	Wilmington	NC	www.wilmingtoninvestor.com	Angel Group	Full	2003	45	No	Network
Chenango Capital	Greensboro	NC	www.chenangocapital.com	Possible Angel	Affiliate	2010	0	Yes	Fund
FM Angel Investment Fund	Fargo	ND	http://fmangelfund.angelgroups.net	Angel Group		2006	27	Yes	Fund
Northern Plains Investment	Bismarck	ND	http://angelsoft.net/angel-group/northern-	Angel Group	Inactive		10	Yes	Fund
Southern Valley Angel Fund	Wahpeton	ND		Angel Group					
Valley Angel Investment Fund	Grand Forks	ND	http://valleyangelinvestmentfund.angelgrou	Angel Group	Full	2006	34	Yes	Fund
Nebraska Angels, Inc.	Lincoln	NE	www.nebraskaangels.org	Angel Group	Full	2006	35	No	Network
eCoast Angels	Portsmouth	NH	www.ecoastangels.com	Angel Group	Full	2000	21	No	Network
First Run Angel Group		NH	www.firstrunangelgroup.com	Angel Group	No				
Granite State Angels	Hanover	NH	www.granitestateangels.com	Angel Group		2001	30	No	Network
Monadnock Angel Investors		NH	www.monadnockangelinvestors.com	Angel Group					
North Country Angels	Hanover	NH	www.northcountryangels.com	Angel Group	Full	2000	35	No	Network
Northeast Angels	Nashua	NH	http://nea.angelgroups.net	Angel Group					
The Breakfast Club of New Hampshire	Hollis	NH	http://angelbreakfastclub.blogspot.com/	Angel Group	No				
Jumpstart New Jersey Angel Network	Mt Laurel	NJ	www.jumpstartnj.com	Angel Group	Full	2003	38	No	Network
NJAngels.net	Somerset	NJ	www.njangels.net	Angel Group	No				
Jersey Angels	Colts Neck	NJ	www.jerseyangels.com	Possible Angel		2009	19	No	
NJIT Highlanders Angel Network	Newark	NJ	none developed	Possible Angel	Provisional	2010	1	No	Network
New Mexico Angels	Albuquerque	NM	www.nmprivateinvestors.com	Angel Group	Full	1999	63	No	Network
Reno Angels	Reno	NV	www.renoangels.org	Angel Group					
Sierra Angels	Incline Village	NV	www.sierraangels.com	Angel Group	Full	1997	50	No	Network
Vegas Valley Angels	Las Vegas	NV	www.vegasvalleyangels.com	Angel Group	Full	2003	35	No	Network
Binghamton Angel Group	Binghamton	NY		Angel Group					
Buffalo Angel Network	Buffalo	NY	http://angelsoft.net/angel-group/buffalo-	Angel Group					
CNY Angel.com	Syracuse	NY	www.cnyangel.com	Angel Group	No				
Dutchess County Angel Network	Poughkeepsie	NY	www.thinkdutchess.com	Angel Group	No	2006	15	No	Network
Eastern New York Angels	Albany	NY	www.easternnyangels.com	Angel Group	Full	2001	17	No	Fund
Gotham Angels	New York	NY	http://www.cammebys.com	Angel Group		2006	30	No	Network
Life Sciences Angel Network	New York	NY	http://www.nyas.org/WhatWeDo/Innovation/	Angel Group	Full	2011	11	No	
Long Island Angel Network	Mineola	NY	http://liangels.angelgroups.net	Angel Group	Full	2006	20	No	Network
New Media Ventures		NY	www.newmediaventures.org	Angel Group					
New York Angels Inc	New York	NY	www.newyorkangels.com	Angel Group	Full	2004	70	No	Network with a Sidecar Fund
Orange County Angel Network	New Windsor	NY	http://www.occdc.com/webpages/investorInf	Angel Group		2005	27	Yes	Network with a Sidecar Fund
Rochester Angel Network	West Henrietta	NY	www.rochesterangels.com	Angel Group	Full	2005	22	No	Network
Seed Capital Fund of CNY, LLC	Syracuse	NY	www.scfcny.com	Angel Group	Full	2007	42	Yes	Fund

