

**NEW JERSEY INSTITUTE OF TECHNOLOGY**  
**BOARD OF TRUSTEES PUBLIC SESSION**  
**June 7, 2007, 11:00 AM**

**Call to Order**

1. **Notice of Meeting to Public** (Statement to be read by the Chair, a requirement of the NJ Open Public Meeting Act)
2. **Minutes**
  - A. Approve minutes of the April 12, 2007 meeting of the Board of Trustees
3. **Public Comments**
4. **Planning Committee**
  - A. NJIT Campus Gateway Plan
  - B. Discussion of enrollment management/growth strategies and projections for 2007-2008
  - C. Approve Resolution to Authorize University Information Systems Application Server Consolidation and Virtualization Plan
5. **Audit and Finance Committee**
  - A. Status of Budget, Tuition and Fee Schedule for FY 2008
  - B. Operating Statement Year to Date
  - C. Schedule of Short Term Investments
  - D. Approve Resolution to Authorize Expenditure for Electricity and Natural Gas for FY 2008
6. **Academic Affairs and Research Committee**
  - A. Approve Promotion and Tenure Recommendations for 2006-2007
  - B. Approve Resolution to Establish the Department of Biological Sciences
  - C. Approve Resolution for Change of Nomenclature for the BS in Management to the BS in Business
  - D. Approve Resolution to Authorize Exclusive Licensure of University Intellectual Property to the Iowa Corn Promotion Board ("ICPB")
  - E. Approve Resolution to Approve Contract with the New Jersey Department of Community Affairs for Rural Sustainability Demonstration Studio
7. **Advancement Committee**
  - A. Report of Gifts and Fund Raising Activities
  - B. Fund Raising Growth Strategies

**Announcement of Next Meeting**

Chair to read resolution regarding Closed Session to discuss Personnel, Real Estate and Contract Matters to be held on Thursday, July 19, 2007, 9:30 AM, Eberhardt Hall NJIT Alumni Center Board Room.

Announce next public meeting: Thursday, July 19, 2007, 11:00 AM, Eberhardt Hall NJIT Alumni Center Board Room.

**Adjourn Public Meeting**

# **1. Notice of Meeting to Public**

**BOARD OF TRUSTEES**

**STATEMENT TO BE READ AT THE OPENING OF EACH  
MEETING OF THE BOARD OF TRUSTEES**

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**“NOTICE OF THIS MEETING WAS PROVIDED TO THE PUBLIC  
AS REQUIRED BY THE NEW JERSEY PUBLIC MEETING ACT, IN  
THE SCHEDULE OF MEETING DATES OF THE BOARD OF  
TRUSTEES OF THE NEW JERSEY INSTITUTE OF TECHNOLOGY  
WHICH WAS MAILED TO THE STAR LEDGER, THE HERALD NEWS,  
AND THE VECTOR ON AUGUST 11, 2005. THIS SCHEDULE WAS  
ALSO MAILED TO THE COUNTY CLERK ON AUGUST 11, 2005 FOR  
FILING WITH THAT OFFICE AND POSTING IN SUCH PUBLIC  
PLACE AS DESIGNATED BY SAID CLERK.”**



**2A. Approve Minutes of the  
April 12, 2007 Meeting  
of the Board of Trustees**



**NEW JERSEY INSTITUTE OF TECHNOLOGY  
BOARD OF TRUSTEES  
MINUTES - PUBLIC SESSION  
April 12, 2007**

1. The meeting was called to order by Acting Chairperson Burns, at 11:20 a.m. Other Trustees in attendance were Vice Chair DePalma, and Board Members Beachem, DeCaprio, Garcia, Knapp, and Montalto. Also in attendance were President Altenkirch, Mr. Mauermeyer, Board Treasurer, and Ms. Holly Stern, Board Secretary.

In accordance with the New Jersey Open Public Meeting Act, the Chairperson read the following statement:

“Notice of this meeting was provided to the public as required by the New Jersey Meeting Act, in the schedule of meeting dates of the Board of Trustees of New Jersey Institute of Technology which was mailed to the Star Ledger, The Herald News and Vector on August 11, 2005. The Schedule was also mailed to the City Clerk of Newark on August 11, 2005, for filing with that office and posting in such public place as designated by said Clerk.”

2. BY A MOTION DULY MADE BY MR. BEACHEM, SECONDED BY DR. DE CAPRIO AND UNANIMOUSLY PASSED, the minutes of the February 8, 2007 meeting were approved.
3. BY A MOTION DULY MADE BY MR. KNAPP, SECONDED BY MR. DE PALMA AND UNANIMOUSLY PASSED, the Resolution to Adopt Board of Trustees Policy on Members of the Public Speaking at the Public Meetings of the Board of Trustees was passed (attached).
4. BY A MOTION DULY MADE BY MR. KNAPP, SECONDED BY MR. BEACHEM, the Resolution to Approve Capital Projects for Implementation was passed (attached).
5. BY A MOTION DULY MADE BY DR. DE CAPRIO, SECONDED BY MR. DE PALMA, AND UNANIMOUSLY PASSED, the Resolution to Change the Faculty Handbook Section on Administrative Appointments was passed (attached).

6. BY A MOTION DULY MADE BY MR. BEACHEM, SECONDED BY DR. DE CAPRIO, AND UNANIMOUSLY PASSED, the Board granted tenure to Dr. Sundar Subramanian, as an Associate Professor in the Department of Mathematical Sciences.
7. BY A MOTION MADE BY MR. KNAPP, SECONDED BY MS. GARCIA, AND UNANIMOUSLY PASSED, the Board amended the agenda and granted tenure to Dr. Sunil Saigal, P.E., a Distinguished Professor in the Department of Civil and Environmental Engineering. He has also been appointed to Dean of the Newark College of Engineering.
8. BY A MOTION DULY MADE BY DR. DE CAPRIO, SECONDED BY MS. MONTALTO, AND UNANIMOUSLY PASSED, the Resolution to Authorize Exclusive License of University Intellectual Property was passed (attached).
9. President Altenkirch provided an update on the Higher Education budget. The Governor has delivered his proposed budget and now we are working with the legislature to improve the position of higher education in the State budget. Last year, there was a net 7% reduction. The Legislature had restored a portion of the Governor's cuts. This year, there is a proposed \$1.3 million increase in operating funds, which reflects a 1.45% penalty for out of state students, lowering the proposed increase. President Altenkirch also discussed university salary needs noting that no funds were included in the Governor's Recommendation to address the FY'08 collective bargaining settlements. Currently, the university is \$2.4 million short as we start the budget process, which is a smaller gap than last year. The details of balancing the budget and prioritizing needs will be developed in the upcoming weeks.
10. President Altenkirch discussed the progress of the NJIT Campus Gateway Plan. The firm of Jones Lang LaSalle Americas was named as the developer for the project. The goal is to prepare a plan by June 30, 2007 for submission for approval to the City of Newark.
11. Vice President Sebastian gave a presentation on Research Growth Strategies, including an update on the Stem Cell Research Facility. Dr. Sebastian noted that this was NJIT's best year in terms of growth, producing a double-digit increase in total direct expenses from external R & D support, resulting in new highs of \$60 million on external support and \$80 million in total R & D expenditures. Major initiatives are in the area of defense appropriations, homeland security, stem cell research and the Liberty Corridor. Dr. Sebastian noted that earmarking in Washington may disappear in future years. Regarding stem cell research, Dr. Sebastian outlined the history leading to the sponsorship for major central investment in the Newark Institute of Regenerative Medicine.



12. President Altenkirch discussed the Strategic Plan/Planning Process. He noted that there needs to be consideration of using the SAT scores as a mark of progress and predictor of academic success; how well students do academically at the high school level tends to be a more accurate predictor of success. With respect to research, NJIT is doing well; the university would like to do more on the federal side, and we have recently moved into the NIH area. With respect to the community, the student satisfaction rate is up, and athletics are progressing, giving the university visibility. The Honors College goal is met with the number of students but not the percentage (since the number of students is increasing). The university needs to expand the donor base, with respect to fundraising. Marketing is going well. In sum, the focus of the university's strategic planning efforts is on recruitment, diversity, and federal funding.
13. Treasurer Mauermeyer also provided an update on the Operating Statement Year to Date, and the Schedule of Short Term Investments. He noted that we are now three quarters of the way through the year, and the expense basis is a little more than 75% of the budget as the academic year is almost ended. The working capital continues to be monitored as we move toward the close of the fiscal year. Summer cash receipts are lower than Fall and Spring. Also the timing of receipts in the State's coming fiscal year depends on a completed State budget and action by State Treasury to start the FY'08 State funding. The university is slightly ahead of tuition revenues, and the year and results are projected to be on target.
14. Vice President Dees reported on gifts and fundraising activities, which were detailed in handouts to the Board and public. In terms of funds raised, we are 7.3% higher than at the same time last year, and have experienced a 9% increase in total alumni donors. The university recently declared victory in the Honors College campaign, exceeding our goal by \$2.8 million. The Athletics campaign is in the quiet phase, and we have received \$3.5 million in gifts and pledges.
15. The Acting Chairperson announced that the next scheduled closed session would be convened on Thursday, June 7, 2007, at 9:30 AM, at Eberhardt Hall Alumni Center, to discuss personnel, real estate and contract matters. The following resolution was read and approved by all Trustees present.

WHEREAS, there are matters that require consideration by the Board of Trustees that qualify under the Open Public Meetings Act for discussion at a Closed Session;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Trustees shall have a Closed Session to discuss such matters as personnel, real estate and contract matters on Thursday, June 7, 2007 at 9:30 AM, Eberhardt Hall Board Room.

The next Public Session of the Board will take place on Thursday, June 7, 2007 at 11:00 AM, Eberhardt Hall Board Room, following the Closed Session of the Board.

BY A MOTION DULY MADE BY MS. BEACHEM, SECONDED BY MR. KNAPP AND APPROVED BY ALL TRUSTEES PRESENT, the meeting was adjourned at 12:15 p.m.



### **3. Public Comments**



## **4A. NJIT Campus Gateway Plan**



**NJIT Campus Gateway Survey**  
**Executive Summary**  
by  
***Jones Lang LaSalle***  
**May 30, 2007**

**Introduction**

To provide input on the needs of MLK section of the James Street Historic District, and to help guide planning for the proposed Campus Gateway project, Jones Lang LaSalle conducted a survey of neighborhood stakeholders, including NJIT administration, NJIT Greek system members, NJIT faculty and staff, neighborhood residents, St. Michael's representatives, and other interested parties including area employers and employees and Rutgers' students. The 27-question survey, which was conducted between May 16 and May 21, was conducted online, through on-the-street polling, and through outreach by the Historic James Street Commons Neighborhood Association.

Overall, the survey demonstrated that among students, faculty and staff there is a strong desire for increased retail opportunities, most notably cafes, restaurants and a grocery store. Area residents are less interested in retail. The community as a whole does not use mass transit, and while transportation patterns may change if additional housing options are offered, it appears likely that automobile traffic and parking will play a significant role in any neighborhood evolution.

Safety was a top-of-mind issue for students and a top priority for the St. Michael's Hospital community. While safety was important to the area residents, historic preservation and preservation of the traditional community structure held a higher priority.

**Respondent Profile**

Of the 731 total survey respondents, 58.7 percent were students attending NJIT (and Rutgers), and 32.6 percent were NJIT (or Rutgers) faculty and staff members. Workers and employees in the neighborhood accounted for 10 percent of those who took the survey. A very small percentage of respondents, 1.8 percent, were non-student residents in the MLK section of the James Street Historic District, while 1.1 percent were business owners and 1.2 percent were property owners, respectively. The responses of these groups were not large enough to impact significantly the results of the survey. However, the ongoing, in-person interviews will enable the priorities of these groups to be reflected in the planning effort. A full 17 percent of non-student residents have lived in the area for more than 10 years.

**Amenities**

When asked about amenities, 59 percent of respondents characterized parking as "very" important to quality of life in the neighborhood, and a total of 82 percent characterized parking as either "very" important or "somewhat" important. Likewise, half or more of

respondents stated that retail and public transportation are “very” important to quality of life. While only 13 percent of respondents stated that hotel accommodations are “very” important to quality of life in the neighborhood, more than 54 percent host out of town visitors. In fact, nearly 30 percent of those who host out of town visitors do so more than five times a year.

## **Retail**

A remarkable 73 percent of respondents felt that restaurants are important to quality of life in the neighborhood -- only 2 percent felt that a restaurant was “not important at all.” The prospect of cafes and coffee shops was equally popular -- 70 percent of respondents said they were “very important.” Similarly, 73 percent of respondents felt that a grocery store was at either “somewhat” or “very important” to their quality of life. The importance of convenience retail outlets such as banks and dry cleaners, scored remarkably high, with 44 percent saying it was “very important.” A drugstore and pharmacy is also on the minds of respondents with 46 percent rating this service as very important. A movie theater was a lesser priority to respondents; 26 percent said it was “very important” and 34 percent said that a movie theater was somewhat important.

According to the survey, respondents shop in a variety of stores throughout the year. The vast majority, 77 percent, shop at discount department stores such as Target, Kohl’s and TJ Maxx, while 70 percent also shop at general department stores like Macy’s and Lord & Taylor. The next most common shopping outlets were national chains such as Gap, J. Crew and H&M. Boutiques were not characterized as frequent shopping choices.

As for dining out, 90.2 percent of respondents go out for dinner at least once a week, and 17.4 percent go out three or more times per week. The majority of respondents, or 52 percent, spend approximately \$11 to \$20 per person when they do go out for dinner. However, 24 percent of respondents who go out for dinner spend \$21 to \$35 per person.

Considering the large student population, it was surprising that 54 percent of respondents said they seldom or never go out to bars, lounges or live music. However, this is likely a reflection of the lack of nightlife options in the MLK section of the James Street Commons Historic District. A combined 78 percent of respondents said a bar, lounge or live music was either “very” or “somewhat” important. Of the respondents who do have an active nightlife, 28 percent said they go out once a week on average. As a whole, local bars/pubs seemed to be the most popular kind of nightlife destination, with 40 percent of respondents frequenting them. The next most popular destination was a live music venue or dance club, which are visited by 30 percent of respondents.

## **Transportation**

A significant majority, 64.2 percent, of respondents drive themselves to work and school, while only 13.7 percent take the train and 8.2 percent walk. Thus, it is not surprising that 57 percent of respondents felt that automobile traffic was heavy in the neighborhood and



that 92 percent felt that pedestrian traffic was light to moderate. Overall, respondents were disappointed with parking options in the area; 77 percent stated that parking is either “not very accessible” or “not at all accessible.” Respondents seemed to be relatively content with public transportation in the area, with nearly 20 percent characterizing as “accessible” and 52 percent stating it was “somewhat accessible.”

### **Quality of Life**

Most respondents, 85 percent, said that safety and security was “very important” in their decision to live/work/attend school in the area. A full 47 percent of respondents said they felt “somewhat safe” in the neighborhood, and while 37 percent said the neighborhood is “not very safe” and nearly 11 percent said it was “not at all safe.” A full 57 percent felt that the neighborhood’s character was “very” important, and 47 percent felt that town-university relations were “very” important. Responses on affordable housing were mixed: 32 percent of respondents felt that affordable housing was “not very” or “not at all” important, and 41 percent felt that it was “very” important.

### **Personal Information**

For this survey, nearly 41 percent of respondents were between the ages of 18 and 25. The next largest age group was 45 to 54, accounting for 14 percent of respondents. There was a significant gender disparity: 65 percent of respondents were men and 35 percent were women.

A majority of the population, or 35 percent, lives with related or unrelated roommates, and nearly 28 percent of the households are comprised of couples with children. Most, or 56 percent, of respondents live in homes with three or more bedrooms. Nearly 40 percent of respondents get their news about the area from student newspapers, while 29 percent find news in the Star-Ledger.

### **Students, Faculty and Staff Subset**

Nearly half, or 45 percent of students, faculty and staff rent or own apartments or houses outside the MLK neighborhood, and only 4 percent live within the neighborhood. Of these respondents, 18 percent live in on-campus housing. Of the students, faculty and staff who do not live on-campus or in the MLK neighborhood, 37 percent said they are “not likely at all” to move to the neighborhood if there were more housing options available, and 14 percent said they would be “very likely” to move if there were more options. Most, or 63 percent of students, faculty and staff, spend less than one hour each day in the MLK neighborhood. Many vocalized that they merely pass through on their way to work or class. Those who spent five or more hours in the neighborhood did so because they held jobs or lived in the neighborhood.



## NJIT Campus Gateway Survey

NJIT has recently initiated planning for a multifaceted revitalization and enhancement effort for the area around the NJIT campus on Martin Luther King Jr. Boulevard between Central Avenue and Orange Street. The effort will seek to increase quality of life by providing additional housing, retail services and entertainment opportunities. The following survey is designed to help guide the revitalization effort by providing input from those who live, work or attend school in the area. Your opinions are a critical component of this project.

**For the purpose of this study, we define the MLK section of the James Street Historic District as the four blocks along Martin Luther King Jr. Boulevard between Central Avenue and Orange Street in the University Heights section of Newark.**

1) Which of the following best describes your relationship to the MLK section of the James Street Historic District? (check all that apply)

- NJIT student
- Rutgers student
- Faculty/staff
- Member of the Greek system
- Non-student resident in the MLK section of James Street Historic District
- Property owner (not affiliated with Greek system)
- Business owner
- Worker/employee in the MLK section of James Street Historic District

2) If you are a non-student resident in the MLK section of the James Street Historic District, how long have you lived there?

- Less than 1 year
- 1-2 years
- 3-5 years
- 6-10 years
- More than 10 years

### Neighborhood Amenities

3) Please rate the **importance** of the following to quality of life in the MLK section of the James Street Historic District:

	Very	Somewhat	Not very	Not at all
Retail stores				
Public transportation				
Parking				
Community centers/events				

Cultural/entertainment centers				
Commercial office space				
Hotel accommodations				

4) Do you ever host out-of-town visitors?

Yes

No

⇒ If yes, how often?

1-2 times per year

3-4 times per year

5+ times per year

### **Retail**

5) Please rate the *importance* of the following types of retail outlets to quality of life in the MLK section of the James Street Historic District:

	Very	Somewhat	Not very	Not at all
Restaurant				
Cafe/coffee shop				
Bar/lounge/live music				
Movie theater				
Grocery store				
Book/music store				
Clothing store				
Convenience retail (bank, dry cleaners, hair salon)				
Drugstore/pharmacy				

6) If more of your retail priorities were available, how likely would you be to patronize retailers in the MLK section of the James Street Historic District?

Very likely

Somewhat likely

Not very likely

Not at all likely



7) Which types of stores have you shopped in during the last six months? (check all that apply)

Discount department store (such as Century 21, Target, Kohl's, TJ Maxx)

Factory outlet stores (such as Woodbury Commons, The Crossings)

General department store (such as Macy's, Lord & Taylor, J.C. Penney)

Chain brand store (such as Gap, J. Crew, H&M, Express)

Specialty boutiques

Other \_\_\_\_\_

8) How many times a week do you typically go out for dinner?

