### Chairs' & Center Directors' Meeting Minutes

**Date:** February 14, 2011 (12:00 to 2:00 pm)

Location: EBU II – Room 443 Attendees: Abbaschian, Reza

Balandin, Alex Barth, Matt Bhanu, Bir Boretz, Mitch Davidson, Don Haddon, Robert Hartney, Pat Lake, Roger

Lonardi, Stefano (for Laxmi Bhuyan)

Matsumoto, Mark Parker, Linda Payne, Tom

Ravi

Schultz, Jerry Stahovich, Tom

Tan, Sheldon (for Daniel Xu)

Yan, Yushan

Absent: Bhuyan, Laxmi

Najjar, Walid Xu, Daniel

The agenda for the meeting is shown in Appendix 1.

### 1. Welcome and call for agenda items - Reza

Jerry added the following agenda items: Pillars of Excellence, Student Retention and eFile.

Reza announced that Yushan will be leaving for the University of Delaware. It was a difficult decision for Yushan. There will be a going-away party for him before he leaves.

Don reported that the body of the missing ME undergrad was found in Newport Beach Harbor last weekend. There was no evidence of foul play. Since he was planning to graduate this Spring, the Executive Committee will decide if a posthumous degree can be conferred.

### 2. Approval of Minutes - Pat

Alex noted the MSE Building equipment discussion that was added to the minutes of the 1/31/11 Chairs/Directors meeting. He emphasized that there appears to be an imbalance of moveable equipment

funding between the Bioengineering and MS&E labs. Reza responded that the final orders for MSE Building moveable equipment have not yet been made.

The revised minutes of the January 31st Chairs/Directors meeting were unanimously approved.

### 3. STC Topic Suggestions - Mitch

Jerry distributed the attached summary of Bioengineering concepts for STC proposals. This document includes proposed STC research themes of: Detection and Analysis of Biomarkers for Pre-Diagnosis and Therapy of Disease; Multi-scale Optical Imaging; Biocomputation: Genes, Proteins and Cells; Artificial Organs and Medical Devices; High-throughput Screening and Drug Design; and Artificial Cells and Organelles.

Tom S. indicated that ME could contribute in the areas of materials, biomedical devices and air pollution. Matt stated that CE-CERT will work with the Office of Research on the current effort in Sustainability (Ecosystems, Water, Transportation, Air Quality).

Stefano reported that CSE could contribute to several STC areas but probably not lead an effort. Ravi responded that he is still interested in Medical Informatics but the UCR Medical School is focused on other efforts at this time. Such an effort would also involve CNAS, SOBA and Psychology Department faculty.

Alex reported that he and Robert recently met with faculty from Physics and are interested in a joint effort, tentatively named SPECTRA. This proposed center would include research in Spins/Magnetic Properties, Thermal Properties and Electrons/Collective Properties and would be led by Robert and Harry Tom (Physics). Yushan stated that CEE could contribute to a Materials for Energy topic.

It was reported that Kambiz was interested in a Porous Media topic.

It was noted that Harry Tom suggested that a Science Museum in Riverside could be an innovative outreach option for an STC center at UCR.

UCR has scheduled a meeting on 2/22/11 to discuss possible STC topics. UCR can submit up to three STC pre-proposals. Eight page STC pre-proposals are due in May 2011.

Reza stated that research teams will need to be built for each STC topic and that white papers should be prepared in advance of the 2/22/11 meeting.

### 4. BCOE Policy on Transfer of University Material - Pat

Pat distributed a revised BCOE Policy on Transfer of University Material. This Policy outlines the process for the transfer of UCR material by a BCOE faculty member moving to another university. This revised draft adds non-inventorial equipment and supplies (i.e., computers, printers, etc) to the Policy. In effect, a transferring faculty member should not assume that he/she can transfer any UCR (inventorial or non-inventorial) items to his/her new institution. Pat believes that transfers between UCR and another UC campus fall under this Policy but will modify the Policy if he finds otherwise. The revised draft also adds the word "anticipated" in front of incoming BCOE faculty hires. After discussion, Pat stated that the revised draft will now be sent to departments for implementation.