STOC Angel Investment Network	Binghamton	NY	www.stoc-ny.com/angel-network.asp	Angel Group					
Tevel Angels Club	New York	NY	www.tevel.org/1.html	Angel Group					
The Angel Fund	Brooklyn	NY	www.angelfundnetwork.org	Angel Group					
Tri State Ventures LLC	New York	NY	www.tristateventures.com	Angel Group	No		46		Network
Tri-State Private Investors Network	New York	NY	www.angelinvestorfunding.com	Angel Group	No				
ARC Angel Fund	New York	NY	http://www.arcangelfund.com/	Possible Angel					
Wider Wake Networks Inc		NY	http://www.widerwake.net/	Possible Angel					
Akron Regional Change Angels	Akron	OH	www.uakron.edu/research/archangels/	Angel Group	Affiliate	2005	250	No	
CoreNetwork	Toledo	OH	www.core-network.org	Angel Group	Full	2004	40	No	Network
East Central Ohio Tech Angel Fund	Worthington	OH	n/a	Angel Group	Provisional	2008	17	Yes	Fund
Garden Club Angels	Youngstown	OH	www.gardenclubangels.org	Angel Group					
Medical Growth Fund	Cleveland	OH	www.medicalgrowthfund.com	Angel Group	Full	2009	10	Yes	Fund
Millstream Angel Club	Findlay	OH	www.not-yet.com	Angel Group	Provisional	2010	25	No	Network
North Coast Angel Fund	Mayfield Heights	OH	www.northcoastangels.com	Angel Group	Full	2006	180	Yes	Fund
Ohio TechAngel Funds	Columbus	OH	www.ohiotechangels.com	Angel Group	Full	2004	282	Yes	Fund
Queen City Angels	Cincinnati	OH	www.qca.com	Angel Group	Full	2000	30	Yes	Network with a Sidecar Fund
SeedStep Angels	Oklahoma City	OK	www.seedstepangels.com	Angel Group	Full	2009	17	No	Network
Keiretsu Forum - Portland	Portland	OR	www.keiretsuforum.com	Angel Group					
Oregon Angel Fund	Portland	OR	http://www.oen.org/programs_oaf.aspx/	Angel Group	Inactive	2007	54	Yes	Fund
Oregon Sustainability Angels	Portland	OR	www.sustainabilityangels.org	Angel Group					
Portland Angel Network	Portland	OR	http://www.oen.org/programs_pan.aspx	Angel Group		1998	30	No	Network
Portland Venture Group	Lake Oswego	OR	none	Angel Group		1992	35	No	Network
Southern Oregon Angel Network	Medford	OR	http://angelsoft.net/angel-group/southern-	Angel Group					
Southern Willamette Angel Network	Eugene	OR	http://www.eugenechamber.com/business/s	Angel Group	Provisional	2010	21	No	Network
Willamette Valley Investors Network	Corvallis	OR	http://angelsoft.net/angel-group/willamette-	Angel Group					
Women's Investment Network	Portland	OR	http://www.oen.org/programs_win.aspx	Angel Group		2002	48	No	Network
BlueTree Allied Angels	Pittsburgh	PA	www.bluetreecapital.com	Angel Group	Full	2003	48	No	Network
Delaware Crossing Investor Group	Warrington	PA	www.delawarecrossing.org	Angel Group	Full	2005	25	No	Network
Great Valley Pennsylvania Angel	Scranton	PA	http://greatvalleyalliance.com/great-valley-	Angel Group					
Indiana County Angel Network	Indiana	PA		Angel Group					
Investors Circle of York	York	PA	http://www.ycedc.org/icy.html	Angel Group					
Lancaster Angel Network	Lancaster	PA	www.angel-investor-network.com/Lancaster-	Angel Group	No				
LORE Associates	Radnor	PA	http://www.loreassociates.com	Angel Group	Full	1987	50	No	Network
Mid-Atlantic Angel Group Fund I	Philadelphia	PA	www.magfund.com	Angel Group	Full	2005	89	Yes	Fund
Minority Angel Investor Network	Philadelphia	PA	http://www.minorityangelinvestornetwork.co	Angel Group	Full	2004	19	No	Network
Pittsburgh Equity Partners LP	Pittsburgh	PA	www.pghpep.com	Angel Group	Full	2009	2	Yes	Fund
Pocono Mountains Angel Network	East Stroudsburg	PA	www.esu.edu/angel	Angel Group					
Private Investors Forum	Harrisburg	PA	www.privateinvestorsforum.com	Angel Group	Full	1993	47	No	Network
Robin Hood Ventures	Wayne	PA	www.robinhoodventures.com	Angel Group	Full	1999	30	No	Network
Susquehanna Investment Network	Lewisburg	PA	www.centralpa-angelnetwork.com	Angel Group	No				
Winners Investment Network	Altoona	PA	http://www.paangelnetwork.com/index.php?	Angel Group	No				
Myeloma Angels	Indiana	PA	www.myelomaangels.com	Possible Angel	Provisional	2010	5	No	Network
Coachella Valley Angel Network		Palm	www.cvangelnetwork.com	Angel Group					
Cherrystone Angel Group	Providence	RI	www.cherrystoneangelgroup.com	Angel Group	Full	2004	45	No	Network
Charleston Angel Partners	Kiawah Island	SC	www.chapsc.com	Angel Group		2003	40	No	Network
Upstate Carolina Angel Network	Greenville	SC	www.upstateangels.org	Angel Group	Full	2008	52	No	Network
Enterprise Angels	Brookings	SD	www.sdei.org	Angel Group		2005	53		
Great Opportunities	Aberdeen	SD	www.gosdfund.com	Angel Group	Inactive	2007	10	Yes	Fund
Prairie Winds Capital	Sioux Falls	SD	www.prairiewindscapital.com	Angel Group		2006	14	Yes	Fund
SDSU Brookings Angel Fund	Brookings	SD	http://brookingsangelfund.com	Angel Group		2007	18	Yes	Fund
Angel Capital Group	Nashville	TN	www.theangelcapitalgroup.com	Angel Group	Full	2007	22	Yes	Fund
Innovation Valley Angels	Oak Ridge	TN		Angel Group	Inactive	2005	20	Yes	Network
Midsouth Angel Network	Memphis	TN	www.innovamemphis.com	Angel Group					
Nashville Capital Network	Nashville	TN	www.nashvillecapital.com	Angel Group	Full	2003	70	No	Network with a Sidecar Fund
Tri-Cities Regional Angel Investor	Johnson City	TN	http://www.etsuilab.org	Angel Group		2005	4	No	Network

Aggie Angel Network	College Station	TX	http://aggieangelnetwork.com/	Angel Group	Provisional	2010	10	No	Network
Baylor Angel Network	Waco	TX	www.baylorangelnetwork.org	Angel Group	Full	2009	38	No	Network
Camino Real Angels	El Paso	TX	www.caminorealangels.com	Angel Group		2002	15	No	Network
Central Texas Angel Network	Austin	TX	www.centraltexasangelnetwork.com	Angel Group	Full	2006	69	No	Network
Concho Valley Angel Network	San Angelo	TX	www.cvAngel.org	Angel Group	Full	2008	13	No	Network
Dallas Ventures Angel Network	Dallas	TX	http://www.dallasventures.com/	Angel Group	Provisional	2010	2	No	Network
Eyes of Texas Partners	Houston	TX	www.eyesoftexaspartners.com	Angel Group					
Health Care Angels	Houston	TX	http://hca.angelgroups.net	Angel Group	Full	2006	14		Network
Houston Angel Network	Kingwood	TX	www.houstonangelnetwork.org	Angel Group	Full	2001	66	No	Network
Lone Star Angels		TX	http://lonestarangels.angelgroups.net/	Angel Group					
North Dallas Investment Group	Richardson	TX	www.nd-ig.com	Angel Group	No	1998	250	0	Network
North Texas Angel Network	Fort Worth	TX	http://northtexasangelnetwork.org/	Angel Group	Full	2007	35	No	Network
Startech	San Antonio	TX	http://www.startech1.org	Angel Group	Full	2003	59	No	Network
Texoma Angels	Wichita Falls	TX	None yet	Angel Group	Provisional	2011	15	No	Network
The Dallas Angels	Dallas	TX	www.thedallasangels.com	Angel Group	No				
The InvestIN Forum of Angel Investors	Dallas	TX	www.theinvestinforum.com	Angel Group		2005	35	No	Network
Waco Angel Network	Waco	TX	www.wacochamber.com/angelnetwork.php	Angel Group					
West Texas Angel Network	Amarillo	TX	www.westtexasangelnetwork.com	Angel Group	Full	2009	15	No	Network
ACU Angel Group		TX		Possible Angel					
Dallas Angel Network	Dallas	TX		Possible Angel					
Research Valley Angel Fund	College Station	TX	not available	Possible Angel		2009	4	Yes	Fund
Cache Valley Angels	Logan	UT		Angel Group					
Dixie Angels	St George	UT	www.dixieangels.com	Angel Group					
Ogden Angels	Ogden	UT		Angel Group					
Olympus Angels	Salt Lake City	UT	www.olympusangelinvestors.org	Angel Group	No				
Park City Angels	Park City	UT	http://parkcityangels.angelgroups.net	Angel Group					
Promontory Angels		UT		Angel Group					
Salt Lake Life Science Angels	Salt Lake City	UT	www.sllsa.com	Angel Group					
Utah Angels	Alpine	UT	www.utahangels.org	Angel Group	No				
460 Angels	Blacksburg	VA	www.460angels.com	Angel Group	Full	2010	25	No	Network
Active Angel Investor Network	Vienna	VA	www.newvantagegroup.com	Angel Group	Full	2003	50	No	Network
Hampton Roads Angel Network	Hampton	VA	www.hrtc.org/en/cms/?926	Angel Group					
Jefferson Comer Group I, LLC	Charlottesville	VA	www.jeffersoncomergroup.com	Angel Group	Full	2005	10	Yes	Fund
New Dominion Angels	Warrenton	VA	www.newdominionangels.com	Angel Group	Full	2008	43	No	Network
Space Angels Network, LLC	Leesburg	VA	www.spaceangelsnetwork.com	Angel Group		2008	8	No	Network
The Wedgwood Circle LLC	Burke	VA	www.wedgwoodcircle.com	Angel Group		2007	30	No	Network
Virginia Active Angel Network	Charlottesville	VA	http://www.virginiaactiveangelnetwork.com/	Angel Group	Full	2005	32	No	Network
Washington Dinner Club	Vienna	VA	www.washingtondinnerclub.com	Angel Group	No	2000	70	Yes	Fund
Alliance of Angels	Seattle	WA	www.allianceofangels.com	Angel Group	Full	1997	68	Yes	Network with a Sidecar Fund
Bellingham Angel Group	Bellingham	WA	www.bellinghamangels.com	Angel Group	Full	2005	50	No	Network
Columbia Investor Group	Spokane	WA	www.watechcenter.org/index.php?p=Colum	Angel Group					
Keiretsu Forum - Bellevue/Eastside	Bellevue	WA	www.keiretsuforum.com	Angel Group					
Keiretsu Forum - Seattle/Northwest	Seattle	WA	www.keiretsuforum.com	Angel Group					
Northwest Energy Angels	Seattle	WA	www.nwenergyangels.com	Angel Group	Full	2006	40	No	Network
Puget Sound Venture Club	Bellevue	WA	www.pugetsoundvc.com	Angel Group	Full	1985	25	No	Network
Seraph Capital Forum	Seattle	WA	www.seraphcapital.com	Angel Group	Full	1998	18	No	Network
Spokane Angel Alliance	Spokane	WA	www.connectnw.org	Angel Group	Full	2002	75	Yes	Network with a Sidecar Fund
TacomaAngel Network	Tacoma	WA	www.tacomaangelnetwork.com	Angel Group	Full	2006	23	No	Network
WINGS - The Medical Technology Angel	Seattle	WA	http://www.medtechwings.com/	Angel Group	Full	2010	50	No	Network
ZINO Society	Seattle	WA	www.zinosociety.com	Angel Group		2005	125	No	Network
Badger AgVest, LLC	Wausau	WI	www.badgeragvest.com	Angel Group	No	2004	86	No	Network
Central Wisconsin Business Angels	Plover	WI		Angel Group					
Chippewa Valley Angel Investors	Chippewa Falls	WI	http://www.momentumwest.org/index.cfm?e	Angel Group	No	2003	22	0	
DaneVest Capital LLC	Middleton	WI	www.danevestcapital.com	Angel Group		2007	25	Yes	Fund
Golden Angels Network	Milwaukee	WI	http://www.goldenangelsnetwork.org/	Angel Group	Full	2003	62	No	Network

