Nomination of

Babcock Graduate School of Management  
Wake Forest University

For the

2003 Outstanding Entrepreneurship Education Award

In the

MBA Program Category

Submitted by

Stan Mandel, Ph.D., CPA, PE  
Babcock Graduate School of Management  
Wake Forest University  
PO Box 7659  
Winston-Salem, NC 27109-7659
I. Title of Program:

Angell Center for Entrepreneurship, Babcock Graduate School of Management
(MBA Entrepreneurship Program at Babcock Graduate School of Management, Wake Forest University)

II. Mission of Program:

To unite the talents of entrepreneurs, students, and faculty as stewards in the pursuit of excellence within entrepreneurial outreach, curriculum, and research.

III. Contact Person:

Stan Mandel, Ph.D., CPA, PE
Executive Professor
Director, Angell Center for Entrepreneurship
Babcock Graduate School of Management
PO Box 7659
Winston-Salem, NC 27106

(336) 758-3689 (O)
(336) 758-5103 (Assistant, Donna Fulp)
(336) 758-4514 (F)
stan.mandel@mba.wfu.edu

IV. Objectives.

We recognize the impact that entrepreneurial activity plays in the success of individuals, organizations, economies, and societies. Therefore, the Angell Center for Entrepreneurship (ACE) seeks to foster entrepreneurial efforts within Wake Forest and beyond through excellence in programs that:

- Develop students’ talents and skills to recognize and act on new market opportunities.
- Impact the performance and relationships of ACE stakeholders through out-reach programs involving facilitation, intervention, and lifelong learning.
- Expand the domains of entrepreneurship and family business through investment of ACE and stakeholder resources.
Who, What, Why, and Focus. In terms of these elements of a mission statement, the focus of ours can be viewed as:

<table>
<thead>
<tr>
<th>Who</th>
<th>Curriculum</th>
<th>Outreach</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Students</td>
<td>Students, Nascent Entrepreneurs, &amp; Businesses</td>
<td>Faculty, Businesses</td>
</tr>
<tr>
<td>Faculty, Businesses</td>
<td>Educate/Mentor</td>
<td>Educate, Mentor, Facilitate, Intervene, Incubate</td>
<td>Research Theme(s), Cases</td>
</tr>
<tr>
<td>Why</td>
<td>Influence Learning and Action</td>
<td>Impact Performance, Relationships, Launch, Economic Development</td>
<td>Expand ENT/FB Domain</td>
</tr>
</tbody>
</table>

V. Entrepreneurship at Babcock GSM.

Babcock has offered MBA level courses since 1985. In June 1998, a formal entrepreneurship center was created with a director/faculty person. Following are the initial goals that were established. Achievement of these goals is described in section VI (Program Description).

ACE Organizational Goals (established in 1998)

- **Overall**: Earn recognition for ENT and FB program excellence as measured by inclusion in national/international rankings within five years.

- **Outreach**:
  - Recruit proven entrepreneurs for service as directors, mentors, teachers, and fund raisers beginning immediately.
  - Start a membership based FB program in year one.
  - Implement ENT programs in response to the needs of Wake, area businesses, students, alumni, and other stakeholders, beginning in year one.
  - Participate at the leadership level in the Winston-Salem Technology Venture Authority, and the WFU Medical School technology transfer program, beginning in year one.

- **Curriculum**:
  - Become the concentration of choice by one-fourth of Babcock students by year three.
  - Recruit one new ENT teacher/scholar and ten academic / adjunct faculty who will take partial responsibility for educational and program elements.

- **Research**:
  - Begin an interdisciplinary stream of research within ENT (and FB) that is application oriented, supports Babcock’s curriculum, and expands the respective domains.