### 5. Export Control - Reza

Reza pointed out the Export Control documents attached to the agenda. Reza noted that a BCOE faculty member was recently visited by the FBI because the faculty member had been in contact with a company being watched by the FBI due to possible export control violations. UCR had to hire an attorney to defend this faculty member which was expensive. It was noted that there is a general lack of export control expertise at UCR. There will be a workshop on March 3<sup>rd</sup> by UC's export control consultant, Donald Fischer. BCOE faculty are encouraged to attend and should prepare questions that can be discussed during this workshop.

### 6. Faculty Recruitment - Chairs

Departments reported that faculty recruitments are moving forward. With the exception of CEE's departmental recruitment, Reza noted that the EVCP will need to approve interviews with tenured faculty candidates since all other BCOE recruitments have been authorized at the Assistant Professor level.

### 7. Undergraduate Education - Ravi

Ravi stated that UCR has offered admission to about 2,000 BCOE applicants. A subsequent round of admissions should be sent out by the end of February. BCOE's target is still 600 incoming freshmen. Ravi noted that there will be a UCR Scholarship event on March 5<sup>th</sup> for about 300 Chancellor Scholars and 122 Regent Scholars. Ravi expects there to be about 250 attendees. He requested that each Chair send him names of 1-2 faculty members that are willing to attend this event to help recruit these students. Ravi reminded the group that BCOE undergraduate programs are reviewed every 6 years by ABET and every 7 years by UCR's Committee on Education Policy (CEP). CEP has now agreed not to do a separate review but will send a representative to each program's ABET exit interview.

Lastly, Ravi noted that BCOE undergrads can take graduate courses for credit but must have GPAs of at least 3.0. Dean's Office approval is needed for undergrads with GPAs less than 3.0 who want to take a graduate course for credit.

### 8. Graduate Education - Mark

Mark distributed the latest summary of graduate student applications and admits. Mark noted that BCOE has 291 domestic grad student applicants this year but that there are another 180 incomplete domestic student applications in GradSIS. He will ask BCOE Grad Assistants to contact these 180 domestic students to encourage them to complete their applications.

### 9. Moodle - Roger/Laxmi

Moodle is an open-source course management system, similar to Blackboard. Stefano noted that CSE had been using Moodle instead of iLearn (Blackboard) for several years but recently switched to iLearn. It is believed that UCR spends \$40-70K/yr for Blackboard (plus 1-2 IT staff). A few universities have switched to Moodle to save money (since it's free) but there are security and other issues with using Moodle. Such a change would have to be done at the UCR campus level.

### 10. Departmental Updates

Matt mentioned that CE-CERT's Board of Advisors meeting is scheduled for March 3<sup>rd</sup> – 4<sup>th</sup> along with a retirement event for Joe Norbeck on March 2<sup>nd</sup>

On a related subject, it was noted that departments will need to schedule their Board of Advisors meetings this year so that the results can be incorporated into their ABET Self Studies. Departments also should obtain input from alumni for their Self Studies.

### 11. Other Matters

In response to a question from Jerry, Reza noted that he compiled the Pillars of Excellence submitted by the Chairs and Directors and forwarded these to the EVCP. He will send an electronic copy of this submission to the Chairs/Directors.

Jerry noted that approximately 40% of BIEN students enrolled in previous years are still in the program which seems to conflict with estimates provided previously by Ravi. Ravi responded that about 33% of BCOE's freshmen graduate in BCOE. BIEN's retention figures may be different since it is a new program and had many Transfer students. Jerry also asked what factors (GPA, math courses, etc) could be used to predict success for freshmen applicants. Ravi responded that he has had great difficulty obtaining detailed data from

UCR. As such, he is downloading quarterly enrollments for BCOE students for the last 10 years. He expects to complete this analysis soon and will present his findings at the next Chairs/Directors meeting. Tom added that admitting freshmen as "Undeclared" students to BCOE would allow the College to review their grades for one year before accepting them to a BCOE program. Ravi indicated that we have already been pursuing this option with Admissions. A mechanism in BCOE already exists for this since we used to admit to Undeclared in the past. However, Admissions is resisting. For some reason, they believe this now requires Academic Senate approval.

