

**TRANSDISCIPLINARY RESEARCH CENTRE FOR
PERFORMANCE AND TECHNOLOGY**

(TRCPT)

APPLICATION FOR A CANADA FOUNDATION FOR INNOVATION GRANT
(CFI)

At

SIMON FRASER UNIVERSITY

Project Leader – Henry Daniel

Authors: Henry Daniel & Olena Hankivsky

With assistance from Christine Stoddard & Rob Lovell



Description of Infrastructure Project and Assessment Against CFI Criteria

Date 12/03/2003

Project number 8213

Descriptive title of infrastructure project (no more than 200 characters):

Transdisciplinary Research Centre for Performance and Technology

Funding program applied to:

Innovation Fund

Language of application:

English French

Institution (See next page for multi-institution applications)

Simon Fraser University

Total cost of infrastructure project and amount requested from the CFI

Note that for each year the CFI request should not exceed 40% of the cumulative cost to that year.

Costs	Year 1	Year 2	Year 3	Year 4	4-year TOTAL
Total project					
Partner contributions					
CFI request					

Designated Project Leader

Name: Daniel, Henry

Title: Assistant Professor

Department: School for Contemporary Arts

Telephone: 604 291-3897

Ext.:

E-mail: hdaniel@sfu.ca

Fax: 604 291-5907

Key words: Provide a maximum of ten (10) words that describe the infrastructure project and the research to which it will contribute. Use commas to separate each key word.

contemporary dance, cultural diversity, performance & new technologies, embodiment, digital archiving & publishing, technological innovation, transdisciplinarity

Research discipline/field code:

Area of application code:

Primary: 30600

Primary: 8.2

Secondary: 11800

Secondary: 10.0

Signature: It is agreed that the general conditions governing the matching provisions and the use of CFI funds as outlined in the Institutional Agreement and the CFI Policy and Program Guide apply to the infrastructure project outlined in this application and are hereby accepted by the institution.

Name _____ Signature _____ Date _____

CEO or President of the Institution (or authorized representative)

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Multi-institutional application. To be completed by **eligible** institutions (other than the institution identified on page 1) that **would share CFI funding** for this project, if approved by the CFI.

The following eligible institutions that will receive CFI funding for this project, agree that the general conditions governing the partner contributions and the use of CFI funds, as outlined in the Institutional Agreement and in the CFI Policy and Program Guide, apply to the project outlined in this application and are hereby accepted by each institution.

Institution:

Name (CEO or President of the institution or authorized representative):

Date:

Signature:

Institution:

Name (CEO or President of the institution or authorized representative):

Date:

Signature:

Institution:

Name (CEO or President of the institution or authorized representative):

Date:

Signature:

Institution:

Name (CEO or President of the institution or authorized representative):

Date:

Signature:

Institution:

Name (CEO or President of the institution or authorized representative):

Date:

Signature:

Institution:

Name (CEO or President of the institution or authorized representative):

Date:

Signature:

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Project overview

In language appropriate for a multidisciplinary committee, use this page and up to one additional page to describe the **infrastructure** that will be acquired or developed and indicate where the infrastructure will be located. Indicate briefly why the infrastructure is needed, what research it will enable to be performed and why that research is important.

New technologies are transforming the concept of performance in all areas of human endeavor. This has led to a tremendous surge of interest in relationships between the body and the computer through the so-called human-machine interface. The Transdisciplinary Research Centre for Performance and Technology (TRAnsCPT) is envisioned as a unique facility in Canada. Situated within the School for the Contemporary Arts (SCA) at Simon Fraser University (SFU), TRAnsCPT is designed to carry out human-centered transdisciplinary collaborative research with researchers from across disciplines and sectors. Its specific objectives are to:

- Form links between artists, scientists, scholars and the private sector who have a mutual interest in collaborative research
- Develop research that bridges previously disparate academic disciplines
- Build new national and international networks and partnerships that will strengthen Canada's position in the global art and technology research community
- In conjunction with industry, develop new convergent media (i.e. computing, telecommunications and broadcasting) for a variety of performance contexts including interactive TV, and gaming
- Develop new methods and techniques for the health sector using interactive media
- Attract and train a new generation of researchers, scholars and artists who will contribute to Canadian society and to Canadian culture
- More clearly articulate the theoretical frameworks used in the exploration of performance through an innovative program of research agendas

Four main research themes will interrogate and explore the ecological impact of technology on human beings within a performance context. These are:

1. New Performance Tools
2. Culture the Body and Technology
3. Networked Practices
4. Archiving and Dissemination

SFU and the SCA are ideally suited to house TRAnsCPT. The University has an international reputation as an institution that delivers high-quality interdisciplinary education, and the SCA is a premiere innovator in the field of contemporary art, particularly in the fields of dance and music technology. In the mid 1980's, the SCA created an annual series of workshops that brought computer scientists, artists, performers and technicians together from all over North America for rigorous two to four-week 'intensives'. The 'Computed Art Intensive' and 'The Shadow Project' functioned as creative laboratories for almost a decade. The School also helped establish the Centre for Image and Sound Research (CI•SR) in downtown Vancouver in 1988. Life Forms, the pioneering software tool for dance choreography, was developed as a collaborative project between researchers from the schools of Computing Science, Kinesiology, Engineering Science, and Contemporary Arts.

TRAnsCPT will add to the considerable presence of science and technology labs at SFU's

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Centre for Systems Science (CSS) including the Vision and Media Lab, CoLab, Graphics/Visualization Lab (GRUVI Lab), and the Network and Communication Lab. Establishing the Centre will also strengthen an already vibrant cluster of private and public media labs in Vancouver (i.e. Vancouver's New Media Innovation Center (NewMIC), Electronic Arts (EA), and Surrey Media Lab). Although recognized for technological innovation, none has skilled artists and performers as their central resource.

TRansCPT's primary researchers and users are recognized as leaders or pioneers in the fields of dance, computer music, interactive telecommunications, computing science, archival science, and performance studies. Their research is integrated into TRansCPT through a combination of special projects, residencies, summer workshops, conferences and symposia, performance works, publishing, and endowed scholarships.

TRansCPT will also play a key role in the development and growth of the SCA at SFU. The SCA is undergoing a process of change precipitated by recent developments in practice, theory, and technology. The Centre will provide the ideal research environment to explore the increasingly complex relationships between art and technology. In addition, the School's six areas are being brought together for the first time in a new building that will house TRansCPT. Once established, the Centre's unique infrastructure of research labs will be a worldwide attraction to academics, researchers, artists and industry partners.

Physically, the infrastructure will consist of the following:

1. Performance Stage and Control Booth (4300 sq. ft).
2. Presentation Room and Greenroom (900 sq.ft)
3. Awareness, Training and Injury Prevention Lab (1200 sq.ft).
4. Media Rich Rehearsal Space(1500 sq. ft).
5. Computer Media Lab (900 sq. ft).
6. Digital Performance Archive (300 sq. ft).
7. Mini labs for composition and modelling (300 sq. ft).
8. Dressing rooms (600 sq. ft).
9. Movement Space (1200 sq.ft).
10. Offline Studio (1500 sq ft).

This space amounts to a total of 12,700 sq. ft.

In sum, the proposed infrastructure will provide the most comprehensive means available for locating the performing body at the centre of transdisciplinary research in the arts in Canada to date. TRansCPT will be unique in that no other facility with these aims currently exists anywhere in the country.

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Self-assessment**A1 - The Research****Choose the statement that best represents the research**

The proposed infrastructure will be used for research that has the potential to:

- (a) high quality and potentially useful;
- (b) competitive at the national level and may lead to innovation;
- (c) competitive at the international level and will lead to innovation;
- (d) at the leading edge internationally, transformative, and can be expected to have a major impact on innovation.

Using the space below and up to 5 additional pages, address all the following:

- outline the major research and how the infrastructure will be used to enable it;
- explain how the proposed research is innovative and how it is different from similar research being done by other groups regionally, nationally and internationally;
- describe the research opportunity and how the proposed research will capitalise on this opportunity.

TRansCPT is designed to explore the human-machine interface within a performance context by bringing together the traditional laboratory of human expression (i.e. the theatre) with the contemporary tool of scientific exploration (i.e. the computer). This synergy allows for a range of researchers to come together and transcend the confines of their disciplines.

Transdisciplinarity is the integration of perspectives in the identification, formulation, and resolution of complex problems (Gibbons et al, 1994). It values equally the performer, including new media artists, as well as more traditional scholars from a range of disciplines.

The acronym TRansCPT, draws on the Latin word transept meaning 'beyond the walls'. Through its transdisciplinary approach, TRansCPT seeks to create a space within the university that responds to the changing needs of knowledge production and organization. The infrastructure of TRansCPT will allow a new balance to be struck between scientific practice, technological innovation, and a concern for human existence. Performance, as the representation of behaviour and social action in natural, staged, and virtual settings, is an ideal context for transdisciplinary examinations of the human-machine interface.

TRansCPT will generate new knowledge for artistic practice as well as benefit significantly research and development in the fields of entertainment, health, and communications. Researchers at TRansCPT will explore a range of practical problems encountered in the design and application through the processes of making art, processes that reveal a great deal about the individual behind the art, the computational logic supporting the performance of both, and the information that can be useful to industry in the development of new products.

Research outputs will include:

- Design and application of new technologies for performance contexts
- New interfaces for interactive performance arts
- New hardware and software development

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- Smart fabrics adapted to high intensity performance contexts (including applications across various sectors including communications, sports and medicine)
- Dynamic modeling and prototyping of interactive, dynamic and experiential records in distributed electronic environments
- Creation and publication of live works
- Networked performances
- New content for the Vancouver Dance Centre
- New methods and policies regarding archiving artistic records, copyright and electronic reproduction of archival records
- Solutions to technological obsolescence for archiving purposes
- Software as cultural product
- Animation and visualization of dance notation scores
- Conferences
- Online journal and other publications of research findings

The outputs will emerge from a series of collaborative research projects directed by the lead researchers. This work will be undertaken with researchers at SCA, across SFU, regionally and nationally among complementary research clusters. One of TRAnsCPT's lead researchers Canadian born Red Burns will help institute the model of collaborative exchange she has so successfully utilized as NYU's Chair of Interactive Telecommunications Program. Burns has a reputation for attracting the best people in the industry to her program and the most promising young research talents. She will help train researchers, establish important business connections with prominent telecommunications and design industry partners, and contribute to the new Summer Institute Program.

Theme 1. New Performance Tools

Researchers: Tom Calvert, Henry Daniel, Johannes Birringer, Martin Gotfrit. Participating Institutions: TRAnsCPT, CoLAB, GRUVI Lab, NewMIC, WestGRID, Interactive Telecommunications at NYU, Troika Ranch, and the Dance Notation Bureau.

By providing a design and test facility, TRAnsCPT will foster cross fertilization among researchers and users, between projects and disciplines, as well as between participating institutions. This will support the development of state of the art performance technologies, and provide a forum where industry partners can view new products.

Main Project A: Dancing in Cyperspace

TRAnsCPT will extend the scope of Calvert's LifeForms software research to develop a series of sub projects involving SFU's GRUVI Lab, Troika Ranch Dance Company and the Dance Notation Bureau of New York. The Interface Sub-Project with the Dance Notation Bureau will create a new computer interface to translate motion capture data directly into Labanotation (the premiere method for notating human movement). The Isadora Sub-Project will see Mark Coniglio of Troika Ranch (key user of TRAnsCPT) develop a new interface for Isadora and MidiDancer, software and hardware products that permit performers to engage external body movements with a variety of new media in live performance contexts. Sub-Project X-Vox will enable Gotfrit's computer based composition/music generating system to

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further develop its live performance applications.

Main Project B: SMODESCH (System Modular Design Choreography).

Motion capture generates extremely high amounts of data, and in performance contexts, this data must be analyzed and redisplayed quickly enough to appear instantaneous to performers. Researchers at the GRUVI lab and NewMIC, in conjunction with TRansCPT, will design a new computing system to more efficiently analyze and re-display motion capture data. Such technology will be beneficial to performance, gaming, film, and health industries.

Theme 2. Culture, the Body and Technology

Researchers: Johannes Birringer, Richard Schechner, Henry Daniel, Barbara Layne, Martin Gotfrit. Participating Institutions: TRansCPT, Hexagram at Concordia University/University of Quebec at Montreal, IDAT, ADaPT, Performance Studies Department at New York University.

Main Project A: Canadian Geographies

This project will examine the role that virtual technologies play in the re-creation of conceptual worlds envisioned in the narratives and rituals of aboriginal peoples. Layne and Daniel will undertake a collaborative project linking the use of sensitive and intelligent fabrics designed around specific Canadian cultural narratives. Layne's aim to 'reinvigorate' textile objects into 'new patterns of discovery' through interactive textiles and wearable computers utilizes transitional spaces where body and fabric meet. Research findings will inform the development of smart fabrics useful to performance, sport, and fashion industries.

In this same project, Layne and Daniel will track the movement of aboriginal peoples across the national landscape and compare these maps to the new electronic network grids crisscrossing Canada. Implicit in this research are knowledge-gathering strategies and communicative processes that reflect cultural and technological change. Some of the products of this research include: geospatial maps, technological maps, infrastructure maps of Canadian databases and archival maps.

Main Project B: Performing Diversity

A recent census established that Vancouver leads the diversity race in Canada. Nearly four out of every ten people are members of a visible minority with that number up 18.6 percent since the last mini-census in 1996. An important aspect of research in TRansCPT will be to explore the influences that technology exerts on different cultural groups. With the emphasis on the body in performance, TRansCPT will be a place where the interstices between culture, the body and technology can be comprehensively and systematically researched.

Birringer and Schechner will use TRansCPT's facility to further their research in culture and technology and to attract international scholars to debate this contested research area. IDAT (International Dance and Technology) holds an international conference every

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two years and SFU expects to host it for the second time when TRansCPT is established. PSi (Performance Studies International) holds its conference in a different country each year, and the TRansCPT plans to host one such conference during the first five years of its existence. The outcomes of this project will include: an on-line journal, conference hosting and bridging cultural awareness to the design of technological products (i.e. technology that adapts to human behaviour, rather than the current model of people adapting to technology).

Theme 3. Networked Practices

Researchers: Red Burns, Johannes Birringer, Jonathan Borwein, Henry Daniel, Susan Kozel
 Participating Institutions: TRansCPT, IDAT, AdaPT, Vancouver Scotia Bank Dance Centre, Banff New Media Institute, and Practice as Research in Performance (PARIP) at Bristol University, UK.

Main Project A: Telematic Dance Network

TRansCPT will establish a new link within an existing network of international centers dedicated to exploring digital practices as performance and transactional communication. Within this network, researchers will investigate new forms of artistic interaction and instructional methodologies for dance and performance. The project's objectives are to increase Canada's involvement in the international field of dance technology by linking TRansCPT's multimedia performance studio to other studios across the Net and to create a composite website for collaborative telematic inquiry. Through Birringer, TRansCPT will connect to ADaPT (Association of Dance and Telematics), an interdisciplinary, interstate consortium of six dance and art programs in the US at Arizona State, Utah, California-Irvine, Wisconsin, Ohio, Wayne State and two partner sites in Brazil at Brasilia and São Paulo.

Main Project B: Virtual Environment Design and Interaction Interface Design

TRansCPT will provide a valuable resource for researchers interested in designing new virtual environments, environmental design architectures and educational learning environments. Through their performance activities, TRansCPT's researchers will pose unique optimization and visualization problems for the researchers at the CoLab. Borwein, as director of CoLab and researcher at TRansCPT, will facilitate these investigations. Results of this research collaboration will include the development of new applications for scientific visualization, advanced publishing, and distributed learning. Improvements in scientific visualization will have numerous implications for virtual image culture, virtual art and the increasing "narrative" sector of game design, as well as interactive television and film.

Theme 4. Archiving and Dissemination

Researchers: Luciana Duranti, Jonathan Borwein, and Henry Daniel. Participating Institutions: TRansCPT, UBC's School for Library, Archival and Information Studies, CoLAB, WestGRID.

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Main Project A: Interactive, Dynamic and Experiential Archives

Under this theme, lead researchers will develop a project that cuts across all research areas of TRanCPT. The project has two distinct components: archiving of performance material and theoretical exploration of archiving methodologies and related policy issues.

Sub-Project 1: eCafé Archive

This project involves the digitization of the entire archive of the LA-based Electronic Café (eCafé). The eCafé has historic records that document art, performance and technology back to 1977. The TRanCPT will archive these records. The eCafé received some funding from the Getty Foundation to preserve its records but their digitization needs the expertise of TRanCPT researchers Duranti and Daniel. Duranti is the Director of InterPARES 2 (International Research in Permanent Authentic Records in Electronic Systems).

Sub-Project 2: Archival Methods

With a proliferation of new media and constantly changing software and hardware systems standards, documentation, archiving, publication and dissemination of performance works have become extremely important to the industry. (Duranti 2000, Manoff 2002, Wolpert, 2000). Works of art, the processes involved in their making, and the methods used in their appraisal rapidly become obsolete in the face of these changes. TRanCPT, under the direction of Duranti, will develop new archival methods and policies to solve problems in the area of intellectual property, copyright and hardware and software obsolescence. This work will be directly applicable to WestGRID in the process of archiving and housing the entire mathematical corpus, post-Gutenberg, and potentially the complete archives of the Canadian Space Agency at SFU's CoLab.

Activities that Cut Across the Research Clusters

Researchers: Red Burns, Richard Schechner, Barbara Layne, and Johannes Birringer
Participating Institutions SCA, NYU, IDAT, AdaPT, CoLab, PSi.

Activity 1: The Summer Institute of Art and Technology

SFU's New Summer Institute will reintroduce the thriving technological and cultural exchange that characterized SCA's Computed Art Intensives in the 1980-90's by adding substantially new 'think tank' components. With the participation of industry partners, these temporary labs will allow for collaboration in both real and virtual spaces to create products centered on the practice and theory of art and technology.

In addition, TRanCPT will host a public series in collaboration with Vancouver's Dance Centre featuring the most up to date research in performance practices from local, national and international companies. It will foster workshops, artists in residence, young choreographers and dancers to stimulate new employment opportunities. With the establishment of new collaborative programs like the Canada Council New Media Research Program with NSERC, SSHRC, and the Daniel Langlois Foundation, TRanCPT can extend already established art-science initiatives funded at regional and federal levels.

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Activity 2: The Body in Motion

The Movement Awareness and Injury Prevention Workshops in TRansCPT will identify, map and investigate new patterns of human movement engendered by technology. This research will be applied to develop the best techniques for training the performing body, and the soundest tools for injury-recovery and injury-prevention within the fields of dance, theatre and other movement-based disciplines. TRansCPT's researchers will collaborate to develop a range of electronic sensors useful for music therapy and physical therapy. The lead researcher (Daniel) has had extensive experience working with people who have particular physical and mental disabilities that severely restrict their ability to move freely, and/or their willingness to move at all (i.e. Alzheimers, Down's Syndrome).

Activity 3: Practice as Research

This activity will allow TRansCPT's researchers to investigate creative-academic issues raised by practice as research and develop national frameworks for the encouragement of the highest standards in representing practical-creative research within academic contexts.

The work and research of artists often takes on the form of live actions, time-based art, screenings and exhibitions in both real and virtual environments. TRansCPT's intention is to create a framework in which such practices can be academically accepted (i.e. credited at the higher research degree level). Such work will build on the research being done by PARIP (Practice as Research in Performance), a project directed by Professor Baz Kershaw at Bristol University, and funded by the Higher Education Funding Council of England (HEFCE). As a result, researchers will be able to increase their access to granting bodies in Canada and internationally.

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A2 - The Researchers

- 1) List the researchers who will **use** the infrastructure. Add one (1) additional page if required. This list may include researchers from non-eligible organizations.
- 2) Provide a CV module for the principal researchers, i.e. the main users essential to the justification of the project (the CFI will accept up to 10 CV modules).
- 3) For New Opportunities applications, include **only** the CVs of new researchers.

Researcher (name and title)

Affiliation (department or faculty & organization)

Principal users:

Daniel, Henry

Assistant Professor

School for Contemporary Arts
Simon Fraser University

Other Users:

Bishko, Leslie

Assistant Professor

Experimental Computer Animation
Emily Carr Institute of Art and Design**Cardin, Martine**

Professeure titulaire

Département d'histoire - Archiviste
Université Laval**Coniglio, Marc**

Artistic Co-Director

Performance, Composition, Programming
Troika Ranch, NYC**Davison, Liane**

Curator

Digital Media Lab
Surrey Art Gallery**Diamond, Sara**

Director

Art and Media
Banff Centre for the Arts**Faguy, Robert**

Director, Choreographer

ARBO and LANTISS
Université Laval**Fisher-Stitt, Norma Sue**

Associate Dean

Fine Arts - Dance and Technology
York University**Galloway, Kit/Rabinowitz, Sherrie**

Founders/Co-Directors

The Electronic Café, LA

Gigliotti, Carol

Professor, Director

Centre for Art and Technology
Emily Carr Institute of Art and Design**Jackson, Tim**

Professor

School of Image Arts
Ryerson University**Kershaw, Baz**

Professor and Head

Department of Drama, Theatre, Film, TV
University of Bristol, UK**Kirkpatrick, Arthur**

Assistant Professor

Computing Science (GRUVI Lab)
Simon Fraser University**Lewis, George**

Professor

Music, Critical Studies
University of California (San Diego)

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A2 - The Researchers

- 1) List the researchers who will **use** the infrastructure. Add one (1) additional page if required. This list may include researchers from non-eligible organizations.
- 2) Provide a CV module for the principal researchers, i.e. the main users essential to the justification of the project (the CFI will accept up to 10 CV modules).

Researcher (name and title)

Affiliation (department or faculty & organization)

Möller, Torsten

Assistant Professor

Computing Science (GRUVI Lab)

Simon Fraser University

Newby, Kenneth

Assistant Professor

Interactive Arts, Programming

Simon Fraser University, Surrey

Rabinovitch, Stephen

Assistant Professor

Kinesiology

Simon Fraser University

Tolmie, Julie

Assistant Professor

IT, Visual Mathematics

Simon Fraser University, Surrey

Zagar, Myrna

Executive Director

Vancouver ScotiaBank Dance Centre

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Self-assessment**A2 - The Researchers****Choose the statement that best describes the principal research users.**The researchers who will be the **main users** of the infrastructure:

- (a) have the skills and expertise to accomplish the proposed research;
- (b) are recognized for their accomplishments, or are new researchers who are promising in the proposed research field(s);
- (c) are acknowledged leaders, or have demonstrated potential for leadership in the proposed field(s);
- (d) are international pioneers in the proposed research field(s), or have the potential for major breakthrough(s) in the proposed field(s).

