

PHASE 1 APPLICATION FORM

Phase 1 applications are due May 28, 2012.

Title of proposed CERC

(e.g., Canada Excellence Research Chair in Environmental Economics)

Canada Excellence Research Chair in Digital Media Research and Innovation

Identification

University: University of British Columbia

University contact

Surname or family name: Nasiopoulos

Given name and initials: Panos

Department/faculty: ICICS; Electrical & Computer Engineering/Applied Science

Title or position: Director, ICICS; Professor, Electrical & Computer Engineering

Telephone: 604-822-6894

Fax: 604-822-9013

Email address: panos@icics.ubc.ca

Research discipline of the proposed Canada Excellence Research Chair

Primary code: 11800

Discipline name: Information Technology

["Click Here for List of Codes"](#)

Secondary code:

Discipline name:

Research Chair proposal summary

Provide a 100 word summary, written in lay language, describing the importance and appropriateness of the proposed research Chair. This summary will be used for peer review purposes and may be used for publicity purposes.

The digital media industries are key drivers of the economy in western Canada, encompassing film/TV production and video games. UBC's significant expertise in this sector includes immersive digital media creation (3D video, simulation/animation, augmented reality), content protection (watermarking, authentication) delivery (wireless networks, social networks, user privacy) and end-user interaction/engagement (attention, interface design). This CERC will be an intellectual leader in envisioning exciting opportunities and addressing critical problems in a fast-changing industry, through a Centre for Digital Media Research and Innovation. The Centre will enhance the bridge between UBC's world-class research expertise and industry innovation, propelling both to global leadership.



Research area of proposed CERC

Research areas: mark the most relevant research areas and (if applicable) sub-area

- Environmental sciences and technologies**
- Water (health, energy, security)
- Cleaner methods of extracting, processing and utilizing hydrocarbon fuels, including reduced consumption of these fuels

- Natural resources and energy**
- Energy production in the oil sands
- Arctic (resource production, climate change adaptation, monitoring)
- Biofuels, fuel cells, and nuclear energy

- Health and related life sciences and technologies**
- Regenerative medicine
- Neuroscience
- Health in an aging population
- Biomedical engineering and medical technologies

- Digital Economy**

- Other area of benefit to Canada**

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Proposed use of funds

Provide estimates on how CERC and university/other funds will be used (total over 7 years of award) according to the line items below. Actual expenditures may deviate from planned expenditures as long as program guidelines on the use of CERC funds are respected. This information is requested for evaluation purposes, as well as for program administrative and accountability purposes.

	Funding from CERC program (total \$ of award)	Funding from the university/other sources • excluding funds from tri- agency and CFI • in-kind or cash
Salary costs of incumbent		
Salary and benefits of the incumbent (including any bonus paid to the incumbent)	875,000	875,000
Student salaries and benefits		
Undergraduate	420,000	420,000
Master's	655,200	655,200
Doctoral	800,800	800,800
Non-student salaries and benefits		
Postdoctoral fellows	702,800	702,800
Other (clerks, secretaries, research assistants, research associates)	877,800	877,800
Other expenses		
Professional / technical services	924,000	924,000
Acquisition, maintenance, operation of research equipment and other research resources	750,000	750,000
Materials, supplies and other expendables	154,400	154,400
Indirect costs related to the Chair (up to a maximum of 25% of direct costs)	2,000,000	2,000,000
Travel and workshops	20,000	20,000
Other (specify): 4 Assistant Professors for 6 years (2 CS, 2 ECE) @ \$130K/year each (incl. benefits) x 6 = \$3,120,000 Start-up funds for Chair & 4 Assistant Professors: 5 x \$130,000 = \$650,000	1,820,000	1,820,000
Total	10,000,000 (maximum \$10 M)	10,000,000 (minimum 100% matching funding to what is requested from the CERC program)

Suggested reviewers

The university is invited to suggest two or three potential reviewers for this application, ideally one reviewer who would be well placed to assess criteria 1 & 2 and another reviewer who would be able to assess criteria 4, 5 & 6. The reviewers cannot:

- be a faculty member at a Canadian institution (excluding adjunct professors);
- be affiliated with the applicant institution (including hospitals and research institutes) or with an organization receiving financial support from the institution;
- have held a position at the institution applying to the program in the last five years;
- be involved in the proposed program of research;
- be a potential nominee for this Chair;
- benefit from the outcome.

