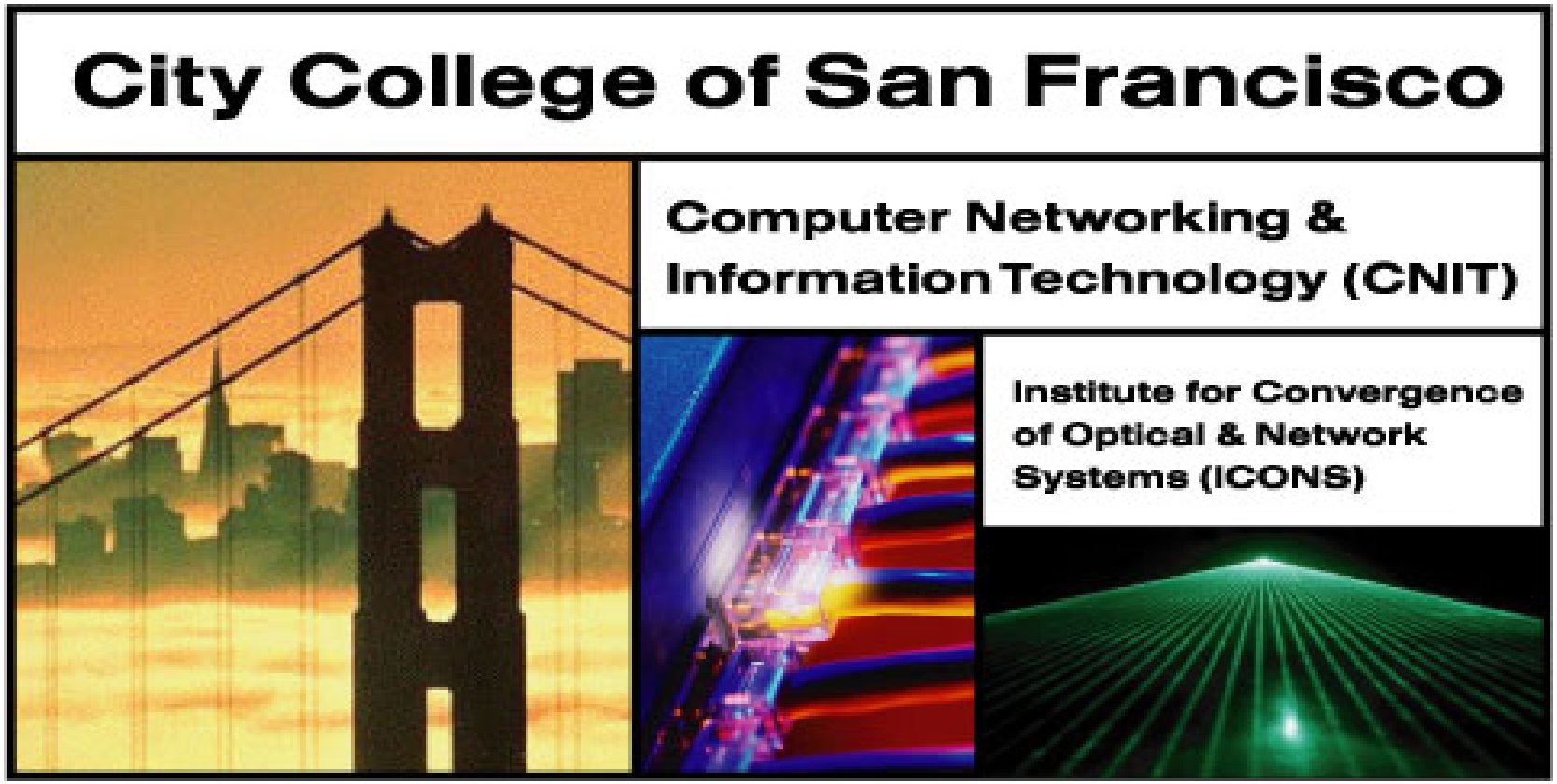


3rd ICONS Advisory Panel Meeting

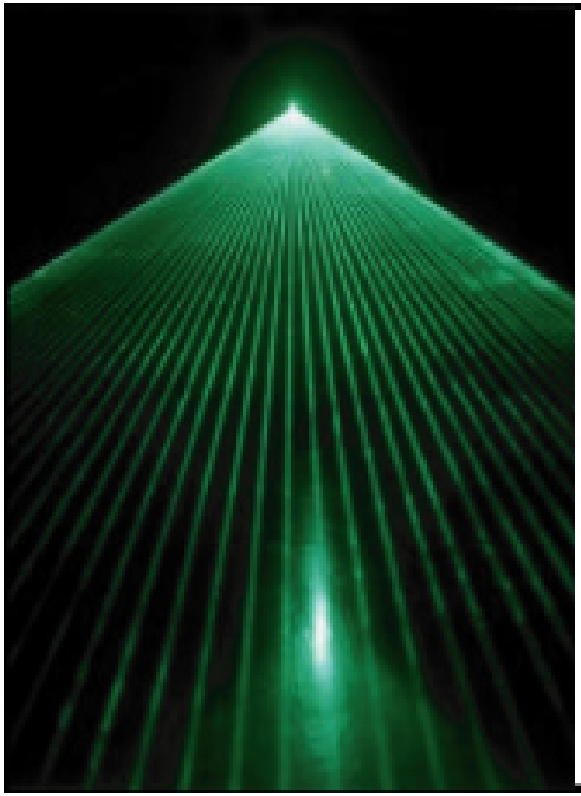
City College of San Francisco Downtown Campus Room 821

September 27, 2006 11am to 1pm

This material is funded in part by the National Science Foundation under Grant Number DUE 0501703

Presentation & Facilitation By

- **Dr. Pierre Thiry** - ICONS Principal Investigator & CNIT Instructor
  - pthiry@ccsf.edu (415) 239-3594
- **Tim Ryan** - Network Manager & ICONS Co-Principal Investigator
  - tryan@ccsf.edu (415) 452-5352
- **Carmen Lamha** - Chair CNIT Dept & ICONS Co-Principal Investigator
  - clamha@ccsf.edu (415) 239-3396
- **James Jones** - Consultant
  - james@photisis.com (415) 867-6616



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Interim Activities

Since Last Advisory Panel Meeting

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Highlights of Plans & Accomplishments

- Curriculum Design Progress
- Summer Convergence Workshops
- Microsoft IT Academy
- Pearson VUE Testing Center
- CalWomenTech
- Seminar and Event Participation
- IEEE Student Chapter

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Curriculum Review

- Advisory Panel Demand Study Completed (5/06)
- Faculty Design Exercises In Progress (5/06 & 10/06)
- Gap Analysis Completed
- Outcomes and Curriculum Revisions Under Way
  - Some courses retained “as is”
  - Some courses to be eliminated
  - Some courses to be modified
  - Some new courses to be added

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GOAL
Develop New Courses

- **Offered Spring and Fall 2006:**
  - **CNIT 211 Fiber Optics Technology**
  - **CNIT 215 Voice over IP (VoIP)**
- **Two new courses for Spring 2007:**
  - **CNIT 209X Operating Juniper Routers in the Enterprise**
  - **CNIT 123 Ethical Hacking and Network Defense**

Microsoft IT Academy Program

CNIT Becoming Microsoft IT Academy

- Microsoft instruction not new to CNIT