Jerry noted that Chairs have access to faculty files at any time in BCOE's ARS system but do not have this capability in UCR's eFile system. Mark responded that we may be able to add this capability (for BCOE only) in eFile.



### Chairs' & Center Directors' Meeting February 14, 2011

### Agenda

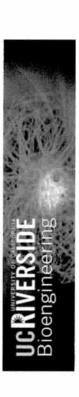
Engineering Building Unit II – Room 443

| 1.  | Welcome - Request for Agenda Items from the Floor | Reza             |
|-----|---|------------------|
| 2.  | Approval of Minutes from January 31, 2011 Meeting | Pat              |
| 3.  | STC Topic Suggestions                             | Chairs           |
| 4.  | BCOE Policy on Transfer of University Material    | Pat              |
| 5.  | Export Control                                    | Reza             |
| 6.  | Faculty Recruitment                               | Chairs           |
| 7.  | Undergraduate Education                           | Ravi             |
| 8.  | Graduate Education                                | Mark             |
| 9.  | Moodle  | Roger/Laxmi      |
| 10. | Department Updates                                | Chairs/Directors |
| 11. | Other Matters                                     |                  |

The next scheduled meeting will be

Monday – February 28, 2011

Please note: Meetings will be held in EBU II - Room 443



### Concepts for STC **Proposals**

Jerome S. Schultz

February 14, 2011

# PROPOSED STO RESEARCH THEMES

for Pre-Diagnosis and Therapy of Disease High-throughput Screening and Drug Design Siocomputation: Genes, Proteins and Cells Detection and Analysis of Biomarkers Artificial Organs and Medical Devices Artificial Cells and Organelles Mutti-scale Optical Imaging

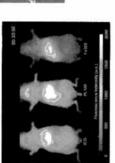
# Bourns College of Engineering has a

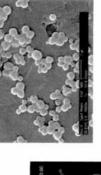
## BIOMEDICAL TECHNOLOGY FACULTY CRITCAL BASSO

Ashok Mulchandani **Guillermo Aguilar** Julia Lyubovitsky **Dimitrios Morikis** Stefano Lonardi Bahman Anvari Robert Haddon Elaine Haberer David Kisailus Jiayu Liao Tao Jiang Bir Bhanu Hyle Park

Valentine Vulley Charles Wyman Jerome Schultz Victor Rodgers Sharon Walker Cengiz Ozkan Jianzhong Wu Masaru Rao Mihri Ozkan







Laser Irradiation of Cancer Cells

Free dye - No Effect



Specific destruction of Cancer Non-coated Particles -

Indiscrimination destruction of cells

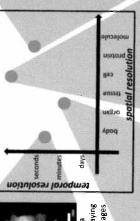
synthesis and characterization optical imaging, laser therapy Bahman Anvari Val Vullev David Lo

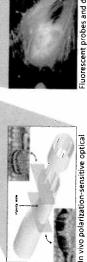
immunology

## 



time-sequence video displaying false-color fluorescence images of mice injected with ICG single frame excerpt from a solution.1

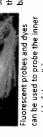




and microtubules (green).

Fluorescence image of

mitochondria (magenta



world of the cell.3

coherence tomography images of a

1. MA Yaseen et al., Optics Express 16: 20. FP Henry et al., in preparation (2010). demyelinated nerve (lower left),2 normal (upper right) and

- same area of one 650 nm (b) STORM image of the thick image slice. Scale oars: 3 µm. 4
- MA Yaseen et al., Optics Express 16: 20577 (2008). 3. N Blow, Nature 456: 825 (2008). FP Henry et al., in preparation (2010). 4. B Huang et al., nature Methods 5: 1047 (2008).









& Cells

Proteins

Cenes

Orugs, Biomaterials, Molecular Devices

6 BCOE, 14 UCR Faculty Members

Networks

Systems

Interactions

Protein-Protein

Proteins

Genes

Interactions

Biocomputation Forum.

