MINUTES
of the
Board of Control
Michigan Technological University
Houghton, Michigan

Meeting of
December 10, 2010
Table of Contents

I. Approval of Agenda 9287

II. Opening Remarks
   A. Chair’s Comments 9287
   B. President’s Comments 9289

III. Committee Reports
   A. Academic Affairs Committee 9291
      - Provost Report 9293
   B. Finance and Audit Committee 9296
      - CFO Report 9297

IV. Consent Agenda
   A. Approval of Minutes 9299
   B. Degrees in Course 9299
   C. Gifts 9305
   D. Resignations, Retirements & Off Payroll 9306

V. Action/Discussion Items
   A. Emeritus Rank 9306
   B. Resolution for Ruth Reck 9306
   C. Resolution for Russell Gronevelt 9308
   D. Appointment with Tenure 9309

VI. Reports
   A. Marketing and Recruiting Update 9309
   B. University Senate Report
   C. Graduate Student Government & Undergraduate Student Government Report
   D. Academic Information Technology Update

VII. Informational Items 9210
   A. Analysis of Investments
   B. University Issued Bond Balances
   C. Research and Sponsored Programs
   D. Advancement Report
   E. Recent Media Coverage

VIII. Other Business 9310

IX. Public Comments 9310

X. Closed Session for Periodic Personnel Evaluation of President Mroz 9310

XI. Adjournment 9311
MINUTES OF THE FORMAL SESSION OF THE BOARD OF CONTROL OF
MICHIGAN TECHNOLOGICAL UNIVERSITY held pursuant to due call in Ballroom B of
the Memorial Union Building on the campus of Michigan Technological University in the
City of Houghton, Michigan at eight thirty o’clock on the morning of December 10, 2010.

The Board of Control of Michigan Technological University met in formal session at the
University’s campus at Michigan Technological University in the City of Houghton, State of
Michigan, at 8:30 a.m., on the 10th day of December, 2010, in Ballroom B of the Memorial
Union Building. The place, hour, and date duly established and duly published for the
holding of such a meeting.

The meeting was called to order by the Chair, M. Richardson, and a quorum was declared
present.

The following members of the Board of Control were present:

M. K. Richardson, Chair
S. J. Hicks, Vice Chair (via telephone)
L. D. Ashford
T. L. Baldini
K. I. Clark
R. A. Gronevelt
P. G. Ollila
R. A. Reck
G. D. Mroz, ex officio

The following members were absent:

None

Also present during part or all of the session were: Dale R. Tahtinen, Secretary of the Board
and Vice President for Governmental Relations; Daniel D. Greenlee, Treasurer and Chief
Financial Officer; George Butvillas, Chair of the Michigan Tech Fund; Max Seel, Provost and
Vice President for Academic Affairs; David D. Reed, Vice President for Research; Shea
McGrew, Vice President of Advancement and Marketing; Paul Tomasi, University Counsel;
and various members of the faculty, administrative staff, student body, press and public.

Where item numbers are used, they refer to corresponding item numbers in the agenda, in the
hands of the Board members.
I. APPROVAL OF AGENDA

It was moved by R. Gronevelt, supported by K. Clark, and passed by voice vote without dissent, that the agenda of the formal session of December 10, 2010, as distributed to the Board, be approved.

II. OPENING REMARKS

Chair’s Comments

I would like to welcome everyone to today’s Board of Control meeting and to this Commencement weekend celebration of achievement and success. This is always a special and exciting time of the year, as we honor our graduates and their families. I would also like to welcome George Butvilas, Chairman of the Michigan Tech Fund and thank him for taking time from his schedule to attend our meeting.

I would also like to take a few minutes to recognize Ruth and Russ as this will be their last Board meeting. Later in the meeting we will be voting on a highly deserved resolution of appreciation for each of them, but I wanted to thank them both for their hard work and dedication along with their willingness to share their wealth of experience and knowledge. We are sad to see their terms end, but wish them the best in their future endeavors.

Here are a few highlights of some of the awards and special activities that have taken place since our last meeting.

Raymond Shaw, Will Cantrell, and Claudio Mazzoleni of Physics, Lynn Mazzoleni of Chemistry, Simon Carn and Bill Rose of Geology, and Paul Doskey, and Judith Perlinger of Civil and Environmental Engineering in association with the Earth, Planetary and Space Sciences Institute have received a $1.3 million award from the National Science Foundation for their project MRI: Development of a Multiphase Reaction Chamber for Laboratory Studies of Atmospheric Aerosol and Cloud Processes. The Chamber will be located in the Great Lakes Research Center and will enable the study of cloud and aerosol particles in a controlled environment. “It will provide an idealization where specific mechanisms can be probed with repeatability. Aerosol-cloud-particle transformations and the chemical and turbulent processes that influence them are the scientific focus of this proposal. Among the broader impacts, the chamber will be an important addition to the United States scientific infrastructure.” Congratulations and if any of these individuals are in the audience would you please stand and receive our appreciation.

Another incredible recognition of Michigan Tech occurred a week ago yesterday when a Michigan Tech paper at the Biennial Army Science Conference won best paper in the Nanotechnology Division. This meant that this paper entitled Nanoscale Bioelectronics for Real-Time Target Sensing, was one of the top 18 papers out of some 200 presented at the Conference. Some 850 papers were originally submitted in hopes of being selected for presentation from the United States and the NATO countries.
That was impressive, but the Michigan Tech nanotechnology paper was also selected as the best paper for the entire Army Science Conference – making it the number one paper overall and earning the highest possible award, the Paul A. Siple Memorial Award. Our major competition was other institutions such as MIT, Cal Tech, Georgia Tech, University of Michigan, RPI, Harvard, Princeton, and other similar universities. The lead author of the paper Mark Griep is a Ph.D. graduate from the ME-EM Department and was advised by Professor Craig Friedrich holder of the Richard and Bonnie Robbins Chair, and now Professor Emeritus Don Lueking from Biology. Dr. Friedrich was also a co-author of this paper as well as Eric Winder another Michigan Tech Ph.D. graduate who was advised by Dr. Friedrich and retired Professor John Adler in Biology. The final co-author is Dr. Shashi Karna a senior scientist at the Army Research Lab and a member of the ME-EM Department’s External Advisory Board. To put this in perspective and to use an athletic analogy this would be the equivalent of winning the Super Bowl.