Seldom/never

Once

Twice

3 to 4 times

5 or more times

9) How much do you usually spend per person for dinner?

Less than \$10

\$11 to \$20

\$21-\$35

\$36-\$49

\$50 or more

N/A

10) How many times a week do you go to bars, lounges or live music?

Seldom/never

Once

Twice

3 to 4 times

5 or more times

11) Which types of establishments did you usually frequent? (check all that apply)

Local bar/pub

Sports bar

Live music venue/dance club

Lounge

Wine bar

N/A

### **Transportation**

12) Please indicate your primary means of transportation to work/school.

NJ Transit train

NJ Transit bus

NJ Transit light rail

PATH

Walk

Bike/blades

Taxi/car service

Drive myself

Other \_\_\_\_\_

13) How would you characterize pedestrian traffic in the MLK section of the James Street Historic District?

- Light
- Moderate
- Heavy

14) How would you characterize automobile traffic in the MLK section of the James Street Historic District?

- Light
- Moderate
- Heavy

15) How would you characterize parking accessibility in MLK section of the James Street Historic District?

- Very accessible
- Somewhat accessible
- Not very accessible
- Not at all accessible

16) How would you characterize the accessibility of public transportation in the MLK section of the James Street Historic District?

- Very accessible
- Somewhat accessible
- Not very accessible
- Not at all accessible

### **Quality of Life**

17) Please rate the *importance* of each of the following items in your decision to live / work / attend school in the MLK section of the James Street Historic District:

	Very	Somewhat	Not very	Not at all
Open space (parks, playgrounds)				
Affordable housing				
Historic preservation				
Town-University relations				
Neighborhood character				
Safety/security				
Opportunities for higher education				

18) How would you characterize your feelings of safety/security in the MLK section of the James Street Historic District?

- Very safe
- Somewhat safe
- Not very safe
- Not at all safe

**Personal Information**

19) Which of the following best describes your age?

- 18 or under
- 19-25
- 26-29
- 30-34
- 35-44
- 45-54
- 55-64
- 65-74
- Over 74

20) Gender:   Male  
                  Female

21) Which of the following best describes your household?

- 1-person household
- Roommates (unrelated or related)
- Couple with children
- Couple without children
- Single parent

22) Please indicate the size of your residence:

- Studio
- 1 bedroom
- 2 bedrooms
- 3 bedrooms
- 4 or more bedrooms

23) What is your primary source for information about the MLK section of the James Street Historic District? (choose only one)

- Major daily newspaper (Star-Ledger)
- Neighborhood newspaper
- Student newspaper
- Community websites
- Other: \_\_\_\_\_



**If you are a student or faculty/staff member:**

24) Where do you live?

On-campus housing

Greek house

Rent or own apartment or house **within** MLK section of James Street Historic District

Rent or own apartment or house **outside** MLK section of James Street Historic District

With family

25) If you do not currently live on campus or in the MLK section of the James Street Historic District, how likely would you be to live in the neighborhood if there were more housing options available?

Very likely

Somewhat likely

Not very likely

Not likely at all

26) How much time during the day do you spend in the MLK section of the James Street Historic District?

Less than 1 hour

1 hour

2 hours

3-4 hours

5+ hours

**4B. Discussion of Enrollment  
Management/Growth Strategies  
and Projections for 2007 – 2008**

# Assessment of Enrollment Management-Recruiting Updated June 7, 2007

- Conducted by Victoria LaFore, Vice President, Consulting Services, Noel-Levitz, May 16-17, 2006
- **Evaluated:**
  1. *Enrollment management organizational structure*
  2. *Cross-campus support of enrollment initiatives*
  3. *Enrollment planning process*
  4. *Tactical recommendations for improvement to marketing and recruitment, particularly as applies to the traditional undergraduate population.*
- Analyzed multiple enrollment planning documents, structures, processes, and interviewed senior staff, deans, staff and students.
- Issued report June 27, 2006.



# Assessment of Enrollment Management-Recruiting

## Conclusions

### 1. *Enrollment Management Organizational Structure*

- A. “Current reporting lines to the VP for Academic and Student Services are true to the enrollment management paradigm...structure very much supports an enrollment management philosophy.”
- B. Newly formed Enrollment Management Committee is a “solid way to tie other units – particularly academic- into the process.”
- C. “Continue the coordinated effort at student retention, but *needs a more comprehensive plan.*”
- D. Staffing is adequate in quantity when benchmarked against public universities, but is about ½ of that of private Institutions.



# Assessment of Enrollment Management-Recruiting

## Conclusions

### 2. Cross-Campus Support of Enrollment Initiatives

- A: “Technology and data management are the cornerstone of a modern enrollment operations...need improved *electronic communications...automatic electronic responses...source codes...web information resources.*”

# Assessment of Enrollment Management-Recruiting

## Conclusions

- B. Marketing and communications *need to be more personalized and differentiated for the targeted population.*
- C. “The level of academic participation in recruitment is fairly typical in some regards, and unusually strong in others. *Of particular note are the organization of high school career days at the academic department level and the designing of recruitment responsibilities to a dean/associate dean/assistant dean in some departments.*”

## Assessment of Enrollment Management-Recruiting

### 3. *Enrollment Planning Process*

- A. “Develop annual and 5-year detailed enrollment projections... engage the academic staff...enrollment management leads the goal-setting process...undergraduate admissions should lead the recruit planning... *Your Enrollment Management Committee is a good vehicle for enrollment planning.*”
- B. Highly effective tactics include: “Your FANS program is a terrific initiative...open houses receive rave reviews...instant decision days are wonderful opportunities...as are high school on-site instant decisions.” *However, personalized follow-up is often lacking.*



## Assessment of Enrollment Management-Recruiting

- B. Goal setting should link budget, net revenue from enrollment, retention and recruitment at the senior staff level.
- C. “I applaud the 17% enrollment increase in the first-year cohort from fall 2002 to fall 2005”.

Year	2002	2003	2004	2005	2006
Students Enrolled	672	738	690	783	860

Admit rates increased 62% to 71%, fall 2002-05, while yield rates remained flat at about 42% for the period. Applications were also flat.

## Assessment of Enrollment Management-Recruiting

D. Transfer application pool and enrollment has steadily declined for the period:

Year	2002	2003	2004	2005	2006
Applications	1472	1386	1139	997	801
Students Enrolled	512	511	440	418	394

E. *“The size of your inquiry and applicant pool is not sufficient for aggressive growth”.*

# Assessment of Enrollment Management-Recruiting

## 4. Tactical recommendations for improvement to marketing and recruitment, particularly as applies to the traditional undergraduate population.

### Recommendation

- A. Revise your prospect buy to purchase names from all available list sources; broaden geographic market for women, minorities; and, increase marketing to high school sophomores.
- B. Differentiate and personalize your marketing/communications plan to your targeted audiences, and do so earlier. For example ,high probability enrollments, ie. “self-generated” should move immediately into inquiry pool for full marketing treatment.

### Action

- Purchased additional 15,000 junior and 7,000 sophomore search names for fall 2007 recruiting. (gender and ethnicity were uploaded so the market can be segmented and targeted as appropriate.)
1. New marketing materials done and new website in place.
  2. 2000 inquiries per college received a personal letter from the Dean, a new college brochure, and an application fee waiver if the student attended Fall Open House.
  3. 7000 names for 2007F (high ability, tri-state area) were treated as inquiries and received mailings as such.

# Assessment of Enrollment Management-Recruiting

## Recommendation

C. Use electronic communications, automatic email responses to your “self-generated” inquiry pool, enter immediately into SIS, and track by source codes; to be remedied by admissions and University Information Systems (UIS).

## Action

1. Goal Quest revised our e-Cruit product (“NJIT Experience”) to reflect new branding and publication design. Very attractive and very well received. Currently analyzing to determine effectiveness.
2. Web Services has designed user-friendly email template for admissions (outside of GoalQuest).
3. Admissions mailbox better managed. Purchased “Intelliresponse”, a software program that allows students to type in their question and they are then led to appropriate response on the website; eliminates need for sending multiple messages requesting information that is readily available. We are currently in the implementation and testing phase; will be fully operative by fall, 2007.



# Assessment of Enrollment Management-Recruiting

- Recommendation

- D. Use a “Territory  
Management System”

<u>Action</u>
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Initiated preliminary “Territory management” system (admissions staff handles inquiries, applications and enrollments by specific territory). Results will be reviewed and analyzed this summer, and system tweaked as necessary for the fall 2007 recruiting season.
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## Assessment of Enrollment Management-Recruiting

### Recommendation Cont.

- E. Develop 5 year enrollment plan inclusive of student retention and revenue projections.

### Action Cont.

1. In process, using FY2006-07 results as the base.
  2. In process, Retention Subcommittee (of the Enrollment Management Committee) will present plan to EMC at May meeting, to begin implementation fall 2007, e.g "First Year Connections."
- 
1. University Information Systems has devised an electronic information request form, which generates personalized and timely initial response to those inquiries.
  2. The on-line application is continually being tweaked and improved; over 75% of our undergraduate freshman applications are submitted electronically.

- F. "Ensure that your online inquiry collection, online admissions applications, and web information resources are strong and easily navigated."

# Assessment of Enrollment Management-Recruiting

## Recommendation

G. Train admissions counselors in Financial Aid 101, able to prequalify inquiries for scholarships; train financial aid counselors in Admissions 101.

## Action

Admissions staff was trained in basic financial aid issues during fall 2006. Due to time and personal constraints, financial aid staff training in basic admissions will be conducted in summer 2007.

H. Review scholarship strategy with a yield analysis; relatively small number of students are receiving large financial aid awards.

Eight additional "Award Cells" were added to the scholarship matrix for students with SAT composites in the 1100-1200 range; awards ranged from \$500-2000. An additional 185 matrix awards were made this year. Results will be analyzed over the summer to determine the effectiveness of this strategy.

# Applications/Projected New Students, Fall 2007

	2007 Apps	2006 Apps	% Change	Projected 2007 New Students	Actual 2006 New Students	% change
<b>Freshmen</b>	2981	2834	5%	860	860	0
<b>Transfer*</b>	824	801	3%	420	394	7%
<b>Graduate*</b>	4301	4034	7%	975	951	3%

\*Transfer and graduate application pools will continue to grow over the summer.



**4C. Approve Resolution to Authorize  
University Information Systems  
Application Server Consolidation  
and Virtualization Plan**

## STATEMENT

### UNIVERSITY INFORMATION SYSTEMS: APPLICATION SERVER CONSOLIDATION AND VIRTUALIZATION PLAN

Hardware supporting many of the university's critical information systems is either at end-of life or unable to support the growing capacity requirements of the application software. University Information Systems (UIS) has developed an upgrade and replacement plan for the servers supporting these applications with a hardware and software solution to 'virtualize' some 50 servers. The virtualization approach consolidates applications running on the 50 separate machines to eight new physical machines. The new machines use software to "virtualize" the original 50 physical machines running various university applications.

Redundancy within the physical machines increases reliability by reducing single points of failure. If applications need additional resources for peak processing cycles, they can easily be reallocated from those not needing them. Systems administration time is greatly reduced. The consolidation and virtualization plan has projected the growth of existing applications for four years, plus 30% spare capacity to accommodate emerging and new applications.

Some of the applications included in the plan are:

- Online admissions application and portal
- Highlander Pipeline – NJIT portal
- Website content management system
- Website traffic analysis
- Web self-services for students, faculty, and employees
- Endeavor Library system
- Vehicle Registration and parking
- WebCT Learning Management System
- Credit card payment gateways to financial institutions
- fsaAtlas (SEVIS compliance)
- Faculty/staff and student e-mail
- Alumni portal
- Campus Directory
- M3 - Mass Mailing Mechanism
- e-Print
- Help Line for IST Help Desk
- Housing system for Residence Life
- Resource/25 for Calendar
- Application frameworks for event registration and credit card payments.
- Survey framework for Institutional Research office.
- Student Employment Management System (SEMS)
- KSS Research and Intellectual Property Office application
- Various Oracle and MS-SQL Server applications
- Raiser's Edge Advancement system (future)

A proposal from Sun Microsystems and Key Government Finance provides a solution totaling \$922,227.18, with four annual payments of \$240,716.91 beginning in July 2007. The proposal provides tax-exempt financing at an interest rate of 2.75%. Funding is to be provided from the IST Budget beginning in FY08, with future commitments in FY09, FY10, and FY11.

Sun Microsystems equipment is compatible with much of the university's existing technology infrastructure and staff has experience and expertise with it. The equipment purchase is covered under New Jersey state contract # 81303.



**RESOLUTION TO AUTHORIZE UNIVERSITY INFORMATION SYSTEMS APPLICATION  
SERVER CONSOLIDATION AND VIRTUALIZATION PLAN**

WHEREAS, hardware supporting many of the university's critical information systems is either at end-of-life or unable to support the growing capacity requirements of the application software, and

WHEREAS, University Information Systems has developed an upgrade and replacement plan for the servers supporting these applications with a hardware and software approach to consolidate and 'virtualize' servers, and

WHEREAS, the plan increases reliability and projects growth requirements of critical application systems over the next four years, and

WHEREAS, Sun Microsystems and Key Government Finance have submitted a hardware and software solution addressing the consolidation and virtualization plan totaling \$922,227.18, with four annual payments of \$240,716.91 beginning in July 2007, and

WHEREAS, financing of the proposal is at a rate of 2.75%, and

WHEREAS, the university has experience and expertise with similar Sun Microsystems equipment, and

WHEREAS, the equipment is covered under New Jersey state contract #81303, and

WHEREAS, funds have been allocated within the university's annual IST budget for this plan,

NOW, THEREFORE BE IT RESOLVED, that the Board of Trustees authorizes the President to execute the necessary contracts with Sun Microsystems and Key Government Finance to implement the University Information Systems plan for consolidation and virtualization of application servers at a cost not to exceed \$922,227.18.

---

Holly C. Stern, Esq.  
General Counsel and  
Secretary to the Board of Trustees  
New Jersey Institute of Technology

June 7, 2007

**5A. Status of Budget, Tuition and  
Fee Schedule for FY 2008**



**New Jersey Institute of Technology**  
**FY 2008 Budget Development**

Impact of FY08 Governor's Budget Recommendations  
on Revenue and Obligations

	FY08 (%)	FY07 (%)	FY07 Final (%)
Average Operating Appropriation % Increase	4.20		
Less: FT Undergraduate Out-of-State Penalty	1.45		
Net % Increase for NJIT	2.75	-9.8	-7.0

**Governor's FY08 Recommended Appropriation Increases:**

	(\$000's)	(\$000's)	(\$000's)
Recommended Appropriation Increase for NJIT	\$1,308	(\$4,960)	(\$3,530)
Anticipated Salary Program Support	\$626	\$0	\$0
Capital/Major Maintenance	\$0	\$0	\$0
Total Anticipated FY08 Appropriation Increases	\$1,934	(\$4,960)	(\$3,530)

# Preliminary Budget Adjustments for FY08

Elasticity	FY08 Action	Revenue Change	Expense Change	Net Change	Net % of Budget	Note
	FY07 Budget @7/1/06	\$184,125	\$184,125	\$0		
	FY07 Mid-year Adjustments	(\$1,381)	(\$1,381)	\$0		
	FY07 Adjusted Budget @1/23/07	\$182,744	\$182,744	\$0		
1	T&F Increase		\$371	\$5,189	2.8%	Based on 7% increase
3	Salary Program	\$5,560	\$5,175	(\$5,175)	2.8%	Based on State-wide bargaining patterns
3	FY07 Non-recurring carry forward	\$5,000		\$5,000	2.7%	
3	T&F Rate (Summer) and Enrollment Inc (over FY07 Base)	\$3,965		\$3,965	2.2%	
3	Non-recurring Funds in FY07 Budget	(\$3,149)		(\$3,149)	1.7%	
2	Commitments/Requirements			(\$2,766)	1.5%	Strategic Plan/utilities/debt service/insurance
3	Capital Projects			(\$2,400)	1.3%	Does not include maintenance items
3	Gov's Budget Recommendation	\$1,984		\$1,984	1.1%	
1	Recurring Needs			(\$1,111)	0.6%	Mostly personnel
1	Non-recurring needs			(\$1,005)	0.5%	Mostly Faculty Separation Incentive Program
1	Adjustment to Reserve			\$668	0.4%	one-year cost/equipment
3	Residence Hall Occupancy	(\$357)		(\$357)	0.2%	Brings reserve to \$1 million
1	Campaign Reserve		\$172	(\$172)	0.2%	Reduction in multiple occupancy in response to competition
3	Programmatic Budget Adjustments	(\$270)	(\$363)	\$93	0.1%	
3	Miscellaneous Net-Zero Adjustments	(\$1,565)	(\$1,565)	\$0	0.0%	
	Total	\$193,912	\$194,484	(\$572)	0.3%	
3	40% of Legislative Salary Ask	\$1,320		\$1,320	0.7%	
	Total	\$195,232	\$194,484	\$748	0.4%	
1	Some elasticity					
2	Minimal elasticity					
3	No elasticity					

NEW JERSEY INSTITUTE OF TECHNOLOGY NON-RESIDENT STUDENT PENALTY			FY 07 Budget FY05 Data <sup>(1)</sup>	FY 08 Budget FY06 Data <sup>(2)</sup>
Estimated Full Cost of Education (General Services Income plus Adjusted Appropriation)			\$127,337,000	\$128,629,000
Enrollment Total (Weighted)			6,205	6,108
Estimated Average Full Cost of Education per FTE Student			\$20,522	\$21,059
Undergrad Non-Res. Rate Tuition			\$13,716	\$14,676
Difference between Average Full Cost of Education per Student and Undergrad Non-Res. Rate Tuition		\$	6,806	\$ 6,383
Total Out-of-State Students			358 <sup>(3)</sup>	376
Projected Additional Revenue That Could be Realized			\$2,436,432	\$2,400,047
Out-of-State Tuition Penalty - Phased 1/4 per year			\$609,108	\$600,012
<div><div>(1) FY2005-FY2006 Governor's Budget Recommendation</div><div>(2) FY2006-FY2007 Governor's Budget Recommendation</div><div>(3) New Jersey Commission on Higher Education "Enrollment of Full-Time Undergraduates in New Jersey Colleges by Residence, Fall 2005" as of 9/9/05</div></div>				
% of Each group from out-of-state				
Athletes			23%	
Honors			17%	
Architecture			12%	

New Jersey Institute Of Technology										
Budget Office										
Undergraduate Out Of State Student Analysis										
Thursday, May 10, 2007										
Summary										
Full Time / Part Time	Student Category	Students #	Total Charges \$	Total		Total Student Awards \$	Net Student Responsibility \$			
				Unrestricted Scholarships \$	Restricted Scholarships \$					
FT	Honors	103	2,175,887	1,013,501	112,372	1,125,873	1,050,014			
FT	Athletes	46	1,184,233	764,577	95,678	860,255	323,978			
FT	Honors & Athletes	18	466,284	391,984	57,650	449,634	16,650			
FT	All Other	272	5,152,938	362,330	39,533	401,863	4,751,075			
Total Full Time Students		439	8,979,342	2,532,393	305,233	2,837,626	6,141,716			
FT	Honors	103	24.2%	11.3%	1.3%	12.5%	11.7%			
FT	Athletes	46	13.2%	8.5%	1.1%	9.6%	3.6%			
FT	Honors & Athletes	18	5.2%	4.4%	0.6%	5.0%	0.2%			
FT	All Other	272	57.4%	4.0%	0.4%	4.5%	52.9%			
Total Full Time Students		439	100.0%	28.2%	3.4%	31.6%	68.4%			
Data sources provided by Registrar, Financial Aid and Bursar offices and reflect Fall '06 and Spring '07 semesters.										



