Virginia Polytechnic Institute and State University Intellectual Property Committee Meeting February 16, 2011, 12:00-1:00 p.m. 325 Burruss Conference Room

FULL COMMITTEE

The Intellectual Property Committee met February 16, 2011.

The following members were present: Bill Knocke (Chair), Robert Broadwater, Robert Harvey, Kay Heidbreder, X.J. Meng, Joe Merola, Steve Sheetz, Steve Tatum, Cindy Wilkinson.

Invited guest members present: Mike Miller (Virginia Tech Intellectual Properties); Dave McGarry (University Controller's Office); Susan Willis-Walton (Center for Survey Research); Aaron Bond (IDDL).

Those members/guests not in attendance: Steve Capaldo, Mark Coburn, Barbara Lockee, Ken Miller, Kristen Mittelman, Robert Walters.

Call to Order

Bill Knocke called the meeting to order at 12:20 p.m.

Approval of Agenda

The agenda was unanimously approved as distributed.

Approval of Minutes

On a motion made by R.J. Harvey, and seconded by Joe Merola, the minutes for the January 19, 2011 meeting were unanimously approved.

Old Business

1. Review of Draft Faculty Survey on IP and Technology Transfer Issues

The committee reviewed the second draft survey (attached) that Bill Knocke emailed to the committee before today's meeting. Bill asked that any feedback or suggestions be sent to Susan Willis-Walton by the end of the week. The goal is to get the survey out soon (target week for distribution is immediately after Spring Break in March) and receive the results back in time to review during the committee's May meeting (May 18).

The committee also provided suggestions to Susan and Bill as to how best to distribute the survey as well as promote participation from faculty regarding

completing the survey. One suggestion was to use the Department Head's Council listsery so that heads/chairs of departments could help encourage faculty participation in the survey process.

2. Lecture Capture

Aaron Bond with the Institute for Distance and Distributed Learning spoke to the committee about the concept of lecture capture. He reported that nationwide approximately 3.5% of college courses make some use of lecture capture technology using commercially available programs. Most vendors who sell lecture capture equipment charge the university to use the service. Aaron distributed several handouts (attached) that provide additional information about lecture capture, including a listing of providers. Aaron reported that research shows that only 40% of universities have some policy regarding the use of lecture capture in their courses. It was recommended that if Virginia Tech was to offer lecture capture, it should be done universitywide as the students are disadvantaged when individual department make separate deals with lecture capture suppliers. A lot of instructors are already doing the lecture capture concept and posting these materials in their course's Scholar site. This practice is already placing a substantial strain on the storage capacity associated with Scholar. If the university explores lecture capture, the IP committee's input would be to make sure the university and faculty's rights to materials were appropriately addressed in the companion policies that are developed around the implementation of the technology.

Next Meeting Date

Unless there is a need to meet next month (March 16) the next meeting of the committee will be April 20, 2011, in 325 Burruss Hall, 12-1 p.m.

<u>Adjournment</u>

There being no further new business, the meeting adjourned at 1:10 p.m.

Respectfully Submitted,

Shelly Key Administrative Support to the IP Committee

Intellectual Property Committee Meeting February 16th, 2011, 12:00 – 1:00 p.m. 325 Burruss Conference Room

AGENDA ITEMS

- 1. Call to Order and Approval of Agenda
- 2. Review and Approval of January 19th Meeting Minutes
- 3. Old Business
 - a. Review of Draft Faculty Survey on IP and Technology
 Transfer Issues Susan Willis-Walton, Bill Knocke, and
 Michael Miller
 - b. Lecture Capture and Potential IP Implications at VT discussion on Lecture Capture led by Aaron Bond
- 4. New Business
- 5. Next Scheduled Meeting Date Wednesday, March 16th
- 6. Adjourn



Virginia Tech Faculty Innovations Survey

Many scholarly activities in a university setting may create intellectual properties such as research papers, books, software programs, new inventions, journal articles, etc. Virginia Tech is committed to supporting faculty innovation and also to making all aspects of innovation and technology transfer as efficient and successful as possible. This survey will allow university leadership to receive valuable input from faculty regarding a wide variety of intellectual property issues. All data from this survey will remain confidential. Thank you for your participation in this important project.

