Family name (surname) : **CUSSENOT** First/other names : **Olivier/**Jean Louis Henri Date of birth : 01/10/1960 Place and country of birth: Epinal, 88, France

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A-DEGREES/CERTIFICATES OBTAINED

- Bachelor's degree in sciences (1976)
- MD Faculty of Medicine University Paris-11 (1986).
- PhD, University Paris -5 (1988)
- « Habilitation à diriger des recherches» degree (1995) University Paris-7
- Qualified (National certification) in general surgery (1991), urology (1991), oncology (1994) & medical genetics (2000).

Other degrees/certificates obtained:

- Master's degree in Ethnology (Anthropology) University Paris-1 Sorbonne, 1985.
- Master's degree in Human Paleontology University Aix-Marseille 2, 1985.
- Postgraduate diploma in vascular surgery Sorbonne university, 1988.
- Badge hospital management and medical sciences MINES ParisTech, 2019

B-POSITIONS HELD

B.1 CURRENT POSITION

- Full professor (Anatomy/Urology) at Sorbonne University Paris
- Head of the translational Research Unit "Predictive Onco-Urology". Institute of cancerology and Sorbonne center for Artificial Intelligence (SCAI) Sorbonne University
- Visiting professor Nuffield Department of Surgical Sciences, University of Oxford

B.2 POSITIONS HELD

- Succeeded in the competition for Resident at the "Assistance Publique Hôpitaux de Paris" (1983)
- Military service (1984)
- Resident at the « Assistance Publique Hôpitaux de Paris » (1984-1988)
- Chief resident in Urology, Assistance-Publique- Hôpitaux de Paris (1988-1993)
- Senior lecturer-consultant, Anatomy/Urology, Assistance-Publique- Hôpitaux de Paris (1993-1996)
- Full Professor, second class, Anatomy/Urology, Head of the department of Anatomy-Histology-Embryology. University Paris-7 Assistance-Publique- Hôpitaux de Paris (1996-2001).
- Full Professor, first class, Anatomy/Urology, Sorbonne University, Assistance-Publique- Hôpitaux de Paris (2011).
- Full Professor, exeptional class, Anatomy/Urology, Sorbonne University, Assistance-Publique-Hôpitaux de Paris (2020).
- Head of the Department of Urology Academic Hospital Tenon Site (APHP-Sorbonne University) 2014-2021

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B.3. EXPERTISES FOR CARE

- Kidney transplantation and remplacement surgery for urologic cancers
- Focal therapies (HIFU, IRE) for prostate cancers
- Oncogenetic and prevention for prostate cancers
- Endocrine and targeted therapies for the management of prostate cancers

C-ACTIVITIES IN CIVIL, PROFESSIONAL, PUBLIC OR INTERNATIONAL AFFAIRS

C.1 DIRECTOR OF RESEARCH UNITS AND GROUPS

(Granted each five years according to National Research Agency's evaluation)

OC combines over 20 years in general surgery, urology, oncology and medical genetics, applied his "from genes to patient" approach to generate insights about the correlations between genetic, environmental factors, early diagnosis and personalized prevention strategies. He has been using Artificial Intelligence to assess disease 'risk early onset and has developed decision support tools for cancer management. He raised to date over €10 million in peer-reviewed academic grants.

- Unit University Paris-7 « Genetic and molecular pathology of urologic tumors » 2000/2005; 2001/2006
- Unit Sorbonne university « Onco-Urology in the Group on « Interactionsof tumor cells and their environment, responses to anticancer agents » 2007/2013
- Group on translational Research, Sorbonne university named "Semiotic analysis of molecular data in clinical onco-urology". 2013-2018.
- Group on translational Research, Sorbonne UniversityUniversity Paris named "Predictive onco-urology". since 2018

<u>C.2 GRANTED RESEARCH PROGRAMS</u> : As Principal investigator (PI) or leader of Team partnership (LP).

The programs listed below are academic or institutional, submitted to peer review and approved by independent committees. OC have been also involved as principal investigator or as co-investigator, in clinical trials or intervention studies sponsored by pharmaceutical industries.

