Alexandre Loupy, MD, PhD
Professor of Nephrology and Epidemiology

Date of Birth: 21/07/1977 (43 years old), Reunion Island, France

INSTITUTION	DEGREE	YEAR	FIELD
Descartes University, Paris, France	HDR*	2015	Epidemiology and Biostatistics
Descartes University, Paris, France	PhD	2014	Epidemiology and Biostatistics
Genetic Center University of Alberta, Canada	Post doc	2012	Genetics
Pierre et Marie Curie University, Paris, France	PhD	2011	Cell biology
Descartes University, Paris, France	M.D	2008	Nephrology

Clearance to conduct research and lead a research team

1. Personal Statement

Trained in Internal medicine, qualification in Nephrology, intensive care and transplantation
Transdisciplinary research skills (PhDs in biostatistics and in basic science)
Thesis director (4 Alumni, 4 on-going thesis) – Affiliated to 2 Doctoral schools of Public Health (ED 393) and Biology (BioSPC, ED157)
Research focus theme in the past 10 years directed toward precision diagnostics in transplantation, risk prediction, risk stratification, alloimmune response, organ rejection, Integrative epidemiology and biostatistics
Director of the Paris expertise center for organ transplantation: a multiorgan transplant network in France comprising 9 institutions for a total of 8,000 patients. Coordinating (2020) 32 people within the network (scientists, M.D's research assistants) (http//www.paristransplantgroup.org)
Coordination of international studies and head of the scientific committee of the Banff international allograft classification. Research grants, investigator, patents & clinical trials (see chapters 3, 4 and 6)

2. Positions

2020: Appointed Adjunct Professor at Cedars Sinai, UCLA, Los Angeles, California USA

2017: Appointed Professor of Nephrology and Epidemiology, Necker Hospital, Paris, France

2015: Director of the Paris Expertise Center for Organ Transplantation (website), French National Medical Research Agency INSERM U970 Team 11 ATIP AVENIR. Paris, France

2013: Associate Professor in Nephrology: Kidney Transplant department, Necker Hospital, Paris, France

2011: Assistant Professor in Nephrology: Kidney Transplant department, Necker Hospital, Paris, France

2010: Assistant Professor in Cardiology and epidemiology, Pompidou Hospital, Paris, France

2002: Resident in internal Medicine, Paris Hospitals, France

3. Mobility, Scholar Societies, Editorial Activities

Mobility
- University of Alberta, Applied Genomic center ATAGC Kidney Transplant Department; Prof Phil Halloran (2011 – 2012)
- UCLA - Cedars Sinai, Los Angeles, CA, USA: annual 1-month short stays (2015,16,17,18,19)

Scholar Societies and Awards
- 2019: Award of the ESOT European Society for Organ Transplantation (most impactful research team "stronger together pro award ")
- 2018: French National Academy of Medicine Award: prix de Académie de Médecine
- 2017: Award of the ESOT European Society for Organ Transplantation (most impactful research team "stronger together pro award ")
- 2017: Clinical science investigator award: American Society of Transplantation
- Expert for the FDA (2015, 2018, 2019)
- 2015 – Present: Appointed Scientific Director of the International Banff Classification
- 2015: French Society of Nephrology Award
- 2009: Young Investigator Award: European Society for Organ Transplantation
- 2008: Laureate of the gold medal of Paris Hospitals (APHP)

  Member of the French Society of Nephrology (SFT), the European Society for Organ Transplantation (ESOT) and the American Society of Transplantation (AST) and international society of transplantation (TTS)

4. Patents and Clinical Trials

Patents & Softwares
- 2020 : Development and validation of a virtual biopsy system in kidney transplant patients (Request 20 305629.6)
- 2019 : Method of predicting whether a kidney transplant recipient is at risk of having allograft loss (Request 19 305 348.5, PCT/EP2020/058029)
- 2017 : Methods for predicting acute rejection in heart recipients (EP3119904 (A1))
- 2020 : Logiciel Biopsie virtuelle (IDDN.FR.001.250020.000.S.P.2020.000.31230)
- 2018 : Logiciel iBOX (IDDN.FR.001.450013.000.S.P.2018.000.31230)

Clinical trials (PI)
- NCT04416256: COVID-19 Pandemic and Worldwide Organ Procurement (2020)

- NCT04258891: Multidimensional System to Dynamically Predict Graft Survival After Kidney Transplantation (2020)

- NCT04226859: Trajectories of Glomerular Filtration Rate and Progression to End Stage Renal Disease After Kidney Transplantation (2020)

- [NCT04117152](#): Trajectories of Cardiac Allograft Vasculopathy After Heart Transplantation (2019)

- [NCT03723668](#): Kidney Transplant Outcome and Organ Acceptance Practice Pattern: A Nationwide Analyses in the US and France (2018)

- [NCT03652402](#): Precision Risk Stratification in Kidney Transplant Patients - EU-TRAIN (2018)

- [NCT03582436](#): Rejection Diagnosis in Kidney Transplants Patients (2018)

- [NCT03474003](#): Development and Validation of a Multidimensional Score to Predict Long-term Kidney Transplant Outcomes (2018)

- [NCT03466775](#): Anti-Angiotensin II Type 1 Receptor Antibodies and Kidney Transplant Outcomes (2018)

- [NCT03438058](#): Complement-activating Anti-human Leucocyte Antigen Donor Specific Antibodies in Solid Organ Transplantation (2018)

5. Editorial Activities

- Associate Editor for *Transplantation* journal 2014 - 2018
- Associate Editor for *American Journal of Transplantation* (2016 – present)
- Member of the editorial board of Kidney international (2020 – present)
- Referee for the following journals:
    - NEJM, Nature Medicine, The Lancet, JAMA, Circulation, BMJ
    - American Journal of Transplantation, Kidney International, Plos Medicine
    - Journal of the American Society of Nephrology

6. Main Grants obtained in the past 5 Years

2018 - [iTransplant](#): intelligence artificielle pour une médecine de précision (A Loupy co PI).
This project will build the biggest European cohort of transplant patients with high phenotypic value and will study and put together traditional risk factors and innovative biomarkers of transplant rejection in order to generate a dynamic system of precision diagnostic and stratification of rejection/allograft loss based on machine learning strategies.