- **Financial**:
  - Achieve a center-wide annual positive cash flow beginning in year two.
  - Develop endowment funds in excess of $5 million by year five.
VI. Recent National Recognition:

In the four years since its founding, the Angell Center for Entrepreneurship has achieved many significant milestones. Recent national awards and recognition include:

- Designated as a NASDAQ Center of Entrepreneurial Excellence by the National Consortium of Entrepreneurship Centers (September, 2001)
- Twice Runner-up for "MBA Entrepreneurship Education" by the United States Association of Small Business and Entrepreneurship (February 2001 and January 2002)
- Ranked #22 of the "Top 50 Business Schools for Entrepreneurs" by Success Magazine (March 2001)
- Hosted the annual conference for the National Consortium of Entrepreneurship Centers (September 2001).

VII. Program Description and Outcomes:

- **Academic Program.** We offer a major and minor concentration in entrepreneurship where students may choose from seventeen courses. A partial list includes: New Venture Creation, Family Business Dynamics, Fast Growth Management, Business Plan Practicum, Entrepreneurial Finance, New Product Marketing, B2B Marketing, Internet Marketing, Principles of E-Business, and Value Creation (see Exhibit 1). Over 90% of all full time students take one of these elective courses, while over 70% take two or more. Faculty commitments (see Exhibit 2) to teach these courses come from a diverse group of 15 full-time, part-time, and executive faculty.

- **Babcock Demon Incubator (BDI).** The BDI, a community incubator, was launched in November 2001. Under the leadership of Paul Briggs (former executive with Duke Power), six companies have entered incubation. Participating companies come from the Triad community, WFU student population, WFU Medical School laboratories, or Babcock alumni. One, Triad Semi-Conductor, graduated to the Winston-Salem Research Park upon receiving $0.5M in seed funding. Two other companies are in final negotiations with angel and VC investors for their seed funding. The BDI business model includes not only nurturing nascent companies, but also, offering MBA student teams the opportunity to work on start-ups business plans, marketing programs, strategic orientation, funding, and launch. Teams perform due diligence and make recommendations if prospective clients should be accepted for incubation (50 performed since inception). Additionally, this past summer 7 students served as entrepreneurial interns with BDI companies. Go to: [http://www.mba.wfu.edu/ace/incubator.html](http://www.mba.wfu.edu/ace/incubator.html)

- **The Elevator Competition (TEC).** This exciting new national business plan competition (fourth year) literally takes student entrepreneurs from the ground floor to the boardroom. Staged at Wachovia Bank’s international headquarters, teams present their plans to venture capitalists during a two-minute elevator ride. The top six teams advance to full presentations before an expanded group of VCs. Winners receive a return trip to present to a VC partnership group that is appropriate for their venture funding. 30 teams from top MBA programs across the country competed in the 2002 event. The winners were from University of Georgia and Wake
KACE Competition. KACE is an outgrowth of our successful student teaching case competition. Students prepare original teaching cases with teaching notes based upon their summer internships. The inaugural competition, funded by the Ewing Marion Kauffman Foundation, was held in January 2001. Participating schools for the first two competitions include: University of Arizona, Northwestern University, University of Notre Dame, University of Chicago, University of Michigan, University of Nebraska, San Diego State University, and Wake Forest University. Winning cases have come from Northwestern, Chicago, Nebraska, and Wake Forest. The competition was the winner of the Irwin-McGraw-Hill Innovation in Entrepreneurship Pedagogy Award, presented by the Academy of Management. The 2002 KACE competition was expanded to include cases developed within the domains of traditional and social entrepreneurship.

Triad Entrepreneurial Initiative (TEI). The Angell Center is a founding member (January, 2002) of this area organization that provides education, mentoring, and incubation services for the Triad and 12-county area. The program, funded by 5-year $2.0 million contributions from private corporations and community foundations, is designed to increase the level of entrepreneurial activity, collaboration, and cooperation, among Greensboro, High Point, and Winston-Salem communities. During 2001, TEI: held three progressive business plan competitions (Spark, Verge, and Fuel) with total prizes of $150,000; conducted educational programs including 12-week sessions in FastTrac Tech, and Next Level; offered mentoring; and offered incubation opportunities to six companies. For more information on this exciting effort, go to www.triadlaunchpad.org.

