

CV

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Carlos Fiorentino, PhD
MDes. BDes. VCD

Carlos Fiorentino (PhD., MDes. University of Alberta; BDes. UNLP, Argentina) is a Visual Communication Designer, design educator and researcher, with main interest on Design for Sustainability, Biomimicry, interface and information design. He teaches in the Department of Art & Design and Department of Human Ecology at the University of Alberta (UofA), and in the Design Studies program at MacEwan University. His research has been funded by the Social Sciences and Humanities Research Council (SSHRC).

In 2010 he introduced the first interdisciplinary undergraduate course focused on Design for Sustainability in Human Ecology, University of Alberta. He has disseminated his work contributing to book chapters, presenting in international conferences and symposia, and published in refereed journals. His professional and scholar activities have taken him to Denmark, Sweden, Norway, Portugal, Saudi Arabia, Germany, China, Australia, South America, the USA and across Canada.

His research and scholarship on sustainability allowed him to be part of the Sustainability Advisory Committee for the University of Alberta's Sustainability Plan 2016-20, and the Education for Sustainability Steering Committee (ESSC) for the Sustainability Advisory Committee at Grant MacEwan University (2014-2015). He is co-founder of the Biomimicry Alberta regional network (2013), founder of the Design for Sustainability Research Group (2012), and more recently the UofA Biomimicry Innovation Hub (2018).

Carlos is co-founder (2004) and design consultant of Pix Design in Buenos Aires, Argentina. He has worked professionally in the visual communication design field for more than twenty years.

He has collaborated in research projects involving humanities computing and Information design (2005-2013), among them the Implementing New Knowledge Environments (INKE) project funded by SSHRC, and more recently the AGEWELL Assistive Technologies program, federally funded by Networks of Centres of Excellence (NCE).

Academic training **2020** PhD - Doctor of Philosophy in Human Ecology, Material Culture and Design Studies program, University of Alberta. Supervisors: Dr. Strickfaden and Dr. Bissonnette

2005-2008 MDes Degree - Master in Visual Communication Design - University of Alberta, Canada.

1988-1993 BDes Degree in Visual Communication Design, Facultad de Bellas Artes - Universidad Nacional de La Plata, Argentina.

Additional studies **2006** Sustainable Design Futures – MA course in Design for Sustainability, International Centre for Creativity, Innovation and Sustainability, Denmark and University of Lund, campus Helsingborg, Sweden.

Academic appointments **2008-present**, Primary Instructor, Design Fundamentals, Art & Design, University of Alberta.
2011-2016, Primary Instructor, Design Studies, Grant MacEwan University.
2010-2015, Primary Instructor, Design for Sustainability, Human Ecology (Special Sessions for Textile and Material Culture & Design Studies), University of Alberta.
2008-2009, Primary Instructor, Visual Communication Design, Art & Design, University of Alberta.
1996-1997 Part-time Teaching Assistant, Catedra Valdez, Facultad de Diseño y Urbanismo, Universidad de Buenos Aires,

Teaching experience **University of Alberta**

Courses taught career total 65; curriculum development participation in 2 programs; courses developed 2; guest lecturing at 2 universities (UNLP, Argentina; Univ. of Canberra, Australia); countries taught in 2 (Canada, Argentina).

DES 135 Design Fundamentals, 23 sections, 2008-2012 and 2014-present
15-19 students per session. Studio + Lecture
Studio-based course open to students outside the art & design program or applying to. Many students taking this class come from other diverse disciplines

DES 139 Design Fundamentals II, 2012, 2013, 2015, 2016, 2018-present
15-18 students. Studio + Lecture
Second semester studio-based course for first year students in the design program

DES 337-437-537 Integrated Media for Health Design II: Bio-centered Design, 2017
12 students. Studio + Lecture

DES 138 Design Fundamentals I, 2009, 2012, 2013, 2014
15-18 students. Studio + Lecture
Studio-based course for first year students in the design program

HECOL 493 Design for Sustainability & Biomimicry, 7 sections between 2010-2015
12-18 students per section. Lecture + special components
This course is the only of its kind offered at UofA. It runs every spring term. 10 seats are reserved for Human Ecology last year students in Textile and Material Culture & Design Studies, 8 seats are open to students in the design programs and other disciplines.

HECOL 350 Applications of Computer-Assisted Design, two sessions, 2010, 2011
32 students per session. Lecture + Lab



This course contained assignments for teaching digital tools on subjects like typography, page layout, signage and photo manipulation.

DES 493 Concepts and Systems in Visual Communication Design I, 2008

18 students (including 2 graduate). Studio + Lecture

Advanced class for students in the third year of the design program. Subjects taught: Information design and data visualizations, visual communication campaigns, critical thinking and design activism.

DES 494 Concepts and Systems in Visual Communication Design II, 2009

16 students. Studio + Lecture

Advanced class for students in the third year of the design program. Subjects taught: visual identity systems, designers as problem identifiers.

Grant MacEwan University

DESN380 Design Research Seminar, 2021

12-19 students. Lecture + Lab

Last year students from different design routes within the program

DESN381 Design Issues Seminar, 2019

12-19 students. Lecture + Lab

Last year students from different design routes within the program

VCDE 383 /DESN 313 Information Design, 2012, 2015, 2016, 2018, 2019

12-19 students. Lecture + Lab

Last year students from different design routes within the program

DESN 310 Design Studio II, 2014, 2015

24,17 students. Lecture + Studio

Second year students from different design routes within the program

DESN 330 Typography II, 2014

10 students. Lecture + Lab

Second year students from different design routes within the program

VCDM 346 Information Design, 2012, 2013, 2014

15 students. Lecture + Lab

Last year students from digital media

VCOM 233 Typography, 2013, 2014

14 students. Lecture + Lab

Second year students from digital media

VCOM 223 Typography, 2011, 2012

22 students. Lecture + Lab

Second year students from photography

Visiting lecturer:

La Trancision del Diseño: Sustentabilidad, Resiliencia, y Pensamiento Biocentrico.”