Dr. Jeff Naber, Associate Professor in the Department of Mechanical Engineering has been named a fellow by SAE, the Society of Automotive Engineers. Fellow is the SAE’s highest grade of membership and recognizes important engineering, scientific and leadership achievements. Dr. Naber was selected based on his outstanding accomplishments in the research and development of engine control systems and diagnostics, as well as his significant contributions to engineering education.

Dr. Wayne Pennington, Chair of the Geological and Mining Engineering and Sciences Department, has been named president of the American Geological Institute. Dr. Pennington’s other leadership roles include being the first vice president of the Society of Exploration Geophysicists in 2002-2003. The American Geological Institute is a nonprofit federation of 47 geoscientific and professional associations that represent more than 120,000 geologists, geophysicists and other earth scientists.

Michigan Tech’s Concrete Canoe team placed in the top five at the National Concrete Canoe Competition in San Luis Obispo, California, which was held this past summer. This year’s canoe, dubbed Yooper, weighed over 160 pounds, was 20 feet in length, and was made of a layer of 3/8 inch thick concrete. The canoe’s specially formulated mix of cement must be less dense than water in order to keep it afloat – even with four team members aboard. The team comprised more than 30 members of many different majors – not just students in civil engineering. Sixteen universities competed in the competition which is hosted by the American Society of Civil Engineers. The competition provides students with the practical application of principles learned in the classroom.

Richard and Elizabeth Henes donated $700,000 to upgrade research facilities in Fisher Hall, including infrastructure improvements. This latest gift from the Henes’ will help to continue to build an outstanding physics department that is working at the cutting edge of modern physics. Michigan Tech currently has interdisciplinary strengths across the university in areas of quantum phenomena, largely nanotechnology and computing. This new gift will set the stage for greater emphasis in the area where quantum physics meets biology. This interdisciplinary work will define this century’s advances in technology. It should also be noted that the Department of Physics is one of the most research-active departments in the College of Sciences and Arts, and three of Michigan Tech’s last four annual faculty research awards have gone to physics researchers. In addition to thanking the Henes’ for their
generous donation, the Board would also like to thank President Mroz for all his significant efforts in securing this gift and the leading role he has taken in the capital campaign.

We would also like to take this opportunity to congratulate President Mroz for receiving an award which was bestowed upon him by NASPA, a professional organization of student affairs administrators in higher education. NASPA honored President Mroz with its 2010 NASPA Region IV-East President’s Award for his demonstrated leadership in higher education and valuable contributions to Michigan Tech. Congratulations to President Mroz for this outstanding honor and for your dedication and leadership in helping Michigan Tech create the future.

President’s Comments

Members of the Board, Faculty, Staff, Students

First, I want to add my thanks to both Russ and Ruth for their service to Michigan Tech. The University has transformed under their guidance, changing the things that need to change, and recognizing that there are some things that should never change. Their wisdom has been critical to helping us all know the difference.

With the elections in the rearview mirror along with all the TV ads, radio ads, emails, blogs, twitters and robo-calls with claims of some sort or another, many are getting back to the critical issues of governance, as well as transitioning to newly elected officials and their new teams. While not nearly at the same level of hype as the elections themselves, this is a critical time with opinions being formed and priorities being set and there is a lot of trash talk on the political court.

But this is no game. As we know on this campus, setting priorities is serious, critical business because they determine how resources are allocated. In the past this has not worked out so well for government.

Consider the follow-up report from the Gathering Storm committee of national leaders….they’ve titled this one Approaching Category 5.

A few of the salient points that speak to our national priorities for Science and Engineering:

Total Annual Federal investment in research in math, the physical sciences, and engineering is now equal to the increase in US health care costs every 9 weeks.

The world economic forum ranks the U.S. 48th in the quality of math and science education.

This list could go on and on and on.

Not surprising then that:

In 2009, 51% of US patents were awarded to non US companies;
And at a time when we are talking about more budget cuts, United States consumers spend more on potato chips each year than the government devotes to energy R&D.

No wonder then that as we approach the winter solstice, 49% of U.S. adults don’t know how long it takes for the earth to revolve around the sun.

But there is some indication that attitudes may be changing. In the election rhetoric, many in our State recognized that an educated workforce is a key to Michigan’s future. This goes deeper than rhetoric. In a statewide survey of 500 households conducted early in September and October, 76% of respondents agreed that “everybody should get a college education.” That compares with just 54% when the survey was first conducted in 2005.

37% of responding parents said a college education is “essential” for getting ahead, versus 27% in 2005, and 52% says it’s “very important.”

And the number of parents who agreed that “people who have a college education are usually better off than people who don’t” increased to 78% in 2010 from 63% in 2005.

This change of heart is good! Right now, Michigan ranks 34th among the states with only 25% of adults with a 4 year degree. Not to put too fine a point on it….that’s the bottom third. So, having Michiganders in greater support of degree attainment is a giant step in the right direction from 5 years ago.

