

Georgia Tech Microelectronics Research Center Communications Plan

Reviewed by client August 2007

Institute Goals

- To be the best Microelectronics Research Center in the nation; the go-to research center.
- To become the nanotechnology research hub of the southeast U.S.
- Provide unfair advantage for MiRC users
- Broaden customer base to include more outside users through development of an industrial partners program.
- Develop and disseminate a strong statement of MiRC's mission.

Communication Goals

- Increase awareness of the value of the Georgia Tech brand in the highly competitive arena of microelectronics research.
- Highlight the exceptional caliber of MiRC people and facilities
- Highlight the contributions and achievements of MiRC researchers
- Have supporters respond affirmatively to the program by awarding grants, initiating research projects, employing our researchers and/or facilities for ground breaking research.
- Develop a strong vision statement.

Situational Analysis

Strengths:

- Highly sought after Atlanta location with modern transportation, superior supercomputing, and telecommunications capabilities.
- Top-notch people and facilities
- State-of-the-industry clean room facilities that serve Georgia Tech, the business community, and the nation.
- Located at a premier technological institution that is committed to the success of GTMiRC and an environment that fosters synergistic opportunities.

Weaknesses:

- Diffusion of resources by attempting to spread them over too many competing interests
- attempting to be all things to all people, resulting in lack of clear brand coherence, desired awareness, prestige or marketplace positioning.

Opportunities:

- To improve market position by improving awareness and prestige.
- Define nanotechnology “white space”, an area that GT MiRC can stake a claim to pre-eminence, possibly bioscience and biomedicine.

Threats:

- Resource dilution and internal and external competition for funding resulting in lagging development results.
- Not having a cohesive strategic plan could prevent clear messaging, consequently confusing stakeholders and diminishing the brand experience.
- Nanocenters in other locations around the country(principal competitor is SUNY-Albany)

Center Mission

The Microelectronics Research Center (MiRC) provides expertise, facilities, infrastructure and teaming environments to enable and facilitate interdisciplinary research in microelectronics, integrated optoelectronics, and microsensors and actuators.

Major Interacting Units

MiRC-associated academic participants come from many disciplines of engineering, including electrical, computer, chemical, materials, and mechanical, from the sciences, including physics, chemistry and mathematics, and from computer science. In addition, the Georgia Tech Research Institute (GTRI) provides full-time professionals in major MiRC areas. The MiRC is allied with other centers, including manufacturing, telecommunications, and packaging.

Major Activities

- **Research:** The MiRC, housed in a 100,000 square foot building and a 20,000 square foot annex, provides facilities including six electronic and optoelectronic materials labs, eight labs for microelectronics design and testing, eight labs for electronic device design and testing, and a 7,000 square foot cleanroom providing complete microfabrication facilities.
- **Instruction:** Over 50 faculty and more than 120 graduate students, along with undergraduates, conduct credit-bearing thesis research in the MiRC. A set of laboratory courses covering hands-on integrated circuit fabrication is offered. A complete sequence of core microelectronics courses is available through registration in one of the affiliated academic units. A new sequence of optoelectronics courses is under development.
- **Service:** The MiRC services regional and national industries in computing, communications, and semiconductors. The MiRC also works with regional economic development agencies
- **Nanotechnology:** The National Nanotechnology Infrastructure Network(NNIN) is an integrated networked partnership of user facilities, supported by the National Science Foundation(NSF), serving the needs of nanoscale science, engineering and technology.

External Interactions

Contracts and grants may be negotiated with individuals or groups of faculty members Multi-company coalitions provide shared access to microelectronic and optoelectronic technologies, entries into proprietary research, and a rapid response team for government initiatives. Student fellowships may be arranged through the Georgia Tech Foundation.

Core Competencies

- Electron Beam Lithography
- Microchip fabrication and design
- Photonics and integrated optoelectronics
- Multichip packaging and Optoelectronic packaging
- Microactuators and microsensors
- Gigascale integration
- Heterostructure materials: MBE and MOCVD
- Analog and digital microelectronics
- Computational electronics
- Gigahertz integrated electronics
- Named National Center of Excellence in Photovoltaics by the Department of Energy
- [A National Science Foundation Engineering Research Center in Packaging](#)

Target Audience

Audience	Outcome/Desired Results
Internal faculty and researchers	Increased awareness of capabilities and services resulting in increased usage.
Graduate students	Increased awareness of capabilities and services resulting in increased usage.
External users	Increased awareness of capabilities and services resulting in increased usage.
Academic institutions	Increased awareness of capabilities, services and accomplishments.
Industrial users	Increased awareness of capabilities and services resulting in increased usage.
Start-ups	Increased awareness of capabilities and services resulting in increased usage.
Fledgling companies	Increased awareness of capabilities and services resulting in increased usage.
Small established companies	Increased awareness of capabilities and services resulting in increased usage.
Large established companies	Increased awareness of capabilities and services resulting in increased usage.
Government agencies	Increased awareness of capabilities, services and accomplishments, resulting in increased funding.
Remote users	Increased awareness of capabilities and services resulting in increased usage.
Learners from K-Gray	Increased awareness of capabilities and services resulting in increased usage.
Medical profession	Increased awareness of capabilities and services resulting in increased usage.