Reviewers should be able to evaluate the nomination in the language in which it is written. The Chairs Secretariat reserves the right to make the final selection of reviewers for any application and may opt not to use any of the suggested reviewers.

1. Please specify which criteria they would be ideally suited to evaluate:
<input type="checkbox"/> criterion 1 <input type="checkbox"/> criterion 2 <input type="checkbox"/> criterion 3 <input type="checkbox"/> criterion 4 <input type="checkbox"/> criterion 5 <input type="checkbox"/> criterion 6
Surname or family name: Given name and initials: Department/faculty/division: Title or position: Institution: Email address:
2. Please specify which criteria they would be ideally suited to evaluate:
<input type="checkbox"/> criterion 1 <input type="checkbox"/> criterion 2 <input type="checkbox"/> criterion 3 <input type="checkbox"/> criterion 4 <input type="checkbox"/> criterion 5 <input type="checkbox"/> criterion 6
Surname or family name: Given name and initials: Department/faculty/division: Title or position: Institution: Email address:
3. Please specify which criteria they would be ideally suited to evaluate:
<input type="checkbox"/> criterion 1 <input type="checkbox"/> criterion 2 <input type="checkbox"/> criterion 3 <input type="checkbox"/> criterion 4 <input type="checkbox"/> criterion 5 <input type="checkbox"/> criterion 6
Surname or family name: Given name and initials: Department/faculty/division: Title or position: Institution: Email address:

CERC proposal - attachments

Page limits – There are two attachments to the application. For part A, “Proposal for a CERC allocation”, the attachment must not exceed the **maximum of 12 pages**. For part B, “Planned CERC recruitment strategy”, the attachment must not exceed **one page**. Any extra pages or materials other than what is requested will be removed. Graphs and illustrations may be included, but will count as part of the page limits. Either single or double column presentation of text, graphs or illustrations is acceptable.

Format – information in part A must be provided under the six headings below to allow for the review of each section individually.

Presentation - put the name of the institution at the top of each page and number all pages. Use 12-point font or larger and a maximum of six lines per inch. Paper must be 8 ½” x 11” (22 cm x 28 cm) and margins must be at least ¾” (2 cm) around.

A. Proposal for a CERC allocation (maximum of 12 pages)

Describe your institution’s plans to establish a Canada Excellence Research Chair by submitting a detailed description based on the criteria below. Provide the information requested, as well as any other relevant information that relates to the criteria.

The information presented in each section below will be assessed in relation to whether the requirements for the criteria are:

- 1 □ not satisfied
- 2 □ partially satisfied
- 3 □ mostly satisfied
- 4 □ fully satisfied
- 5 □ fully satisfied, and significantly exceeded

Criterion 1 - The institution’s research strengths in the proposed field, assessed against global standards of excellence

Outline *institutional commitments and investments* in the proposed field of research as evidenced by:

- The institutional Strategic Research Plan (SRP). Please provide an up to date copy of the SRP summary and comment on the how the designated field has been fostered and enhanced over time and how this Chair fits within the institutional priorities
- Institutional investments in the research field over the past 5 years, e.g.
 - Current faculty positions, Canada Excellence Research Chairs (CERC), Canada Research Chairs (CRC) and other similar positions devoted to this research field over the past 5 years (provide a table of relevant faculty and Chair positions in this research field and the appropriate comparison data for the institution as a whole)
 - Investments in space, infrastructure, labs, libraries, databases, etc
 - Overhead, special administrative support
 - Research support from the institution
 - New graduate and undergraduate programs and courses, technician training, etc.