WFU – Family Business Center. This program is one of the most successfully launched university-based family business initiatives. Participation includes five sponsoring organizations and 35 member companies representing over 100 family members. Each year we hold six or more programs that help our membership create stronger families and more successful businesses. We conduct bi-monthly affinity roundtables where participants explored issues of common interest in greater depth. Go to: http://www.mba.wfu.edu/ace/fb/

Summer Entrepreneurial Internships. The purpose of this program is to provide students with first hand experience of the entrepreneurial process by working directly with entrepreneurs and venture capitalists. In 2002, Babcock sponsored interns for: three within the social entrepreneurship domain; seven for organizations within the Babcock Demon Incubator; two with VC firms; and four with medical technology start-up companies. Interns receive course credit upon completion of an original teaching case with teaching note based on their experience. This requirement helps students bridge the theory-to-practice gap that can exist in MBA programs. Funding is provided through company support and contributions by the Small Business Technology Development Center, and the Price, Kauffman, and Angell foundations.

Medical Technology Transfer. This ongoing program includes summer entrepreneurial internships (nine in last three years), management consulting practicum projects (six in last three years), and special initiatives such as FastTrac Tech. Our relationship with the WFU Office of Technology Asset Management is excellent as we continue to intensify our contributions to the commercialization of their inventions.
- **Babcock Entrepreneurial Fellows.** Fellows are 30 professional (or “serial”) entrepreneurs, venture capitalists, angel investors, service providers, and chief executive officers. Fellows support the mission of the Angell Center by:
  - Enabling entrepreneurs and service providers to support specific Angell Center initiatives.
  - Serving as a resource for classroom discussions and student-focused activities.
  - Supporting (as mentors, advisers, investors, etc.) students, alumni, and individuals who are embarking on entrepreneurial activities.

- **Babcock Entrepreneurs** This is an active, well-led student organization. Babcock Entrepreneurs represent over 1/3 of full-time students. Activities are extensive and include sponsoring The Elevator Competition, Babcock Entrepreneur's Roundtable, speaker series, company visits, attendance at RTP conferences, and participation in VC competition.

- **Venture Capital and Structured Angel Network Projects.** We provide student assistance to NC venture capital and structured angel firms and their portfolio companies. This initiative has resulted in projects that offer great experience for students to interact with high tech businesses and their financial backers.

VII. Funding and Support

Funding for academic and outreach programs (estimated at $900,000/year) comes from a variety of sources. Following are major components:

- **Endowment.** Don Angell endowed the Angell Center in 1999 at $1 million.

- **Kauffman Center for Entrepreneurial Leadership.** Since 1998, Kauffman has helped fund entrepreneurial internships ($145,000 total) and the KACE competition ($145,000 total).

- **Price Foundation for Entrepreneurial Studies.** Since 1991, the Price Foundation has funded the entrepreneurial internship program for $328,000 (total).

- **Small Business Technology Development Center.** The SBTDC fund: Babcock Entrepreneurs (student club) at $3000 per year, The Elevator Competition at $2000 per year; and BDI student assistantships at $16,000 per year.

- **Family Business Initiative.** Sponsors fund this membership program at $15,000 each/year ($75,000 total/year) and members at $2500 each/year ($87,500 total/year).

- **Entrepreneurial Interns.** Participating companies contribute approximately $50,000/year to fund help fund this program.

- **Triad Entrepreneurial Initiative.** ACE will receive $240,000 over three years to provide education and incubation services for this new tri-community initiative.