Webinar lecturer to “El Futuro que Creamos desde el Diseño Gráfico” Universidad Privada Franz Tamayo, Cochabamba, Bolivia, May 22, 2020

About Design, Research and Biocentered Thinking. Visiting lecturer to “Monday Design Talks” Kolding University, Kolding, Denmark, April 20, 2020

Carlos Fiorentino

Curriculum Vitae

Introduction to Biomimicry. Visiting lecturer and workshop facilitator to the iiTT– Inspiring Innovation Through Technology Workshop for Teachers, July 09-13, 2018 MacEwan University, Edmonton, AB.

Urban Transportation and Design. Visiting lecturer to Urban Week, organized by the Geography and Planning Students Society, University of Alberta, March 19-23, 2018

Biomimicry and Sustainability. Visiting lecturer to Sustainability 201, first interdisciplinary course extended across faculties at Grant MacEwan University, 2016

Biomimetics of Colour. Visiting lecturer to the faculty of Arts and Design of the University of Canberra, Centre for Creative and Cultural Research (CCCR), Australia, 2015

Design for Sustainability and Biomimicry lectures to students of last year in the Material Engineering program at University of Alberta, ETCL 2013, 2014, 2015

Teaching design in Canadian institutions. Lecture to students and faculty at Universidad Nacional de La Plata, Argentina, 2012.

Non-cartesian visualizations of time. Talk co-presented with Dr. Stan Ruecker to graduate students in Humanities Computing, University of Alberta, 2011

Data visualization projects talk to last year students in Humanities Computing, University of Alberta, 2010

Design for Sustainability talk to DES 490 students, University of Alberta 2007, 2008, 2009



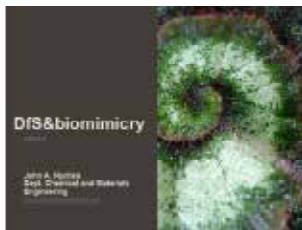
Graduate Teaching Assistant, University of Alberta

DES 397 Photography, 2007

DES 135 Design Fundamentals, 2006-2007

DES 390 Foundations of Visual Communication Design, 2006

DES 490 Concepts and Systems in Visual Communication Design, 2005



Teaching Assistant, Universidad de Buenos Aires, Argentina

Taller de diseño III Catedra Valdes, 1997

Taller de diseño II Catedra Valdes, 1996

Undergraduate Teaching Assistant, Universidad Nacional de La Plata, Argentina

Panorama Historico social de diseño Catedra Vazquez, 1990

Taller de diseño I Catedra Fernandez-Innaro, 1990

Organizer of Guest Lectures

2017, DES 337-437-537 Entropy and Design (Dr. Richard Sydora, Professor of Physics, University of Alberta).

2015, HECOL 493 DfS and Biomimicry from a Material Engineering Perspective (Dr. John Nychka, Professor of Material Engineering, University of Alberta).

2015, HECOL 493 Entropy (Dr. Richard Sydora, Professor of Physics, University of Alberta).

2015, HECOL 493 Sustainability for the Oft-Forgotten (Dr. Naomi Krogman, Professor, Department of Resource Economics and Environmental Sociology, Academic Director of the Office of Sustainability, University of Alberta)

2014, HECOL 493 Energy Efficiency (Godo Stoyke, CEO Carbon Busters, LEED ap.)

2013, HECOL 493 The Anthropocene (Dr. Alexander Wolfe, Geologist and professor at

Earth and Atmospheric Sciences, University of Alberta)

2012, HECOL 493 Sustainability and Genuine Progress Indicators (Prof. Mark Anielski, author of the Canadian best-seller book *The Economics of Happiness: Building Genuine Wealth*)

2012, HECOL 493 Research on Sustainable Packaging Design and Empathic Design (Piyush Mann, Graduate Student in VDC, University of Alberta)

2010, 2011, HECOL 493 Biomimicry and Wettability (Dr. John Nychka, Professor of Material Engineering, University of Alberta).

2009, HECOL 350 Digital illustration (Pablo Lobato, designer and cartoonist for *The New Yorker*, *RollingStone* magazine, among other publications)

2009, DES 494 Climate Migration in the North (Dr. Marianne Douglas, Canadian Circumpolar Institute, University of Alberta).

2008, DES 493 Calligraphy and Type (Betina Naab, *Caligrafos de la Cruz del Sur*, Argentina)

Development of Curricula, New Course Modules & Assignments

2010-2015 HECOL 493 Design for Sustainability (Special Topics for the Textiles & Clothing, Human Ecology, University of Alberta). Full course package with 6 modules, lectures, assignments and in-class activities.

2015 HECOL 493 Design for Sustainability & Biomimicry (Special Topics for the Textiles & Clothing and Material Culture Studies, Human Ecology, University of Alberta). Inclusion of one new module, lecture, assignments and in-class activities on Biomimicry.

2015 DES 139 Design Fundamentals II, P1 Design for a different culture (ethnography): The Mate project

2014-2015 SUS 201 Contribution to the creation of Sustainability 201, first course focused on the subject across disciplines at MacEwan University, as part of my duties as Advisor to the Education Sustainability Steering Committee.

2012-2015 DES 139 Design Fundamentals II P3 Type activism: tagging public places / P5-6 Packaging inspired by nature: a biomimicry and project

2012-2015 DES 139 Design Fundamentals II P7-8 Designers as problem identifiers

2012-13 DESN 330 Typography II, MacEwan Univ. P4 Design with lyrics

2012-13 VCDM 346 / VCDE 383, Information Design, MacEwan Univ. P2 Wayfinding interface with augmented reality

2010-2015 DES 135-138 Design Fundamentals P7 Designing instructions: a Lego problem / P6 Imagery and page layout: transforming old TV series into new movies / P8 Packaging Zero (sustainable packaging) / P5.2 Quantifying and mapping colour / P5.3 Creating colour palletes for different target audiences

Research experience

2019-present StrC, A Rich Prospect Taxonomy Interface, AskNature.org, Biomimicry Alberta, University of Alberta.