But the task to increase this number is daunting. According to data from the Presidents Council for the State Universities in Michigan - Michigan is 49th in its support for higher education. While states like Utah spend $3 on higher ed for every dollar it spends on corrections, Michigan spends 79 cents on higher ed for every dollar spent on corrections - and there are those who are clamoring to cut more. Funding has been cut 12% over the past 8 years, and when you correct for inflation, its 37%. With increased enrollments, the universities are getting about 19% less per student statewide even before inflation is taken into account. Dale Stein, former Michigan Tech President was unfortunately spot-on 35 years ago when he said if we don’t like the high cost of education, we are really not going to like the high cost of ignorance. 68% of Michigan’s prison population lacks a high school degree.

This is the startling story that gets public attention. Here’s the rest of the story that has to get out! High college matriculation rates are not in and of themselves the entire solution.

Every bit as important is the scientific and technological breakthroughs that cause dramatic increases in production and efficiency, whether that is through products like new engine technologies, less invasive procedures to treat knee injuries, or working to create bio-nano hybrid materials that capture light and convert it to electricity. The list can literally be endless, dependent only on the imaginations and skills of the people of Michigan and in particular, the faculty, staff, students and graduates of research universities like Michigan Tech- who through excellent education and technological innovation can attract the capital that will create the jobs that will change Michigan.

At Michigan Tech, we concentrate on our core strengths and values in this process to educate the future of Michigan. At this holiday season, it’s easy to be immersed in the finer things in
life – our families. But remember that this is priority setting season for newly elected officials and those priorities will affect your families as well. Talk to them!

Let them know that as citizens of the United States, – we’ve liked the whole idea of the U.S. being first. Being the best. We’d like that to be the America for our children and grandchildren.

And let them know that it is critical to have priorities that match the aspirations that we remain a first rate country.

And that those priorities depend on having a more educated, innovative and entrepreneurial populace in the future.

Sending that message to your elected officials, to help them align their priorities, just might be the best gift you can give your children and grandchildren this Christmas.

Think about it.

Thank you.

III. COMMITTEE REPORTS

Academic Affairs Committee Report

On Thursday afternoon, the Academic Affairs Committee met with all members of the committee in attendance.

First on the agenda were a couple of proposed Board of Control policy changes in the ongoing process of having an up-to-date Board of Control policy manual. Some of these changes are simply editorial in nature, and some need more discussion. It was suggested that Board of Control policy changes need to be considered by both committees, the academic and the finance and audit committee. The full Board will consider these changes at its next meeting in February.

The Provost then discussed the approval process for new academic programs. Here at Michigan Tech, the Board first gives preliminary approval, then it goes to the Presidents Council of State Universities of Michigan where the Academic Affairs Officers of all Michigan Universities review all the proposed programs, and then it comes back one more time to the Board of Control for final approval. This is not Board policy, just past and current practice at Tech. We are the only university in Michigan doing it this way. That is, bringing a degree program twice to the Board. Everyone else brings a program proposal just once to the Board for approval, before it goes to the State.

We agree with the Provost and recommend that we follow from now on the practice of the other Michigan State universities and have only one Board approval of a new degree program, before it goes downstate to the Presidents Council. It would come back to the Board only if the Presidents Council review resulted in substantive changes. This will streamline the process and we gain up to three months in advertising a new degree program.
Next on the agenda was an appointment with tenure which requires Board of Control action: Dr. Ezra Bar-Ziv is being recommended for appointment as Professor with tenure in the Department of Mechanical Engineering-Engineering Mechanics, effective December 27, 2010. He is a proposed senior hire in the strategic faculty hiring initiative in Next Generation Energy Systems. Dr. Bar-Ziv is an internationally known expert in clean combustion. You have his impressive curriculum vitae in your agenda.

The appointment has the support of the department chair, the departmental promotion and college promotion and tenure committee, and the dean of the college of engineering. The Academic Affairs committee supports the recommendation and recommends approval of appointment as Professor with tenure for Dr. Bar-Ziv.

As an update to the capital outlay request which the Board of Control approved at the last meeting in September, the provost reported that Facilities Management submitted our request for a “Next Generation Energy Complex on December 1. However, our project was not included in the newest capital outlay bill. As everyone is aware, we are in the early stages of our latest capital outlay project, the Great Lakes Research Center, which will be completed in Spring 2012.

We then received an update on the Strategic Faculty Hiring Initiative. Details are given on the last 3 pages of the hand-out prepared for the Provost report. We believe that this initiative provides sharp strategic focus for reallocation and investments in Michigan Tech’s programs and should be continued in the budget planning process.

As of last June, the faculty hires in the first two initiatives in Sustainability and Computational Discovery and Innovation have advised 40 graduate students, have served on 26 graduate committees, taught 32 undergraduate and 32 graduate courses, and were successful in receiving $2.1 million dollars in external research funding. In the current round, in the second year of the Energy and Health initiatives, we received 364 applications for up to ten positions, almost evenly split between the two initiatives. 132 applicants passed the preliminary review, and the steering committees and the cognate reviewers are currently in the process of identifying the strongest 20 candidates who will be invited for a campus interview.

The rest of our meeting was dedicated to an update on the topic of improving student retention and graduation rates. We debated passionately about attrition, efficiency, productivity and more. Since this will be the topic of the Provost Report, I will stop here, unless there are any questions.

Provost Max Seel provided the Board with the following report.
Issues for 2010/2011 Central to the University's Academic Mission

Provost Report

Student Data Meeting
September 30, 2010
UPDATE December 10, 2010

Helping University Leaders Address Their Most Pressing Problems

Michigan Tech's set - Common set of similar pressing issues for all provosts/universities in 2010/11

- Improving Student Retention and Graduation Rates
- Maximizing Campus Space Utilization
- Making the Global Vision Real
- Taking Costs Out of the Academy/Cost Reduction = Revenue Enhancement
- Supporting Faculty Migration to Online and Blended Learning
- Capturing New Professional and Distance Education Markets

Improving Student Retention and Graduation Rates

1. Academic Advising Enhancement AQIP Project -

2010/11: AQIP team continues to work with Assistant Provost until Assessment is concluded - in progress

2. Cost Study/Comparison:
   $ to recruit, $ of financial aid, $ per graduate

Caveat emptor = Buyer Beware!