Key Message

Key Message	Audience	Delivery Method
Association with Georgia Tech; number one facility in southeast; unique kind and quality equipment; access to extraordinary resources; top quality staff, facilities and equipment; hands-on assistance and guidance throughout; flexibility in facility use and services provided(customizable); strong virtual tools and processes easily accessible; strong effective training and best practice resources; convenient, accessible Atlanta location; association with large national programs and research agencies	Internal faculty and researchers	Web site; brochures; personal contact; Events; conferences
Same messaging	Graduate students	Web site; brochures; personal contact; Events; conferences
Same messaging	External users	Web site; brochures; personal contact; Events; conferences
Same messaging	Academic institutions	Web site; brochures; personal contact; Events; conferences
Same messaging	Industrial users	Web site; brochures; personal contact; Events; conferences
Same messaging	Start-ups	Web site; brochures; personal contact; Events; conferences
Same messaging	Fledgling companies	Web site; brochures; personal contact; Events; conferences
Same messaging	Small established companies	Web site; brochures; personal contact; Events; conferences
Same messaging	Large established companies	Web site; brochures; personal contact;

		Events; conferences
Same messaging	Government agencies	Web site; brochures; personal contact; Events; conferences
Association with Georgia Tech; number one facility in southeast; unique kind and quality equipment; access to extraordinary resources; top quality staff, facilities and equipment; hands-on assistance and guidance throughout; flexibility in facility use and services provided(customizable); strong virtual tools and processes easily accessible; strong effective training and best practice resources; association with large national programs and research agencies	Remote users	Web site; brochures; personal contact; Events; conferences
Customize messaging	Learners from K-Gray	Web site; brochures; personal contact; Events; conferences
Association with Georgia Tech; number one facility in southeast; unique kind and quality equipment; access to extraordinary resources; top quality staff, facilities and equipment; hands-on assistance and guidance throughout; flexibility in facility use and services provided(customizable); strong virtual tools and processes easily accessible; strong effective training and best practice resources; convenient, accessible Atlanta location; association with large national programs and research agencies	Medical profession	Web site; brochures; personal contact; Events; conferences

Key Tactics and Timeline

Dates	Purpose	Tactic	Audience	Responsibility
Priority 1 Fall 07	Provide overview of capabilities, services and accomplishments.	Develop viewbook	All adult audiences	MiRC develop content GTCM provide design, editing, photography and production
Priority 2 Fall 07	Provide consistent packaging for collateral materials	Develop pocket folder	All adult audiences	MiRC develop content GTCM provide design, editing, photography and production
Priority 3 Spring 08	Provide info about MiRC's NINN initiative	Develop 4 X 9 brochure with details of GT's efforts and information about how to collaborate	Prospective collaborators on Nano initiatives	MiRC develop content GTCM provide design, editing, photography and production
Priority 4 Spring 08	Provide details of each labs capabilities	Series of brochures representing each lab	Prospective lab users	MiRC provide content GTCM provide design, editing, photography and production
Priority 5 Spring 08	Provide web visitors with new information presented in a more interesting and easy to use format.	Update web site with new look and feel and improved content	All	MiRC supply content GTCM provide design, editing, photography and production
Priority 6 Spring 08	Provide educational materials for use by k-12 teachers that explain nanoscience and nanoengineering in an entertaining manner.	Consider coloring books, comic books, web-based games, etc.	K – 12 students and teachers	MiRC develop content GTCM provide design, editing, photography and production
Priority 7 Academic year 07-08	Provide branded materials and premiums to all audiences as appropriate.	Premium give-aways that reinforce messages.	All	MiRC develop content GTCM provide design, editing, photography and production

Key Tactics and Timeline

Priority 8 Academic year	Provide consistent look and feel for MiRC communications that reinforce branding	Develop graphic standards manual and templates to be used in development of in-house collateral, eg., powerpoint presentation	All	GTCM provide design, editing, photography and production
Priority 9 Academic year	Provide more timely overview of facilities and accomplishments.	Develop annual report	All adult audiences	MiRC develop content GTCM provide design, editing, photography and production

Team/Responsibilities

Name	Organization/Telephone/E-mail	Role/Responsibilities
David Arnold	GTCM / 4-6015/ david@gatech.edu	Team lead
Katharine Russell	GTCM / 4-8689 / Katharine.russell@comm.gatech.edu	Graphic Design
Nicholyn Hutchinson	GTCM / 4-6502 / nicholyn.hutchinson@comm.gatech.edu	Writer
Wendy Veney	GTCM / 4-2452 / wendy.veney@comm.gatech.edu	Project coordinator
Web developer(TBD)		Web developer
Leslie Oneil	MiRC / 5-7203 / leslie.oneill@mirc.gatech.edu	Coordinator for MiRC