C.2.a Completed programs :

- Concerted Action BIOMED2 N°CT96 Gene Therapy for Prostate cancer. Cussenot (PI). 1996-2000.
- National Transfer Technology Program (MRT). Cussenot (PI). 2000-2002. Development of cell and tissue specific vectors for gene therapy of prostate cancer."
- Public Health Network INSERM on Epidemiological Genetics of Prostate Cancer. Cussenot (PI). 1997-2001.
- PHRC 2003-2012. Cussenot (PI). 01/01/2003-01/01/2012. Bladder cancer diagnosis from molecular markers in urines (The major goal of this project was to validate urinary molecular markers for diagnosis of bladder cancer)
- PHRCAOM06209. Cussenot (PI). 01/31/2007- 12/31/2011. Genetic predictors of aggressive residual prostate cancer after radical prostatectomy. (The major goal of this project was to identify genetic variants associated to recurrence after radical prostatectomy).
- PRIMA EU Contrat N° LSHC-CT-2004-504587. Schalken (PI); Cussenot (LP of partner 12).07/15/2004-07/15/2008. Prostate Cancer Integral Management Approach
- EURISMUS program. THALES (industry coordinator); Cussenot (LP of academic partner in urology).01/01/2007-08/31/2010. UV Endoscopy applied to early cancer detection (lung and bladder). (The major goal of this project is to develop technology for endoscopic diagnosis of bladder cancer based on autofluorescence induced by laser exposition).
- BIOTYPE Cluster Competitiveness Ile de France MEDICEN. IMSTAR (industry coordinator); Cussenot (PI-Academic).2006-2008. Cellular and molecular multidimensional biotyping for cancer diagnosis and prognosis.
- LDFKidney ANR program. Tualle (PI); Cussenot (LP of partner 2).2009-2012. Development of a new type of laser Doppler velocimeter based on optical interferometry for monitoring the infusion of organs or tissues.

- PHRC AOM09219. Cussenot (PI). 07/01/2010-12/31/2013. Impact of genetic factors on early diagnosis strategy for aggressive prostate cancers (prospective cohort from study PROGENE) (The major goal of this project is to identify genetic factors associated to aggressiveness of prostate cancer at diagnosis).
- CLINICAL ELLIPSE (Elucidating Loci Involved in Prostate cancer SuscEptibility) CONSORTIUM (CEC), NIH/NCI. Eeles (PI). 2010-2015.
- NCI U01-CA155309 Pooled Genome-Wide Analysis of Kidney Cancer Risk. Scélo (PI) (IARC). 01/01/2011-12/31/2014.
- NCI Prostate Specialized Program of Research Excellence (SPORE) Prostate Cancer Genetics Working Group (GWG). Catalona / Cooney/ J. Stanford (Pis).
- Cancer Genetic Markers of Susceptibility consortium (CGEMS). Chanock (PI) (NIH/NCI). (The major goal of this project is to identify common genetic variants that affect a person's risk of developing cancer).
- NCI 5U01 CA089600-06 Prostate Cancer Susceptibility: The ICPCG Study. 12/01/2000-08/31/2013. Isaacs (PI); Cussenot (LP of Partner 10) 12/01/2000-08/31/2012. (The major goal of this project is to identify genes intervening in the susceptibility to hereditary prostate cancer by performing combined molecular and statistical analyses based on DNAs collected by different groups).
- PAIR²⁰¹⁰ Mitigation of risk of prostate cancer in high risk populations. Eisinger (PI); Cussenot (LP of partner 2).2011-2013.
- STIC²⁰¹⁰. Vlaeminck-Guillem (Biology PI); Cussenot (Clinical PI). Medico-economic evaluation of the use of PCA3 urine tests in the diagnostic strategy (PSA biopsies) of aggressive prostate cancers. 2012-2014.
- French program in the ICGC (International Cancer Genetics Consortium) project on Prostate Cancers, granted by INCA. Cussenot (PI). 2011-2013.
- European Institute of Innovation & Technology EIT Food4Health Consortium (LP) 2019