  - Courses leading to MS Certification taught since inception
- CNIT now more directly aligning courses to Microsoft curriculum
- As Pearson VUE Center CNIT can now administer official tests for Microsoft certification for CNIT students

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Computer Networking & Information Technology

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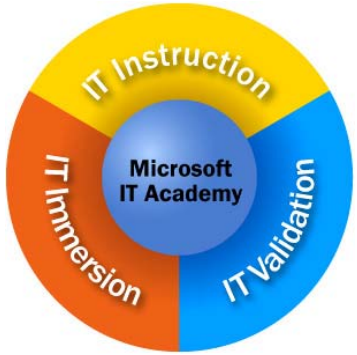

Microsoft IT Academy

- **Program designed to be model for continuous learning based on 3-point strategy:**
  - **IT Instruction**
    - **provide world-class Microsoft training curriculum with a wealth of online resources and an immersive teaching and learning experience for both educators and students**
  - **IT Validation**
    - **assess and certify performance at many levels**
    - **provide more affordable certification**
    - **verify students' skills to prospective employers.**
  - **IT Immersion**
    - **immerse students in real-world experiences to help them prepare for and enter the workforce - thus meeting the needs of employers and the professional IT community.**

Microsoft | IT Academy Program

Benefits to Becoming Microsoft IT Academy

- Access to E-Learning resources
- Online faculty training
- Low-priced Official Microsoft Learning Products & Courseware
- Access to Microsoft Speaker's Bureau presentation resources
- Microsoft software licenses
- Access to student internship and job placement resources
- Student and faculty resume resources
- Faculty and student mentorship programs
- Access to special training events and marketing materials

CNIT Becoming Pearson VUE Authorized Test Center

- Pearson VUE is:
  - an electronic testing business which provides a variety of testing related services for the
    - Health & Medicine
    - Information Technology
    - Driving License
    - Academic/Admissions
    - Employment & Human Resources and
    - Financial Services industries.

