

Vinculum

A newsletter of the
College of Integrated Science & Technology

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Collaboration
Integration
Support
Achievement
Teaching

These are the goals and values that CISAT strives to espouse.

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Vinculum, meaning a bond or tie, is derived from the Latin *vincire*. This represents the many connections among our programs, faculty, and students.

The Dean's Reflections

-Jerry Benson

On Friday, February 1st, we held a general CISAT faculty and staff meeting. As was noted at the beginning of this academic year, we would plan to periodically hold such meetings as a means of enhancing communication within the College. Given the status of the budget and the resulting impact on implementing existing programs, as well as program planning and innovation, it seems even more important than ever to share information, curtail rumors, and, most importantly, support each other as we address the present adversity.

While a primary goal of Friday's meeting was to share the information known at that time regarding current and anticipated budget reversions, restrictions resulting from these reversions, and to answer questions regarding the budget, an equally important goal was to also share some of the very creative and innovative activities and significant accomplishments occurring in our College. Although resources may not be readily available, we continue to tweak and improve our academic programs, engage our students in research and field-based experiences that expand their knowledge and horizons, and dream of new and innovative programs—many of which may better represent or coordinate our current activities and maxi-

mize the use of our resources. We also continue to seek external funding in support of our academic mission, and, as we do so, we must support the efforts of those involved, ensure the application of the same standard for high quality program activity in such projects, and celebrate the "victories" as they come.

Regarding the budget reversions for this year and budget planning for next year, the University and the Academic Affairs Division are trying to take a "worse case scenario" approach in the belief that any of us would rather be pleasantly surprised with less severe cuts than those for which we had been asked to plan. As I mentioned in our College meeting, I would want everyone to know that all the Divisions of the University are experiencing cuts in their Education and General (E&G) funds—these are the ones received by the University from the state and include revenues generated by tuition. The academic mission of the institution stays as the University's top priority and thus is protected as much as possible in any budget reversion process. In fact, the reversion targets for the academic units have been "softened" by larger cuts in some of the other Divisions. Within the College, we are trying to balance a number of factors in implementing any cuts that are required. For example, we are trying to avoid substan-



tial cuts to infrastructure areas like lab and technology support.

I have been keeping the Dean's Faculty Advisory Council fully apprised of the budget situation and am working closely with members of the College's Leadership Council in all these efforts. In a time of constrained resources and needing to maximize our effectiveness and efficiency in the use of these resources, I believe it is important to emphasize decision-making at the academic unit level. There is not a "one shoe fits all" solution to the issues and problems we will face, so we need to recognize and value the differences among our academic units and our programs as they go about carrying out their mission.

I appreciate the efforts and supportive attitude of each of you as we, as a College, move forward. We will build upon our strengths and continue to be forward-looking.

Intellectual property

Intellectual property is a term some faculty and staff are familiar with, but one which Dr. Robert Kolvoord says, everyone needs to know. Simply put, intellectual property is any potentially patentable idea or copyrightable work.

Dr. Kolvoord chairs the Intellectual Property Committee, which works to protect the rights of individuals as well as those of the University. The committee aids faculty, staff, and students in determining ownership of ideas and property.

Learning about intellectual property is important in all fields, but it is of particular concern to the CISAT community due to the nature of our work. Many, if not all departments do applied research, which has the potential to make it to the marketplace. It is important for creators of intellectual property to know who holds ownership of the property so that arrangements with publishers/commercial firms can be made. By having ownership already

declared, there will hopefully be less confusion when signing a contract.

There are many instances where faculty (and staff members) retain the copyright in work that they've produced. Some examples are journal articles and course materials that have been produced without the use of University funding, or grants, either external or internal.

Some instances in which JMU might have an ownership interest are when grants are involved, projects that include a substantial use of University resources, and in work-for-hire situations. If an idea or product is created using funding from the University, often times, at least partial ownership falls to JMU.

The first step in getting the committee to review an item is by filling out a disclosure form. This can be downloaded by going to www.jmu.edu/JMUpolicy and clicking on 1107—intellectual property. You need to indicate what kind of work has been

done and whether it was done as part of a grant (internal or external). The next step is to submit the completed form to the committee for review. The committee then reviews the form, decides who has ownership, and replies back to the individual.

One key point that Dr. Kolvoord stresses, is that students' work belongs to them. This includes any projects that a student might develop for a class. This does not apply to situations in which students are hired to assist faculty members on projects. There are some situations where the teacher and student should make an agreement regarding the property, such as when a student volunteers to help on a research project. The best policy is to work out these issues at the beginning of a project, not at the end.

For more information on intellectual property or the review board, contact Dr. Robert Kolvoord at kolvoora@jmu.edu or at 540-568-2752.

