## Curriculum vitae PROF. LUCIA PIETRONI

School of Architecture and Design - University of Camerino

Full Professor in Industrial Design (SSD ICAR/13) at the School of Architecture and Design "Eduardo Vittoria" of the University of Camerino (Unicam); Architect, graduated cum laude at the Politecnico of Milan; PhD in Environmental Design at the University of Rome "La Sapienza". Teaches "Design for Sustainability" at the Bachelor's Course in Industrial and Environmental Design, of which, from 2011 to 2015, she has been Coordinator; and "Design for Innovation" at the Master's Course in Computational Design of the University of Camerino. Since 2007 she is Director and Member of Scientific Committee of Master in "Eco-design & Eco-innovation. Strategies, methods and tools to design and to develop sustainable products" and since 2017 she is Member of Scientific Board of the PhD course in "Architecture, Design, Planning" and Coordinator of the PhD Curriculum in "Innovation Design" at the School of Advanced Studies of Unicam.

Her research activities have always focused on the deepening of environmental issues related to the Design and Eco-innovation of industrial products, with particular interest in the application of innovative methodologies, techniques and tools for the development of Sustainable Design and of Design-driven Innovation Processes. She has participated, with roles of principal investigator and scientific coordinator and responsible, in national and international research projects, funded by competitive grants and contracts for third parties. She has received awards for her scientific activities to promoting technology transfer and the creation of innovative start-up (2009-2nd prize in the "Research Ideas for Business" competition, organized by Unicam and selection for the "Progetto Impresa", promoted by the Impat Consortium of Bologna; 2012-Italy Biennial Award of Design Events organized by the University of Genoa; 2015-Second special mention at the International Bio-inspired Design Competition, promoted by the VisionArtech company; 2018-Selection in the book "100 Italian Circular Economy Stories", a research project by Enel and the Symbola Foundation, etc.). Furthermore, she has obtained, as an inventor, more than 10 patents for utility invention and design models, realized in partnership with some different enterprises. She has participated in numerous conferences in Italy and abroad and she has coordinated and directed many national and international seminars, conventions and workshops on eco-design and eco-innovation issues. She is author of more than 200 publications (books, articles and papers) on topics of design, sustainable design and eco-innovation, design-driven innovation processes, including also scientific journals in "class A" and she has collaborated and she collaborates yet, also as Member of the Scientific and Editorial Committee, with national and international journals (DIID, MD Journal, Op.Cit., Scienze e Ricerche, etc.). She was also Scientific Director of the International Biennial of Design (BID) – Edition "0" – "Laboratorio di idee per l'innovazione e il futuro" (21 April-15 July 2010) and, from 2014 to 2016, she was Scientific Coordinator of the project "DCE-Distretto Culturale Evoluto del Piceno. Il Design del Bello, Buono e Benfatto", cofunded by the Marche Region and developed by a public-private partnership (11 partners: Institutions and SME's). From 2015 to 2018, she was President of Industrial Design Association (ADI) "Marche Abruzzo Molise" section (ADI MAM) and now she is Member of ADI MAM Steering Committee. Since 2013 she is co-founder member and President of EcodesignLab Srl, an academic spin off of the University of Camerino, situated at the School of Architecture and Design, that provides integrated ecodesign services to SME's of different manufacturing sectors. (Furniture, Domestic Appliances, Packaging, Automotive, Consumer Electronic Products, etc.). In 1996, she was co-founder of Rapi.Rete, a network of Italian University researchers on Environmental Requirements of Industrial Products and Sustainable Design and now she is Member of LeNS-Italia in the LeNSin project - International Learning Network on Sustainability, an EU funded project, that involves 36 Universities from Europe, Asia, Africa, South America and Central America, aiming at the promotion of a new generation of designers and educators capable to effectively contribute to the transition towards a sustainable society for all. Finally, since 2018 she is a Member of Scientific and Steering Committee of SID-Italian Society of Design, a scientific society of Italian University Researchers of Industrial Design. Her main research fields are: Industrial and Product Design, Sustainable and Bio-inspired Design, Eco-design and Eco-innovation, **Design-driven Innovation Processes.** 

Principal investigator, scientific coordinator and responsible for many research projects (R&D and R&I), developed in partnership with Universities, Research Centres, Institutions and Companies, including the following:

- "S.A.F.E. Sustainable Design of Anti-seismic Furniture as Smart Life-saving Systems during an Earthquake", an industrial research project co-funded by the MIUR-PON R&I 2014/2020, in according to D.D. 13/07/2017 n.1735 - Specialization Area: "Design, Creatività e Made in Italy", involving a public-private consortium of three Universities (UNICAM, UNIVAQ, UNIBAS) and eight companies operating in wood and furniture manufacturing sector (AZ Ufficio, Vastarredo, Camillo Sirianni, Styloffice, ICAM, COSMOB) and in ICT sector (Santer Reply, Filippetti), with support of FederlegnoArredo, Protezione Civile, ADI-Associazione per il Disegno Industriale, ENEA (SSPT-MET-ISPREV); Lead Partner: UNICAM; Duration: 42 months (June 2018/December 2021) - (Personal engagement: Scientific Coordinator and Project Leader).

The project S.A.F.E. is aimed at the design, development and industrial realization of "anti-seismic" systems, smart and "life-saving" furnishings for schools and offices in case of earthquake, by integrating different technical and scientific knowledge and skills, such as Industrial Design, Structural Engineering, Computer Science and Chemistry. The challenge for scientific, technological and industrial research is to innovate, through a structural perspective, the design of sustainable furniture that are used in the schools and offices and transform them in smart passive-safety systems, to contribute to the protection of life and - through the development and integration of sensors and a IT platform for management – to make them able of the localization and retrieval of people in the event of a crash during an earthquake, also improving their performance in terms of safety, environmental sustainability and healthiness. http://www.safeproject.it

- "DCE-D<sup>3B</sup>". Distretto Culturale Evoluto del Piceno. Il Design del Bello, del Buono e del Benfatto" – an research project, co-funded by the Marche Region, in according to Delibera della Giunta Regionale Marche n. 1426 del 14/10/2013, and it was developed by a public-private consortium of eleven partners (Institutions and Enterprises); Lead Partner: Consorzio Universitario Piceno; Scientific Coordinator: UNICAM; Duration: 28 months (March 2014/July 2016) – (Personal engagement: Scientific Coordinator and Project manager). http://dcepiceno.it/dce-d3b/

The main goal of the research project, based on the idea that the design and the creativity represent two potential drivers of the territorial socio-economic development and of the economic exploitation of Cultural Heritage, tangible and intangible, of the Piceno, of Marche Region and National territory, has been to regenerate and innovate, through the design skills and actions, organized in cluster of public and private partners, the traditional Cultural Heritage, such as the museums, the agri-food and wine-making goods, the artisanal manufacturing.

"Ideazione e sviluppo di un packaging eco-sostenibile per un prodotto lattiero-caseario destinato ai bambini", an industrial research project co-funded by the Marche Region (POR Marche FESR 2007-2013
Intervento 1.2.1.05.08), in the context of "SPECI.AL.ITALIA. Specialità Alimentari Italiane", an cluster project for innovation, coordinated by Sabelli SpA and carried out by four agri-food companies (Sabelli SpA, Trivelli Tartuf Srl; Ecos Srl; L'Ascolana Srl); Lead Partner: Sabelli SpA.; Duration: 12 months (May 2013/May 2014) – (Personal engagement: Scientific Coordinator).

The main goal of the research project has been to design and develop a new concept of sustainable and bio-degradable packaging for small cheese for kids, 100% Made in Italy and produced by Sabelli SpA.

## Main scientific publications in the last years

- L. Pietroni, L. Cutaia, R. Scialdoni, Scenari di miglioramento delle prestazioni ambientali di imballaggi per CD/DVD tramite metodologia LCA, in S. Scialbi, A. Dominici Loprieno (a cura di), VI Convegno della Rete Italiana LCA. Dall'Analisi del Ciclo di Vita all'Impronta Ambientale: percorsi ed esperienze a confronto, ENEA, Roma 2012, ISBN 9788882862671, pp. 63-69.

- L. Pietroni, J. Mascitti, Biomimetic Materials for Design, in H. Bartolo et al., Green Design, Materials and Manufacturing Processes, Proceedings of the 2<sup>nd</sup> International Conference on Sustainable Intelligent Manufacturing, Lisbon, June 26-29 2013, CRC Press, Taylor & Francis Group, London UK, 2013, ISBN 978-1-138-00046-9, pp. 579-582.