**Sellular Structures** & Processes



Biomaterial &



Molecular devices

Bioinformatics

**Drug-Protein** Interactions

Drug Delivery

Drug Design Virtual Screening

# Center for Artificial Organs and

## Medical Devices

## Medical Devices are California's Future

- Over 2,000 medical device companies in California
  - California is home of 3 of the 9 major biomedical clusters in the world

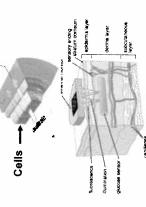
### A Few BCOE Examples

- Jerome S. Schultz
- Victor G. J. Rodgers, Devin Binder Implantable glucose sensor
- Brain swelling reduction in TBI patients
  - Laser techniques for dermatology Bahman Anvari

Ashok Mulchandani, Nosang Nyung

- Bioaffinity sensing nanowires B. Hyle Park
- OCT devices for nerve damage detection Bir Bhanu
  - Algorithms to improve imaging analysis

### **Biohybrid Artificial Kidney**



Manipulation Molecular

Implentable Glucose Sensor, Courtesy J. S. Schultz

## Bioendineering High-throughput Screening and Drug Design Center





**Promising Future Diagnosis** 

and Medicine

**UCR Heath Initiative** 

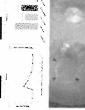


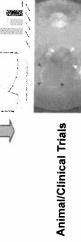
for Assay Development



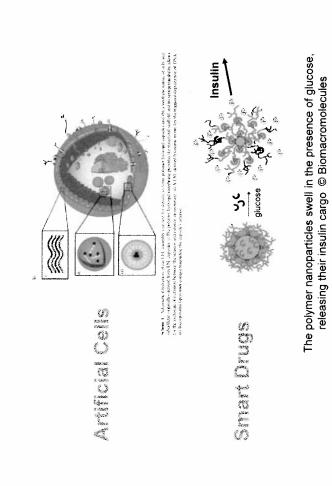








Jiayu Liao, Masaru Rao, Michael Purring, Sean Cutler, Thomas Girke, Natasha Raikhel, Julia Bailey-Serres, Zhenbiao Yang, Michael E. Adams, Prue Talbot, and Karine Le Roch



### PROPOSED STC INITIATIVES FEBRUARY 14, 2011

### Jerome S. Schultz

### RESEARCH THEMES

### Detection and Analysis of Biomarkers for Pre-Diagnosis and Therapy of Disease

Current imagining and diagnostic technologies can now detect low-level biomarkers that are overexpressed by diseased cells (such as some cancer cells) with the help of nanoparticle technology. In addition, with the advent of new materials, it is now possible for nanoparticles to, not only identify diseased tissue with pinpoint precious, but also direct highly effective therapeutic drugs at the point associated with the malignant cells

### Multi-scale Optical Imaging

Synergistic enhance the NSF IGERT program in Video Bioinformatics initiated by Bir Bhanu in the Electrical Engineering department with the CEPCEB Microscopy and Imaging Core Facility supervised by David Carter, as well as enhance the development of the Biomolecular Imaging Research and Technology division of the Center for Bioengineering Research.

### Biocomputation: Genes, Proteins and Cells

Develop a biocomputational forum in the campus and to launch a series of computational studies aiming to delineate protein structure-dynamics-interactions-function relations and to analyze the large gene databases. In addition, biocomputation at the protein and network levels is now essential for the rational design of new drugs and the prediction of protein-drug and drug-drug interactions

### **Artificial Organs and Medical Devices**

The Center will design, model, and/or manufacture biomedical devices with specialization in controls, system-level integration, clinical translation, and/or commercialization. Over 2,000 biomedical products companies are located in Southern California

### High-throughput Screening and Drug Design

Develop and integrate high-throughput and silicon drug design technologies with state-of-the art engineering, computation, bioengineering, and *in vivo* biology in a multi-disciplinary effort to discover molecular probes and biomarkers for *in vitro* and *in vivo* systems.

### Healthcare Informatics

The Center for Healthcare Informatics would develop innovative information technologies and serve as an impartial broker between healthcare players, with the goal of achieving better healthcare delivery nation-wide. In addition to facilitating cooperation between healthcare players, the center would develop and disseminate tools and technologies to achieve better healthcare delivery.

### **Artificial Cells and Organelles**

Engineered synthetic cellular systems are expected to become a powerful biomedical platform for the development of next-generation therapeutic carrier vehicles.