2014-2019 Doctoral Research on Biomimetics and Structural Colour, Human Ecology, Material Culture and Design Studies, University of Alberta.

2015-present HQP (High Qualified Personnel) and Research Assistant appointed to AGEWELL program, federally funded by Networks of Centres of Excellence (NCE). Research Project Innova, Precedent-based Tool for Assistive Technologies, conducted by Dr. Strickfaden (Human Ecology, University of Alberta), and other contributions to Work Packages 2 and 6 (Several Universities across Canada involved).

2016 Research Assistant project on Dementia Regulations in Alberta conducted by Dr. Strickfaden (research documents delivered in winter 2016).

2015 “The Nature of Colour” Qualitative Study, Human Ecology, Material Culture and Design Studies, University of Alberta.

2013 Research Assistant in Human Ecology, Textile and Material Culture Study conducted by Dr. Bissonnette, University of Alberta.

2010-present Independent Research on Teaching Design for Sustainability and Biomimicry subjects, University of Alberta.

2009-2012 Interdisciplinary Research involving Design Studies and Digital Humanities for University of Alberta, INKE Group, IIT, project funded by the Social Sciences and Humanities Research Council (SSHRC). <http://inke.ca>

2008-2010 Research Assistant for the Digital Humanities Research Studio, Arts Resource Centre, University of Alberta

2007 DSV Usability Study for Design and Visualization of Strategic Scenarios and Decision Support, study conducted by Stan Ruecker (University of Alberta) and Mariana Paredes Olea (Universidad de Sonora, Mexico)

2006-2008 Researcher for NORA-MONK Project, Interface Design and Text Visualizations for Humanities, funded by the Andrew W. Mellon Foundation. Partner institutions: University of Alberta, University of Illinois, Urbana-Champaign, University of Maryland, College Park, McMaster University, University of Nebraska, The National Center for Supercomputing Applications, Northwestern University

2006-2007 Research on Design for Sustainability for VCD Master’s Thesis, University of Alberta

2006-2007 Researcher in Interface Design Project and Visualizations of Strategic Scenarios for Decision Support in local industry, Faculty of Chemical Engineering, University of Alberta

2006-2007 Graduate Research Assistant in Visual Communication Design, Department of Art and Design, University of Alberta

**Other academic contributions
& professional activities**



<https://biomimicryalberta.wordpress.com/baw01-biomimicry-alberta-workshop-2014/>

2019-present Member of the University of Alberta Climate Coalition

2020 Interface Design contributions to the Material Failures Database, Directed by Dr. J. Nychka, University of Alberta.

2016, 2018, 2020 Jury member of Biomimicry Global Design Challenge - BGDC The Biomimicry Institute

2019 Reviewer for the Design Decoded 2019, International Conference on Design Industries and Creative Culture, 19-20 June 2019, Kompleks Pelancongan Hutan Paya Laut Sungai Merbok, Sungai Petani, Kedah, Malaysia.

2019 Co-Chair of the Biomimicry Alberta Lecture Series at the Rounhouse, MacEwan University Allard Hall, January 25, 2019.

2014, 2016, 2017 Co-Chair of the Biomimicry Alberta Workshop, Barrier Lake Station Kananaskis, Alberta, Canada. Oct. 4 - 5, 2014, and Oct. 1-2 2016, and University of Alberta June 24-25 2017: <https://biomimicryalberta.com/baw03-biomimicry-alberta-workshop-2017-arthropods/>; <https://biomimicryalberta.com/baw02-biomimicry-alberta-workshop-2016-alberta-genius-of-place/>; <https://biomimicryalberta.wordpress.com/baw01-biomimicry-alberta-workshop-2014/>

2019 Presentation of doctoral research “Sustainable Colours” at the *R.E. Peter Biology Conference 2019*, March 7, 2019, University of Alberta.

2019 Presentation of doctoral research “Sustainable Colours” at the *ALES Graduate Research Symposium*, March 13, 2019, University of Alberta.

2017 Poster presentation of doctoral research “DTSC: A Case of Academic Prototyping”



<http://www.mailoutinteractive.com/Industry/Landing-Page.aspx?id=1946534&p=1>

at the *ALES Graduate Research Symposium*, March 17, 2017, University of Alberta.

2017 Poster presentation of doctoral research “A Dynamic Taxonomy on Structural Colour” at the *Eleventh International Conference on Design Principles and Practices*, January, 2017 Institute Without Boundaries, Toronto, Canada.

2016-2017 External Consultant of AUT Master’s candidate’s thesis Byron Thornhill on “Improving Clinical Guidelines in the Hospital Context (Auckland City Hospital), supervised by Dr. Stephen Reay, Auckland University of Technology, New Zealand.

2015- 2016 Peer-reviewer for Common Ground Design Journals On Sustainability –2 papers reviewed

2015 Presenting “Biomimetics of Colour” at the Doctoral Colloquium, IASDR 2015 conference, Brisbane, Australia.

2015-present Member of the Sustainability Advisory Committee, Office of Sustainability University of Alberta.

2014 Mentoring junior high school students visiting the University. Research Projects on Environmental Stewardship / Sustainability - March 3, 2014, University of Alberta.

2014 Panelist at the Sustainability Students Summit, SAW Office of Sustainability, January 2014 University of Alberta.

2013-2016 Member of the Sustainability Advisory Committee at MacEwan University, Advisor to the Education Sustainability Steering Committee

2013 Co-founder of Biomimicry Alberta regional network, part of the Biomimicry Institute 3.8 global network: <https://biomimicryalberta.wordpress.com>

2013 Founder of Design for Sustainability Research Group at University of Alberta

2012 Visiting lecturer to the National University of La Plata (UNLP), presenting “Teaching Design in Canada and the inclusion of Design for Sustainability in Undergraduate Programs”. Invited by the Visual Communication Design Department as part of the celebration of its 50th anniversary.

