

# **ΒιοΓΙΝ**κ

# THE MIDWEST BIOLINK COMMERCIALIZATION & BUSINESS CENTER

# **B**USINESS **P**LAN

Prepared for the City of Madison, WI Department of Planning, Community, and Economic Development Economic Development Division

by

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# **Executive Summary**

# History & Partners

The City of Madison in conjunction with the U.S. Economic Development Agency (EDA) and Madison Development Corporation (MDC), has initiated an effort to develop an agriculturally-focused incubation facility, the Midwest BioLink Commercialization and Business Center (BioLink). The EDA has proposed to fund \$3.6M for the construction and \$930,000 for operating cost during the first 3 years for a total of \$4,530,000. MDC is seeking TIF funding of \$2,049,750 plus \$513,533 in land value from the City of Madison.

BioLink will reside on a 2.6-acre site inside the 27-acre BioAg Gateway Campus bounded by Interstates 39/90, Femrite Drive, Agriculture Drive, and the Wisconsin Department of Agriculture (DATCP) building. The BioLink and BioAg Gateway Campus is part of a much larger regional and statewide initiative. Phase I of the facility will initially be 31,000 sq. ft. consisting of the following:

- 5,000 sq. ft. Office, Conference, Laboratory (fully finished)
- 17,000 sq. ft. Flex Space (enclosed, HVAC, with partial TI)
- 3,000 sq. ft. Head House
- 6,000 sq. ft. Greenhouse

Test plot and crop showcase lands will also be available to client companies within the campus. The facility will be expandable to approximately 60,000 square feet. Due to the diverse functions of Bio-Link's technology and the varying stages of maturity for prospective tenants, this facility will serve as an incubator as well as a center for prototyping, production and commercialization. Its ultimate goal is to take invention and technology, refine them, find viable commercial applications, and produce products of value for the world.

### Mission

The mission of BioLink will be to:

- Create a critical mass of agricultural based companies in the region
- Attract all stages of investment capital to the region
- Attract highly qualified top management talent to the region
- Commercialize partner technologies
- Gain recognition as a world center for agriculture-based invention, prototyping and commercialization
- Create new jobs within agriculture-based companies in the region



# Market Opportunity

The five driving-forces in pursuing this opportunity are primarily below:

- Accessing exciting new areas in agricultural biotechnology that are having dramatic affects on the world economy, human health and environment
- Building on the already substantial assets and strengths that exist in Madison and Wisconsin (these are detailed in the marketing and competition sections of this report)
- Providing the opportunity to access the ever increasing private and public sector resources in these sectors
- The need to be more proactive than reactive in the creation of agricultural biotechnology start-up businesses in the region
- These opportunities are a fit for the region and are substantive

# Affiliations

BioLink's facility and its executive staff should have a close working relationships with the University of Wisconsin-Madison; primarily in the area of the agricultural sciences biology, microbiology, molecular biology, biochemistry, food sciences and chemical engineering. In addition, BioLink will strive to have close relationships with the Great Lakes Bioenergy Research Center (GLBRC), USDA Forest Products Research Laboratory, Wisconsin Department of Agriculture (DATCP) and the U.S. Dairy Forage Research Center. Executive staff and prospective tenants will also work closely with private sector partners like MG&E, Danisco, Virent Energy, and Orbital Technology Corporation (Orbitec).

BioLink Commercialization Center is positioned to complement but not duplicate the UW facilities and expertise on campus. The major differentiation is its focus on commercialization and private sector tenants. It is differentiated form the University Research Park (URP) by its greenhouse, controlled environment facilities, on-site applied advisor CEO, and its agricultural focus.

# Operations Strategy

BioLink commercialization and scientific leadership expertise along with the physical attributes of BioLink will enable the facility to: a) attract quality clients (nationally), b) access quality top management for tenant companies, and c) access risk capital (internationally). In addition, the center will be highly selective of client companies and will provide distinguishable value-added client services not available elsewhere. These will be the key factors in BioLink being operationally successful by having successful clients.





## Keys to Success

BioLink Commercialization Center will be a truly public/private partnership involving federal, state and local institutions in addition to large and small private sector firms. It will succeed because of a focused market (agriculturally-based products and technology), stable funding provided by its partners, and an affiliation with major research institutions. BioLink's Board of Directors will be nationally recruited which will assure recruitment of top talent and opportunities to the region.

### ▶ Management

BioLink will be managed and run by a CEO. The CEO will be primarily responsible for selecting and advising client companies as detailed in this plan. The CEO will also be responsible for ongoing fund-raising and national sponsorships. Day-to-day facility management will be performed under an administrative contract with Orbitec (Orbital Technologies Corporation), the initial anchor tenant in the facility with expertise in controlled environment technology and greenhouses.

It is the opinion of the author, Dr. Robert Calcaterra (see Bio in Appendices) of this business plan after 20 years in the business incubation field that the one most critical factors in the success of a BioLink is the CEO who manages it.