Efficiency, Productivity <-> Mission of a University
Finishing the First Log:

The Cost of First-Year Student Attrition in America's Four-Year Colleges and Universities (Mark Schneider, American Institute for Research)

Table 1: Five-Year Total Costs Incurred by First-Year Attrition (2003–2008)

All Four-Year Total Costs Incurred by First-Year Attrition

- State subsidies through appropriations: $6.18 billion
- State grants to students: $1.4 billion
- Federal grants to students: $1.5 billion

Illustrative Michigan Tech Calculation –
Numbers from 2009-10 Fact Book

State Appropriation: $405,185,000  
Total Enrollment: 7,148 (12% graduate, 59% undergrad)

State Appropriation per Student: $56,927.6
Net Freshmen: 1,160
Retention Rate: 81.8%

Number of Students who do not Return: (1,160 - 1,160 x 0.818) = 211
Cost for State of Students who do not Return: 211 x $56,927.6 = $1,462,555

Different Way of Cost of Attrition Calculation
Cost per Student (FTE): $34,129
211 x $34,129 = $7,303,419

Cost for University:

Cost to Recruit per Enrolled Undergraduate: $1,181
Average Gift per Freshman (all funds from the university which the student does not have to repay): $6,241

Cost for University of Students who do not Return:
211 x $1,181 + 211 x $6,241 = $249,191 + $1,316,851 = $1,566,042

Student pay Tuition!
### Michigan Public Colleges

What is the college performance in economics by math grade?

<table>
<thead>
<tr>
<th>College</th>
<th>Math Grade</th>
<th>Economics Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>College A</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>College B</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>College C</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

### Median Starting Pay for Recent Graduates

<table>
<thead>
<tr>
<th>Degree</th>
<th>Starting Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor</td>
<td>$45,000</td>
</tr>
<tr>
<td>Master</td>
<td>$55,000</td>
</tr>
<tr>
<td>PhD</td>
<td>$65,000</td>
</tr>
</tbody>
</table>
Finance and Audit Committee Report

Mr. Hicks provided the Board with the following report.

We have met several times by phone since the last Board meeting, discussing the financial position of Michigan Tech in line with the strategic plan. As of yesterday we met again, looking at the financial positioning and the outlook for Michigan Tech. Specifically, we discussed looking at our debt levels, credit ratings, and capital project analysis as we go forward and how we position Michigan Tech not only for growth, but in a financially prudent manner.

We also looked at our Fiscal Year 12 budget parameters, primarily enrollment projections, room and board rates, overall positioning for the University including the Strategic Faculty Hiring Initiative, and looking at the economic impact of this initiative and what value it brings not only in the short term but for the long term for Michigan Tech and its strategic plan. The Committee also looked at various scenarios over the next five years in our
financial model whether it be state appropriations, growth in research, or all activities in line with our strategic plan and what that means to the economics of Michigan Tech.

Michigan Tech is not only well positioned today, but we believe well positioned for tomorrow. The Committee is looking at the right metrics for the financial well being of Michigan Tech going forward.

Mr. Greenlee provided the Board with the following report:

---

**Financial Report**
**Board of Control Meeting**
**Friday, December 10, 2010**

---

**Balance Sheet**
**Condensed Statement of Net Assets**
**as of September 30, 2010**

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Assets</td>
<td>33,605,509</td>
</tr>
<tr>
<td>Noncurrent Assets</td>
<td></td>
</tr>
<tr>
<td>Capital Assets, net</td>
<td>243,082,301</td>
</tr>
<tr>
<td>Other Noncurrent Assets</td>
<td>29,090,010</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td><strong>206,667,820</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIABILITIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Liabilities</td>
<td>$ 19,267,281</td>
</tr>
<tr>
<td>Noncurrent Liabilities</td>
<td>12,911,105</td>
</tr>
<tr>
<td><strong>TOTAL LIABILITIES</strong></td>
<td><strong>$ 32,178,386</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NET ASSETS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments in capital assets, net of related debt</td>
<td>$ 173,125,540</td>
</tr>
<tr>
<td>Other net assets, restricted and unrestricted</td>
<td>34,790,214</td>
</tr>
<tr>
<td><strong>TOTAL NET ASSETS</strong></td>
<td><strong>$ 207,915,754</strong></td>
</tr>
</tbody>
</table>
Current Fund FY11
(in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Original</th>
<th>1st Qtr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>245,429</td>
<td>248,554</td>
</tr>
<tr>
<td>Expense</td>
<td>(245,218)</td>
<td>(248,300)</td>
</tr>
<tr>
<td>Net Income</td>
<td>211</td>
<td>174</td>
</tr>
<tr>
<td>Current Fund Balance</td>
<td>15,527</td>
<td>15,488</td>
</tr>
</tbody>
</table>

Note: Current Fund includes General Fund, Designated Fund, Auxilliaries, Retirement and Insurance, and the Employment Restricted Funds.

Current Fund Balances
(in Thousands)

<table>
<thead>
<tr>
<th></th>
<th>Balance 06/30/09</th>
<th>Projected Balance 06/30/11</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL CURRENT FUND</td>
<td>15,635</td>
<td>15,488</td>
</tr>
<tr>
<td>LEGALLY RESTRICTED FUNDS</td>
<td>(2,072)</td>
<td>(3,168)</td>
</tr>
<tr>
<td>UNRESTRICTED FUND BALANCE</td>
<td>12,813</td>
<td>12,320</td>
</tr>
</tbody>
</table>

CASH FLOW
2009 & 2010 YTD
(dollars in millions)

$13.0MM
IV. CONSENT AGENDA

It was moved by K. Clark, supported by R. Reck, and passed by voice vote without dissent, that the Board of Control approve and adopt the items contained in the Consent Agenda.