IQ Corridor Angel Network	Waukesha	WI		Angel Group					
Lake Superior Angel Network	Superior	WI	www.lakesuperiorangels.com	Angel Group					
Origin Investment Group	La Crosse	WI	http://www.uwlax.edu/SBDC/Origin-	Angel Group		2001	23	No	Network
Pennies from Heaven	Kenosha	WI		Angel Group					
Phenomenelle Angels Fund I, LP	Madison	WI	www.phenomenelleangels.com	Angel Group	Full	2005	30	Yes	Fund
Silicon Pastures	Milwaukee	WI	http://siliconpastures.com	Angel Group	Full	2000	23	No	Network
St. Croix Valley Angel Network Inc	River Falls	WI	http://angelsoft.net/venture-fund/st-croix-	Angel Group					
Successful Entrepreneur Investors	Milwaukee	WI	http://successfulentrepreneurinvestors.ange	Angel Group					
Wisconsin Investment Partners LLC	Middleton	WI	www.wisinvpartners.com	Angel Group	Full	2000	55	No	Network
West Virginia Angel Network	Fairmont	WV	www.wvangel.net	Angel Group	Provisional	2008	13	No	Network
Wyoming Angel Network	Laramie	WY	www.wyomingangels.angelgroups.net	Angel Group		2007			
AOS Ventures			www.aosventures.com	Angel Group					
Film Angels			www.filmangels.org	Angel Group					
Golden Seeds LLC			www.goldenseeds.com	Angel Group	Full	2004	190	No	Network
Keiretsu Forum - NY Tri-State			www.keiretsuforum.com	Angel Group					
Northern Arizona Angels			http://www.nacet.org/	Angel Group					
Rio Grande Valley Angels	TX			Angel Group					
US Angel Investors			www.usangelinvestors.com	Angel Group					
Wedgwood Circle Institute				Angel Group					
Austin Angel Investors				Possible Angel					
Baltimore Angels				Possible Angel					
Fat Cat Club			www.thefatcatclub.com	Possible Angel					
Giantstep Angel Network	San Francisco		www.giantstepllc.com/	Possible Angel					
McDermott Pre-seed Fund				Possible Angel					
PreFlight Ventures				Possible Angel					
Research Triangle Angels				Possible Angel					

ADDENDUM 4

Center for Venture Research

Director, Jeffrey Sohl

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THE ANGEL INVESTOR MARKET IN 2007: MIXED SIGNS OF GROWTH

Market Size

The angel investor market in 2007 has continued a reasonable growth path in investment activity but has exhibited little change in investment dollars from last year. Total investments in 2007 were $26.0 billion, an increase of 1.8% over 2006, according to the **Center for Venture Research** at the University of New Hampshire. However, a total of 57,120 entrepreneurial ventures received angel funding in 2007, a robust 12.0% increase from 2006, and the number of active investors in 2007 was 258,200 individuals, an increase of 10.3% over 2006. The modest increase in total dollars, coupled with the increase in investments and more angels participating, resulted in a smaller deal size for 2007. In contrast to venture capital, in which money must be invested during the life of the fund and is in part based on the size of the fund, angel investing is an individual decision and angels invest from their net worth. These data indicate that angels are exhibiting a cautious approach to investing in light of the recent volatility in the economy.

Sector Analysis

Software accounted for the largest share of investments, with 27% of total angel investments in 2007, followed by Healthcare Services/Medical Devices and Equipment (19%) and Biotech (12%). Industrial/Energy accounted for 8% of investments, potentially reflecting an appetite for green technologies. Retail (6%) and Media (5%) round out the top six investment sectors. Since the angel market is essentially the spawning ground for the next wave of high growth investments, this sector investing provides an indication of investment opportunities that will be available for later stage institutional investors.

Sector	Software	Healthcare	Biotech	Industrial/Energy	Retail	Media
Deals	27%	19%	12%	8%	6%	5%

Job Growth

Angel investments continue to be a significant contributor to job growth with the creation of 200,000 new jobs in the United States in 2007, or 3.3 jobs per angel investment. However, this tracks jobs created at the time of the angel investment and thus it is likely that this job creation of 200,000 is the minimum number of jobs created by angels in 2007.