That person needs to have the following personal characteristics:

- Articulate Spokesperson
- Nurturing but Goal Oriented

Experience should include:

- Strong Technical Background (Advanced Degree PhD preferred)
- Agricultural Business Experience
- Business Development Experience (preferably Start-Up)
- High Level Strategic Management Experience

In addition the person should have familiarity with:

- Venture Capital Process
- Economic Development Issues
- University Technology Transfer Issues
- Patent Law

A complete staff skills inventory for BioLink is provided in the Appendix of this report.



### Financial Plans

The summary financial pro forma shown below is predicated on a more detailed formal analysis presented and discussed in the financial section of this report. It is predicated on the BioLink Commercialization Center remaining at 31,000 sq. ft. during that period.

YEAR	2011	2012	2013	2014	2015
INCOME					
Rent (GPI)	\$ 946,680	\$ 979,755	\$ 1,013,988	\$ 1,049,418	\$ 1,086,089
Vacancy	\$ (708,750)	\$ (489,038)	\$ (202,462)	\$ (209,548)	\$ (216,882)
Gross Income	\$ 237,930	\$ 490,717	\$ 811,526	\$ 839,891	\$ 869,207
EXPENSES					
Total Expenses	\$ 748,000	\$ 773,550	\$ 799,994	\$ 827,364	\$ 855,692
Net Operating Income	\$ (510,070)	\$ (282,833)	\$ 11,532	\$ 12,507	\$ 13,516
EDA Contribution	\$ 310,070	\$ 310,000	\$ 310,000	0	0
Net Cash Flow	\$ (200,070)	\$ (172,903)	\$ 148,629	\$ 161,136	\$ 174,652

\*These numbers are based on information gathered from the Nidus Center in St. Louis, University Research Park in Madison, and Ruedebusch Construction in Madison.

BioLink Commercialization Center pro-forma shows a positive operational cash flow during its first 5 years due to the infusion of \$930,000 from the EDA for operations and maintenance during the first three years. Given the expensive nature of running this world-class facility, the potential for future tenant improvements as companies graduate, the desire to accumulate cash reserves to fuel facility expansion, and TIF staff's concern about potential blips in operational cash flow, future additional financial partners will be desirable.

After approval of the EDA Grant and the City TIF for this project, the Economic Development Division of the City of Madison will continue to work with numerous private corporations, foundations and the State agencies to secure their help in raising this money to cover potential losses going forward beyond 2015. As the BioLink facility expands in future years, economies of scale will continue to occur and operational deficits will decrease.







# Regional Economic Impact

Projections of economic development benefits from the BioLink facility are shown below. The reader should be careful not to add job benefits to investment dollars in that the former numbers are reflective of a portion of the later investment numbers. Private Investments are cumulative in year 2020.

Year	2011	2012	2013	2014	2015	2020
New Client Companies	2	2	2	2	2	Х
Cumulative Companies	2	4	6	8	10	20
Graduate Companies	0	0	0	1	2	7
Direct Jobs	15	25	50	75	100	200
\$MM (@ \$65K/Year)	0.98	1.63	3.25	4.88	6.5	13
Indirect Jobs*	38	63	100	178	250	500
\$MM (@ \$50K/Year}	1.9	3.15	5	11.57	12.5	25
Cumulative. Private Investment, \$MM	2	10	30	60	100	250

\*Based on a conservative 2.5 to 1 ratio to direct jobs created.



# **Market & Competition**

### Exciting New Commercial Opportunities

New areas of agricultural research and product development that are creating substantial interest and excitement are:

- Nutrition for Health
- Plant-based Medicines and Vaccines
- Bio Materials and Bio Fibers
- Plant-based Bio-chemicals and Polymers
- Bio-fuels / BioEnergy
- Bio-security

BioLink will provide assets and resources that will allow people to work at creating entrepreneurial ventures in these areas.

### Benefits to Stakeholders

BioLink will assist the region in reaching critical masses in leading edge agricultural research as well as in top management for companies in this area. It will also increase access to capital at all levels and providing adequate physical infrastructure. All four of these factors are critical for a region to be successful in becoming a leader in agricultural biotechnology.

More directly BioLink will contribute to the region and Wisconsin's already strong position in green-tech, clean energy, and sustainable agriculture (U.W. Madison top 10 Cleantech universities in U.S.A. (Source: Sustainable World Capital, 2010). It will increase potential participation in ever increasing R&D expenditures in the U.S. (60% Biotechnology) with the highest growth rate (37%). Agricultural biotechnology industry growth rate is comparable to overall biotechnology growth.

Work at BioLink will also allow the state of Wisconsin (and thus the city of Madison) to retain its leadership position in bioscience education (16<sup>th</sup>-20<sup>th</sup>), bio-industry employment (14<sup>th</sup>), and risk capital investment (16<sup>th</sup>).