2011 Participation in the 3rd. Annual Day of Digital Humanities, international online collaborative publication.

2009 Member of the SusDesTeach discussion group initiated by Ann Thorpe, Open University, Walton Hall, UK

2008-2009 Member of AIGA Center for Sustainable Design Education Committee

2007-2009 Coordinator of ERSC/VCD collaborative project –Environmental Research and Studies Centre and Visual Communication Design Department, University of Alberta–involving design work –visual identity and webdesign– developed by 2 undergraduate courses, and submitted to ERSC Outreach Committee

2007 “All routes lead to U of A” FGSR Community Outreach lecture series, presentation “Design for Sustainability at U. of A.”. ETLIC, University of Alberta

2007 “DfS Design for Sustainability” presentation series at DES 590 courses, University of Alberta

2007 Member of the Advisory Committee of the Environmental Research and Studies Centre, University of Alberta

2007 Supporter of the Talloires Declaration on the Civic Roles and Social Responsibilities of Higher Education.

2007 FGSR Community Outreach Program, lecture “Sustainability and Design at U. of A.” at Otewell Junior High “Interactions and Ecosystems” class

Refereed Publications
Book chapters and contributions

Fiorentino, C. (2020) "Sustainability in Alberta: experiences and impressions by design." In Prochner I. & Antoniuk T. (Ed.), *Situating Design in Alberta*, Book chapter. [In press]

Strickfaden M., **Fiorentino C.**, Martin M., Eales J., Fast J. (2020) 'Innova' Digital Application and Database for Designers to Innovate for Carers. In: Langdon P., Lazar J., Heylighen A., Dong H. (eds) *Designing for Inclusion*. CWUAAT 2020. Springer, Cham. https://doi.org/10.1007/978-3-030-43865-4_4

Fiorentino, C., Montana-Hoyos, C. (2019). "La Perspectiva del Diseño Biocentrico" In *Re-descubriendo el mundo natural*, Sierra, C (Ed.). Colombia: UNAD, pp. 227-248. ISBN 978-958-651-631-0 (book chapter in Spanish).

Ruecker, S., Radzikowska, M., & Sinclair, S. (2011). *Visual interface design for digital cultural heritage: A guide to rich-prospect browsing*. Surrey, UK: Ashgate Publishing, Ltd. Academic prototyping contributions shown in pp. 41, 92, 98–101, 139–142.

Ruecker, S., **Fiorentino, C.**, Michura, P., Radzikowska, M., Clement, T., & Sinclair, S. (2009). "Slot Machines, Graphs, and Radar Screens: Prototyping List-based Literary Research Tools." In Lucie Dolezalova (Ed.), *The Charm of a List: From the Sumerians to Computerised Data Processing*. Cambridge: Cambridge Scholars Publishing, 2009. pp. 167–176.

Forthcoming contributions

Fiorentino, C., Strickfaden, M. "Materials, Design and Habitats from a Biocentered Human Ecologist Perspective" (book chapter for *Biomimicry for Materials, Design and Habitats: Innovations and Applications* edited by Vikram Shyam, Marjan Eggermont and Aloysius Hepp, Elsevier Publishing)

Fiorentino, C. "Transición del Antropocentrismo al Biocentrismo: El Presente Distopico y el Futuro del Diseño" (article to be published in *Actas de Diseño, Universidad de Palermo*)

Fiorentino, C., "A Dynamic Taxonomy on Structural Colour: Bridging Science and Design for Bio-centered Innovation." (article in progress for *Design Principles & Practices Journal*)

Thesis Published

Fiorentino, C. (2020). *StrC-Rich Prospect Taxonomy on Structural Colour: A Tool for Research to Connect Scientific Knowledge on Nature and Biomimetic Design Innovation*. (Doctoral dissertation, University of Alberta).

Fiorentino, C. (2008). *Design for Sustainability: Teaching Design for Sustainability in the Visual Communication Design Classroom: Preparing Future Designers for the Next Design (r) evolution* (Masters thesis, University of Alberta).

Refereed Publications
Journal articles

[Since 2007: total of 16 journal articles published]

16. **Fiorentino, C.** (2019). *Colores Sustentables: Cuando Ciencia y Diseño se Encuentran* (Sustainable Colours: When Science and Design Meet). *Cuadernos del Centro de Estudios en Diseño y Comunicación [Ensayos]: Realidad Difusa. Practicas de Diseño y Tendencias*. Buenos Aires, Argentina: Universidad de Palermo & Politécnico di Milano. 22 (94) 2020-2021, pp. 73-88 ISSN 1668-0227 (article in Spanish and Portuguese)