1.	Please indicate the types of intellectual property below that you have created or plan to create while employed at Virginia Tech.				
	O Books (for example, an English composition textbook which could be sold commercially)				
	O Journal articles and research papers				
	O Original artwork or photographs				
	O Technology (Please specify the type(s) of technology:				
	O Reproduction of a lecture (lecture capture)				
	O Software programs (including applications for IPhone, Facebook, etc.)				
	O Other inventions or discoveries (Please specify the type(s) of inventions or discoveries:				
	O I have not/do not plan to develop any of the intellectual properties listed while employed at Virginia Tech				
2.	Copyright covers works such as books, paintings, computer programs, and publications and give the copyright holder the sole and exclusive privilege to copy, distribute, and use the works. Do you ever create work for which you could seek copyright protection?				
	O Yes				
	O No [GO TO Q4]				
	O Don't know/unsure [GO TO Q4]				
3.	Have you received a copyright for any of your work?				
	O Yes				
	O No				
	O Copyright currently pending				

4.	Patent rights are granted for inventions of <u>new</u> and <u>useful</u> processes, machines, manufactures, compositions of matter or any new and useful improvement thereof, or for certain plants. Patents are made by governments (for United States patents through the Patent and Trademark Office) to a patent holder, conferring the right to exclude others for a certain amount of time from making, using, or selling an invention in the country. Do you ever create work for which you could seek patent protection?			
	O Yes			
	○ No [GO TO Q6]			
	O Don't know/unsure [GO TO Q6]			
5.	Have you received a patent for any of your work?			
	O Yes			
	O No			
	O Patent currently pending			
6.	To what extent are you familiar with the university's Policy on Intellectual Properties that establishes ownership criteria and addresses ownership responsibilities, rights and privileges and develops basic guidelines for the administration of the IP Policy (Policy 13000)?			
	O I am very familiar with the policy			
	O I have heard of the policy but am not familiar with specific aspects of the policy			
	O I have never heard of the policy			
7.	Please indicate your level of experience with the university resources in the offices of Virginia Tech Intellectual Properties, Sponsored Programs, the Office of the Vice President of Research, the Intellectual Property Committee, and Legal Counsel, available to faculty creating potential intellectual properties?			
	O Unaware of intellectual property resources at Virginia Tech [GO TO Q9]			
	O Aware of intellectual property resources at Virginia Tech but have not utilized them [GO TO Q9]			
	O Have utilized the resources at Virginia Tech related to intellectual properties			
	Please describe the resources at Virginia Tech you have used in seeking assistance with protecting			

9.	To what extent are you familiar with the process of documenting your original ideas developed while at Virginia Tech?
	O Unaware of process for documenting my original ideas
	O Somewhat aware of process for documenting my original ideas
	O Very aware of process for documenting my original ideas
10.	Virginia Tech faculty members are required to disclose intellectual properties they have created even if the university is not entitled to ownership rights. Have you ever submitted a disclosure for an invention, work or innovation at Virginia Tech?
	O Yes
	O No [GO TO Q12]
11.	How would you rate the ease of the process for disclosing intellectual property at Virginia Tech?
	O Excellent
•	O Good
	O Fair (Please describe why:)
	O Poor (Please describe why:)
12.	Have you ever commercialized an invention, work or innovation?
	o Yes
	O No [GO TO Q14]
13.	How would you rate the ease of finding the information you might need at Virginia Tech to explore commercializing an intellectual property you have developed?
	O Excellent
	O Good
	O Fair (Please describe why:
	O Poor (Please describe why:
14.	Have you ever used the services of Virginia Tech Intellectual Properties?
	O Yes
	O No [GO TO Q16]

15. Please indicate your level of agreement with each statement below.

		Disagree	Somewhat Disagree	Agree	Strongly Agree	Don't Know
		***************************************	Please Clic	k One Respo	onse Option	1
a.	It is important to seek intellectual property rights protection for my innovations developed while at Virginia Tech.	0	0	0	0	0
b.	I am familiar with the process of obtaining intellectual property rights for an innovation I develop or contribute to.	0	0	0	0	0
c.	The processes for the protection of intellectual property at Virginia Tech are fair and serve the best interests of faculty members at the university.	0	0	0	0	0
d.	Faculty members need to disclose research products or inventions to protect them because once they enter the public domain, such as through publication, those rights may be lost.	0	0	0	0	0
e.	Faculty who do not submit a disclosure regarding an intellectual property may be subject to a loss of revenues which might otherwise accrue to them under university policy in the instance of commercialization.	0	0	0	0	0
f.	Virginia Tech has a more generous revenue sharing policy related to intellectual properties than most private companies.	0	0	0	0	0
g.	I know who to go to at the university to obtain information about intellectual property issues.	0	0	0	0	0
h.	Virginia Tech does a good job of getting information to faculty about intellectual property issues.	0	0	0	0	0
i.	Virginia Tech does a good job of getting information to students about intellectual property issues.	0	0	0	0	0
j.	The protection of intellectual property rights seems to be a priority at Virginia Tech.	0	0	0	0	0
k.	I am aware of the role of Virginia Tech Intellectual Properties (VTIP) in assisting Virginia Tech community members with intellectual property issues.	0	0	0	0	0

16. Please indicate your level of familiarity with each aspect of the Virginia Tech policy regarding intellectual property below.

