



BiomedicalTechnology**Alliance**

*Biomedical Technology Alliance
2005 Annual Report*

Message from the Steering Committee Chairmen.

Dear Reader;

We are pleased to present this report on the progress of the Biomedical Technology Alliance.

The BTA was formed in 2004 for the purpose of fostering research collaboration and commercialization in biomedical technology – activities that are at the core of high-tech innovation. By fostering biotech innovation, the alliance seeks to create a stronger economy in the Milwaukee region, create more jobs with higher wages, broaden the tax base, keep the best and brightest at home in Wisconsin, leverage federal grants, offer companies access to research, and spin off more companies.

Since its formation, the BTA has made significant progress toward increasing awareness of the resources that exist in the region and creating incentives for collaboration. Through a series of collaborative seminars, the BTA has brought together a cross section of scientists, clinicians and businesspeople as well as government and community leaders; these seminars have helped highlight the significant intellectual capital that exists in several key areas. With the support of the State Legislature and Wisconsin Governor, Jim Doyle, the BTA is implementing a collaborative grant program that will provide funding incentives for researchers to form multi-institutional teams to tackle challenging problems. The Alliance is also creating a roadmap that will lead to the creation of research infrastructure in the Milwaukee region, including a biotechnology campus.

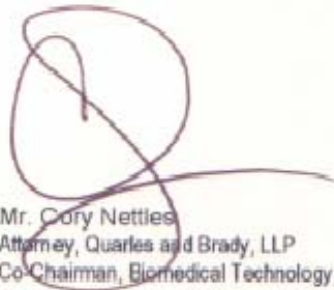
The next year will be critical for the Alliance. We must implement the collaborative grant program and leverage the precious resources in ways that will most benefit biotechnology research and commercialization in our region. We must also lay the foundation for the larger initiative that will build research infrastructure in the Milwaukee region that will serve this important and growing segment for the next decade, and help the Milwaukee Region attain a position of national leadership in biomedical technology.

Thank you for your support.

Sincerely,



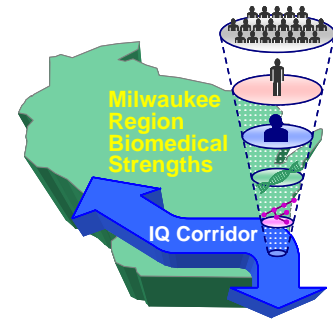
Dr. William H. Hendee
President, MCW Research Foundation
Co-Chairman, Biomedical Technology Alliance



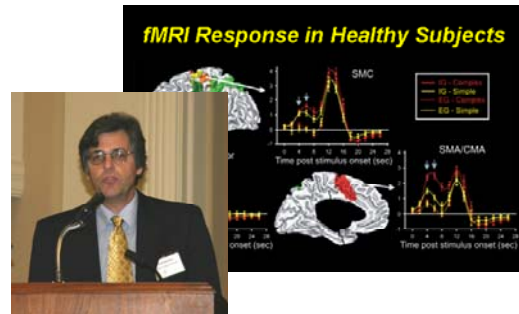
Mr. Cory Nettles
Attorney, Quarles and Brady, LLP
Co-Chairman, Biomedical Technology Alliance

Highlights. Since its formation in 2004, the Biomedical Technology Alliance (BTA) has made significant progress toward its goals of fostering research collaboration and commercialization in biomedical technology. The BTA has sought to increase awareness of the resources that exist in our region, provide incentives for collaboration and ultimately provide infrastructure for research and commercialization. Highlights of these initial efforts include:

- **Regional Biotechnology Strengths.** Led by the scientific subcommittee, the BTA has cataloged the significant strengths that existing in biomedical technology in the Milwaukee region. These strengths are found in multiple academic institutions in the region, large industrial players, early stage start-up companies, and hospital and clinical systems of the area. These efforts have highlighted several key areas:
 - **Rehabilitation and Biomechanics**
 - **Biomedical Imaging**
 - **Genetics, Proteomics and Biochemistry**
 - **Bioinformatics and Medical Informatics**



- **Collaborative Seminars.** Since 2004, the BTA has hosted a series of collaborative seminars to highlight these areas of strength and to foster dialog that can lead to new ideas and innovation. These events have grown to include hundreds of participants and have featured prominent local scientists, clinicians and business people as well as government and community leaders who have expressed their support for the alliance.
 - **Rehabilitation and Imaging**, November 2004
 - **Bio and Medical Informatics**, March 2005
 - **Biomedical Imaging**, May 2005
 - **Neurological Disorders**, November 2005