Madison, South Central Wisconsin and the State have a unique asset advantage over other regions in agricultural biotechnology which are displayed below:

#### **City, Region and State-wide Assets**

Madison Assets	Regional and Wisconsin Assets
University of Wisconsin:	Wisconsin Department of Agriculture (DATCP)
Plant Sciences	Wisconsin Department of Commerce (DCOMM)
Microbial Sciences	Wisconsin Office of Energy Independence (OEI)
Food Sciences	Wisconsin Leadership
Engineering	Food Processing
Regenerative Medicines	Dairy and Cheese Production
Research Stations	Organics
Community / Quality of Life	Biotech Cluster/Emerging Therapeutics
Federal Laboratories:	Seed Producers:
Great Lakes Bioenergy Research Center	Mycogen
USDA Forest Products Laboratory	Syngenta
U.S. Dairy Forage Research Center	Batz
USDA Barley and Malt Laboratory	Renk International Ltd.
Successful BioAg Companies: Danisco / Virent / Orbitec / Agrecol	Organics Agriculture Diversity Environmental Science Legacy Proximity to Int'l (Major) Markets— Chicago, Minneapolis, Milwaukee

### Competition

Hiebing and Vandewalle & Associates were hired in 2008 to do a review of the regions of North America where Agricultural Biotechnology is being promoted and is strong. They found and reviewed 16 locations that are shown on the graphic and profiled in narrative form on pages 9 and 10 of this report.

They concentrated their efforts on 4 locations in particular which are:

- St. Louis BioBelt
- Ohio Bioproducts Innovation Center
- Bioproducts Gelph
- Peoria Next

The consultants felt these were the most robust of the 16 and were the direct competitors to BioAg Gateway and BioLink given their regional location, physical assets, biomass strengths, and pillars of success identified in their business models.

**St. Louis BioBelt**- This is probably the most competitive of the regions in that it has three institutions that emphasize agricultural biotechnology associated with it. It has the Donald Danforth Plant Sciences Center, the BRDG Park associated with the Danforth Center and the Nidus Center which is a plant and life sciences incubator funded by the adjacent Monsanto Corporation and affiliated with the other two institutions. The author of this report started and managed the Nidus Center until July 1, 2008.



The BioBelt also has another research park (CORTEX) and incubator CET (Center for Emerging Technologies) that are located near Washington University and its medical school. Both of these institutions are primarily focused on the medical sciences. The BioBelt has a general life sciences emphasis and is not solely ag biotech primarily because of the strength of Washington University. It has affiliations with numerous universities in the region including Washington University, Purdue University, the University of Iowa and the University of Missouri. Since its inception approximately 10 years ago, the BioBelt has grown to 25+ companies in the two incubators and 400 plant and life science enterprises and over 15,000 employees. However, the region does not have the concentration of agriculturally-focused R&D and bioscience companies as Madison does. The exception to the critical mass in this area is Monsanto with over 1500 researchers. It is important to note that the Nidus Center has a national board of directors.

**Ohio Bioproducts Innovation Center**- OBIC was started in 2005 by the state of Ohio with an \$11.5 million award and leverages matching funds from numerous external partners. Its primary focus is the production of specialty chemicals, polymers and plastics from renewable sources. Its primary purpose is to link university and industry in common research efforts.

**Bioproducts Guelph**- Bioproducts Guelph is an initiative primarily to promote R&D in Ontario in the biomaterials area with a special focus on the auto industry. This partnership includes numerous universities and companies including Ford, DuPont, Chrysler, etc.

**Peoria Next-** Peoria Next is funded by the USDA's National Center for Agricultural Utilization Research and targets commercialization of new technologies in an incubation center.

There are a number of key elements that were discovered in analyzing all of the competitive locations. They were as follows:

- 1. In almost all cases they are connected to multiple universities.
- 2. They have collaborative research partnerships with multiple major corporations.
- 3. They are not-for-profit corporations.
- 4. Boards are diverse and involve leadership from both the public and private sectors, academia, and industry.
- 5. Half of the regions have incubators with laboratories. Those that don't are in the development stages. Notably, few have greenhouses associated with the incubators. The exception is Nidus and the Donald Danforth Plant Science Center which is expanding their greenhouse facility.
- 6. One third of these initiatives have state and local tax incentives.
- 7. All have developed a strong identity with logos and name recognition.





From this analysis, the litmus for BioAg Gateway and BioLink to be competitive is fourfold:

- 1. There must be a connection to the University of Wisconsin Madison
- 2. There must be a corporate connection to BioLink.
- 3. The board of directors of BioLink must be substantive and recognized
- 4. The park and the center both must have a strong marketing identity



### Regional Economic Impact

The predicted economic impact of BioLink as shown in the table in the Executive Summary as well as below is based on comparable numbers from 3 incubators which the author has managed, and in particular the Nidus Center in St. Louis. The occupancy numbers are reasonable for the combined office lab and greenhouse space being used, and the investment numbers should be comparable based on the similar missions and expected makeup of client companies in both facilities.

Year	2011	2012	2013	2014	2015	2020
Companies						
New Client Companies	2	2	2	2	2	Х
Cumulative Companies	2	4	6	8	10	20
Graduate Companies	0	0	0	1	2	7
Direct Jobs	15	25	50	75	100	200
\$MM (@ \$65K/Year)	0.98	1.63	3.25	4.88	6.5	13
Indirect Jobs*	38	63	100	178	250	500
\$MM (@ \$50K/Year}	1.9	3.15	5	11.57	12.5	25
Cumulative. Private Investment, \$MM	2	10	30	60	100	250

\*Based on a conservative 2.5 to 1 ratio to direct jobs created.