IV-A. Approval of Minutes

It was moved by K. Clark, supported by R. Reck, and passed by voice vote without dissent, that the minutes of the formal session of September 30, 2010, as distributed to the Board, be approved.

IV-B. Degrees in Course

It was moved by K. Clark, supported by R. Reck, and passed by voice vote without dissent, that the Board of Control approves the awarding of the degrees as specified, to each of the candidates listed, and offer congratulations.

Michigan Technological University
Degrees Awarded for Conferral Term: 201012

Bachelor of Arts in Scientific and Technical Communication
Michelle A Farrey - Cum Laude

Bachelor of Science in Accounting
Jie Chen
Amanda Kristin Heikkinen

Bachelor of Science in Business Administration
Aleksandar Alex Dimitrijeski
Rachelle M Donaghue
Alyson J Dreher
Sarah Marie Graff
Claire Elizabeth Kangas
Travis James Kole
Lou Michael Meyers
Aaron Michael Parmenter
Katherine A Polzien
Joshua A Ylitalo
Glenn Daniel Ylitalo

Bachelor of Science in Finance
Amanda Marie Boers

Bachelor of Science in Applied Geophysics
Joshua Daniel Shue
Bachelor of Science in Biomedical Engineering  
Stephen R Stafford  
Eli Vlaisavljevich - Summa Cum Laude  

Bachelor of Science in Civil Engineering  
Johan Bjorkquist  
Michael Aaron Carpenter  
Chad David Girard  
Carl Ardell Honkala  
Lasse Kristian Kausrud  
Eric Aldrich Koppana  
Andrew D Mansfield  
Ryan James Pike  
Yusuf Kamal Rida  
Brian Charles Snover  
Kyle Peter Thompson - Magna Cum Laude  
Jeffrey Dean Valensky  

Bachelor of Science in Chemical Engineering  
Colin J Breckler - Magna Cum Laude  
Jordan Lee Klinger  
Isabel MacKerrol Wescott  

Bachelor of Science in Computer Engineering  
Wayne Oliver Brown  
Christopher William Didur  
Noah M Ewing  
Nathan Steven Fettinger  

Bachelor of Science in Electrical Engineering  
Shyam Sundar Akella  
Anthony N Doering - Cum Laude  
Jake Elwood Dunda  
Mark Andrew Hopkins - Magna Cum Laude  
Andrew Christopher Kolinko  
Roger J Matias  
Katherine Lee Retzloff  
Jason Michael Rudden  

Bachelor of Science in Environmental Engineering  
Edward Joseph Nahan  
Christopher Michael Paquette  
Alyssa Jane Shomion  

Bachelor of Science in Geological Engineering  
Christian Dean Bartz  
Laura G Crimmins - Magna Cum Laude
Bachelor of Science in Mechanical Engineering
  Jeffrey Michael Bladecki
  Justin Tyler Dillon
  Zhaomin Dong
  Kingsley Chinedum Iduma
  Russell P Jungnitsch
  James Joshua Martin
  Cory Steven Michalec
  Michael M Mott - Summa Cum Laude
  Nicholas Michael Pattullo
  Justin Anthony Schaut
  Joshua S Schmidt
  John Howard Scott
  Richard Henry Sypniewski
  Jerin T Varghese
  Matthew James Zblewski

Bachelor of Science in Materials Science and Engineering
  Steven G Klimowicz

Bachelor of Science in Forestry
  Joshua J Wickman

Bachelor of Science in Wildlife Ecology and Management
  Amanda Irene Norris
  Matthew Jerome O'Neill

Bachelor of Science in Anthropology
  Catherine Rebecca Cogger - Magna Cum Laude
  James R Dau

Bachelor of Science in Biological Sciences
  April Dawn Powers
  Holly Lynn Seppala

Bachelor of Science in Chemistry
  Katrina Marie Bugielski
  Annie L Putman - Cum Laude

Bachelor of Science in Computer Science
  Jason Scott Hiebel - Magna Cum Laude
  Mark Daniel Vignali

Bachelor of Science in Health and Physical Education
  Vernon Lee McCoy

Bachelor of Science in Exercise Science
  Sophia Feldt
Valerie L Halonen
Bachelor of Science in Mathematics
Andrew W Boettcher

Bachelor of Science in Psychology
Sarah Marie Graff
Jay Paul Little

Bachelor of Science in Social Sciences
Christopher L Steimel
Amy Ann Bubnash Storer - Summa Cum Laude
Angela Susan Tomasi

Bachelor of Science in Scientific and Technical Communication
Bryant Alan Weathers

Bachelor of Science in Construction Management
Drew Peter Ambrose
William Justin Swanteck

Bachelor of Science in Computer Network and System Administration
Nathan A Chikowski
Obie Wesley McGowan
Daniel J Pfister
Wesley James Thelen
Daniel J Toth - Magna Cum Laude
Jason D Vivian - Magna Cum Laude

Bachelor of Science in Mechanical Engineering Technology
Christopher S Bell
Nicholas Bruce East
Zachary Thomas Hitt

Master of Business Administr. in Business Administration
Anwar A Aglan
Shawn P Fanello
Ryan Michael Jones
Eric D Joseph
Maria Ann Kasza
Andrew Robert Lillesve
Paul Matthew Moynryla
Heath Armin Nunnemacher
Heather Ann Richards
Lisa Louise Tincknell
Brett Thomas Watson-Rosso
William Robert White
Master of Forestry in Forestry
  Joshua Earl Mann

Master of Science in Civil Engineering
  Cory Joseph Shorkey
  Andrew William Walter