INSTITUTIONAL REVIEW BOARD

The Institutional Review Board (IRB) is charged with reviewing all research proposals that involve human subjects. It is chaired by Janet Gloeckner, who has taken on this responsibility for four years. Along with Dr. Gloeckner, there are ten other members including one person who is not a scientist and one person who is not at all associated with JMU.

Federal and state law mandates the existence of an IRB for studies involving human subjects. Its main purpose is to protect the subjects involved in research. This is not to imply that researchers are knowingly harming their subjects, but there are inherent risks in any study. The biggest risk that stems from most of the research at JMU is loss of subject anonymity or confidentiality.

In general, most of the studies performed at JMU contain very little risk. This allows for a much faster review process. As Dr. Gloeckner explained, there are two types of reviews that the IRB conducts. The full review and the expedited review. The majority of the proposals that the IRB receives are processed through the expedited review. The committee can exempt some studies from review as allowed by federal law.

The expedited review is done by a subcommittee, which involves fewer people than a full review. The subcommittee is capable of approving studies, but it cannot deny studies. If the subcommittee feels that a study should not go through, it is then put under a full review by the whole IRB.

Although 99% of the proposals go under an expedited review, there is one

exception, regardless of its risks. Federally funded studies are required to receive a full review, even if the risks are deemed minimal.

The IRB has three basic principles regarding research:

◇ *Subjects to be autonomous agents.* This means that they can think about what they are being asked to do, make a decision regarding this, and act upon that decision. If all three of these aspects are not evident in a subject, that person requires extra protection. A perfect example of this is a child. Parental consent is required for children to be part of a study, but the child must also exhibit his or her assent. If the child is having a tantrum about participating in the study, then that child should be excluded, regardless of pa-

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The SinterStation 2500 plus is Here

The SinterStation is a highly complex device, which can reduplicate a desired object. This of course, is a very simplistic explanation. This fascinating technological advance is being touted as a device which can revolutionize the use of space, money, and time. This is all done through a process called "selective laser sintering".

The first step is to have a design in mind. You can create this on a computer, or use the design of a pre-existing object. You then scan its design properties into the machine, and the rest is up to the sintering machine. The SinterStation reads the design that is fed into it, and replicates it layer by layer. A plastic or metal powder helps create each layer of an object. At the end of this layering process, the object is essentially a metal powder held together by plastic. The new object is then put on a bronze plate and baked in a special oven for 24 hours at 1,800 degrees Fahrenheit.

The existence of the SinterStation creates the possibility of small number productions prior to mass production, which will aid in deciding if mass production should be pursued. JMU has already built parts for two companies, clearly working to earn back the \$420,000 it took to build the SinterStation. This creation is currently housed in the CISAT manufacturing lab. For more information, see the article in the November issue of the JMU universe or contact Dr. Ron Kander at kanderrg@jmu.edu or at 568-2740.



Coming Attractions & Department Highlights

- Feb. 28 Brenda Seal, Jim Benedict, and Karen Santos will discuss the topic "Is the Lecture Dead?" at 3:30 in the Cleveland Partnership Center.
- Mar. 4 JMU closed
- Mar. 4-8 Spring Break/No classes
- Mar. 11 Classes Resume
- Mar. 12-19 James Madison Week

Nursing Highlights

- ◇ A series of seminars on Complementary and Alternative Therapies will be offered on five consecutive Thursday evenings, beginning March 14. For details, contact Melody Eaton at eatonmk@jmu.edu
- ◇ The Nursing Department, along with the Social Work Department and the Alzheimer's Association, received funding for a respite program for family caregivers of people with Alzheimer's. This makes use of students and community volunteers. For more information, contact Merle Mast at mastme@jmu.edu or Karen Rose at karen.rose@alz.org or 568-6454.

- ◇ The Student Nurses Organization is doing many community service projects and hopes to win some awards at the State Student Nurses Convention. Contact Vicki Martin at martinvc@jmu.edu for more information.
- ◇ The second annual Nursing Scholarship Symposium is coming up on Friday, April 12. It is sponsored by the Pi Mu Chapter of Sigma Theta Tau International. It will feature presentations by nursing students from JMU and EMU, as well as nurses from the community. Contact Diane Barger at bargerd@jmu.edu for more information.

There are two exciting training programs being offered as a part of the cross-cultural programs within the Blue Ridge Area Health Education Center (BRAHEC).

The Community Health Interpreter Service is holding a 40-hour medical interpreter training course during February. This class is full, but there will be another class offered early next fall.

The training will involve evaluating language proficiency, and areas to be covered are: roles of the interpreter, code of ethics, interpersonal skills, advocacy, and impact of culture on interpreting. This service is striving to improve the quality of interpretation for

the well-being of the patient and the provider.

Please contact Alison Helmick at 568-3011 or Beth Rodgers at 568-3383 for more information.