# Marketing Strategy

The strategy for marketing BioLink should be multi-faceted. The first approach will be to position BioAg Gateway, Madison and the Region as an esteemed destination for bio and agricultural related companies and scientists. This can be done by emphasizing the leading edge research going on at the Univesity of Wisconsin--Madison, and by featuring companies such as Virent, Orbitec, and Mycogen. In particular, promoting the fact that Madison already has the very well known USDA Forest Products Laboratory and that the UW is only one of three places in the country which received \$130M from the DOE in a highly competitive process for the establishment of a bio-energy research center is important. The new center will be called the Great Lakes Bioenergy Research Center (GLBRC).

Secondly, the campus (BioAg Gateway) and the Commercialization, Incubator and business center (BioLink) need to brand themselves with a unique logo, signage, and brochures that will be displayed and used at trade shows and national and international conferences such as BIO, World Congress of Industrial Biotechnology, etc. The City is making great progress on this marketing front and examples (logo, tagline, signage) are shown in their draft form in the Appendices of this document. Agricultural biotechnology technical conferences and venture forums should be attended to look for and source technologies and potential companies for the BioLink facility.

BioLink's staff should be tasked with the responsibility for organizing annually a local BioAg Showcase event that does exactly what its name says, i.e., showcase leading edge technology and companies in some of the product areas mentioned at the beginning of this section.



Finally, Hiebing and Vanderwalle & Associates have identified 150 initial small-to-midsize companies along with leadership from companies with R&D in the bio-agricultural areas. They have also identified opinion leaders with connections to entrepreneurs. These are targets for BioLink and the BioAg Gateway campus to focus on with personal contact.

# **Operating Plan**

### Keys to Success

In the Executive Summary we have discussed some of the organizational and operational activities that are key for commercialization center success. Two of the operational factors are a stringent selection process and value added services. My experience has been that proper due diligence leads to about a 3-4% acceptance rate. This tends to be higher than a 1% rate typical of venture capital.

A highly selective selection process can be justified for a number of reasons:

- 1. World Class Image- In order to nationally attract high quality business opportunities, top management, and board members the BioLink must project an aspiration to being world class.
- 2. Mission Fit- The mission of a commercialization center is to create successful companies and therefore high paying jobs and economic development.
- 3. Assure Success- Incubators which are not selective tend to be populated by a large number of companies that are the living dead and don't grow or expand or create jobs and therefore cause the incubator to be ineffective and inefficient.
- Increases Investment- Doing thorough due diligence on companies provides an investment package that can be shared with potential investors and therefore increases interest from angel and venture capital investors in working with the incubator.

The due diligence process is described in the "Selection Process" section below. Client companies will build value through proper management decision making, setting appropriate goals and milestones and proper preparation for fundraising. Some of the best practices of incubators in assisting clients through quality value-added services are described below.

# Selection Process

The due diligence process is critical in judging the probability of a companies future success. The process itself is very similar to that used by venture capitalists in deciding whether to invest in companies.

Factors to look at are:

- 1. A quality and appropriate **management team** with experience managing at a strategic level, raising risk capital, and a firm understanding of the industry the company is in.
- 2. Unique and commercially viable **Technology/Science** that involves top research scientists and engineers working at the leading edge.
- 3. A strong **Intellectual Property** position with unencumbered ownership that is free of any infringements and freedom to operate issues.
- 4. A viable **Business Model** with a clear value added product or service that has a market, supply chain, and operating plan advantage with high profit potential.
- 5. An **Industry Compatible** product or service that will fit into customer systems and manufacturing processes.

Due diligence on applicant companies to BioLink will be conducted by the Center's CEO sometimes with the assistance of highly qualified MBA interns (with strong technical backgrounds) from local universities.



### Best Practices

It is well known in the incubation industry that direct proactive intercession of incubator management in advising client companies is the most effective reason for company success. Below I have detailed some of the most effective approaches used in the incubation business in no particular order of importance:

*Participate in all board and SAB meetings* - Incubator management should participate in all client Board of Directors and Scientific Advisory Board meetings--at a minimum as an observer. At the discretion of the BioLink Board of Directors and based on liability tolerance, incubator management can participate as a client company board member. In all cases this should be consistent for all clients.

Assist in Enhancing Management Team - BioLink management will assist client companies in finding suitable management, including finding CEO's and participating in the candidate interview process.

Assist in Developing a Viable Business Plan - During and after the due diligence process, the incubator should assist the client company in developing a viable business plan and agree on milestones and goals.

*Milestone Setting and Tracking* - Upon admission, BioLink management shall reach an agreement with the client company as to milestones and regular tracking and reporting requirements.

Assure Strong IP (Intellectual Property) Position - In conjunction with client patent legal counsel and management, BioLink management need to be assured that they have filed and/or pursued the appropriate patent, trademark and copyright portfolio. In addition, incubator management should work with them and other experts to assure that they have filed in the right countries. This is all predicated on cost and ability to pay.

Assist in Raising Investment Capital - Incubator management will approach and introduce both angel and VC (Venture Capital) sources of capital to client companies. Where appropriate, incubator management should participate as a resource at presentations to potential investors. At the discretion of the client, incubator management could provide due diligence packages to potential investors.