Master of Science in Computer Engineering
  Anish Arun Chandwani
  Lufeng Shi

Master of Science in Electrical Engineering
  Daniel Lee Heidfeld
  Chen Li
  Sheng Mao
  Nicholas Josef Riegel
  Pruthviraj Natwarsinh Solanki
  Michael Andrew Starrett
  Awadhesh Kumar Thakur
  FNU Vidur

Master of Science in Environmental Engineering
  Travis Kyle Ostrom
  Ryu Suzuki

Master of Science in Geophysics
  Jemile Elif Erdem
  Joshua Paul Richardson

Master of Science in Mechanical Engineering
  Joydeep Chakrabarti
  Animish Dilip Dande
  Christina Marie Doering
  Geomy George
  Gayatri Suhas Kadlaskar
  Kunal Sanjeev Kolte
  Vinaykumar Konduru
  Pragneshkumar Ghanshyambhai Patel
  Anna Lourdes Pereira
  Andrew Mark Schafer
  Tyler Franklin Schoenherr
  Tushar Sadashiv Shinde

Master of Science in Materials Science and Engineering
  Richard Markus Basary

Master of Science in Applied Ecology
  Max Amil Henschell
Alexandra E Wrobel

Master of Science in Applied Science Education
   Emily Louise Curry
   Sarah I Storm
   Sarah Marie Van Baale

Master of Science in Computer Science
   Tin Tin Yu

Master of Science in Mathematical Sciences
   Kenneth James Riedel

Master of Science in Physics
   Rajalakshmi Krishna

Master of Science in Industrial Archaeology
   Sean Michael Gohman

Doctor of Philosophy in Civil Engineering
   Yuejun Yin

Doctor of Philosophy in Chemical Engineering
   Joshua James Carlson

Doctor of Philosophy in Engineering - Environmental Engineering
   Lauren Marie Fry

Doctor of Philosophy in Mechanical Engineering - Engineering Mechanics
   Shreehari Elangovan
   Ezequiel Fernando Medici
   Siladitya Pal
   Edwar Romero Ramirez

Doctor of Philosophy in Biological Sciences
   Sarah Nelson Kiemle
   Eric Michael Winder

Doctor of Philosophy in Engineering Physics
   Jason Peter Moscatello
   Ming Xie

Doctor of Philosophy in Rhetoric and Technical Communication
   Laurence Jose
   Kimberly Christine Rudkin
   Cynthia Lynn Weber
IV-C. Gifts

It was moved by K. Clark, supported by R. Reck, and passed by voice vote without dissent, that the Board of Control acknowledges the gifts to Michigan Technological University.

Michigan Technological University
Michigan Tech Fund
Gift Activity Cash Report
July 1, 2010 through October 31, 2010
Compared to Prior Year

<table>
<thead>
<tr>
<th>Gift Type</th>
<th>FY11 YTD Total</th>
<th>FY10 YTD Total</th>
<th>% Change from Previous Fiscal Year</th>
<th>% Change from Previous Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash (current year)</td>
<td>2,110,214</td>
<td>1,983,889</td>
<td>6.4%</td>
<td>72.0%</td>
</tr>
<tr>
<td>Realized Planned Gifts (current year)</td>
<td>249,296</td>
<td>143,505</td>
<td>73.0%</td>
<td>110,551</td>
</tr>
<tr>
<td>Current Year Subtotal</td>
<td>2,359,510</td>
<td>1,127,394</td>
<td>105.4%</td>
<td>1,152,184</td>
</tr>
<tr>
<td>Cash (receipts from prior year pledges)</td>
<td>180,269</td>
<td>1,275,412</td>
<td>-85.9%</td>
<td>-1,095,143</td>
</tr>
<tr>
<td>Realized Planned Gifts (previously recorded)</td>
<td>55,000</td>
<td>8,114</td>
<td>658.0%</td>
<td>48,886</td>
</tr>
<tr>
<td>Receipts from Previous Year Subtotal</td>
<td>235,269</td>
<td>1,281,526</td>
<td>-81.6%</td>
<td>-1,046,257</td>
</tr>
<tr>
<td>Total</td>
<td>2,594,759</td>
<td>2,489,815</td>
<td>4.3%</td>
<td>105,544</td>
</tr>
</tbody>
</table>

Michigan Technological University
Michigan Tech Fund
Fundraising Productivity Report
July 1, 2010 through October 31, 2010
Compared to Prior Year

<table>
<thead>
<tr>
<th>Source</th>
<th>Goal</th>
<th>FY11 YTD Total</th>
<th>% YTD</th>
<th>FY10 YTD Total</th>
<th>% YTD</th>
<th>FY10 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals - Major Gifts (25K and up)</td>
<td>13,000,000</td>
<td>2,205,245</td>
<td>17%</td>
<td>2,205,245</td>
<td>17%</td>
<td>2,205,245</td>
</tr>
<tr>
<td>Realized Planned Gifts (Unanticipated - 25K and up)</td>
<td>238,073</td>
<td>127,032</td>
<td>600.784</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individuals - non-Major Gifts</td>
<td>1,250,000</td>
<td>391,610</td>
<td>31%</td>
<td>398,342</td>
<td>35%</td>
<td>393,783</td>
</tr>
<tr>
<td>Full Value New Planned Gift Commitments</td>
<td>8,200,000</td>
<td>2,853,973</td>
<td>35%</td>
<td>1,940,312</td>
<td>4,741.392</td>
<td></td>
</tr>
<tr>
<td>Annual Fund</td>
<td>1,500,000</td>
<td>389,771</td>
<td>25%</td>
<td>792,798</td>
<td>1,479,546</td>
<td></td>
</tr>
<tr>
<td>Corporations</td>
<td>1,000,000</td>
<td>701,051</td>
<td>44%</td>
<td>309,485</td>
<td>1,286,427</td>
<td></td>
</tr>
<tr>
<td>Foundations &amp; Other Organizations</td>
<td>600,000</td>
<td>130,753</td>
<td>22%</td>
<td>18,796</td>
<td>119,049</td>
<td></td>
</tr>
<tr>
<td>Gifts-in-kind</td>
<td>850,000</td>
<td>25,075</td>
<td>3%</td>
<td>22,293</td>
<td>457,715</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>27,000,000</td>
<td>6,337,698</td>
<td>26%</td>
<td>3,105,340</td>
<td>13,115,018</td>
<td></td>
</tr>
</tbody>
</table>