### Campus Leaders in Biomedical Technology Bourns College of Engineering Faculty shown in bold

Bioinstrumentation and Techniques

Bahman Anvari (BIEN) Biophotonics

Julia Lyubovitsky (BIEN) Non-linear Microscopy

Hyle Park (BIEN) Optical Coherent Tomography

Jerome Schultz (BIEN) Biosensors

Valentine Vullev (BIEN) Microfludics, Magnetic Tweezers

Bir Bhanu (EE) Biological and Medical Imaging & Signal Processing

Ashok Mulchandani (CEE) Environmental Biotechnology, Biosensors

Masaru Rao (ME) Micro/nanofabrication Methods and Biomedical Microdevices.

Quan Cheng Biosensing and imaging arrays

Cynthia K. Larive Ligand-protein interactions, tissue-targeted metabonomics

**Biomaterials** 

Huinan Liu (BIEN) Biological Applications for Nanoparticle Composites

Julia Lyubovitsky (BIEN) Collagen Chemistry

David Kisailus (CEE)

Bio-mimetics, Bio-inspired Materials Synthesis, Biomineralization

Robert Haddon (CEE) Biological Applications of Nanotubes

Elaine Haberer (EE) Bio-templated materials for electronic, energy applications

Cheryl Hayashi Bioengineered Fibers Roya Zandi Engineered Viruses

**Biomedical Devices** 

Bahman Anvari (BIEN) Nanocapsules for Phototherapy

Victor Rodgers (BIEN) Brain Swelling

Hyle Park (BIEN) OCT Assessment of Neuronal Damage

Guillermo Aguilar (ME)

Mihri Ozkan (EE)

Sharen Welker (CEE)

Laser Tissue Interactions, Thermo-mechanics of Tissues

Bionanotechnology for Cancer Treatment and Imaging,

Sharon Walker (CEE)
Laura Zanello

BioFilms, Cellular Adhesion
Nanomaterials for osteoblasts

**Therapeutics** 

Jiayu Liao (BIEN) High Throughput Drug Screening, Cell Regulatory Systems

Dimitrios Morikis (BIEN) Immunophysics, Rational Drug Design

Michael Pirrung Drug Discovery

John Shyy Genetics of biomechanic effects on cells Manuela Martins-Green Wound healing and tumor development

David Lo Mucosal vaccines

**BioComputation** 

Dimitrios Morikis (BIEN)

Immunophysics, Immunoengineering, Rational Drug Design

Victor Rodgers (BIEN)

Biothermodynamics, Bioreaction and Transport Systems

Chinya Ravishankar (CS) Health Care Informatics

Tao Jiang (CS)
Stefano Lonardi (CS)
Bioinformatics
Bioinformatics

Bir Bhanu (EE) Biological and Medical Imaging & Signal Processing

Jianzhong Wu (CEE) Biomolecular modeling using coarse-grained methods

Thomas Girke Bioinformatics, Cheminformatics
Umar Mohideen Signal transmission in the human brain
Roya Zandi Computational modeling of viruses

Chia-En Cheng Computational Biology

Renyi Liu Bioinformatics tools for plant and bacterial genomes

Shizhong Xu Quanittative Genetics, Statistical Genomics

Xinping Cui Biostatistics

Jason Stajich Population and evolutionary genomics of fungi

### **BCOE Policy on Transfer of University Material**

### A. Material Acquired with Contract and Grant Funds

Per UCR Policy Number 750-24 (J): **TRANSFERS OF UNIVERSITY OWNED MATERIAL ACQUIRED** WITH FEDERAL CONTRACT AND GRANT FUNDS:

This paragraph applies only to Federally funded material where title has been vested in the University. Material acquired with State general funds is excluded.