New Jersey Institute Of Technology Budget Office Undergraduate Out Of State Student Analysis Thursday, May 10, 2007 Summary						
Tuition/Fees Current	In-State	Out-of-State Increment	Total	% Out-of State	Out/In	
NJIT Tuition	\$9,066	\$6,784	\$15,850	42.8%	0.75	
NJIT Fees	\$1,440	\$0	\$1,440	0.0%		
<b>Total</b>	<b>\$10,506</b>	<b>\$6,784</b>	<b>\$17,290</b>			
RU Tuition	\$7,923	\$8,505	\$16,428	51.8%	1.07	
RU Fees	\$2,035	\$0	\$2,035	0.0%		
<b>Total</b>	<b>\$9,958</b>	<b>\$8,505</b>	<b>\$18,463</b>			
MSU Tuition	\$6,028	\$5,354	\$11,382	47.0%	0.89	
MSU Fees	\$2,531	\$0	\$2,531	0.0%		
<b>Total</b>	<b>\$8,559</b>	<b>\$5,354</b>	<b>\$13,913</b>			
Rowan Tuition	\$6,798	\$6,798	\$13,596	50.0%	1.00	
Rowan Fees	\$2,532	\$0	\$2,532	0.0%		
<b>Total</b>	<b>\$9,330</b>	<b>\$6,798</b>	<b>\$16,128</b>			
Ramapo Tuition	\$6,579	\$5,310	\$11,889	44.7%	0.81	
Ramapo Fees	\$2,532	\$0	\$2,532	0.0%		
<b>Total</b>	<b>\$9,111</b>	<b>\$5,310</b>	<b>\$14,421</b>			
TCNJ Tuition	\$7,615	\$6,546	\$14,161	46.2%	0.86	
TCNJ Fees	\$2,938	\$0	\$2,938	0.0%		
<b>Total</b>	<b>\$10,553</b>	<b>\$6,546</b>	<b>\$17,099</b>			
<b>Increased</b>						
NJIT Tuition	\$9,066	\$8,159	\$17,225	47.4%	0.90	
NJIT Fees	\$1,440	\$0	\$1,440	0.0%		
<b>Total</b>	<b>\$10,506</b>	<b>\$8,159</b>	<b>\$18,665</b>			
<b>Total @7% Inc</b>	<b>\$11,241</b>	<b>\$8,731</b>	<b>\$19,972</b>			
Current In-State						
TCNJ	\$10,553					
NJIT	\$10,506	RU	\$18,463			
RU	\$9,958	NJIT	\$17,290			
Rowan	\$9,330	TCNJ	\$17,099			
Ramapo	\$9,111	Rowan	\$16,128			
MSU	\$8,559	Ramapo	\$14,421			
		MSU	\$13,913			
Current Out-of-State						
Data sources provided by Registrar, Financial Aid and Bursar offices and reflect Fall '06 and Spring '07 semesters.						

## FY 2008 Budget Priorities

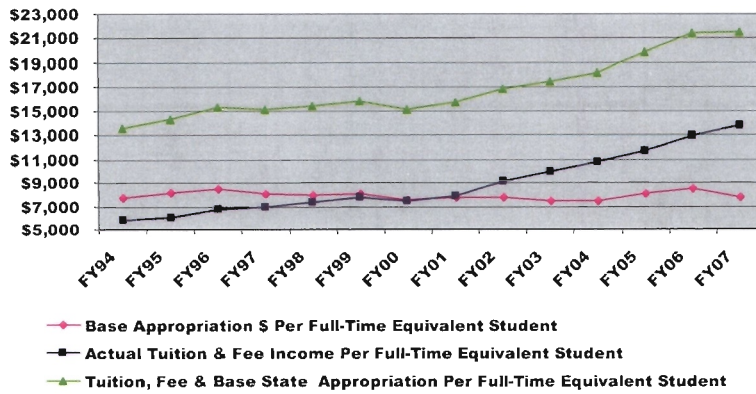
- **Additional operating support - \$3.6 million:** Operating funds in addition to that proposed in the Governor's Budget are needed to support FY07 salary annualization, the estimated FY08 salary program, and inflationary cost increases. Salary funding for FY08 is especially important owing to the fact that the FY06 and FY07 salary program, with a total cost of approximately \$8.8 million, was not funded. Recent significant budget shortfalls have had to be made up through tuition and fee increases, personnel reductions, and extraordinary cost savings measures.
- **Homeland Security - \$1.0 million:** Currently, there is little to insure that technology purchased by local, county, state and federal levels will lend itself to integrated usage to create a comprehensive web of protection from terrorist attacks. To address this issue, Executive Order No. 111 created the Homeland Security Technology Systems Center at NJIT in June, 2004. The Center's focus is to leverage New Jersey's core research strengths and to develop partnerships to insure basic standards of performance and inter-operability of technologies.
- **Teacher Education in Science, Technology, Engineering, and Mathematics - \$0.5 million:** Over the years, a number of NJIT graduates have gone on to pursue teaching careers through the Alternate Route Process. The individuals who have become teachers through this process have expertise in the field in which they are teaching, but have learned educational theory and practice on the job. There is a good deal of experience at NJIT in training students for careers in teaching, though not all the formal requirements are offered. However, NJIT has recently been granted the authority by the State to offer its students teaching certification in partnership with Rutgers-Newark. Thus, NJIT students can now participate in an education program and complete an undergraduate degree (in Applied Mathematics, Applied Physics, Biology, Chemistry, Communication-literature, Environmental Science, History, or Science/Technology/Society) and receive their teaching certification.

NJIT plans to institutionalize this initiative and expand it by establishing the Program in Science, Technology, Engineering, and Mathematics (S&T) Education, which will expand the number of S&T teachers in the State.

- **The New Jersey Center in Newark for Science, Technology, Engineering and Mathematics Education - \$70.0 million:** NJIT is currently working with Newark Public Schools, the Schools Construction Corporation, and the Attorney General's Office on finalizing terms under which NJIT will purchase Newark's current Central High School, which is being replaced by a new facility scheduled to open in 2008. The building would be renovated to serve as the location for the State's flagship center for science, technology, engineering and mathematics (S&T) education, "New Jersey's S&T Education Center in Newark," to assist in improving the quality of all levels of pre-college teaching and learning in New Jersey's school systems. NJIT, as the State's science and technology research university, is uniquely positioned and qualified to serve as the State's leader in this area. The requested amount includes acquisition, renovation, and fit out.

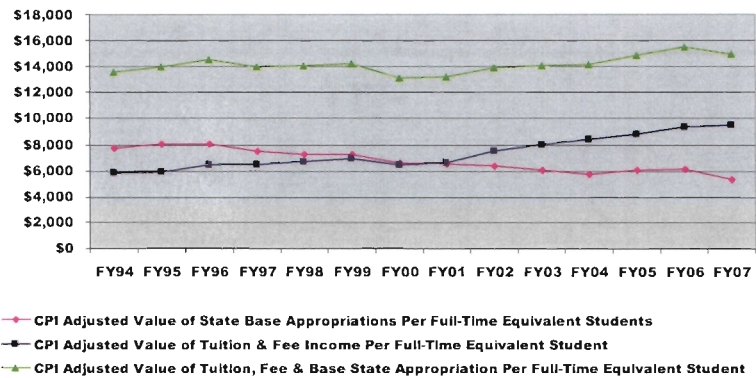
# NJIT Funding History

Comparison of Base Appropriation and Tuition & Fee Income per FTE FY94-FY07 (000's)



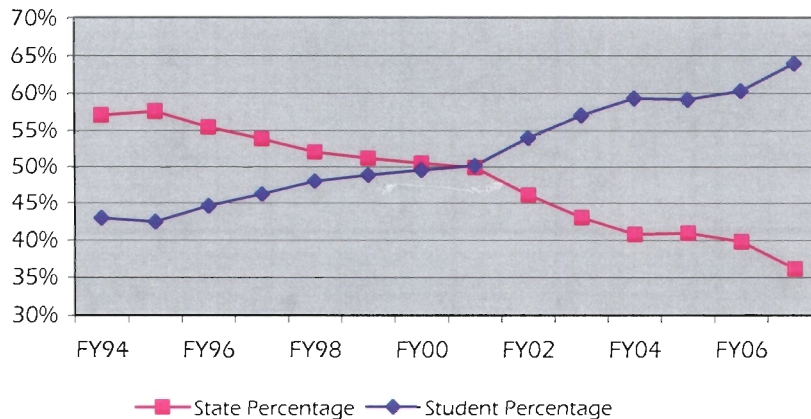
NJIT's base State appropriation per student has remained flat since FY94 necessitating tuition and fee increases

Comparison of CPI Adjusted Value of Base Appropriation and Tuition & Fee Income per FTE FY94-FY07 (000's)



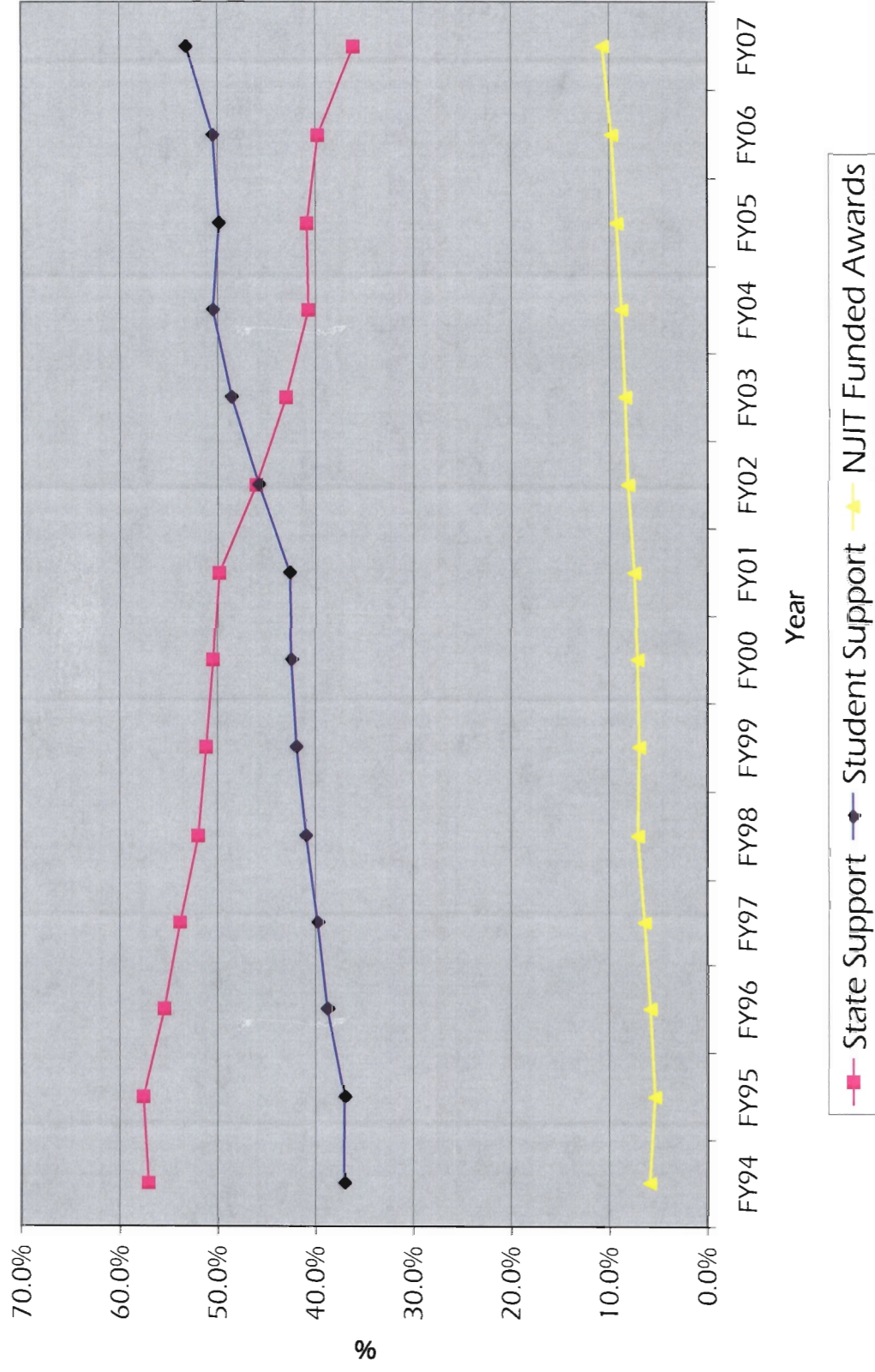
NJIT's inflation adjusted base State appropriation per student has declined since FY94. Tuition increases to accommodate this decline have resulted in the inflation adjusted total revenue per student remaining flat. Consequently, revenue and expenditure have only just kept pace with inflation (no real programmatic growth), and tuition and fees have gone up faster than inflation.

Percent of Educational Costs FY94-FY07



In FY07, NJIT students pay 64% of educational costs compared to 43% in FY94

## Percent Support of Education Cost per Student FTE





## **5B. Operating Statement Year to Date**

A

NEW JERSEY INSTITUTE OF TECHNOLOGY  
STATEMENT OF CURRENT FUND REVENUES AND EXPENDITURES  
FOR THE TEN MONTHS ENDED APRIL 30, 2007  
(dollars in thousands)

RESTRICTED YEAR TO DATE (84%)					UNRESTRICTED YEAR TO DATE (84%)						
		% OF BUDGET					% OF BUDGET				
BUDGET	AMOUNT	2006/2007	2005/2006		BUDGET	AMOUNT	2006/2007	2005/2006			
REVENUES											
Education and General											
\$	56,800	\$	50,231	88%	80%	\$	84,575	\$	88,955	105%	96%
							79,174		65,977	83%	83%
							8,847		8,263	93%	462%
							2,703		1,750	65%	70%
	56,800		50,231	88%	80%		175,299		164,945	94%	90%
							11,529		11,454	99%	98%
	56,800		50,231	88%	80%		186,828		176,399	94%	90%
EXPENDITURES											
Educational and General											
	41,400		33,765	82%	78%		66,219		57,882	87%	84%
							6,100		4,999	82%	67%
							2,580		2,336	91%	83%
							19,550		13,949	71%	72%
							10,400		9,306	89%	81%
							29,200		21,047	72%	68%
	15,400		16,466	107%	85%		16,683		11,270	68%	70%
							14,300		13,979	98%	99%
	56,800		50,231	88%	80%		165,032		134,768	82%	79%
							10,267		8,527	83%	81%
	56,800		50,231	88%	80%		175,299		143,295	82%	79%
							6,279		4,876	78%	78%
							5,250		4,375	83%	83%
							11,529		9,251	80%	81%
	56,800		50,231	88%	80%		186,828		152,546	82%	79%
EXCESS OF REVENUES OVER EXPENDITURES AND TRANSFERS											
\$	0	\$	0			\$	0	\$	23,853		

B

NEW JERSEY INSTITUTE OF TECHNOLOGY  
EXPENSE REPORT  
FOR THE TEN MONTHS ENDED APRIL 30, 2007  
(dollars in thousands)

				(84%)	PERCENT OF BUDGET	
	CURRENT	YEAR TO		ACTUAL	INCLUDES ENCUMBRANCES	
	MONTH	DATE	BUDGET	YEAR TO	PRIOR	CURRENT
	ACTUAL	ACTUAL		DATE	YEAR	YEAR
ACADEMIC						
Salaries & Fringe Benefits	\$ 7,769	\$ 77,298	\$ 91,449	85%	97%	97%
Equipment Purchases	87	1,360	2,250	60%	48%	64%
Financial Aid to Students	0	13,979	14,300	98%	99%	98%
Other Operating Expenses:						
Materials & Supplies	87	1,042	1,350			
Travel & Development	95	1,409	1,100			
Library Collections	35	802	1,110			
Other General Operating	662	5,508	6,601			
Total Other Operating	879	8,761	10,161	86%	80%	100%
TOTAL ACADEMIC	8,735	101,398	118,160	86%	95%	97%
SUPPORT						
Salaries & Fringe Benefits	1,983	21,712	27,000	80%	88%	99%
Equipment Purchases	47	199	350	57%	64%	97%
Utilities	467	5,535	7,268	76%	97%	99%
Other Operating Expenses:						
Materials & Supplies	74	602	1,000			
Travel & Development	50	294	300			
Other General Operating	407	3,278	8,251			
Total Other Operating	531	4,174	9,551	44%	67%	69%
TOTAL SUPPORT	3,028	31,620	44,169	72%	84%	92%
TRANSFERS	820	8,527	10,267	83%	100%	100%
TOTAL ACADEMIC,SUPPORT&TRANSFERS	12,583	141,545	172,596	82%	92%	96%
Auxiliary Enterprises	453	4,876	6,279	78%	80%	92%
Auxiliary Transfers	437	4,375	5,250	83%	100%	100%
TOTAL OPERATING EXPENSES	13,473	150,796	184,125	82%	92%	96%
EXPENSES FROM ALLOCATED FUNDS	27	1,750	2,703	65%	100%	100%
TOTAL UNRESTRICTED EXPENSES	13,500	152,546	186,828	82%	91%	95%
RESTRICTED	3,795	50,231	56,800	88%	80%	88%
TOTAL EXPENSES AND TRANSFERS	\$ 17,295	\$ 202,777	\$ 243,628	83%	89%	94%



## **5C. Schedule of Short Term Investments**



NEW JERSEY INSTITUTE OF TECHNOLOGY

SCHEDULE OF INVESTMENTS

AS OF APRIL 30 2007

<u>DATE PURCHASED</u>	<u>MATURITY DATE</u>	<u>RATE</u>	<u>TYPE</u>	<u>WACHOVIA BANK</u>	<u>CITY NATIONAL BANK</u>	<u>MERRILL LYNCH</u>	<u>JP MORGAN CHASE</u>	<u>TOTAL</u>
--	OVERNIGHT	4.66	CMA*			\$ 3,975,086	\$	3,975,086
1/27/2007	7/28/2007	4.64	CD		\$ 500,000			500,000
--	VARIES	5.11	PRIME MONEY MARKET				\$ 2,139,671	2,139,671
--	VARIES	4.25**	MONEY MANAGER	\$ 31,648,620				31,648,620
	OVERNIGHT	5.09**	MONEY MARKET	7,462,612				7,462,612
--	OVERNIGHT	4.04	REPO*	152,000				152,000
				\$ 39,263,232	\$ 500,000	\$ 3,975,086	\$ 2,139,671	\$ 45,877,989
							Crossfoot	\$ 45,877,989

INVESTMENT AS OF APRIL 30, 2006 WERE \$46,228,813

\* MONIES IN THIS ACCOUNT ARE INVESTED IN GOVERNMENT SECURITIES

\*\* NET OF FEES

**5D. Approve Resolution to Authorize  
Expenditure for Electricity and  
Natural Gas for FY 2008**

# STATEMENT RESOLUTION TO AUTHORIZE EXPENDITURES FOR ELECTRICITY and NATURAL GAS, FY 2008

There exists a need to purchase electricity and natural gas for the campus from PSE&G, Amerada Hess and other electricity and natural gas suppliers and transporters. Shown below are the actual cost for FY 2005, FY 2006 and projections for FY 2007 and FY 2008.