---

- Except for the Annual Fund, all totals include outright gifts and the full amount of new pledge commitments
- Annual Fund includes cash from prior year pledges in addition to outright current year gifts and new pledge commitments due current year
- An individual's gifts given through another source (e.g., family foundation or closely held business) are credited to the individual
IV-D. Resignations, Retirements & Off Payroll

It was moved by K. Clark, supported by R. Reck, and passed by voice vote without dissent, that the Board of Control accepts the resignations and confirms the off payroll determinations.

**BOARD OF CONTROL OFF-PAYROLL REPORT**  
**September 5, 2010 – October 30, 2010**

<table>
<thead>
<tr>
<th>RESIGNATION</th>
<th>Department</th>
<th>Title</th>
<th>Hire Date</th>
<th>Term Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peterson, Karl</td>
<td>Civil &amp; Env Eng</td>
<td>Research Asst Professor</td>
<td>06/01/99</td>
<td>10/15/10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RETIREMENT</th>
<th>Department</th>
<th>Title</th>
<th>Hire Date</th>
<th>Term Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adler, John</td>
<td>Biological Sciences</td>
<td>Professor</td>
<td>08/27/84</td>
<td>10/15/10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXEMPT</th>
<th>Department</th>
<th>Title</th>
<th>Hire Date</th>
<th>Term Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Li, Haihua</td>
<td>J.R. Van Pelt Library</td>
<td>Web Services Librarian</td>
<td>02/10/05</td>
<td>10/29/10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NON-EXEMPT</th>
<th>Department</th>
<th>Title</th>
<th>Hire Date</th>
<th>Term Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Besonen, Kimberly</td>
<td>Civil &amp; Env Eng</td>
<td>Office Assistant 5</td>
<td>11/13/00</td>
<td>10/16/10</td>
</tr>
<tr>
<td>Eckhart, Alfred</td>
<td>Rozsa Center</td>
<td>Office Assistant 4</td>
<td>01/14/02</td>
<td>10/02/10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NON-EXEMPT-PT</th>
<th>Department</th>
<th>Title</th>
<th>Hire Date</th>
<th>Term Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hickey, Sherry</td>
<td>Campus Dining Services</td>
<td>Food Service Helper</td>
<td>10/26/09</td>
<td>10/15/10</td>
</tr>
</tbody>
</table>

V. ACTION/DISCUSSION ITEMS

V-A. Emeritus Rank

It was moved by R. Reck, supported by K. Clark, and passed by voice vote without dissent, that the Board of Control approves the following emeritus appointments:

1.) Dr. Anand Kulkarni, Professor Emeritus, Department of Electrical and Computer Engineering
2.) Dr. Ted Lockhart, Professor Emeritus, Department of Humanities

V-B. Resolution for Ruth Reck

Dr. Ruth Reck’s appointment to the Board of Control expires on December 31, 2010, and in recognition of Dr. Reck’s distinguished service and outstanding contributions to the Board of Control and Michigan Tech the Board would like to honor her with a resolution of appreciation.
It was moved by K. Clark, supported by T. Baldini, and passed by voice vote with one abstention (R. Reck), that the Board of Control adopts the Resolution of the Board of Control of Michigan Technological University In Appreciation for Ruth A. Reck as presented herein.

Michigan Technological University
Houghton, Michigan

Resolution of the Board of Control of Michigan Technological University
In appreciation
Ruth A. Reck

The Board of Control of Michigan Technological University at its meeting on the tenth day of the month of December in the Two Thousand and Ten year declared that:

WHEREAS Ruth A. Reck, a long time citizen of the State of Michigan, has honorably and dutifully served her State and its constituents; and

WHEREAS such duty was with eminence and honor, and such membership included serving as the Chair of this distinguished body and a member of the Finance and Audit Committee and the Academic Affairs Committee; and

WHEREAS her service to the Michigan Technological University Board of Control was for a period of twenty productive years; and

WHEREAS her contributions to Michigan Technological University and higher education in general have been of the highest order and in the best interest of all: Therefore be it

RESOLVED, that the Michigan Technological University Board of Control extends appreciation and congratulations to this distinguished citizen and former member of this body.

Dr. Reck made the following comments:

It isn’t about me, it’s about the University. And when people tell me that something happened while I was here, you really are talking about yourself, and you are talking about what has been accomplished here. I am so incredibly proud of this University. I can just burst at the seams now. I think of when I came, and I didn’t know a lot about the University at the time, and wow today. You should really feel fantastic on the accomplishments and where Michigan Tech has gotten.

I hope you dream big, and I don’t mean in size. I hope that your accomplishments can be tremendous, almost beyond your thoughts at this point. You don’t get anywhere without first aspiring to get there. And you have to think where can we go, what can be our contributions to the world. You are a fantastic asset for Michigan. You are an even more incredible asset to the United States and to the World. Just keep up everything that you are doing. Be very positive. Know you have the capability. Sometimes I worry that some of our people don’t realize how good they are. I think they don’t really recognize their own power and their own
capability. And I just ask you to reassure each one. Be kind to everybody here. Be kind to your colleagues.