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CNIT Becoming Pearson VUE Test Center

- Pearson VUE operates:
  - a network of more than 4000 PVACs
  - in 145 countries and
  - over 230 company-owned and –operated testing centers
    - Pearson Professional Centers
  - www.pearsonvue.com

CNIT Computer Networking & Information Technology

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CNIT Becoming Pearson VUE Test Center

- CNIT to initially test CNIT students
  - At CCSF
  - Relevant to CNIT Courses
- Additional Tests Available in Future

- CompTIA A+
- CompTIA Network+
- CompTIA Security+
- CompTIA Linux+
- Cisco CCNA
- Cisco CCNP
- Cisco VoIP
- Cisco PIX
- Cisco WLAN
- Microsoft MCP
- Microsoft MCSA
- Microsoft MCSE
- Microsoft MCDST

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GOAL
Develop New AS Degree

- Proceeding with AS Degree in CNIT
- Application Submission Expected in December 2006
- Tentatively Consisting of:
  - 42 units General Education
  - 18 CNIT Units
  - 3 Core & 3 Elective CNIT Courses

GOAL Expand High School Outreach

- Expand outreach to High Schools – SFUSD's School to Career office coordinates IT Academies in several High Schools: Galileo Lincoln and Balboa. Promote access to an education in ICT starting at CCSF.
- CNIT 131 Course (Internet Basics & Beginning HTML) Presently offered (Fall 2006) Targeting 100 HS Students

GOAL

Expand Articulation & Transfer Opportunities

- Develop and promote transfer relationships in which CNIT students transfer credits & continue study for BS degree
  - California State University – Channel Islands (CSU-CI)
  - California State University – Monterey Bay (CSU-MB)
- Articulation Officers of Both CSU-MB & City College Working to Align Necessary Courses for Formalized Agmt

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GOAL

Recruit & Serve More Under-represented Students

- **CalWomenTech NSF Grant**
  - **Donna Milgram, PI**
    - **Executive Director of Institute for Women in Trades, Technology & Science (IWITTS)**
    - **ICONS Advisory Panel Member**
  - **Carmen Lamha, Co-PI**

CalWomenTech NSF Project

KIMBERLY CARDOSI

Age 28, Caucasian
Software Developer
Employed by Thermo BLH, Inc.

PATRICIA GALLARDO-IRVIN

Age 45, Latina
Tool Maker
Employed by General Motors

LATASHA GARY

Age 37, African-American
Director of World Wide Sales & Service Sales Operation Systems
Employed by Compaq Computer Company

MALYPHONE KHAMSYVORAVONG

Age 28, Laotian
Quality Auditor
Employed by Coto Technology

JOANNE TROMBLEY

Age 43, Native American&Caucasian
Technology Education Teacher
Employed by West Chester Area
School District (West Chester, PA)

By Donna Milgram 9-25-06

What IWITTS Does

- Bigger Pic – WomenTech Project, WomenTech Trainings, ATE Centers, Cisco
- Practical Tools on Recruitment/Retention
- Best Practices, WomenTech CD, Futures Video

Goals

- Increase # of women in STEM education in CA Com College Emerging Technology Centers in CA (8 to 10) ATE & CATC
- To institutionalize gender equity strategies beyond life of the Project
- State and national dissemination

Methods

- Recruitment & Retention Best Practices
- 8 to 10 CCs – Nov RFP, Jan Select, Feb training (over 2 years)
- Intensive training, Tech. Assistance
- On-line and phone conf. FU training
- In-depth follow-up training

Methods (continued)

- Template Recruitment Collateral
- Gender Equity Lending Library
- Development of new gender equity "technology" i.e. curriculum taking into account female interests and learning styles

Methods (continued)

- Leadership Teams of 10 - stipend
- Continuous feedback loop - quarterly
- Peer Mentoring among teams
- FU conferences – B to B Model
- National Advisory Committee

CCSF - ICONS

- Carmen Lamha, Co-PI , Dr. Thiry on National Advisory Committee
- One of eight CC sites
- Provide advice and guidance overall and testing of strategies and “technical” solutions and bigger pic on ATE
- Provide leadership to ATE/CATC community

Hiring a CalWomenTech Project Manager

- Great Position
- See me for a job description
- It’s also on our website www.iwitts.com

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GOAL
Develop & Use Computer & Network Infrastructure