	FY 2005	FY 2006	FY 2007	FY 2008
Utility Cost - \$ for Natural Gas & Electricity (\$000's)	4,898	5,604	6,945	7,619
Sq. Ft. (\$000's)	2,618	2,653	2,653	2,653
\$/sq. ft.	1.87	2.11	2.62	2.87
Cost of Electricity \$/kwh	0.10	0.10	0.125	.143
Cost of Natural Gas \$/Therm	1.01	1.39	1.54	1.54

New and previously implemented energy conservation measures continue to have a positive effect on controlling costs. Some of these measures are shown below:

- Closure of one-half of the floors at the parking deck during the Summer
- Closure of Redwood (partial) and Oak Residence Halls for the Summer
- Summer compressed 4 day work week
- Adjustment of equipment schedules to better match occupancy and usage needs
- Contract for gas supply through Amerada Hess (an approximate \$450,000 savings over current state rates for FY 08)
- Installation of energy efficient lighting where appropriate
- Use of Solar Energy
- Use of State Contracts where appropriate
- Additional upgrades to control systems in Cypress Hall, Cullimore Hall, GITC
- Additional photocell controls for campus exterior lighting
- Installation of duct insulation and flow valves in the Student Mall to improve efficiency
- Installation of exhaust fan interlock with gas supply automatic valves to reduce energy lose and maintain safe operations in cooking areas
- Applications for energy rebates (approximately \$115,000 in FY 08)

Factors having a negative impact on cost include:

- Continuing uncertainties of the energy markets
- Continuing increase in the use of facilities to accommodate a 24/7 campus
- PSE&G TARIFF changes



**RESOLUTION TO AUTHORIZE  
EXPENDITURES FOR ELECTRICITY  
AND NATURAL GAS FOR FY 2008**

**WHEREAS, there exists a need to purchase electricity and natural gas through Public Service Electric & Gas Company, Amerada Hess and other electricity and natural gas providers; and**

**WHEREAS, a cost effective combination of suppliers and transporters will be used to provide needed utilities; and**

**WHEREAS, it is estimated that amounts will not exceed \$7,619,000; and**

**WHEREAS, funds for these utilities will be provided in the FY 2008 budget**

**NOW, THEREFORE, BE IT RESOLVED that the Board of Trustees of New Jersey Institute of Technology authorizes the President to execute the necessary contracts to purchase these utilities in an amount not to exceed \$7,619,000.**

---

**Holly C. Stern, Esq.  
General Counsel and  
Secretary to the Board of Trustees  
New Jersey Institute of Technology**

**June 7, 2007**

**6A. Approve Promotion and Tenure  
Recommendations for 2006 – 2007**





To: Robert A. Altenkirch, President

From: Priscilla P. Nelson, Provost

Re: Promotion and Tenure Recommendations

Date: May 28, 2007

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The following, based on policies and procedures on promotion and tenure outlined in the Faculty Handbook, are the recommendations for promotion and tenure:

**Promotion to Distinguished Professor**

Robert Miura	Mathematical Sciences
--------------	-----------------------

**Promotion to Professor**

Norman Loney	Chemical Engineering
Zoi-Heleni Michalopoulou	Mathematical Sciences
Edip Niver	Electrical and Computer Engineering
Ronald Rockland	Engineering Technology
Leonid Tsybeskov	Electrical and Computer Engineering
Chao Zhu	Mechanical Engineering

**Promotion to Associate Professor with Tenure**

Ali Abdi	Electrical and Computer Engineering
Gabrielle Esperdy	NJ School of Architecture
David Horntrop	Mathematical Sciences
Roberto Rojas-Cessa	Electrical and Computer Engineering
Laurent Simon	Chemical Engineering
Brook Wu	Information Systems

**Recommendation for Tenure Only**

Dimitrios Theodoratos	Computer Science
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**Recommendation for Promotion to Associate Professor Only**

Andrei Sirenko	Physics
----------------	---------



New Jersey Institute of Technology  
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973.596.3220  
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pnelson@njit.edu

**Priscilla P. Nelson, Ph.D.**  
*Provost and Senior Vice President  
for Academic Affairs*

To: Robert A. Altenkirch  
President

From: Priscilla P. Nelson  
Provost

Re: Tenure for Dr. Annaleena Parhankankas, School of Management

Date: May 30, 2007

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I am very happy to report that we have completed a search to fill the new Leir Chair faculty position in the School of Management. I am pleased to recommend that Dr. Annaleena Parhankankas be appointed to the NJIT Faculty for Fall semester, 2007 at the rank of Associate Professor, and that she be granted tenure in the School of Management (SOM).

Dr. Parhankankas currently holds a tenured position as a Professor at the Helsinki University of Technology (HUT), Institute of Strategy and International Business, and she currently serves as the Acting Director of that Institute. She received her Ph.D. degree in 1999 from Helsinki University of Technology, Department of Industrial Engineering and Management, one of the most prestigious departments in international business enterprise in the world. Dr. Parhankankas was identified from among a diverse pool of more than 20 applicants. Both the Promotion and Tenure Committee in the School of Management and the Dean of SOM strongly support this tenured appointment.

Dr. Parhankankas will fill the university's much needed faculty position in innovation and international business. Her research experience and interests encompass extremely valuable areas of management. She is particularly interested in how the institutional environment as well as relationships of financiers, competitors and other entities influence creative processes and innovation. These interests fit well with NJIT's desire to strengthen its research and education programs in Management and related areas such as innovation and globalization. They will complement and extend the existing strengths of research areas currently active among the faculty in the School.

Dr. Parhankankas is in an excellent position to play a leadership role in seeking research funding in business and management, both through single investigator awards, as well as spearheading wider inter-departmental and interdisciplinary efforts. Her research experience includes many grants from TEKES (the National Technology Agency of Finland), the Nordic Innovation Center, the European Union, and the Emil Aaltonen Foundation. She has won several awards attesting to the importance of her research, and has twice (in 2003 and 2004) received the coveted Taylor and Francis Publishers Award for Excellence in Research on the Topic of Venture Capital. No one else has ever received this award twice. Dr. Parhankankas has already published eleven peer reviewed and more than 20 international conference papers, and this funding and publication record bodes very well for valuable future research contributions. SOM is confident that she will demonstrate her leadership, not only in getting grants for herself, but also by mentoring junior faculty to success in grant competitions.

Dr. Parhankankas also has teaching experience at all levels of graduate and undergraduate courses in business and management, and she will be a very valuable asset in our teaching efforts in SOM. In addition to teaching at HUT, she has taught undergraduate courses at Rensselaer Polytechnic Institute and has offered graduate coursework at Chalmers University of Technology. She has also supervised the work of 21 MS thesis and 9 doctoral students.

In summary, Dr. Annaleena Parhankankas' professional credentials, accomplishments, and interests attest to her international stature, and fit well with NJIT's desire to strengthen its research and education programs in business, management and innovation. As you know, we expect high standards in teaching, research, and service from our faculty. We are confident that she will be a great success at NJIT.

**SUMMARY INFORMATION ON  
PROMOTION AND TENURE RECOMMENDATIONS  
FY 2006 – 2007**

**Submitted to the  
COMMITTEE ON ACADEMIC AFFAIRS AND RESEARCH  
BOARD OF TRUSTEES  
June 7, 2007**

**Kevin Toolan, Chair  
Vincent DeCaprio  
Anthony Knapp  
David Samuel**

**Promotion to Distinguished Professor**

Two faculty members were under consideration for promotion to distinguished professor, and one is being recommended to you:

**Robert Miura**, Department of Mathematical Sciences, joined NJIT in 2001 as a professor with tenure. He received his Ph.D. from Princeton University in 1966 and began his academic career at New York University (Courant Institute of Mathematical Sciences). He is a scholar with diverse interests in applied mathematics ranging from physical sciences to biological sciences. In January 2006 he was awarded the Leroy P. Steele Prize for Seminal Contribution to Research. Also in January 2006, he was awarded, as co-principal investigator, a \$1M Howard Hughes Medical Institute Graduate Training Grant in Quantitative Neuroscience (with UMDNJ and Rutgers – Newark). He was elected Fellow of the American Association for the Advancement of Science in February 2006. He is the Co-Editor-in-Chief for the *Analysis and Applications Journal*, was associate editor for 12 years for the *Japan Journal of Industrial and Applied Mathematics*, served 17 years on the advisory board of the *Journal of Mathematical Biology*, and currently is an editorial board member for two journals. His service to the University is well known, having contributed, at various times, as Director of the Biology Program and as Associate Chair and Acting Chair of the Department of Mathematical Sciences.

## **Promotion to Professor**

Of the eleven faculty members recommended by their departments/colleges for Promotion to Professor, six are being recommended to you.

**Norman Loney**, Department of Chemical Engineering, joined NJIT as a special lecturer in 1985. From 1988 – 1991 he was a teaching fellow and in 1991 he was appointed as an assistant professor. In 1996, he was promoted to associate professor with tenure. Dr. Loney has written a successful book entitled *Applied Mathematical Methods for Chemical Engineers*, recently released in a second edition and already adopted by a number of chemical engineering departments. He also has substantial publications in peer reviewed journals and refereed conference proceedings. Dr. Loney has an excellent record in the teaching area; he has developed two graduate courses and one undergraduate course. His service to the profession, university, and department has been extensive. For more than eight years, he has held the position of Faculty Fellow in NASA's summer programs. He is an effective mentor and currently serves as an advisor for students and faculty in several outreach programs that target minorities and other under-represented groups.

**Zoi Heleni Michalopoulou**, Department of Mathematical Sciences, came to NJIT as a research assistant professor in 1994. She was appointed assistant professor in 1995 and promoted to associate professor with tenure in 1999. Since 1997, her research in underwater acoustics has earned uninterrupted funding from the Office of Naval Research and the results of that research have been published in prestigious journals. She is a Fellow of the Acoustical Society of America, further evidence of the recognition of her scholarly work and service to the acoustics community. More recently her research interests have broadened and now involve collaborative endeavors in terahertz imaging and remote sensing. She is the principal investigator of the recently awarded NSF CSUMS proposal – “Research and Education in Computational Mathematics for Undergraduates in the Mathematical Sciences at NJIT.” The award is for \$536,696. Dr. Michalopoulou is an excellent teacher and for academic year 2006 – 2007 she also served as associate chair of the department.

**Edip Niver**, Department of Electrical and Computer Engineering, came to NJIT in 1982 and was appointed assistant professor in 1983. He is a dedicated educator and researcher, and has developed many undergraduate laboratory and theory courses in microwave theory, antennas, and propagation and radio frequency communications. His research contributions have been recognized at the international level and he is well respected among his peers in professional societies. Dr. Niver has published in refereed journals and conference proceedings and has received the Van Houten Award for Excellence in Teaching, presented by the NJIT Alumni Association. His service to the profession, university, and department is solid. He has served as a peer reviewer for premium journals and chaired sessions at international conferences. He has also served on various institute and departmental committees and was instrumental in creating innovative teaching and research laboratories for the ECE department.



**Ronald Rockland**, Department of Engineering Technology, joined NJIT in 1995 as an assistant professor, following many active years in the biotechnology industry. Dr. Rockland has an excellent record in research and scholarship having received more than \$3.7 million in sponsored research from federal and state agencies and a private foundation. His grants have focused mainly on innovations in engineering education. Dr. Rockland is a Master Teacher in every sense of the word and currently serves as Chair of the NJIT Master Teachers Committee. He teaches undergraduate courses in Engineering Technology, but he also has a joint appointment in the Biomedical Engineering Department and in that capacity has supervised one Ph.D. and four M.S. students. He serves as Associate Dean of the Newark College of Engineering, leads NCE in the ABET accreditation process, and has been instrumental in recruitment and retention of undergraduates for the college.

**Leonid Tsybeskov**, Department of Electrical and Computer Engineering, came to NJIT as an associate professor in 2001. He was tenured in 2003. He has successfully established an outstanding research group in the area of quantum nanostructures. His research has funding to date of a total in excess of \$2 million from federal agencies including NSF and the Department of Defense as well as private corporations. In 2004, he was elected a Fellow of the American Physical Society. His scholarship record is very strong, he is an excellent teacher, and serves as a peer reviewer for more than two dozen research journals and funding agencies. He is also an editor for the Materials Research Society and serves on several university and department committees. He is internationally known and recognized for his research and scholarship.

**Chao Zhu**, Department of Mechanical Engineering, came to NJIT as an assistant professor in 1995 and was promoted to associate professor with tenure in 2003. Dr. Zhu's research interests are particulate multiphase flow and powder technology and his work has been sponsored by NASA and Exxon-Mobil. He regularly publishes in peer-reviewed journals and has written three book chapters. He is a co-inventor for a recently issued U.S. Patent. He has a very strong teaching record for both undergraduate and graduate courses. Dr. Zhu is an active peer-reviewer for more than a dozen journals and research providers. He has supervised eight doctoral students and graduated four (three since he was promoted to associate professor in 2003). He has also supported nine graduate students in the past eight years from his external research funding. Thanks to his leadership as chair of the mechanical engineering undergraduate recruitment committee the enrollment of mechanical engineering students increased significantly.

## **Promotion to Associate Professor**

Of the ten faculty members recommended by their departments for Promotion to Associate Professor with tenure, six are being recommended to you.

**Ali Abdi**, Department of Electrical and Computer Engineering, came to NJIT in 2001 as an assistant professor. Dr. Abdi has established a record of excellence in teaching, scholarly research, and service. His contributions are documented by teaching evaluations and awards, a significant record of publications in peer-reviewed journals, and his sponsored research success. He has sixteen papers published or accepted in archival journals and thirty-seven papers published in conferences. He has five U.S. patents pending for novel communications devices and techniques. He is an outstanding teacher and received the 2006 NJIT Excellence in Teaching Award for Team and Multidisciplinary Teaching. He is an effective advisor and mentor and has an excellent record of service to the professional and academic communities.

**Gabrielle Esperdy**, New Jersey School of Architecture, came to NJIT in 2001. Her record of scholarship, teaching, and service is excellent. Professor Esperdy has a contract with the highly regarded University of Chicago Press to publish her book *Modernizing Main Street: Architecture and Consumer Culture in the 1930's*. She has published several peer reviewed journal articles and has several currently under review. She is currently combining research, teaching, and service by working with students to develop a series of walking tours for the City of Newark. Professor Esperdy is a gifted teacher and heads the Mentoring Program at the NJSoA. She is an articulate spokesperson for gender issues within the profession of architecture and in that capacity has organized or participated in several events. Her extraordinary teaching abilities and her effective advocacy of gender equality along with her scholarly work have made her an essential faculty member.

**David Horntrop**, Department of Mathematical Sciences, came to NJIT in 2001 as an assistant professor. Prior to joining NJIT, Dr. Horntrop held positions as an associate research scientist at the Courant Institute of Mathematical Sciences at New York University and as an assistant professor of mathematics at the University of Massachusetts/Amherst. He is an active researcher having published nine refereed journal publications in high quality journals (five since coming to NJIT). He has received NSF support since 2002 for his research efforts in which he has included undergraduate students. He is a fine teacher, having taught both undergraduate and graduate courses. He has revitalized the department's course in stochastic processes and introduced a new course in stochastic simulation. Dr. Horntrop has provided exemplary service to the department and the university. Dr. Horntrop will be a focal point from which to develop the departmental presence in the burgeoning field of applied mathematics which is poised for growth nationwide.

**Robert Rojas-Cessa**, Department of Electrical and Computer Engineering, joined NJIT in 2002 as an assistant professor. He has aggressively and successfully pursued

external grant opportunities for research funding in the area of wireless networking and embedded systems. Since joining NJIT, he has published one book chapter, thirteen journal papers, and thirty five papers in conference proceedings. He has also filed two patents through NJIT. Wireless Communications and Networking is a strategic research thrust area in the ECE Department, and Dr. Rojas-Cessa has already exhibited a peer-review based recognized research expertise as well as professional service in the department and scientific community. He is a highly effective mentor for NJIT students with a strong service record serving as a peer reviewer for numerous research journals.

**Laurent Simon**, Department of Chemical Engineering, came to NJIT in 2001 as an assistant professor. He is an outstanding teacher and has developed two undergraduate courses and one graduate course. He is an effective mentor and serves as a role model for our diverse student population. His research focuses on transdermal drug delivery and pharmaceutical engineering – two areas of critical importance to NJIT's Chemical Engineering Department. He was recently appointed associate director of the Pharmaceutical Engineering Graduate Program. Dr. Simon is currently active in the new NSF Engineering Research Center (ERC) on Structured Organic Particulates. He serves as a peer-reviewer for a number of journals and regularly chairs sessions at national conferences. Dr. Simon's service to the profession, university, and department has been substantial.

**Yi-fang (Brook) Wu**, Department of Information Systems, came to NJIT in 2001 as an assistant professor. Dr. Wu is an active researcher and has been a co-principal investigator on a number of grants. Her research combines innovative theoretical approaches, extensive experimental results, and the building of software systems that are used by others; such systems require a substantial amount of time, effort, and skill. Dr. Wu's research in text search and data mining is cutting edge technology and her development of several new and productive approaches in text searching and data mining is quite impressive. She has translated each of these into peer reviewed publications resulting in a substantial body of both conference and journal papers. Dr. Wu is an active mentor and role model to women students in computing. She will play a strong and valuable role in the IS Department and the College of Computing Sciences.