*CEO Counseling* - On an agreed upon timeframe, BioLink management should provide individual counseling to client company CEOs. It is recommended that for an early stage company and tenants with inexperienced management, this should be as frequent as once per month. For more experienced management with companies further along this might be a minimum of once quarterly and, in between, on an ad hoc basis.

*CEOs in Residence* - Many of the best incubators in the country have a CEO in residence (CIR) program that involves providing space for serial entrepreneurs who are seeking their next opportunity. At the Nidus Center, selected CIRs are provided an office with the proviso that they will assist client companies with problems that the incubator identifies for them. In return, the incubator management is seeking a new opportunity for the CIR. This is a powerful program in that it provides substantial help for client companies and eventually leads to new client companies who are lead by highly qualified management people.

*Facilitated Joint CEO Meetings* - Another powerful tool within the incubator is the collective wisdom that exists within the client company CEOs. The Nidus Center facilitated monthly CEO meetings among its clients companies. Items discussed in those meetings were proprietary to the meetings where they all helped each other with problem solving. This program was so effective that the client company CEO's took responsibility for the meeting and invited others to the meeting from non incubator companies. Once this program was initiated, cross fertilization among companies became a natural occurrence without facilitation.



*Financing Preparation* - Incubator managers routinely assist companies in preparation of their investment presentations and packages which they provide potential investors.

*SBIR (Small Business Innovation Research) Proposal Assistance* - SBIR and STTR (Small Business Technology Transfer) are federal resource grants that require a for profit company to work with research institutions such as universities, governmental agencies and laboratories or other non-profits (i.e hospitals) on technology transfer and innovation. Having a person in the incubator who can coach companies on how to write SBIR/STTR grants is an invaluable asset. Non-dilutive funding is becoming a major factor in company success.

### Graduation

Companies will graduate from BioLink for numerous reasons. Typically, the company will progress to a point where it no longer needs the services of the incubator or because space requirements become too large for the capability of the facility. In all cases, every effort will be made to assure that this decision is a mutually agreed upon decision. Companies are normally ready to move on from incubators when they a) have an eminently qualified management team, b) have a solid intellectual property position, c) have a business model that shows evidence that it is succeeding, d) have an investment syndication that has the wherewithal to take the company to a sustainable position or e) until liquidity.

# ► Tracking

Client company progress should be tracked, at a minimum, on a quarterly basis based on milestones set in agreement with the incubator management when they were admitted and also against numerous good business factors. These would consist of the following:

- Technical Progress
- Regulatory Progress
- Partnership Agreements
- Manufacturing Progress
- Meeting Sales Goals
- Cash Flow Position
- Management Quality/Completeness
- Other Personnel Issues
- Financing Progress
- Legal: IP Position/Other
- Exit Potential

An example tracking document that I used at the Nidus Center is attached in the Appendix of this report for reference.



# Sustainability

BioAg Gateway will help us continue our environmental leadership and be a center-point for solution-based collaboration and applications of new technologies to help solve some of the world's most pressing global issues. The BioLink Commercialization Center will be critical infrastructure for the growth of applied green technologies and helping grow a more sustainable and healthy local and global food system. As mentioned previously, BioLink and the entire BioAg Gateway campus will focus on target industries that are at the center of global sustainability needs in a) Plant sciences and genetics, b) Agriculture technologies, c) Bio manufacturing and small-scale bio processing, d) food science and nutraceuticals, e) Bioenergy, f) Plant-based pharmaceuticals and vacines, g) Bioplastics and biomaterials, and h) waste-to-energy technology. The proximity to the Dane County's Landfill, the potential for wind and solar resources, and the city's desire for sustainable development projects will provide many interesting opportunities on energy conservation.

For 25-plus years the incubation industry has been trying to demonstrate financial sustainability. For value added service incubator programs, it has never been demonstrated. This is even more unlikely in technology and biotech oriented incubators because of the high cost of tenant improvements and the inability of start-up companies to cover those costs at a high enough level. The Nidus Center probably came the closest to accomplishing that with later years cash flow (including depreciation credit) deficits of \$150,000 to \$250,000 per year.

There are a number of ways that incubators try to achieve financial sustainability. Primarily they do it through endowment or by taking equity positions in client companies. The latter approach of course is not assured and timing tends to be long term especially in the biotech area where liquidity of companies commonly doesn't occur many times for up to 10 years after founding.





# Management

# Structure

BioLink will be operated as a subsidiary of Madison Development Corporation until a separate 501(c)(3) corporation is established. As such it will be able to receive tax free donations from foundations, private corporations and government agencies. BioLink will have an independent board of directors.