The Promotoras de Salud will be hosting a training session for the Hispanic Lay Health Promoter program. The training will begin in the spring on March 16 and will run for 10 weeks.

Duties included in the program are, detecting health problems in people in the community through health screenings; referring people to existing health care systems and documenting these referrals; teaching about insurance; assisting in enrolling eligible children in Medicaid or FAMIS; distributing and explaining Spanish language health materials; and participating in community health activities for neighborhoods.

Please contact Beth Rodgers at 568-3383 or Magda Bullock at 568-8029 for more information. You can also visit their website at www.brahec.jmu.edu for more information on either program.



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- rental consent.
- ◇ *Benefit-risk ratio.* The IRB wants to make sure that there is enough benefit to justify the risk. If it doesn't seem to balance, they will try to think of ways to minimize the risk to the subjects while still achieving the same research outcomes.
 - ◇ *The principle of justice.* This questions whether the subjects are going to benefit from the research that is being performed. For instance, college-aged subjects would not benefit from a study about menopausal women. This principle helps insure that the appropriate subjects are being used for each study.

A very important and new development in the review process is training. As of December 13, 2001, all researchers using human subjects are required to go through an online training in how to handle these human subjects. This is a very sig-

nificant step in the review process, because a proposal will not be approved until the researcher(s) has gone through this training.

The training website keeps track of who has completed the program. The entire training takes about 30 minutes and includes a quiz at the end, which is graded by the Office of Sponsored Programs (OSP). There is no renewal system in place yet for the training, but researchers will most likely need to renew their status every two to three years. It is important that every person involved in each study go through the training program, including students. If all participants have not gone through the training, approval will be delayed.

To begin the process of review, one must go to www.jmu.edu/sponsprog. From there, click on the IRB tab and then click on the 'forms' tab. One must then fill out a research review request form. Once completed, the form can be submitted electronically to the address indicated at the bot-

tom of the form. It can also be submitted in electronic format to the Office of Sponsored Programs. The IRB then reviews the form and decides if it is exempt or needs an expedited or full review.

Once the proposals are submitted electronically, they are uploaded to a secure website which is available only to IRB members. The reviewers then fill out a comment sheet which goes to the OSP. The IRB promises a three-week turn-around for the whole process. If changes need to be made to the study, it can take longer, but the initial response will be submitted within three weeks.

For more information on the IRB, visit www.jmu.edu/JMUpolicy or www.jmu.edu/sponsprog.



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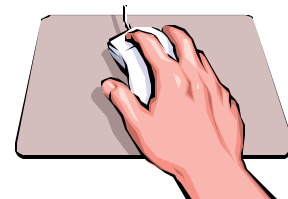
Comments about this issue and suggestions for future issues can be e-mailed to Love at lovejl@jmu.edu

Don't forget the web page!

Some features include:

- College Statistics
- CISAT committees and groups
- Forms and documents
- CISAT Centers
- Position openings
- Student resources and organizations
- Facilities information (lab hours, room capacities)

And much more!



While you're there, check out the new Health and Human Service web page at www.hhs.jmu.edu. It has information on the Center for Innovation in Health and Human Services, academic programs, outreach, service and research programs, faculty, students, campus resources, and frequently asked questions.

Happy Birthday Wishes

March

- 3 - Tom Syre, Health Sciences
- 6 - Harriet Cobb, Psychology
Karen Ford, Social Work
- 10 - Joann Grayson, Psychology
- 13 - Becky Helton, CSD
- 14 - Pamela Bailey, Health Sciences
- 15 - Abdel Rabie, ISAT
Dick Travis, Health Sciences
- 17 - Cathy Gilbert, Migrant Ed.
Pat Reynolds, Computer Science
Lori Smilowitz, Human Development Center
- 18 - Debbie Ford, Health Sciences
Pamela Gibson, Psychology
Challace McMillin, Kinesiology & Recreation
- 19 - Peggy Kellers, Kinesiology & Recreation
Helmut Kraenzle, ISAT
- 21 - Hossain Heydari, Comp. Science
- 22 - Angela Berry, Madison MediaLab
- 23 - George Baker, ISAT
- 24 - Bob McKown, ISAT
Margaret Slattery, Kinesiology & Recreation
- 25 - Nancy Grembi, Social Work
Ken Parmalee, Dean's Office
- 27 - Vida Huber, Dean's Office
- 28 - Michael Gottfried, CSD
Gene Tucker, ISAT
- 29 - Dave Cockley, Health Sciences
Janet Gloeckner, Health Sciences
- 31 - Hope Thompson, Dean's Office