C.2.b On-going programs

- PROGENE cohort. Cussenot (PI). .Epidemio-genetic aspects of prostate cancer. (The major goal of this project is to identify genetic factors associated to the risk of prostate cancer). <u>http://cerepp.org/etude-progene/</u>
- HRPCall Cussenot (PI). Evaluation of multimodal strategy for early diagnosis of men at high genetic risk of prostate cancer. <u>https://www.e-cancer.fr/Institut-national-du-cancer/Appels-a-projets/Appels-a-projets-resultats/PHRC-K-2020</u>
- SMPP Metabolis syndrome and prostatic diseases. Cussenot (PI). <u>https://www.health-data-hub.fr/partenariats/smpp</u>
- IRCI : International Rare Cancers Initiative (CoPI: Rare urothelial (Griffiths/Cussenot)
 <u>https://www.cancerresearchuk.org/funding-for-researchers/how-we-deliver-research/our-research-partnerships/international-rare-cancers-initiative</u>
- PRACTICAL (Prostate Cancer Association Group to Investigate Cancer Associated Alterations in the Genome). Eeles/Kote-Jarai/Easton (LP). <u>http://practical.icr.ac.uk/blog/?page_id=19</u>
- Pan-Prostate Cancer Consortium (LP) <u>https://panprostate.org/members.html</u>

C.3 TEACHING ACTIVITIES

- With his current functions as a professor at the Sorbonne university, OC delivers courses to MD students on cancerology and Morphology.
- With his current functions as a research director at the institute of cancerology of the Sorbonne university, OC manages and supervises students involved in master and PhD degrees. https://www.theses.fr/052589293#directeurSoutenue
- As a director of theses successive research units, OC has directed PhD students (16), ten of them are now professors in Universities in France (Paris, Brest, Angers, Reims, Poitiers) and Canada (McGill Montreal), two are full qualified surgeon in an academic hospital, two hold executive positions in pharmaceutical companies.
 - As member of the Sorbonne Center for Artificial Intelligence (SCAI) OC leads course on translational artificial intelligence in predictive oncology and clinical research
- Involvement as a teacher in other courses.

- 3D anatomy and virtual dissection (Sorbonne university)
- Degree in oncogeriatry (Sorbonne university)
- Degree in oncogenetic. (Université Aix-Marseille II) and (University Paris-7)
- Master genetic counseling and predictive medicine (University Aix- Marseille II)
- Master Clinical Research (Sorbonne university)
- Degree in History of Medicine (courses on history of Urology) (University Paris-5)

multimedia and e-learning documents

Interactive CD on genetics and cancer Online Video teaching Anatomy Sorbonne University (EIA Digestive) Online Video teaching DESC Pathology (pathologie moléculaire) Online Video teaching oncogenetic and prostate cancer

Interactive Simulators (Artificial Intelligence)

Decision simulator for the diagnosis of prostate cancer Decision simulator for the treatment of prostate cancers

C.4 ORGANIZATIONAL FUNCTIONS IN NATIONAL HEALTH INSTITUTIONS OR UNIVERSITIES

- Chairman of the Strategic Research Clinic Group in onco urology at the French National Cancer Institute (INCa). 2009-2013.
- Member of the Strategic Management Steering Committee at the "Cancéropole Ile de France" 2010-2013.
- Chairman of the National Campaign for Prostate Integrated Researchat the INCa. [The Campaign Program for Prostate Integrated Research; Bull Cancer. 2010; 97(12):1497-8]
- Member of the Research Commission at INSERM 2007-2008.
- Member of the National Campaign for Research on kidney and urinary tract diseases at the INSERM [Renal and urinary tract disease national research program. NephrolTher. 2007 Jul;3(4):157-62].
- Throughout his career, OC has also nominated members of various scientific and educational committees at the school of medicine in University Paris-5; Sorbonne, Paris-7, and at the National veterinary school (ENVA MaisonAlfort).
- Member and referent in research for the Executive Committee of the DMU SAPERE (Academic Department at APHP Sorbonne University on abdomino-pelvic and renal specialties of adults and children)

Within the French National Agencies

- French National Cancer Institute (INCa) expert
- Biomedicine Agency expert
- French National Cancer Institute (INCa). Lead of the research urological cancers co-operator group
- National Food, Environmentand Labour Safety Agency (ANSES) expert
- Full member of the National Urological Surgery Qualification Board (Conseil National de L'Ordre de Médecins)