Using the space below and up to 1 additional page, describe how each researcher will use the infrastructure to contribute to the proposed research. If major new users are to be recruited, describe the recruitment plan.

TRansCPT will bring together a group of pioneering artist/scholars with worldwide reputations for innovative research in performance and new technologies. They will form a strategic network that connects SFU and TRansCPT with other regional, national and international research communities. TRansCPT's investigators will provide innovative direction in new areas of performance research, attract a wider pool of research granting monies, and create linkages with industry and other research clusters in Canada and abroad. The inclusion of internationally acclaimed scholars from NYU and Ohio State University will open up possibilities of applying to US-based granting organizations and linking with private industry beyond the Canadian context.

Johannes Birringer is the head of the Dance & Technology Program at Ohio State University. He is an internationally known choreographer/media artist and theorist, artistic director of AlienNation Co, and a founding member and principal investigator of AdaPT. Birringer will use the telematic technologies at the Centre to link TRansCPT to AdaPT to create on-line performances, on-line learning, and transnational archival work.

Jonathan Borwein is Shrum Professor of Science at SFU, where he holds a Canada Research Chair in IT. He founded and directed the Centre for Experimental and Constructive Mathematics and now directs SFU's CoLab. Borwein will use the lab facilities to link WestGrid, CoLab and NewMic into one of the largest performance networks in Canada, allowing him to further investigate the challenges of high performance grid computing and visualization.

Red Burns is Chair of the Interactive Telecommunications Program in the Tisch School of the Arts at NYU. Burns is an expert in telecommunications and is considered one of the most influential leaders in New York's economy. Burns will use TRansCPT to train faculty and students in techniques for designing place-based interactive computing systems (e.g. acoustic science, industrial design, and audible display research).

Thomas Calvert is Professor and Acting Director in the Information Technology and Interactive Arts Program at SFU Surrey. His research interests include human figure animation, software for choreography, and software systems for distributed learning. Currently, Calvert is leading a collaborative project with the Dance Notation Bureau (New

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York) and Credo Interactive Inc. (Vancouver) to develop an animation stem to visualize Labanotation scores for dance. He will use TRansCPT's facilities to develop and test the software and hardware for this project.

Henry Daniel is an Assistant Professor in the School for the Contemporary Arts, Artistic Director of the UK dance/performance company Full Performing Bodies, and lead researcher for TRansCPT. Daniel has an international reputation as an innovative dancer, choreographer and educator. He is also a Research Associate in the SFU CoLab and a Co-Researcher on the InterPARES 2 project. Daniel will use the infrastructure at TRansCPT to develop new performance prototypes in distributed electronic systems and new training and injury prevention techniques.

Luciana Duranti is Chair and Professor in the Master of Archival Studies at the School of Library, Archival and Information Studies, University of British Columbia. She is a renowned scholar of archival theory and diplomatic analysis and presently Project-Director of InterPARES 2, a large multinational, collaborative and interdisciplinary research project on the long-term preservation of authentic electronic records. Duranti will use TRansCPT's archival resources to further the research of InterPARES by testing the identity and authenticity of artistic records.

Martin Gotfrit is Associate Professor and the Director of the School for the Contemporary Arts at SFU. Gotfrit is a well-known electro-acoustic composer recognized for his innovative collaborations with dance, theatre, poetry and film. His work has been selected for performance at a variety of prestigious conferences and events. Gotfrit will rely upon the facilities at TRansCPT to further his work in real time music composition and generation.

Susan Kozel is an Associate Professor in the Interactive Arts Program at SFU Surrey. Kozel is an acclaimed performance artist, scholar, and co-founder of Mesh Performance Partnerships. Kozel's latest research project on kinetic interfaces requires the use of TRansCPT's movement lab, motion capture and telematic technologies in order to explore new strategies for translating physical movement into 3D graphical spaces.

Barbara Layne is Associate Dean/Associate Professor of the Studio Arts Programme, Concordia University and principal investigator with Lynn Hughes on the CFI funded project Hexigram. Layne's work incorporates the Internet as a place to collect, transmit and exchange textile information. Layne will be instrumental in linking TRansCPT with Hexigram; she will also use TRansCPT's performance space and mini-lab to develop her textile-based performance work in British Columbia.

Richard Schechner is one of the pioneers of the field of Performance Studies. He is University Professor of Performance Studies at the Tisch School of the Arts at NYU and Editor of TDR: Journal of Performance Studies. As a leader in the field he helped to shape, Schechner has promoted numerous international projects in performance history, theory and theatrical production. He will rely upon TRansCPT's performance and presentation spaces to develop a research program exploring the relationship between indigenous practices and technology.

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Self-assessment**B1 - Need for the infrastructure****Choose the statement that best represents the proposed infrastructure**

The proposed infrastructure is essential for the proposed research and:

- (a) enhances institutional research capacity;
- (b) establishes a unique institutional research capability;
- (c) establishes a unique regional or national research capability;
- (d) establishes an internationally competitive research capability which would not exist otherwise.

Using the space below and up to 2 additional pages, address all of the following:

- the appropriateness of the infrastructure project for the proposed research;
- the project's potential impact on building institutional, regional or national capacity for innovation;
- the availability and accessibility of similar infrastructure within the institution, the region, the country or internationally, as well as issues of complementarity, duplication and sharing;
- how the infrastructure project helps build capacity in the institution's strategic research priority areas, including efforts to attract and retain highly qualified researchers in these areas. Describe the means the institution proposes to take to support these priority areas (e.g. institutional resources to capitalize on the infrastructure, creation of new academic staff positions, research chairs, etc.).

Because of the increasingly complex relationship between art and technology it is necessary to build facilities such as TRansCPT. Such studio laboratories make possible performance research and cultural applications of interactivity that inform industry research and development.

The main lab of TRansCPT will be a confluence of two distinct environments: a comprehensively equipped performance/presentation space and a technologically intelligent lab. This 'studio lab' will be optimized for research in human performance. TRansCPT will make possible the development and testing of new technological systems at the human-machine interface. Research outcomes will be presented as innovative and expressive artistic forms. With the addition of the Awareness, Training and Injury Prevention Lab, the Digital Performance Archive and ancillary labs/support spaces, the infrastructure of TRansCPT will be a convergence of scientific study and creative activity within a University environment.

TRansCPT's unique facilities and their organization in one space are designed to attract an innovative composition of researchers from the six areas of the SCA and the fields of Computing Science, Mathematics, Engineering, Geography, Sociology, Anthropology, Education, Cultural Studies, Kinesiology, Business, Economics, Cognitive Science and Neuroscience, to create transdisciplinary research in the field of performance.

Situated within and supporting one of the oldest interdisciplinary fine and performing arts university programs in Canada (SCA), TRansCPT is ideally positioned to extend the legacy of excellence for which this country is known. Vancouver contains an impressive network of industry and culture that would greatly benefit from the creation of TRansCPT. Canada needs this type of infrastructure in order to maximize the potential of Western Canadians in the future economy.

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With the resources that TRAnsCPT offers for the creation, identification, and authentication of new interactive, dynamic and experiential records in electronic systems, it will become the only facility capable of performing such a comprehensive task in Canada. In the theatre of Robert LePage or the performances of Carbon 14, one finds evidence of our national capacity for inventive and pioneering use of technology in performance. By creating a Western centre to balance the aforementioned artists from Quebec, TransCPT will further our international reputation for innovation in performance by offering new interface designs, telepresence and image evolution in the areas of visual art, visual media culture, music and interactive sound design.

Establishing TRAnsCPT at SFU will strengthen the existing cluster of labs devoted to technological innovation, none of which have skilled artists and performers as their central resource, or performance practice as their primary research activity. Specifically, TRAnsCPT's facilities will compliment labs in the Centre for Systems Science, the Interactive Arts Program at SFU Surrey (both the Shared Virtual Environment and the Interactivity Lab) and NewMIC, situated at the same location as SFU's downtown Harbor Centre Campus. The new academic program at SFU Surrey will be a powerful complement to TRAnsCPT, offering researchers access to expertise in interactive arts and information technology crucial to new kinds of art-science collaborative endeavors.

Nearby, the Scotiabank Dance Centre, the Emily Carr Institute for Art and Design Centre for Art and Technology (ECIAD) and the University of British Columbia in Vancouver share resources and pursue complimentary activities with SFU. For example, the Centre for Art and Technology at ECIAD together with Daniel and the SCA are undertaking a research collaboration in the area of film and animation techniques. There are current plans in the making to work collaboratively with the proposed new Institute for Computing, Information, and Cognitive Systems at UBC.

Regionally, SCA has collaborated with the Banff New Media Institute in Alberta for many years (their director Sara Diamond is one of our alumni and current faculty have had research grants to pursue performance related work there). On the national scene, there are a number of university-supported new media facilities that link technological innovation and artistic production as a research endeavor. Of interest are the three leading Montreal universities (UQAM, Concordia, and McGill), linked to TRAnsCPT through primary researcher Layne. This Eastern Canadian centered activity provides a strong argument for an equally distinct research institution to be established in Western Canada.

TRAnsCPT will also join a number of international research centers. The Zentrum für Kunst und Medien in Karlsruhe (ZKM) is focused on new media technologies as they affect the fields of visual arts, dance, music and web art. IRCAM (Institute of Research and Coordination in Sound/Music) in Paris has recently added dance choreography to its research on sound synthesis and processing technologies. Other centers include: Ars Electronica (Austria), V2 (Holland), CICV (France), Steim Institute (Holland), C3 (Hungary) and SMARTLab (UK) and of course, the MIT Media Lab in the USA. These focus primarily on new media technologies: telepresence, virtual, interactive, and multi-media environments and technologies for music, internet/web imaging and streaming.

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There is a growing network of US universities dedicated to supporting technological innovation in dance linked by IDAT and AdaPT. SFU hosted the second IDAT conference in 1993 and prefigured ADAPT by hosting one of the first 'web jams' featuring musicians from New York City, dancers from SFU and actors from New York University. All of these institutions have built on the first wave of dance and performance related events that SFU helped initiate.

TRansCPT will provide the physical, economic, and social conditions to enhance SFU's institutional capacity to engage in experimentation and exploration with other institutes. This proposed infrastructure is congruent with SFU's Faculty of Arts Academic Plan 2001-2004, which promises to support opportunities to foster innovation, to promote inter-institutional and inter-sectoral collaboration, to attain and attract excellent researchers, to train highly qualified personnel through research, and to improve the capacity of generating and applying new knowledge.

TRansCPT is also essential to the realization of the current academic plan of the School for the Contemporary Arts, especially in creating new facilities, faculty renewal in the direction of digital media and technological expertise, extending the field of performance studies, and expanding the base of graduate researchers. One strategic pillar of TRansCPT's research mandate which is especially congruent with the mission of SCA is the commitment to cultural diversity.

Through resources available through the SCA's KRT Fund, the School has brought in researchers from Ghana and Indonesia and will fully utilize the mandate of the fund to support residencies for TRansCPT researchers from outside of Europe and North America. TRansCPT is designed to forge a new direction in infrastructure design and research directions that will confirm SFU and Canada among the leaders in engaging the human body and performance as catalysts for technological and artistic innovation.

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Self-assessment**B2 - Training, through research, of Highly Qualified Personnel (HQP)****Choose the statement that best represents the infrastructure project.**

The infrastructure project will support the training of HQP, through research, by imparting:

- (a) the basic skills and expertise required to undertake research activities or other endeavours;
- (b) an appropriate set of skills and expertise needed in areas of importance to Canada;
- (c) a broad range of high-level skills and expertise in areas of critical importance to Canada;
- (d) an exceptional set of high-level skills and expertise that are considered as "world class" in areas of critical importance to Canada.

Using the space below and up to 1 additional page, address all of the following

- how the proposed infrastructure will create a stimulating and enriched training environment for HQP;
- current HQP training at the institution(s) and future plans for HQP training to be carried out with the proposed infrastructure. Include the current number and level (undergraduate and graduate students, postdoctoral fellows, technicians, technologists other trainees/students) of HQP trained as well as the number and level of HQP to be trained as a result of the proposed infrastructure.

We are experiencing a worldwide shortage of skills in technology, what has been referred to as an 'IT Skills Gap'. It has been suggested that more than 1,000,000 North Americans could be employed in rewarding, high-income jobs today if they had the appropriate information technology skills. In Canada, the shortfall has been estimated at no fewer than 20,000 unfilled jobs.

The highly qualified persons trained at TRansCPT will improve the quality of Canada's human capital in the field of art and technology. The objectives of TRansCPT are to empower artists and scientists to work across disciplines and transcend their areas of specialization to create what has been referred to as a "whole brain" approach to innovation (ITAC, 2001). TRansCPT will provide an environment for training graduate researchers across art, science, and technology, as well as nourish and sustain a vibrant research community. TRansCPT will train a distinctive academic and/or professional whose understanding of media and technology is informed by a strong sense of aesthetics and ethics.

In a knowledge-intensive and technologically enhanced workplace that moves quickly, researchers-in-training need more than technical skills. They need an understanding of the culture we live in and the underlying structures that fuel the dynamism between technology and creativity. Young researchers at TRansCPT, through the extant pedagogy of the SCA, will be trained to become integrated researchers who are artistic and analytical, concrete and imaginative, and who can draw upon a rich mix of disciplines, cultures and experiences.

TRansCPT's ten senior researchers are outstanding instructors whose students have excelled in academia and the cultural and technology industries. TRansCPT's potential for training HQP is evident in the SCA's alumni. Two nationally renowned alumni include IA Surrey Professors, Kenneth Newby and Thecla Schiphorst. Many of the SCA's graduates include practicing artists and technicians in dance, music, film/video, the gaming industry and new media performance, successful scholars or practitioners in the fields of information technology, interactive arts, computing science and mathematics, as well as

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managers and administrators with both institutional and independent affiliations.

Graduates of TRansCPT's principal researchers have found positions with Sony Pictures Imageworks, Lucent Technologies, Electronic Arts, Credo Interactive, Alias Wavefront, Design Variations, Microsoft, Intel, and Electronic Hollywood. Duranti's Archival and Information Studies graduates currently work for the European Union, the United Nations and the World Bank, creating and preserving digital records. They have faculty positions in Canadian, US and European universities.

TRansCPT's infrastructure will expand these successes by facilitating cross appointments of faculty, providing expanded lab and studio resources and accommodating specialist researchers in areas of practice and theory. With the facility in place, the complement of graduate researchers from the SCA will be doubled, and with the inclusion of students from other programs and disciplines and cross appointments of faculty, that complement could easily be tripled.

The New Economy has a pressing need for new researchers who can keep up with the accelerating pace of technological change. The creative and problem-solving skills engendered by transdisciplinary experience at the post-secondary level, within the context of a liberal arts faculty, can provide such resilience and training. By ensuring that the cultural community has the necessary education and skills, TRansCPT will contribute to our knowledge-based economy by stimulating creativity and generating new innovative technologies to support Canadian performing arts and their contribution to a rich and rewarding quality of life.

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Self-assessment**B3 - Research Collaborations and Partnerships****Choose the statement that best represents the infrastructure project.**

The proposed research infrastructure will create or strengthen:

- (a) collaborations among researchers (e.g. collaboration on funded projects, co-authorship);
- (b) collaborations among researchers from different disciplines, institutions, sectors or countries;
- (c) partnerships (e.g. formal signed agreements) among research institutions in the same sector or from different sectors;
- (d) international partnerships among research institutions or among sectors.

Using the space below and up to 1 additional page, address all of the following aspects:

- what collaborations or partnerships already exist;
- what collaborations or partnerships are planned;
- what steps have been taken or will be taken to create or strengthen collaborations or partnerships;
- how the infrastructure is essential to the collaborations or partnerships.

"Canadian researchers recognize that the key to achieving rapid breakthroughs is to collaborate with the greatest minds in the world because we are living in a global age of discovery" (Alan Rock, Ministry of Industry, September 2002).

TRansCPT's facilities will sustain and expand existing partnerships at the regional, national and international levels. This will allow for new heights in research and productivity for all associated researchers and users. A Summer Institute, jointly put on by TransCPT and the SCA will host research workshops, design studios, and hands-on training. These activities will strengthen partnerships, provide a forum for strategic think tanks, and raise research funds.

Simon Fraser University: Current and Future Collaborations and Partnerships:

- CoLab and GRUVI Lab (Borwein, Calvert). TRansCPT will introduce a performance element to these networked labs helping to develop new graphics, optimization, and visualization technologies.

- Surrey Art Gallery's New Digital Media Lab (Gotfrit, Kozel). These researchers are involved in collaborative research in cultural diversity.

- SCA and the Injury Prevention and Mobility Lab, School for Kinesiology (Gotfrit, Kozel). Investigators will collaborate on research examining performance/movement techniques and therapies for the medical field and health industries. TRansCPT will also link with the Institute for Health Research and Education (IHRE), Environment of Physiology Unit, and the Geraldine and Tong Loui Centre.

- The Faculty of Business (Burns, David Thomas). TRansCPT has established linkages with the Management of Technology MBA Program to market products emerging from TRansCPT's research activities.

Regional and National: Current and Planned Collaborations and Partnerships:

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- NewMIC (Burns). With NewMIC, TRAnsCPT will initiate new industry partnerships, including research and development.
- WestGRID (Borwein). TRAnsCPT will become a crucial node on this research network.
- InterPARES 2, UBC (Duranti, Daniel). TRAnsCPT will carry out research projects of InterPARES.
- Emily Carr College Institute of Art and Design (Kozel, Burns). TRAnsCPT will formally link to the Centre for Art and Technology.
- Vancouver Dance Centre. Both Centres will create a telematic network for live performances and the archiving of that material.
- Banff New Media Centre (Gotrit, Diamond). Professional guest artist exchanges will be established between TRAnsCPT and Banff.
- Hexagram (Layne). The western node TRAnsCPT will link to Hexagram in the east through new performance practices.
- LANTISS at Level (Duranti). TRAnsCPT will collaborate on cultural research in the area of digital performance archiving.
- Dance Department, York University (Calvert). TRAnsCPT will join York Univeristy and share access grid technologies with the European network HUMAK (Humanities Polytechnique) to research on-line courses and to extend international dance technology networks.
- Rogers Communication Centre, The Theatre School and The Dance and Theatre Programs at Ryerson University (Kozel). TRAnsCPT will link with Ryerson's current network research activities and especially in the area of convergent media (computing, telecommunications, and broadcasting).

International: Current and Planned Collaborations and Partnerships:

- PARIP (Schechner, Daniel, Birringer). TRAnsCPT will share methodologies and theoretical perspectives on practice as research in performance.
- ADaPT (Biringner, Kozel). TRAnsCPT will facilitate collaborations that explore performance telematics.
- NYU's Performance Studies/Hemispheric Institute of Performance and Politics (Schechner, Birringer). NYU and TRAnsCPT will develop theoretical perspectives on performance as ethnographic and cultural investigation; formal research partnership is under development with the Institute's process of grant renewal with the Ford and Rockefeller foundations.
- NYU's Interactive Telecommunications Program (Burns, Calvert). TRAnsCPT and the Program will establish collaborations in creative practice and industrial design (application of creativity and imagination to the latest digital tools and techniques); faculty and graduate research exchanges will also be established.
- Troika Ranch (Calvert, Kozel, Coniglio). TRAnsCPT's researchers will explore new interfaces for MidiDancer® and Isadora®, a graphic programming environment. During the Summer Institute, Troika Ranch will host their Live-I Workshop, an intensive training seminar for artists and researchers who want to explore the use of interactive computer technology in the creation and performance of dance, theatre, and installation.
- Dance Theater Workshop (DTW) in New York City (Daniel, Schechner, Birringer). TRAnsCPT will join DTW, a pioneering institution for experimental dance and, internationally, one of the most sophisticated venues for performance technologies.

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Self-assessment**C - Potential benefits of the research to Canada****Choose the statement that best represents the infrastructure project.**

The proposed infrastructure will support research that has the potential to:

- (a) contribute indirectly to economic activities (e.g. economic growth, cost savings, job creation) **or** contribute indirectly to the improvement of society, quality of life, health, or the environment;
- (b) improve economic activities (e.g. economic growth, cost savings, job creation) **or** improve society, the quality of life, health, or the environment;
- (c) contribute to increased economic activity in strong or emerging areas of the Canadian economy **or** yield a major benefit in terms of society, quality of life, health, or the environment;
- (d) contribute significantly to increased economic activity; help Canadian industry increase its global competitiveness and create new economic ventures; **or** lead to dramatic sustained improvements to society, quality of life, health, or the environment.

Using the space below and up to 1 additional page

- identify potential users of the research results; including partnerships with industry, health providers, etc.
- describe expected benefits, how these will be realised and the timeframe over which they are expected;
- where appropriate, provide plans for the development of clusters and for technology transfer, other forms of commercialisation or transfer of know-how, as well as contributions to policies and practices.

"Innovation is about the process of generating something new that has value." (Watters, 1999)

As noted in Canada's Innovation Strategy, a vibrant cultural community is both a product and a part of a modern knowledge-based economy, generating new ideas, stimulating creativity in the wider economy and society, and contributing to a rich and rewarding quality of life. Canadian artists are using leading-edge technologies to transform the performing arts. Artist/researchers challenge the applications of new technologies and extend the range of their use. Innovative product development is therefore dependent upon the interaction of skills, craft, and expertise, and the creative feedback between researchers and industry.

There are historical precedents for these kinds of activities; for example, the Bauhaus School of Art that existed in Germany in the first half of the twentieth century developed a program that subsequently influenced entire generations of international artists, architects, designers, art schools, furniture makers, painters, sculptors, choreographers and industrial designers.

Universities play an important role in performing research and advancing the creation of knowledge. They help the private sector develop and adopt innovations. They are also the dominant players in terms of training the highly qualified people that create and apply knowledge.