# ► Staff

BioLink will be managed and run by an Executive Director. The Executive Director will be primarily responsible for selecting and advising client companies as detailed in this plan. The CEO will also be responsible for ongoing fund-raising and national sponsorships. Day-to-day facility management will be performed under an administrative contract with Orbitec (Orbital Technologies Corporation), the initial anchor tenant in the facility with expertise in controlled environment technology and greenhouses. For a fee, Orbitec will provide administrative assistant/reception and a lab/ facility technician for the greenhouse and technical mechanicals. MDC's President and Controller will supervise the contracts and oversight of the facility until a separate 501 (c) (3) and Board are established. A rule-of-thumb used in the venture capital and incubation industries for assistance-intensive incubators is that one person can effectively oversee only 5 companies at one time. This of course is highly dependent on the stage of the company. Later stage companies with experienced management require less assistance and advice. It is very important to focus management goals in a few very focused areas. Those are:

- Building a Pipeline of Client Companies
- Admitting High Quality Client Companies
- Matriculating Successful Companies
- Retention of Companies in the Region
- Management of the Incubator Budget, Occupancy, and Sustainability
- Community Involvement



TF

#### BioLink—EDA Sources and Use of Funds 2/2/10

	EDA	City	TOTALS
Capital Costs			
Building	\$ 3,604,472	\$ 1,532,250	\$ 5,136,722
Site	\$0	\$ 515,533	\$ 515,533
Equipment/Technology	\$0	\$ 330,000	\$ 330,000
Capital Costs	\$ 3,604,472	\$ 2,377,783	\$5,982,255
Contingencies (3.98%)		\$ 187,000	\$ 187,000
			\$ 6,169,255
Operating Costs			
Salaries	\$ 600,000	\$0	\$600,000
Contract Admin/Facility Mgmt	\$ 350,000	\$0	\$330,000
<b>**</b> Operating Costs	\$ 930,000	\$0	\$930,000
Totals	\$ 4,534,472	\$ 2,564,783	\$ 7,099,255
% Project Funding	63.87%	36.13%	100.00%

\*These estimates have been verified with local real estate developers.

\*\* \$930,000 EDA allocation spread out over first 3 years of operation. \$200,000/year Executive Director Salary, \$40,000/MDC Management and \$70,000/year ORBITIC Fa cility Mgt.





#### **BioAg Gateway Campus Plan**





**General Site Plan** 

BioLink will reside on a 2.6 acre site as part of the 27-acre BioAg Gateway Business Park bounded by BioAg Showcase area and Interstate 39/90 to the east, Femrite Drive (south), Agriculture Drive (west), and the Wisconsin Department of Agriculture (north) building. The facility will initially be 31,000 sq. ft. consisting of the following:

- 5,000 sq. ft. Office, Conference, Laboratory (fully finished)
- 17,000 sq. ft. Flexible Space (enclose, HVAC, without TI)
- 3,000 sq. ft. Head House
- 6,000 sq. ft. Greenhouse



#### **Building Plan Schematic**



# **Financials**

#### Assumptions

The assumptions used in creating the 5-Year Financial Projections shown in the table below are based on the proposed 31,000 sq. ft. building as follows:

#### **Revenue:**

Rental Rates:	Office: \$28/sq. ft.
	Lab, Head House and Greenhouses: \$34/sq. ft.
Rent Escalation:	3.5%/Year
Occupancy:	Year 1: 25%
	Year 2: 50%
	Thereafter: 80%

Expenses:	
Utilities:	\$6/sq. ft.
Maintenance and Repair:	\$3/sq. ft.
Salary Overhead:	30%
Expense Escalation:	3.5%

After approximately 5 years of operations, the Midwest BioLink Commercialization and Business Center will be expanded to a final anticipated size of 61,000 sq. ft. Once that size is reached economies of scale will reduce any annual deficit potentials.

# Financing Strategy

The City of Madison is developing a plan for the BioAg Gateway Campus in southeast Madison. They have been asked by the U.S. EDA to apply for a \$4.5M grant, a portion of which will pay for 2/3 of the capital cost of the BioLink Center, an agriculture biotech incubator. \$930,000 of the EDA money will be used for BioLink operating costs. The City Economic Development Division has asked for and received Common Council approval of TIF funding for \$2,049,250 of the construction cost and \$513,533 on land.

Once EDA funding has been committed, the City will solicit funds from other sources to include foundations, corporations, high wealth individuals and the State of Wisconsin to defray operating losses.



# **Proforma Financial Projections**

# Cash Flow Analysis

BioLink 31,000 SF						2/2/10
Year	0	2011	2012	2013	2014	2015
INCOME						
Rental		\$ 945,000	\$ 978,075	\$ 1,012,308	\$ 1,047,738	\$ 1,084,409
Other		\$ 1,680	\$ 1,680	\$ 1,680	\$ 1,680	\$ 1,680
GPI		\$ 946,680	\$ 979,755	\$ 1,013,988	\$ 1,049,418	\$ 1,086,089
Vacancy		\$ (708,750)	\$ (489,038)	\$ (202,462)	\$ (209,548)	\$ (216,882)
Gross Income		\$ 237,930	\$ 490,717	\$ 811,526	\$ 839,871	\$ 869,207
	-					
EXPENSES						
Property Taxes		\$ 80,000	\$ 82,800	\$ 85,698	\$ 88,697	\$ 91,802
Water & Sewer		\$ 15,000	\$ 15,525	\$ 16,068	\$ 16,631	\$ 17,213
Gas & Electric		\$ 180,000	\$ 186,300	\$ 192,821	\$ 199,569	\$ 206,554
Insurance		\$ 5,000	\$ 5,175	\$ 5,356	\$ 5,544	\$ 5,738
Maintenance & Repair		\$ 90,000	\$ 93,150	\$ 96,410	\$ 99,785	\$ 103,277
Management		\$ 240,000	\$ 248,400	\$ 257,094	\$ 266,092	\$ 275,406
Admin.		\$ 70,000	\$ 72,450	\$ 74,986	\$ 77,610	\$ 80,327
Legal & prof., dues		\$ 20,000	\$ 20,700	\$ 21,425	\$ 22,174	\$ 22,950
Telephone/data		\$ 30,000	\$ 31,050	\$ 32,137	\$ 33,262	\$ 34,426
Total Operating		\$ 730,000	\$ 755,550	\$ 781,994	\$ 809,364	\$ 837,692
Replacement reserves		\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000
Other		\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenses	_	\$ 748,000	\$ 773,550	\$ 799,994	\$ 827,364	\$ 855,692
NOI		\$ (510,070)	\$ (282,833)	\$ 11,532	\$12,507	\$ 13,516
EDA Contribution		\$ 310,000	\$ 310,000	\$ 310,000	0	0
Net Cash Flow		\$ (200,070)	\$ (172,903)	\$ 148,629	\$ 161,136	\$ 174,651