15. **Fiorentino, C.** (2016). Escaping the Design Dystopia: Propositional Bio-informed Theories to Evolve from Anthropocentric Design. *The International Journal of Sustainability Education*. Champaign, Illinois, USA: Common Ground Publishing LLC 12 (3), pp. 15-27 ISSN 2325-1212 (Print) ISSN 2325-1220 (Online) doi:10.18848/2325-1212/CGP (Journal).
14. **Fiorentino, C.,** Montana-Hoyos, C. (2014). The Emerging Discipline of Biomimicry as a Paradigm Shift towards Design for Resilience. *The International Journal of Designed Objects*. Champaign, Illinois, USA: Common Ground Publishing LLC 8 (1) pp. 2-15 ISSN: 2325-1379
13. Montana-Hoyos, C., **Fiorentino, C.** (2016). Bio-utilization, bio-inspiration, and bioaffiliation in design for sustainability: Biotechnology, biomimicry, and biophilic design. *The International Journal of Designed Objects*. Champaign, Illinois, USA: Common Ground Publishing LLC. 10 (3) pp.1-18
12. Martin, M., Eales, J., Fast, J., **Fiorentino, C.,** & Strickfaden, M. (2020). The Value of Collaborating with Undergraduate Students on an Interdisciplinary Project. *Journal of Student Research*, 9(1). <https://doi.org/10.47611/jsr.v9i1.748>
11. Ruecker, S., ..., **Fiorentino, C.** et al (2013). The Beginning, the Middle, and the End: New Tools for the Scholarly Edition. *Scholarly and Research Communication*, 3(4).
10. Shiri, A.; Ruecker S.; **Fiorentino, C.** et al (2013). User Evaluation of Searchling and T-Saurus: Multilingual Thesaurus-Enhanced Visual Interfaces for Digital Libraries. *Canadian Journal of Information and Library Science*. 37 (2), pp. 137-160.
09. **Fiorentino, C.** (2012). El diseño resiliente como conductor hacia el diseño sustentable (Resilient Design as conducive to Sustainable Design). *BOLD, Journal of Visual Communication Design*, Universidad Nacional de La Plata, Argentina. ISSN 2344-9853 1(1), pp. 51-55 (2013)
08. **Fiorentino, C.** (2012) Design for Sustainability vs. Design for Resilience: A Time Scale Problem? *The International Journal of Sustainability Education*. Common Ground Publishing LLC 8 (2), pp. 30-45
07. Shiri, A., Ruecker, S. & **Fiorentino, C.** (2012). Interactive Visualizations for Multilingual Search Bulletin of the American Society for Information Science and Technology (ASIS&T) 38 (4).
06. Blandford, A., Brown, S., Dobson, T., Faisal, S., **Fiorentino, C.,** Frizzera, L., ... & Windsor, J. (2012). Designing Interactive Reading Environments for the Online Scholarly Edition. *Abstracts of Digital Humanities 2012*, Ed. J.C. Meister, 35-40. Hamburg: U of Hamburg
05. Shiri, A., Ruecker, S., ... **Fiorentino, C.** et al (2011). "An evaluation of thesaurus-enhanced visual interfaces for multilingual digital libraries." In *Research and Advanced Technology for Digital Libraries* (pp. 236-243). Springer Berlin Heidelberg.

04. Arazy, O., Stroulia, E., Ruecker, S., Arias, C., **Fiorentino, C.**, Ganev, V., & Yau, T. (2010). Recognizing contributions in wikis: Authorship categories, algorithms, and visualizations. *Journal of the American Society for Information Science and Technology*, 61(6), 1166-1179.
03. Ruecker, S.; Radzikowska, M.; Michura, P.; **Fiorentino, C.** and Clement, T. (2009) "Visualizing Repetition in Text". *Digital Studies / Le champ numérique*, 1(3) (2009) http://www.digitalstudies.org/ojs/index.php/digital_studies/article/view/164/229
02. Paredes-Olea, M., Ruecker, S., **Fiorentino, C.**, & Forbes, F. (2008). Using an affordance strength approach to study the possible redeployment of designs for decision support visualization. In *9th Advances in Qualitative Methods Conference* pp.8-11.
01. Ruecker, S., **Fiorentino, C.**, Michura, P., Radzikowska, M., Clement, T., (2007). Visualizing Repetition in Text. *CHWP A.46*, publ. July 2008 http://www.chass.utoronto.ca/epc/chwp/CHC2007/Ruecker_etal/Ruecker_etal.htm

**Refereed Contributions
Papers & proceedings**

[Since 2007: total of 45 conference proceedings published]

On Sustainability and Biomimicry

45. **Fiorentino, C.**, Terzin, T. (2020). "StrC–Rich Prospect Taxonomy on Structural Colour: An Interface to Facilitate Scientific Knowledge to Biomimetic Designers" Proceedings of the Biological and bio-inspired optics Faraday Discussion, Royal Society of Chemistry, Cambridge, UK, July 22-24, 2020
44. **Fiorentino, C.**, Cohen, M. (2020) "Biomimicry: una epistemologia en construccion" –Biomimicry: A Epistemology Under Construction (proceedings for the X Congreso Latinoamericano de Enseñanza del Diseño, Universidad de Palermo, Argentina)
43. **Fiorentino, C.**, Nychka, J., Terzin, T., Bissonnette, A., Strickfaden, M. (2019). "StrC: A Research Tool to Connect Scientific Knowledge of Nature with Biomimetic Design Innovation" *The First International Conference on Nature Inspired Surface Engineering (NISE 2019)*. June 11-14, 2019, American Institute of Sciences, New Jersey, US. Abstracts ISSN 2643-3184 1(1) p.54
42. **Fiorentino, C.**, Bissonnette, A., Strickfaden, M., Terzin, T. (2019). Sustainable Colours–StrC: A Rich Prospect Taxonomic Interface. *15th International Conference on Environmental, Cultural, Economic & Social Sustainability*, 17-19 January 2019 University of British Columbia – Robson Square, Vancouver, Canada
41. **Fiorentino, C.** (2019). "Waste" by Nature: a Biomimicry Approach. *Sea Change: A Waste Reduction Conference*. Recycling Council of Alberta, 2-14 October 2019 – Fairmont Jasper, Canada
40. **Fiorentino, C.**, Bissonnette, A., Strickfaden, M., Terzin, T. (2017). A Dynamic Taxonomy on Structural Colour. *11th International Conference on Design Principles & Practices*. March 1-4, Institute Without Boundaries, Toronto.