Outline *existing institutional strengths* in the research field, including the following:

- Key researchers involved in the research field; identify their most important research contributions
- Current involvement in national and international collaborations in this research field, including role of key researchers and institutions
- Comparative citation data on institutional publications in the research field area where bibliometrics are appropriate (not all research fields)
- Data on research trainees enrolled and graduated p.a. for 5 years (split by masters, PhD, PDF’s) in the research field, including information on student scholarships and awards

- Quality and suitability of current research facilities

Provide *information and insights on your comparative strength*

- List those international institutions/centres that are comparable and/or key competitors in the research field
- Indicate what comparative advantages and disadvantages your institution has in this research field in relation to global competitors (provide evidence to back up statements)
- Outline the significant research issues in this field where researchers at your institution have provided insights and advances in the last 5 years, situating your comments in a global context

Criterion 2 - The promise of the proposed field of research for the Chair, measured in the context of leading global research in this field; and the likelihood that the work associated with the proposed Chair will be recognized as relevant and will advance the frontiers of research in the field globally.

Outline the *future research directions* that will be enabled by the recruitment of a CERC to your institution:

- Describe the research field your institution is proposing and how this Chair has the prospect of *leading transformative or paradigm shifting research activities*.
- Outline why the recruitment of a Chair in this particular research field is critical at this time to the development of Canadian research in this area, in the context of international knowledge and activity

Describe the *specific institutional expectations of impact and ongoing commitments* that accompany appointment of this CERC:

- The role of the Chair within the institution, group, and/or centre in relation to existing faculty within the institution
- The role of the Chair nationally and internationally
- The expectations of the Chair in the training of graduate students (consider competencies and demand for highly qualified personnel in this research field)
- How the institution will facilitate linkages with users of the research outputs and outcomes
- The space, infrastructure, research facilities and other support that the institution will provide
- How your institution will seek to position itself in a stronger leadership position in this research field (within a time horizon of 5-7 years)

Identify, as much as possible, the measurable *research outcomes and impacts* on which you would report after the initial 7 years of the Chair

Criterion 3 - The extent to which the proposal fits in one or more of the priority and sub-priority areas identified or will address issues that will be of benefit to Canada

Describe the *alignment of the proposed field of research with the identified priorities and sub-priorities*:

- How the proposed Chair will contribute to one or more of the identified priority and/or sub-priority areas
- The extent to which there is alignment with provincial and territorial priorities
- What other Canadian groups and organizations (all sectors) are active in this research field, the focus of those activities, and how your institutional Chair initiative will relate to those activities

If the research area does not align with one of the priority or sub-priority areas identified, explain how the research would be of benefit to Canada and Canadians by describing how, for example:

- The CERC will improve Canada's social, cultural and economic prosperity and resilience
- The CERC will improve the health and quality of life of Canadians
- The CERC will result in economic advantages (e.g., the extent to which transfer of knowledge to the marketplace, the building of a culture of innovation in business, facilitating the generation of wealth from commercialization, etc, would occur)
- The CERC will improve Canada's research capacity (e.g., the extent to which a critical mass would be built in the field,

the competitive advantage that would be developed, how Canada's reputation as a magnet for talent and centre of research excellence would be strengthened)

- The CERC will improve Canada's position and influence in the world
- Other benefits to Canada

Criterion 4 - The ability of the university to sustain the research advantage created by the proposed CERC after the seven year term of the Chair expires

Outline the plans for sustainability:

- The institutional plan to sustain the momentum created by the Chair and capitalize on the advantage provided by the 7-year Chair
- Plans to extend the reach of the institutional activities in this research field, during the tenure, and after the expiry, of the Chair

Be as concrete as possible in your plans, including any targets for growth and long-term funding prospects, where possible providing firm financial commitments (salaries, infrastructure, etc.)