- L. Pietroni, J. Mascitti, R. Scialdoni, Benefici ambientali derivanti dall'applicazione di criteri di Life Cycle Design e della metodologia Life Cycle Assessment nella progettazione e sviluppo di una linea di accessori per ufficio, in S. Scalbi e A. Dominici Loprieno (a cura di), Atti del VIII Convegno della Rete Italiana LCA, Firenze 19-20 giugno 2014, ENEA, Roma 2014, ISBN 978-88-8286-306-7, pp. 15-22.

- L. Pietroni, Gli oggetti "usa e getta": l'ipertelia, in AA.VV., "Op.cit." 50 anni della rivista 1964-2014, n. 151, Electa Napoli, settembre 2014, ISBN 88-510-0097-2, pag. 53-64.

- L. Pietroni, Bio-inspired Design. La Biomimesi come promettente prospettiva di ricerca per un design sostenibile, in "Scienze e Ricerche", n. 4, febbraio 2015, ISSN 2283-5873, pp. 18-20.

- L. Pietroni, Il design impara dalla natura. Coralhex, il parastinchi ispirato ai coralli, in "Mappe", n. 7, febbraio 2016, Gagliardini Editore, ISSN 2282-1570, pp. 134-135.

- L. Pietroni, J. Mascitti, Superfici biomimetiche. I materiali bioispirati per un design sostenibile e rigenerativo, in "MD Journal", "Involucri sensibili. Integumentary Design" n. 1, luglio 2016, Media MD, ISSN 2531-9477 (online), ISBN 978-88-940517-5-9 (print), pp. 66-77.

- L. Pietroni, J. Mascitti, Servizi di eco-design su misura per un'innovazione sostenibile, in L. Chimenz, R. Fagnoni, M. B. Spadolini (a cura di), Design su Misura. Atti dell'Assemblea annuale della Società Italiana di Design, SID, Genova 2018, ISBN 978-88-943380-8-9, pp. 283-293.

- L. Pietroni, Designing for water sustainability, in "Area", n. 157 +, "Water", supplemento al n. 157, aprile 2018, DCB Bologna, ISSN 9-770394-005011, pp. 8-11.

- L. Pietroni, F. O. Oppedisano, C. Vinti, Design per la valorizzazione del territorio piceno e dei suoi patrimoni culturali: il progetto DCE-D3B, in M. Parente, C. Sedini, D4T Design per i territori. Approcci, metodi, esperienze, LISt Lab, Trento 2018, ISBN 9788899854614, pp. 267-277.

- L. Pietroni, J. Mascitti, Oltre il biomorfismo: l'approccio bioispirato, in Op. cit., n. 165, maggio 2019, ISSN 0030-3305, pp. 51-65.

- L. Pietroni, D. Galloppo, J. Mascitti, Design strategies for the development of life-saving furniture systems in the event of an earthquake, in "WIT Transactions on The Built Environment" a cura di G. Passerini, F. Grazia e M. Lombardi, WIT Press, vol. 189, Southampton (UK), 2019, ISBN 978-1-78466-351-3, pp. 67-77.

- L. Pietroni, J. Mascitti, D. Galloppo, A. Dall'Asta, A. Zona, F. Scozzese, B. Re, F. De Angelis, C. Di Nicola, S. Scuri, Design industriale, ingegneria strutturale, informatica e chimica per lo sviluppo di sistemi di arredo con funzione salva vita in zona sismica, in "XVIII Convegno ANIDIS - L'Ingegneria Sismica in Italia, Ascoli Piceno, 15-19 Settembre 2019, Pisa University Press, Pisa, 2019, sezione "Ricerca Industriale sulla prestazione sismica degli elementi non strutturali - SS04, pp. 43-50.

- L. Pietroni, J. Mascitti, D. Galloppo, S.A.F.E. Design sostenibile di sistemi di arredo intelligenti con funzione salva-vita durante eventi sismici, in AA.VV. (a cura di), 100 Anni dal Bauhaus. Le prospettive della ricerca di design, Atti dell'Assemblea SID 2019, Società Italiana di Design, Torino, Ottobre 2020, ISBN 9788-89-43380-2-7, pp. 144-153.

- L. Pietroni, B. Pollini, J. Mascitti, D. Paciotti, Toward a New Material Culture: Bio-inspired Design, Parametric Modelling, Material Design, Digital Manifacture, in AA.VV. (a cura di), Design in the Digital Age, Maggioli Editore, Sant'Arcangelo di Romagna, 2020, ISBN 978-88-916-4327-8, pp. 208-213.

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Lucia Pietroni