39. **Fiorentino, C.** Transición del Antropocentrismo al Biocentrismo: El Presente Distópico y el Futuro del Diseño. *IX Congreso Latinoamericano de Enseñanza del Diseño*, 1-3 August, 2018 Congreso de Enseñanza del Diseño Universidad de Palermo, Buenos Aires, Argentina.
38. **Fiorentino, C.** What is More Sustainable Than Nature? Anthropocentric and Bio-centered Design. *Fourteenth International Conference on Environmental, Cultural, Economic & Social Sustainability*, 17-19 January, 2018 The Cairns Institute, James Cook University, Australia.
37. **Fiorentino, C.,** Montana-Hoyos, C. (2014) The Emerging Discipline of Biomimicry as a Paradigm Shift towards Design for Resilience. *Eighth International Conference on Design Principles and Practices*, 16-18 January, 2014 UBC Vancouver, Canada.
36. **Fiorentino, C. (2014).** Escaping the Design Dystopia: Propositional Bio-informed Theories to Evolve from Anthropocentric Design. *Eleventh International Conference on Environmental, Cultural, Economic, and Social Sustainability*, Copenhagen, Denmark, 21-23 January 2015.
35. Montana-Hoyos, C., **Fiorentino, C.** (2014). Biological Approaches to Design for Sustainability: Biotechnology, Biomimicry and Biophilic Design. *Eighth International Conference on Design Principles and Practices*, 16-18 January, 2014 UBC Vancouver, Canada.
34. **Fiorentino, C.** (2014). Understanding Resilience as the key to Sustainability and Bio-inspired Design. *UBCO IGSA Conference 2014*, UBC Okanagan, Kelowna, BC.
33. **Fiorentino, C.** (2011). Design for Sustainability vs. Design for Resilience: A Time Scale Problem? *Eighth International Conference on Environmental, Cultural, Economic and Social Sustainability*. University of British Columbia, Vancouver, Canada, January 2012.

On Human Ecology and Material Culture

32. Strickfaden, M., Thomas, A., **Fiorentino, C.**, Pinckbeck, L. (Oct 2018) Filmic Co-creations Illustrating Designed Things as Therapy. Oral presentation at: *CAG2018: Making it Matter: Mobilizing Aging Research, Practice & Policy 47th Annual Scientific and Educational Meeting of the Canadian Association on Gerontology*, Gerontology Research Centre at Simon Fraser University, Vancouver BC, 18-20 Oct 2018.
31. Strickfaden, M., Eales, J., **Fiorentino, C.**, Nahirniak, J. & Fast, J. (Oct 2018) Living Spaces for Dementia Care: Policy Supports and Barriers in Alberta. CAG. Oral presentation at: *CAG2018: Making it Matter: Mobilizing Aging Research, Practice & Policy 47th Annual Scientific and Educational Meeting of the Canadian Association on Gerontology*, Gerontology Research Centre at Simon Fraser University, Vancouver BC, 18-20 Oct 2018.
30. Strickfaden, M., Thomas, A., **Fiorentino, C.**, Pinchbeck, L. Eales, J. & Fast, J.

(July 2018) Illustrating Designed Things: A Filmic Co-creation. Oral presentation at: *Transforming practices and knowledge through the lens of disability: Experiences, transmissions, training, organizations*. ALTER European Society for Disability Research. Catholic University of Lille, July 5-6, 2018.

29. **Fiorentino, C., Strickfaden, M., Fast, J., Eales, J., Martin, M.** (2017). *Innova: A Precedent-based Interface Tool for Assistive Technologies*. *11th International Conference on Design Principles & Practices*. March 1-4, Institute Without Boundaries, Toronto.

On Design Education

28. **Fiorentino, C., Van der Ree, A., Fartushenko, L.** (2013). *Design as a second language*. Design as a multicultural-multidisciplinary space of integration. *DRS-Cumulus 2013: The 2nd International Conference for Design Education Researchers*. May 14-17, 2013, Oslo, Norway. ISBN: 978-82-93298-00-7
27. **Fiorentino, C.** (2012). *Education on Design for Sustainability: Focus vs. Fragmentation* in the curriculum. *Designia 2012: Un/Sustainability*, University of Beira Interior, Portugal.
26. **Fiorentino, C.** (2011). *Applying Biomimicry Concepts in Teaching Design for Sustainability: The most inspiring design solutions are present in nature*. *STB Conference 2012 Sustainability Through Biomimicry: Discovering a world of solutions inspired by nature*. Dammam University, College of Design, Saudi Arabia.
25. **Fiorentino, C.** (2011). *Teaching Design for Sustainability in 2011: First Results from a Prospective Curriculum*. *The Tao of Sustainability: an International Conference on Sustainable Design Strategies in a Globalization Context*. Academy of Arts and Design of Tsinghua University, Beijing, China.
24. **Fiorentino, C.** (2010). *DfS. Teaching Design for Sustainability: A Prospective Curriculum*. *ConnectED, 2nd International Conference on Design Education*, University of New South Wales, Sydney Australia. ISBN: 978-0-646-54506-6.
23. **Fiorentino, C.** (2009). *Teaching Design for Sustainability: A Prospective Curriculum*. *Environmental Studies Association of Canada (ESAC) Annual Conference*, held in conjunction with the *Congress of the Humanities and Social Sciences*, at Carleton University, Ottawa.

On Information Design, Data Visualization and Digital Humanities

22. **Fiorentino, C.** (2020) "El Prototipo Académico como Método Multidimensional de Diseño" –Academic Prototyping as a Multidimensional Research Method (proceedings for the *X Congreso Latinoamericano de Enseñanza del Diseño*, Universidad de Palermo, Argentina)
21. Shiri, A., Ruecker, S., ... **Fiorentino, C.** et al (2010). *Designing a Semantically Rich*

Visual Interface for Cultural Digital libraries Using the UNESCO Multilingual Thesaurus. *Catac, Cultural Attitudes towards Technology and Communication Conference*, University of British Columbia