# **Income and Expense Summary - 2011**

Income		
Rental Income	\$ 945,000	
Other Income	\$ 1,680	
Total Income	\$ 946,680	
Vacancy Allowance	\$ (708,750)	at 25%
Gross Income		\$ 757,680
Expenses		
Property Taxes	\$ 80,000	
Water & Sewer	\$ 15,000	
Gas & Electric	\$ 180,000	
Insurance	\$ 5,000	
Maintenance & Repair	\$ 90,000	
Director	\$ 240,000	
Admin. Contract	\$ 70,000	
Other Legal /prof	\$ 20,000	
Other tel/Data	\$ 30,000	
Total		\$ 730,000
Net Operating Income		(510,070)
EDA Grant Revenue		\$310,000
Income/Loss		(200,070)



# Assumptions

Project	BIO-AG								
	Scenario A								
Acquisition									
Land/Site	Imp	\$ 200,000							
Constr Cos	its	\$5,419,250							
Other cost	S								
Total Costs	5	\$5,619,250							
Financing									
		Amount	%of Total	Rate	Term	Monthly Pmt	Annual Pmt	Points	
First Mortga	ge	0.3	0	0	99999			1.50%	
Second Mort	gage	0.6	0	0	99999			0.25%	
Rehab Loan			0	0	0			1.50%	
Equity		\$2,564,783	41.57%	0	0				
Grants		\$3,604,472	58.43%	0	0				
Total		\$6,169,255							
<b>D</b> .									

Rents

	Beds	Туре	size in sq. ft	# of units	Monthly Rent		
1	1	\$34	17500	1		\$49,583	
2	2	\$26	12500	1		\$29,167	
3	3			0			
4	2			0			
5						\$78,750	1789.8
б							
7							
8							
9							
10							

Annual increase	3.50%
Vacancy rate	20.00%
Expense growth rate	3.50%



# **Sources & Uses Summary**

Sources of Funds	%	\$
First Mortgage EDA	58.4%	\$ 3,604,472
City	33.2%	\$ 2,049,250
Other - City Land	8.4%	\$515,533
Other		
Total	100%	\$6,169,255
Uses of Funds		
Site Purchase Price		\$513,533
Construction Costs:		
New Construction	\$ 5,136,722	
Equipment	\$ 330,000	
Contingency	\$ 187,000	
Subtotal		\$5,419,250
Carrying Costs:		
Construction Interest		
Property Taxes		
Other		
Financing Costs:		
Lender Fees		
Title Insurance		
Appraisal		
Other		
Other Costs:		
Total Uses*		\$ 6,169,255







# Skills Inventory of CEO/VP

#### **BioLink Commercialization Center CEO Skills Inventory**

#### Personal:

- Articulate Spokesperson
- Energetic but Collegial
- Nurturing but Persistent Personality

#### Education/Experience:

- PhD in Science or Engineering
- Work Experience in Life Sciences or Biotechnology Area
- High Level Strategic Management Experience
- Business Development Experience
- Prior Incubation Management Experience
- Familiarity with Venture Capital Process
- Start-up Experience
- Familiarity with Economic Development Issues
- Familiar with Academia and University Technology Transfer

#### Midwest BioLink Executive VP and COO Skills Inventory

#### Personal:

- Ability to act as spokesperson
- Coaching skills
- Strong Interpersonal skills
- Strong desire for learning and willingness to be coached

#### Education/Experience:

- Undergraduate degree in Science or Engineering
- Advanced Degree (MBA, Masters in Science or Engineering)
- Minimum 10 Years Business Experience in decision making roles
- (preferably in Life Sciences Area)
- Strategic and Business Development Experience
- Relevant background and skills to succeed BioLink Commercialization Center CEO within 5 years
- Familiarity with Venture Capital and Economic Development Issue



# **Consultant Vitae**

#### Dr. Robert J. Calcaterra – Managing Partner StartUP Midwest Management, LLC

Dr. Robert J. Calcaterra is currently a principal in StartUp Midwest an early stage biotech venture fund where he is trying to raise \$20M. He is also an adjunct faculty member in the Biomedical Engineering Department at Washington University and consults for many public and private institutions including the USDA (United States Department of Agriculture)