TRansCPT will contribute to Canada's growing strength in these areas in a number of ways. It will strengthen the growing cluster of research nodes through its leading edge research and development capacities, knowledge-sharing infrastructure, technology transfer capacity, training of highly qualified people, including artists, entrepreneurs,

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and creators. More importantly, through its research on how technology affects the social and cultural well-being of Canadians, TRansCPT contributes to building Canada's social cohesion. All of these activities will fuel Canada's long term competitiveness in a global economy.

TRanCPT's research will lead to development in the following areas:

1. New interfaces for interactive performance arts
2. Development of new convergent media for industry (e.g. gaming, interactive TV, 3D animation)
3. Smart fabrics/wearable computers for high intensity performances
4. Modeling and prototyping of interactive, dynamic and experiential records in networked environments
5. Development of new technologies for music therapy and physical therapy
6. Creation and publication of live works
7. New methods, policies and solutions for archiving artistic records, copyright and electronic reproduction of archival records
8. Animation and visualization of dance notation scores
9. Conferences, online journal and other publications of research findings

These findings will be distributed through the researchers' international networks. TRansCPT's researchers will also translate their findings into applications that will be used by a variety of sectors. Many of the researchers have already founded artistic-scientific connections with computer software and hardware engineers through developments like the Life Forms software or the creation of wearable computers and digital prosthetics.

TRansCPT seeks to create and develop similar new technologies, as well as foster links with the gaming, film animation and video industries. The new digital film industry relies upon skilled physical performers to infuse life into their virtual characters on the screen. This commercial and lucrative application of motion capture provides a clear link between the research of TRansCPT and the needs of industry.

TRansCPT will also positively affect the health industry (i.e. sensing technologies developed for live dance performances have been used by doctors and therapists in the rehabilitation of stroke patients and disabled persons). The Movement Awareness Lab at TRansCPT will be used to develop techniques in injury-prevention and recovery. For example, the use of ultrasonic sensors enable people with disabilities to create music through minimal movement actions. This work also has the potential to impact research in the fields of kinesiology, physiotherapy, gyrokinesis and other health sectors. TRansCPT will collaborate with SFU's newly established IHRE and with other researchers in the CSS at SFU in the development of similar technological products.

In its investigation of the human-machine interface TRansCPT will merge 'commerce' and 'culture'. Its research will inform Canadian policy by providing important perspectives on culture and its humanization of technology thus contributing to one of the key purposes of innnovation: "promoting the quality of life" (Rock, 2002).

SUGGESTED REVIEWERS

Date: 12/03/2003

Project number: 8213

Title of project: Transdisciplinary Research Centre for Performance and Technology

Institution: Simon Fraser University

Designated Project Leader Daniel, Henry

Complete this module for all applications to the CFI. Identify six (6) reviewers appropriate for the application. **Reviewers must not be** current or recent (within the last 6 years) collaborators, departmental colleagues, students or supervisor(s).

Provide a complete mailing address, telephone number, fax number, **current e-mail address**, and the areas of expertise of potential reviewers. Suggested reviewers may be Canadian or international and should be able to evaluate the application in the language in which it is written.

The CFI reserves the right to make its own selection of reviewers.

Name: Flynn, Anne Telephone: 403 220-7663 #

Address: Faculty of Fine Arts and Kinesiology Fax: 403 282-6925

University of Calgary

2500 University Drive, NW

Calgary, Alberta

Postal Code: T2N 1N4

e-mail: flynn@ucalgary.ca

Area(s) of expertise (key words): Modern dance, technique and history, structured improvisation,
dance and cultural studies

Name: Foster, Susan Leigh Telephone: 310 825-3951 #

Address: World Arts and Cultures Fax: 310 206-1342

University of California at Los Angeles

11000 Kinross Avenue, ROOM 200, Box 9516

Los Angeles, California

Postal Code: 90095-1608

e-mail: slfoster@arts.ucla.edu

Area(s) of expertise (key words): Dance history and criticism, choreography, cultures of
embodiment, feminism and dance

Name: Machover, Todd Telephone: 617 253-0394 #

Address: Music and Media Fax: 617 258-6264

MIT Media Lab

Wiesner Building, 20 Ames St.

Cambridge, Massachusetts

Postal Code: 02139-4307

e-mail: tod@media.mit.edu

Area(s) of expertise (key words): Composer, hyperinstruments group/opera of the future, music
performance and education

SUGGESTED REVIEWERS

Date: 12/03/2003

Project number: 8213

Title of project: Transdisciplinary Research Centre for Performance and Technology

Institution: Simon Fraser University

Designated Project Leader: Daniel, Henry

Reviewers must not be current or recent (within the last 6 years): collaborators or departmental colleagues, students or supervisors. Provide a complete mailing address, telephone number, fax number, **current e-mail address**, and the areas of expertise of potential reviewers. Suggested reviewers may be Canadian or international and should be able to evaluate the application in the language in which it is written.

The CFI reserves the right to make its own selection of reviewers.

Name: Karpen, Richard Telephone: 206 543-7130 #
Address: Center for Digital Arts and Experimental Fax: 206 616-3346
University of Washington
Box 353689
Seattle, Washington
Postal Code: 98195
e-mail: karpen@u.washington.edu
Area(s) of expertise key words): Music composition, computer music

Name: Smith, William Telephone: 403 380-1803 # 2748
Address: Department of Fine Arts, Multimedia Fax: 403 382-7127
University of Lethbridge
4401 University Drive W.
Lethbridge, Alberta
Postal Code: T1K 3M4
e-mail: aw.smith@uleth.ca
Area(s) of expertise key words): Theatre, art, dance, music, animation, image processing,
interactive multimedia sequencing

Name: Rhyman, Rhonda Telephone: 519 888-4567 # 2748
Address: Dept of Recreation and Leisure Studies Fax:
University of Waterloo
BMH 2203
Waterloo, Ontario
Postal Code: N2L 6A3
e-mail: rsryman@healthy.uwaterloo.ca
Area(s) of expertise key words): Functional anatomy and applied biomechanics, technique and
pedagogy, computer & Life Forms animation



CURRICULUM VITAE

IDENTIFICATION

Surname or family name:	Daniel	Given name and initials:	Henry
Title or Position:	Assistant Professor		
Department:	School for the Contemporary Arts	Date	20/02/2003
		PIN:	24477

MAILING ADDRESS (including institution, street and number, municipality, province, and postal code):

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		Fax:	604 291-5907
E-mail address:	hdaniel@sfu.ca		
I wish to receive correspondence in:			
	<input checked="" type="radio"/>	English	<input type="radio"/> French

ACADEMIC BACKGROUND

Degree	Year	Discipline/Field	Institution and Country
Master's Doctorate	1995	Dance Studies	Laban Centre, City University London, UK
		Dance & Performance	Bristol University, UK

AREA(S) OF EXPERTISE

Write a maximum of ten (10) key words that describe your current area(s) of expertise, including expertise with particular instruments and techniques. Use commas to separate each key word.

theatre & performance studies, contemporary dance, physical theatre, Tanztheater, intercultural performance (African Diaspora), performance & new technologies

Specify up to two discipline/field code(s) for your research.

Primary code: 30600

Secondary code: 31000

Use only the pages provided. Use the CFI codes to specify discipline.

Name: Daniel, Henry

ACADEMIC, RESEARCH, PROFESSIONAL, AND INDUSTRIAL EXPERIENCE - List all positions, beginning with the current or most recent position. List the others in reverse chronological order.

Position Held Institution/Organization	Department/Faculty	Period	
		year	to year
Assistant Professor Simon Fraser University	School for the Contemporary Arts	2000	
Lecturer (permanent) King Alfred's College, UK	School for Community & Performing	1998	2000
Lecturer University College Scarborough, UK	School of Arts	1997	1998
Lecturer University of Plymouth, UK	Dept. Theatre and Performance	1996	1997
Freelance Choreographer		1995	1996
Lecturer Arts Educational Schools of London, UK	Contemporary Dance	1995	1995
Lecturer Laban Centre, City University London, UK	Contemporary Dance	1994	1995
Freelance Director, Choreographer Henry Daniel & Dancers, & others		1991	1994
Assistant Director, Choreographer, Dancer Tanztheater Münster/Städtische Bühnen		1989	1991
Director, Choreographer Henry Daniel & Dancers, & others		1986	1989
Dancer, Contemporary Dance Teacher Tanztheater Freiburg, Städtischen Bühnen		1985	1986
Dance Teacher, Choreographe Tanzprojekt München, Henry Daniel Dancers		1984	1985
Solo Dancer Jose Limon Dance Co.		1979	1984

FOR NEW RESEARCHERS UNDER NEW OPPORTUNITIES ONLY: Provide the date (DD/MM/YYYY) of the academic appointment:

Date position taken up or expected to be taken up:

Name: Daniel, Henry

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Use the space below and up to one additional page. Start with the most recent and use reverse chronological order. Describe:

- your **most significant** contributions to research (refereed articles, monographs, books, patents, copyright, products, services, technology transfer, other forms of research output). For your most important contributions, describe the significance in terms of influence and impact on the target community and;
- other activities that show the impact of your work, such as research training, awards, consulting, contributions to professional practice or public policy, and membership on committees, boards, or policy-making bodies.

SELECTED PERFORMANCE WORKS

1. Dancer, "Percy" (2002) Karen Jamieson Dance Co., at Bill Reid Foundation benefit concert, Chan Performing Arts Centre.
2. "Out of Body" (2002). Performance of new work live in Vancouver's CBC Studio. Text by Dionne Brand, voices Dionne Brand & Lisa Voth, and background video footage by Brian Johnson.
3. "This Woman" (2002). Commissioned choreography for ACEDANCE - African Cultural Exchange, Birmingham, England. Performances included July 22-24 run at Lillian Baylis Sadlers Wells Theater, London with Badejo Arts "Tilewa" platform. 2002.
4. "Duet" (2002). The Firehall. Vancouver's Dancing on the Edge Festival.
5. "Kafka's Report to the Academy-Response from Dance" (2001). SFU's Mainstage Performance.
6. "Quartet" (2001). Performances at Main Dance Studio Theatre Vancouver.
7. "Untitled" (2000). A twenty-four minute work-in-progress premiered at the SFU Mainstage.

PUBLICATIONS

1. "Re-Cognising Corporeality." Chapter in Performing Processes, Roberta Mock, ed. Intellect, 2000. 61-8. ISBN 1841500100
2. "Performing in Technologically Aware Environments." Journal for Theatre Dance and Theory 6 (1999): 27-32. ISSN 0807 - 6316

CONFERENCES, WORKSHOPS & PRESENTATIONS

1. 2002: InterPARES 2 Workshop 3. Co-Investigator. Crowne Plaza Hotel Beverly Hills Los Angeles CA, USA.
2. 2002: "Performing in Virtual Environments with Technologically Mediated Bodies." SFU CoLab. <http://www.colab.sfu.ca/events.html>
3. 2002: "Theatres of Life." The Eighth Annual Performance Studies International Conference. New York University.
4. 2002: InterPARES 2 Workshop 1-Domain Task Force. Co-Investigator. Crowne Plaza Hotel Georgia, Vancouver, BC.
5. 2002: "The Uncanny: Experiments in Cyborg Culture". Attendance at the series of events; talks and performances at The Western Front, Simon Fraser Harbor Center (SFU) campus, and the Emily Carr Institute for Art and Design (ECIAD), and the Vancouver Art Gallery's (VAG) main exhibit.
6. 2002: "The Cyborg Chronicles." Attendance at two lectures at the Vancouver Art Gallery.
7. 2001: InterPARES 2 Symposium. Preparation for submission of large SSHRC Grant by InterPARES 2 Canadian Team. Hotel Georgia, Vancouver, BC.
8. 2001: InterPARES Symposium-International Research on Permanent Authentic Records in Electronic Systems. University of British Columbia.

Name: Daniel, Henry

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

9. 2000: "Less Aesthetics More Ethics" Architecture-Performance. Attendance at the Biennale di Venezia Venice, Italy.
10. 2000: "The Automated Body " Workshop on Dance performance and New Technologies. Austin, Texas, USA.
11. 1999: "The Futurist Equation." Performance at The Modernist Body Conference, University of Antwerp, Belgium.
12. 1999: "Shango Meets Ogun." Performance at Momentum: Conference on Dance and Physical Theatre, Manchester Metropolitan University.
13. 1999: "Physical/Virtual Bodies." Attendance as Delegate to Dance and Technology Conference, University of Middlesex Research Centre (RESCEN).
14. 1999: "Shango meets Ogun." Performance at Here be Dragons: 5th International Performance Studies Conference, University of Aberystwyth, Wales.
15. 1999: "Movement, Image, Text and Technology in Contemporary Theatrical Performances." Paper delivered at Visual Cultures, Claremont College, CA.

Name: Daniel, Henry

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
InterPARES	SSHRC	C	500 000	2002	2006
Duranti L	25 hours/month				
Interdisciplinary Performance Research Facility	Western Economic Development SFU VP Research	C	25 000	2002	2003
Daniel H	95 hours/month				
Equipment for teaching & research	Simon Fraser University Setup Grant for New Faculty	H	10 355	2000	2001
Daniel H	n/a				
Computing Equipment for teaching & research	Simon Fraser University Endowed Research Fellowship	H	5 000	2000	2001
Daniel H	n/a				
Relatively Well-Centred	Simon Fraser University President's Research Grant	H	10 000	2000	2001
Daniel H	65 hours/month				



CURRICULUM VITAE

IDENTIFICATION

Surname or family name:	Birringer	Given name and initials:	Johannes
Title or Position:	Associate Professor		
Department:	Dance	Date 22/02/2003	PIN: 24504

MAILING ADDRESS (including institution, street and number, municipality, province, and postal code):

Department of Dance			
Ohio State University			
Columbus, OH			
43210			
UNITED STATES			
Office Telephone	614 688-0169	Extension:	Fax:
E-mail address:	birringer.1@osu.edu		
I wish to receive correspondence in:		<input checked="" type="radio"/> English	<input type="radio"/> French

ACADEMIC BACKGROUND

Degree	Year	Discipline/Field	Institution and Country
Bachelor's	1978	English, History, German	Universität Trier, Germany
Master's	1979	English, History	Universität Trier, Germany
Doctorate	1983	English, Ling., History	Yale University, USA/Universität Trier

AREA(S) OF EXPERTISE

Write a maximum of ten (10) key words that describe your current area(s) of expertise, including expertise with particular instruments and techniques. Use commas to separate each key word.

dance & technology, interactive performance systems, choreography, media arts, cultural theory

Specify up to two discipline/field code(s) for your research.

Primary code: 30600

Secondary code: 31000

Use only the pages provided. Use the CFI codes to specify discipline.

Name: Birringer, Johannes

ACADEMIC, RESEARCH, PROFESSIONAL, AND INDUSTRIAL EXPERIENCE - List all positions, beginning with the current or most recent position. List the others in reverse chronological order.

Position Held Institution/Organization	Department/Faculty	Period	
		year	to year
Associate Professor Ohio State University	Dance & Technology Program	1999	
Research Fellow Rice University, USA	Anthropology	1997	
Research Fellow University College Chichester, UK	Related Art	1997	
Assistant Professor Northwestern University	Performance Studies	1990	1997
Visiting Assistant Professor Rice University, USA	Humanities	1989	1990
Full Professor Justus-Liebig Universitat Giessen	Inst of Applied Theatre Science	1988	1988
Assistant Professor University of Texas-Dallas	Arts and Humanities	1985	1987
Lecturer, Visiting Ass. Professor Yale University	Theatre Studies and English	1984	1985
Lecturer Yale University	English	1983	1984
Instructor Yale University	German, Acting	1981	1983
Teaching Assistant Universität Trier, Germany	English	1975	1979

FOR NEW RESEARCHERS UNDER NEW OPPORTUNITIES ONLY: Provide the date (DD/MM/YYYY) of the academic appointment:

Date position taken up or expected to be taken up:

Name: Birringer, Johannes

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Use the space below and up to one additional page. Start with the most recent and use reverse chronological order. Describe:

- your **most significant** contributions to research (refereed articles, monographs, books, patents, copyright, products, services, technology transfer, other forms of research output). For your most important contributions, describe the significance in terms of influence and impact on the target community and;
- other activities that show the impact of your work, such as research training, awards, consulting, contributions to professional practice or public policy, and membership on committees, boards, or policy-making bodies.

RECENT BOOKS

1. Performance on the Edge: Transformations of Culture. London: Continuum, 2001. London: Athlone, 2000.

2. Media and Performance: Along the Border. Baltimore: Johns Hopkins UP, 1998.

SELECTED ARTICLES, CHAPTERS & JOURNALS

1. "Dance and Digital Media." Special issue prepared and edited for Performing Arts Journal, with introductory essay on "Dance and Media Technologies," 2001.

2. "Muoversi attraverso le tecnologie." La scena digitale: nuovi media per la danza. Armando Menicacci and Emanuele Quinz, eds. Bolzano, Italy: Marsilio, 2001. 231-36.

3. "Artists in Profile." Guerrilla Performance and Multimedia. Leslie Hill and Helen Paris, eds. London: Continuum, 2001. 10-17.

4. "The Intelligent Stage." Performance Research 6.3 (2001): 116-22.

5. "Intelligent Stages/Compensation Design." Ballet International/tanz aktuell 3 (2001): 17.

6. "Spomini Realnega." Teorije sodobnega plesa. Emil Hrvatin, ed. Ljubljana: Maska, 2001. 208-18.

7. "Moving through Technologies." Movement Research 20 (2000): 9.

8. "The Politics of Reception." Conversations on Art and Performance. Bonnie Marranca and Gautam Dasgupta, eds. Baltimore: Johns Hopkins Univ. Press, 1999. 76-101.

9. "Contemporary Performance/Technology." Theatre Journal 61.4 (1999): 361-81.

10. "Els mitjans contemporanis de performance-art." Papers D'Art 74 (1999): 71-78.

11. "Art and Performance." Special issue prepared and edited for Artlies 18, Texas art magazine. Includes "Long Time No See." Artlies 18 (1998): 3-9.

12. "Art in America: A Conversation with Tania Bruguera," Performance Research 3.1 (1998): 24-31.

13. "The Movement of Memory: The Physicality of Digital Performance," Leonardo 31.3 (1998): 165-72.

14. "Makrolab: A Heterotopia," Performing Arts Journal 60 (1998): 66-75.

Plus 13 reviews and abstracts since 1998.

SELECTED PROCEEDINGS AND PRESENTATIONS

1. 2001: "Connected Dance: Distributed Performance across Time Zones." Hypertext essay with Ellen Bromberg, Naomi Jackson, John Mitchell, Lisa Naugle, and Doug Rosenberg. Ed. by J. Birringer in "Transmigratory Moves/Dance in Global Circulation." Congress On Research in Dance Conference Proceedings, New York University. 51-77.

2. 2001: "Connected Sites/Distributed Performance", Wissen schaffen über Tanz Congress, conference proceedings, Akademie der Künste, Berlin, and Gesellschaft für Tanzforschung e.V, Germany.

3. 2000: "Exploding Perceptions." Conference Proceedings, University College Chichester, Conference Papers. 7-10.

4. 1999: "Lively Bodies Lively Machines." IDAT 99 Proceedings. A. William Smith, ed. FullHouse Publishing International. 7-12.

Name: Birringer, Johannes

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Plus 12 scholarly presentations since 1998.

SELECTED PERFORMANCE WORK

1. ADaPT Telepresence performances. Created collaborative live streaming video and audio, linking Ohio State Univeristy with four other dance programs in the US (Arizona State Univ., Univ. of Utah, Univ. of California-Irvine. Univ. of Wisconsin). Telepresence sessions in Mar., Apr., May, June, Sept., 2001.
2. "Mirak." Created video choreography and projection design for opera and film recital. Music by Steve Pare. Houston Composers Alliance. Duncan Hall, Shepherd School of Music, Houston, 2001.
3. "Irregeleitete Anatomie." Created video choreography, text, and installation design. Dance by Angel Blasco. Festspielhaus Hellerau, Dresden, Germany, 2000.
4. "Mirak." Directed evening-length dance opera, created choreography, video, and design. Additional choreography by AlienNation Co. Music by Steve Paré. Libretto by Angeles Romero. Additional décor by Donald Calledare. Additional Film by Serena Lin. World premiere, commissioned by Diverse Works, Houston, 1999.
5. "Parachute." Full-length evening concert. Designed space for performance, created video and projection environment, and provided Production Management. Choreography by Sandra Organ. Music by Steve Paré, 1998. Directed performance and installation cycle at various locations: Bayou Place/El Mercado del Sol/316 Main Street, Houston, Internatiional FotoFest '98. "Parachute Online" webcast, www.ruf.rice.edu/~orpheus/
6. "between the places." Created dance environment, choreography, and video design. Performed by Angeles Romero. 10 Minutes Max Dance Festival. Diverse Works, Houston, 1998.
7. "migbot." Choreography/direction. Full-length evening dance/film installation and sonic environment. Performed by AlienNation Co. Winter Street Art Center, Houston, Texas, 1998. Interactive/online installation. www.migbot.ndirect.co.uk
8. "North by South." Full length evening concert, created choreography, video and scenography. Performed by AlienNation Co. Diverse Works, Houston, 1998.
9. "East by West." Directed digital dance/music concert. Performed by André Marquetti with AlienNation Co. Winter Street Art Center, Houston, 1998.