April

- 2 - Ellen O'Neal, Health Sciences
- 3 - Dan Halling, CSD
- 4 - David Wenos, Health Sciences
- 8 - Ali Eskandarian, ISAT
- 11 - Beth Rogers, Blue Ridge AHEC
- 12 - Charlie Abzug, Computer Science
- 13 - Patricia Warner, Psychology
- 15 - Chris Nye, Blue Ridge AHEC
- 16 - Joe Blandino, Lab Operations
George Coffman, Lab Operations
Anita Warner, Migrant Ed.
- 17 - Gerry Taylor, ISAT
- 22 - Charles Harris, Psychology
- 24 - Jacqueline Williams, Kinesiology & Recreation
- 25 - Jim Seifried, Dean's Office
- 26 - Vince Drumheller, T.S.E.C.
Ron Raab, ISAT
Joe Vedelli, Kinesiology & Recreation
- 28 - Taz Daughtrey, Computer Science
- 30 - Tammy Gilligan, Psychology

May

- 1 - Janis Babbitt, CSD
- 5 - Kim Poole, Lab Operations
- 6 - Vince Capaccio, Lab Operations
- 13 - Clint Bennett, CSD
- 14 - Monica Reis -Bergan, Psychology
- 16 - Mo Zarrugh, ISAT
- 17 - Cathy Webb, Nursing
- 19 - Tom Benzing, ISAT
- 21 - Arch Harris, Computer Science
Butch Filter, CSD
- 23 - Blair Bigger, Madison MediaLab
- 24 - Cindy Allen, Computer Science
Jeff Loveland, Health Sciences
- 26 - Michael Stoloff, Psychology
- 27 - Stephanie Chisolm, Health Sciences
Edson McKee, Psychology
- 28 - Louise White, Dean's Office
Beverly Robertson, Human Development Center
- 29 - Cheryl Talley, Psychology
- 31 - Steven Evans, Human Development Center

Bits and Pieces

MINE ACTION INFORMATION CENTER NEWS

- ◆ JMU's Mine Action Information Center (MAIC) hosted an international conference on December 3-5 in Miami, Florida. The conference was sponsored in part by the U.S. Department of Defense. JMU attendees included Dr. Steve Stewart, Department Head of Health Sciences, Nicole Kreger and JJ Scott—Technical and Scientific Communications (TSC) majors, Mary Ruberry—graduate student in TSC, and Kamala Hirsch, a SMAD major.
- ◆ The Mine Action Information Center awarded the State Department Humanitarian Demining Fellowship for 2002, to Jennifer Lange, and TSC major and Sarah Kindig, a Political Sciences major.
- ◆ At the State Department dinner held on November 27 in Washington, D.C., Secretary of State Colin Powell honored the MAIC and Dennis Barlow by saying "Dennis Barlow from the Mine Action Information Center at James Madison University and his team are the world's go-to people when you need land-mine data".
- ◆ Visit the MAIC on the web at maic.jmu.edu

SOCIAL WORK INTERESTS

Karen Ford's Social Policy class is one of ten social work programs around the country participating in the CSWE/SAGE-SW Intergenerational Policy and Advocacy Course Project Pilot Program. This program has established a collaborative program with the National Committee to Preserve Social Security and Medicare, and the National Association of Area Agencies on Aging. They hope to encourage social work education in the areas of policy, community organization, and advocacy. The Intergenerational Advocacy Project involves social work students going out into the community to educate and advocate on issues such as Social Security, Medicare and Older Americans Act programs. This provides students with real life experience in working on community organization and advocacy in preparation for future careers.

PSYCHOLOGY NEWS

- ◆ According to Jill Sundheim, the Peer Advisors helped out a family that was very much in need this holiday season. Working with Harrisonburg Social Services, the Peer Advisors decided to adopt this family, because the father was going through brain surgery around the holidays. About 33 Peer Advisors got together to help provide basic necessities, clothing, food, and toys to the family. This wonderful gesture has made JMU very proud!
- ◆ Peer writing assistance is available through the School of Psychology's Peer Writing Advisor Program. This semester there are 7 Advisors who will work with the professors to learn about their expectations and then aid the students in their writing assignments. If you would like to use this service for your class, please contact Ashton Trice as soon as possible at tricead@jmu.edu.

CONGRATULATIONS

2002 CISAT Faculty Awards!

Distinguished Service Award : Bijan Saadatmand — Psychology
CISAT Distinguished Teacher Award : J. Edson McKee — Psychology
Madison Scholar : Helmut Kraenzle — ISAT



Grant Awards (November-February)

Staunton Youth Risk Study : Jeanne Martino-McAllister — Health Sciences
State Board Anemometer Loan Program : Jonathan Miles — ISAT
Summer Institute 2001-2002 : Vida Huber — CISAT
Promotoras de Salud (Lay Health Promoter) : Sandra Hopper — Blue Ridge AHEC
Harrisonburg-Rockingham Tobacco Use Prevention Project : Jeanne Martino-McAllister — Office of Substance Abuse Research