Before I sit down I want to acknowledge three people. One of them is of course my dear friend Dale Tahtinen who was the first person I laid eyes on when I got welcomed to Michigan Tech. He came and visited me when I was at General Motors Research Labs and brought me a whole lot of paper to read and I wondered what I was getting into. And, the two ladies who have been just incredibly important in making my stay here wonderful. Roberta was the first and very shortly was Janet. These are women that are so extraordinary. I don’t think you realize all they contribute. How much they integrate the University. The thing that you can’t put in someone’s intention is the goodwill that they produce. They intend to do the right thing. They don’t have to be told. They do it. They are thinking ahead and they are doing it all the time, and I think they make the whole thing work very well. Without them nothing could happen. So I want to thank them so much and thank Dale as well.

It’s been 20 years of my life that I’ve thought of you as family. Thank you.

V-C. Resolution for Russell Gronewelt

Mr. Gronewelt’s appointment to the Board of Control expires on December 31, 2010, and in recognition of Mr. Gronewelt’s distinguished service and outstanding contributions to the Board of Control and Michigan Tech the Board would like to honor her with a resolution of appreciation.

It was moved by K. Clark, supported by L. Ashford, and passed by voice vote with one abstention (R. Gronewelt), that the Board of Control adopts the Resolution of the Board of Control of Michigan Technological University In Appreciation for Russell A. Gronewelt as presented herein.
Resolution of the Board of Control of Michigan Technological University

In appreciation

Russell A. Gronevelt

The Board of Control of Michigan Technological University at its meeting on the tenth day of the month of December in the Two Thousand and Ten year declared that:

WHEREAS Russell A. Gronevelt, a citizen of the State of Michigan, has honorably and dutifully served his State and its constituents; and

WHEREAS such duty was with eminence and honor, and such membership included serving as the Chair of this distinguished body and a member of the Finance and Audit Committee and the Academic Affairs Committee; and

WHEREAS his service to the Michigan Technological University Board of Control was for a period of seven productive years; and

WHEREAS his contributions to Michigan Technological University and higher education in general have been of the highest order and in the best interest of all: Therefore be it

RESOLVED, that the Michigan Technological University Board of Control extends appreciation and congratulations to this distinguished citizen and former member of this body.

[Signatures]

Mr. Gronevelt provided the following comments:

Thanks everyone. I truly do mean it’s pretty awesome to be on the Board of Control for your alma mater. It has been a great seven years. I now live in the neighborhood, and I’m sure that I will continue to stay involved. Thank you.

V-D. Appointment with Tenure

It was moved by R. Gronevelt, supported by K. Clark, and passed by voice vote without dissent, that the Board of Control approves the appointment of Dr. Ezra Bar-Ziv as Professor with tenure in the Department of Mechanical Engineering-Engineering Mechanics effective December 27, 2010.

VI. REPORTS

A. Marketing and Recruitment Update – Mr. Shea McGrew, Vice President for Advancement and Marketing and Dr. Les Cook, Vice President for Student Affairs

A copy of Mr. McGrew’s and Dr. Cook’s presentation is on file in the Board Office
B. University Senate Report – Dr. Rudy Luck, President
   A copy of Dr. Luck’s report was included in the agenda book.
C. Graduate Student Government and Undergraduate Student Government Report –
   Mr. Jarod Maggio and Mr. Paul Mattson, Presidents
   A copy of Mr. Maggio’s and Mr. Mattson’s report was included in the agenda book.
D. Academic Information Technology Update – Dr. Walter Milligan, Chief Information
   Officer
   A copy of Dr. Milligan’s report is on file in the Board Office.

VII. INFORMATIONAL ITEMS
   A. Analysis of Investments
   B. University Issued Bond Balances
   C. Research and Sponsored Programs
   D. Advancement Report
   E. Recent Media Coverage

VIII. OTHER BUSINESS

   There was no other business at this time.

IX. PUBLIC COMMENTS

   There were no public comments at this time.

X. CLOSED SESSION FOR PERIODIC PERSONNEL EVALUATION OF PRESIDENT MROZ

   It was moved by R. Gronevelt, supported by K. Clark, and passed by voice vote without
   dissent, that the Board of Control proceed into closed session for a periodic personnel
   evaluation of President Mroz. (A closed session for such a purpose is provided for in Section
   8 (a) of P.A. 267 of 1976). (A roll call vote is required).

   Roll Call Vote:
     Richardson – Yes    Reck - Yes
     Ashford – Yes       Ollila - Yes
     Gronevelt – Yes     Clark - Yes
     Baldini – Yes

   The motion passed.

   The Board of Control reconvened in open session with a quorum present.
Personnel Evaluation

I wanted to report briefly on what we discussed in closed session, which as you know is the periodic evaluation of the performance of the President. Janet works on it all year long, but we have certainly been working on it as a Committee for most of the year. My thanks to the Committee chaired by Russ Gronevelt with Kathy Clark and Paul Ollila as members.

I am pleased to report that we have had an excellent performance evaluation for President Mroz, and that reflects very well upon not only him but the excellent team that he has assembled to support him. In particular, high marks were received in leadership and team building which we see on a daily basis as we work with Dr. Mroz. With the condition of the State budget and the lack of salary increases for virtually anyone else anywhere, and in spite of the fact that President Mroz obviously deserves some sort of compensation increase, but with the state of the economy we are just not going to be able to do that. So the President will have to be satisfied with an “Attaboy”, excellent job, and keep up the good work. Our compliments to the leadership team of the University who are right there every step of the way in this excellent performance evaluation.

Janet we couldn’t do this without you. You are such a central part of this Board, this University, and this Committee’s activities, so thank you so much for all your hard work.

XI. ADJOURNMENT

It was moved by R. Gronevelt, supported by K. Clark, and passed by voice vote without dissent, that the meeting be adjourned.

__________________________
Secretary of the Board of Control

__________________________
Chair, Board of Control