Over 10 video exhibitions and performance installations since 1998. Plus dance & performance choreography, direction, curatorship for numerous university productions (approx. 2/year). Visual illustrations and designs of choreographies and dancetheatre and media productions are shown in the websites created for my company Alien Nation and for exhibitions: <http://www.aliennationcompany.com>,

<http://www.ruf.rice.edu/~orpheus/>,

<http://www.migbot.ndirect.co.uk/enter.html>, <http://www.kunsttage-dreieich.de/jbirringer.html>, http://DPA.ntu.ac.uk/dpa_site/

AWARDS (since 1998)

1999: Received \$ 4,250.00 Cultural Arts Council of Houston/Harris County Individual Artist's Project Award for excellence of community outreach project ("Art and Technology Media Lab")

1999: Received Juror's Merit Award for my film installation "Vespucci," in "Dissolving Language" exhibition, ACA Gallery, Austin, Texas

1998: Received a \$ 1,000.00 Public Arts Award for "Parachute Online" from the Cultural Arts Council of Houston

Name: Birringer, Johannes

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
telematic performance Birringer J	Ohio State University Technology in Instruction Pro	H	7 000	2001	2001
conference on dance and software development Birringer J	Ohio State University Office of International Affai	H	5 000	2001	2001
workshop with Stelarc Birringer J	Ohio State University Inst. for Collab. Research	H	500	2000	2000
Computer-Körper-Interaktion Birringer J	Ohio State University College of Arts travel grant	H	1 000	2000	2000
Parachute Birringer J	Texas Commission on the Arts		600	1998	1998



CURRICULUM VITAE

IDENTIFICATION

Surname or family name:	Borwein	Given name and initials:	Jonathan	M
Title or Position:	Professor			
Department:	Mathematics & Statistics	Date	16/09/2002	PIN: 310

MAILING ADDRESS (including institution, street and number, municipality, province, and postal code):

CECM, Dept. of Mathematics & Statistics
Simon Fraser University
8888 University Drive
Burnaby, BC
V5A 1S6

Office Telephone 604 291-3070 Extension: Fax: 604 291-5614

E-mail address: jborwein@cecm.sfu.ca

I wish to receive correspondence in: English French

ACADEMIC BACKGROUND

Degree	Year	Discipline/Field	Institution and Country
Bachelor's	1971	Mathematics (Honours)	University of Western Ontario
Master's	1972	Mathematics	Oxford University (Jesus College)
Doctorate	1974	Mathematics	Oxford University (Jesus College)
Other	1999	Doctorat Honoris Causa	Universite de Limoges

AREA(S) OF EXPERTISE

Write a maximum of ten (10) key words that describe your current area(s) of expertise, including expertise with particular instruments and techniques. Use commas to separate each key word.

convex and nonlinear analysis, experimental mathematics, entropy optimization, special functions, computer algebra, nonsmooth analysis, classical and number theory experimental

Specify up to two discipline/field code(s) for your research.

Primary code: 12100
Secondary code: 12000

Use only the pages provided. Use the CFI codes to specify discipline.

Name: Borwein, Jonathan

ACADEMIC, RESEARCH, PROFESSIONAL, AND INDUSTRIAL EXPERIENCE - List all positions, beginning with the current or most recent position. List the others in reverse chronological order.

Position Held Institution/Organization	Department/Faculty	Period	
		year	to year
Associate Member Simon Fraser University	Computing Science/ Applied Science	1994	
Shrum Professor of Science Simon Fraser University	Mathematics & Stats / Science	1993	
Director Simon Fraser University	CECM	1993	
Adjunct Professor Dalhousie University	Maths, Stats & CS / Art & Science	1993	1996
Professor University of Waterloo	Comb & Opt Mathematics	1991	1993
Professor Dalhousie University	Maths, Stats & CS / Art & Science	1984	1993
Professor Invite French National Fellowship	Universite de Limoges / Science	1991	1991
Australian Research Council Fellowship ANU/Newcastle	Maths / Science	1988	1988
Senior Killam Fellow Dalhousie University	Maths, Stats & CS / Art & Science	1987	1988
Distinguished Visiting Professor Centre de Recherche Mathematiques	Universite de Montreal / Science	1986	1986
Professor Invite French National Fellowship	Universite de Limoges / Science	1985	1985
Associate Professor Dalhousie University	Maths, Stats & CS / Art & Science	1980	1984
Assistant/Associate Professor Carnegie-Mellon University	Mathematics / Science	1980	1982
Assistant Professor Dalhousie University	Maths, Stats & CS / Art & Science	1976	1980

FOR NEW RESEARCHERS UNDER NEW OPPORTUNITIES ONLY: Provide the date (DD/MM/YYYY) of the academic appointment:

Date position taken up or expected to be taken up:

Name: Borwein, Jonathan

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Use the space below and up to one additional page. Start with the most recent and use reverse chronological order. Describe:

- your **most significant** contributions to research (refereed articles, monographs, books, patents, copyright, products, services, technology transfer, other forms of research output). For your most important contributions, describe the significance in terms of influence and impact on the target community and;
- other activities that show the impact of your work, such as research training, awards, consulting, contributions to professional practice or public policy, and membership on committees, boards, or policy-making bodies.

MOST SIGNIFICANT CONTRIBUTIONS

1. The comprehensive study of generalized subdifferentials meshing multifunctional, measure theoretic, topological, and functional analytic techniques.
2. Development of a coherent & mathematically sound formulation of maximum entropy and projection methods in the corpus of infinite dimensional convex programming and analysis.
3. Exploiting significant possibility of careful empirical mathematics, mixing symbolic, high precision, and combinatorial technique with rigorous theorem proving.
4. Use of experimental math methodology in multiple zeta values, spanning number theory, analysis, combinatorics, knot, and quantum field theory.
5. CECM world-class research centre in symbolic computing, internet tech, computational analysis and number theory, optimization and approx. theory (www.cecm.sfu.ca/~jborwein)
6. Successful spin-off (www.mathresources.com) building educational math software.

SELECTED CONTRIBUTIONS (More than 250 refereed publications & 6 books since 1975)

1. JM Borwein, DJ Broadhurst & J Kamnitzer "Central Binomial Sums, Multiple Clausen Values, and Zeta Values" *Experimental Mathematics*, 10 (2001), 25-41.
2. JM Borwein, WB Moors & X Wang "Generalized subdifferentials: A Baire categorical approach" *Transactions AMS*, in press 2001.
3. JM Borwein & PB Borwein "Challenges for Mathematical Computing" (Invited) *Computing in Science & Engineering*, 3 (2001), 48-53.
4. JM Borwein & SP Fitzpatrick "Duality inequalities and sandwiched functions" *Nonlinear Analysis: Th Meth Appl*, in press 2001.
5. JM Borwein, DM Bradley, DJ Broadhurst & P Lisonek "Special values of multidimensional polylogarithms" *Trans Amer Math Soc*, 353 (2001), 907-941.
6. JM Borwein, DM Bradley & RE Crandall "Computational strategies for the Riemann zeta function" *Journal of Computational & Applied Mathematics*, 121 (2000), 247-296.
7. JM Borwein & P Lisonek "Applications of integer relation algorithms" *Discrete Mathematics (Special issue for FPSAC 1997)*, 217 (2000), 65-82.
8. JM Borwein, P Marechal & D Naugler "A convex dual approach to the computation of NMR complex spectra" *Mathematical Methods of Operations Research*, 51 (2000), 91-102.
9. JM Borwein & R Corless "Emerging tools for Experimental Mathematics" *MAA Monthly*, 106 (1999), 889-909.
10. H Bauschke, D Noll, A Celler & JM Borwein "An EM-algorithm for dynamic SPECT" *IEEE Transactions on Medical Imaging*, 18 (1999), 252-261.
11. JM Borwein, J Treiman & Q Zhu "Partially Smooth Variational Principles and Applications" *J Nonlinear Analysis, Theory Methods Applications*, 38 (1999), 1031-1059.
12. JM Borwein, DM Bradley, DJ Broadhurst & P Lisonek "Combinatorial aspects of multiple zeta values" *Electronic Journal of Combinatorics*, 5 (1998) R38, 12 pages.
13. D Borwein, JM Borwein & C Pinner "Convergence of Madelung-like lattice sums" *Trans Amer Math Soc*, 350 (1998), 3131-3167.
14. JM Borwein, JS Treiman & QJ Zhu "Necessary conditions for optimization problems with

Name: Borwein, Jonathan

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

semicontinuous & continuous data" Trans Amer Math Soc, 350 (1998), 2409-2429.

15. JM Borwein, DM Bradley & DJ Broadhurst "Evaluations of k-fold Euler/Zagier sums: A compendium of results for arbitrary k,," Elec J of Combinatorics, 4 (1997), R5 (21 pages).

16. JM Borwein & DM Bradley "Empirically determined Apery-like formulae for zeta(4n+3)" Experimental Mathematics, 6 (1997), 181-194.

17. JM Borwein & WB Moors "Essentially smooth Lipschitz functions" Journal of Functional Analysis, 49 (1997), 305-351.

18. HH Bauschke & JM Borwein "Legendre functions and the method of random Bregman projections" J Convex Analysis, 4 (1997), 27-67.

19. DH Bailey, JM Borwein & RH Crandall "On the Khintchine constant" Mathematics of Computation, 66 (1997), 417-431.

20. JM Borwein & Q Zhu "Variational analysis in non-reflexive spaces and applications to control problems with L1 perturbations" J Nonlin Anal, Theory Methods Apps, 28 (1997), 889-816.

AWARDS: HPL/MSRI Visiting Prof. Berkeley (Declined, 2001); Nat'l Alumni Award of Merit UWO (1999); Doctorat Honoris Causa (1999); BC/CUFA Academic of the Year with P Borwein (1996); Fellow, Royal Society of Canada (Acad of Sci 1994); Chauvenet & Merten M Hasse Prize of the MAA "Outstanding survey or expository mathematics paper" in N Amer J (1993); APICS/Fraser Gold Medal, Research Excellence (1988); ON Rhodes Scholar (1971)

INVITED LECTURES (>100 since 1993) including: Ernst Schroedinger Lecture at U Vienna 2000; Donald H Clanton Lecture at Furman U 2000; Doctorat Honoris Causa Lecture 1999; Buckingham Fellow at Miami U 1999; ISSAC 1999 Plenary Lecture; MAA Plenary Lecture 1999; Technion Institute of Advanced Studies Series 1999; Seminaire des mathematiques superieures Lecture Series 1998; Laird Lecture in Winnipeg 1997; FPSAC 1997 Plenary Lecture

TRAINING OF HQP since 1993: 7 MSc, 4 PhD, 18 post-doctoral fellows, various RAs

SELECTED PROFESSIONAL ACTIVITIES: Canada Research Chair in IT
 2000-2002 President (elect 1999-2000) Canadian Mathematical Society
 1999-2001 NATO Advisory Panel Physical and Engineering Sciences and Technology
 1999-2000 Presidential Search Committee, SFU
 1997-2002 C3.ca National Board (www.c3.ca); (Executive 97-98)
 1998-2002 Royal Society of Canada, McNeil Medal Selection Committee
 1997-2003 Member Advisory Board of CISTI (www.cisti.nrc.ca) (Chair 01-03)
 1997-1999 NATO Advisory Panel on Collaborative Research Grants (Chair 1998)
 1996-pres Partner, Math Resources Inc., Halifax NS (www.mathresources.com)
 1995-2000 Project Leader, Multi-modal Mathematics Project in TL-NCE (www.telelearn.ca)
 1995-1997 Chair of Electronic Services Committee of the CMS
 1992-1996 Member, NSERC Committee on Collaborative Research Initiatives

EDITORSHIPS: CMS Books (camel.math.ca/CMS/Publications/) with P Borwein (Wiley 90-98, Springer 98-present). Editorial Boards: Set-Valued Analysis, J Convex Analysis, ZOR: Math Meth of OR, Ramanujan Quarterly, Exper Math, Proc AMS, SIAM Elec Probs

CD/WEB PRODUCTS: MathResource, 97 Best Post-Secondary Reference Software; Eddie by Educational Software Review; MathProbe, Media & Methods 1998 Awards Portfolio; Lets Do Math 2000 Technology & Learning Award (Company www.mathresources.com)

Name: Borwein, Jonathan

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
Topics in Applied Analysis BORWEIN J	NSERC Operating Grant 80 hrs/month	C	41 600	1998	2003
HPC@SFU BORWEIN J	CFI	C	728 084	2001	2003
HPC@SFU BORWEIN J&P	BCKDF	C	728 084	2001	2003
Advanced Knowledge Delivery for Math Learning BORWEIN J	Telelearning-NCE 20 hrs/month	C	75 000	1999	2001
Advanced System Institute BORWEIN J	Advanced Publishing Analysis EMedia-IT	C	40 000	2000	2001
Symbolic Analysis BORWEIN P	MITACS-NCE 10 hrs/month	C	225 000	1999	2001
Computing Lab BORWEIN P	NSERC Equipment Grant	C	60 000	2000	2001
PolyLAB/SUN Academic Equipment Grant BORWEIN J	CFI Institutional Innovation Fund	H	340 000	1999	2000
MultiModal Mathematics BORWEIN J	TeleLearning-NCE 10 hrs/month	H	85 000	1995	1999

Name: Borwein, Jonathan

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
Nonlinear Analysis BORWEIN J	NSERC Operating Grant 80 hrs/month	H	36 000	1993	1998
Experimental Math Lab BORWEIN J	Shrum Research Grant	H	36 000	1993	1998
CECM Computing BORWEIN J&P	NSERC Equipment Grant	H	38 000	1997	1998
Interactive Mathematics BORWEIN P	NSERC Equipment Grant	H	45 000	1996	1997



CURRICULUM VITAE

IDENTIFICATION

Surname or family name:	Burns	Given name and initials:	Red
Title or Position:	Professor		
Department:	Interactive Telecommunications Program	Date	21/02/2003
		PIN:	24488

MAILING ADDRESS (including institution, street and number, municipality, province, and postal code):

Tisch School of the Arts			
New York University			
721 Boradway, 4th Floor			
New York, New York			
10003			
UNITED STATES			
Office Telephone	212 998-1888	Extension:	Fax: 212 998-1898
E-mail address:	Red.Burns@nyu.edu		
I wish to receive correspondence in:		<input checked="" type="radio"/> English	<input type="radio"/> French

ACADEMIC BACKGROUND

Degree	Year	Discipline/Field	Institution and Country

AREA(S) OF EXPERTISE

Write a maximum of ten (10) key words that describe your current area(s) of expertise, including expertise with particular instruments and techniques. Use commas to separate each key word.

Specify up to two discipline/field code(s) for your research.

Primary code: 20600

Secondary code:

Use only the pages provided. Use the CFI codes to specify discipline.

Name: Burns, Red

ACADEMIC, RESEARCH, PROFESSIONAL, AND INDUSTRIAL EXPERIENCE - List all positions, beginning with the current or most recent position. List the others in reverse chronological order.

Position Held Institution/Organization	Department/Faculty	Period	
		year	to year
Chair New York University	Interactive Telecommunications	1983	
Tokyo Broadcasting System Professor New York University	Communications	1997	
Co-Founder & Director New York University	Alternate Media Center	1971	
Adjunct Professor New York University	Film and Television	1974	1979
Community Media Coordinator New York University	School of the Arts	1970	1971

FOR NEW RESEARCHERS UNDER NEW OPPORTUNITIES ONLY: Provide the date (DD/MM/YYYY) of the academic appointment:

Date position taken up or expected to be taken up:

Name: Burns, Red

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Use the space below and up to one additional page. Start with the most recent and use reverse chronological order. Describe:

- your **most significant** contributions to research (refereed articles, monographs, books, patents, copyright, products, services, technology transfer, other forms of research output). For your most important contributions, describe the significance in terms of influence and impact on the target community and;
- other activities that show the impact of your work, such as research training, awards, consulting, contributions to professional practice or public policy, and membership on committees, boards, or policy-making bodies.

RECENT AWARDS & CITATIONS

1. Chrysler Design Awards-Year of Design Champion. Nov.2002.
2. 1000- Richard Saul Wurman's Who's Really Who. The Most Creative Individuals in the USA 2002. Feb. 2002
3. 2001: Technology 100: Leaders Who Will Shape New York. Crain's New York Business. May 2001.
4. 100 Top Business Leaders of New York's Economy. Crain's New York Business. 2000.
5. New York's 100 Most Influential Women in Business. Crain's New York Business, Sept. 1999.
6. One of Silicon Alley's 100. The Silicon Alley Reporter. Dec.1998.
7. Art Director's Club Inc. Special Award in Education. Induction into the Hall of Fame. Nov.1998. NYC.
8. Crain's All-Stars 1998: Professor inspires, grooms the city's new media elite. Crain's New York Business. Apr.1998.
9. Mayor of New York's Award for Excellence in Science and Technology, 1998.

SELECTED PROJECTS

1. 2001: Principal Investigator, Investigating The Development of an Interactive Media Program, University of Witswatersarand, Johannesburg.
2. 1998: Principal Investigator. NCR Knowledge Lab.
3. 1998 to present: Principal Investigator. Intel Research.
4. 1998 to present: Principal Investigator. Microsoft Research.

SERVICE TO BOARDS

1. Board of Directors, Art Director's Club (since 2002).
2. Explorer's Club, Interaction Design Institute, IVREA (since 2001).
3. Board of Directors, Witness (since 2001).
4. Board of Directors, ProBono.net (since 2000).
5. Board of Directors, MIT Media Lab Europe (since 2000).
6. Board of Directors, The Charles H. Revson Foundation (since 1999).
7. Advisory Board, New York Times Digital (1999-2001).
8. Founding Board Member, New York New Media Association (1994-2000).
9. Board of Directors, Echo Communications (1990-1999).

RECENT APPOINTMENTS

1. Judge. The American Institute of Graphic Arts. "365 AIGA Annual Design Competitions." NYC. (2002).
2. Judge. The Rockefeller Foundation New Media Fellowship Panel, NYC. (2002).
3. Judge. Creative Capital Grants. NYC. (2002).
4. Advisor, American Museum of National History's Seminars on Science, NYC. (since 2001).
5. Education Committee Member. New Museum of Contemporary Art, NYC. (2000).

Name: Burns, Red

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

6. Judge. Mid Atlantic Arts Foundation. Baltimore, MD. (2000).
7. Judge. The National Magazine Awards. NYC. (2000).
8. Member. Mayor's Council on New Media. NYC. (1999).
9. Member. The Honorary Gala Committee. New York Hall of Science. NYC. (1999).
10. Judge. The Webby Awards, CA. (1999-2002).
11. Member. Governor Pataki's Task Force on New Media and the Internet. NYC. (since 1998).
12. Advisor. The Office of the Superintendent of Manhattan High Schools. NYC. (since 1998).

SPEAKING ENGAGEMENTS

1. 2002: Digital Art. Ludwig Foundation, Havana, Cuba.
2. 2002: Interactivity, IBM Research, New York.
3. 2001: Human Centered Product Innovation Conference. Intel. Portland, OR.
4. 2000: "Attraction, Distraction: Perceptual Conditions of Media Art." Cummings Art Building, Annenberg Auditorium. Stanford University, Stanford, CA.
5. 2000: Women in Communications, NYC.
6. 2000: Keynote, NYU Visits Arizona. Scottsdale, AZ.
7. 1999: CTI Multimedia Roundtable. San Jose, CA.
8. 1998: "New Media At the Millenium." PriceWaterhouse Coopers. Leesburg, VA.
9. 1998: Moderator. "Women in New Media." New York Women in Communications. NYC.
10. 1998: Keynote. "The Future of Interactive Communication." Lund University of Cognitive Science, Lund, Sweden.
11. 1998: Keynote. "Transarchitectures." The Getty Institute, Los Angeles, CA.
12. 1998: Panel Speaker. ArtSci98 - A Public Symposium. The Great Hall, Cooper Union, NYC.

RECENT CONSULTATIONS

1. 2002: Ball State University, School of Communication, Information and Media. Muncie, IN.
2. 1999 to present: Mentor. Ross School, East Hampton, NY.

RECENT PUBLICATIONS

1. "Technology and The Human Spirit." The Future of Interactive Communication. Sweden: Lund University Cognitive Science, 1998.
2. "Creativity and Technology." The Education of an E-Designer. NY: Allworth Press, 2001.

Name: Burns, Red

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure		
				year	to	year



CURRICULUM VITAE

IDENTIFICATION

Surname or family name:	Calvert	Given name and initials:	Thomas	W
Title or Position:	Professor			
Department:	Information Technology and Interactive Arts	Date	13/02/2003	PIN: 24359

MAILING ADDRESS (including institution, street and number, municipality, province, and postal code):

Information Technology & Interactive Art			
Simon Fraser University			
2400 Central City, 10153 King George Hwy			
Surrey, BC			
V3T 2W1			
CANADA			
Office Telephone	604 5865240	Extension:	Fax: 604 5866060
E-mail address:	tom@sfu.ca		
I wish to receive correspondence in:			
		<input checked="" type="radio"/> English	<input type="radio"/> French

ACADEMIC BACKGROUND

Degree	Year	Discipline/Field	Institution and Country
Bachelor's	1957	Electrical Engineering	University College, London, UK
Master's	1964	Electrical Engineering	Wayne State Univ., USA
Doctorate	1967	Electrical Engineering	Carnegie-Mellon Univ., USA
Other	1963	HS Teaching Certificate	Ontario College of Education

AREA(S) OF EXPERTISE

Write a maximum of ten (10) key words that describe your current area(s) of expertise, including expertise with particular instruments and techniques. Use commas to separate each key word.

Computer graphics, Human Figure Animation, Human Computer Interaction, Computers and Dance, E-Learning

Specify up to two discipline/field code(s) for your research.

Primary code: 31000

Secondary code: 11800

Use only the pages provided. Use the CFI codes to specify discipline.

Name: Calvert, Thomas

ACADEMIC, RESEARCH, PROFESSIONAL, AND INDUSTRIAL EXPERIENCE - List all positions, beginning with the current or most recent position. List the others in reverse chronological order.

Position Held Institution/Organization	Department/Faculty	Period	
		year	to year
Professor/Director SFU	Information Tech & Interactive Art	2002	2003
Founder & Director Credo Interactive Inc		1997	2003
Professor/VP Research Technical Univ of BC	IT	1997	2002
Professor SFU	Computing Science	1972	1997
President Science Council of BC		1990	1992
Associate Professor Carnegie-Mellon Univ	Elect Eng & Biomedical Eng	1967	1972
Instructor Wayne State Univ	Electrical Engineering	1964	1965
Lecturer Western Ontario Inst of Tech	Electronics	1961	1964
Instrumentation Engineer Canadair Ltd.	Flight Test	1960	1961
Instrumentation Engineer ICI Ltd, UK	Instrumentation	1957	1960

FOR NEW RESEARCHERS UNDER NEW OPPORTUNITIES ONLY: Provide the date (DD/MM/YYYY) of the academic appointment:

Date position taken up or expected to be taken up:

Name: Calvert, Thomas

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Use the space below and up to one additional page. Start with the most recent and use reverse chronological order. Describe:

- your **most significant** contributions to research (refereed articles, monographs, books, patents, copyright, products, services, technology transfer, other forms of research output). For your most important contributions, describe the significance in terms of influence and impact on the target community and;
- other activities that show the impact of your work, such as research training, awards, consulting, contributions to professional practice or public policy, and membership on committees, boards, or policy-making bodies.

