

Curriculum Vitae

Ellen VAN OBBERGHEN-SCHILLING, Research Director Inserm DR1

Group leader, Institute of Biology Valrose (iBV) (CNRS - Inserm – UCA)

Université Côte d'Azur, Nice, France

Tel +33 (0)489 15 0790 or +33 06 75 08 1746

E-mail vanobber@unice.fr

Degrees

Bachelor of Science (Biology Honors) Purdue University, West Lafayette IN, USA (1978)

PhD (Doctorat d'Etat ès-Sciences) University of Nice, France (1985)

Career/Employment

1990-present Directeur de Recherche Inserm (DR1 since 2005)

1982-1990 Chargée de Recherche Inserm

1985-1988 Staff Fellow (post-doc), Laboratory of Chemoprevention, NCI, National Institutes of Health, Bethesda, MD, USA

1995-present Team Leader (Inserm Team) [*Adhesion Signaling and Stromal Reprogramming in the Tumor Microenvironment*](#)

Awards

2019-2023 Chair, 3IA Université Côte d'Azur

2001 Inserm Research Award in Physiology/Pathology

1996 Young Scientist Award (Fondation pour la Recherche Médicale)

1991 Prix Exceptionnel, Groupe d'Etudes sur l'Hémostase et la Thrombose

Translational Research

Contrat d'Interface (2003-2010), Contrat Hospitalier de Recherche Translationnelle (2010-2013) INSERM-Centre A. Lacassagne; Co-PI, biological arm of multi-center clinical trials in HNSCC (CARISSA, TOPNIVO)

Scientific Evaluation Committees

- HCERES Evaluation committee (2016, 2020 Co-chair)
- INCa PLBIO (2012-13 Co-chair), INCa PLBIO (2018)
- INSERM Commission Scientifique Spécialisée (CSS2) (2008-2012)
- Scientific Advisory Board Member, Unit of Signal Transduction, GIGA-R, Liège, Belgium (2009-2010)
- Scientific Advisory Council, Association for International Cancer Research (currently Worldwide Cancer Research) (2005-2009)
- National Scientific Commission (CN4) ARC (1999-2005)

Scientific Councils

- Steering Committee, Translational Research (Co-president), Unicancer Head & Neck Group (since 2019)
- Scientific Council Member, Biological Resources Center, Centre Antoine Lacassagne (since 2018)
- Steering Committee, Nice University Interdisciplinary Axis: Physics of living matter (2015-2018)
- Scientific Council Member - University Nice Sophia Antipolis Faculty of Medicine (since 2014)
- Scientific Council Member, Ile-de-France Région (2011-2015)
- Scientific Advisory Board Member, Unit of Signal Transduction, GIGA-R, Liège, Belgium (2009-2010)
- Scientific Council Member Cancéropôle PACA (2007-2018)
(Co-responsible AxeB, 2007-2010; Co-responsible Axe III, 2011-2015)
- Board of Directors Cancéropôle PACA (CNRS representative) Since 2007
- Council of the Doctoral School, University Nice Sophia Antipolis (2000-2004)
- Comité de Coordination de la Recherche Biomédicale des Alpes-Maritimes Member (2001-2006)

Networks and Career-related Activities

- Coordinator, FITMANET PAIR-VADS - FITMANET network (2011-2015)
- Scientific Coordinator, iBV Experimental Histopathology Facility (since 2014)
- Co-leader, Workpackage Head & Neck Diseases, FHU OncoAge (AVISAN label November 2015)
- Participating Team, Labex (Laboratory of Excellence) SignalLife (since 2012)

Research Interests

(past) Description of the first genetic defect in insulin and insulin-like growth factor receptors; mitogenic signaling by α -thrombin; cloning/mutagenesis of TGF- α and - β ; Cloning/downstream signaling of the PAR-1 G protein-coupled α -thrombin receptor

(present) Integrin-based signaling and stromal reprogramming in the tumor microenvironment

Selected Meeting Presentations & Seminars (past 5 years)

2020- EMEA DP & AI Congress Preconference Workshop (Akoya Biosciences): Revealing Spatial Biology on Every (Webinar, 2 December 2020)

2019 - European Association of Cancer Research Conference Series, "Goodbye Flat Biology: Advancing 3D-based Models for Cancer Biology and Drug Discovery" (Berlin, Germany)

- Imaging in Cancer: Multimodal Analyses (Nice, France)

- PerkinElmer-Phenotypics User Group Meeting (Uppsala, Sweden)

- Indica Labs - HALO User Group Meeting (Paris, France)

- Gordon Research Conference Fibronectin, Integrins & Related Molecules (Il Ciocco, Italy)

2018 - Harvard Medical School (Boston, MA, USA)

- EACR Conference Series, "Goodbye Flat Biology: In Vivo Inspired Cancer Biology and Therapy" (Berlin, Germany)