Criterion 5 - The ability of the institution to leverage additional resources that, together with the CERC program, will enable the university to adequately support the direct and indirect costs associated with a world class program of research

Outline the institutional plans for leverage and acquisition of required matching funding and additional resources during the tenure of the CERC and thereafter. Demonstrate that the CERC and the associated team will have the appropriate resources to enable a leading-edge program of research.

Support your plan with information on:

1) *Past success* in leverage of funds for the institution as a whole and in this research field:

- Externally sponsored research – provide data on sponsored research revenue for the past 5 years
- External partner funding for the capital costs of CFI projects acquired over the past 5 years
- Endowed Chairs and Centres at your institution

2) *Prospective leverage* in the research field of the Chair:

- Key partners who have expressed an interest in collaborating
- Federal (e.g. tri-agency and CFI) and non-federal funding sources and programs that will be accessed for operating funds and used to build and strengthen the overall program of research. (Note: tri-agency and CFI funds do not count toward the required matching funding).
- Other funding sources
- Outline overall expectations of leveraged funding for this Chair

Criterion 6 - The potential to apply the research results from the CERC to advance public policy and/or to commercialize research discoveries from the Chair.

Outline how benefits will be realized and provide information on the institution's track record:

- Describe the plans to engage with knowledge users at all stages of the research, from the formulation of the research questions to the design of research projects to the transfer of results.
- Identify the key receptors (firms, not-for-profits, government) of the innovations and insights from the work of the Chair and describe existing institutional partnerships and linkages with these receptors
- Identify current challenges and barriers as well as opportunities to enhance the impact and use of research findings in this field. Please comment with respect to factors that are specific to this field, and specific to this institution and its major partners. Discuss the plans of the institution and the proposed Chair to mitigate these challenges, overcome these barriers and seize these opportunities.

- Describe what structures and policies exist within the institution to facilitate interactions with external receptors – knowledge translation, knowledge mobilization and/or technology transfer. Outline the institutional IP policy. Provide information on the track record of your institution in knowledge translation, knowledge mobilization and/or technology transfer in this field.

B. Planned CERC recruitment strategy (one-page maximum)

Describe your institution's strategies to ensure the breadth and diversity of the pool of qualified candidates you will approach and consider. Specifically, ensure your plans address the following:

- the inclusiveness and comprehensiveness of the candidate search;
 - the proactive measures taken to attract and encourage the participation of a broad and diverse pool of potential candidates;
 - the strategies implemented to engage researchers at a wide range of career stages;
 - the plan to ensure a diverse pool of candidates are considered; and
 - the objectivity and transparency of the recruitment and hiring process.
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Signature

With respect to the proposal entitled “Canada Excellence Research Chair in ____” from our institution, ____, it is agreed that the general conditions governing the Canada Excellence Research Chairs Program as outlined on the Program Web site, as well as the applicable policies of the relevant granting agency, apply to this application and are hereby accepted by the university.

It is agreed that the uses and disclosures of information by the Canada Excellence Research Chairs Program, as outlined on the Program Web site, are understood and hereby accepted by the university.

University signature

Title (President, Rector or Principal of the university or authorized representative)

____/____/____
Year Month Day

NOTE: In order to ensure full accountability and transparency for the proper use of public funds in supporting research, Canada’s federal granting agencies—Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council of Canada (NSERC), and Social Sciences and Humanities Research Council of Canada (SSHRC) will now require all researchers applying for funding to provide a **Consent to Disclosure of Personal Information**, allowing them, in cases of a serious breach of agency policy and subject to applicable laws, including the *Privacy Act*, to publicly disclose: 1) the name of the researcher; 2) the nature of the breach; 3) the name of the institution where the researcher was employed at the time of the breach; and 4) the name of the institution where the researcher is currently employed. The Canada Excellence Research Chairs program is a tri-agency program and thus conforms to the accountability rules and regulations of the three federal granting agencies. The consent to disclosure of personal information will be sought from all researchers who are nominated in Phase 2 of the competition.