1. Most Significant Contributions to Research and/or to Practical Applications

A. Development (with L. Harasim) of the Virtual-U web-based software for support of online post-secondary courses. This system has been more widely studied than any comparable system. A company (VLEI) has been formed to commercialize and market it.

B. Research led by T. Calvert on human figure animation in the SFU Graphics and Multimedia Research Lab has resulted in the development of the Life Forms software package. This is being further developed and marketed by Credo Interactive Inc, of which T. Calvert is founder and board member. The software is in use throughout the world by animators and choreographers.

C. Methodologies for the design and evaluation of user interfaces have been developed and applied to industrial control systems, multimedia authoring tools and systems for telelearning. This has been the focus of research projects sponsored by PRECARN, IRIS2 and the TL-NCE.

2. Research Contributions and Practical Applications

a. Refereed papers

L. Bartram, C. Ware and T. Calvert. Moticons: Detection, Distraction and Task. International Journal of Human-Computer Studies, special issue on the Design and Evaluation of Notification Interfaces, to appear 2003.

Yinlong Sun, F. David Fracchia, Mark S. Drew, and Thomas W. Calvert, "A Spectrally Based Framework for Realistic Image Synthesis," The Visual Computer, Vol. 17, No 7, pp. 429-444, 2001.

Y. Sun, F.D. Fracchia, T.W. Calvert and M.S. Drew, Deriving Spectra from Colors and Rendering Light Interference, IEEE Computer Graphics and Applications, vol. 19, pp. 61-66, 1999.

b. Book Chapters:

T. Calvert and P. Stacey, "Learning for an E-Connected World" in The E-Connected World: its social and political implications, S. Coleman (Ed), McGill University Press, 2003.

T. Calvert, "From email to virtual reality: The role of technology in supporting learning", Invited Essay - inno've-tion2, edited by J. Downey and L. Claxton for CFI, Key Porter, 2002.

Name: Calvert, Thomas

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

T. Calvert and C. R. Pantel, "Distributed Multimedia Learning Environments" in Distributed Multimedia, S.K. Chang and S.T. Vuong (eds), World Scientific Publishers, 1999.

c. Refereed Conference Papers:

Lyn Bartram, Colin Ware & Tom Calvert, "Moving Icons: Detection and Distraction", Proc. Interact 2001 Conference, Waseda University, Japan, July 2001.

Richards, G., Calvert, T., Dufresne, A., Bartram, L. & Hatala, M. "Cultivating a community of practice: Designing the TeleLearning Exchange", 6th Intl Conference on Computer Supported Collaborative Work in Design, London, July 2001.

T. Calvert and A. Sonnichsen, "Emergent Behaviour in Animated Crowd Scenes", Life Like Computer Characters Workshop, Snowbird, Utah, October 1998.

T. Calvert, S. Mah and Z. Jetha. "Designing an Interface for Choreographers" Proceedings of IFAC Symposium on Analysis, Design and Evaluation of Man-Machine Systems, Kyoto, Japan, September 1998.

T. Calvert, "Video-conferencing and other Tele-collaboration Tools for Web-based Virtual Learning Environments", Invited presentation, International Forum - Towards Building International Networks: Issues and Prospects, National Institute for Multimedia Education, Chiba, Japan, September 1998.

Name: Calvert, Thomas

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
LORNET - Learning Object Repository Network Paquette G	NSERC Network 20 h/month	A	2 000 000	2003	2008
Visualization of Dance Notation Calvert T.W.	Dance Notation Bureau/NEH Contract 10h/month	C	42 000	2001	2004
POOL - Learning Objects Calvert T.W.	CANARIE Learning Program Learning Program 15h/month	H	20 000	2001	2003
Lessons learned: Communicating the telelearning ex Calvert T.W.	SSHRC-INE INE 5 h/month	C	50 000	2002	2003
User Interaction in Virtual Learning Calvert T.W.	TeleLearning NCE Research Grant 20h/month	H	45 000	1999	2002
Design of open source components and platforms Calvert T.W.	TeleLearning NCE Research Grant 10h/month	H	35 000	2000	2002
Agent based animation of human figures Calvert T. W	NSERC Research Grant 20h/month	H	37 000	1996	1999



CURRICULUM VITAE

IDENTIFICATION

Surname or family name:	Duranti	Given name and initials:	Luciana
Title or Position:	Professor		
Department:	School of Library, Archival and Info. St.	Date	04/03/2003
		PIN:	14782

MAILING ADDRESS (including institution, street and number, municipality, province, and postal code):

School of Library, Archival and Info. St
The University of British Columbia
#831-1956 Main Mall
VANCOUVER BC
V6T 1Z1
CANADA

Office Telephone 604 822-2587 Extension: Fax: 604 822-6006

E-mail address: luciana@interchange.ubc.ca

I wish to receive correspondence in: English French

ACADEMIC BACKGROUND

Degree	Year	Discipline/Field	Institution and Country
Bachelor's	1979	Langue Francaise	Ecole Internationale Langue et Civilization
Master's	1979	Paleografia e Diplomatic	Archivio di Stato di Roma, Italy
Doctorate	1975	Archivistica	Universita di Roma, Italy
Doctorate	1973	Lettere (Arts)	Universita di Roma, Italy

AREA(S) OF EXPERTISE

Write a maximum of ten (10) key words that describe your current area(s) of expertise, including expertise with particular instruments and techniques. Use commas to separate each key word.

archival theory, appraisal, electronic records, authenticity of records reliability of records, history of archives, records creation, records preservation, records management

Specify up to two discipline/field code(s) for your research.

Primary code: 20500
Secondary code: 20200

Use only the pages provided. Use the CFI codes to specify discipline.

Name: Duranti, Luciana

ACADEMIC, RESEARCH, PROFESSIONAL, AND INDUSTRIAL EXPERIENCE - List all positions, beginning with the current or most recent position. List the others in reverse chronological order.

Position Held Institution/Organization	Department/Faculty	Period	
		year	to year
Professor University of British Columbia	Library, Archival & Info Studies	1997	
Associate Dean of Arts University of British Columbia	Faculty of Arts	1997	1999
Associate Professor University of British Columbia	Library, Archival & Info Studies	1992	1997
Assistant Professor University of British Columbia	Library, Archival & Info Studies	1987	1992
Professor-Researcher Universita di Roma, Italy	Archivisti e Bibliotecari	1982	1987
Assistant Professor Archivio di Stato di Roma, Italy	Archivistica, Paleografia e Diplom	1979	1983
Archivista di Stato Archivio di Stato di Roma, Italy		1978	1982
Lecturer Ministero della Pubblica Istruzione	Corsi di aggiornamento	1981	1981
Lecturer Prefettura di Roma, Italy	Corsi di aggiornamento	1980	1980
Project Archivist Consiglio Nazionale delle Ricerche		1974	1977

FOR NEW RESEARCHERS UNDER NEW OPPORTUNITIES ONLY: Provide the date (DD/MM/YYYY) of the academic appointment:

Date position taken up or expected to be taken up:

Name: Duranti, Luciana

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Use the space below and up to one additional page. Start with the most recent and use reverse chronological order. Describe:

- your **most significant** contributions to research (refereed articles, monographs, books, patents, copyright, products, services, technology transfer, other forms of research output). For your most important contributions, describe the significance in terms of influence and impact on the target community and;
- other activities that show the impact of your work, such as research training, awards, consulting, contributions to professional practice or public policy, and membership on committees, boards, or policy-making bodies.

REFEREED JOURNAL ARTICLES

1. "Diplomatics of Electronic Records," *Bibliothèque de l'École des chartes*, special issue on "Exportations de la diplomatie" (Fall 2002): in press.
 2. "The Challenge of Digital Photography and the InterPARES 2 Project," *Dossier on "Archivi Fotografici. Photographic archives"*, *Supplemento a Il Mondo degli Archivi Anno X Nuova Serie* numero 1/2002, pp. 72-76. Also in Italian, "La sfida sulle fotografie digitali e il Progetto InterPARES 2," *ibidem*, pp. 4-7.
 3. "La Society of American Archivists (SAA)," *Archivi per la Storia XIV*, 1-2 (2001): 383-390.
 4. "Formazione professionale per records managers: la situazione nordamericana," *Archivi per la Storia XIV*, 1-2 (2001): 253-258.
 5. With Kenneth Thibodeau, "The InterPARES Research Project," *Information Management Journal*, vol. 35, 1 (January 2001): 44-50.
 6. "Concepts and Principles for the Management of Electronic Records," *The Information Society. An International Journal*, 17 (2001): 1-9.
 7. "The Impact of Digital Technology on Archival Science," *Archival Science* 1, 1 (2001): 39-55.
 8. "La gestione dei documenti elettronici: problemi e possibili soluzioni," *Atti del Congresso ANAI 1999* (Roma: ANAI, 2000).
 9. "The Society of American Archivists and Graduate Archival Education: A Sneak Preview of Future Directions," *The American Archivist* 63, 2 (Fall 2000): 237-242.
 10. "Meeting the Challenge of Contemporary Records: Does It Require a Role Change for the Archivist?," *The American Archivist* 63, 1 (Spring/Summer 2000): 7-14.
 11. "La conservazione a lungo termine di documenti elettronici autentici: il progetto InterPARES," *Archivi per la storia XII*, 1-2 (1999): 155-167.
 12. "Concepts and Principles for the Management of Electronic Records, or Records Management Theory is Archival Diplomatics," *Records Management Journal* 9, 3 (1999): 149-172.
 13. "D'aquí a l'eternitat: conceptes i principis de la gestió de documents electrònics," *Lligall* 14 (1999): 113-131.
 14. "Archival Education and the Modern Asian Archivist," *East Asian Archives* 5 (1999): 6-20. Also published in Chinese in "Archives and Development" (English translation of the Chinese journal name), 1998 (the publication in translation preceded that in English).
- BOOKS
1. With Terry Eastwood and Heather MacNeil, *Preservation of the Integrity of Electronic Records* (Dordrecht: Kluwer Academic Publishers Group, 2002)
 2. *Arhivski zapisi. Teorija i praksa* (Zagreb: Hrvatski drzavni arhiv, 2000). It is a translation of *I documenti archivistici. La gestione dell'archivio da parte dell'ente produttore* with a new chapter and a new preface.
 3. *Diplomatics: New Uses for An Old Science* (Chicago, Ill.: SAA, ACA and Scarecrow Press,

Name: Duranti, Luciana

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

1998). It is the collection into one volume, with a new 30 pages Introduction written by the author, of the six articles on diplomatics published in *Archivaria* (1989-92).

CHAPTERS/PARTS OF BOOKS

1. "La conservazione nel tempo dell'affidabilità e autenticità dei documenti elettronici," *Le carte operose*, Grazia Tato' ed. (Trieste: Associazione Nazionale Archivistica Italiana, 2002), in press.
2. "Origin and Development of the Concept of Archival Description" *Stichting Archiefverzorging-Jaarboek: 'Toegang'* (Amsterdam, 2001), 95-102. [see also under "refereed publications"].
3. "The Future of Archival Scholarship," *The Archivist and the Millennium*, Ailsa Holland, Tom Quinlan and Rhena Lohen eds. (Dublin, Ireland: University College Dublin Press, 1999).
4. With William Underwood, Daryll Prescott and Mark Kindl, "IDEF Methodology and the Reengineering of Records Management," *Reengineering in Action: The Quest for World Class Excellence*, Chan Meng Khoong ed., (London, Singapore: Imperial College Press, an imprint of World Scientific Publishing, 1998).

SELECTED CONFERENCE PROCEEDINGS

1. "Authenticity and Appraisal: Appraisal Theory Confronted With Electronic Records," *Proceedings of the 3rd International Colloquium on Library and Information Science: "The refined art of the destruction: records' appraisal and disposal."* October 9-11, Salamanca, Spain (Salamanca: University of Salamanca, 2002): in press.
2. "The Long-Term Preservation of Authentic Electronic Records," *Proceedings of the First Ph.D. Forum on Archives—November 17-19, Beijing, China* (Beijing: Renmin University of China, 2001): 251-261.
3. "The Long-Term Preservation of Electronic Records," *Proceedings of the 27th International Conference on Very Large Data Bases—September 11-14, 2001, Roma, Italy* (Roma: Morgan Kaufmann Publishers, 2001): 625-629.
4. "L'autenticità dei documenti elettronici: concetti e requisiti," *Atti della Terza Conferenza Organizzativa degli Archivi delle Università Italiane—Padova, 5-7 April 2001* (Padova: Università di Padova, 2001).
5. "The InterPARES Project," in *Proceedings of the Open Seminar on Current Projects on Digital Preservation and Electronic Records—March 1,2 2001* (Glasgow, UK: University of Glasgow, 2001).
6. "The Authenticity of Electronic Records: The InterPARES Approach," in *Actes de les journées internationales sur la conservation a long-terme des documents électroniques, Paris 8-9 Mars 2001* (Paris, France: Les Archives Nationales, 2001).
7. "Draft Conceptual Requirements for Authenticity," in *Proceedings of the Symposium "How Do You Know It's The Real Thing?(II) Authentic Records in the Electronic Age," Vancouver, B.C., 17 February 2001* (Vancouver, B.C.: Istituto Italiano di Cultura, 2001).
8. "Concepts, Principles and Methods for the Management of Reliable and Authentic Electronic Records Throughout Their Life Cycle," CD ROM of the *Proceedings of the Second International Conference on Office Information System OA (OIS) 2000* (Beijing, China: OA(OIS), 2001).
9. "The Impact of Technological Change on Archival Theory," *Acts of the 14th International Congress on Archives* (Paris, France: International Council of Archives, 2001).
10. "Batir un avenir pour les documents électroniques: le projet InterPARES," *Actes du 29e Conges de L'Association des archivistes du Quebec* (Sillery, Que.: Association des Archivistes du Quebec, 2000): 164-170.

Name: Duranti, Luciana

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
InterPARES 2 Duranti L	SSHRCC MCRI grant	C	460 000	2002	2006
InterPARES 2 Duranti L	University British Columbia Vice-President Research	C	80 000	2002	2005
InterPARES 2 Duranti L	University British Columbia Hampton Fund	C	30 000	2002	2005
InterPARES 2 Duranti L	University British Columbia Dean of Arts	C	23 500	2002	2005
Technical Specifications for Model Requirements... Fresko M	European Commission funds in Euros	H	50 000	2000	2001
InterPARES Duranti L	University British Columbia Vice-President Research	H	5 000	1999	2001
InterPARES Duranti L	University British Columbia Dean of Arts	H	21 500	1999	2001
InterPARES Duranti L	Univeristy British Columbia Hampton Fund	H	30 000	1999	2001
InterPARES Duranti L	SSHRCC MCRI	H	300 475	2001	2001

Name: Duranti, Luciana

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
Institutional Readings: Early Modern Europe...	Peter Wall Institute	H	25 000	2000	2000
Frelick N					
InterPARES	SSHRCC MCRI	H	271 740	2000	2000
Duranti L					
InterPARES	SSHRCC MCRI	H	273 302	1999	1999
Duranti L					
long-term preservation of electronic records	University British Columbia Vice-President Research	H	20 000	1998	1998
Duranti L					
long-term preservation of electronic records	University British Columbia Dean of Arts	H	20 000	1998	1998
Duranti L					



CURRICULUM VITAE

IDENTIFICATION

Surname or family name:	Gotfrit	Given name and initials:	Martin	S.
Title or Position:	Director			
Department:	School for the Contemporary Arts	Date	20/02/2003	PIN: 24478

MAILING ADDRESS (including institution, street and number, municipality, province, and postal code):

School for the Contemporary Arts
 Simon Fraser University
 8888 University Boulevard
 Burnaby, British Columbia
 V5A 1S6
 CANADA

Office Telephone 604 291-3766 Extension: Fax: 604 291-5907
 E-mail address: gotfrit@sfu.ca

I wish to receive correspondence in: English French

ACADEMIC BACKGROUND

Degree	Year	Discipline/Field	Institution and Country
Bachelor's	1974	Film & Music	Concordia University, CDN
Master's	1977	Communications	McGill University, CDN

AREA(S) OF EXPERTISE

Write a maximum of ten (10) key words that describe your current area(s) of expertise, including expertise with particular instruments and techniques. Use commas to separate each key word.

music composition, computer music, electroacoustic music, interactive performance systems, sound design

Specify up to two discipline/field code(s) for your research.

Primary code: 30500

Secondary code: 31000

Use only the pages provided. Use the CFI codes to specify discipline.

Name: Gotfrit, Martin

ACADEMIC, RESEARCH, PROFESSIONAL, AND INDUSTRIAL EXPERIENCE - List all positions, beginning with the current or most recent position. List the others in reverse chronological order.

Position Held Institution/Organization	Department/Faculty	Period	
		year	to year
Director Simon Fraser University	School for the Contemporary Arts	2001	
Associate Professor Simon Fraser University	School for the Contemporary Arts	1994	
Laboratory Instructor Simon Fraser University	School for the Contemporary Arts	1981	1994
Research Manager Centre for Image and Sound Research		1989	1992
Exhibit Designer BC Science World	Music Machines Exhibition	1988	1989

FOR NEW RESEARCHERS UNDER NEW OPPORTUNITIES ONLY: Provide the date (DD/MM/YYYY) of the academic appointment:

Date position taken up or expected to be taken up:

Name: Gotfrit, Martin

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Use the space below and up to one additional page. Start with the most recent and use reverse chronological order.
Describe:

- your **most significant** contributions to research (refereed articles, monographs, books, patents, copyright, products, services, technology transfer, other forms of research output). For your most important contributions, describe the significance in terms of influence and impact on the target community and;
- other activities that show the impact of your work, such as research training, awards, consulting, contributions to professional practice or public policy, and membership on committees, boards, or policy-making bodies.

Full CV is at http://www.sfu.ca/~gotfrit/research_branch.html

1. "Flights." Electroacoustic composition commissioned by the CBC for Radio One. Broadcast Sept. 11, 2002.
2. "Mêlée Mécanique II" Interactive installation work for 2 robots in 6 channel sound. Video In, Vancouver International Music Festival 2002. "Mêlée Mécanique" Interactive work for robot & remote controlled tank. SFU Theatre 2002.
3. "All the Knowing" Electroacoustic work. Presented at Int. Biennial for Elec. Music, Sao Paulo Brazil, 2002
4. "The Mystery of His Will." Electroacoustic composition commissioned by the CBC for Radio One. Dec. 2001.
5. "My G3 Wants to Kill your Mama," "Shifting Floors," "PP4PP." Interactive work for the pianist Paul Plimely. Latest version of the Live Process software (v 5.0) Performance Works, Granville Island, 2000 - 2002.
6. "A Bucket of Sound." Live performance work for microphone, bucket and computer processing Performance Works, Granville Island, 1999.
7. "balloon." Electroacoustic work. Featured selection of the Canadian League of Composers; Open Ears Festival, Kitchener, Ont. 2001.
8. "Story Time." Interactive piece for computer system and custom interface. Uses Gotfrit's Xvox software. Vogue Theatre, Vancouver International Music Festival, 1998.
9. "A Place Called Chiapas." Musical director with Sal Fereras. Genie award for feature length documentary, 1998.

Name: Gotfrit, Martin

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
Lecture at Film & Television Institute of India Gotfrit M	BC Centre for Inter. Educatio Aid to Scholars Two days	H	2 000	2002	2002
Flights Gotfrit M	CBC Radio One Special Projects Ann. of 9/11 2 months	H	1 800	2002	2002
The Mystery of His Will Gotfrit M	CBC Radio One Ann. of Marconi's 1st Trans. two months	H	500	2001	2001
Impact of New Technologies on the Film Industry Gotfrit M	BC Inst of Film Professionals One month	H	2 000	2000	2000
Zen & the Art of Audio (ZAP) & Music Fundamentals Gotfrit M	Simon Fraser University Innovations Fund 6 months	H	10 000	1998	1998



CURRICULUM VITAE

IDENTIFICATION

Surname or family name:	Kozel	Given name and initials:	Susan
Title or Position:	Associate Professor		
Department:	Interactive Arts & Information Technology	Date	20/02/2003
		PIN:	24482

MAILING ADDRESS (including institution, street and number, municipality, province, and postal code):

Interactive Arts & Information Technolog
Simon Fraser University Surrey
2400 Central City, 10153 King George Hwy
Surrey, BC
V3T 2W1
CANADA

Office Telephone 604 586-6085 Extension: Fax: 604 586-6060
E-mail address: kozel@sfu.ca

I wish to receive correspondence in: English French

ACADEMIC BACKGROUND

Degree	Year	Discipline/Field	Institution and Country
Bachelor's	1987	Economics & Finance	McGill University, CDN
Master's	1989	Continental Philosophy	University of Essex, UK
Doctorate	1994	Philosophy	University of Essex, UK

AREA(S) OF EXPERTISE

Write a maximum of ten (10) key words that describe your current area(s) of expertise, including expertise with particular instruments and techniques. Use commas to separate each key word.

interactive arts, performance, dance & technology, embodiment, theories of performance, kinetic interfaces

Specify up to two discipline/field code(s) for your research.

Primary code: 31000

Secondary code: 22000

Use only the pages provided. Use the CFI codes to specify discipline.

Name: Kozel, Susan

ACADEMIC, RESEARCH, PROFESSIONAL, AND INDUSTRIAL EXPERIENCE - List all positions, beginning with the current or most recent position. List the others in reverse chronological order.

Position Held Institution/Organization	Department/Faculty	Period	
		year	to year
Associate Professor Simon Fraser University Surrey	Interactive Arts & IT	2002	
Co-Founder & Director Mesh Performance Partnerships		1998	
Assistant Professor Technical University of British Columbia	Interactive Arts	2001	2002
Visiting Research Fellow London Institute (Central St Martin's)	SMARTlab	2001	2001
Senior Research Advisor University of Surrey, UK	Inst for New Media Performance	2000	2001
Lecturer & Researcher University of Surrey, UK	Department of Dance Studies	1995	1999
Co-founder HEAR studio for Arts Research, UK		1997	1999
Co-founder London Butoh Network, UK		1997	1997

FOR NEW RESEARCHERS UNDER NEW OPPORTUNITIES ONLY: Provide the date (DD/MM/YYYY) of the academic appointment:

Date position taken up or expected to be taken up:

Name: Kozel, Susan

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Use the space below and up to one additional page. Start with the most recent and use reverse chronological order.
Describe:

- your **most significant** contributions to research (refereed articles, monographs, books, patents, copyright, products, services, technology transfer, other forms of research output). For your most important contributions, describe the significance in terms of influence and impact on the target community and;
- other activities that show the impact of your work, such as research training, awards, consulting, contributions to professional practice or public policy, and membership on committees, boards, or policy-making bodies.