Stage

Angels continue to be the largest source of seed and start-up capital, with 39% of 2007 angel investments in the seed and start-up stage. Angels also exhibited an interest in post-seed/start-up investing with 35% of investments in this stage. Expansion stage investing (21%) showed the biggest increase. While angels continue to represent the largest source of seed and start-up capital, market conditions and the capital gap are requiring angels to engage in more later-stage rounds. New, first sequence, investments represent 63% of 2007 angel activity, unchanged from 2006, indicating a continued preference for new, as opposed to follow-on, investments.

Yield Rates

The yield (acceptance) rate is defined as the percentage of investment opportunities that are brought to the attention of investors that result in an investment. In 2007 the yield rate was 14%, continuing a decline in yield rates that began in 2005 (23% yield rate). This reduction in the yield rate to the historical average reduces the concern of an unsustainable investment rate.

Women and Minority Entrepreneurs and Investors

In 2007 women angels represented 12.0% of the angel market. Women-owned ventures accounted for 12.7% of the entrepreneurs that are seeking angel capital and 16.0% of these women entrepreneurs received angel investment in 2007. Thus, while the number of women seeking angel capital is low, the percentage that receives angel investments is in line with the overall market yield rate. These data indicate that when women do seek angel capital they fair well, but the need is to increase the number of women entrepreneurs that seek angel capital.

Minority angels accounted for 3.0% of the angel population and minority-owned firms represented 4.7% of the entrepreneurs that presented their business concept to angels. The yield rate for these minority-owned firms was 21.2%, which for the first time is in line with market yield rates. However, the small percentage of minority-owned firms seeking angel capital is of concern, as is the sustainability of the yield rate.

Return Rates

Mergers and acquisitions represented 65% of the angel exits, and IPOs 4%, in 2007. Bankruptcies accounted for 27% of the exits. Annual returns for angel's exits (mergers and acquisitions and IPOs) were 27.7%. However, these returns were quite variable and a reasonable estimate for returns rates for 2007 is 20%-40%.

The **Center for Venture Research** (CVR) has been conducting research on the angel market since 1980. The CVR's mission is to provide an understanding of the angel market and the critical role of angels in the early stage equity financing of high growth entrepreneurial ventures. Through the tenet of academic research in an applied area of study, the CVR is dedicated to providing reliable and timely information on the angel market to entrepreneurs, private investors and public policymakers.

The Center for Venture Research would like to thank all the angel groups and individual angels that participate in our research efforts. The Center for Venture Research also provides seminars to angels and entrepreneurs, and research reports on aspects of the angel market are also available. For more information visit www.unh.edu/cvr or contact the CVR at 603-862-3341.

PREPARED STATEMENT OF ROBERT F. BARGATZE

EXECUTIVE VICE PRESIDENT, CHIEF SCIENTIFIC OFFICER, LIGOCYTE PHARMACEUTICALS, INC.

JULY 20, 2011

Good morning Chairman Tester, Ranking Member Vitter, Members of the Committee, ladies, and gentlemen. My name is Robert Bargatze, and I am Executive Vice President and Chief Scientific Officer of LigoCyte Pharmaceuticals, Inc. I want to thank you for the opportunity to speak with you today about the unique hurdles to accessing capital that innovative biotech startups face. Make no mistake, biotechnology has incredible potential to unlock the secrets to curing devastating disease and helping people to live longer, healthier, and more productive lives, but the barriers that small biotech companies encounter on a daily basis raise some important questions: Would we rather see the next generation of breakthrough cures discovered by researchers in Bozeman or Beijing? Do we want the jobs associated with this groundbreaking science to go to workers in Missoula or Malaysia? If we want more scientific breakthroughs that allow us to enjoy a high quality of life—indeed, breakthroughs that save the lives of our loved ones—then shouldn't we put in place policies that encourage innovation through private investment?

While the biotechnology industry faces significant challenges, we nonetheless have the ability to deliver the next generation of cures and treatments to the bedsides of patients who desperately need them while at the same time creating a healthier American economy. The 1.42 million Americans directly employed by biotech are driven to treat and heal the world, but in order for them to be able to do that, Congress must remove the barriers to innovation that we face. Innovation in biotechnology leads to the medical breakthroughs that cure and treat devastating diseases like cancer and Alzheimer's and allow real people to see their grandkids graduate from college or walk their daughters down the aisle.

The leash that holds our industry back from helping more people is, in large part, the devastating effect that a lack of access to necessary capital can have on growing biotech companies. Today, Congress has the opportunity to help speed lifesaving cures and treatments to patients by bolstering capital formation in our industry.

My company, LigoCyte, is a private biopharmaceutical company based in Bozeman, Montana, that is developing innovative vaccine products based on our virus-like particle (VLP) platform. VLP technology provides antiviral protection without the complexity associated with live viruses. Our lead product candidate, a VLP-based vaccine designed to prevent gastroenteritis caused by norovirus, just completed a Phase I/II study which showed proof-of-principle in humans. I cofounded LigoCyte in 1998, and we currently have 38 employees.

I am also the Chairman of the Montana BioScience Alliance, which fosters partnerships among the various biotech stakeholders in Montana in order to grow and sustain a globally competitive bioscience industry in our State. Our relationships with entrepreneurs, laboratories, hospitals, clinics, and universities allow Montana biotechnology companies to create high-quality jobs and economic opportunity for the people of Montana.

When I cofounded LigoCyte in 1998, we were the quintessential small business. My four cofounders and I each gave the new company $5,000 to get things off the ground—our very first round of financing. With our startup funds, we bought kitchen cabinets from the home improvement store down the street and installed them ourselves, giving us our first laboratory shelves in our new workspace. Our location in the Advanced Technology Park near Montana State University put us in prime position to succeed, but we had no cash on hand past our initial personal investment. Our first contracts were for high content screening with large pharmaceutical companies like Merck and SmithKline to facilitate selection of lead product candidate anti-inflammatory drugs. These small revenue streams generated income to cover our overhead while we wrote our Small Business Innovation Research (SBIR) grant proposals.

SBIR gave us the jumpstart we needed to move forward with our own projects. SBIR is targeted specifically at small, innovative companies like ours, and it was a key foundation of LigoCyte's success in Montana. Because of our SBIR grants, we could focus on our vaccines and make important progress in our research. We were able to leverage this progress into a contract to do biodefense vaccine development work for the Department of Defense (DoD). With our success on our DoD contract, we were finally able to get our first round of venture financing. Venture capital is the lifeblood of the biotechnology industry around the country, and our early partnerships with two small venture firms in the Rockies allowed us to fund Phase I clinical trials in our vaccine pipeline. The data from those trials was instrumental in getting buy-in from larger investors, which has pushed our research to where it is today. Four years ago, we attended the Montana Economic Development Summit, hosted by Montana Senator Max Baucus. We successfully presented our Phase I data there to Forward Ventures and subsequently met with several interested venture capital funds, including Fidelity BioVentures and those affiliated with the large biopharmaceutical companies MedImmune and Novartis. These relationships led to a $28 million round of venture financing.