- 1. In order to transfer material acquired with federal contract and grant funds to another institution, in conjunction with a move by a faculty member to that institution, the following conditions must be met:
  - The material must be available for transfer: its title must be vested in the University, and terms of the grant or contract from which it was funded do not prohibit such transfer to another institution.
  - A written request to transfer must be made by the departing faculty member and must include the following: (1) A specific list of the material including (at a minimum) property numbers, descriptions, original unit costs, and original funding sources/agencies. (2) The reason for the transfer. (3) Name of the institution to which title will be transferred. (4) Justification for transferring rather than leaving or selling the material.
  - The request must be approved by each of the following: (1) Department Head, (2) Dean, (3) Office of Research Affairs, (4) Equipment Manager (verifies that title vests in the University and that there are no restrictions to transfer).
  - Transfers of material with a total historical cost in excess of \$100,000 must be approved by the Vice Chancellor of Administration, the Senior Vice President--Administration, the Vice President--Agriculture and Natural Resources or a comparable Laboratory Administrator in their respective areas of responsibility. Requests for material transfer shall not be divided to avoid this requirement.
  - -The recipient institution must agree, in writing, to accept title, with the understanding that the material is for the initial use of the new faculty member. This agreement may be obtained via a standard acceptance form signed by an appropriate office of the recipient institution.
- 2. The Equipment Manager (or equivalent) shall verify that all required approvals have been obtained and shall approve the release of the material from custody.
- 3. Unless specific provisions are made in the terms of a contract or grant, transfers of material to individuals or for-profit organizations are prohibited.

Before the BCOE Dean's Office will approve any request to transfer material (<u>including non-inventorial</u> <u>items such as computers, printers, etc</u>) acquired via federal, state or private contracts/grants, the departing faculty member's department must verify that this material is not needed for research and/or educational purposes by (in order of descending priority):

- 1. anticipated incoming BCOE faculty hires
- 2. current faculty members in the departing faculty member's department
- 3. current faculty members in other BCOE departments/centers

### B. Material Acquired with State General Funds or Gift Funds

The BCOE Dean's Office will not approve transfers of material (including non-inventorial items such as computers, printers, etc) acquired (entirely or partially) via State General funds (including Initial Complements and Internal Allocation Accounts) or Gift funds (including endowment interest) to a departing faculty member's new institution.

### Export Control Regulations UCR Dean's Council February 4, 2011

### What is Export Control?

The mechanism used by the federal government to control dissemination of United States technology and technical data outside the United States borders and within the borders to foreign persons\*.

### What federal agencies regulate export controls?

- U.S. Department of State (Office of Defense Trade Controls) controls defense articles, defense services, and related technical data including most space-related articles (ITAR).
- ❖ U.S. Department of Commerce (Bureau of Industry and Security) controls "dual-use" items − good and technology with both civilian and military/strategic uses (EAR).
- ❖ U.S. Department of the Treasury (Office of Foreign Assets Control) oversees U.S. trade embargoes.

  All three are enforced by Department of Homeland Security (U.S. Customs and Border Protection Services).

### What constitutes export of controlled commodity, software, technical data or technology?

- Physical Export The shipment or transmission of items out of the United States.
- Deemed Export The release (oral or visual) of "technical data" or "technology" (including software source code) to a "foreign person" regardless of where the export takes place
  - Laboratory, classroom, conference, technical assistance, etc.
- Technology is defined in the EAR as specific information necessary for the "development," "production," or "use" of a product.
- Technical Data is defined in the ITAR as information...required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance, or modification of defense articles;
- Invention covered by secrecy order, and software directly related to defense article.

### What isn't controlled?

- Technical Data and Technology is not controlled in the following instances:
  - Public domain
  - Published for sale, in libraries open to the public, or through patents available at any patent office
  - General scientific, mathematical, or engineering principles commonly taught in colleges and universities
  - Available through unlimited distribution at a conference, meeting, seminar, trade show, or exhibition
  - Arises during or results from fundamental research with no restrictions on publication or access
  - Non-technical contract or business document

### Why is compliance important?

Civil and criminal penalties for the individual and institution.

\*Foreign person is everyone other than a US citizen, a permanent resident alien, & certain "protected individuals" (refugees and those with asylum). This includes companies not incorporated in the United States.

### **I-129 Export Control Questionnaire**

As of December 22, 2010, employers, including the University of California, are required to use a revised I-129 form when they petition for certain classifications of nonimmigrant workers. The I-129 form now requires that the University certify that it has reviewed federal export control regulations to determine whether a license is necessary with respect to the technology or technical data to which the nonimmigrant worker will be given access by the University.