-		Unaware of This Prior to Survey	Heard of This but Not Familiar with Details	Familiar With This Aspect of the Policy
	M land	Please Cli	ck One Respo	nse Option
a.	A faculty member is the owner of intellectual property developed if the work is a traditional result of academic scholarship and there is not explicit evidence presented by the university that the university specifically commissioned the work.	0	0	0
b.	For the novel results of research such as products, processes, machines, software, biological technology, etc. (unless developed without university resources or facilities) ownership of the intellectual property rests with the university and the originator(s) are obliged to sign the appropriate legal assignment documents upon request.	0	0	0
c.	In the case in which an intellectual property is generated as a result of research funded by a private sector company under a sponsored research project, the rights of the sponsor shall take precedence over the rights of the university/inventor(s).		0	0
d.	Research sponsored by an agency of the federal government has statutory intellectual property rights that are usually limited to a non-exclusive non-transferrable royalty-free license to any patent generated by the research, as long as researchers /university advise the agency in timely manner of intent to retain rights and provide for legal protection (i.e., patenting).	0	0	0
e.	Ownership of intellectual properties developed by students who are also employees of the university will be determined by the rules which apply to all university employees.	0	0	0
f.	For intellectual properties generated by a team of inventors in which one or more are not members of the faculty/staff/supported students, each inventor is usually entitled (by law) to shared ownership of the entire right.	0	0	0
g.	Researchers at Virginia Tech have an obligation to submit a disclosure when doubt as to the commercial potential of a new technology exists.	0	0	0
h.	To the extent and as soon as the researcher/inventor/creator obtains research results that may be considered an intellectual property and recognizes that they may have potential for commercial utilization there exists an obligation to bring these results to the attention of the university in the form of a disclosure.	0	0	0

Q17. Please indicate your level of interest in learning more about each of the aspects related to intellectual property/technology transfer mentioned below.

		Very Interested	Somewhat Interested	Somewhat Uninterested	Not at All Interested	Don't Know
			-Please Clic	k One Respon	se Option	
a.	How to protect intellectual properties developed at Virginia Tech.	0	0	0	0	0
b.	Specific information regarding the policies related to intellectual properties at Virginia Tech.	0	0	0	O	0
c.	How to set up confidentiality agreements through the Office of Sponsored Programs.	0	0	0	. 0	0
d.	Information on what is considered to be an intellectual property.	0	0	. 0	. 0	0
e.	Information on obtaining a copyright.	0	0	0	0	0
f,	Information on obtaining a patent.	0	0	0	0	0
g.	How to commercialize work and ideas developed.	0	0	0	. 0	0
h.	Information about submitting a disclosure and compliance with disclosure procedures.	0	0	0	0	0

Q18. Please indicate your interest in obtaining information about intellectual property/technology transfer issues via each of the formats mentioned below.

		Very Interested		Somewhat Uninterested	Not at All Interested	Don't Know
\vdash		w = = = = = = = = =	-Please Clic	k One Respon	se Option	
a.	One on one meeting with representative(s) from VTIP, OSP or legal counsel.	0	0	0	0	0
b.	Group workshop or information session hosted in my department or college.	0	0	0	0	0
c.	Information module that I could review online.	0	0	0	0 .	0
d.	Information sessions hosted on campus by outside companies (successful startups stemming from faculty work etc.).	0	0	0	0	0
e.	Workshop on intellectual property issues hosted through the Faculty Development Institute (FDI).	0	0	0	0	0

Q19. Please provide any comments you may have about intellectual property issues at Virginia Tech.

END. Thank you for your help with our study. Please click "submit" to end the survey.

Lecture Capture Fact Sheet

3.5 percent of college courses make some use of lecture capture technology. (2009 Campus Computing Survey)

Online is different: 48.1 percent) indicated that long video segments were "somewhat used" in their institution's online programs (WCET, <u>2009 Managing Online Education (MOE) Survey</u>)

Lecture Capture Providers

Matterhorn: http://www.opencastproject.org/matterhorn capture

Tegrity: http://www.tegrity.com/

Echo360: http://echo360.com/?gclid=CJm28PaJjacCFYSK4AodoBKbeA

Camtasia Relay: http://www.techsmith.com/

Topics to Consider

1. Infrastructure

a. Connectivity

b. Storage

i. Catalogs, tags, etc.