We are currently entirely privately funded, with the exception of our ongoing contracts with the Department of Defense. As you can see, getting to this point was no easy task. Even as the Chief Scientific Officer, I always had to keep one eye open for financing opportunities to further our research. There is no "beaten path" for small companies like ours to follow. Instead, we have to break new ground, both in our science and in our search for funding. It is not a simple undertaking, and many companies are not as successful as LigoCyte has been. Their science might be just as groundbreaking as ours, but if the funding cards do not fall the right way the science hardly matters.

As Chairman of the Montana BioScience Alliance, I have heard numerous stories of other biotech startups going through the same process that LigoCyte did. The first years of a private biotech consist of cobbling together funding from any source possible until a larger revenue stream opens up. LigoCyte was lucky enough to be researching vaccines, as our biodefense contract with the Department of Defense was an important financing milestone in our early development as a company. However, most startups do not have a pipeline that lends itself quite so easily to large biodefense contracts. Companies researching treatments for cardiovascular disease, the leading cause of death in the United States; diabetes, one of the fastest-growing ailments in the population; or cancer, the largest biotechnology research space, would get no interest from DoD, leaving them in an even weaker position when seeking venture capital financing.

There are thousands of companies facing similar funding struggles throughout the United States, each one with molecules and product candidates that could change the face of modern medicine. Biotechnology may hold the answers to the medical problems that America faces, from the devastation of cancer and HIV/AIDS to the personal losses of Alzheimer's and Parkinson's to the spiraling costs of health care associated with diseases of epic proportions, such as Type 2 diabetes. Of the 118 scientifically novel drugs approved from 1998 to 2007, 48 percent were discovered and/or developed by biotech companies. These revolutionary cures and treatments save lives, provide a higher quality of life, and reduce long-term health care costs. As Congress continues to look for ways to reduce our Nation's deficit, it is important that we remember the impact that innovative medicines can have on increasing overall health, especially by combating costly chronic diseases. These advances will save taxpayers money by decreasing the outlays necessary to care for our aging population.

Additionally, the biotech industry is a thriving economic growth engine, directly employing 1.42 million Americans in high-quality jobs and indirectly supporting an additional 6.6 million workers. The average biotechnology employee makes $77,595 annually, far above the national average salary. President Obama has called for the United States to lead in the 21st century innovation economy, and biotechnology can be a key facet of our Nation's economic growth. Montana is among the leaders of this growth—the bioscience sector in our State spends more on R&D per capita than the bioscience sectors in all but 13 States.

Despite these windows of opportunity, biotechnology research and development is often a difficult process. Bringing groundbreaking cures and treatments from bench to bedside is a long and arduous road, and small biotechnology companies are at the forefront of the effort. It takes an estimated 8 to 12 years for one of these breakthrough companies to bring a new medicine from discovery through Phase I, Phase II, and Phase III clinical trials and on to FDA approval of a product. The entire endeavor costs between $800 million and $1.2 billion. Due to this capital-intensive process, biotechnology companies lacking research and development funds turn to private sector investors and collaborative agreements to finance the early stages of development.

However, the current economic climate has made private investment dollars extremely elusive. In 2010, venture capital fundraising endured its fourth straight year of decline and its worst since 2003. Biotechnology received just $2 billion in venture funding, a 27 percent drop from its share in 2009. Even worse, the biggest fall was seen in initial venture rounds, which are the most critical for early-stage companies. Series A deals last year brought in just over half of what they did in 2009. Decreasing up-front investment could mean cures and treatments being shelved in labs across the Nation and ultimately not reaching patients. Generally, venture capitalists are challenged by significantly reduced capital flowing into their funds on the front end and are having to hold their investments longer before exiting due to the weakness of the public markets. This has led to venture funds deploying capital differently than in the past, to biotech's disadvantage.

Montana startups are at a particular disadvantage due to the dearth of venture capital firms in and around our State. Although the Montana BioScience Alliance has taken steps to increase university partnerships, find firms that specialize in biotech construction and intellectual property protection, and propel scientific and management expertise to Montana companies, it remains the case that funding sources are few and far between among the Rocky Mountains. In fact, Senator Baucus's Economic Development Summit is one of the only efficient ways for startup biotechnology companies in our State to connect with venture capitalists. Small biotech companies in Montana are almost all private and are largely reliant on SBIR and other Government programs like the Therapeutic Discovery Project (TDP). However, Government funding combined with investment from a company's founders is not enough to pilot a clinical study or investigate potential new treatments. The high cost and long development period associated with bringing a new medicine to market make private capital necessary, often in the form of angel investors and venture capitalists. LigoCyte has been fortunate thus far, but the high-risk nature of biotech development and the gloomy economic climate have made investors reluctant.

The shift in the economy has also harmed companies like mine that already have venture financing. Historically, venture capitalists receive a return on their investment when a company goes public through an initial public offering (IPO). The cash raised through the IPO would provide an exit for these early investors as well as provide the capital to fund expensive Phase II and Phase III trials at the company. However, the IPO market is essentially closed at the moment. From 2004 to 2007, the United States had an average of 34 IPOs in biotechnology per year. In 2010, there were only seventeen. Although the funding level of biotech IPOs is increasing from its recession-induced nadir, this progress has been made almost entirely by larger, more mature companies. The two largest transactions in the industry last year were completed by a company in Phase III trials and a next-generation sequencing company that was already generating revenue. The weak demand for these public offerings for smaller companies is restricting access to capital. This then hampers critical research, forces companies to stay private for longer, and depresses valuations of later-stage venture rounds.

As U.S. biotech companies face financial uncertainty, other countries are increasing their investments and enacting intellectual property protections to encourage their own biotech growth. The United States still holds its place as the leader in global biotechnology patents thanks to our large head start, but China and India rank first and second in biotech patent growth. These emerging powers are heavily investing in science, and particularly in biotechnology. Meanwhile, the U.S. has fallen to 20th out of 23 countries in new biotech patent applications. A recent survey conducted by BIO found that nearly a third of small biotech companies have been approached to move their R&D operations offshore, and CEOs named China and India as two prime destinations. Furthermore, since 2008, trouble in the IPO market has decreased the number of public biotech companies in the U.S. from 394 to just 302, a 23 percent drop. Meanwhile, China's biotech IPO market continues to grow—in 2010, thirty-three bioscience IPOs in China raised $5.9 billion, an increase of 47 percent over 2009. The venture capital and private equity market is thriving in China as well, increasing funding levels by over 200 percent in the past 2 years. Meanwhile, companies here in the United States struggle to find funding from any number of sources, not all of which prove fruitful. In Montana, we have found that novel financing sources are few and far between, and innovation capital is dwindling. It is imperative that financing is robust and available to encourage continued biotech innovation in the U.S., enhance American competitiveness on the global stage, and ensure that the United States maintains a healthy and growing innovation economy.

Modifications to Current Federal Programs Impacting Innovative Biotech Companies

Congress and the Administration have taken some notable steps to help companies facing these financial struggles. By providing funding to innovative companies and incentivizing investment in small businesses, certain programs have proven invaluable to companies like mine. However, Congress can increase the impact of these important programs by making modifications to ensure that they have the largest possible effect on innovation.