### **Tenure Only Without Promotion**

**Dimitrios Theodoratos**, Department of Computer Science, joined NJIT in 2001 as an associate professor. Prior to coming to NJIT he held various visiting assistant professor, post doctoral researcher, and researcher positions. His research is primarily in data warehousing, multidimensional databases, OLAP, and Semi Structure Data/XML; his work is highly cited. Dr. Theodoratos has received several grants, including those from NSF, Department of Defense, European Union, and IBM. He has actively participated in international research collaboration, government sponsored projects, and industrial partnerships. His teaching evaluations are outstanding and consistently among the highest in his department; in 2005 he was awarded the Excellence in Teaching Award for Graduate Instruction. He is a member of the

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University Excellence in Teaching Awards Committee as well as various departmental committees.

**Promotion to Associate Professor (without tenure)**

**Andrei Sirenko**, Department of Physics, joined NJIT in 2003 as an assistant professor. Prior to coming to NJIT, he held various post doctoral positions and industry positions in the fields of optical telecommunications, analytical techniques for nanoscale materials characterization, and polarization mode dispersion. Although he excels in both teaching and service, his research accomplishments mark his greatest contribution to the university. He has published extensively in high quality highly selective journals. In 2006 he received a prestigious NSF CAREER Award. He has been awarded grants for beam-time at leading synchrotron facilities and has two patents, one since his arrival at NJIT. He is a world renowned mature research scientist. He has international research experience and successful international collaborations having forged collaborative relationships with scientists in France, Russia and Germany. Dr. Sirenko has also demonstrated strong teaching skills and service to the department.



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## Curriculum Vitae

Annaleena Parhankangas

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Finland  
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### PROFESSIONAL EXPERIENCE:

<b>Current Position</b>	<i>January 2005- :</i> Professor (acting), Helsinki University of Technology, Institute of Strategy and International Business
<b>Previous Positions</b>	<i>January 2004-December 2004: Visiting Scholar</i> , Chalmers University of Technology, Institute of Industrial Dynamics, Sweden <i>February 2003- December 2003: Senior Lecturer (Associate Professor)</i> , Helsinki University of Technology, Institute of Strategy and International Business, Finland <i>August 2002-February 2003: Director (acting)</i> , Institute of Strategy and International Business, Helsinki University of Technology, Finland <i>August 2001- June 2002: Visiting Scholar</i> , University of Pennsylvania, the Wharton School of Business <i>August 2001- June 2002: Visiting Professor</i> , Rensselaer Polytechnic Institute, Lally School of Management and Technology <i>October 1998 – July 2001: Lecturer (Assistant Professor)</i> , Helsinki University of Technology, Institute of Strategy and International Business <i>1995 – September 1998: Research and Teaching Associate</i> , Institute of Strategy and International Business, Helsinki University of Technology, Finland <i>1993-1994 Research Assistant</i> , Institute of Biochemistry and Microbiology, Helsinki University of Technology, Finland
<b>Other Affiliations</b>	<i>August 2006- :</i> Visiting international faculty, Center for Business Innovation, Chalmers University of Technology, Sweden
<b>International Extended Visit</b>	<i>August 2000 – November 2000: Visiting Researcher</i> , Chalmers University of Technology, Institute of Industrial Dynamics, Gothenburg, Sweden
<b>Birthdate</b>	February 16, 1971

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## EDUCATION:

- Ph.D.* Helsinki University of Technology, Department of Industrial Engineering and Management, May, 1999
- Major in Strategy and International Business
  - Minor in Corporate Law
- Master of Science in Industrial Engineering and Management* Helsinki University of Technology, Department of Industrial Engineering and Management, April, 1994
- Major in Strategy and International Business
  - Minors in Industrial Psychology and Biotechnology

## AWARDS

*The Outstanding Reviewer Award for 2006 by the Journal of Business Venturing*

*The 2004 Taylor & Francis Publishers Award for Excellence in Research on the Topic of Venture Capital for the paper:*

Parhankangas, A., Landström, H., & Smith, D.G. 2004. Experience, Contractual Covenants and Venture Capitalists' Responses to Unmet Expectations. A paper presented at the 2004 *Babson-Kauffman Entrepreneurship Research Conference*.

*The John Bessant Best Paper Award for the paper*

Feller, J., Parhankangas, A., & Smeds, R. 2004. Process Learning in Alliances Developing Radical and Incremental Innovations: Evidence from the Telecommunications Industry. A paper presented at the 2004 *CINET Conference*.

*The 2003 Taylor & Francis Publishers Award for Excellence in Research on the Topic of Venture Capital for the paper*

Parhankangas, A., & Landström, H. 2003. Responses to Psychological Contract Violations in the Entrepreneur-Venture Capitalist Relationship: An Exploratory Study. A paper presented at the 2003 *Babson-Kauffman Entrepreneurship Research Conference*.

## RESEARCH INTERESTS:

My research focuses on how corporations and industries may renew themselves through their involvement in innovative activities. In particular, I am interested in how the institutional environment as well as relationships to financiers, competitors and other firms or units influence creative processes. Five examples of this work are as follows:

1. How established organizations may act as incubators for new firms and technologies. It is possible to identify two inter-related research streams within this topic area. First, I am interested in analyzing the impact of knowledge transfer from established organizations to new firms, adopting the perspective of both the parent organization and its offspring. In this research setting, it is possible to explore whether inherited knowledge and resources act as an impetus for growth of the offspring, or whether inheritance jeopardizes the chances for renewal through passing outdated structures and inertia from the parent to its offspring. Second, I focus on how large firms identify and respond to their non-core technologies. Herein I observe how internal corporate ventures became independent companies for the reason that they did not serve the

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current strategic mission of the parent firm. Special attention is given to the evolution and outcome of parent and spin-off firm relations during the spinning-off process. I have also extended this work to include a larger array of means available to large corporations managing the parts of their technology portfolio outside their core areas.

2. A related research project focuses on how knowledge creation, sharing, and assimilation may be promoted in R&D alliances in the global telecommunications industry. In particular, we study the antecedents and the consequences of the emergence of communities of learning in inter-organizational space.

3. A third research project is investigating the conflict management strategies used by venture capital firms facing disappointments with their portfolio companies. This project includes an analysis of the legal as well as psychological contracts between the venture capitalists and entrepreneurs. In particular, we are interested in how the nature of the psychological contract violation and the venture capitalist's social environment shapes his or her reactions to unmet expectations.

4. I am also interested in how technical entrepreneurs learn about their markets. There are numerous examples illustrating how radically new technologies emerge as "solutions looking for problems" and how firms developing these technologies encounter serious difficulties when trying to transfer their inventions to the market place. Paradoxically, business folklore often cites adaptability and change as key to survival and performance; yet learning, defined as changes in the core elements of the firm, is not necessarily advantageous for the learning organization. In fact, there exists a strong research stream in the field of population ecology suggesting that selection processes tend to favor organizations whose structures are difficult to change. To further explore this dilemma, this project makes a distinction between market learning through expansion, modification and contraction. The results of our study show that the likelihood of market learning depends on a host of contextual factors, such managerial experience of founders, novelty of technology and markets as well as prior performance. This project contributes to the debate on whether learning is helpful or harmful for organizations by showing that market learning through business model expansion has positive performance implications for innovating firms, whereas learning through modification and contraction may hurt the performance of technology-based ventures.

5. Finally, it is important to note that the institutional environment exerts a profound impact on the level and type of entrepreneurship and innovation. Most comparative studies of entrepreneurial activity take the traditional notion of entrepreneurship as the creation of independent start-ups as their point of departure, excluding subsidiaries, branches and spin-offs created by existing firms. In a similar vein, most comparative studies in innovation focus on radical or product innovations. In this study, however, we argue that the definitions mentioned above are too narrow, reflecting the Anglo-Saxon notion of entrepreneurship and innovation. To further explore this assumption, we turn to the institutional theory to identify meaningful differences in normative, cognitive and regulatory structures and their impact on the type and level of entrepreneurship and innovation in their respective institutional environments.

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## MAJOR RESEARCH PROJECTS SINCE 1996

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|---------|--|
| Past    | <ul style="list-style-type: none"><li>• MINT-Project (Management and integration of new technologies in SMEs) funded by the National Technology Agency of Finland (TEKES)</li><li>• Networks, Collective Learning and RTD in Regionally Clustered High Technology SMEs, a project funded by European Union</li><li>• A study of Spin-Off Firms from Large Finnish Industrial Corporations</li><li>• Managing Non-Core Technologies in Large Corporations (Non-Core Tech), a project funded by National Technology Agency of Finland (TEKES)</li><li>• Conflict Management in Entrepreneur-Venture Capitalist Relationship: (together with Professor Gordon Smith, University of Wisconsin and Hans Landström, University of Lund), a project funded by the Ella and Georg Erhnrooth Foundation, and the Foundation of OKO Bank</li><li>• Developing and Managing Communities of Knowledge and Learning for Networked R&amp;D in the Telecommunications industry, a project funded by National Technology Agency of Finland (TEKES)</li><li>• Entrepreneurial Learning and Academic Spin-Offs: a project funded by Nordic Innovation Centre</li><li>• Risk Management in the Venture Capital Context (together with Tomas Hellström, Copenhagen Business School), a project funded by Emil Aaltonen Foundation</li><li>• Nordic Seed and Venture Capital Markets for Innovation: Analysis of Performance and Suggestions for Improvements and Cross-Border Collaboration (together with Sören Sjölander and Stefan Sans-Velasco from Chalmers University of Technology, Tomas Hellström, University of Oslo, Rögnvaldur Saemundsson, and University of Reykjavik), a project funded by the Nordic Innovation Center</li></ul> |
| Ongoing | <ul style="list-style-type: none"><li>• Econ-Change: Economic change: Micro-Foundations of Entrepreneurial and Organizational Changes in Europe (together with Åsa Lindholm-Dahlstrand, Chalmers University of Technology and Helen Lawton-Smith from Oxford University), a project funded by European Union</li><li>• From Innovation to Sustainable Competitive Advantage (together with Olavi Lehtoranta from Statistics Finland and Technical Research Center of Finland), a project funded by the National Technology Agency of Finland (TEKES)</li><li>• Entrepreneurial Learning (together with Olavi Lehtoranta, Statistics Finland and Technical Research Center of Finland and Pasi Kuusela from Helsinki University of Technology)</li></ul>  |

## EXPERIENCE OF ACADEMIC LEADERSHIP

- Acting Director of Institute of Strategy and International Business, Helsinki University of Technology
- Project manager of Non-Core Tech –project, From Innovation to Sustainable Competitive Advantage, Conflict Management in the Venture Capitalist-Entrepreneur Relationship project Risk Management in the Venture Capital Context-project and Coprel (Communities of Practice and the Effectiveness of Technology Programs) project



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## RESEARCH GRANTS

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|---|---|
| Doctoral Dissertation 1996-1999   | <ul style="list-style-type: none"><li>• Foundation of Paulo</li><li>• Foundation of IVO</li><li>• Foundation of Ella and Georg Erhnrooth</li><li>• Finnish Cultural Foundation</li><li>• City of Helsinki</li></ul> |
| Conflict Management in the Venture Capitalist-Entrepreneur Relationship 2001-2003 | <ul style="list-style-type: none"><li>• the Ella and Georg Erhnrooth Foundation</li><li>• Foundation of OKO Bank</li><li>• Foundation of Jenny and Antti Wihuri</li></ul>   |
| Risk Management in the Venture Capital Context 2004                               | <ul style="list-style-type: none"><li>• Foundation of Emil Aaltonen</li></ul>   |

## DISSERTATION

*Disintegration of technological competencies: An empirical study of divestments through spin-off arrangements*

- Advisors: Professors Tomi Laamanen and Erkki Autio, Helsinki University of Technology
- Evaluation Committee: Professors Åsa Lindholm-Dahlstrand of Chalmers University of Technology, Tom Elfring of Rotterdam School of Management, and Ron Sanchez, IMD

## PUBLICATIONS

### *Peer Reviewed Publications*

Parhankangas, A., & Hellström, T. 2007. How Experience and Perceptions Shape Risky Behavior: Evidence from the Venture Capital Industry. Forthcoming in *Venture Capital: International Journal of Entrepreneurial Finance*, 9(3).

Feller, J., Parhankangas, A., & Smeds, R. 2006. Process Learning in Alliances Developing Radical versus Incremental Innovations: Evidence from the Telecommunications Industry. *Knowledge and Process Management*, 13(3): 175-191.

Parhankangas, A., & Landström, H. 2006. How Venture Capitalists Respond to Unmet Expectations: The Role of Social Environment. *Journal of Business Venturing*, 21(6): 773-801.

Parhankangas, A., Landström, H., & Smith, D.G. 2005. Experience, Contractual Covenants and Venture Capitalists' Responses to Unmet Expectations. *Venture Capital: Journal of Entrepreneurial Finance* 7(4): 297-318.

Parhankangas, A., Ing, D., Hawk, D.L., Dane, G.S., & Kosits, M. 2005. Negotiated Order and Network-Form Organizations. *Systems Research and Behavioral Science*, 22: 431-452.

Parhankangas, A., Landström, H., & Smith, D.G. 2004. Experience, Contractual Covenants and Venture Capitalists' Responses to Unmet Expectations. *Frontiers of Entrepreneurship Research 2004*: 695-709.

Parhankangas, A., & Landström, H. 2004. Responses to Psychological Contract Violations in the Entrepreneur-Venture Capitalist Relationship: An Exploratory Study. *Venture Capital: Journal of Entrepreneurial Finance*, 6(4): 217-242.

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Sapienza, H.J., Parhankangas, A. & Autio, E. 2004. Knowledge Relatedness, Learning and Growth of Young Industrial Spin-Off Firms. *Journal of Business Venturing*, 19(6): 809-829.

Parhankangas, A and Arenius, P. 2003. From a Corporate Venture to an Independent Company: A Base for a Typology for Corporate Spin-Off Firms. *Research Policy* 32(3): 463-481.

Parhankangas, A., & Landström, H. 2003. Responses to Psychological Contract Violations in the Entrepreneur-Venture Capitalist Relationship: An Exploratory Study. *Frontiers of Entrepreneurship Research 2003*.

Autio, E., & Parhankangas, A. 1998. Employment Generation Potential of New, Technology-Based Firms During A Recessionary Period: The Case of Finland. *Small Business Economics*, 11(2): 113-123.

#### *Book Chapters, Reports and Working Papers*

Parhankangas, A., & Hawk, D.L. 2007. From the Exploration of New Possibilities to the Exploitation of Recently Developed Competencies. Evidence from Five Ventures Developing New-to-the-World Technologies. Forthcoming in *Handbook of Research on Technoentrepreneurship*. Edward Edgar Publishing.

Parhankangas, A. 2007. An Overview of the Research on Early Stage Venture Capital: Current Status and Directions for Future Research. Forthcoming in *Handbook of Venture Capital Research*. Kluwer Publishing.

Hewlett, R., Parhankangas, A., Pearson, H., & Russell, K. 2006. External Review: School of Management New Jersey Institute of Technology.

Sjölander, S., Parhankangas, A., Erikson, T., Saemundsson, Hellström, T., Magnusson, M., Björkdal, J., Berglund, H., Sanz-Velasco, S. 2006. Nordic Seed and Venture Capital Markets for Innovation. A project report to Nordic Innovation Centre.

Sjölander, S., Parhankangas, A., Hellström, T., Sæmundsson, R.J., Magnusson, M., Sans-Velasco, S., Johansson, M. 2005. *Entrepreneurial learning & academic spin offs*: A project report to Nordic Innovation Centre.

Parhankangas, A., Holmlund, P., & Kuusisto, T. 2003. Managing Non-Core Technologies: Experiences from Finnish, Swedish and US Corporations. *TEKES (National Technology Agency of Finland) Technology Review Reports* 149/2003.

Parhankangas, A. 1999. Disintegration of Technological Competencies: An Empirical Study of Divestments through Spin-Off Arrangements. *Acta Polytechnica Scandinavica, Mathematics, Computing and Management in Engineering Series No 99*.

Parhankangas, A & Autio, E. 1998. Structured Approach to Designing Technology Strategy in SMEs: Good Practice Description of the TEKES MINT Methodology. In Martinsuo, M & Järvenpää, E. (Eds). *Development and challenges of small and medium-sized enterprises*. Pp. 13-26.

Parhankangas, A. 1997. Disintegration of Technological Competences- A Comparison of Competence-Based and Contractual Perspectives. Working Paper 1997/1. Helsinki University of Technology. Institute of Strategy and International Business.

Parhankangas, A., & Kauranen, I. 1997. Spin-offs from Established Corporations- A Systematic Classification of Spin - Off Firms and A Study of Their Contribution to Industry Growth. Working Paper 1997/2. Helsinki University of Technology, Institute of Strategy and International Business.

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### *Work in Progress*

Parhankangas, A., & Lindholm-Dahlstrand. Spin-Offs to Stock Markets as an Alternative Form of Entrepreneurship: Contrasting the US, UK and Japanese Experiences. Submitted to *Entrepreneurship Theory & Practice*.

Feller, J., Parhankangas, A., & Smeds, R. 2005. Inter-Partner Relationship and the Impact of Knowledge Transfer Mechanisms on Process Learning. Revise and resubmit to *International Journal of Technology Management*.

Feller, J., Parhankangas, A., & Smeds, R. How companies learn to collaborate: Emergence of improved inter-organizational processes in R&D alliances.

### *Conference Papers*

Danielsen, A., & Parhankangas, A. 2007. When Learning Can Hurt Your Performance: Market Learning Through Expansion, Modification and Contraction in Technology-Based Ventures. A paper to be presented at the Babson-Kauffman Entrepreneurship Research Conference, Madrid, June 2007.

Parhankangas, A., & Lindholm-Dahlstrand, Å. 2006. Spin-Offs to Stock Markets as an Alternative Form of Entrepreneurship: An Institutional Approach. A paper presented at the Academy of Management Conference, Atlanta, August 2006.

Parhankangas, A., & Hellström, T. 2006. Attitudes towards Risk, Risk Perceptions, Risk Behavior and Post Investment Risk Reduction Strategies: Evidence from the Venture Capital Industry. A paper to be presented at the Babson-Kauffman Entrepreneurship Research Conference, June, 8-10, 2006, Indianapolis, IN.

Lawton Smith, H., Parhankangas, A., & Lindholm-Dahlstrand, Å. 2005. Corporate spin-offs and economic development: The UK Case. A paper presented at the EconChange Workshop, October 24<sup>th</sup> and 25<sup>th</sup> in Brussels and Leuven.

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Parhankangas, A., Ing, D., Hawk, D.L., Dane, G.S., & Kosits, M. 2004. Negotiated Order in the Organizations in the Network Form. A paper presented at the *2004 ICSTM Conference*.

Parhankangas, A., Gopalakrishnan, S., & Hasan, I. 2003. The performance of the spin-off unit revisited: How long do spin-off units take to stand on their feet? A paper presented at the *SMS miniconference* in Buenos Aires, March 2003.

Parhankangas, A., & Landström, H. 2003. Responses to Psychological Contract Violations in the Entrepreneur-Venture Capitalist Relationship: An Exploratory Study. A paper presented at the 2003 *Babson-Kauffman Entrepreneurship Research Conference*.