- **Babcock Graduate School of Management.** The balance, or approximately 50% of program support (primarily faculty and staff) comes from the school.
Entrepreneurship Concentration Elective Course Descriptions

- **Entrepreneurship: New Venture Creation (ENT 5446)**
  Entrepreneurship is an eclectic field, drawing from such areas as strategy, economics, psychology, and business functional domains (marketing, finance, and operations). Entrepreneurs are concerned with the relentless pursuit of opportunities and the goal of this course is to teach students to identify and act on new opportunities. By the conclusion of this course, students should understand their potential roles as entrepreneurs and have the skills to systematically analyze new opportunities for commercialization. (3.0 Credits)

- **Family Business Dynamics (ENT 5447)**
  If you are not directly involved in your own family's business, most likely you will be as a professional manager, accountant, lawyer, psychologist or employee. This course explores the business, personal and interpersonal issues associated with a family-owned and managed company. We examine such issues as (1) your role in a family business, (2) strategic family and business planning, (3) succession planning, (4) family business conflict resolution and (5) estate planning. (1.5 Credits)

- **Business Plan Practicum (ENT 5448)**
  Starting a new venture is risky and often ends in failure. An effective tool for entrepreneurs who want to reduce risks and better ensure success is a convincing business plan. A business plan serves two purposes. It acts as a roadmap for managers and helps to secure financing. This course focuses on the critical components of a business plan. The course assignment is to prepare a business plan for an opportunity chosen by the student. (3.0 Credits)

- **Fast Growth Management (ENT 5449)**
  The most challenging, exciting, and rewarding experiences for the entrepreneur are the growth of her/his new venture. However, achieving operational success poses daunting challenges to your management and analytical skills. This course first helps students to learn to anticipate the challenges that entrepreneurial companies face during periods of fast growth. The course also provides students with concepts, techniques, and skills needed to respond to the challenges of managing fast growth. It is intended for students interested in start-up companies, as well as new business ventures within existing organizations. (1.5 Credits)

- **Value Creation (FIN 5570)**
  Value creation, in the context of financial management, is the process by which companies earn returns on the capital invested in excess of the cost of that capital (economists call this "entrepreneurial rents"). A manager’s financial goal is to maximize the creation of economic values. This course explores operating and financial strategies for creating value and links those strategies to valuation models for planning and controlling results. Three prominent models are used to compute valuations including EVA, CFROI and the Ferner Model. (1.5 Credits)

- **Internet Marketing (MKT 5583)**
  The purpose of this course is to provide students with conceptual tools to compete effectively in the new digital economy. The focus will be on the marketing issues that managers must address as they consider how to develop successful commercial strategies on the Internet and other emerging electronic media. Drawing on existing scholarly research as well as current industry practices, the course will examine, analyze, and evaluate marketing challenges that need to be tackled to compete in this revolutionary environment. The intent of this course is to look at the Internet from a strategic, not a technical perspective. (1.5 Credits)

- **Principles of E-business (IT 5720)**
  The Internet offers fundamentally new ways to conduct business including the ways products and services can be customized, customer relationships established, new products and services developed, partnerships valued, and the supply chain managed. The topic of e-business is of necessity interdisciplinary cutting across all functional areas and disciplines. The AACSB defines e-business as "any process that a business organization (for profit, governmental, or nonprofit entity) conducts over a computer-mediated network." The purpose of this course is to investigate the organizational challenges, risks, and opportunities in the broad e-business context. The course begins with an overview of the strategic issues related to the use of technology and emerging new business models. Then, based on this broad strategic foundation, narrows the focus and examines the impact e-business is having on marketing, operations, and finance. (1.5 Credits)
New Product Introduction (MKT 5430)
This course gives students hands-on experience in the process by which new consumer products are introduced and marketed. Beginning with research to identify a viable target segment and a positioning strategy, students proceed from the estimation of sales and profit potential to the development of a marketing plan. The instructors, who include professional advertising and brand management practitioners, function as management consultants. Students work in teams to prepare short oral and written reports of weekly progress. The course ends with team presentations to a “board of directors” composed of managers and executives from local companies. (1.5 Credits)