- c. Processing
- 2. Pedagogy and Best Practice
 - a. Preview, Review, How-to.
- 3. Intellectual Property
 - a. Who owns it?
 - b. Who uses it?
 - c. Who controls access?

Sample Policy Statements

Student Based: http://trs.unimelb.edu.au/lec/lec-policy.html

Lecture Capture

How does it work?

Lecture capture systems include a suite of software applications with specifications for preferred hardware, which typically consists of items such as a camera and a microphone that are available in many classrooms. The Panopto sulte, for example, includes CourseCast Recorder, CourseCast Editor, and CourseCast Server. These applications integrate with audiovisual hardware to capture a lecture. Pushing a single button is enough to activate turnkey systems like Tegrity Campus and Panopto CourseCast and begin capturing a lecture. Recordings can be viewed on the web or in formats compatible with MP3 players and portable video devices.

Why is it significant?

Lecture capture enhances and extends existing instructional activities, whether in face-to-face, fully online, or blended learning environments. It works especially well in subject areas where students benefit from repeated viewing of content, as when complex information is discussed or formulas are written on a board. The video-on-demand portion of lecture capture allows students to closely examine the steps of a demonstrated procedure or stop and focus on important actions in a science experiment. Lecture capture may enable freer thinking-students who find themselves struck by a particular comment or point can pursue that line of thought, confident that the lecture itself can be reviewed later.

Some worry that students may cut classes in favor of viewing captured lectures. Yet, from the advent of the cassette tape through the podcast, students have found that recordings take as much time to absorb as a live lecture, but without the opportunities for question-and-answer or interaction with their classmates. Moreover, instructors might add group activities during in-class times to supplement the lecture material held in archives from previous years. Recorded lectures might offer a new library of information resources and trigger changes in archiving and accessing data and new citation practices. They also offer advantages for interdisciplinary programs—a biology professor, for example, might show recorded lectures from colleagues in the physics or chemistry departments as part of the biology curriculum.

What are the downsides?

Some question whether any pedagogical benefit emerges from replaying a lecture and covering the same ground twice. Beyond that, the practice raises a number of issues around who should have access to lectures and for how long, as well as questions of how the recordings are to be stored and what policies will govern their handling. A complicating element of lecture capture is ambiguity over who is responsible for providing the recording resources and who owns the intellectual property once the recording has been made: Using these systems for classes, conferences, and guest speakers might require a legal release, particularly when lecture capture depends on a complex infrastructure provided by the institution. Colleges and universities must also decide whether the same release applies when a professor independently captures a lecture and makes it available to students on a faculty website,

Where is it going?
Recorded lectures could easily result in large stores of material that require new paradigms for search and archiving, including the ability for students to create personal course archives. The platform may invite mashups as developers enable ways for students to annotate a lecture itself and share the results with study groups. Such additions to captured recordings could change the character of the lecture as students annotate and reorganize what they have heard.

Institutions will need to establish copyright policies for captured lectures, arrange releases, and ensure that intellectual property rights are not left in limbo. Future lecturers might find that elements of course content become a point for contract negotiation under the heading of "courseware rights."

What are the implications for teaching and learning?

This technology adapts to multiple input locations so that instructors or guest speakers can present from any location that has the appropriate recording equipment. At the same time, it conforms easily to a variety of content delivery models-podcasts, mobile devices, laptops, or high-definition presentation. These systems provide convenience for students, offering remarkable flexibility with course timetables to coordinate work and study schedules. Students might even be able to take two courses scheduled at overlapping times. Emerging features in tagging and markup may draw students into intellectual discussion on a topic and encourage them to share work with others.

Lecture capture also offers new flexibility for each student's course of study, as a single lecture could be extracted from a series and viewed separately by any student enrolled at the college or university, promoting ad hoc interdisciplinary research. An easy-tosearch archive of recorded courses would thus allow a student to cross disciplines to watch a philosophy lecture on Roger Bacon, for instance, that supports a paper on the evolution of scientific thought for a course on the history of medicine. Lecture capture provides new educational opportunities—for distributed learning students as well as residential students in face-to-face or blended courses-opening up multidisciplinary programs where students can pick the best lectures from any school on any topic and assemble their own lesson plans. Faculty, on the other hand, can work with colleagues on their own campus or disparate campuses to assemble multidisciplinary courses constructed with lectures from the leading experts in the field.



7 things you should know about... Lecture Capture

Scenario

At medical school orientation, the incoming students in Leah's class were warned that the lecture capture system used at the university should not be seen as a substitute for attending lectures. In the first week, she realized she would never be tempted—there was so much information to absorb and so little time in the classroom to assimilate it that she found herself downloading the recorded lectures to fast-forward to the parts she didn't understand so that she could listen again to the explanation and stop the recording to clarify her notes.