C.5 BIOETHICS

- Member then Chairman of the Institutional Review Board (IRB/CPP IDF 4) for the Protection of Persons included in clinical trials. 1998 -2006.
- Expertin bioethics at the European Commission (DG12) 1999-2001

C.6 GENERAL PUBLIC ACTIONS

- Chairman of the scientific board of the Patients association for prostate cancerANAMACaP: www.anamacap.fr/.
- Advisor for public press information or actions for research on cancer ("cussenot and cancer" on Google's web search engine)

C.7 HONORS

• Nominated as Member at the «Institut Universitaire de France». <u>http://www.iufrance.fr/</u>

D-SCIENTIFIC PRODUCTIVITY

D.1 PUBLICATIONS

More than 450 scientific articles referenced as "cussenot o" are available on "Pubmed" data search engine (373 in the field of cancer, including 209 in genetics). His publications have an "H" index of >75 and have been cited over >24.000 times. (https://scholar.google.com/)

D.2 EDUCATIONAL PUBLICATIONS, REVIEWS AND GUIDELINES

OC has written more than 60 Books, monographs or chapters in books.

D.3 PATENTS AND MODELS FILED

D.3.a Claims patented as inventor:

(<u>http://worldwide.espacenet.com/</u>) Patent search

- METHOD FOR IN VITRO DIAGNOSIS OF PROSTATIC CANCER AND KIT THEREFOR: WO0200929 (A1) 2002-01-03
- DETERMINING TOTAL OR NON-COMPLEXED PROSTATE-SPECIFIC ANTIGEN, USEFUL FOR DIAGNOSIS AND PROGNOSIS OF PROSTATIC CANCER, USING SPECIFIC ANTIBODIES IN SANDWICH ASSAY: FR2813394 (A1) 2002-03-01
- PROSTATIC CELL LINE AND USE THEREOF TO OBTAIN AN ESTABLISHED PROSTATIC CANCER IN AN ANIMAL US2003013191 (A1) — 2003-01-16
- USE OF SEMAPHORIN 3A FOR DIAGNOSING AND TREATING CANCER, ESPECIALLY PROSTATE CANCER: US2004152110 (A1) 2004-08-05
- PHARMACEUTICAL COMPOSITIONS FOR THE TREATMENT OF PROSTATE CANCER: WO2006085033 (A2) 2006-08-17
- PREDICTION METHOD FOR THE SCREENING, PROGNOSIS, DIAGNOSIS OR THERAPEUTIC RESPONSE OF PROSTATE CANCER, AND DEVICE FOR IMPLEMENTING SAID METHOD: US2011301863 (A1) 2011-12-08
- LOGICIEL (SOFTWARE) « MODULE UROLOGIQUE » RCP ASSISTANT: APP N°IDDN.FR.001.280044.000.S.P.2012.000.10800 2012-07-13
- METHOD FOR ANALYSING A SCATTERING SAMPLE USING A TIME-RESOLVED MEASUREMENT AND ASSOCIATED DEVICE: W02014001406 (A1) — 2014-01-03
- METHOD FOR URINARY DETECTION OF BLADDER CANCER: JP2015226545 (A) 2015-12-17
- MOLECULAR SIGNATURE AND USE THEREOF FOR THE IDENTIFICATION OF INDOLENT PROSTATE CANCER: PCT EP 2019051870 — 2018-01-25
- ADAMES (Individual prediction methods and medical care support for customizing primary, secondary or tertiary prevention actions in patients with age-related androgenic deficit or treatment, especially in the treatment of prostate cancer): Enveloppe SOLEAU

D.3.b Biological models filed:

Models previously deposed by PrCussenot at the European Collection of Cell Cultures (ECACC), a Health Protection Agency Culture Collection <u>http://www.hpacultures.org.uk</u>

Catalogue No.	Cell Line Name	Keywords
<u>95012614</u>	PNT1A	Human post pubertal prostate normal, immortalised with SV40
<u>95012613</u>	PNT2	Human prostate normal, immortalised with SV40