Dr. Stephen Rao speaks on neurological disorders

- **Collaborative Grant Program.** The BTA is working to provide incentives for researchers to collaborate. Through the efforts of the Wisconsin Legislature and with the support of Governor Jim Doyle, the Alliance has been authorized to receive \$500,000 from the State of Wisconsin for a collaborative grant program. These funds will be matched by the participating academic institutions to provide a pool of \$1 million that will be awarded to researchers who form multi-institutional teams to address promising areas of biomedical technology research. Recently the legislature and the governor have expressed their support for increasing the State contribution by an additional \$2 million which would lead to a total of \$5 million including institutional matching funds.

Alliance to receive \$500,000 from State of Wisconsin for collaborative grant program

HUD Special Project Grant. The Alliance received its start when TechStar (a Milwaukee-based collaboration among the founding institutions that emphasizes research commercialization) received a federal earmark from Housing & Urban Development (HUD) thanks to the efforts of Senator Herb Kohl and the City of Milwaukee. TechStar defined a series of development milestones that would be achieved using the \$298k federal earmark in the period from 2004 to 2006. As of year end 2005, \$169k of this grant has been expended, and \$129k remains for activities in 2006. Following is a summary of those milestones, accomplishments to date and next steps.

In addition to funds provided by the federal earmark, there has been broad support from the community and academic institutions to advance the mission of the BTA. Supporters have included the MCW Research Foundation, The Milwaukee Economic Development Corporation, We Energies and Whyte Hirschboeck Dudek Government Affairs who have contributed nearly \$5000 to make the conferences possible in addition to the significant in-kind contributions provide by the institutions.

Business Plan Development (Milestone 1). The objective of the business plan is to provide an overall strategic plan for the development of the Biomedical Technology Alliance. The BTA is assembling elements of the plan that will include a definition of core capabilities and strategies, an operational plan that defines BTA programs and a plan for long-term plan for financing of the Alliance.

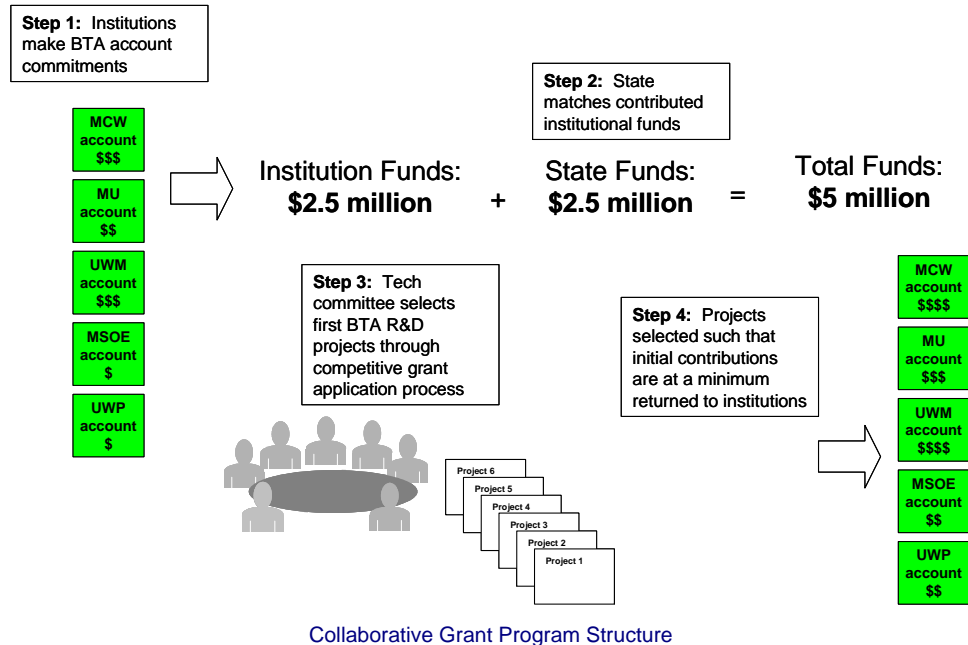
Accomplishments:

- **Phase 1 Infrastructure Proposal to Governor Doyle.** The BTA has developed a blueprint document that outlined the long term vision for the BTA. This blueprint was shared with Governor Jim Doyle's administration as part of a letter signed off by twelve academic and community leaders from the Milwaukee region.
- **Phase 1 Operational Planning Document.** The BTA has created an operational planning document that outlines a plan for infrastructure development, identifies potential sources and uses of funds, and establishes a framework for inter-institutional collaboration.
- **\$500,000 Commitment in from State of Wisconsin.** Senator Ted Kanavas led efforts to provide funding for the BTA by proposing \$2.5 million in funding for the Alliance. Governor Jim Doyle ultimately approved \$500,000 in initial funds for the BTA.
- **Collaborative Grant Program Plan.** Working closely with the founding academic institutions of the BTA, TechStar has developed a detailed plan for the implementation of the collaborative grant program. This plan identifies eligibility criteria (no more than 75% of the research can be performed by a single institution, projects must have a commitment for matching institutional funds), establishes selection criteria (including scientific merit, commercial potential and ability to access follow-on funding), and establishes accounting principles for the program.
- **BTA Executive Summary.** To foster ongoing development of strategy for the Alliance, the BTA has developed an executive summary highlighting the regional strengths and a strategic plan to create awareness, incentives and infrastructure.

Next Steps:

- **Collaborative Grant Program Implementation.** Implementation of the collaborative grant program will be a critical step in the first half of 2006. TechStar is working with the academic institutions to identify a selection committee, solicit initial proposals that will hopefully lead to funding the first projects in early 2006. The program structure is shown below.
- **Regional Economic Whitepaper.** TechStar is developing a regional economic whitepaper that identifies how the BTA will fit in with broader regional economic development initiatives.

- **Funding Strategy.** The Alliance will continue its ongoing efforts to identify near-term operational funding and long-term funding sources for infrastructure development.



Board of Directors/Advisory Board Development (Milestone 2). The BTA is developing a leadership team comprised of academic, business and community leaders. Initially, this team will be structured as a steering committee. As the BTA organizational structure matures, this may change to include a formal board of directors and/or an advisory board.

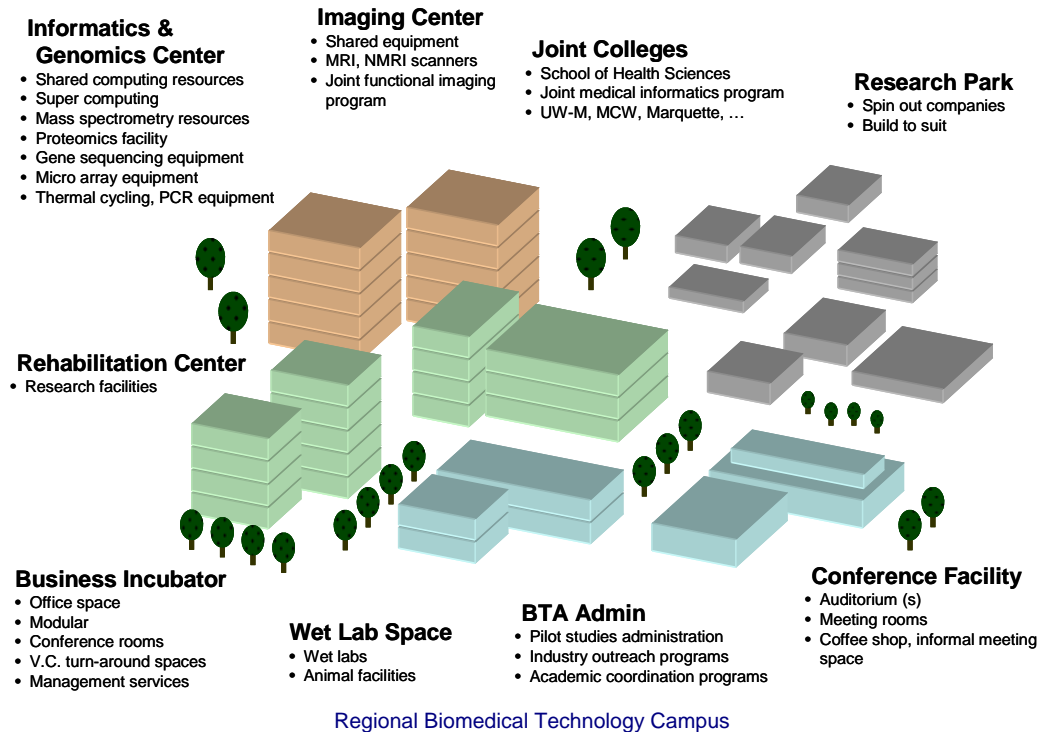
Accomplishments:

- **Formation of Steering Committee.** The BTA has developed a high level steering committee comprised of nineteen academic, business and community leaders lead by Dr. William Hendee and Mr. Cory Nettles. That steering committee formed two subcommittees – a finance subcommittee, chaired by Tom Hefty and a scientific subcommittee chaired by Dr. Hendee.
- **Finance Committee Efforts.** The finance subcommittee has been initially focused on passage of stage legislation to allocate funds to the BTA. This has included initial legislation that ultimately led a \$500,000 commitment from the State of Wisconsin and ongoing efforts to secure an additional \$2 million in State matching funds to support the collaborative grant program. The finance subcommittee leads the effort to identify a long term funding strategy for funding of a regional biomedical research campus.
- **Scientific Subcommittee Efforts.** The scientific subcommittee has been primarily responsible for identifying regional strengths in biomedical technology and for selecting topics for the collaborative seminars. Subcommittee members contributed to documenting the regional biomedical collaborations.

Next Steps:

- **Ongoing Efforts of Finance Subcommittee.** Under the direction of the overall steering committee, the finance subcommittee will continue to pursue funding for long-term infrastructure development.

- **Ongoing Efforts of Scientific Subcommittee.** The scientific subcommittee will work to develop a long-term vision for creating a position of national prominence for the biomedical research in the Milwaukee region.



Corporate Structuring (Milestone 3). In conjunction with the business planning efforts, the BTA is working to establish the appropriate corporate structure that will support the long-term objectives of the Alliance.

Accomplishments:

- **BTA Formation.** The Biomedical Technology Alliance was initially formed in 2004. In a letter to Governor Jim Doyle, twelve academic, business and community leaders from the Milwaukee Region announced the formation of the alliance and encouraged Governor Doyle to support the initiative.
- **Legislative Summary.** (4/25/05) BTA legislative summary – describing the objectives and structure of the BTA – prepared in support of legislative efforts to fund grant program.
- **Infrastructure Funding Options.** (5/10/05) Outline of funding options for BTA Building Infrastructure, prepared in support of long-term strategy.

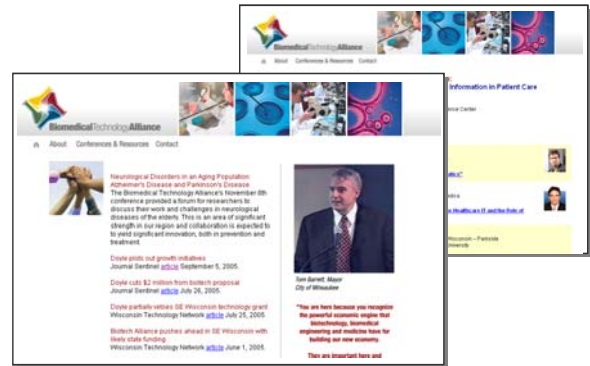
Near Term Objectives:

- **Corporate Structuring.** In 2006, the BTA steering committee will address the issue of long-term structure for the BTA. Initially, the Alliance has benefited from the informal nature of the organization; however, the Alliance may consider forming a 501c3 non-profit organization in 2006 if this is consistent with the long-term needs of the BTA.

Marketing Plan, Website, Marketing Materials (Milestones 4,5,6). In addition to the business planning and structuring efforts, an important element of launching the BTA is to increase awareness – both of the biomedical technology resources that exist in the Milwaukee region, but also of the Alliance itself. The marketing plan, website and marketing materials will support these efforts by helping to inform, attract and coordinate researchers and industry.

Accomplishments:

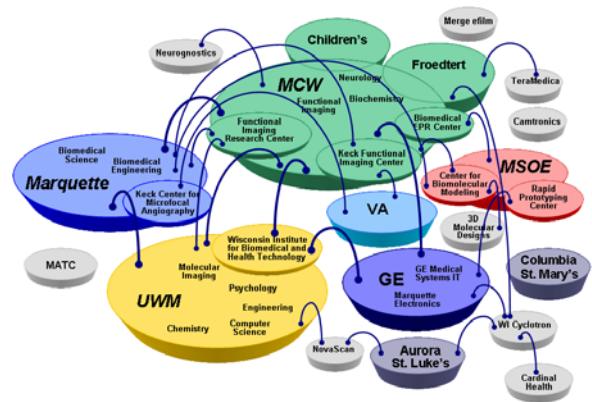
- **BTA Website.** The BTA developed and launched its website in 2004 to provide information about the Alliance and allow interested parties to register for upcoming collaborative seminars.
- **Marketing Plan.** The BTA engaged Marge Meyer and Associates to support marketing efforts, develop the website and support the promotion of the collaborative seminars.
- **Public Relations.** The BTA has leveraged publicity from the collaborative seminars, working with journalists from numerous publications to help educate people about the BTA. These efforts have resulted in numerous articles in the Milwaukee Journal-Sentinel, the Wisconsin Technology Network and WisBusiness.com.
- **Milwaukee Region Biomedical Collaborations.** Working in conjunction with the Scientific Subcommittee, TechStar has compiled a list of existing biomedical collaborations in several key areas, including: rehabilitation, biomedical imaging, genetics and proteomics, and informatics.
- **Seminar Resources.** The BTA website has been expanded to include resources from the previous collaborative seminars, allowing interested parties to download presentations and other conference materials for each of the previous BTA events.



BTA Website: www.biomedtechalliance.org

Next Steps:

- **Future Developments.** The BTA will continue to expand the website so that it is a resource; documenting previous conferences and other products of the BTA including whitepapers.

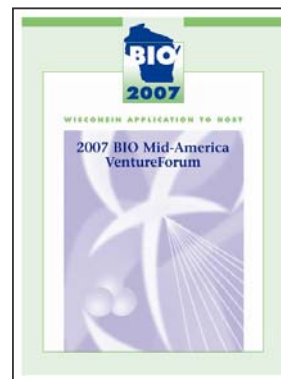


Milwaukee Regional Biomedical Collaborations

Community Outreach (Milestone 7). The BTA hopes to be the center point of numerous efforts to promote biomedical technology in the Milwaukee Region. To ensure that the Alliance can best benefit from the experience and suggestions of other community partners, the BTA has an ongoing community outreach effort to educate people about the Alliance and seek their suggestions.

Key Relationships:

- **Wisconsin Initiative for Biomedical Health Technologies (WIBHT).** WIBHT is a multi-institutional initiative led by UW-Milwaukee to promote biomedical research in specific areas – including biomedical imaging and medical informatics. Partners include: faculty at MCW and Marquette University and corporate partners GE Healthcare, Aurora Healthcare and Cerner. This initiative was first announced by Governor Jim Doyle at the May 2005 BTA conference on biomedical imaging. It exemplifies the sort of inter-institutional collaboration that the BTA seeks to foster, and the BTA has an ongoing participation WIBHT, including serving on the selection committee for the WIBHT executive director.
- **Wisconsin Biomedical Device Manufacturers Association (WBMA).** The BTA has an ongoing relationship with the WBMA, which is primarily a trade group serving Wisconsin biomedical companies. The industry focus of WBMA complements the academic focus of the BTA. The BTA supported the planning of WBMA's annual meeting in October 2005 by identifying speakers to highlight cutting edge biotechnology research in the Milwaukee Region. The BTA also helped coordinate a creativity summit, which was held in conjunction with the annual meeting.
- **BIO Mid-America VentureForum.** The BTA supported the successful bid to bring the 2007 BIO Mid-America VentureForum to Milwaukee. This effort was led by Dan Broderick at Mason-Wells (a Milwaukee-based venture capital firm) and the WBMA.
- **Other Outreach Efforts.** The BTA has supported numerous efforts to inform and educate about the mission of the Alliance. These activities include: a presentation to the delegation from Chiba Japan at a UWM sponsored event (9/05); presentations to Marquette University Provost, Deans and senior leadership council (8/05 and 9/05); meetings with the Wisconsin Hospital Association (8/05); a presentation to the Madison biotechnology alliance (10/05); and support to Marquette/MCW proposal to the Bradley Foundation (10/05).



Milwaukee to Host Bio 2007
Mid-America Venture Forum

Future Outreach

- **Planned Activities.** The BTA will continue outreach efforts in 2006. In particular, the BTA will seek to develop closer ties with the Wisconsin Technology Council and major clinical sites. Medical Directors from each of the regional hospital systems have been invited to participate in the scientific subcommittee.

Collaboration Seminars (Milestones 8,9,10). The collaboration seminars organized by the BTA are a key element of the Alliance's efforts to promote awareness of the resources that exist in the region. These events are designed to give researchers and clinicians from academia and industry an opportunity to interact. The BTA has hosted four conferences to date and plans for two additional conferences in 2006.