- 5th International Geneva Diabetes Centre Symposium (Geneva, Switzerland)

2017 - Annual Meeting of the French Cancer Society (Paris, France)

- Collège de France (Paris, France)

- Comité de réflexion en cancérologie ORL (Nice, France)

- Annual Seminar of the Cancéropôle PACA (St Raphaël, France)

2016 - Engineering Conference International (ECI) "Nanotechnology in Medicine: from molecules to humans" (Hernstein, Austria)

- EACR Conference Series, "Goodbye Flat Biology: Models, Mechanisms & Microenvironment (Berlin, Germany)

- INCa Séminaire de Restitution PAIR-VADS (Paris, France)

2015 - 23rd Annual Meeting of the French Matrix Biology Society (plenary lecture) (Lyon, France)

- Gordon Research Conference on Fibronectin, Integrins & Related Molecules (Il Ciocco, Italy)

- 7th Thematic Meeting of ProteoPACA on « Cancer & Proteomiques » (Marseille, France)

Meeting Organization/Co-Organization (past 5 years)

Joint French-German meeting for Matrix Biology (May 26-28, 2021) ; 2021 IEEE International Symposium on Biomedical Imaging Clinical Day : "AI-based approaches to biomedical image analysis in cancer". Nice, France (April 13, 2021); SophIA Summit (2019, 2020, Sophia Antipolis, France); Chair, European Association of Cancer Research Conference Series, "Goodbye Flat Biology: Advancing 3D-based Models for Cancer Biology and Drug Discovery" (2019, Berlin, Germany); Imaging in Cancer: Multimodal Analyses (2019, Nice, France); EACR Conference Series, "Goodbye Flat Biology: In Vivo Inspired Cancer Biology and Therapy" (2018, Berlin, Germany); Mini-workshop FHU OncoAge, (2017, Nice, France); Annual Meeting of the French Society of ECM Biology, (2017, Marseille, France); Journée Scientifique « Apports en cancérologie de l'imagerie » (2017, Marseille, France); EACR Conference Series, "Goodbye Flat Biology: Models, Mechanisms & Microenvironment" (2016, Berlin, Germany); SIGNALIFE Mini-symposium "Signaling in health and disease" (2015, Nice, France)

Research Supervision

8 Master Students, 12 PhD Students, 11 Post-doctoral fellows (from France and abroad)

Participation in 27 PhD thesis juries and 4 HDR juries since 2010

Publications: (past 5 years) of 97 publications in international peer-reviewed journals (H-index=40)

Veracini L, Grall D, Schaub S, Beghelli-de la Forest Divonne S, Etienne-Grimaldi M-C, Milano G, Bozec A, Babin E, Sudaka A, Thariat J and Van Obberghen-Schilling E. (2015) Elevated Src family kinase signaling stabilizes E-cadherin-based junctions and collective movement of head and neck squamous cell carcinomas. *Oncotarget* 6:7570-83.

Thariat J, Vignot S, Lapiere A, Falk A, Guigay J, Van Obberghen-Schilling E, Milano G. Integrating genomics in head and neck cancer treatment: promises and pitfalls. *Critical Reviews in Oncology/Hematology Crit Rev Oncol Hematol.* (2015) Apr 18. doi: 10.1016/j.critrevonc.2015.03.005.