Parhankangas, A., & Landström, H. 2003. Venture Capitalists and Psychological Contract Violations: An Institutional Approach. A paper presented at the 2003 *Academy of Management Conference*, August 2003.

Parhankangas, A., & Hawk, D. 2003. Mutual development of technologies and governance: Reliance on Systemic Coincidence, Natural Luck or Strategic Planning? A paper presented at the *2003 ISSS conference*, Crete, July 2003.

Parhankangas, A. & Hawk, D. 2003. From the exploration of new possibilities to the exploitation of old certainties: Evidence from five ventures developing new-to-the world technologies. A paper presented at a *Symposium on the Intersection of Entrepreneurship, Networks and Innovation*, 2-3 October 2003, Rensselaer Polytechnic Institute.

Hawk, D., & Parhankangas, A. 2001. The ABCs of 21<sup>st</sup> Century International Services Management. A paper presented at the *IT&FA Conference*, May 26-29, 2001, Washington DC.

Parhankangas, A. 2001. From a Corporate Venture to an Independent Company: A base for a typology for corporate spin-off firms. A paper submitted to the *2001 IEEE International Conference on Engineering Management*, October 7-9, 2001, Albany, NY.

Hawk, D., & Parhankangas, A. 2001. Systems Cracks are Where the Light Gets In: Models and Measures of Service in the Benefit of Context. A paper presented at the *45<sup>th</sup> Meeting of the International Society for the Systems Sciences*, July 7-11, 2001, Pacific Grove, CA.

Hawk D., & Parhankangas A., Ikonen T. 2001. Changelessness, and Other Impediments to Systems Performance and Management. A Paper presented at the *5th World Multiconference on Systemics, Cybernetics and Informatics (SCI 2001)* and the *7th International Conference on Information Systems Analysis and Synthesis (ISAS 2001)*, July 22-25, 2001, Orlando, FL.

Parhankangas A., & Hawk D. 2000. From a Corporate Venture to an Independent Company: Implications of Parent Firm Spin-off Firm Relationship for the Competence Development in Spin-Off Units. A paper presented at *European International Business Academy 26<sup>th</sup> Annual Conference*, December 10-12, 2000, Maastricht, the Netherlands.

Arenius, P. & Parhankangas, A. 2000. Influence of Past Growth, Social Aspiration and Social Capital on Entrepreneurial Growth Aspiration." A paper presented at the 2000 *Babson-Kauffman Entrepreneurship Research Conference*, June 8-10, 2000, Boston, Massachusetts.



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Parhankangas, A. 1997. The Impact of Boundary Choice on Competence Building Activities- A Comparative Study of Technology-based Internal Ventures and Technology-Related Spin-off Firms.” A paper presented at 7<sup>th</sup> *European Doctoral Summer School in Technology Management*. Leuven, August 17-30, 1997.

Autio, E. & Parhankangas, A. 1996. Employment Generation Potential of New, Technology-Based Firms During A Recessionary Period: The Case of Finland. *High Technology Small Firm Conference*, Enschede, The Netherlands, 5-6 September 1996

## TEACHING EXPERIENCE

### *Chalmers University of Technology*

- |                                      |   |
|--------------------------------------|---|
| Graduate courses<br>(Master's Level) | <ul style="list-style-type: none"><li>• Strategic Company Development</li><li>• Project in Industry and Market Analysis</li></ul> |
|--------------------------------------|---|

### *Rensselaer Polytechnic Institute*

- |                       |  |
|-----------------------|--|
| Undergraduate courses | <ul style="list-style-type: none"><li>• International Business</li><li>• Starting up a New Venture</li><li>• Practicum in Technical Entrepreneurship</li></ul> |
|-----------------------|--|

### *Helsinki University of Technology*

- |                                      |  |
|--------------------------------------|--|
| Graduate courses<br>(Master's Level) | <ul style="list-style-type: none"><li>• Strategic Management of Technology and Innovation</li><li>• Strategic Management in the Telecommunication Industry</li><li>• Seminar Course in Strategy and International Business</li><li>• Special Study in Business Strategy and International Business</li></ul> |
| Ph.D. courses                        | <ul style="list-style-type: none"><li>• Strategy and Technology Management Module, Executive School of Industrial Management, Helsinki University of Technology</li></ul>  |

### *Master's theses supervised and under supervision*

- |                    |  |
|--------------------|--|
| Heidi Kettunen     | <ul style="list-style-type: none"><li>• Management System for Strategic Initiatives</li></ul>  |
| Chen Ying          | <ul style="list-style-type: none"><li>• China's Institutional Environment for the Finnish Companies</li></ul>  |
| Olli Sirkiä        | <ul style="list-style-type: none"><li>• Price Setting as a Competitive Advantage in Betting Industry</li></ul>   |
| Teemu Laitinen     | <ul style="list-style-type: none"><li>• Managing Transfer from Nordic Nanotechnology Research Centers</li></ul>  |
| Arto Viitanen      | <ul style="list-style-type: none"><li>• Consumer Acceptance of Media Rich Mobile Marketing Communication</li></ul>   |
| Mikko Laine        | <ul style="list-style-type: none"><li>• Key Success Factors for Virtual Communities</li></ul>  |
| Eeva-Kaisa Schmidt | <ul style="list-style-type: none"><li>• Developing a Performance Measurement System for Nokia Corporation</li></ul>  |
| Pekka Rantasaari   | <ul style="list-style-type: none"><li>• Developing a Process Scenario Approach to Business Cases</li></ul>   |
| Anton Danielsen    | <ul style="list-style-type: none"><li>• From Invention to Sustainable Competitive Advantage: Analyzing the Evolution of Finnish innovations</li></ul>                                    |
| Pasi Kuusela       | <ul style="list-style-type: none"><li>• Division of Labor in Innovative Activities: Comparison of Large Firms and Their Spin-Off Companies as Incubators of Novel Technologies</li></ul> |

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Olli Aura	• Managing the Front End Product Development Processes
Lauri Sommerberg	• Developing a Performance Measurement System for a Large Project-Based Corporation
Yalin Sevgör	• Professionalization of the Management of Football Leagues in Eastern Europe
Per Skallefel and Christian Persson	• Risk Management in the Venture Capital Context
David Johansson and Björn Coster	• Expansion of SKF to the Korean Market
Thomas Fall, Rasmus Myrgren and Joakim Lindholm	• SMIT Ltd's Growth in the Shanghai market
Martin Exner and Andreas Eriksson	• Visualising and Improving Fläkt Woods Market Position on the British and German Air Handling Unit Market
Niclas Brogren and Claes Wilhelmsson	• Application of SKF Oil Injection Method in the Steel Industry
Ossi Iivari Ollinaho	• Innovation Management at UPM-Kymmene
Jan Feller	• Inter-Partner Process Learning in R&D Alliances
Turkka Kuusisto	• Managing Non-Core Technologies in Large Corporations

*Doctoral dissertations supervised or under supervision*

Jan Feller (PhD in 2004) Helsinki University of Technology	• Process Learning in R&D Alliances
Stefan Sans-Velasco (PhD in Jan 2007) Chalmers University of Technology	• Entrepreneurial Learning in High Technology Environments
Martin Wallin (PhD in Fall 2007) Chalmers University of Technology	• Financing of Corporate Venturing Initiatives
Terho Kaikuranta (ongoing) Helsinki University of Technology	• Strategic Surprises in the New Product Development Projects
Pasi Kuusela (ongoing) Helsinki University of Technology	• Entrepreneurial Learning
Tuomo Nikulainen (ongoing) Helsinki University of Technology	• Industry Emergence in Nanotechnology Fields
Mikko Laine (ongoing) Helsinki University of Technology	• Building Competitive Advantage in Online Communities
Ossi Ollinaho (ongoing) Helsinki University of Technology	• Challenges in the Globalizing Pulp and Paper Industry
Veroniek Collewaert (ongoing) University of Ghent	• Conflict Management in the Entrepreneur and Business Angel Relationship

**OPPONENT FOR PhD THESES**

- Terje Berg-Utby, Norwegian University of Science and Technology

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## **OPPONENT FOR LICENCIATE'S THESES**

- Mattias Johansson, Chalmers University of Technology

## **PEDAGOGICAL TRAINING**

- Faculty development in international entrepreneurship (Center for International Business Education and Research (CIBER)), June 4-7, 2007

## **PROFESSIONAL MEMBERSHIPS**

- Academy of Management
- Academy of International Business
- European Group for Organization Studies

## **MEMBERSHIPS IN EDITORIAL BOARDS**

- International Journal of Technoentrepreneurship

## **AD HOC REVIEWER FOR**

- Management Science
- Journal of Business Venturing
- Venture Capital: International Journal of Entrepreneurial Finance
- Työelämän tutkimus (Research on Renewing Conditions in Labor Relations)
- IEEE Transactions on Engineering Management
- Academy of Management Conference
- Academy of International Business Conference

## **MEMBER OF THE EXTERNAL REVIEW COMMITTEE FOR**

- New Jersey Institute of Technology School of Management

## **BUSINESS EXPERIENCE**

2000-2001

- Membership of the board of directors in Malibu Telecom Ltd.

1990-1994

- Market research for a new HUT-based biotechnology company
- Market research for Valio International, Oy Aga AB Ltd, and Salon Alexandra Ltd
- Business development consulting for Tehdasinsinöörit Oy (a local engineering company); Kvaerner-Masa Yards, and the Post Office of Helsinki

## **LANGUAGES**

Fluent in Finnish and English. Some French (passed the DALF-examination), Swedish and German.

## SUMMARY OF 2006 2007 PROMOTION RECOMMENDATIONS

NAME	Dept.	Current Rank	Date of Appt. to Current Rank	Date of NJIT Appt.	Date of Tenure Track	Date of Terminal Degree	Terminal Degree
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### RECOMMENDATION FOR PROMOTION TO DISTINGUISHED PROFESSOR

Robert Miura	Math	Professor	6/27/05	6/27/05	Tenure at hire	1966	Ph.D.
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### RECOMMENDATION FOR PROMOTION TO PROFESSOR

Norman Loney	CHE	Associate	1996	1985	1991	1991	Ph.D.
Zoi-Heleni Michalopoulou	Math	Associate	1999	1994	1995	1993	Ph.D.
Edip Niver	ECE	Associate	1986	1982	1983	1979	Ph.D.
Ronald Rockland	ET	Associate	2001	1995	1995	1972	Ph.D.
Leonid Tsybeskov	ECE	Associate	2001	2001	2003	1986	Ph.D.
Chao Zhu	ME	Associate	2003	1995	1995	1991	Ph.D.

### RECOMMENDATION FOR PROMOTION TO ASSOCIATE PROFESSOR WITH TENURE

Ali Abdi	ECE	Assistant	2001	2001	2001	2001	Ph.D.
Gabrielle Esperdy	SoA	Assistant	2001	2001	2001	1999	Ph.D.
David Horntrop	Math	Assistant	2001	2001	2001	1995	Ph.D.
Roberto Rojas-Cessa	ECE	Assistant	2002	2002	2002	2001	Ph.D.
Laurent Simon	CHE	Assistant	2001	2001	2001	2001	Ph.D.
Yi-fang (Brook) Wu	IS	Assistant	2001	2001	2001	2001	Ph.D.

### RECOMMENDATION FOR TENURE ONLY

Dimitrios Theodoratos	CS	Associate	2001	2001	2001	1991	Ph.D.
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### RECOMMENDATION FOR PROMOTION ONLY TO ASSOCIATE PROFESSOR

Andrei Sirenko	Physics	Assistant	2003	2003	2003	1993	Ph.D.
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## NJIT Teaching Faculty Summary Data 1991 - 2006

	1991	1992	1993	1994	1995**	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
DIST. PROF.	13	12	9	12	16	19	20	21	23	24	24	25	25	26	26	25
PROF.	90	92	99	97	108	110	109	113	113	113	118	120	119	122	122	123
ASSOC.	97	99	98	95	103	102	111	107	110	109	99	96	94	96	90	95
ASST.	84	88	71	71	79	74	62	64	55	51	62	61	62	66	67	54
<b>TOTAL</b>	<b>284</b>	<b>291</b>	<b>277</b>	<b>275</b>	<b>306</b>	<b>305</b>	<b>302</b>	<b>305</b>	<b>301</b>	<b>297</b>	<b>303</b>	<b>302</b>	<b>300</b>	<b>310</b>	<b>305</b>	<b>297</b>
SPEC. LECT.	26	23	21	37	29	30	42	41	60	73	79	79	78	80	79	71
OTHER*	9	13	10	17	13	19	14	16	18	34	36	28	26	33	23	23
PROF. & INST. STAFF															9	8
<b>GRAND TOTAL</b>	<b>319</b>	<b>327</b>	<b>308</b>	<b>329</b>	<b>348</b>	<b>354</b>	<b>358</b>	<b>362</b>	<b>379</b>	<b>404</b>	<b>418</b>	<b>409</b>	<b>404</b>	<b>423</b>	<b>416</b>	<b>399</b>

\*includes Research Prof. & Visiting Professors

\*\* Deans and other tenured admin. incl. in totals for 1st time.

*faculty data fall 06*

## Rank By Department: Fall 2006

Department	Dist Prof. / Prof.	Assoc Prof.	Asst Prof.	Other	Total
Bio Medical Engineering	3	3	3	7	16
Chemical Engineering	13	1	4	2	20
Chemistry & Environmental Science	7	3	4	6	20
Civil & Environmental Engineering	19	6		1	26
Computer Science	10	12	5	8	35
Electrical & Computer Engineering	21	8	5	2	36
Engineering Technology	1	6	1	4	12
Federated Biology	2	1		1	4
Federated History	2	1	2	1	6
Humanities	7	6	2	20	35
Industrial & Manufacturing Eng.	7	5		0	12
Information Systems	4	4	4	2	14
Information Technology				3	3
Mathematical Sciences	15	17	11	8	51
Mechanical Engineering	12	5		5	22
NJ School Of Architecture	8	6	4	9	27
Physics	10	3	5	18	36
School Of Management	7	8	4	5	24
<b>Grand Total</b>	<b>148</b>	<b>95</b>	<b>54</b>	<b>102</b>	<b>399</b>

# **Tenure Status by Department: Fall 2006**

Department	Tenure Track		Tenured		Total
	#	%	#	%	
Bio Medical Engineering	3	33.3%	6	66.7%	9
Chemical Engineering	3	16.7%	15	83.3%	18
Chemistry & Environmental Science	5	35.7%	9	64.3%	14
Civil & Environmental Engineering		0.0%	25	100.0%	25
Computer Science	7	25.9%	20	74.1%	27
Electrical & Computer Engineering	5	14.7%	29	85.3%	34
Engineering Technology	1	12.5%	7	87.5%	8
Federated Biology	1	33.3%	2	66.7%	3
Federated History	1	20.0%	4	80.0%	5
Humanities	2	13.3%	13	86.7%	15
Industrial & Manufacturing Eng.		0.0%	12	100.0%	12
Information Systems	5	41.7%	7	58.3%	12
Mathematical Sciences	13	30.2%	30	69.8%	43
Mechanical Engineering		0.0%	17	100.0%	17
NJ School Of Architecture	4	22.2%	14	77.8%	18
Physics	5	27.8%	13	72.2%	18
School Of Management	5	26.3%	14	73.7%	19
<b>Total</b>	<b>60</b>	<b>20.2%</b>	<b>237</b>	<b>79.8%</b>	<b>297</b>

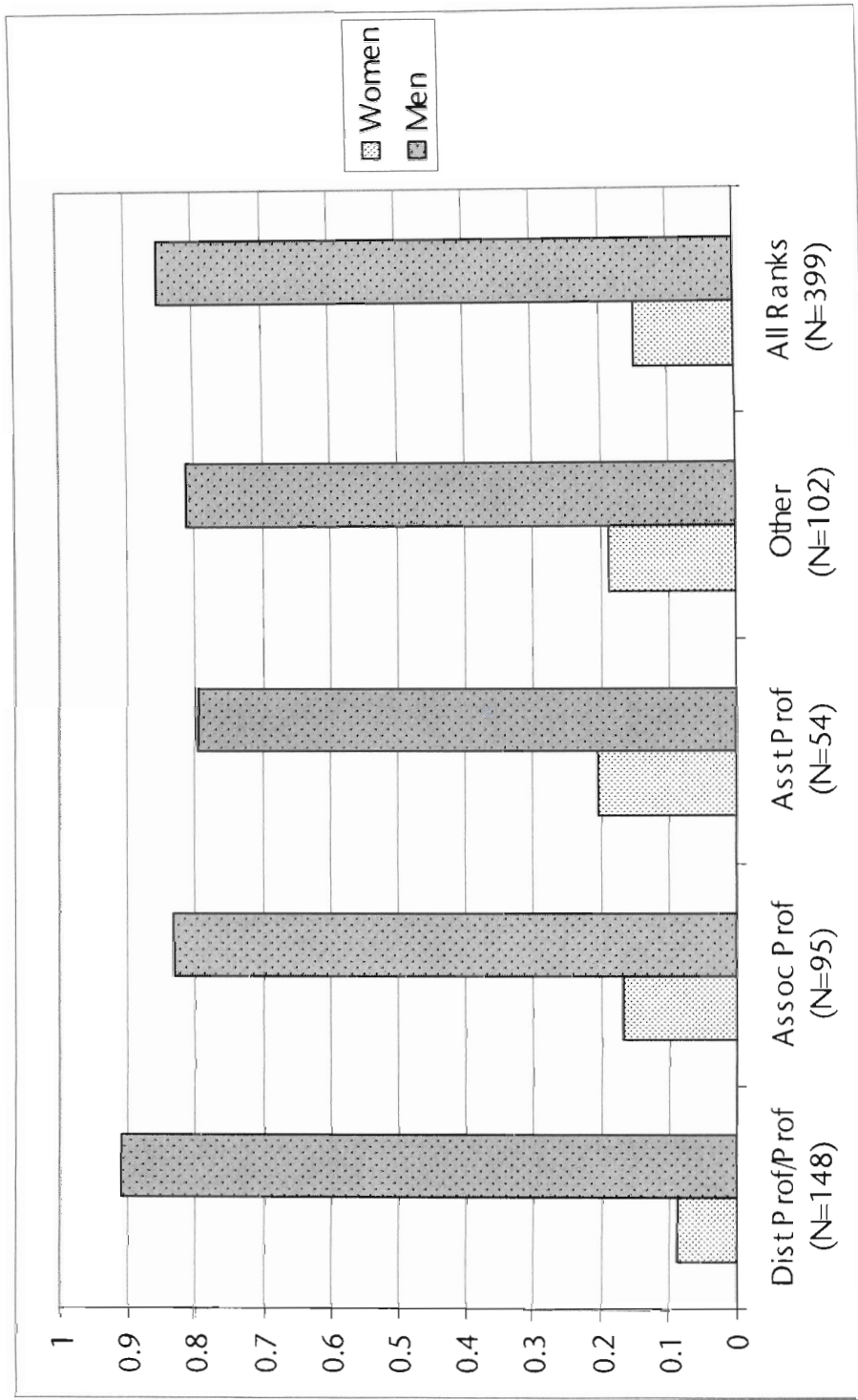
**Percentage Distribution by Faculty Rank for Selected Universities: Fall 2006\*\***