Previous Conferences:

- Opportunities for Partnering in Rehabilitation and Imaging Conference.** (11/18/04) Hosted at Marquette University, this was the first BTA event, and it attracted over 100 participants. Rehabilitation technologies are an area of significant strength in Milwaukee and southeastern Wisconsin, both in fundamental research and clinical applications. This conference examined current resources in rehabilitation and looked at how they might leverage area strengths in imaging technology. The scientific program included keynote speakers in rehabilitation and imaging as well as three panel discussions. In addition, academic and government leaders introduced the event – including UW-M Chancellor, Dr. Carlos Santiago; MCW President, T. Michael Bolger; Marquette University Provost, Dr. Madeline Wake and Milwaukee Mayor, Tom Barrett. This event resulted in a whitepaper which is posted on the BTA website under conference resources.
- Bioinformatics and Medical Informatics Conference.** (3/3/05) Bioinformatics and medical informatics are two areas of strength in southeastern Wisconsin that will help define the future of health care. This conference explored the future of bioinformatics and how genetic information will become more important in patient care. The conference also examined medical informatics and the challenges faced in integrating electronic medical records into the current clinical environment. The event was hosted by the Milwaukee School of Engineering (MSOE) and was introduced by MSOE President, Dr. Hermann Viets and included over 150 participants.
- Biomedical Imaging Conference.** (5/2/05) This event examined the Milwaukee Region's significant strengths in biomedical imaging – which include major industry players and a strong core of university-based research. This program examined state-of-the-art image acquisition technologies and integration of imaging data within the health care system. UW-Milwaukee hosted this event which featured Wisconsin Governor Jim Doyle who introduced UW-Milwaukee's new WHBIT collaboration.
- Neurological Disorders Conference.** (11/8/05) Building on previous conferences that highlighted biomedical tools, this conference examined a key health care area that the Milwaukee region is well equipped to address, neurological disorders, including Alzheimer's and Parkinson's diseases. The event was hosted by We Energies, a strong community partners that supports regional economic development. The scientific program included speakers in fundamental research, diagnostics and clinical care. Cory Nettles, Co-Chairman of the BTA introduced the event, and the lunchtime keynote speaker, Steve Smith of Journal Communications and the Greater Milwaukee Committee.



Chancellor Carlos Santiago at BTA Rehab Conference



Dr. Diana Kerwin speaks on care of Alzheimer's Patients

Future Conferences:

- 2006 Conferences.** Two conferences are planned for 2006. Potential topics that the scientific subcommittee is considering include cardiovascular, genetics/proteomics, and drug discovery.



Biomedical Technology Alliance 2005 Annual Report

BTA Steering Committee.

Mr. Tom Barrett
Mayor, City of Milwaukee

Dr. Lane Brostrom
Managing Director, TechStar
(Finance Subcommittee)

Ms. Mary Burke
Secretary of Commerce, State of Wisconsin

Mr. John Byrnes
Senior Partner, Mason-Wells
(Scientific Subcommittee)

Mr. Paul Carbone
Managing Partner, Baird Capital Partners

Mr. Michael Cudahy
President, Endeavors Group

Mr. Robert Dennick
Representative for Milwaukee County Executive

Mr. David Gilbert
Special Assistant to the Chancellor,
University of Wisconsin - Milwaukee
(Scientific Subcommittee)

Mr. Thomas Hefty
Attorney, Reinhart Boerner Van Deuren, SC
(Chair of Finance Subcommittee)

Dr. William Hendee
President, MCW Research Foundation
Steering Committee Co-Chairman
(Chair of Scientific Subcommittee)

Dr. Stan Jaskolski
Dean of Engineering, Marquette University
(Scientific Subcommittee)

Senator Ted Kanavas
Wisconsin State Senator
(Finance Subcommittee)

Mr. Frank Langley
President/CEO, PointOne Systems, Inc.

Mr. Cory Nettles
Attorney, Quarles & Brady LLP
Steering Committee Co-Chairman

Mr. John Rogers
Government Relations Principal, Whyte Hirschboeck Dudek
(Finance Subcommittee)

Mr. Timothy Sheehy
Executive Director, Milwaukee Metropolitan Area Chamber

Mr. Brian Thompson
Managing Director, TechStar
(Scientific Subcommittee)

Mr. John Torinus
CEO, Serigraph

Mr. Patrick Walsh
President, Milwaukee Economic Development Corporation
(Finance Subcommittee)