Small Business Innovation Research (SBIR) Program

As I have already mentioned, SBIR was a potent lifeline for LigoCyte during our early stages of development. The SBIR program is structured so that 2.5 percent of all Federal R&D grant monies are reserved for small business applicants. These funds provide critical seed money to new business innovators like the biotech startups in Montana. However, the eligibility rules for small businesses to qualify for SBIR have excluded biotech companies since 2003. In particular, the size standard limits eligibility to companies that are majority owned and controlled by individuals who are U.S. citizens (or resident aliens). While the congressional intent of this definition was to keep funding in the United States, the Small Business Administration (SBA) has interpreted it differently. In 2001, after LigoCyte had already received our SBIR grants, the SBA Office of Hearings and Appeals ruled that the definition of "individuals" only applied to "natural persons," and not to entities such as venture capitals funds, pension funds, or corporations. In 2003, SBA specifically applied this ruling to biotechnology companies funded by venture capitalists. This effectively barred venture-backed companies from receiving SBIR funds, a drastic change from the program's implementation since 1982.

In order for biotechnology companies to be successful, they must tap into venture capital funding. LigoCyte, for instance, meets virtually every definition of the "small, high-tech, innovative" businesses that SBIR purports to help; however, we are not currently eligible for SBIR grants because we are majority owned by venture capital companies. Other companies like LigoCyte that are not as far along the development pathway have been similarly barred from the program. I have seen the impact the SBIR program has had on the biotechnology industry, not only by fostering the growth of fledgling companies during some of the most challenging times in their business cycles, but also by enhancing the advancement of important cures and treatments to the marketplace. However, the current rules have inhibited the growth and survival of small private biotechnology companies due to the inability of venture-backed companies to participate in the SBIR program. I believe that Congress should restore SBIR eligibility to majority venture-backed companies in order to truly incentivize breakthrough innovation.

Therapeutic Discovery Project (TDP)

Another program which has helped LigoCyte and other small biotechnology companies is the Therapeutic Discovery Project (TDP). Last March, Congress enacted this important tax credit program designed to stimulate investment in biotechnology research and development. Under this program, small biotech companies received a much-needed infusion of capital to advance their innovative therapeutic projects while creating and sustaining high-paying, high-quality American jobs.

In total, the Therapeutic Discovery Project awarded $1 billion in grants and tax credits to nearly 3,000 companies with fewer than 250 employees each. These small companies were eligible to be reimbursed for up to 50 percent of their qualified investment in activities like hiring researchers and conducting clinical trials. The impact of this funding was felt across the American biotech industry, as companies in 47 States received awards. The average company received just over $200,000, an important shot in the arm in these rough economic times.

LigoCyte received two awards under TDP, both for the maximum amount of $244,479. Our nearly $500,000 TDP allotment has been a valuable resource to our company. As a result of this funding, we were able to hire one new researcher and keep the rest of our 44 workers employed at salaries that reflects the hard work they put in. The cash influx that TDP provided also helped us advance our research. One of our grants was for our VLP-based norovirus vaccine which, as I have mentioned, recently showed proof-of-principle in a Phase I/II trial. Additionally, we received a grant for another candidate in our pipeline, a VLP-based vaccine to prevent respiratory disease.

The infusion of capital for small biotech companies provided by the Therapeutic Discovery Project is an essential incentive for companies to keep their research and development, manufacturing, and operations here in the United States. The critical funding will also accelerate the movement of cures and treatments to patients who need them. This program was a step in the right direction by Congress to invest in growing the U.S. biotech industry to keep pace with our global competitors. Given the imbalance between the extraordinarily high demand by small biotech companies and the limited pool of funds, I hope that Congress will extend and expand this oversubscribed program and assist more American companies in pursuing life-saving scientific breakthroughs and supporting American jobs.

Financial Services Capital Formation Proposals

The breadth of the financing problem in the biotechnology industry calls for comprehensive solutions to ease capital formation, involving both tax and financial services policy. In addition to the difficult financing landscape and struggling public markets, growing biotech companies also face regulatory burdens which further hinder capital formation in our industry. Making changes to regulations which unintentionally harm the biotech industry would free companies to focus their efforts on their innovative scientific research rather than complex reporting and compliance. I believe that changes to Sarbanes-Oxley Section 404(b), SEC Rule 12b-2, SEC Regulation A, and the SEC reporting standard could provide great benefit to groundbreaking biotechnology companies.

Sarbanes-Oxley Section 404(b) (Financial Reporting)

The Sarbanes-Oxley Act (SOX) was enacted to protect investors by bringing greater transparency to public companies. While the financial reporting requirements in SOX continue to provide this important service, Section 404(b) imposes a disproportionately negative cost burden on smaller public companies.

The biotechnology sector is especially disadvantaged by the compliance burden of Section 404(b) due to the unique nature of our industry. The long, capital-intensive development period intrinsic to biotechnology often causes companies to have a relatively high market capitalization (caused by multiple rounds of venture financing prior to going public) but little-to-no revenue. Therefore, many biotech companies facing their first few years on the public market are forced to divert funds from scientific research and development to Section 404(b) compliance. The opportunity cost of this compliance can prove damaging, resulting in already limited resources being driven away from a company's search for cures and treatments.

Further, the true value of biotech companies is found in nonfinancial disclosures such as clinical trial milestone results, FDA approvals, and patent status. Investors often make decisions based on these development milestones rather than the financial statements mandated by Section 404(b). Thus, the financial statements required do not provide much insight for potential investors, meaning that the high costs of compliance far outweigh its benefits.

Section 989G of the Dodd-Frank Wall Street Reform and Consumer Protection Act is an important acknowledgment by Congress that Section 404(b) of Sarbanes-Oxley is not an appropriate requirement for many small reporting companies. Dodd-Frank sets a permanent exemption from Section 404(b) for companies with a public float below $75 million; however, this is too narrow in practicality and must be raised. In 2006, the SEC Small Business Advisory Board recommended that the permanent exemption be extended to companies with public floats less than $700 million. The Advisory Board's proposed ceiling would allow small innovative companies to focus on speeding cures and treatments to patients rather than SOX compliance.

The Advisory Board also realized that public float alone does not fully portray the complexity and risk associated with a reporting company, and suggested a revenue test to paint a fuller picture. Revenue should be a critical consideration when determining the appropriateness of Section 404(b) compliance, along with public float. The addition of a revenue test would better serve the congressional intent behind Sarbanes-Oxley by reflecting the truly small nature of companies with little or no product revenue. Public companies with a public float below $700 million and with product revenue below $100 million should be permanently exempt from Section 404(b), allowing them to focus on their critical research and development.

SEC Rule 12b-2 (Filing Status Definitions)

Amending the filing status definitions found in SEC Rule 12b-2 would be another way to reduce the 404(b) compliance burden on small innovative companies.

SEC Rule 12b-2 establishes three distinct classifications by which companies determine their filing status: large accelerated filers—companies with a public float of more than $700 million; accelerated filers—those with a public float of more than $75 million but less than $700 million; and nonaccelerated filers—companies with a public float of less than $75 million (known as smaller reporting companies).