During her second year, Leah had to attend a funeral and missed a key class on respirator settings in her pulmonology course. Late that afternoon she was able to download the lecture and watch it on her laptop as she rode the train back to campus. Someone in her study group had added to the recording a bibliography reference for a related article. She requested the article online that evening from the medical library and found that it explained key elements discussed in the lecture.

Leah's third year in medical school found her assigned to clinical rotation at a rural site five hours from the university. The lecture capture option allowed her to watch a one-time-only series of lectures on herbal medicine delivered on campus by a guest speaker from China.

Leah served her residency at a hospital with a grant to study a rare hearing disorder. An online correspondence with doctors in Spain and Germany offered new insight into the study. Leah organized a live presentation from both doctors via the lecture capture systems at their universities, arranging for it to be shown at a nearby lecture hall. Meanwhile, a doctor in Ecuador saw the proposed abstract of the study and requested information related to patients at his clinic. All the doctors were able to send questions to one another by e-mail during the presentation and discuss the answers before the end of the conference.

When she completed her residency, Leah began work in a program in Thailand sponsored by Médecins Sans Frontières. Because she was able to take continuing education courses through her university, she signed up for a course in tropical medicine, downloading the lectures to her laptop and watching them whenever she had time in her schedule.

What is it?

Lecture capture is an umbreila term describing any technology that allows instructors to record what happens in their classrooms and make it available digitally. The term is used to describe a wide array of software, system capabilities, and hardware options. in its simplest form, lecture capture might be an audio recording made with an IPod. Alternatively, the term might refer to a software capture program, such as TechSmlth's Camtasia Relay, that records cursor movement, typing, and other on-screen activity for demonstration purposes with an audio voiceover. At the other end of the complexity spectrum, a lecture capture system might mean a turnkey operation like Sonic Foundry's Mediasite, a webcasting platform that is frequently set up in a dedicated studio where software and hardware reside permanently to provide as-needed audio and video recordings of presentations and accompanying slides or other digital resources. While not intended as a replacement for in-class instruction, lecture capture systems offer three important benefits; an alternative when students miss class; an opportunity for content review, particularly when abstruse topics are introduced or detailed procedures are performed; and content for online course development.

Who's doing it?

Many schools are implementing these systems to provide students with greater convenience if they miss class or simply want to catch up on course content. As an additional benefit, captured lectures often form part of online or blended course development. The University of Geneva, which captured video of lectures as far back as 1970, began a program two years ago to use a lecture capture system to convert its archived holdings to new formats and generate new recordings. The system has been enthusiastically received by students because it provides more options for accessing academic content. Lecture capture systems are also popular in health and medicine programs. Michigan State University, The Johns Hopkins University, the University of North Carolina, and a number of other institutions with medical programs have been explorers in and adopters of this technology, possibly because medical training often involves demonstrations that cannot be easily repeated. In lecture capture sessions at Carleton University, students meet in classes where the lectures can be broadcast via Internet television (ITV); lectures are recorded and made available within 24 hours. One team at Carleton has devised a video mashup tool that lets students personalize lecture capture by tagging, editing, annotating, and subsequently sharing the results with their peers.



TOURO UNIVERSITY NEVADA	Page No.	Number:	
	Effective Date	ė	
POLICY & PROCEDURE MANUAL	Required Rev	iew: Executive Council	
	Reviewed:		
Policy [X] Procedure []	Revised:		
Title: COURSE CAPTURE	Responsible Position: Chief Information Officer		
	Approval Requirements: Chief Executive Officer		

I. PURPOSE:

To help provide guidance over recording course capture of lectures and instruction using the course capture devices located throughout campus.

II. SCOPE

This policy applies to all employees of Touro University Nevada.

III. POLICY

Touro University Nevada will automatically record course lectures and instruction in all programs given in the classrooms and lecture halls where course capture devices have been installed. Once completed, the recorded lectures and instruction will be placed in a "pending" status within the secured TUN network for three business days where each faculty member will then have the ability to edit the recording and post it to the University Media catalog.

Recorded lectures or instructions are made available to the faculty, students, and other persons designated as authorized to view the material by the faculty member, Department Chair/Program Director, or the Dean of the College in which the course was conducted.

If no action is taken by the faculty member after three business days while the recording is in a "pending" status then the unedited recording will be not be posted until such time as a faculty member authorizes the posting of such recording. If a recording has been posted and a faculty member requests to edit the recorded lecture or instruction, the faculty member must seek the