SELECTED CONTRIBUTIONS

1. With Thecla Schiphorst. "Pulp Fashion/Wearable Architectures." Submitted to SIGGRAPH 2002 for the Art Gallery Papers category.
2. "Crossing/Dwelling." HNY/P.S.1 Hotel New York, J. Van Heeswijk, ed. Rotterdam: Van Heeswijk, 2001.
3. "Feminism and Phenomenology: Developing Critical and Cultural Practices" Global/Local Cultures and Sustainable Development, T Belghazi & L Haddad, eds. Rabat, Morocco: Faculty of Letters and Human Sciences, 2001.
4. "room with a view/PLAATSBEPALING(it's about time)." Room With A View, Part II, J. Van Heeswijk, ed. Rotterdam: Van Heeswijk, 2000.
5. "Infinitesimal clouds of electric charge: A-Life approached through interactive live performance." La Mazarine: Tragédies Charnelles Nature et Écologie. Paris: édition du treize mars, (2000): 65-72.
6. With Kirk Woolford, "Utterance 5: Mesh Performance Partnerships" Performance Research Journal, (Oct. 1999): 61-63.
7. "Refiguring Linearity: politics and post-linear performance." The Routledge Reader in Politics and Performance, Lizbeth Goodman, ed. London & New York: Routledge, 1999.
8. "Ghostcatching: more perspectives on captured motion." Archis: Architecture-City-Visual Culture 1999/4 (1999): 70-74, and in DTJ 15.2 (1999): 13-15.
9. "Marionettes and Dancers: dance and digital technologies." Archis: Architecture-City-Visual Culture. 1998/10.61 (1998): 61-65.
10. "Multi-Medea: feminist performance using multimedia technologies." The Routledge Reader in Gender and Performance, L. Goodman & J. de Gay, eds. London & New York: Routledge, 1998. 299-302.
11. "Spacemaking: experiences of a virtual body (reprint)." The Routledge Reader in Dance Studies, A. Carter, ed. London & New York: Routledge, 1998. 81-88.
12. "Exiles, Ghosts and Astronauts: physical interventions in the critique of virtual culture." Aura, filmvetenskaplig tidskrift (Swedish Journal of Film Studies) (April 1998): 83-90. Reprinted and translated into Italian for La Scena Digitale: Nuovi media per la danza, a cura di Armando Menicacci ed Emanuele Quinz. Marsilio Editori: Venezia, 2001.
13. "Digital Dancing." Archis: Architecture-City-Visual Culture. 1998/4 (1998): 58-61.

SELECTED DANCE & THEATRE PROJECTS

1. "whisper" (2002), with Thecla Schiphorst. Supported by the Canada Council for the Arts, the Daniel Langlois Foundation, Future Physical (UK), V2 Institute for Unstable Media (Netherlands), Canaire (Canada).
2. "trajets" (2001-2002). Interactive installation co-directed with Gretchen Schiller. Co-production with the Banff Centre for the Arts supported by the Canada Council and Stentor. Arts Council of England's National Touring Programme support for tour of England (2001-2002). "trajets" has been exhibited in Canada, England, Germany, Denmark & France.
3. "Hyperopticon" (2001). Installation and performance research project with the

Name: Kozel, Susan

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

- Department of Dramaturgi of the University of Aarhus (Denmark) and the Institute for Figurative Theatre (Norway), and Luca Rozza Architectural Design (Italy)
4. "Contours" (1999). Interactive installation/performance. Co-commissioned by University of Surrey (UK), south east dance agency (UK), and Dance Screen 99 (Cologne). Premiered at Fabrica (Brighton), performed at Dance Screen 99 (Cologne), University of Surrey (Guildford), St Mary in the Castle (Hastings), Bonnington Gallery (Nottingham) and The Place - Spring Loaded season (London) 1999-2000. Supported by the Arts Council of England and South East Arts.
 5. "Figments" (1999). Motion capture installation and performance, commissioned by Event Coast. Premiered University College Chichester. Supported by the National Lottery.
 6. "Contours/P.S.1" (1999). Performance at P.S.1 Institute for Contemporary Art, New York City (USA) as part of the Hotel New York/P.S.1 exhibition curated by Jeanne van Heeswijk.
 7. "In Flying Spaces" (1998). Directed by Sally Jane Norman at the ZKM (Karlsruhe, Germany)
 8. "Liftlink" (1998). Telematic performance at the Brighton Media Centre, commissioned by South East Dance Agency and Lighthouse as part of The Brighton Festival and the National Festival of Street Art.
 9. "White Sanctuary Project" (1998). Butoh performance, HEAR (London). Choreographed by Joan Laage of Seattle, USA.
 10. "Space Dance Body of the Future" (1998). Butoh performance, Turtle Key (London). Choreographed by Tetsuro Fukuhara of Todyo, Japan.

CONFERENCES PRESENTATIONS, WORKSHOPS & RESIDENCIES

1. 2001: "Designing Experience: Modeling On-Line Collaborative Learning in Art & Design." Panel contribution to SIGGRAPH Educators Forum, Los Angeles, CA.
2. 2001: Participant of BRIDGES: International Consortium on Collaboration in Art & Technology, hosted by University of Southern California Annenberg Centre for Communications and the Banff Centre for the Arts New Media Institute.
3. 2000: "Transparent and Artificial: Refiguring Embodiment and Artificial Life through Computer-Mediated Performance." Proceedings for Consciousness Reframed III, Centre for Advance Inquiry into Interactive Art (CaiiA), University of Wales, Newport, UK.
4. 1999-2000: Contours. Workshops and lectures as part of the tour, UK & Germany.
5. 1999: International Dance and Technology Conference IDAT99. Various contributions, including member of the Programme Committee; presenter on the "Theoretical-critical-creative Loop" roundtable; co-host on the Arizona end of a videoconference discussion on motion capture with Scott deLaHunta in Aarhus, Denmark; member of the "Designing On-Line Internet Courses" Panel, Arizona, USA.
6. 1999: "Motion Capture: The voice from inside." Conference presentation for The Digital Experimentarium, University of Aarhus, Denmark.
7. 1999: "Physical Bodies/Virtual Futures." Presentation for Wiretap at V2 Centre for Unstable Media, Rotterdam, Holland.
8. 1998: Contribution to the Panel on Technology in Higher Education coordinated by Terry Braun for Digital Dancing, London, UK.
9. 1998: "Le corps performative selon les experiments télématicques." Conference presentation for Le Corps dans le Corpus Technologique conference on art and science at Odysud-Blagnac, Toulouse, France.
10. 1998: Butoh: Transformation and Tradition. Co-ordinator of conference for the London Butoh Network, HEAR studio, London, UK.

Name: Kozel, Susan

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
Figments	Lighthouse, BN1 & Nat. Lotter Event Coast Commission	H			
Whispers: wearable computers in performance projec	Daniel Langlois Foundation	H		2002	2002
trajets	Arts Council of England National Touring Programme	H		2001	2002
Kozel S trajets	Banff Centre for the Arts, et Canadian Cultural Innovation	H		1999	2000
At the Interface	Chisenhale Initiative	H		1999	1999
Countours	Arts Council of England Combined Arts Panel grant	H		1999	1999
Kozel S Contours	Dance Screen 99 (Cologne), et	H		1999	1999
Kozel S					



CURRICULUM VITAE

IDENTIFICATION

Surname or family name: Layne
 Title or Position: Associate Professor
 Department: Faculty of Fine Arts

Given name and initials: Barbara
 Date 25/02/2003
 PIN: 15916

J

MAILING ADDRESS (including institution, street and number, municipality, province, and postal code):

Concordia University
 Department of Studio Arts
 1395 Rene Levesque W.
 Montreal, Quebec
 H3G 2M5
 CANADA

Office Telephone 514 848-4703 Extension: Fax: 514 848-4599

E-mail address: layne@vax2.concordia.ca

I wish to receive correspondence in: English French

ACADEMIC BACKGROUND

Degree	Year	Discipline/Field	Institution and Country
Bachelor's	1979	Studio Arts	University of Colorado, USA
Master's	1982	Studio Arts	University of Kansas, USA

AREA(S) OF EXPERTISE

Write a maximum of ten (10) key words that describe your current area(s) of expertise, including expertise with particular instruments and techniques. Use commas to separate each key word.

digital art, sculptural installation, interdisciplinary, internet, web design, textile arts, women & technology

Specify up to two discipline/field code(s) for your research.

Primary code: 31000
 Secondary code: 20300

Use only the pages provided. Use the CFI codes to specify discipline.

Name: Layne, Barbara

ACADEMIC, RESEARCH, PROFESSIONAL, AND INDUSTRIAL EXPERIENCE - List all positions, beginning with the current or most recent position. List the others in reverse chronological order.

Position Held Institution/Organization	Department/Faculty	Period	
		year	to year
Associate Professor, Grad Director Concordia University	MFA Studio Arts	1993	2003
Assistant Dean Concordia University	Faculty of Fine Arts	1999	2002
Assistant Professor Concordia University	Studio Arts	1989	1993
Assistant Professor University of South Carolina	Studio Arts	1984	1989
Visiting Professor California State University	Studio Arts	1987	1988
Instructor University of South Carolina	Studio Arts	1982	1984

FOR NEW RESEARCHERS UNDER NEW OPPORTUNITIES ONLY: Provide the date (DD/MM/YYYY) of the academic appointment:

Date position taken up or expected to be taken up:

Name: Layne, Barbara

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Use the space below and up to one additional page. Start with the most recent and use reverse chronological order. Describe:

- your **most significant** contributions to research (refereed articles, monographs, books, patents, copyright, products, ~~services, technology transfer, other forms of research output~~). For your most important contributions, describe the significance in terms of influence and impact on the target community and;
- other activities that show the impact of your work, such as research training, awards, consulting, contributions to professional practice or public policy, and membership on committees, boards, or policy-making bodies.

Within the Institute of Digital Arts I have been a member of the research team "Interactive Textiles and Wearable Computers". New experimental research will include weaving fiber optics and other conductive materials to create animations embedded into the structure of fabric. I have been collaborating with various teams in the development of the Institute, and contributed to the successful Valorisation Recherche Québec grant (\$6,000,000) and the FCAR grant application "Institut des arts médiatiques" (\$2,250,000). I am currently the Primary Investigator on the CFI Innovation Grant, Converging Digital Content (21,963,639) 2002-2005.

Research activities include writing, lecturing, gallery exhibitions and web projects to examine the relationship between digital and hand technologies. Traditional creative activity is combined with electronic technologies to address the importance of sustaining a meaningful physical presence in an increasingly technological world. "Migrant Textiles: Burdens, Bundles and Baggage" is a major essay I wrote for the forthcoming anthology, *Re-inventing Textiles: Tradition and Innovation in Contemporary Practice*, Telos Art Pub., London. This work is an analysis of the past 10 years of research that examines the relationship between groundbreaking digital projects such as Electronic Textiles and traditional, ethnographic research as the Maya Textiles project (both below). The book is in print and selections from the essay were presented at the College Art Conference in New York (February 2001) and used as text material for studio courses in colleges and universities in Canada and the U.S.. Other recent publications include "Extrapolations", an essay for the CD ROM/Catalogue "e-textiles" (2000) for an exhibition that is travelling internationally, and "An Inventory of Labor" for the anthology "Objects of Labor", Chicago Art Institute Press (2001).

"Maya Textiles: Visions of Identity", a collaborative project with Karen Michelsen was exhibited at the Marsil Museum for Textiles, St. Lambert, Québec in 1997. Mayan textiles from my private collection were presented in the form of visual essays, combining weaving, photography, text and an extensive trilingual website to reconsider the presentation of culture in the museum environment. This creative/ethnographic project was the culmination of 15 years of research in Guatemala, celebrating the resilience of the Mayan after three decades of civil war. It connected communities in Canada and Guatemala, including the Museo Ixchel del Traje Indígena (Guatemala City), Comité d'Appui au Peuple de Guatemala (Montreal), London Guatemala Solidarity Committee (Ontario) and received recognition from Rigoberta Menchu, (1992 Nobel Peace Prize) and scholars of Mayan culture.

<http://alcor.concordia.ca/~textiles/>

"Electronic Textiles: Hacking the Museum" a solo exhibition at the Glass Box Gallery in Manchester, England was held in conjunction with the European Textile Network (ETN) conference in 1996. The ETN rarely invites North Americans to participate in their activities however few artists were doing pioneering research in the field of contemporary textile arts. (Note: my former graduate student was also invited to create a digital textiles work at this conference). "Electronic Textiles" involved the Internet transmission of images of textile objects from the Marsil Museum for Textiles in Quebec,

Name: Layne, Barbara

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

to a gallery in England where a team of workers reconstructed the images into new material objects. This project has been discussed broadly, including conference presentations in New York, England, Los Angeles and Australia. A discussion of the project (Janis Jefferies and Barbara Layne) was published in the ACT "Art-Criticism-Theory" journal. Janis Jefferies, Director of the Constance Howard Resource and Research Centre in Textiles at Goldsmith's College, University of London and I have recently established the Textile Research and Cultural Exchange Sites (TRACE), a research team for international, cross-disciplinary projects in textiles.

"Fault Lines: Measurement, Distance and Place", a collaboration with Ingrid Bachmann, was presented in 1995 at Galerie La Central, Montreal and Side Street Projects in Santa Monica, CA. It involved the simultaneous production of two cloths at two distinct locations in Québec and California. Patterns for the cloths were produced through seismic data submitted daily by geologists from the Geologic Survey of Canada and the California Institute of Technology through the Internet. The information was translated by custom designed software and weavers at each site operated the looms each day for a month to create the cloths. This was an early exploration in which the Internet was used to create an art work through distance communication. The goals of this project were to experiment with new computer technologies using custom designed software, explore new means of generating pattern systems and incorporate digital technologies into material practices. This major project continues to receive substantial international interest (20+ essays and articles) including consideration by prominent cultural theorists in the following publications:

Sarat Maharaj, "Dislocutions: Interim Entries for a dictionnaire elementaire on cultural translation", Re-Verberations, Jan Van Eyck Editions, England, 2001

Diana Wood Conroy and Kurt Brereton, "The Translation of Textiles in the Electronic Field", International Tapestry Journal, Australia, 2000

Sadie Plant, "The Good, the Bad, and the Productive", Beyond Ethics and Aesthetics, Sun Publications, England, 1998

Betty Ann Brown, "Gatekeepers, Silences, and Freedom", Expanding Circles: Women, Art and Community, 1996

Lectures & Panel Presentations

2001: Univ. of Washington, Seattle WA; Womens Art Society, McCord Museum of Art, Montreal

2000: Australia: Univ. of Southern Queensland, Toowoomba, Canberra School of Art, Canberra, Univ. of New South Wales, Sydney, Univ. of Queensland, Brisbane

1998: Governor's Conference on the Arts, Los Angeles, Int'l Symposium of Electronic Arts, England, College Art Association, Toronto, Textile Society of America, NY

1997: Marsil Museum, Quebec, State Univ. of New York, Potsdam, NY

1996: San Diego State Univ., CA; Colorado State Univ., Fort Collins, CO, Univ. of Salford, England; Glasgow School of Art, Scotland; Manchester Metropolitan University, England; University of London, England, University of Nebraska, Lincoln.

As MFA Graduate Programme Director 1993-1999, I was responsible for the leadership of the Studio Arts and Cinema programme. Activities included organizing numerous exchanges and conferences with graduate researchers from Canadian and European institutions. Committee memberships include Graduate Studies Council, Grad Studies Research Steering Committee, the Subcommittee for Canadian Research Chairs, and Chair the Digital Technology Committee for Fine Arts.

I normally supervise 3 graduate thesis projects each year. I also direct 2-3 interns and independent researchers per year.

Name: Layne, Barbara

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
Institut des arts médiatiques Poissant L	FCAR (Quebec) Regroupement Strategique 60 hours/month	A	225 000	2002	2008
Converging Digital Content Layne B	Canadian Foundation for Innov Innovation Fund 30/week	C	7 000 000	2002	2005
Institute of Emerging Digital Arts Jackson C.	Min. Recherche Science Tech. Valorisation Recherche Quebec 60 hours/month	C	2 000 000	2001	2004
Prototype de Vetements Communicants Halary C.	Min. de la Métropole Fonds de dév. de la Métropole 20 hours/month	C	27 000	2001	2001
Science Fair (Studio XX) Oades L.A.	Daniel Langlois Foundation Exhibitions 20 hours/month	C	20 000	2001	2001
Close Ties Layne B.J.	University of So. Queensland Visiting Professors Fund 1 month total	H	3 000	1999	1999
Drawing Threads Layne B.J.	Conseil des arts (Quebec) Visual Arts B Grant 5 hours/month	H	4 415	1998	1998
Reality & Virtual Reality Layne B.J.	Canada Council for the Arts Travel Grant 5 hours/month	H	1 000	1998	1998
Electronic Textiles Layne B.J.	Conseil des arts (Quebec) Travel Grant 20 hours/month	H	2 500	1996	1996

Name: Layne, Barbara

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year
Fault Lines Layne & Bachmann, I. B.J.	Canada Council for the Arts Computer Integrated Media 30 hours/month	H	14 720	1996	1996
Casting the Net: Bodies and Gestures in Tech Space Layne B.J.	Concordia University Faculty Research Development 40 hours/month	H	14 297	1995	1996



CURRICULUM VITAE

IDENTIFICATION

Surname or family name: Schechner
 Title or Position: Professor
 Department: Tisch School of the Arts
 Given name and initials: Richard
 Date 20/02/2003
 PIN: 24487

MAILING ADDRESS (including institution, street and number, municipality, province, and postal code):

Performance Studies, Tisch School of Art
 New York University
 721 Broadway, 6th Floor
 New York, New York
 10003
 UNITED STATES

Office Telephone 212 998-1638 Extension: Fax: 212 998-1827

E-mail address: richard.schechner@nyu.edu

I wish to receive correspondence in: English French

ACADEMIC BACKGROUND

Degree	Year	Discipline/Field	Institution and Country
Bachelor's	1956	English	Cornell University, USA
Master's	1958	English	University of Iowa, USA
Doctorate	1962	Theatre	Tulane University, USA

AREA(S) OF EXPERTISE

Write a maximum of ten (10) key words that describe your current area(s) of expertise, including expertise with particular instruments and techniques. Use commas to separate each key word.

comparative performances & performance theories, intercultural & global perspectives, experimental performance, theories & practice of stage directing

Specify up to two discipline/field code(s) for your research.

Primary code: 30400

Secondary code: 20100

Use only the pages provided. Use the CFI codes to specify discipline.

Name: Schechner, Richard

ACADEMIC, RESEARCH, PROFESSIONAL, AND INDUSTRIAL EXPERIENCE - List all positions, beginning with the current or most recent position. List the others in reverse chronological order.

Position Held Institution/Organization	Department/Faculty	Period	
		year	to year
University Professor New York University	Tisch School of the Arts	1991	
Professor New York University	Performance Studies	1967	
Professor Titular Adjunto Instituto Superior de Arte, Havana		1993	
Honorary Professor Shanghai Theatre Academy		1995	
Andrew H. White Professor-at-Large Cornell University		1999	2005
Ida Beam Distinguished Visiting Prof rsity of Iowa		2000	2000
Theaterwissenschaft Justus-Liebig University, Giessen		1997	1997
Emens Professor Ball State University		1991	1992
Whitney Halsted Visiting Scholar School of the Art Institute of Chicago		1989	1989
Hoffman Eminent Scholar Florida State University		1987	1988
Theaterwissenschaft Justus-Liebig University, Giessen		1985	1985
Assistant/Associate Professor Tulane University	Theatre	1962	1967

FOR NEW RESEARCHERS UNDER NEW OPPORTUNITIES ONLY: Provide the date (DD/MM/YYYY) of the academic appointment:

Date position taken up or expected to be taken up:

Name: Schechner, Richard

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

Use the space below and up to one additional page. Start with the most recent and use reverse chronological order. Describe:

- your **most significant** contributions to research (refereed articles, monographs, books, patents, copyright, products, services, technology transfer, other forms of research output). For your most important contributions, describe the significance in terms of influence and impact on the target community and;
- other activities that show the impact of your work, such as research training, awards, consulting, contributions to professional practice or public policy, and membership on committees, boards, or policy-making bodies.

RECENT BOOKS

1. Interculturele Puzzels (Dutch) Utrecht: PassePartout, 2002. Includes work by and about Schechner.
2. Performance Studies-An Introduction. London: Routledge, 2002.
3. Environmental Theatre (Chinese). Shanghai: Theatre Academy, 2001.
4. Performance: Teoria & Practicas Interculturales (Spanish). Buenos Aires: Libros del Rojas Universidad de Buenos Aires, 2000.
5. Przyszlosc Rytualu (Polish). Warsaw: Oficyna Wydawnicza Volumen, 2000.
6. Magnitudini della Performance (Italian). Rome: Bulzoni, 1999.
7. Performance Studies: Where Theatre Meets Anthropology (Japanese). Tokyo: Jimbun Shoin, 1998.