Because a particular filing status carries with it onerous regulatory duties and compliance costs (such as compliance with SOX Section 404(b)), finding a method of designation that fairly captures a company's profile is essential. While using public float as a primary metric for determining filing status is a good first step, it fails to take into account other relevant factors that more accurately measure the size and complexity of certain industries or categories of companies. The biotechnology industry provides a telling example.

Biotech companies often have a relatively large public float because of the potential of the groundbreaking cures and treatments they are developing. However, as

I have discussed, the extended R&D timeline that we face calls for a long-term commitment and considerable private funding. During the long development period, small biotech companies commonly have no revenue or operate at a loss. If revenue was taken into account in determining filing status, then companies with little to no revenue but a high public float could avoid the financial burdens of certain auditing requirements with which larger, more established companies must comply. Revising the definition of smaller reporting companies to include a revenue component would reflect the true nature of startup biotechnology companies and allow them to focus on their groundbreaking science.

Additionally, the current quantitative metrics for determining filer status under Rule 12b-2 also need revision. The definitions of filer status were created to offer unique classifications based on filer characteristics and determine the breadth of regulatory compliance to which filers must adhere. As I have mentioned, the markers are currently set at $75 million and $700 million, dividing filers into three groups. When these definitions were set, they provided an accurate depiction of the groups above and below the markers. Since then, however, the market has continued to evolve and these markers have become outdated. In particular, the $75 million public float cap for smaller reporting companies does not match current market conditions. I believe that a $250 million cap for nonaccelerated filers would group companies with common characteristics together, as the rule originally intended to do, rather than split them at the outdated $75 million point.

SEC Regulation A (Direct Public Offerings)

Regulation A, adopted by the SEC pursuant to Section 3(b) of the Securities Act of 1933, was created to provide smaller companies with a mechanism for capital formation with streamlined offering and disclosure requirements. Updating it to match today's market conditions could provide an important funding source for small biotechnology companies.

Regulation A allows companies to conduct a direct public offering valued at less than $5 million while not burdening them with the disclosure requirements traditionally associated with public offerings. The idea behind Regulation A was to give companies which would benefit from a $5 million influx (*i.e.,* small companies in need of capital formation) an opportunity to access the public markets without weighing them down through onerous reporting requirements.

However, the $5 million offering amount has not been adjusted to fit the realities of the current market and Regulation A is not used by small companies today. The current threshold was set in 1980 and is not indexed to inflation, pushing Regulation A into virtual obsolescence. As it stands, a direct public offering of just $5 million does not allow for a large enough capital influx for companies to justify the time and expense necessary to satisfy even the relaxed offering and disclosure requirements.

I believe that Regulation A could have a positive impact for small biotechnology companies if its eligibility threshold was increased from $5 million to $50 million while maintaining the same disclosure requirements. This increase would allow companies to raise more capital from their direct public offering while still restricting the relaxed disclosure requirements to small, emerging companies. Regulation A reform could provide a valuable funding alternative for small biotech startups, giving them access to the public markets at an earlier stage in their growth cycle and allowing them to raise valuable innovation capital.

SEC Reporting Standard (Shareholder Limit)

Although SEC policies like Rule 12b-2 and Regulation A are designed to monitor public companies, the agency also keeps tabs on private companies when they reach a certain size. Modifying the SEC's public reporting standard would prevent small private biotechnology companies from getting unnecessarily burdened by shareholder regulations.

Once a private company has 500 shareholders, it must begin to disclose its financial statements publicly. Biotechnology companies are particularly affected by this 500 shareholder rule due to our industry's growth cycle trends and compensation practices. As I have mentioned, the IPO market is essentially closed to biotechnology, leading many companies to choose to remain private for at least 10 years before going onto the public market. This long time frame can easily result in a company having more than 500 current and former employees, most of whom have received stock options as part of their compensation package. Under the SEC's shareholder limit, a company with over 500 former employees holding stock, even if it had relatively few current employees, would trigger the public reporting requirements. Exempting employees from any shareholder limit is a minimum necessary measure to ensure growth-stage biotech companies are able to hire the best available employees and compensate them with equity interests, allowing them to realize the financial upside of a company's success.

Also, including accredited investors in the private company shareholder count does not serve the intended purpose of protecting retail investors. The SEC recognizes that accredited investors are a unique class that does not require the same level of protection as other investors. By including them in the 500 shareholder limit, growth-stage private companies are forced to rely primarily on institutional investors because they need to maximize funding without triggering the limit. This excludes retail investors, who the SEC was originally trying to protect, from taking part in this process.

Additionally, increasing the shareholder limit from 500 to 1,000 would relieve small biotech companies from unnecessary costs and burdens as they continue to grow. As it stands, the limit encumbers capital formation by forcing companies to focus their investor base on large institutional investors at the expense of smaller ones that have been the backbone of our industry. Further, it hinders a company's ability to compensate its employees with equity interests and negatively affects the liquidity of its shares. Increasing the shareholder limit and exempting employees and accredited investors from the count are measures that, together, would remove significant financing burdens from small, growing companies.

New Tax Proposals Encouraging Private Biotech Company Investment

While modifications to onerous regulations would provide key improvements to the biotechnology investment environment, Congress has the opportunity to enact new incentives that could open new sources of capital for small biotechs. Though this Subcommittee does not have jurisdiction over tax issues, I would like to take this opportunity to highlight a few tax policies that could be valuable in incentivizing private investment. There are a number of new proposals, including the modifications to IRC Section 1202, the House-passed Small Business Early Stage Investment Program, an angel investor tax credit, and partnership structures to support high-risk innovative industries, which could incentivize biotechnology investment.

Reduced Capital Gains Rate for Sale of Qualified Small Business Stock (IRC Section 1202)

Congress has striven to aid startup companies by providing investors in qualified small businesses preferential capital gains tax treatment on the return on their investments. Section 1202 of the Internal Revenue Code covers this reduced capital gains tax and defines the small businesses that are eligible for preferential treatment.

Congress's original intent in enacting Section 1202 was to stimulate investment in small businesses. President Obama and the 111th Congress further emphasized the importance of small business investment by enacting a law temporarily allowing 100 percent of gains from the sale of qualified small business stock to be excluded from capital gains taxation. Thus, investors in qualified small businesses are eligible for a zero percent capital gains rate on their sale of certain qualified stock through the end of 2011. However, despite Congress's support for stimulating investment in small and start-up businesses, Section 1202, which defines the qualified small business stock eligible for an exclusion from capital gains taxation, is too limited and presents technical challenges which investors in small innovative companies are unable to overcome. Among other challenges, Section 1202 employs a test in which a corporation's gross assets must be less than $50 million immediately before and after the stock is issued in order to be eligible for preferred capital gains treatment. When intellectual property (IP) is incorporated as an asset, small biotech companies are almost always over the $50 million limit. The high value of our IP belies the fact that our emerging companies are small businesses that need support if they are going to continue to work toward important medical breakthroughs.