20. Fast, J., Strickfaden, M., Eales, R., Ren, H., Kim, C., Martin, M., **Fiorentino, C.**, Keating, N., Liu, L. & Mortenson, B. (Oct 2015) Assistive Technologies that Care for the Caregiver. AGE-WELL Conference, Calgary AB, October 22-23.
19. Blandford, A.; ... **Fiorentino, C.** et al. (2013) The Design of New Knowledge Environments. Panel / Paper for the *Digital Humanities annual international conference*, University of Nebraska–Lincoln, July 2013.
18. Sinclair, S., Ruecker, S., ... **Fiorentino, C.** et al, and the INKE Research Group (2012). "Toward Tool Integration in a Digital Scholarly Environment." Participation in *the INKE Havana Gathering 2012: Research Foundations for Understanding Books and Reading in the Digital Age: E/Merging Reading, Writing, and Research Practices*.
17. Blandford, A., Faisal, S., **Fiorentino, C.** et al, and the INKE Research Group. (2012) "The Usability of Bubblelines: A Comparative Evaluation of Two Prototypes." Panel for the *Digital Humanities Conference 2012*, University of Hamburg, July 2012.
16. Blandford, A.; Brown, S; ... **Fiorentino, C.** et al (2012) "Designing Interactive Reading Environments for the Online Scholarly Edition" *The Digital Humanities DH2012 Conference*, July 2012, University of Hamburg, Germany
15. Ruecker, S., ... **Fiorentino, C.** et al (2011). "An Interdisciplinary Digital Humanities Project on Canadian Health Information Design (CHI)." *Osaka Symposium on Digital Humanities (OSDH2011)*. Osaka, Japan Osaka, Japan, Sept 12-14, 2011.
14. Ruecker, S., ... **Fiorentino, C.** et al (2011). "The Visual Representation of Time". *The Canadian Writing Research Collaboratory Conference*, Ryerson University.
13. Ruecker, S.; **Fiorentino, C.** et al; and the INKE Research Group (2010). The Design of Bubblelines. *Society for Digital Humanities/ Société pour l'étude des médias interactifs annual conference / 2010 Congress of the Social Sciences and Humanities*, University of New Brunswick, Fredericton.
12. Ruecker, S., Giacommetti, A.; **Fiorentino, C.** and the INKE Research Group (2010). "Showcase Browsing with Texttiles 2.0 and BubbleLines". *Research Foundations for Understanding Books and Reading in the Digital Age: Textual Methodologies and Exemplars*, Koninklijke Bibliotheek (National Library of the Netherlands), The Hague; in conjunction with the conference *Text & Literacy*.
11. Shiri, A., Ruecker, S., ... **Fiorentino, C.** et al (2010). Exploratory Interaction with Information through Visualization and Semantics: Designing a Visual User Interface Using the UNESCO Multilingual Thesaurus. *Canadian Association for Information Science CAIS/ACSI 2010 Conference*

10. Given, L.; Ruecker, S.; ... **Fiorentino, C.** et al (2010). Customizable Health Avatars. *Design Research Society annual conference DRS2010*, Montreal, Canada.
09. Given, L.; Ruecker, S.; **Fiorentino, C.** (2009) User Information for the Design of Visual Interfaces for Health Information and the Management of Complex Health Regimes. *Society for Digital Humanities/ Société pour l'étude des médias interactifs annual conference at the 2009 Congress of the Social Sciences and Humanities*, Carleton University.
08. Ruecker, S.; Radzikowska, M.; Michura, P.; **Fiorentino, C.** and Clement, T. (2009). Text as Image: Visualization components of Text Analysis Tools. *Society for Digital Humanities/ Société pour l'étude des médias interactifs annual conference at the 2009 Congress of the Social Sciences and Humanities*, Carleton University.
07. Ruecker, S; **Fiorentino, C.**, Bouchard, M. (2009). The Magic Circle: a new tool for visualizing information. Poster presented in the *DH09 Digital Humanities Conference*, University of Maryland, Washington DC
06. Paredes-Olea, M., Ruecker, S., **Fiorentino, C.**, & Forbes, F. (2008). Using an affordance strength approach to study the possible redeployment of designs for decision support visualization. *Advanced Qualitative Methods conference*. Banff, Canada 2009.
05. Sinclair, S., Macdonald, A., ...Radzikowska, M., Ruecker, S., Michura, P., **Fiorentino, C.**, et al. (2008). Late Nights at the Scriptorium: Interim Results from the Interface Cell of the MONK Project". *Canadian Digital Humanities Conference*. University of Oulu, Finland.
04. McDonald, A. Kumar, M. Bouchard, N. Giacometti, A.; Patey, M. Radzikowska, M., Michura, P. , **Fiorentino, C.** Ruecker, S. Plaisant, C. and Sinclair, S. (2008). Dozens of Little Radio Stations: Getting Technologies Talking in the MONK Workbench. *Chicago Colloquium on Digital Humanities and Computer Science 2008*
03. Ruecker S., **Fiorentino C.**, et al (2008). Visualizing Relative Wiki Contributions. *The Third Annual Chicago Colloquium on Digital Humanities and Computer Science; DHCS 2008*, November 1-3, 2008, Chicago, USA.
02. Ruecker, S., **Fiorentino, C.**, Michura, P., Radzikowska, M., Clement, T., & Sinclair, S. (2008). Slot Machines, Graphs, and Radar Screens: Prototyping List-based Literary Research Tools. *Theoretical Studies Review*, Prague, Czech Republic
01. Ruecker, S., **Fiorentino, C.**, Michura, P., Radzikowska, M., Clement, T., & Sinclair, S. (2007). "Dial R for Research", "A text is a string of words", and "The Novel as Slot Machine." *SDH / SEMI Society of Digital Humanities Conference*, University of Saskatchewan

Awards & scholarships [Total of \$168,000 awarded]

2019 Social Sciences and Humanities Research Council of Canada –SSHRC Doctoral Fellowship

2019 President's Doctoral Prize of Distinction, University of Alberta Faculty of Graduate Studies and Research (FGSR)

2019 Alberta Spotlight Scientist, TELUS World of Science, Edmonton, Alberta

2019 Mary Louise Imrie Graduate Student Award, University of Alberta

2019 Human Ecology Doctoral Award, University of Alberta

2018 Queen Elizabeth II Graduate Scholarship, University of Alberta

2016, 2017, 2018 AGEWELL (NCE) Research Assistantships

2016 AGEWELL (NCE) Access Fund for HQP –High Qualified Personnel

2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018 Teaching & Learning Enhancement Fund – Professional Development. Office of the Provost and Vice-President, University of Alberta

2015 Faculty of Agricultural, Life & Environmental Sciences Support for the Advance Scholarship (SAS) Grant, University of Alberta

2015 Green & Gold Professional Development Grant, University of Alberta

2012, 2013, 2014, 2015, 2019, 2020 Professional Development & Travel Award from Centre for the Arts and Communication, Grant Macewan University.