Financing The Entrepreneurial Venture (ENT 5440)
New venture formation and small business have been major forces in the growth and vitality of the global economy. This course is about financing high potential ventures. Specific topics include (1) techniques for evaluating new venture opportunities, (2) strategies of starting versus buying an existing firm, (3) valuation of closely held companies, (4) venture capital and other financing sources, (5) aspects of organizational form, taxes, and securities regulations, (6) techniques of structuring and negotiating a deal, and (7) ethical issues. (1.5 Credits)

Case Writing Practicum (MGT 5156)
This course is required of all students participating in the entrepreneurial internship program. The focus of this course is to help students bridge the theory-to-practice gap of a management/industry/functional area/other issue through writing a teaching case with teaching notes. This is an individualized course with directed readings under the supervision of a faculty member. The selection of case issue(s) and organizational site are by mutual agreement of student and supervising faculty member. Normal course credit for this elective is 1.5 hours. Each practicum must receive prior consensus of the participating faculty member. (1.5 Credits)

Operations Strategy I, II, III (OPS 5690, 5691, 5692)
This course deals with ways of understanding a firm’s operations strategy in the context of how it affects other functional areas and the firm as a whole. It provides exposure to the concepts of operations strategy and how operations strategy is used as a competitive weapon. Specific topics include capacity strategies, technology strategies, vertical integration and sourcing strategies, facilities strategies, matching process technology with product/market requirements, and building the competitive potential of the operations function in an organization. (1.5 Credits or 3.0 Credits)

Management Consulting Practicum (MGT 2201)
Required of all students with less than three years of relevant work experience. This course allows students to deal directly with organizations and managers. Student teams act as project consultants to a local, regional, or national business or nonprofit organization. They apply the skills acquired in the first year of the full-time program to an actual business problem. Students complete a comprehensive written report, make a formal oral presentation to the client, and present an oral defense before faculty members who also act as project advisers. (3.0 Credits)

Business-to-Business Marketing (MKT 5241)
This course encompasses management activities that enable a supplier firm to understand, create and deliver value to other businesses, governments and institutional customers. There are four guiding principles of business-to-business marketing: make value the cornerstone, focus on business processes, emphasize doing business across borders, and accentuate working relationships and business networks. Classes are set in a seminar format, featuring the discussion of articles and analyses of management cases. (3.0 Credits)

Marketing Research (MKT 5380)
This course includes topics such as information systems, syndicated data services, secondary and primary data collection, and data analysis and interpretation. Student groups develop, implement, and manage a market research project. Particular emphasis is placed on projects involving primary data collection. (3.0 Credits)

Marketing Strategy & Planning (MKT 5390 or MKT 5391)
This is a decision-oriented course concerned with solutions to problems of product, price, promotion, and distribution channels. Students are expected to locate their own marketing plan projects and to prepare a professional marketing plan. The course makes extensive use of case studies and instructional methods include slides, examples, and videotapes. (1.5 or 3.0 Credits)
Exhibit 2

Entrepreneurship Faculty Support

B.R. Baliga John B. McKinnon Professor of Management. BE, University of Madras; PGDBA, Indian Institute of Management; DBA, Kent State University. Dr. Baliga’s research and teaching interests are in the areas of managing strategy, managing multinational corporations and leading strategic change.

Bernard L. Beatty Associate Professor of Management and Faculty Director of the Executive MBA Program – Winston-Salem. BS, Ohio State University; MBA, DBA, Harvard University. Dr. Beatty is particularly interested in small business planning and control, including organizational structure and financing.

Derrick S. Boone Assistant Professor of Marketing. BA, University of North Carolina at Chapel Hill; MBA, Fairleigh Dickinson University; PhD, Duke University. Dr. Boone’s research interests include analytical modeling, the diffusion of new products, and consumer behavior and decision-making. His teaching interests center on marketing research and new product management.