SELECTED ARTICLES (since 1998):

1. "Fundamentals of Performance Studies." Teaching Performance Studies. Carbondale: Southern Illinois UP, 2002. ix-xii.
2. "The 'Yes', 'No', and 'But' of Intercultural Performances." In Program for Search:Hamlet, Copenhagen: Betty Nansen Theatre, 2002. 32-35.
3. "Performance Studies in/for the 21st Century." Anthropology and Humanism 26.2 (2001): 158-66.
4. "Rasaesthetics," TDR 45.3 (2001):27-50.
5. "Vibhuti Narain Singh, Maharaja of Banaras," TDR 45.2 (2001): 5-7.
6. "What Is 'Performance Studies' Anyway?" New Approaches to Theatre Studies and Performance Analysis, Gunter Bergaus, ed. Tübingen: Niemeyer Verlag, 2001. 1-12.
7. "The Five Avant Gardes or None" (in Chinese), Theatre Art 5(2000): 4-13.
8. "Wujaszek Jack Z Sachodniej Wirginii" (Polish) Dialog XLV Lipiec 7 (2000):148-51.
9. "Zachowac chlodne sporzjenie" (interview Polish), Didaskalia Grudzien (2000): 60-61.
10. "Znaczenie rytualu w dzisiejszym swiecie przekazywanie wiedzy rytualnej"(Polish) Didaskalia Grudzien (2000): 53-59.
11. "Food" Performance Artists Talking in the Eighties, Linda Montano, ed. Berkeley: U of California P, 2000. 205-10.
12. "Die Zukungt des Rituals." (German) Aufbruch zu neuen Welten Theatralitat an der Jahrtausendwende, Michael Huttler, Sussane Schwinghammer, and Monika Wagner, eds. Frankfurt: IKO Verlag fur Interkulturelle Kommunikation, 2000. 229-78.
13. "Approaches to Performance Theory." The Routledge Reader in Politics and Performance, Lizbeth Goodman with Jane de Gay, eds. London: Routledge, 2000. 194-201.
14. "Organicity in Action, Exercises, Spaces, and Persons: Jerry Rojo's Project." Preface to Rojo's An Acting Method Using the Psychophysical Experience of Workshop Games-Exercises. Lewiston: Edwin Mellen, 2000. i-vii.
15. "An Interview with Richard Schechner." Conducted by James M. Harding. Contours of the Avant-Garde. Ann Arbor: U of Michigan P, 2000. 202-14.
16. "Post Post-Structuralism" TDR 44.3 (2000): 4-7.

Name: Schechner, Richard

RESEARCH CONTRIBUTIONS IN THE LAST FIVE YEARS

17. "Mainstream Theatre and Performance Studies" TDR 44.2 (2000): 4-6.
18. "Approaches to Performance Theory." Politics and Performance. Lizbeth Goodman, ed. London: Routledge, 2000. 194-201.
19. "Theatre Alive in the New Millennium," TDR 44.1 (2000): 5-6.
20. "Rasaesthetics" Teatro e Storia XIII-XIV 1998-1999 (Italian), 2000: 19-38.
21. "Believed-in Theatre." Rituale heute, Corina Caduff and Joanna Pfaff-Czarnecka, eds. Frankfurt-am-Main: Dietrich Reimer, 1999. 181-90.
22. "Jerzy Grotowski, 1933-1999" TDR 43.2 (1999): 5-8.
23. "Oedipus Clintonius" TDR 43.1 (1999): 5-7.
24. "Re-Wrighting Shakespeare." Teaching Shakespeare Through Performance. Milla Riggio, ed. Washington: Modern Language Association, 1999. 127-41.
25. "Chinese Theatre Theory in Perspective." Foreword to Chinese Theories of Theater and Performance from Confucius to the Present, Faye C. Fei, ed. Ann Arbor: U of Michigan P, 1999.
26. "Researching Ramlila of Ramnagar," DAK, American Institute of Indian Studies 1 (winter 1999): 7-11.
27. "Augusto Boal, City Councillor: Legislative Theatre and the Chamber in the Streets," an interview (co-interviewer, Sudipto Chatterjee) TDR 42.4 (1998): 75-90.
28. "L'emotion qu'on veut eveiller n'est celle de l'acteur, mais celle du specateur" (French) Mise en scene et Jeu de l'acteur Entretiens. Montreal: Editions Jeu/Editions Lansman, 1998. 279-94.
29. "Artnow!!!" The Soul of the American Actor 1.3 (fall 1998): 1, 7.
30. "Believed-in Theatre: An Excerpt," Seagull Theatre Quarterly 18 (June 1998): 3-9.
31. "'A World Where And Is More Important Than Or', a discussion with Richard Schechner," Seagull Theatre Quarterly 18 (June 1998): 10-23.
32. "Theatre," India's Worlds and U.S. Scholars: 1947-1997. Edward C. Dimmock, Jr. and Ainslie T. Embree, eds. New Delhi: Manohar and American Institute of Indian Studies, 1998. 545-68.
33. "Peter Minshall: A voice to Add to the Song of the Universe," with Milla Riggio, and interview. TDR 42.3 (1998):170-93.

PERFORMANCES DIRECTED (since 1998)

1. 2002: Waiting for Godot (Beckett), Cornell University
2. 1999: Hamlet (Shakespeare), East Coast Artists

EDITORIAL WORK

1. General editor for Routledge Worlds of Performance series. Includes 11 volumes, 4 of which are currently in press.
2. Editor of TDR: The Drama Review since 1985, and guest editor for Intercultural issue (1982) and Social Science issue (1973).
3. Currently on the editorial board of Journal of Ritual Studies (since 1987) and Asian Theater Journal (since 1983).

LECTURES & WORKSHOPS

Over 27 lectures on theatre and performance studies and 4 performance workshops at a variety of institutions since 1998.

RECENT FELLOWSHIPS & AWARDS (since 1998)

1. 2002: Lifetime Achievement Award, Performance Studies International
2. 2001: Award for Inspiring Scholarship, American Academy of Religion, Eastern Region
3. 2000: Otto Award for Political Theatre from Castillo Cultural Center, New York
4. 1999: Montgomery Fellow, Dartmouth College

Name: Schechner, Richard

RESEARCH SUPPORT - List sources of support during the last five years, as an applicant or co-applicant for grants and contracts from all sources, including industry and academic/research institutions.

Use the following groupings: support applied for (A); support currently held (C) or held in the last five years (H)

Use one additional page if required.

- Title of Project - Family Name and Initial(s) of Principal Applicant	- Funding Source and Program - Time Commitment (hours/month)	A, C, H	Amount per Year	Years of Tenure	
				year	to year

Total System Price

Line # Code # System

1	13	Performance Stage	\$ 1,562,334
2	13	Movement Rehearsal Studio	\$ 72,967
3	13	Presentation Room and Greenroom	\$ 173,760
4	13	Awareness Training, Injury Lab	\$ 99,172
5	13	Media Rich Rehearsal Space	\$ 360,675
6	13	Computer Media Lab	\$ 643,996
7	13	Digital Performance Archive	\$ 187,748
8	13	Mini labs/cubicle/pods	\$ 146,345
9	13	Dressing Rooms	\$ 29,483
10	15	Personnel Costs (Acquisition and Development)	\$ 456,000
11	17	Travel (Infrastructure Related)	\$ 10,000
12	18	Software	\$ 281,395
13	19	Extended Warranty	\$ 408,954
14	20	Building	\$ 5,334,809

TOTAL PROJECT \$ 9,767,639

CFI	40.00%	\$ 3,907,055
BCKDF	40.00%	\$ 3,907,055
MATCH	20.00%	\$ 1,953,528

Line #	Code #	System	Item	# of Items	Educational Price (CDNS)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
1	13	Performance Stage			1.60					
			16x16 Video Audio Matrix	1	1,360,799.72	1,562,334.16	\$ 1,562,334			
			2x48 point bannum patch panels	2	5,830.00	13,386.85				
			3 to 1 port VGA monitor switch	2	550.00	1,262.91				
			32 point video patch panel	1	427.50	490.81				
			Audio Equalizer	2	800.00	1,836.96				
			Audio Limiter	1	300.00	344.43				
			C1575B Super Clamp	1	508.33	583.61				
			D302 Magic Arm	4	224.00	1,028.70				
			DATAVIDEO DN-100 Hard Drive Video R	4	171.50	787.60				
			Extra Lenses for Slide projectors	8	2,200.00	20,206.56				
			ForMac Frame Grabber	8	920.00	8,450.02				
			G4 Power PC 1024MB 120GB	2	700.00	1,607.34				
			Heather lighting controller	4	8,612.67	39,552.83				
			I-Cube	1	2,600.00	2,985.06				
			I-Cube Sensors (bend, touch, far reach, near	2	1,200.00	2,755.44				
			Keyspan Serial Cards	1	2,523.50	2,897.23				
			Kodak Extapro 9020 Slide Projector	5	2,043.00	11,727.84				
			Mackie 8DB (controllable via extmal compt	6	3,266.67	22,502.78				
			MIDI Dancer suit	1	2,103.25	2,414.74				
			MIDI man 8x8 midi interface	1	597.72	686.24				
			Mounting Brackets (3 projectors each)	1	527.50	605.62				
			Pentium PC	4	1,200.00	5,510.88				
			Pentium PC Laptop	2	1,116.58	2,563.89				
			Phoenix Optical Motion Capture System	1	2,675.83	3,072.12				
			Pioneer DVD V7400	1	350,000.00	401,835.00				
			Projector 3000+ lumens 1024x768, 800x600	2	1,800.00	4,133.16				
			PS-12CCD Power Supplies	5	12,000.00	68,886.00				
			Relay Kit for VM-2	4	126.00	578.64				
			RM-3 Rack mount for Vm-2	1	21.50	24.68				
			Screens	1	80.50	92.42				
			Shure U1 bodypack transmitters	3	700.00	2,411.01				
			Shure UD4 wireless receiver	4	686.67	3,153.46				
			Sony CDP-D11 CD Player	2	2,950.00	6,773.79				
			Sony MDSE11 Mini Disc Player	2	1,896.67	4,355.13				
			Sony SLV-ED100ME Multisystem VHS VC	2	2,646.67	6,077.28				
			TBC-4000	2	1,620.00	3,719.84				
			TV-3514 3.5mm Lens	8	1,875.00	17,221.50				
			TVCCD 460 B/W Cam	1	60.00	68.89				
			TVCCD 480 Color Cam	2	536.00	1,230.76				
			VGA to NTSC video converters	2	626.00	1,437.42				
			VLC-2516M, 2.5 mm Lens	3	800.00	2,755.44				
			VM-2 (PAL)	4	973.33	4,469.92				
			WJ-MW30 Mixer	4	230.00	1,056.25				
			Xserve Dual 1GHz Server G4	4	490.00	2,250.28				
				4	5,900.00	27,095.16				
				1	5,987.38	6,874.11				

Line #	Code #	System	Item	# of Items	Educational Price (CDNS)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
			Quart K900E Single Muff headset	8	256.50	2,355.90				
			Custom Corn Panel 4x male XLR patch lot com wire to all locations	9	227.81	2,353.94				
			EA W 18" Subwoofer	1	48.00	55.11				
			EA W 12", 2-way speaker system	2	3,348.00	7,687.68				
			QSC RMX2450 500 watt/8ohm	6	3,612.60	24,885.76				
			Ashly Protea 4.24C	4	820.80	3,769.44				
			Cable Factory Snakes + speaker lines	1	742.50	852.46				
			Audio Racks (1 RMS & 1 SKB 12 space)	1	1,211.08	1,390.44				
			Speaker Rigging kits	1	2,430.00	2,789.88				
			dynamic microphones & stands	6	2,430.00	16,739.30				
			30' microphone cables	2	116.03	266.43				
			Clear-Com SB440 4 channel paster station	12	178.20	2,455.10				
			Clear-Com RS-501Belt Pack	1	291.25	334.38				
			Clear Com ce-95 single ear standard headset	8	400.00	3,673.92				
			Clear-Com MR-202 2 channel station, flush	8	325.00	2,985.06				
			Clear-com HS-6 telephone style handset	2	106.25	243.97				
			Yorkville TX4 2-way concert enclosure	2	175.00	401.84				
			Yorkville TX5M 2-way angled floor monito	4	2,500.00	11,481.00				
			Yorkville TX9S rectangular subwoofer	2	612.50	1,406.42				
			Yorkville AP-2020 amplifier	2	1,750.00	4,018.35				
			Yorkville AP-4020 amplifier	2	1,050.00	2,411.01				
			Yorkville AP-4040 amplifier	2	1,399.00	3,212.38				
			Yorkville AP-4060 amplifier	2	1,399.00	3,212.38				
			Yorkville TX4P Processor for TX4 cabinets	2	1,875.00	4,305.38				
			Yorkville TX5P Processor for TX5M monit	1	312.50	358.78				
			Ashly Protea 4.24C	1	725.00	832.37				
			Dbx 1066 4 channel compressor/limiter	1	1,275.00	1,463.83				
			Shure UC24/BETA A 58 UHF Wireless sys	1	3,399.00	3,902.39				
			Shure BETA A58A Handheld microphone	2	2,190.00	5,028.68				
			Lexicon MPX-1 effects processor	1	412.50	473.59				
			K&M 210/9 telescopic mic stands	4	1,725.00	7,921.89				
			Cabling, Racks & Accessories	2	500.00	1,148.10				
			ETC Insight 3 Lighting Console	1	587.50	674.51				
			LCD Monitor for light consoles	3	240.00	826.63				
			Lighting Infrastructure	1	2,500.00	2,870.25				
			Pipe Grid	1	22,893.75	26,284.31				
			Studio Drapes	3	3,200.00	11,021.76				
			Dimmer System (96 dimmers)	1	3,074.83	3,530.21				
			Control and Distribution	1	23,052.50	26,466.58				
			Cable For dimmer circuits	1	62,517.00	71,775.77				
			Lighting Fixtures	1	31,260.00	35,889.61				
			Casing and Storage	1	15,366.00	17,641.70				
			Electronic Keyboard Sampler	1	43,740.00	50,217.89				
			Midi Upright Acoustic Piano	1	10,812.00	12,413.26				
			Microphones	1	4,000.00	4,592.40				
			Firewire Digital Audio Interface MOTU 828	1	12,000.00	13,777.20				
				12	400.00	5,510.88				
				1	1,300.00	1,492.53				

BUDGET

Line #	Code #	System	Item	# of Items	Educational Price (CDNS)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
			4x4 USB MIDI Interface	2	178.50	409.87				
			Portable DAT Digital Audio Player/Recorder	1	500.00	574.05				
			Sensor to MIDI Translator	2	1,200.00	2,755.44				
			Digital 8 Firewire Camcorder	1	1,000.00	1,148.10				
			Analogue Composite Video to Firewire Con	2	350.00	803.67				
			Basic Stamp Microprocessors & Accessories	1	500.00	574.05				
			Racks, Cables, Furniture and Accessories	1	3,333.00	3,826.62				
			W2K Dual Processor Data Station Real Tim	1	6,000.00	6,888.60				
			Single Eva RT License	1	9,000.00	10,332.90				
			Remote Video Node	1	4,250.00	4,879.43				
			Remote Focus Unit	1	2,650.00	3,042.47				
			Portable Network Node	4	4,050.00	18,599.22				
			ETC Source-4 PAR Ellipsoidal (19-50 DEG	72	635.00	52,491.13				
			ETC Source-4 PAR EA- Complete	36	326.00	13,474.10				
			ETC Source-4 Pamel- Complete	36	432.00	17,855.25				
			Strand 3380 6" Fresnel- Complete	36	595.00	24,592.30				
			Aliman FC-3-3 CELL Focusing CYC Comf	6	1,400.00	9,644.04				
			5 Deg Lens Tube	6	575.00	3,960.95				
			10 Deg Lens Tube	6	445.00	3,065.43				
			19 Deg Lens Tube	12	179.00	2,466.12				
			26 Deg Lens Tube	24	179.00	4,932.24				
			36 Deg Lens Tube	24	179.00	4,932.24				
			50 Deg Lens Tube	12	179.00	2,466.12				
			Martin Mac 500 Moving Light	6	2,000.00	13,777.20				
			48R 12-14 SOCAPEX - CSA Assembly	16	440.00	8,082.62				
			6 Way F-TLG Break Out Box	16	625.00	11,481.00				
			Misc. Cable Package as Required	1	12,000.00	13,777.20				
			Retractable Seating	1	135,000.00	154,993.50				
			Active Near Field Monitors	2	500.00	1,148.10				
			4x4 USB MIDI Interface	2	179.00	411.02				
			Cassette Player/Recorder	1	800.00	918.48				
			Furniture	1	5,000.00	5,740.50				
			Marley Dance Floor Blac/White Rolls:1.6m:	6	2,405.00	16,567.08				
			Lab Patching (Video,Audio,DMX,Net,Data)	1	1,600.00	1,836.96				
2	13	Movement Rehearsal Studio				72,967.31	\$	72,967		
			Mirrors	1	63,554.84	72,967.31				
			Sprung Floor	1	3,280.00	3,765.77				
			Marley Dance Floor Blac/White Rolls:1.6m:	5	8,000.00	9,184.80				
			Equipment Rack	1	2,405.00	13,805.90				
			Projector 4000+ lumens 1024x768, 800x600	1	1,200.00	1,377.72				
			Sony CDP-D11 CD Player (w/ rs232 contro	1	12,900.00	14,810.49				
			Sony SLV-ED100ME Multisystem VHS VC	1	1,896.67	2,177.57				
			TDW354BK is JVC's dual cassette player w	1	1,620.00	1,859.92				
			Video & Audio Cable	1	733.33	841.94				
			Cable Snake & speaker lines	1	300.00	344.43				
			Ashly LX-308B stereo line level mixer 8 ch:	1	387.34	444.71				
			QSC CX404 4-channel amplifier	1	2,000.00	2,296.20				
				1	1,750.00	2,009.18				

Line #	Code #	System	Item	# of Items	Educational Price (CDNS)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
			JBL MS112 Compact Two-Way Full Range	4	1,200.00	5,510.88				
			Clear Com Install	1	420.00	482.20				
			Studio Drapes	1	5,187.50	5,955.77				
			Pipe Grid	1	4,180.00	4,799.06				
			Lab Patching (Video,Audio,DMX,Net,Data)	1	1,600.00	1,836.96				
			Front Projection Screen Remote rolldown.	1	1,075.00	1,234.21				
			16 point video patch	1	200.00	229.62				
3	13	Presentation Room and Greenroom					173,759.75	\$		173,760
			Flascreen display 50" Plasma (VGA, HD, N	2	12,100.00	27,784.02				
			Mitsubishi XD200 DLP Projector	1	5,660.00	6,498.25				
			G4 with 17" display	1	8,500.00	9,758.85				
			Panasonic WJ-MW20 Mixer	1	2,300.00	2,640.63				
			Pipe Grid 32'X32' including installation	1	4,000.00	4,592.40				
			Screens	1	800.00	918.48				
			Sony SLV-ED100ME Multisystem VHS VC	2	3,240.00	7,439.69				
			TBC-4000	2	1,600.00	3,673.92				
			VGA to NTSC video converters	2	900.00	2,066.58				
			Pentium PC	1	4,466.33	5,127.80				
			Clear-Com Patch to Performance and Offlin	1	450.00	516.65				
			Lab Patching (Video,Audio,DMX,Net,Data)	1	1,600.00	1,836.96				
			Smart Board Display	1	30,000.00	34,443.00				
			Pioneer DVD V7400	1	1,105.00	1,268.65				
			Sony CDP-D11 CD Player (w/ is232 contro	1	1,896.67	2,177.56				
			TDW354BK is JVC's dual cassette player w	1	733.33	841.94				
			Yamaha 8 channel Mixer (midi controllable)	1	4,000.00	4,592.40				
			Yorkville MP8D 8 Channel Mixer	1	810.00	929.96				
			Racks & Mounting brackets.	1	729.00	836.96				
			Cable Snake & speaker lines	1	387.34	444.71				
			Ashly LX-308B stereo line level mixer	1	850.00	975.89				
			Ashly GQX-3102 stereo 31-band equalizer	2	1,200.00	2,755.44				
			QSC CX404 4-channel amplifier	1	1,750.00	2,009.18				
			JBL MS112 Compact Two-Way Full Range	4	1,100.00	5,051.64				
			Cabling, Racks & Accessories	1	800.00	918.48				
			Cabling, Racks & Accessories	1	100.00	114.81				
			8x8 routing switcher for video	1	1,900.00	2,181.39				
			ETC Express 24/48	1	4,844.81	5,562.33				
			Control and Distribution	1	6,630.00	7,611.90				
			Cable For dimmer circuits	1	3,683.00	4,228.45				
			Lighting Fixtures	1	7,870.00	9,035.55				
			Dimmer System (12 dimmers)	1	9,000.00	10,332.90				
			Cabling (audio, video, data, net)	1	4,000.00	4,592.40				
4	13	Awareness Training, Injury Lab					99,171.93	\$		99,172
			Gyromonic Pulley Towers	5	5,500.00	31,572.75				
			Other Exercise Training Devices	1	4,500.00	5,166.45				
			Ladder	1	2,195.00	2,520.08				

BUDGET

Line #	Code #	System	Item	# of Items	Educational Price (CDNS)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
			Jumping Stretching Board	1	2,000.00	2,296.20				
			Weights	1	700.00	803.67				
			Audio	1	450.00	516.65				
			Video	1	5,350.00	6,142.34				
			Patch Panel (Video, audio, data, net)	1	800.00	918.48				
			Clear-com	1	1,200.00	1,377.72				
			35 mm Camera	1	1,160.00	1,331.80				
			Canon or Sony DV cameras	1	6,500.00	7,462.65				
			DAT digital recorder (portable)	1	1,700.00	1,951.77				
			Equipment Cases	1	222.50	255.45				
			microphone cables (25', 5')	2	93.33	214.31				
			Nikon D1x 5.47 Mpixel body Camera, Nikk	1	10,633.00	12,207.75				
			Sony ECM-44B lavalier microphones	2	1,326.67	3,046.29				
			Sure condenser microphones	2	2,080.00	4,776.10				
			tripods (lightweight)	1	2,245.00	2,577.48				
			Video cables (various lengths 25', 5')	2	150.00	344.43				
			video monitor 4 inch colour	1	1,250.00	1,435.13				
			Sony CDP-D11 CD Player (w/ rs232 contro	1	1,896.67	2,177.56				
			Sony SLV-ED100ME Multisystem VHS VC	1	810.00	929.96				
			TDW354BK is JVC's dual cassette player w	1	683.33	784.54				
			Racks & Mounting brackets.	1	567.00	650.97				
			Cable Snake & speaker lines	1	166.67	191.35				
			QSC CX404 4-channel amplifier	1	1,750.00	2,009.18				
			JBL MS112 Compact Two-Way Full Range	4	1,200.00	5,510.88				
							360,674.83			
										360,675
5	13	Media Rich Rehearsal Space		1	314,149.32					
			Electrical Work for ETC Lighting	1	8,000.00	9,184.80				
			Sprung Floor	1	8,000.00	9,184.80				
			Auto Pilot 3	1	20,000.00	22,962.00				
			iCube System with extra sensors	5	1,275.00	7,319.14				
			Storage Cabinets (larger items	4	1,500.00	6,888.60				
			Marley Dance Floor Blac/White Rolls:1.6m:	5	2,405.00	13,805.90				
			16x16 Video Audio Matrix	1	4,095.00	4,701.47				
			Racks	5	800.00	4,592.40				
			Video Frame Grabber	3	1,200.00	4,133.16				
			Keyspan Serial Cards	6	495.00	3,409.86				
			Tascam DA-P1 portable DAT recorder	1	2,389.00	2,742.81				
			2x48 point banium patch panels	1	1,666.67	1,913.50				
			32 point video patch panel	1	795.00	912.74				
			D302 Magic Arm or Mounting kit	2	343.00	787.60				
			DeltaScan-Pro GL - Genlock NTSC Version	1	1,750.00	2,009.18				
			DMX 512 cable	1	50.00	57.41				
			Equipment Rack	2	1,400.00	3,214.68				
			ForMac Frame Grabber	1	700.00	803.67				
			Front Projection Screen Remote rolldown.	1	1,075.00	1,234.21				
			Furniture	1	3,000.00	3,444.30				
			G4 Power PC 1024MB 2x120GB	3	7,958.00	27,409.74				
			Heather Controller	1	1,920.00	2,204.35				