2011 Conference Travel Award from Faculty of Agricultural, Life & Environmental Sciences and the Vice-President Research of the University of Alberta.

2008 “The Magic Circle: a new tool for visualizing information”. First place in the “Best Idea for New Tool” category in the T-Rex digital humanities tool competition, organized by TADA Research Evaluation Exchange, McMaster University

2007 International Student Award, Department of Art & Design, University of Alberta

2006 Gordin Kaplan Travel Award, University of Alberta

2006 FGSR Research Abroad Award, University of Alberta

2006, 2015 GSA Professional Development Grant, Graduate Student's Association, University of Alberta

2005-2007 Faculty of Graduate Studies and Research FGSR Graduate Scholarship, University of Alberta

Professional design practice

2020 Interface Design for CanLink Thesis Finder Canada Project, University of Alberta

2016-2017 Visual Identity and web design for CAPS-CPCA UBC

2016 Visual Identity and interface design for Wayfinding application “Walkie” –eHub UofA

2016 Visual Identity system for Unicog –Agewell WP6

2015-present Visual Identity and interface design for Innova, Assistance Technology Precedent-based Tools –Agewell WP2.4

2014-present Visual Identity and promotional materials for Biomimicry Alberta Regional Network

2013-2014 Visual Identity, Print and web materials for Alberta Environmental Network

2007-2013 Design consultant on international projects for PIX design, Buenos Aires, Argentina. Clients include: Telia (Denmark), Copenhagen Airport (Denmark), WTPF (United Nations, Switzerland) and CTA (Chicago, US)

2006-2015 Contracts and collaborations at University of Alberta, involving visual communication design projects with Department of Human Ecology 2006-2015, School of Business 2010-2015, ERSC 2008-2010, Dimic Institute for Comparative and Cross Cultural Studies 2008-2009, Women Writing and Reading in Canada from1950 project canWWRfrom1950.org 2008, Visions Health Law Conference Banff 2007.

2010-2011 Advertising materials, publishing and conferences packages for the Edmonton Waste Management Centre of Excellence, City of Edmonton

2004-2006 co-founder and design director of PIX design+web+multimedia design bureau, based on Buenos Aires, dedicated to Corporate Identity, Webdesign and Motion Graphics.

2002-2006 design consultant for international projects in visual communication design

1992- 2006, Specialized in corporate Id. design programs for foreign trade clients

1997-2001 co-founder and design director of studio naab/fiorentino oriented to corporate id.

1997-2001 dedicated to motion graphics for cinema and tv.

1996-2001 dedicated to new supports in web and media for corporate clients.

1989-1992 Freelancer for corporate identity projects, packaging and editorial design

Other collaborations:

2009 Program for Sean Caufield & Roy Mills exhibition at the Art Gallery of Alberta: "Through Destination"

2007-2008 Design of Visual identity for Rideau Park School EPSB Elementary

2006 Catalog for "Decay", U of A Industrial Design Students Exhibition in New York

International projects, activities & professional development

2016 Participation in EPIC Design Innovation Workshop for dementia care organized by AgeWell in Quebec, July 2-8 2016

2016 Participation in Living Lights, 2nd. international Conference on Biophotonics, Scripps Institution of Oceanography at UC, San Diego CA, US

2015 Participation in the 2nd. Global Conference on Biomimicry at SXSWeco 2015 organized by The Biomimicry 3.8 Institute, Austin, TX US

2014 Participation in the 2nd. Annual Biomimicry Network Leader Community Gathering November 20-23, Ralston White Retreat Center, San Francisco, CA

2013 Participation in the 7th Education Summit and Global Conference on Biomimicry organized by The Biomimicry 3.8 Institute, Boston, Mass. US

2011 Participation in the Biomimicry in Higher Education webinar organized by The Biomimicry 3.8 Institute

2008 Participation in the AIGA Social Studies Conference, Baltimore, US

2002-2007 Design Consultant for WTPF-UNCTAD, World Trade Point Federation under the United Nations Conference on Trade and Development Program

2004-2005 Pix series of presentations about Design Motion Graphics for the Argentine-British, Argentine-French and Argentine-Danish Chambers of Commerce, lectures given in Buenos Aires and San Juan, Argentina.

2004 Design direction of WTPF-UNCTAD Website Project, Hamburg, Germany

2003-2004 Design support for WTPF-UNCTAD, Saxony, Germany

2000 Participation in the How Design Conference, Atlanta, Georgia, US

1992-1997 Management and design of exhibitions for municipal and provincial Government in Buenos Aires, projects applied in international trade shows in South America

2020 Living Colours: A Structural Colour Exhibition. Installation created with Dr. Tomislav Terzin, presented at Augustana Jan-Mar, 2020, Augustana Campus Library, University of Alberta.



2015 Living Colours: A Biomimetic approach to inform and inspire Design. Mixed media on current doctoral research, presented at Design Latitudes May-June, 2015, FAB Gallery, University of Alberta.

2012 An Interdisciplinary Digital Humanities Project on Canadian Health Information Design (CHI). Interface Design project exhibited at InSight: Visualizing Health Humanities exhibition, May-June, 2012, FAB Gallery, University of Alberta.

2008 Masters' Thesis showcase "Design for Sustainability", Fine Arts Building and Enterprise Square, University of Alberta

2006 The SDA (Student Design Association) of the University of Alberta Exhibition. Vancouver, B.C. Work exhibited: Information design & Visual rhetorics