As I have mentioned, venture capital funding is very limited in Montana, so incentives for further investment in our industry are much needed. Modifications to the small business stock rules under Section 1202 so that they more accurately represent the State of innovative small businesses in America could provide a critical capital infusion for small biotechs.

Small Business Early-Stage Investment Program

Last year, the House of Representatives took action to assist early-stage venture-backed businesses like those in the biotechnology industry. In June, it passed the Small Business Early-Stage Investment Program as a part of the Small Business Lending Fund Act of 2010. This program would provide $1 billion in matching funds for venture capital investments in certain industries, including life sciences. These funds would serve as matching dollars for venture capitalists that have already raised an equivalent amount of capital from private sector sources. The Government would essentially double the seed financing for venture capitalists who are investing in biotech startups.

In order to participate, an investment company like a venture fund would have to submit a business plan describing its investment strategy in early-stage small businesses in targeted industries, information about the expertise of the management team, and the likelihood of success and profitability. A participating investment company would have to make all of its investments in small business concerns, 50 percent of which would have to be early-stage small businesses, defined as domestic businesses with less than $15 million in gross annual sales revenues for the previous 3 years. If a venture group qualified, it would use its grant from the SBA to double its investment in an early-stage small business.

Under the program, the SBA's grants would be treated the same as investments by other limited partners in an investment fund, except that the SBA would not receive any control or voting rights with respect to the early-stage small business. Ideally, over time, the SBA's investment program would become self-sustaining as funds from successful small businesses were repaid into a revolving fund. This would allow the SBA to continue to provide matching grants for venture capitalists to extend lifelines to even more early-stage high tech companies.

This legislation has the potential to significantly increase the flow of capital into small, early-stage biotechnology companies. In turn, it would give biotech startups the opportunity to conduct their groundbreaking research to find cures and treatments for patients while providing high-paying jobs for American workers.

Angel Investor Tax Credit

Congress could look to the States for examples of how to spur biotech innovation. Over 20 States have implemented angel investor tax credit programs, in which individual taxpayers are incentivized to invest in small innovative businesses like mine. While Montana does not have an angel investor tax credit program, angel investors continue to play a significant role in early-stage financing of our small biotechnology companies. A Federal angel tax credit program would encourage additional financing from these valuable investors during a biotech's seed stage of development.

Angel investors are the main source of capital for about 50,000 companies each year in the United States, but that number could decrease significantly unless action is taken to promote investment and minimize risk. Many States have recognized the importance of angel investors and implemented tax credit programs reimbursing angels for 25 percent to 50 percent of their qualified investments in biotechnology startups and other small businesses. This investment by the States makes clear the important impact that innovation can have on the national level. It is imperative that Congress look at measures the Federal Government could take that would spur seed investing vital to the beginning of the research and development process.

R&D Partnership Structures

Congress's support for biotechnology is critical in this uncertain economic climate. Historically, Congress has provided tax incentives to high-risk industries as a means of encouraging investment in new endeavors which it deems important. Research and development in the biotechnology industry is an extremely high-risk undertaking with substantial start-up costs, a lengthy time period, and the possibility that the technology will not be commercially viable. Biotech companies face hurdles in finding and developing new resources and diversifying risk while also expending substantial financial resources on research and development before successful FDA approval.

Allowing investors in high-risk biotech startups to take advantage of tax benefits accumulated during the long development process would create a powerful incentive structure for private investment in this often uncertain industry. By permitting biotech companies to drop their R&D projects into joint ventures with investors to pass through their tax benefits, R&D partnership structures would provide key early funding for startup biotechs while also keeping investors engaged. As Congress looks to maintain U.S. competitiveness in the global economy and lead the effort to cure and treat diseases, it should look to tax incentives that encourage investment despite the high-risk nature of the biotechnology industry.

Closing Remarks

The U.S. biotechnology industry remains committed to developing a healthier American economy, creating high-quality jobs in every State, and improving the lives of all Americans. Additionally, the medical breakthroughs happening in labs across the country could unlock the secrets to curing the devastating diseases that affect all of our families. While I am appreciative of the steps Congress has taken to support and inspire biotechnology breakthroughs, further investment is needed if the United States is to hold its place as a leader in creating new medicines and cures. While there is no single solution to the challenges facing our industry, the portfolio of options I have presented will help startup biotech companies in Montana and across the Nation weather the current economic storm and continue working toward delivering the next generation of medical breakthroughs—and, one day, cures—to patients who need them.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR HAGAN FROM ROBERT F. BARGATZE

Q.1. Dr. Bargatze, your testimony discussed the rounds of financing that your firm undertook as it grew.

Is it common for early-stage firms like yours to seek financing from investors such as angel networks, venture funds, and high-net worth individuals?

A.1. Yes, from my experience here in Montana this is a commonly shared path to early-stage company financing for raising private capital. For the majority of biotechnology companies that are without any product revenue, the significant capital requirements necessitate fundraising through a combination of angel investors and venture capital firms. Additionally, we and other Montana startups have taken significant advantage of SBIR/STTR and DOD contracts to advance our research and development efforts. Being nondilute these funds have allowed for founders and early-stage investors to suffer less dilution of ownership. Additionally, these Government sources of nondilutive capital made up the lion's share of financing that enabled LigoCyte's acquisition of a large $28M round of venture funding that has facilitated our later Phase human clinical trials.

Q.2. If so, do these types of investors typically make up the majority of shareholders in an early-stage firm?

A.2. In addition to founders and employees—yes, this would represent a typical majority of early and midstage firms.

Q.3. I understand that proposals have been advanced that would increase the 500 shareholder cap under Section 12(g) of the Securities and Exchange Act to 1,000 shareholders. I am aware of at least one such proposal that should also exempt accredited investors and employees from the shareholder count.

If the shareholders in an early-stage firms are typically accredited investors and employees, couldn't this exemption result in a substantial "phantom increase" in the 12(g) requirement?

A.3. While it is true that exempting employees and accredited investors from the proposed 1,000 private shareholder limit effectually redefines the limit to 1,000 retail shareholders, exempting employees from any shareholder limit is critical. Including employees in the count does not serve the intended goal to protect investors in privately held companies, but rather it limits a privately held company's ability to seek investor financing of any kind due to employee compensation practices.

Because many such companies are emerging, growth-stage entities, the full financial success has yet to be realized. Without large (or any) revenues, companies often reward valuable talent with stock options so that employees can realize the financial upside of the company, versus doling out hefty salaries at a time when the company has little to no product revenue.

Companies within industries with long growth cycles—such as biotech—are particularly burdened. They see many employees come and go in the 10-plus years it often takes to ready for the public markets. One can see how quickly and easily a company could hit the shareholder cap with employees, alone. These restrictions prevent companies from hiring and compensating the best talent, prevent companies from raising the outside capital they need from private investors, and shut out the retail investors that would otherwise choose to participate in the growth of exciting private companies.

Including accredited investors in the shareholder count has a similar effect: companies are forced to focus only on the largest and most qualified investors, due to the cap. Therefore, once again, retail investors are crowded out. Excluding retail investors altogether was not the original intention behind the private company shareholder limit.