Research



May 2011

Babson Faculty Pedagogical Fund Awards

The Babson Faculty Pedagogical Fund (BFPF) is a fund available to faculty for the development of cases, simulations, exercises, tutorials, industry notes—anything considered pedagogical material. Its purpose is:

- to encourage and facilitate the development of cases and teaching materials by Babson faculty,
- to keep Babson's curriculum current and international,
- to publicize new cases and teaching materials across campus, and
- to increase the public visibility and teaching reputation of the College and its faculty.

This year, BFPF has funded the following teaching materials:

- Appirio by Erik Noves, Entrepreneurship and Bala Iver, TOIM
- Mannequin Madness by Donna Stoddard, TOIM
- Manzi Metals by Donna Stoddard, TOIM
- Tax 3500 Teaching Materials by Eli Bortman, Accounting and Law
- Zumba by Bradley George, Entrepreneurship

For further information please go to the BFPF website.

In This Issue

BFPF Awards Faculty News GCC Awards Travel Policies Final Products Accepted External Funding

Research @ Babson is published by the **Babson Faculty Research Fund**

Faculty News

distance two" by Sarah Spence Adams and Denise Sakai Troxell, Mathematics and Science, will be published in Applied Mathematics Letters, Volume 24, Issue 6, June 2011, Pages 950-957. This research was supported with a BFRF spring 2010 course release.

Glavin **Council of Chairs Additional Awards**

2011 Summer Research Expenses Elizabeth Goldberg, Arts and Humanities

2011-2012 Research Expenses Anne Roggeveen, Marketing

College Wide Travel Policy Updated "Labeling matched sums with a condition at

Traveling this Summer?

The Purchasing Department, in conjunction with other division representatives on campus, has completed the process of updating the College Wide Travel Policy. The new policy has been reviewed and approved by the CFO, General Counsel, and VP of Administration. Effective January 1, 2011, the new travel policy will take effect. Any travel plans made after January 1st should comply with this new policy. Click here to view the Travel Policy.

INTERNATIONAL SOS

The College recognizes that in this rapidly changing world travelers prefer to be prepared with regard to health and security. The International SOS network of services for immediate help in any emergency is offered to you via Babson College. Services range from telephone advice and referrals to full-scale evacuation by private air ambulance. International SOS is like a concierge service that will help you get all the information and care you need to plan, as well as to stay safe and healthy while abroad. To access these services, log in on the SOS Global Scholastic Portal or call the International SOS Service Center in Philadelphia at +1-215-942-8226 (prior to international departure). If you have questions or if you have difficulties with the International SOS website, contact the Office of Risk Management at Babson College for assistance.

Back to Top

BFRF Final Products Accepted

Sinan Erzurumlu, TOIM, Operational Hedging Strategies to Overcome Financial Constraints for Clean Technology Startups

Clean technology startups face multiple sources of uncertainty, and require specialized knowhow and longer periods for revenue growth than their counterparts in other industries. These startups require large investments and have been hit hard during the current credit squeeze. On the other hand, clean technologies create important positive externalities for the economy. Hence, loan guarantees and other incentive schemes are being developed that are conditioned upon operational benchmarks. We offer a framework to establish the extent wherein operational hedging can reduce risk and increase the probability of obtaining financing. We examine a variety of evidence, ranging from production outsourcing to creation of joint ventures, to posit that operational hedging may affect both the marginal cost of capital and the marginal return on investment through mitigating the informational problems in the market. However, operational hedging may not be an effective strategy in all settings: the decision for creation of such hedges ought to weigh the benefits of reduced marginal cost of capital and the opportunity cost of reduced future growth potential against a status quo.

Donna Kelley, Entrepreneurship, Growth Aspirations as a Function of Entrepreneurial Motivations and Perceptions This research studies the growth-seeking ambitions of entrepreneurs. Drawing on expectancy theory, we develop and test a motivation perspective to determine if the desire to improve one's life through greater income or independence is associated with an entrepreneur's aspirations for growth. We also develop an opportunity perspective to test whether characteristics of the opportunity can impact an entrepreneur's judgment about the growth potential for the venture. We find that growth entrepreneurs are more likely to have higher improvement motivations, and perceive they have more innovative opportunities with few competitors. The implications for theory and literature on entrepreneurial growth lies with our finding that human motivation as well as perceptions about an opportunity can play an important role in expectancy models.

Denise Troxell, Mathematics and Science, Irreversible k-threshold and majority conversion processes on complete multipartite graphs and graph products," (with S.S. Adams, Z. Brass, C. Stokes) In graph theoretical models of the spread of disease through populations, the spread of opinion through social networks, and the spread of faults through distributed computer networks, vertices are in two states, either black or white, and these states are dynamically updated at discrete time steps according to the rules of the particular conversion process used in the model. This paper considers the irreversible k-threshold and majority conversion processes. In an irreversible k-threshold (resp., majority) conversion process, a vertex is permanently colored black in a certain time period if at least k (resp., at least half) of its neighbors were black in the previous time period. A k-conversion set (resp., dynamic monopoly) is a set of vertices which, if initially colored black, will result in all vertices eventually being colored black under a k-threshold (resp., majority) conversion process. We answer several open problems by presenting bounds and some exact values of the minimum number of vertices in k-conversion sets and dynamic monopolies of complete multipartite graphs, as well as of Cartesian and tensor products of two graphs.

Keith Wilcox, Marketing, Far Away or So Close: The Influence of Counterfeits on Genuine Brand Preference

This research demonstrates that counterfeit brands can increase or decrease consumers desire for genuine luxury brands. We demonstrate that consumers' processing mindset (concrete vs. abstract) moderates the influence of counterfeits on genuine brand preference. When consumers process at a concrete level, they contrast the genuine brand with the counterfeit version, which increases their desire for the genuine version. When consumers process at an abstract level, they assimilate the genuine brand toward the counterfeit version, which reduces their desire for the genuine version. The assimilation process that reduces the desire for a genuine brand can be interrupted by active self-expression goals, such that consumers prefer the genuine brand more when a counterfeit version is available even when they process abstractly.

Back to Top

External Funding Opportunity



Summer Stipends

Program: Summer Stipends support individuals pursuing advanced research that is of value to humanities scholars, general audiences, or both. Recipients usually produce articles, monographs, books, digital materials, archaeological site reports, translations or editions. Summer Stipends support full-time continuous work on a humanities project for a period of two months.

Funds: Multiple awards of \$6,000 each

Deadline: September 26, 2011

Eligible: Researchers, teachers and writers

Information: Division of Research, Room 318, National Endowment for the Humanities, 1100 Pennsylvania Ave, N.W., Washington, D.C. 20506, Telephone: (202)-606-8200, Email:stipends@neh.gov, Link: http://www.neh.gov/grants/guidelines/stipends.html

If you are interested in pursuing this funding opportunity or other external funding, please contact <u>Wendy Silverman</u>, Director, Corporations, Foundations, and Government Relations.