K 1

By way of background, federal export control regulations require U.S. persons and entities (including employers) to seek and receive a license from the U.S. Department of Commerce and/or the U.S. Department of State in order to release certain technology or technical data to foreign persons of certain countries, unless applicable exemptions or exclusions apply. The applicable regulations are the Export Administration Regulations (EAR) (15 CFR Parts 770-774) and the International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130).

In most cases, the University does not need to obtain a license to release technology or technical data to employees and others conducting research at the University. This is because most types of technology are not controlled for export or release to foreign persons, and, in addition, because UC primarily conducts open fundamental research (which generally is excluded from export control regulations). Therefore, in most cases, the University will be able to check off the box on the I-129 form indicating no license is required. However, there may be certain cases in which the beneficiary (i.e., the nonimmigrant researcher on whose behalf the University is filing the I-129 petition) will be conducting research that may require further evaluation before the University can conclude that no license is required.

In order to confirm that the visa beneficiary's work at the University does not require a license, the department requesting the University to file an I-129 petition should be asked to work with the person who will be supervising the visa beneficiary or who is otherwise knowledgeable about the beneficiary's intended work at the University (usually this will be the principal investigator) to answer the following questions.

The purpose of this questionnaire is to provide the International Scholar Office and/or the local campus export control administrator with enough information about the work the visa beneficiary will be doing to determine whether the University can check the box on the I-129 indicating that no license is required. In most cases, these initial screening questions will be sufficient to make that determination; in some cases, the local campus export control administrator may need additional information. Departments should allot sufficient time to ensure that these questions can be answered (and that any necessary consultation with the local campus export control administrator can be conducted) in advance of the date on which the I-129 petition is to be submitted.

### I-129 Deemed Export Questionnaire

Note: The following questionnaire should only be used when the visa beneficiary will be working in one of the following areas: biomedical sciences, computer sciences, engineering or other scientific discipline; for all other disciplines, the first box on the I-129 form may be checked by your International Scholars Office.

The following questions should be answered by the principal investigator who will be supervising the visa beneficiary ((i.e., the nonimmigrant researcher on whose behalf the University is filing the I-129 petition), or who is otherwise knowledgeable about the beneficiary's intended work.

| 1. | Visa beneficiary's name:   |
|----|--|
| 2. | Visa beneficiary's citizenship(s):   |
| 3. | Name of University department sponsoring beneficiary and supervising PI:   |
| 4. | Does the research agreement (e.g. grant or contract) on which the beneficiary will be working restrict or prohibit the participation of foreign persons in the project or the research team's right to publish any of the results? <i>Please contact your Sponsored Programs Office if you are not certain.</i>  |
|    | No   |
|    | Yes*   |
| 5. | Is there any <i>non-standard</i> language in the research agreement on which the beneficiary will be working regarding export control regulations? <i>Please contact your Sponsored Programs Office if you are not certain.</i>  |
|    | No   |
|    | Yes*   |
| 6. | Does the research project on which the beneficiary will be working involve access to technical information that has been stamped "export controlled;" or will the beneficiary be provided with any sponsor or 3 <sup>rd</sup> party proprietary or confidential information, materials, or software?   |
|    | No   |
|    | Yes*   |
|    | Will the beneficiary work on military or space applications, or "dual-use" technologies that have potential applications to military/proliferation purposes in addition to the usual commercial uses? If you are unsure whether the technologies that the beneficiary will be working on constitute "dual use technologies," please consult with your Sponsored Programs Office or export control administrator. |
|    | No   |
|    |  |

|                             | tment should consult with the campus export control exceptional case in which a license will be required. |
|-----------------------------|---|
| Person completing this form | <br>Date  |

\_\_\_\_\_Yes\*

Please send the completed form to [Campus should determine whether all forms will go to the local campus export control administrator, or whether they are to be returned to the International Student/Scholar office for further action].

### A Seminar with Donald Fischer, LLM

(Export Control Consultant to the University of California)

about

### Export Control Regulations: What You Need to Know In Order to Conduct Your Research

- What are these regulations?
- What do they have to do with my research?
- Why is it required that I know this information?