School	Dist/Full Professor		Associate Professor		Assistant Professor		Total		Tenured		Women Faculty	
	N	%	N	%	N	%	N	%	N	%	N	%
NJIT	148	38%	95	26%	54	15%	297		237	80%	39	13%
Georgia Tech	372	45%	245	29%	209	25%	826		564	68%	141	17%
Michigan Tech	97	31%	128	41%	77	25%	302		224	74%	64	21%
Rochester Inst of Technology	195	28%	237	33%	266	38%	698		480	69%	214	31%
Texas Tech	281	26%	318	29%	327	30%	926		541	58%	283	31%
Virginia Tech	497	37%	423	32%	274	21%	1194		876	73%	307	26%
Clarkson University	56	34%	57	35%	39	24%	152		107	70%	23	15%
Rensselaer Poly Tech	169	43%	112	29%	109	28%	390		286	73%	82	21%

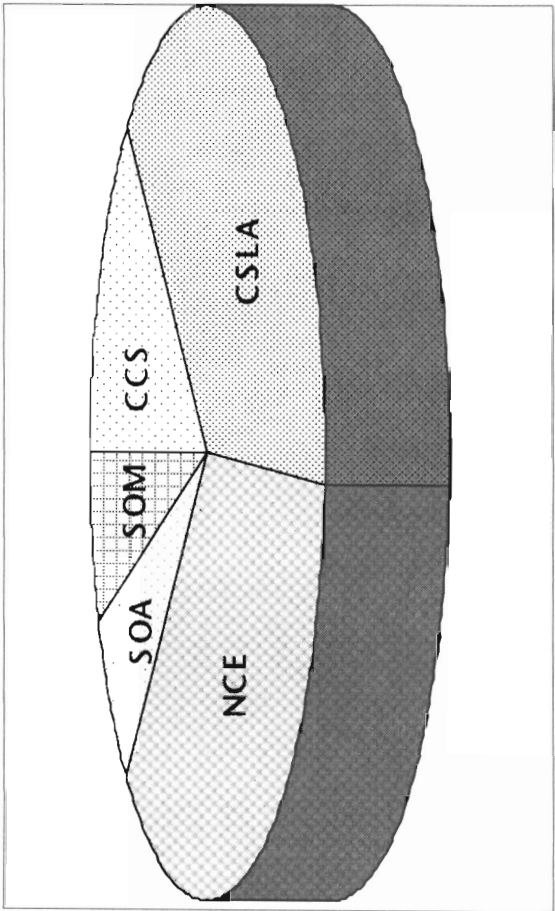
\*\*Source Academe March-April 2007



# NJIT Rank by Gender: Fall 2006



# **NJIT Full Time Teaching Faculty Percentage by College: Fall 2006**



School	#	%
CCS	52	13.0%
CSLA	152	38.1%
NCE	144	36.1%
SOA	27	6.8%
SOM	24	6.0%
Grand Total	399	100.0%



**6B. Approve Resolution to Establish  
the Department of Biological  
Sciences**

COLLEGE OF SCIENCE & LIBERAL ARTS

## Proposal to Establish a Department of Biological Sciences at NJIT

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2. Biological Sciences Presence at NJIT.....	3
2.1 The Undergraduate Biology Program.....	3
2.2 The Graduate Biology Program.....	4
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3. The Proposed Department of Biological Sciences at NJIT.....	4

### Executive Summary

The efforts in Biological Sciences education and research at New Jersey Institute of Technology (NJIT) are currently centered in a division located within the Department of Mathematical Sciences. We propose that the division be reorganized into a department: The Department of Biological Sciences under the College of Science and Liberal Arts. This department will build on the existing strengths of the current NJIT biology faculty in quantitative and computational biology, with emphasis on membrane and cellular biophysics, computational neuroscience, and computational molecular biology. The new department will stress emphasis on interdisciplinary and inter-college collaboration, and act as a catalyst for excellence in biological sciences education and research within CSLA, while promoting more effective coordination of life sciences initiatives at NJIT. This reorganization also coincides with the planned construction of a stem cell research facility at NJIT.

The Department of Biological Sciences will be committed to an interdisciplinary model of research and teaching. Within NJIT, there will be opportunities for joint-appointments between members of the Department of Biological Sciences and other academic units such as Mathematical Sciences, Biomedical Engineering, Chemistry and Environmental Science, Physics, Computer Science, Information Systems, and possibly others. Collaborations among NJIT departments and other national and international academic/research organizations will be of natural importance in the continued development and growth of the proposed department. The formation of the Department of Biological Sciences is important in further elevating NJIT's visibility as a comprehensive research university and as a leader in research and education in the life sciences.

The current degrees offered by in Biological Sciences include BA-BS, MS, and PhD. These degrees are awarded jointly with Rutgers-Newark. This proposal call for no new degrees and the proposed new department will remain federated with Rutgers-Newark. The



new department will follow the guidance provided in the NJIT Faculty Handbook regarding of establishment of departmental governance and formation of a Promotion and Tenure Committee.

This document begins with introductory remarks about the evolving field of biological sciences, followed by a description of NJIT's presence in Biological Sciences, and concludes with a proposal to create a Department of Biological Sciences within the College of Science and Liberal Arts at NJIT. We believe the new Department of Biological Sciences will benefit the university, its students, and its faculty and will receive wide support for the implementation of its intended goals. It is expected that the Department would formally come into existence on July 1, 2007.

## **1. Introduction**

The 21<sup>st</sup> Century is being called the Century of Biology. With the sequencing of the human genome, as well as the genomes of other animals, mankind is at the threshold of significant and far-reaching discoveries in the life sciences. In addition to the vast discoveries over the past several centuries, new experimental and quantitative techniques and technologies will profoundly change how we study and view biological systems. There are many unanswered questions that are "bio" related and many challenges that will decide our quality of living in the future. Biological issues influence many aspects of our lives from health concerns and treatment of diseases to effects of the environmental impact on our society from oil spills to polluted streams to endangered species. And, quick ecological fixes may not always be the optimal solutions.

The increased mathematization of the engineering disciplines, the sciences, medicine, and even the social sciences, has introduced a new era in dealing with contemporary biology questions. While both old and new experimental techniques will continue to isolate and identify mechanisms responsible for many of these phenomena, a complete and insightful understanding of them must rely on more sophisticated qualitative and quantitative methods. For many of these complex systems, mathematical modeling combined with improved mathematical and advanced computational methods is the key to fully understanding them. These complex problems lead to new types of models that require the development of new techniques to solve them, thereby advancing the quantitative sciences as well as coming to better understanding of the phenomena being studied. State-of-the-art computer hardware and software, including networked computer clusters, are essential for carrying out the computer-intensive computations required to attack these complex problems. Research and education methodologies continue to evolve as this technology evolves.

Biology is the unifying category for all life sciences and it continues to be the most common education path for students who seek to enter the health and medical fields, those who aim for a career in the pharmaceutical and biotechnology industries, or for the scientists who wish to focus on research in life sciences. The research activities in bio-related fields at NJIT are some of the most diverse in New Jersey, and the continued expansion of research

expertise in these areas will enhance the health and safety of our society, while providing further understanding and better tools for improving treatments in medicine and health.

## **2. Biological Sciences Presence at NJIT**

NJIT has been working steadily and deliberately on establishing its presence in biological sciences for the past decade. The NJIT/Rutgers-Newark Federated Department of Biological Sciences was founded under the Memorandum of Understanding signed by President Fenster of NJIT and Provost Samuels of Rutgers-Newark, dated September 23, 1997. Under this agreement, NJIT was approved to offer Biology degrees jointly with Rutgers-Newark, and committed to hiring three new faculty members, each with a primary appointment in a department at NJIT and a joint appointment in the Federated Department. Presently, there are four NJIT faculty members in the Federated Department of Biological Sciences. They are:

- Jorge Golowasch
- Gareth Russell
- G. Miller Jonakait
- Farzan Nadim

The structure of the Federated Department of Biological Sciences within the two universities has enabled NJIT to offer five degree programs in Biology. These degrees include the B.A., B.S., M.S., and Ph.D. in Biology and the M.S. in Computational Biology. All diplomas issued to students in the Federated Department carry both NJIT and Rutgers-Newark names and logos. The total NJIT enrollment in AY06/07 in these programs is 118 students (109 undergraduate, six masters and three doctoral).

There are also a number of other established and emergent bio-related majors and options within NJIT in the science, engineering, and computing disciplines. Similarly, there is a thriving, well-funded research program across the university, particularly within the Department of Biomedical Engineering, Division of Biological Sciences, and Department of Mathematical Sciences.

### **2.1 The Undergraduate Biology Program**

Most NJIT Biology students are enrolled in the B.S. degree program. The B.S. in Biology was developed primarily for NJIT students and features a much more demanding curriculum in the areas of mathematics, physics, and computer science than the B.A. degree (practically all Rutgers-Newark Biology undergraduate students are pursuing the B.A.). This program requires 21 credits of mathematics and six credits of computer science. In contrast, the B.A. degree has only the GUR requirements of six and three credits, respectively.

There has been consistent growth in biological sciences enrollment at the undergraduate level. There are currently 109 undergraduate Biology majors at NJIT compared to only 26 in fall 2000. The growth and success are attributed, in part, to the

excellent stewardship of the program by the Mathematical Sciences Department. Table 1 provides undergraduate enrollment details from 2000-2006.

Table 1. Undergraduate enrollment in the Biology program							
	<b>F2000</b>	<b>F2001</b>	<b>F2002</b>	<b>F2003</b>	<b>F2004</b>	<b>F2005</b>	<b>F2006</b>
<b>BA/BS</b>	26	26	37	46	74	80	109

The growth trend appears to be continuing and can be seen in prospective students' interest in this major. Therefore AY07/08 there are 172 NJIT applicants for the B.S. and B.A. in Biology (primarily B.S.) of which 117 have been accepted (compared to 146 / 120 at this time last year). It is important to note that so far this year, the Biology program has the second highest number of applications among all NJIT programs. Although it is premature to estimate the admissions yield for next year, there is evidence that we will attract a large and strong incoming Fall 07 freshman class in Biology.

## 2.2 The Graduate Biology Program

Student applications for the Master's program in Biology have traditionally been processed through the Rutgers-Newark system and Master's degree students in the Computational Biology program have been processed through NJIT. Starting in Fall 05, NJIT began to admit Master's students in Biology and there are currently six students enrolled in that program. In the doctoral program, the Rutgers Ph.D. students mentored by NJIT faculty in the Federated Department of Biological Sciences are counted towards the total number of Ph.D.s for NJIT. Additionally, NJIT has also admitted students into the Biology doctoral program. The current number of enrolled Biology doctoral students is three.

## 2.3 Other Bio-related Programs and Options at NJIT

In addition to the Biology degrees (BS-BA/MS/PhD-CSLA), there are a number of bio- and health-related programs and options within CSLA, NCE, and CCS. These are: Biochemistry (option within BS in Chemistry-CSLA), Biophysics (option within BS in Physics-CSLA), Biostatistics (option within MS in applied statistics-CSLA), Computational Biology (MS-CSLA), Mathematical Biology (option within BS in Mathematical Sciences-CSLA), Public Health (MS-CSLA), Biomedical Engineering (BS/MS/PhD-NCE), Pharmaceutical Engineering (MS-NCE), Bioinformatics (BS/MS-CCS).

## 3. The Proposed Department of Biological Sciences at NJIT

There is a need to establish a home base for Biological Sciences at NJIT to promote the strengthening of academic and administrative oversight for the academic programs, the quality of services offered to existing students (such as mentoring and academic advising), the recruitment of new students, and the expansion of research opportunities. The proposed Department of Biological Sciences will manage all degree programs in Biology at NJIT and will continue its drive to increase the quantity and quality of the student body as well as substantially expand the breadth and depth of biology courses on the NJIT campus. The

department will also play an active role in promoting collaborative and interdisciplinary curricula and degree programs across the NJIT campus.

It is expected that the new department will comprise the administrative structure, personnel, and facilities necessary to attract high quality students and faculty, and to offer excellent academic programs and services. The federation with the Rutgers' Department of Biological Sciences is extremely valuable to both universities and the degree programs will continue to be coordinated jointly and have consistent requirements at both institutions.

The governing structure of the new department will be consistent with the NJIT norms and will operate under bylaws in accordance with the College, university and Faculty Handbook guidelines, as well as the federation agreement with Rutgers-Newark. The Promotion and Tenure (P&T) Committee of the department will be established to include all faculty members with the rank of full professor or above. If the case where the department does not have a minimum of three such faculty members, additional CSLA faculty, those jointly appointed as well as other, will be considered upon the recommendation of the chair and the dean to establish the three-person minimum, in accordance with NJIT rules and regulations.

The establishment of the Biological Sciences Department is not expected to have any adverse impact on NJIT resources such as the library or computing services. The current level of such services is satisfactory and, additionally, the federation agreement with Rutgers-Newark allows the NJIT biology faculty and students the use of the Rutgers University library resources, which are quite extensive in area of life sciences.



## STATEMENT

The NJIT/Rutgers-Newark Federated Department of Biological Sciences was established in 1997 under a Memorandum of Understanding signed by President Fenster of NJIT and Provost Samuels of Rutgers-Newark. Five joint degrees are offered under the umbrella of that agreement – the B.A., B.S., M.S. and Ph.D. in Biology and the M.S. in Computational Biology. NJIT has a Division of Biological Sciences within the Department of Mathematical Sciences. Enrollment in the NJIT programs has grown steadily and for the 2006 – 2007 academic year, there is a total enrollment of 118 students. (109 undergraduate, 6 masters, and 3 doctoral).

With the steadily increasing enrollment in NJIT's biology programs, the steadily increasing interest in all areas related to the biological and life sciences and the planned construction of a stem cell research facility at NJIT, it is now time to reorganize the existing division and create a Department of Biological Sciences. Furthermore, a Department of Biological Sciences is important in further elevating NJIT's visibility as a comprehensive research university and as a leader in research and education in the life sciences. The Department of Biological Sciences will be committed to an interdisciplinary model of research and teaching. The proposed new department will remain federated with Rutgers-Newark; no new degrees are being proposed.

The establishment of the Department of Biological Sciences is not expected to have any adverse impact on NJIT resources such as the library or computing services. The current level of such services is satisfactory and the federation agreement with Rutgers-Newark allows the NJIT biology faculty and students continued use of the Rutgers-Newark resources which are quite extensive in the life sciences areas.

The establishment of the Department of Biological Sciences has the support of the Committee on Academic Affairs and the university's administration. It was approved by the faculty as a whole at the meeting on May 2, 2007.

## **Resolution to Establish the Department of Biological Sciences**

WHEREAS, the board of Trustees has examined materials provided by the President of the University relative to the formation of the College of Computing Sciences; and

WHEREAS, the Board recognizes that NJIT seeks to be a leader in biological and life sciences; and

WHEREAS, the Board is satisfied that the proposed new college has the support of the faculty of the Committee on Academic Affairs and the university's administration; and

WHEREAS, the establishment of the Department of Biological Sciences was approved by the faculty as a whole at the meeting on May 3, 2007;

NOW THEREFORE BE IT RESOLVED, the Board of Trustees approves the establishment of the Department of Biological Sciences effective July 1, 2007.

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Holly C. Stern, Esq.  
General Counsel and  
Secretary to the Board of Trustees  
New Jersey Institute of Technology

June 7, 2007



**6C. Approve Resolution for Change  
of Nomenclature for the BS in  
Management to the BS in  
Business**

## STATEMENT

The School of Management has requested, and the Committee on Academic Affairs and the Faculty as a whole have approved, a nomenclature change for the B.S. in Management to the B.S. in Business.

The nomenclature change will better reflect the shift from an emphasis on functional areas of Management to an emphasis on the growing importance of cross-functional integration around business ideas. It will help the School to clarify and emphasize what has long been special about the School of Management i.e. providing an education in the technological languages, systems and platforms that are becoming the critical organizing force within and between organizations. It will also help to resolve any misunderstanding about the term “management” as it is often perceived of by first-time full-time freshman and community college transfer students.

This nomenclature change will better reflect the scope of the program as it is currently offered and will broaden its appeal to incoming undergraduate students.



**Resolution to Change the Nomenclature for the  
B.S. in Management to the B.S. in Business**

WHEREAS, the Board of Trustees has examined materials provided by the President of the University relative to a proposed nomenclature change for the B.S. in Management to the B.S. in Business; and

WHEREAS, the Committee on Academic Affairs and the Faculty as a whole have approved this nomenclature change; and

WHEREAS, the Board is satisfied that the proposed nomenclature change requires no additional resources; and

WHEREAS, the Board of Trustees attests to the foregoing;

NOW THEREFORE BE IT RESOLVED, that the Board of Trustees approves the nomenclature change for the B.S. in Management to the B.S. in Business.

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Holly C. Stern, Esq.  
General Counsel and  
Secretary to the Board of Trustees  
New Jersey Institute of Technology

June 7, 2007

**6D. Approve Resolution to  
Authorize Exclusive Licensure  
of University Intellectual  
Property to the Iowa Corn  
Promotion Board (“ICPB”)**



## **STATEMENT OF INFORMATION FOR EXCLUSIVE LICENSE OF NJIT PATENTS**

### **Introduction**

As part of its Intellectual Property ("IP") Program, NJIT assesses the commercial value of its patents to determine the most appropriate avenue to achieve a return on its investment. Options include the exclusive licensing of patent rights.

The Iowa Corn Promotion Board ("ICPB") has expressed an interest in acquiring an exclusive license to certain NJIT pending patent applications in accordance with the commercialization and licensing rights granted to it under the terms of a sponsored research agreement. The proposed license would be for the life of each patent issued in exchange for a minimum of 20% of all gross royalties ICPB receives from any and all sublicenses of the technology. In addition, ICPB will pay for all upfront costs associated with the filing, prosecution, maintenance and enforcement of all U.S. and foreign patent rights. NJIT retains the right to use the technology for research and educational purposes and retains a commercial use license with the right to license or sublicense to third parties in those fields of use in which ICPB has been unable to use or sublicense. A list of the individual pending patent applications follows.

As the exclusive license of the pending patent applications for the life of the patent essentially represents a disposition of NJIT property, the Board of Trustees is being asked to approve the same. A Resolution has been prepared for consideration.

### **Background on the Iowa Corn Promotion Board**

The Iowa Corn Promotion Board (ICPB) is composed of 17 corn growers, elected by their peers, who direct funds collected through the Iowa Corn Checkoff Program - a program designed to promote Iowa's corn industry. The Iowa Corn Checkoff Program, established in 1977, has been a model for corn Checkoff Programs in 18 other states. The Checkoff Program collects one-half cent for each bushel of Iowa corn sold into commercial channels. The ICPB, and the growers it represents, are actively working to create an economic climate in which the Iowa corn industry will flourish through research, market development and education. The Iowa checkoff invests approximately \$1 million annually in research to develop new products from corn, emphasizing especially research that can lead to value-added opportunities.