Jack D. Ferner Lecturer of Management. BA, University of Rochester; MBA, Harvard University. CMA. Mr. Ferner teaches courses in entrepreneurship, finance, accounting and strategy. He is a valuation expert of small businesses, intellectual property and antitrust damages. He is the author of Successful Time Management and serves on the editorial board of the Case Research Journal. Mr. Ferner also is a director of TempGuard and is a strategic planning consultant for Garner Food Co., The Children’s Home, Thermaco and others.

Michael D. Lord Assistant Professor of Management. BA, Harvard University; MBA, Baylor University; PhD, University of North Carolina at Chapel Hill. Dr. Lord’s teaching and research interests include international corporate strategy (particularly emerging markets), corporate political strategy, the management of knowledge, technology and innovation management, mergers and acquisitions, and management consulting.

Stanley W. Mandel Executive Professor and Director of the Angell Center for Entrepreneurship. BSME, Tulane University; MBA, Northwestern University; PhD, Texas Tech University. CPA, PE. Dr. Mandel’s teaching and research interests include entrepreneurship, strategy and family business. He has participated in the start-up of several organizations within the retail, financial services, health care, consulting and nonprofit sectors. Dr. Mandel also advises and serves on the boards of many student- and alumni-led start-up companies involving electronic commerce, biotechnology, venture capital and retail services.

Kelly A. Mollica Assistant Professor of Management. BS, Western Carolina University; MS, University of Tennessee; PhD, Pennsylvania State University. Dr. Mollica’s research focuses on workforce diversity, work-family conflict, organizational justice and employee reactions to downsizing. Her teaching interests are organizational behavior, human resource management and negotiations. She has worked in management, sales and marketing in the health-care industry.
James A. Narus  Professor of Business Marketing. BA, MBA, University of Connecticut; PhD, Syracuse University. Dr. Narus’ research and teaching interests are in business marketing management and value-based marketing. He studies strategic alliances, value assessment and management, and adaptive channel systems.

Tom L. Ogburn Jr.  Executive Professor of Marketing. BA, Davidson College; MBA, University of North Carolina at Chapel Hill. Mr. Ogburn was vice president of public issues and served in a number of domestic and international marketing and marketing research positions during a 25-year tenure with R.J. Reynolds Tobacco Co. He is president of The Ogburn Group and owner of Buena Vista Farms.

Michelle L. Roehm  Assistant Professor of Management. BS, MS, University of Illinois at Urbana-Champaign; PhD, Northwestern University. Dr. Roehm teaches advertising policy and brand management. Her research is centered on information processing and consumer behavior.

Scott M. Shafer  Associate Professor of Management. BBA, BS, PhD, University of Cincinnati. Dr. Shafer’s research and teaching interests are in the areas of cellular manufacturing, operations strategy, business process design and information technology. He is co-author of Operations Management: A Process Approach with Spreadsheets. He is member services coordinator of the Decision Sciences Institute and is Certified in Production and Inventory Management (CPIM) by the American Production and Inventory Control Society.

Chuan-Fong (Eric) Shih  Assistant Professor of Marketing. BA, University of California at Berkeley; MBA, University of California at Riverside; PhD, University of California at Irvine. Dr. Shih’s teaching interests include marketing management, marketing on the Internet, marketing research and consumer behavior. His research centers on the diffusion of information technology, consumer behavior and the Internet, and new media and advertising. Dr. Shih is a member of the American Marketing Association, the Association for Consumer Research and the Society of Consumer Psychology.

Adjunct Faculty:

Paul Briggs, Director, Babcock Demon Incubator
Gerald Chrisco, CFO, The Budd Group
Alan Cox, Principal, The Planning Edge
Bob Fly, Retired President & COO, Long Haymes Carr Advertising
Karen Mishra, Champion, Social Entrepreneurship Initiative, ACE
Hap Royster, Managing Partner, Triad Commercial Properties
Exhibit 3
Babcock Entrepreneurial Fellows