Thursday, March 3, 2011

2PM – 4PM

Bourns College of Engineering (A-265)

or

Friday, March, 04, 2011 9:30AM - 11:30AM Genomics Auditorium

RSVP: Yolanda Morris-Barnes @ Yolanda.morris-barnes@ucr.edu or 2-4802 (Space is Limited)



2011-12 BCOE GRADUATE RECRUITMENT TARGETS

| Dept     | M.S. | Ph.D. | Total | Accepts | % of Target |
|----------|------|-------|-------|---------|-------------|
| BIEN     | 20   | 15    | 35    |         |             |
| CEE      | 5    | 16    | 21    |         |             |
| CSE      | 15   | 20    | 35    |         |             |
| EE       | 13   | 32    | 45    |         |             |
| MSE      | 4    | 8     | 12    |         |             |
| ME       | 15   | 10    | 25    |         |             |
| Subtotal | 72   | 101   | 173   |         |             |

Applicants - as of February 14, 2011

| D       | International Students |      |      | Domestic Students |      |      | Total Students |      |      |
|---------|------------------------|------|------|-------------------|------|------|----------------|------|------|
| Program | 2009                   | 2010 | 2011 | 2009              | 2010 | 2011 | 2009           | 2010 | 2011 |
| BIEN    | 25                     | 25   | 36   | 22                | 61   | 53   | 47             | 86   | 89   |
| CEE     | 111                    | 129  | 123  | 22                | 60   | 71   | 133            | 189  | 194  |
| CS      | 425                    | 331  | 386  | 55                | 61   | 68   | 480            | 392  | 454  |
| EE      | 416                    | 332  | 422  | 33                | 57   | 40   | 449            | 389  | 462  |
| MSE     | NA                     | 49   | 60   | NA                | 7    | 30   | 0              | 56   | 90   |
| ME      | 64                     | 68   | 86   | 16                | 20   | 29   | 80             | 88   | 115  |
| Total   | 1041                   | 934  | 1113 | 148               | 266  | 291  | 1189           | 1200 | 1404 |

| Apps |   |  |  |  |
|------|---|--|--|--|
| 2010 | 2011  |  |  |  |
| 1200 | 1404  |  |  |  |
| 1071 | 1067  |  |  |  |
| 1143 | 1266  |  |  |  |
| 50   | 52  |  |  |  |
| 120  | 168   |  |  |  |
| 96   | 112   |  |  |  |
| 3680 | 4069  |  |  |  |
|      | 2010<br>1200<br>1071<br>1143<br>50<br>120<br>96 |  |  |  |

Admits Applicants - as of February 14, 2011

|         | International Students |      |      | Domestic Students |      |      | Total Students |      |      |
|---------|------------------------|------|------|-------------------|------|------|----------------|------|------|
| Program | 2009                   | 2010 | 2011 | 2009              | 2010 | 2011 | 2009           | 2010 | 2011 |
| BIEN    | 0                      | 0    | 0    | 6                 | 25   | 7    | 6              | 25   | 7    |
| CEE     | 9                      | 0    | 0    | 5                 | 19   | 4    | 14             | 19   | 4    |
| CS      | 0                      | 0    | 0    | 0                 | 0    | 0    | 0              | 0    | 0    |
| EE      | 3                      | 0    | 0    | 0                 | 0    | 0    | 3              | 0    | 0    |
| MSE     | NA                     | 0    | 0    | NA                | 0    | 1    | 0              | 0    | 1    |
| ME      | 0                      | 0    | 0    | 1                 | 0    | 0    | 1              | 0    | 0    |
| Total   | 12                     | 0    | 0    | 12                | 44   | 12   | 24             | 44   | 12   |

|       | Admits |      |  |  |  |
|-------|--------|------|--|--|--|
| Unit  | 2010   | 2011 |  |  |  |
| BCOE  | 44     | 12   |  |  |  |
| CHASS | 20     | 15   |  |  |  |
| CNAS  | 163    | 69   |  |  |  |
| DBS   | 4      | 5    |  |  |  |
| AGSM  | 13     | 9    |  |  |  |
| GSOE  | 2      | 3    |  |  |  |
| Total | 246    | 113  |  |  |  |