Since 2003, ICPB has been sponsoring research at NJIT related to use of corn products to replace petroleum in many industrial applications specifically exploring (i) low molar mass corn-derived (sugar-derived) additives for the commercial polymer industry; (ii) commercially attractive hydrogels based on itaconic acid; and (iii) use of corn-derived chemistries to improve the performance of commercial polymers through antiplasticizer and cross-linking effects.

### **Current Purchase Offer**

ICPB has presented an offer to NJIT for the exclusive license of four (4) pending patent applications, with right to sublicense, in return for a minimum of 20% of all gross royalties ICPB receives from any and all sublicenses of the technology. In addition, ICPB will pay for all upfront costs associated with the filing, prosecution, maintenance and enforcement of all U.S. and foreign patent rights.

The net amount derived from the transaction shall be shared with the inventors pursuant to NJIT's current Patent Policy. One of the inventors on three of the patents is a visiting researcher from the University of Sao Paulo and pursuant to a collaboration framework agreement NJIT will equally share royalties received with the University of Sao Paulo and they will be compensate their inventor pursuant to their policies.

**List of Disclosures And Pending Patent Applications**

- (i) NJIT Patent File #06-044, entitled “Esters of Anhydrosugar Alcohols as Plasticizers”, Utility: 11/445,027, Filed: June 1, 2006, Inventors: Anthony J. East, Michael Jaffe, Yi Zhang & Luiz Catalani;
- (ii) NJIT Patent File #05-001, entitled “Ethers of Bisanhydrohexitols”, Provisional: 60/810,060, Filed: June 1, 2006, Inventors: Anthony J. East, Michael Jaffe, Yi Zhang & Luiz Catalani;
- (iii) NJIT Patent File #05-003, entitled “Thermoset Epoxy Polymers From Renewable Resources”, Provisional: 60/810,512, Filed: June 2, 2006, Inventors: Anthony J. East, Michael Jaffe, Yi Zhang & Luiz Catalani;
- (iv) NJIT Patent File #06-043, entitled “Ultraviolet Absorber For Cosmetics and Polymeric Materials”, Utility: 11/355,936, Filed: February 16, 2006, Inventors: Anthony J. East, Yi Zhang & Michael Jaffe



**RESOLUTION TO AUTHORIZE EXCLUSIVE LICENSURE OF  
UNIVERSITY INTELLECTUAL PROPERTY**

**WHEREAS**, the Board of Trustees of New Jersey Institute of Technology is empowered to direct and control the disposition of NJIT intellectual property if deemed necessary or advisable to carry out the goals of NJIT; and

**WHEREAS**, *Administration recommends the exclusive licensing of certain identified NJIT Intellectual Property to the Iowa Corn Promotion Board in exchange for a share of royalties received through the Iowa Corn Promotion Board's sublicensing of the technology; and*

**NOW THEREFORE BE IT RESOLVED** by the Board of Trustees of New Jersey Institute of Technology that the exclusive licensing of the Patents by NJIT is hereby approved; and

**THEREFORE BE IT FURTHER RESOLVED** by the Board of Trustees of New Jersey Institute of Technology that the Senior Vice President for Research and Development is hereby authorized to execute any and all agreements or documents on behalf of NJIT to consummate the licensing transaction.

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Holly C. Stern, Esq.  
General Counsel and  
Secretary to the Board of Trustees  
New Jersey Institute of Technology

June 7, 2007

**6E. Approve Resolution to Approve  
Contract with the New Jersey  
Department of Community  
Affairs for Rural Sustainability  
Demonstration Studio**



## RESOLUTION

**Whereas**, New Jersey Institute of Technology (NJIT) desires to apply for and obtain a grant from the New Jersey Department of Community Affairs for approximately \$100,000 to carry out a project to explore the rural sustainability of hamlet-based growth patterns which support agricultural retention for the Delaware Township.

**Be it therefore RESOLVED**,

- 1) that New Jersey Institute of Technology does hereby authorize the application for such a grant; and
- 2) recognizes and accepts that the Department may offer a lesser or greater amount and therefore, upon receipt of the grant agreement from the New Jersey Department of Community Affairs, does further authorize the execution of any such grant agreement; and also, upon receipt of the fully executed agreement from the Department, does further authorize the expenditure of funds pursuant to the terms of the agreement between New Jersey Institute of Technology and the New Jersey Department of Community Affairs.

**Be it further RESOLVED**, that the persons whose names, titles, and signatures appear below are authorized to sign the application, and that they or their successors in said titles are authorized to sign the agreement, and any other documents necessary in connection therewith:

\_\_\_\_\_  
/s/

\_\_\_\_\_  
**Donald H. Sebastian**

(type or print name)

**Senior Vice President for  
Research and Development**

(title)

### CERTIFICATION:

I, Holly C. Stern, the Secretary to the Board of Trustees, of New Jersey Institute of Technology hereby certify that at a meeting of the Board of Trustees held on June 7, 2007, the above Resolution was duly adopted.

\_\_\_\_\_  
Holly C. Stern, Esq.  
General Counsel and  
Secretary to the Board of Trustees  
New Jersey Institute of Technology

June 7, 2007  
Board Resolution 2007-18

## **7A. Report of Gifts and Fund Raising Activities**



# **Summary - 2005 (7/1/2004 to 4/30/2005) vs 2006 (7/1/2005 to 4/30/2006) vs 2007 (7/1/2006 to 4/30/2007)**

## **Comparison of Total Giving Year to Date:**

	2005	2006	2007
To All Sources:	\$4,855,911	\$6,239,285	\$6,938,787
To All Sources without Gifts in Kind:	\$3,466,199	\$4,333,265	\$5,839,724
Matching Gifts:	\$117,572	\$123,305	\$134,265

## **Comparison By CFAE Type Year To Date for 2005, 2006 and 2007:**

Category	2005			2006			2007		
	\$ Giving	%	# Donors	\$ Giving	%	# Donors	\$ Giving	%	# Donors
Alum	\$987,211	20.33	4,091	\$1,209,145	18.70	3,529	\$1,249,878 <sup>1</sup>	18.01	3,793
Corp	\$2,723,245 <sup>2</sup>	56.08	389	\$3,477,683 <sup>3</sup>	53.78	402	\$2,888,750 <sup>4</sup>	41.63	503
Foundations	\$803,770	16.55	43	\$809,041	16.02	41	\$1,090,755 <sup>5</sup>	15.72	37
Friends	\$202,069	4.16	378	\$371,079	5.74	404	\$758,698 <sup>6</sup>	10.93	501
Other	\$139,616	2.88	24	\$372,337	5.76	29	\$950,706 <sup>7</sup>	13.70	36
Totals:	\$4,855,911	100.0	4,925	\$6,239,285	100.0	4,405	\$6,938,787	100.0	4,870

## **Endowment:**

Endowment, Life Income and Irrevocable Expectancies	April FY '07	Year To Date	Total*
Revocable Expectancies	\$58,114	\$2,070,654	\$72,903,000*
			\$10,842,365

\*Includes accumulated capital gains received on endowment

<sup>1</sup> Alumni – McGowan \$105K, Glass \$100K, Saporito \$75K, Dorman \$73K, Fleisher \$63k

<sup>2</sup> Corporations – Anonymous \$1.2M

<sup>3</sup> Corporations – Anonymous \$1.8M

<sup>4</sup> Corporations – Anonymous \$870K

<sup>5</sup> Foundations – Stabile \$250K

<sup>6</sup> Friends – York \$300K, Morse \$110K, Metz \$100K

<sup>7</sup> Other – Student Senate \$300K, Concrete Industry Mgt \$100K, Vanguard \$100K

# HONORS COLLEGE SCHOLARSHIP ENDOWMENT CAMPAIGN

## Campaign Update

April 30, 2007

### Campaign Purpose and Status

The purpose of the ADHC Scholarship Endowment Campaign is to generate resources to expand enrollment in the Dorman Honors College by 100 students. The Campaign was formally launched at the annual "Celebration" dinner in November 2004 when National Campaign Chair J. Robert Hillier publicly announced the \$20 million goal. Campaign victory was announced during Board Day, April 11, 2007, and celebrated with a special dinner that evening.

<u>Campaign Progress</u>	<u>3/31/07</u>	<u>4/30/07</u>
• <b>Cash in Hand:</b>	\$ 8,472,863	\$ 8,503,218
• <b>Pledges:</b>	\$14,339,950	\$14,324,315
• <b>Total:</b>	\$22,812,813	\$22,827,533

### Campaign Related Activities

- Five Steering Committee meetings since 1/04
- Two small cultivation luncheons and one dinner in California – 12 alumni attendees
- Six "Meet the President" receptions in Boston, California, Philadelphia and New Jersey
- Celebration 2005 Executive Dinner Committee meeting in May 2005
- DC alumni reception 6/05 in conjunction with ADHC student seminar – 3 alumni attendees
- ADHC Alumni Association reception on 7/9/05 – 40 alumni attendees
- Campaign Chair Bob Hillier hosted reception in Princeton 7/26/05
- Honors College 10-Year Anniversary Celebration on 10/8/05
- Trip to Los Angeles, California 10/05
- Regional trip to Washington DC 10/05
- Roberta Renard hosted reception at home 10/05
- Campaign Chair Bob Hillier hosted reception at home 11/05
- Trip to TX 11/05 – included Henderson alumni reception, 5 cultivation/solicitation meetings
- Trip to FL 1/06 – included 8 cultivation/solicitation meetings
- Greek-American Alumni Reception 1/18/06
- Trip to CA 2/06 – included 12 cultivation/solicitation meetings
- Trip to Washington DC 3/06 – included 4 cultivation/solicitation meetings
- Trip to TX 3/06 – included 7 cultivation/solicitation meetings
- Six additional cultivation/solicitation meetings in the Tri-State area 2/06 – 3/06
- Trip to MA 6/06 – included 7 cultivation/solicitation meetings
- Trip to FL 9/06 – included 3 cultivation/solicitation meetings
- Dorman challenge included as giving option in 9/06 phonathon, faculty/staff campaigns
- Trip to TX 10/06 – included 6 cultivation/solicitation meetings
- Trip to CA 10/06 – included 5 cultivation/solicitation meetings
- Trip to MA 10/06 – included 5 cultivation/solicitation meetings
- Trip to CA 3/07
- Dorman Challenge – targeted mailings, phonathon, e-newsletter; e-solicitation 10/06 through 4/07
- Mass appeal – completed via e-solicitation 4/07
- Victory celebration held 4/11/07

### One to One Visits

- 141 individual or corporation cultivation/solicitation meetings; 79 prospects have been solicited

### Marketing and Communications

- Campaign website ([www.njit.edu/honorscampaign](http://www.njit.edu/honorscampaign)) launched 2/05
- Print newsletter produced 11/06
- Included in 1/07 and 4/07 issues of *The Edge*

### Upcoming Activities and Events

- Campaign report planned for fall 2007

# **HIGHLANDERS ATHLETICS CAMPAIGN**

**Update Internal-Confidential May 16, 2007**

## **Campaign Purpose**

The purpose of the Highlanders Athletics Campaign is to raise funds necessary to upgrade selected athletics facilities and increase the amount of money available for athletic scholarships. \$5 million goals has been set, which will provide \$3 million for athletics facilities, \$1.5 million for athletic scholarships and \$500,000 for program support.

<b><u>Campaign Progress</u></b>	<b><u>3/31/07</u></b>	<b><u>4/30/07</u></b>
• <b>Cash in Hand</b>	<b>\$1,865,036</b>	<b>\$1,878,106</b>
• <b>Balance of Pledges</b>	<b>\$1,670,030</b>	<b>\$1,768,573</b>
• <b>Total</b>	<b>\$3,535,066</b>	<b>\$3,646,679</b>

## **NAMING OPPORTUNITIES TAKEN**

Basketball Court	\$500,000	TAKEN by Zoom & Bruce Fleisher
Score Board	\$100,000	TAKEN by Pepsi Cola
Executive Director Office	\$100,000	TAKEN by Vincent Naimoli
Electronic Message Scoreboard	\$ 50,000	TAKEN by King and Helen Moy

## **Campaign Activities**

- **Upcoming:**
- Public announcement for the Campaign is scheduled for the Athletics Hall of Fame dinner in September of 2007
- The new Campaign Director, Darlene Lamourt joined NJIT in January has been focusing on bringing the Campaign to closure by scheduling one on one visits and increasing membership and gifts to the Highlander Athletic Fund.
- In March, Vice President Dees and Vice President Bloom traveled to Los Angeles, CA area and met with several athletic alumni for the first time.
- On June 7, Jay Haase`75 will host a fencing/volleyball, yachting, and golf and tennis dinner in Eberhardt Hall. Over 400 alumni have been invited and special guest Yefim Litvan; the new fencing coach, will be the featured guest.
- The Golf Outing brochure mailed to 2,500 prospects
- An E-Solicitation to all athletic alumni scheduled for June 15, 2007.
- The Gene Schmidt baseball brochure is in the final stages, target completion date June 2007.
- In June, a Swanson Fund appeals to the classes of `53, `54 and `55.

## **Recent Activities:**

- The Tampa Bay Devil Rays Annual Alumni Baseball game event drew 167 participants on April 22, 2007. Vince and Lenda Naimoli hosted a reception at their home on April 21, targeting high-end Leadership Circle donors and athletic alumni. Twenty-two people

attended. Bernie and Beverly Lubetkin committed a \$100,000 bequest to the Athletic Campaign

- In March, James Boyle signed an appeal letter which accompanied the new Highlander Athletic Fund Brochure and mailed to all athletic alumni
- On May 4<sup>th</sup>, a Press Conference was held to welcome new fencing coach, Yefim Litvan, former head coach of fencing at Rutgers; Litvan coached the US team in two Olympics and led Rutgers to 13 NCAA berths .

#### **On Going:**

- Alumni visited during the Florida Soccer Reunion on March 9, 10 and 11
- The Athletic Director visited several alumni in Northern California.
- The Bob & Dot Swanson Athletics Scholarship Fund lunched with a target goal of \$250,000. To date, \$67,255 in gifts, matching gifts and pledges raised from 66 donors.
- The Mal Simon Soccer Fund has raised \$461,045 from 85 donors. During the summer of '07, "Sons of Simon" alumni will organize two gatherings to create an endowed scholarship in honor of Mal.
- Ham Bowser '52 and Dona Hausser, the wife of the late Paul Hausser, have initiated a campaign for the Paul Hausser Fencing Fund. The brochure is completed and has been mailed to all fencers and baseball players who were coached by Paul Hausser. The Hausser Fund has raised \$25,150 from twelve donors. A dinner with a fencing focus and hosted by Jay Haase, who signed the appeal letter for the Campaign, is scheduled for June 7, 2007
- Pi Kappa Phi fraternity brothers, Class of '65, considering establishing an endowed Fitzgerald Scholarship for basketball at their reunion in Nov '07. Jim Juliano '65 has indicated that this will be part of their website and he will be pursuing it with fellow fraternity brothers.
- **The 2007 Highlander Golf Outing is set for Monday October 1, 2007.** Save the Date Cards were mailed at the end of Jan 2007. Brochure mailed mid May 2007.
- Several meetings with baseball alumni have taken place to determine goal of campaign and to seek leadership gifts. Nine donors have contributed \$15,095 as 4/30/07.

#### **One on one visit:**

- To date, 200 prospects have been contacted
- There have been over 100 personal visits and some multiple times
- Follow-up solicitation visits continue to be scheduled



## **7B. Fund Raising Growth Strategies**

**Development Growth Strategies**  
**May, 2007**

Plan for a Comprehensive Campaign

- Darlene Lamourt hired as the Campaign Director: **January 8, 2007**
- Formal wealth screening of entire database completed by Wealth Engine. Further screening conducted on an on-going basis.
- Needs assessment committee chaired by Bob Lynch held meeting with Provost, Deans and NAC committee with a presentation by outside consultants – Changing Our World : **March 22<sup>nd</sup>, 2007**
- Call for proposals memo sent from Provost to faculty and professional staff: **April 4, 2007**
- Proposals from faculty and professional staff due to Needs Assessment Committee : **May 15, 2007**
- Outside counsel to conduct Feasibility Study – Changing Our World hired. **June 1, 2007**
- Seek, qualify and cultivate prospects capable of \$5 million nucleus gifts to launch a comprehensive campaign: **Ongoing**
- Formalize naming opportunities and endowment thresholds policy and procedures: June **2007**
- Darlene Lamourt participated in the JCA Webinar: Preparing Your Operations for a Capital Campaign: **May 8, 2007**
  - ✓ Invest in the right personnel to cultivate relationships and manage a capital campaign.
  - ✓ Recruit Volunteers and motivate board members to participate.
  - ✓ Have a well-organized support system to maximize the results of your valuable volunteers and staff.
  - ✓ Recognize the impact on operations for the different stages of a campaign, accounting considerations and more.
- Darlene Lamourt attended the CASE Campaign Strategies Conference: **May 15-17, 2007, San Antonio, TX**
- With the oversight and approval of the President and a dedicated Board of Trustees and Board of Overseers, committed to leadership of a comprehensive campaign, create a “Go/No-Go” Strategy leading toward the quiet phase of a comprehensive campaign” **TBD**

- “Go/No-Go” and Goal will be determined by the results of the feasibility study:  
**TBD**
- If a Go, the president, Provost and key deans will vet the results of the needs assessment committee and come to a determination of which needs are critical to the future of the University and its ability to fulfill its educational mission:  
**December 2007**
- Identify and recruit volunteer leaders to form the nucleus of the Campaign Steering Committee: **TBD**
- Create a compelling case statement: **TBD**
- Begin Quiet Phase: **TBD**
- Public Announcement: **TBD**

## **Chairperson's Closing Statement**



**BOARD OF TRUSTEES**

**RESOLUTION RE: CLOSED SESSION TO DISCUSS PERSONNEL MATTERS,  
REAL ESTATE AND CONTRACT MATTERS.**

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**WHEREAS, THERE ARE MATTERS THAT REQUIRE CONSIDERATION BY  
THE BOARD OF TRUSTEES THAT QUALIFY UNDER THE OPEN PUBLIC  
MEETINGS ACT FOR DISCUSSION AT A CLOSED SESSION.**

**NOW, THEREFORE, BE IT RESOLVED, THAT THE BOARD OF TRUSTEES  
SHALL HAVE A CLOSED SESSION TO DISCUSS MATTERS INVOLVING  
PERSONNEL, REAL ESTATE AND CONTRACTS TO TAKE PLACE ON  
JULY 19, 2007 AT 9:30 AM, EBERHARDT HALL NJIT ALUMNI  
CENTER BOARD ROOM.**