- Soubies E, Schaub S, Radwanska A, Van Obberghen-Schilling E, Blanc-Feraud L, Aubert GA Framework for Multi-Angle TIRF Microscope Calibration, 2016 IEEE International Symposium on Biomedical Imaging
- Sakakini N, Turchi L, Burel-Vandenbos F, Bergon A, Holota H, Rekima S, Lopez F, Paquis P, Almairac F, Fontaine D, Baeza-Kallee N, Van Obberghen-Schilling E, Junier M-P, Chneiweiss H, Figarella-Branger D, Imbert J* and Virolle*. (*equal contribution) EGR1 transcriptionally regulates the miR-18a* network to promote glioblastoma stem cell proliferation and self-renewal. *J Biol Chem.* (2016) Mar 21. pii: jbc.M116.720698
- Rupp T, Langlois B, Koczorowska MM, Radwanska A, Sun Z, Hussenet T, Lefebvre O, Murdamoothoo D, Arnold C, Klein A, Biniossek ML, Hyenne V, Naudin E, Velazquez-Quesada I, Schilling O, Van Obberghen-Schilling E, Orend G. Tenascin-C Orchestrates Glioblastoma Angiogenesis by Modulation of Pro- and Anti-angiogenic Signaling. *Cell Rep.* 2016 Dec 6;17(10):2607-2619. doi: 10.1016/j.celrep.2016.11.012. PMID: 27926865
- Gopal S*, Veracini L*, Grall D, Butori C, Schaub S, Audebert S, Camoin L, Baudelet E, Radwanska A, Beghelli-de la Forest Divonne S, Violette SM, Weinreb PH, Rekima S, Ilie M, Sudaka A, Hofman P and Van Obberghen-Schilling E. Fibronectin-guided migration of carcinoma collectives. *Nat Commun.* 2016 7, 14105 doi: 10.1038/ncomms14105. PMID: 27926865
- Degli Esposti D*, Sklias A, Lima SCS, Beghelli-de la Forest Divonne S, Cahais V, Fernandez-Jimenez N, Cros M-P, Ecsedi S, Cuenin C, Bouaoun L, Byrnes G, Accardi R, Sudaka A, Giordanengo V, Hernandez-Vargas H, Felipe Ribeiro Pinto L, Van Obberghen-Schilling E* and Herceg Z*. Unique DNA methylation signature in HPV-positive head and neck squamous cell carcinomas. *Genome Med.* *co-corresponding authors *Genome Med.* (2017) 9:33.
- Radwanska A, Grall D, Schaub S, Beghelli-de la Forest Divonne S, Ciai, D, Sudaka A, Rekima S, Rupp T, Orend G and Van Obberghen-Schilling E. (2017) Counterbalancing anti-adhesive effects of Tenascin-C through fibronectin expression in endothelial cells. *Sci Rep.* Oct 6;7(1):12762. doi: 10.1038/s41598-017-13008-9.
- Grapa AI, Meunier R, Blanc-Féraud L, Efthymiou G, Schaub S, Radwanska A, Van Obberghen-Schilling E and Descombes X. (2018) Classification of fibronectin variants with curvelets IEEE International Symposium on Biomedical Imaging.
- Soubies E, Radwanska A, Grall D, Aubert GA, Blanc-Feraud L, Van Obberghen-Schilling E and Schaub S. Nanometric axial resolution of fibronectin assembly achieved with an efficient reconstruction approach for multi-angle-TIRF microscopy *Sci Rep.* 2019 Feb 13;9(1):1926.
- Soubies E, Blanc-Feraud L, Schaub S. and Van Obberghen-Schilling E. Improving 3D MA-TIRF reconstruction with deconvolution and background estimation. 2019 IEEE International Symposium on Biomedical Imaging
- Hofman P, Ayache N, Barbry P, Barlaud M, Bel A, Blancou P, Checler F, Chevillard S, Cristofari G, Demory M, Esnault V, Falandry C, Gilson E, Guérin O, Glaichenhaus N, Guigay J, Ilié M, Mari B, Marquette CH, Paquis-Flucklinger V, Prate F, Saintigny P, Seitz-Polsky B, Skhiri T, Van Obberghen-Schilling E, Van Obberghen E and Yvan-Charvet L. The OncoAge consortium. Linking aging and oncology from bench to bedside and back again. *Cancers Cancers (Basel).* 2019 Feb 21;11(2). pii: E250. doi: 10.3390/cancers11020250.
- Grapa AI, Blanc-Féraud L, Van Obberghen-Schilling E and Descombes X. (2019) Optimal Transport vs Many-to-many assignment for Graph Matching GRETSI 2019 | 27th Symposium of the Signal and Image Processing Study Group
- Efthymiou G, Saint A, Ruff M, Rekad Z, CiaisD and Van Obberghen-Schilling E. Shaping Up the Tumor Microenvironment with Cellular Fibronectin. *Front Oncol.* 2020 Apr 30;10:641. doi: 10.3389/fonc.2020.00641.
- Spénlé C, Loustau T, Murdamoothoo D, Erne W, Beghelli-de la Forest Divonne S, Veber R, Bourdely P, Mörgelin M, Brauchle E-M, Cremel G, Randrianarisoa V, Camara A, Rekima S, Schaub S, Nouhen K, Imhoft T, Hansen U, Paul N, Carapito R, Pythoud N, Hirschler A, Carapito C, Dumortier H, Mueller C, Koch M, Schenke-Layland K, Kon S, Sudaka A, Anjuère F, Van Obberghen-Schilling E, Orend G Tenascin-C orchestrates an immunosuppressive microenvironment in oral squamous cell carcinoma *Cancer Immunol Res.* 2020 Jul 14:canimm.0074.2020. doi: 10.1158/2326-6066.CIR-20-0074.
- Efthymiou G, Radwanska A, Grapa A-I, Beghelli-de la Forest Divonne S, Grall D, Schaub S, Hattab M, Poet M, Pisani D, Counillon L, Descombes X, Blanc-Feraud L and Van Obberghen-Schilling E Alternatively-spliced extra domains confer topographically and functionally distinct features to fibronectin. *Journal of Cell Science* 2021 : jcs.252957 doi: 10.1242/jcs.252957 Published 1 February 202197
- Saint A and Van Obberghen-Schilling E. The role of the tumor matrix environment in progression of head and neck cancer. *Current Opinion in Oncology* (in press)