Line #	Code #	System	Item	# of Items	Educational Price (CDNS)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
			i-Cube	1	978.00	1,122.84				
			Keypan Serial Cards	2	711.00	1,632.60				
			Lightweight Tripod	1	947.50	1,087.82				
			Line Conditioner	1	920.00	1,056.25				
			MIDI man 2x2 midi interface	1	155.00	177.96				
			MIDI man 8x8 midi interface	1	527.50	605.62				
			Others (network, midi, usb)	1	150.00	172.22				
			Pioneer DVD V7400	2	1,600.00	3,673.92				
			Power	1	250.00	287.03				
			Projector 4000+ lumens 1024x768, 800x600	2	12,900.00	29,620.98				
			Serial Card	2	200.00	459.24				
			Sony CDP-D11 CD Player (w/ rs232 contro	1	1,896.67	2,177.57				
			Sony SLV-ED100ME Multisystem VHS VC	2	1,620.00	3,719.84				
			TDW354BK is JVC's dual cassette player w	1	733.33	841.94				
			TYCCD 480 Color Cam + Power supply	2	552.00	1,267.50				
			Various i-Cube Sensors	1	2,523.50	2,897.23				
			VGA	1	200.00	229.62				
			Video & Audio Cable	1	300.00	344.43				
			VLC5-2516M, 2.5 mm Lens	2	327.00	750.86				
			WJ-MW30 Mixer	2	5,450.00	12,514.29				
			Yamaha O3D Mixer	1	6,000.00	6,888.60				
			Yorkville MP8D 8 Channel Mixer	1	810.00	929.96				
			Racks & Mounting brackets.	1	729.00	836.96				
			Cable Snake & speaker lines	1	387.34	444.71				
			Ashly LX-308B stereo line level mixer	1	850.00	975.89				
			Ashly GOX-3102 stereo 31-band equalizer	2	2,598.00	5,965.53				
			QSC CX404 4-channel amplifier	1	1,750.00	2,009.18				
			JBL MS1112 Compact Two-Way Full Range	8	1,200.00	11,021.76				
			Cabling, Racks & Accessories	1	800.00	918.48				
			Clear Com Install	1	420.00	482.20				
			Cabling, Racks & Accessories	1	1,400.00	1,607.34				
			ETC Express 24/48	1	4,844.81	5,562.33				
			Control and Distribution	1	15,630.00	17,944.80				
			Cable For dimmer circuits	1	7,685.00	8,820.85				
			Lighting Fixtures	1	38,870.00	44,626.65				
			Studio Drapes	1	10,427.00	11,971.24				
			Pipe Grid	1	4,180.00	4,799.06				
			Installation of pipe grid	1	2,900.00	3,329.49				
			Dimmer System (48 dimmers)	1	28,000.00	32,146.80				
			Lab Patching (Video, Audio, DMX, Net, Data)	1	1,600.00	1,836.96				
6	13	Computer Media Lab		1	560,923.61	643,996.40	\$	643,996		
			Dual 1GHz G4 Computer With 17" Display	18	8,000.00	165,326.40				
			Canon or Sony DV cameras (\$4000-\$6000	4	6,500.00	29,850.60				
			Dual 1.25 Ghz G4 Computer With 22" Displ	5	9,098.00	52,227.07				
			SDL T220 Tape backup (110 GB at 11 MB/s	4	9,966.67	45,770.94				
			Panasonic MiniDVD/DVPro cassette player/s	4	4,500.00	20,665.80				
			Dual 1.25 Ghz G4 Computer With 22" Displ	2	11,818.00	27,136.49				

Line Code #	#	System	Item	# of Items	Educational Price (CDNs)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
	10	eMAC Computers		10	2,299.00	26,394.82				
	4	tripods (flightweight)		4	2,245.00	10,309.94				
	4	Sure condenser microphones		4	2,080.00	9,552.19				
	4	220GB firewire drives		4	1,914.00	8,789.85				
	4	Sony DTC-A6 professional DAT playback/r		4	1,771.00	8,133.14				
	2	17" monitor + Apple DVI to ADC Adapter		2	1,650.67	3,790.27				
	4	4 Mega pixel Digital Camera		4	1,604.00	7,366.21				
	5	Intel Pentium 4 2Ghz Computer w/ 19" disp		5	3,050.00	17,508.53				
	4	500GB 4 Drive Raid Array		4	3,747.50	17,210.02				
	8	Self Powered speakers		8	900.00	8,266.32				
	4	Sony ECM-44B lavalier microphones		4	1,326.67	6,092.60				
	2	Yamaha O3D		2	6,550.00	15,040.11				
	1	Infrastructure Misc		1	12,539.00	14,396.03				
	4	Digidesign pro-tools audio post-production :		4	1,250.00	5,740.50				
	4	video monitor 4 inch colour		4	1,250.00	5,740.50				
	4	12 inch colour monitor		4	1,130.00	5,189.41				
	10	Roland MA-12C self powered stereo speake		10	556.67	6,391.13				
	4	Active Near Field Monitors		4	800.00	3,673.92				
	10	Iomega Jazz external removable drive, c/w 2		10	405.00	4,649.81				
	5	Sony SVO-1520 VHS HiFi video cassette re		5	1,575.00	9,041.29				
	1	Sony UVW-1800 Industrial Betacam SP vid		1	7,775.00	8,926.48				
	2	Firewire Digital Audio Interface MOTU 828		2	1,600.00	3,673.92				
	1	G4 Power Book		1	6,059.00	6,936.34				
	2	Mitsubishi Diamond Pro 91TXM, 21" Diam		2	2,800.00	6,429.36				
	2	patch bay for edit suites (video and audio)		2	2,700.00	6,199.74				
	1	24 Track Automated Digital Mixing Conso		1	5,000.00	5,740.50				
	4	MIDI Keyboard Controller		4	400.00	1,836.96				
	8	equipment racks		8	900.00	8,266.32				
	1	Sony PVM-20M4U 20" colour video monit		1	3,460.00	3,972.43				
	1	Racks, Cables, Furniture and Accessories		1	3,333.00	3,826.62				
	2	VHS/S-VHS NTSC/PAL playback unit with		2	1,475.00	3,386.90				
	4	MIDI man midi interface 2x2		4	286.67	1,316.50				
	1	Apple Cinema HD Display (23" flat panel)		1	2,799.50	3,214.11				
	1	Intel Pentium 4 Notebook		1	2,525.00	2,898.95				
	2	Active Loud Speaker		2	1,200.00	2,755.44				
	2	35 mm Camera		2	1,160.00	2,663.59				
	10	miscellaneous cabling and accessories		10	225.00	2,583.23				
	10	Equipment Cases		10	222.50	2,554.52				
	1	Nanosync audio clock/video sync generator		1	2,025.00	2,324.90				
	1	Electronic Tools & Accessories		1	2,000.00	2,296.20				
	10	microphone cables (25', 5')		10	93.33	1,071.52				
	4	4x4 USB MIDI Interface		4	178.60	820.20				
	4	Digital Mix Controller		4	416.00	1,910.44				
	1	Automated Digital Mixing Control Console		1	1,500.00	1,722.15				
	10	Video cables (various lengths 25', 5')		10	150.00	1,722.15				
	3	video patchbay 32 points+		3	475.00	1,636.04				
	2	Sensor to MIDI Translator		2	700.00	1,607.34				
	1	Sony EVS7000 Hi-8 video cassette recorder		1	1,024.50	1,176.23				
	1	Digital 8 Camcorder		1	1,000.00	1,148.10				

Line #	Code #	System	Item	# of Items	Educational Price (CDN\$)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
7	13	Digital Performance Archive				187,747.84	\$ 187,748			
		X-Serve G4 Terabyte storage		1	163,529.17	187,747.84				
		Dual 1Ghz G4 Computer With 17" Display		2	21,900.00	50,286.78				
		Cinematic display 23"		2	8,120.00	18,645.14				
		Nanosync audio clock/video sync generator		1	5,000.00	5,740.50				
		Panasonic MiniDVD/DVPro cassette player/i		1	2,025.00	2,324.90				
		patch bay for dubbing suites (video and audi		1	4,800.00	5,510.88				
		Roland MA-12C self powered stereo speake		2	2,700.00	3,099.87				
		Sony DTC-A6 professional DAT playback/r		1	556.67	1,278.22				
		Sony EVS7000 Hi-8 video cassette recorder		1	2,771.00	3,181.39				
		Sony PVM-20M4U 20" colour video monit		2	2,024.50	4,648.66				
		Sony SVO-1520 VHS HiFi video cassette re		2	4,460.00	10,241.05				
		Sony SVO-1520 VHS HiFi video cassette re		2	2,575.00	5,912.72				
		Sony UVW-1800 Industrial Betacam SP vid		2	515.00	1,182.54				
		TAO L-Port 422 Lanc to 422 control adapto		2	12,775.00	29,333.96				
		VHS/S-VHS NTSC/PAL playback unit with		1	647.50	743.39				
		audio patchbay 48 points+		2	1,475.00	3,386.90				
		video patchbay 32 points+		1	800.00	918.48				
		Yamaha O3D		1	975.00	1,119.40				
		Storage Cabinets, Shelving		1	6,550.00	7,520.06				
		Cabling		1	3,000.00	3,444.30				
		miscellaneous accessories		1	1,600.00	1,836.96				
		Sorenson Webcast software		1	225.00	258.32				
		SDLT220 Tape backup (110 GB at 11 MB/i		2	1,400.00	3,214.68				
		Racks		2	9,966.67	22,885.46				
				1	900.00	1,033.29				
8	13	Mini labs/cubicle/pods				146,344.86	\$ 146,345			
		Dual 1Ghz G4 Computer With 17" Display		1	127,467.00	146,344.86				
		Active Near Field Monitors + amplification		1	8,000.00	27,554.40				
		Digital Mix Controller 4-8 channels		2	900.00	6,199.74				
		MIDI Keyboard Controller		1	416.00	1,432.83				
		Racks, Cables, Furniture and Accessories		1	400.00	1,377.72				
		12 inch colour monitor		1	3,333.00	11,479.85				
		120GB firewire drives		1	1,500.00	5,166.45				
		Digitidesign pro-tools audio post-production :		1	1,914.00	6,592.39				
		DV Mini Player/Recorder		1	7,250.00	24,971.18				
		Iomega Jazz external removable drive, c/w 2		1	3,375.00	11,624.51				
				1	405.00	1,394.94				

Line #	Code #	System	Item	# of Items	Educational Price (CDNS)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
9	13	Dressing Rooms	MIDI man midi interface 2x2	1	286.67	987.37				
			miscellaneous cabling and accessories	1	225.00	774.97				
			Panasonic MiniDVD/DVPro cassette player/patch bay for edit suites (video and audio)	1	9,000.00	30,998.70				
			Roland MA-12C self powered stereo speake	2	556.67	3,834.65				
			Sony DTC-A6 professional DAT playback/r	1	2,771.00	9,544.16				
							29,483			
10	15	Personnel Costs (Acquisition and Development)					\$ 456,000			
			Project Manager	1	95,000.00	114,000.00				
			Consulting	1	45,000.00	54,000.00				
			Technician	1	80,000.00	96,000.00				
			Technician	1	80,000.00	96,000.00				
			Technician	1	80,000.00	96,000.00				
11	17	Travel (Infrastructure Related)					\$ 10,000			
			Travel	1	10,000.00					
12	18	Software					\$ 281,395			
			AutoCad 2002	1	245,096.50	281,395.29				
			Adobe Acrobat	5	3,000.00	17,221.50				
			Adobe After Effects	5	33.75	193.74				
			Stein Big Eye	10	44.89	515.38				
			Boris	2	150.00	344.43				
			Bryce 5	5	77.63	445.64				
			Cool Edit Pro	5	46.91	269.29				
			Cyclops	5	249.00	1,429.38				
			Global Controller	2	99.00	227.32				
			Pluggo	4	-	-				
			Eyes	8	297.50	2,732.48				
			MAX/MSP	10	360.00	4,133.16				
			MAX/MSP/jitter	20	800.00	18,369.60				
			Macromedia Director	10	1,300.00	14,925.30				
			Dreamweaver	10	29.70	340.99				
			3D Studio Max	10	28.24	324.22				
			Final Cut Pro	10	65.00	746.27				
			Final	20	1,500.00	34,443.00				
			Macromedia Fireworks	10	380.00	4,362.78				
				20	20.83	478.30				

Line #	Code #	System	Item	# of Items	Educational Price (CDNS)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
		Flash		20	28.24	648.45				
		Form Z		20	125.00	2,870.25				
		Freehand		10	20.83	239.15				
		GraphicConverter		10	35.00	401.84				
		Illustrator		5	22.49	129.10				
		Kaydara-Filmbox		5	250.00	1,435.13				
		Laban Writer		10	300.00	3,444.30				
		LifeForms		20	504.45	11,583.18				
		Lightscape		10	595.00	6,831.20				
		Maya		10	1,999.00	22,950.52				
		Media Cleaner Pro		10	499.00	5,729.02				
		Metasynth		10	299.00	3,432.82				
		Microsoft Office		20	260.00	5,970.12				
		Nato for Max/Msp		2	549.00	1,260.61				
		Painter		5	749.00	4,299.63				
		Bias Peak		1	499.00	572.90				
		Kodak Photo Enhancer		1	125.00	143.51				
		Emagic Logic Audio Platinum		5	679.00	3,897.80				
		Adobe Photoshop		20	44.89	1,030.76				
		Poser		20	313.00	7,187.11				
		Adobe Premier		20	44.89	1,030.76				
		Protools		10	750.00	8,610.75				
		QuarkXpress		10	1,503.00	17,255.94				
		Quicktime VR		10	461.00	5,292.74				
		RealBasic SmartSound		10	349.00	4,006.87				
		SoundEdit16		10	360.00	4,133.16				
		Sound Jam		10	250.00	2,870.25				
		Specular Infiniti-D		10	600.00	6,888.60				
		Studio Pro		10	999.00	11,469.52				
		Strata Vision3d		10	131.00	1,504.01				
		Toast		5	115.00	660.16				
		Truespace		10	167.00	1,917.33				
		Veillum Solids		5	3,995.00	22,933.30				
		Videodelic		5	249.00	1,429.38				
		Vicon-Bodybuilder		10	-	-				
		Vicon-Workstation Waveburner		10	-	-				
		Sorenson Broadcaster		4	1,270.00	5,832.35				
13	19	Extended Warranty		3	136,318.07	408,954.20	\$	408,954		
		5%/yr of equipment cost								
14	20	Building					\$	5,334,809		
		Performance Stage & Control Booth	sq ft	4300						
		Movement Space		1200						
		Presentation Room and Greenroom		900						

Line Code #	System #	Item	# of Items	Educational Price (CDNS)	Total Eligible Cost plus tax, ship	Total System Price	In-Kind CDN	Partner	Year
		Awareness Training and Injury Prevention I	1200						
		Media Rich Rehearsal	1500						
		Computer Media Lab	900						
		Digital Performance Archive	300						
		Mini Labs/cubicles/pods	300						
		Dressing Rooms	600						
		Offline Studio	1500						

		Architectural Fees		Original Est. sq meter	Revised sq meter				
				1,246.00	1,041.00	0.835473515			
		Site development		231,700.00	193,579.21				
		Construction		4,633,000.00	3,870,748.80				
		Professional Fees		743,500.00	621,174.56				
		Completion/Admin/Regulatory		170,600.00	142,531.78				
		Contingency		462,400.00	386,322.95				
		Tax (2.31%)		144,171.72	120,451.65				

TOTAL PROJECT

\$ 9,767,639

CFI	40.00%	\$ 3,907,055
BCKDF	40.00%	\$ 3,907,055
Match	20.00%	\$ 1,953,528

BUDGET JUSTIFICATION

The requested infrastructure of approximately 12,000 sq. ft will allow innovative transdisciplinary research projects to be developed and undertaken in TRansCPT's uniquely configured labs. Each lab at TRansCPT can be used individually or in conjunction with the others as required by the researchers ensuring flexibility in space. A brief description of each lab follows and an equipment list is appended.

1. **The Performance Stage:** will have retractable seating, a full complement of lighting, sound, imaging and other performance media, as well as capabilities for online networked access-grid communication. A Control Booth in the same space will monitor, receive, broadcast and otherwise share performance data in real time using satellite technologies. A broadband network with telepresence technology will link the TRansCPT with other distant locations.
2. **Movement Rehearsal Studio:** for alternate movement practices independent of technological mediation
3. **Presentation Room and Greenroom:** will contain the necessary equipment for teleconferencing, on-line presentations, and e-learning.
4. **Awareness Training and Injury Lab** based on the Gyrotonic Expansion System and Gyrokinesis. Motion Capture technology will also be used to implement safe practices in dance, theatre, music and other disciplines that utilize the body as a performance tool.
5. **Media Rich Rehearsal Space:** will be used for modeling and prototyping new performance experiments in both online and offline contexts, using immersive, interactive, sensory, motion capture and geo-spatial technologies, handheld and wearable computers.
6. **Computer Media Lab:** will be used for treatment of pre and post performance data, video and sound editing, and other multi-media activities.
7. **Digital Performance Archive:** to be used in an ongoing study of the identity i.e. authenticity and reliability, as well as the collection and preservation of artistic records of an interactive, dynamic and experiential nature.
8. **Mini-labs/cubicles/pods:** composing and modeling media experiments outside performance conditions.
9. **Dressing Rooms**
10. **Personnel:** will include appropriate personnel for acquisition, development of TRansCPT.
11. **Travel:**
12. **Software:**

13. **Extended Warranty:** 3 years of extended warranty will be purchased where necessary.

14. **Building**

Financial Resources for Operations and Maintenance

Operations budget summary

COSTS

	Year 1	Year 2	Year 3	Year 4	Year 5
Personnel	328,500	328,500	344,925	344,925	353,138
Manager	96,000	100,800	100,800	103,200	103,200
Technician (2)	165,000	173,250	173,250	177,375	177,375
Archivist	67,500	70,875	70,875	72,563	72,563
Administrator	67,500	70,875	70,875	72,563	72,563
Supplies	200,000	200,000	250,000	300,000	300,000
Minor Upgrades			50,000		100,000
Maintenance/Service contracts					140,000
Other, Specify					
TOTAL	528,500	528,500	644,925	644,925	893,138

FUNDING SOURCES

	Year 1	Year 2	Year 3	Year 4	Year 5
Institutional contributions	528,500	513,500	624,925	594,925	818,138
SFU	300,500	285,500	396,925	366,925	590,138
CFI IOF Funds	228,000	228,000	228,000	228,000	228,000
Other Organizations					
User fees		15,000	20,000	50,000	75,000
Other					
TOTAL	528,500	528,500	644,925	644,925	893,138

PLANS FOR MANAGEMENT INFRASTRUCTURE

After the TRansCPT is developed, it will become a University Centre under the jurisdiction of the SFU's VP Research. Simon Fraser University and the Faculty of Arts are committed to the development and ongoing operations of the TRansCPT.

Director

As the principal researcher, Henry Daniel will be appointed as the Director of TRansCPT.

Manager

The Manager will be responsible for the day-to-day operations of TRansCPT. This individual will be familiar with ICT developments and the philosophical and economic policies involved in creating balance between scientific practice, technological innovation and human-centered artistic research. The manager will also have knowledge of the increasing demands for public outreach and community-oriented programming and interfaces (including the current pressures towards distance learning and the observable tendencies among professional theatre, dance, opera and music companies to develop new works in co-production with university presenters).

Technical Staff

Technical support is necessary for the labs and the networking (LAN) which, when installed, will have many live connections and numerous devices connected to it. Two types of expertise are required, network and applications. Two in-house full time staff person(s) will be hired to fill these needs.

While the proposals for technical support are to cover all the TRansCPT needs within the new facility, special consideration will be given to the digital archive/library, which may have the most general access for faculty and researchers. The archive will be staffed by an archivist who will instruct and problem solve, digitize and create the archive and its formulations of best practices for capture/retrieval/and access. A graduate researcher who is linked to InterPARIS and who will receive hand-on training in this position will fill this position.

COMMITTEES**Steering Committee**

As with other university centres, direction will be provided by a steering committee that will initially consist of 8-10 faculty members and graduate researchers from a number of disciplines (users that have been identified for the TRansCPT). The committee will provide intellectual direction for research projects and be involved in strategic planning for the TRansCPT. Of particular importance will be the presence of business faculty and students on the committee who provide advice on business plans, industry collaborations, and product marketing.

Business Advisory Council

The Council should be composed of industry representatives and community leaders with connections to the arts or appropriate industries. The Council will be charged with developing a

sustainability plan for TRansCPT. Specifically, they would be responsible for developing linkages to industry for the emerging technologies and products at the TRansCPT, fundraising for various initiatives (e.g. visiting artists/scholars, companies in residence, and the Summer Institute).

Technical Support Subcommittee

A technical sub-committee will be established that is charged with collective decision-making regarding equipment purchases, building and studio design, and any changes in information and communications technologies (ICT) provision.

Administrative Assistant

The University has committed funds for an administrative position in the first five years of the Centre.

Finally, TRansCPT will require a number of persons for its initial start up: e.g. construction project manager, technical support people

Acquisition Plan: to come