Dr. Calcaterra brought 19 years of experience in incubator management to his position as president and chief executive officer of Nidus Center for Scientific Enterprise until his retirement in July 1, 2008. At Nidus Center, Dr. Calcaterra led efforts to commercialize technologies in the plant and life sciences by recruiting and nurturing young entrepreneurs with promising ideas and relevant business expertise. The Nidus Center has nurtured twenty (20) client companies with nine(9) graduates. The Nidus Center won two consecutive national awards (2005-06) for Incubator Client Company of the Year. The Nidus Center hosted the National Business Incubation Association international conference in 2006.

During Dr. Calcaterra's tenure at the three incubators he has managed he has been involved in the creation of over 50 start-up companies, raised over \$200M in equity capital and has served on the board of directors of at least 40 of those companies. In St. Louis he was primarily responsible for the creation of the BioGenerator (a \$7.8MM pre-seed venture fund) and the Arch Angel Network where he is now President. The Arch Angel Network has invested over \$20 million in 21 companies since its inception in 2005.

Prior to the Nidus Center Dr. Calcaterra was president, founder and chief executive officer of the Arizona Technology Incubator (ATI). A public/private partnership, ATI provides technical and business support services to early-stage, technology-based entrepreneurial companies. Under Dr. Calcaterra's leadership ATI has won three consecutive awards (1996-98) in the categories of Incubator Company of the Year, Incubator Innovation of the Year and Incubator Graduate Company. ATI hosted the NBIA conference in 1998.

The Arizona Technology Incubator is Dr. Calcaterra's second successful technology incubator. He established the Boulder Technology Incubator (BTI) in 1989. Much like the Arizona Technology Incubator, BTI served as a mentor to technology-based entrepreneurial companies providing them with technical and business support. BTI won the National Incubator of the Year award in 1998.

Previously, Dr. Calcaterra worked for numerous Fortune 500 companies. While with the Adolph Coors Company, he was director of Research & Development, Licensing, and Quality Assurance where he managed as many as 325 employees. He also formed eight new technically-based businesses for Adolph Coors Company. Prior to his work at Adolph Coors, Dr. Calcaterra worked as senior research engineer for long-range strategic planning and technology forecasting and assessments for Amoco Corporation. He was also a research engineer for Alcoa Corporation and Monsanto Company, where he began his career in 1965.

Dr. Calcaterra is well known for his civic work involving small business-related issues. In 1995, he was appointed by President Bill Clinton as a delegate to the White House Conference on Small Business.



On a national level Dr. Calcaterra is involved in the following organizations:

- Member of the Advisory Board to the National Business Incubation Association, where he served on the board of directors for two years.
- Past Southwest Michigan Innovation Center (SMIC) Board Member
- Past member of Senator Bond's Small Business Committee Advisory Board on SBIR/STTR US Senate

At the state and local level, Dr. Calcaterra has held leadership roles in the following organizations:

- Past Missouri Technology Corporation Board (Chair of Innovation Center, Investment, and SBIR Committees)
- Past member Missouri Venture Capital Roundtable (Co-Chairman)
- Past MOBIO Board of Directors
- Coalition for Plant and Life Sciences Executive Committee Member
- BioGenerator Executive Committee
- Past Executive Committee of Technology Gateway Alliance
  - Entrepreneurship and Technology Transfer Committee (Former Chair)
  - ► Capital Formation Committee
- St. Louis Capital Alliance Executive Committee
  - ► Pipeline Committee Chair
- Missouri Venture Forum (Chairperson 2004-2005)
- Past St. Louis County Economic Development Council Member
- Past Greater St. Louis Economic Development Council Member
- TEC Incubator Board (Former Chair)
- Past member of Creve Coeur Economic Development Council and Planning and Zoning Commission
- BIO Mid-America Venture Forum
  - ► Advisory Board
  - ► Program Committee
- Invest Midwest Venture Capital Conference Executive Board Member and Chair Biotech
  Committee
- Past Biomedical Engineering and Chemical, Environmental and Energy Engineering Department, Washington University, Advisory Board Member
- Past Advisory Board to the Washington University Biomedical Engineering
- Coulter Translational Research Partnership in Biomedical Engineering
- Bio-molecular and Chemical Engineering Department, University of Nebraska, Advisory Board Member (Chairman 3 years)
- College of Arts and Sciences Dean's Advisory Board at Webster University

Dr. Calcaterra extended his leadership efforts internationally when he agreed to be a Mentor for Australia High Technology (ACT) Incubator System in Canberra, Australia. In May 1999, he represented the National Business Incubation Association in Beijing China.

Dr. Calcaterra also taught graduate courses in entrepreneurship at the University of Colorado, Arizona State University and Washington University. Dr. Calcaterra did his graduate and undergraduate work in chemical engineering at the University of Nebraska at Lincoln with BS and MS degrees. He received his D.Sc. in chemical engineering from Washington University in St. Louis and later completed Harvard University's Industrial Research Institute Executive Management Seminar.



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