- **New Generation Alcatel IP Phones Deployed**
  - IP Touch Model 4068
  - Wideband Codec Technology (Richer Sound)
  - Spectrum Sampling Range Increased from 3Khz to 7Khz
- **SIP Trunking Beta Test**
  - Alcatel & Telekenex/Networld
  - Follows RFI Issued Last Fall
  - Hand Carrier IP Voice Traffic via Ethernet at Data Center
  - Reduce PSTN Trunking Requirements and Costs ($25K/year)
  - Extend to Cisco Networking Academy

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GOAL

Secure Additional Funds

- **NSF STEM Scholarship Grant awarded on September 15 to School of Science & Math Departments award # 0630713**
  - **$500K for 5 years**
  - **Pierre Thiry is a co-PI**

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GOAL

Expand Job Placement Opportunities

In collaboration with CCSF Career Connection, Linda Harwood

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GOAL
Develop Seminars & Workshops

- **Summer 2006 Convergence Workshop Completed**
- **NSF Advanced Technology Education National Conference**
  - **Washington, DC; 10/18 - 10/20/06**
- **Society of Telecommunications Consultants (STC) Conference**
  - **CCSF Technology Transformations & ICONS; San Francisco, CA; 10/19/06**
- **League for Innovation Conference on Information Technology (CIT)**
  - **Charlotte, NC; 10/22 – 10/25/06**
- **Globecom2006 (IEEE)**
  - **San Francisco, CA 11/27 – 12/1/06**
- **NCTT Winter 2007 Conference**
  - **Hosted by ICONS at Downtown Campus; San Francisco, CA 1/12 – 1/13/07**

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Summer 2006 Convergence Workshop Completed

- Fiber Optics
- Voice over IP (VoIP)
- Metro/Wide Area Ethernet
- Juniper Routing & Security
- Video Networking
- WiFi Networking

Juniper NETWORKS
Certified
Internet Specialist

City College of San Francisco

IEEE COMMUNICATIONS SOCIETY

- 11/27 – 12/1/06
- Hosting Exhibit Booth
- Presenting Half Day Seminar on NSF/Industry Collaboration
- Participating in Panel on Community Networks
- Facilitating Student Volunteer Participation

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IEEE Student Chapter

IEEE COMMUNICATIONS SOCIETY

- **Initial Meeting to Create Student Chapter**
- **Thursday, 10/12/06 4:30 to 6:00 pm Library Room 518**
- **Including students in the fields of:**
  - Engineering,
  - Computer Science,
  - Information Technology,
  - Physical Sciences,
  - Biological Sciences
  - Medical Sciences,
  - Mathematics,
  - Technical Communications, Ed, Mgmt, Law, and Policy

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IEEE Student Chapter

IEEE COMMUNICATIONS SOCIETY

Benefits of IEEE membership (www.ieee.org/web/membership/home):

- Student Membership only $30/year
- Network with huge membership community
- Online access to industry's most essential technical info (>1 million IEEE documents)
- Subscription to IEEE Spectrum magazine
- Discounts on journals, conference proceedings, standards & books
- Enhances professional image
- Access to IEEE Job Site, Consultants Database & Career development tools
- IEEE email alias
- Opportunities for Student Scholarships, Awards and Competitions
- Discounts on financial, insurance, home, office and travel services

NCTT Winter 2007 Conference

- National Center for Telecommunications Technology
  - ATE Center
  - Gordon Snyder, Exec Dir.
- “Showcase of Solutions & Trends in ICT Education”
- January 12-13, 2007
- Right Here at Downtown Campus
- Hosted by ICONS

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Advisory Panel

- CCSF
- Educational Institutions
- Service Providers
- Equipment Manufacturers
- Private Enterprises
- Standards Bodies
- Government
- Community Non-Profits

National Institute for Women in Trades, Technology & Science
NSF
California State University Monterey Bay
hp
ipnetworks
EDD Employment Development Department State of California
invent Cisco Systems
Juniper Networks
IEEE
Community Technology Foundation of California
at&t
National Center for Telecommunications Technologies
NCTT
cenic Corporation for Education Network Initiatives in California
SeaKay
comcast
Cabrillo College est. 1959
PHOTISIS CONSULTING
SFUSD
Met-Net SCALABLE BANDWIDTH
METRO Ethernet Forum
verizon
TSI The Saflund Institute
Dandin Group
NaTOa
Hotwire.com
ALCATEL
DTIS Telecommunications & Information Services
Sprint Together with NEXTEL
CUYAMACA COLLEGE
bioink Educating the Biotechnology Workforce
Broadwing Connecting with Customers at the Speed of Light
TELEKENEX