2018 - [H2020 EU-TRAIN](#): The EUropean TRAnsplantation and INnovation consortium for risk stratification in kidney transplant patients (A Loupy PI). 6,100 K€.
The goal of this project is to develop an integrated risk-stratification and prognosis system (EU-TRACER) to improve graft survival in kidney transplantation. This system will be converted into clinical actionable information for the clinician to monitor individual risk prediction (3, 5, 7, 10-year allograft loss). The project involves 7 European transplant centres in France, Spain, Switzerland, Germany and 2 industrial partners (Oxford Immunotec and Cerner)

2017 - [ANR KTD-innov](#): Kidney Transplant Diagnostics innovation (A Loupy PI). 8,400 K€
Engineering a diagnostic system for precision medicine in kidney transplantation. This project aims at providing a solid algorithm tool to the clinician for rejection diagnosis.

7. Publications and Scientific Communications

7.1 PhD Thesis in Science
PhD #1 (Basic Science): "PTH-independent regulation of blood calcium concentration by the calcium-sensing receptor" (1 related article published as first author in JCI)

PhD #2 (Epidemiology - biostatistics): "Risk prediction system for prediction allograft failure: population approach" (3 articles published as first author in Lancet, NEJM and BMJ)

7.2 Selected Publications and metrics
SIGAPS 2450 ; H Index 42

1. **Loupy A**, Aubert O, Reese PP, Bastien O, Bayer F, Jacquelinet C: *Organ procurement and transplantation during the COVID-19 pandemic.* Lancet 2020 (IF=59.102)

2. **Loupy A**, Coutance G, Bonnet G, Van Keer J, Raynaud M, Aubert O, Bories MC, Racapé M, Yoo D, Duong Van Huyen JP, Bruneval P, Taupin JL, Lefaucheur C, Varnous S, Leprince P, Guillemain R, Empana JP, Levine R, Naesens M, Patel JK, Jouven X, Kobashigawa J: *Identification and Characterization of Trajectories of Cardiac Allograft Vasculopathy After Heart Transplantation: A Population-Based Study.* Circulation 2020 (IF=23.054)

3. Aubert O, Reese PP, Audry B, Legendre C, Empana JP, Jouven X, Jacquelinet C, Lefaucheur C, **Loupy A**: *Disparities in the acceptance of deceased donor kidneys and consequences for transplant access: Nationwide analyses of practice in the US and France.* JAMA internal medicine 2019 (IF=20.768)

4. **Loupy A**, Aubert O, Orandi BJ, Naesens M, Bouatou Y, Raynaud M, Divard G, Jackson AM, Viglietti D, Giral M, Kamar N, Thaunat O, Morelon E, Delahousse M, Kuypers D, Hertig A, Rondeau E, Bailly E, Eskandary F, Bo¨hmig B, Gupta G, Glotz D, Legendre C, Montgomery RA, Stegall MD, Empana JP, Jouven X, Segev DL and Lefaucheur C: *Prediction system for risk of allograft loss in patients receiving kidney transplants: international derivation and validation study.* BMJ 2019 (IF=30.223)

5. Bouquegneau A, Loheac C, Aubert O, Bouatou Y, Viglietti D, Empana JP, Ulloa C, Murad MH, Legendre C, Glotz D, Jackson AM, Zeevi A, Schaub S, Taupin JL, Reed EF, Friedewald JJ, Tyan DB, Süsal C, Shapiro R, Woodle ES, Hidalgo LG, O'Leary J, Montgomery RA, Kobashigawa J, Jouven X, Jabre P, Lefaucheur C, **Loupy A**: *Complement-activating donor-specific anti-HLA antibodies and solid organ transplant survival: A systematic review and meta-analysis.* PLOS Med 2018 (IF=11.048)

6. **Loupy A**, Lefaucheur C: *Antibody-Mediated Rejection of Solid-Organ Allografts.* N Eng J Med 2018 (IF=70.670)

7. **Loupy A**, Duong Van Huyen JP, Hidalgo L, Reeve J, Racapé M, Aubert O, Venner JM, Falmuski K, Bories MC, Beuscart T, Guillemain R, François A, Pattier S, Toquet C, Gay A, Rouvier P, Varnous S, Leprince P, Empana JP, Lefaucheur C, Bruneval P, Jouven X, Halloran PF: *Gene Expression Profiling for the Identification and Classification of Antibody-Mediated Heart Rejection.* Circulation 2017 (IF=23.054)

8. Aubert O, Kamar N, Vernerey D, Viglietti D, Martinez F, Duong-Van-Huyen JP, Eladari D, Empana JP, Rabant M, Verine J, Rostaing L, Congy N, Guilbeau-Frugier C, Mourad G, Garrigue V, Morelon E, Giral M, Kessler M, Ladrière M, Delahousse M, Glotz D, Legendre C, Jouven X, Lefaucheur C, **Loupy A**: *Long term outcomes of transplantation using kidneys from expanded criteria donors: prospective, population based cohort study.* BMJ 2015 (IF=30.223)

9. **Loupy A**, Vernerey D, Viglietti D, Aubert O, Duong Van Huyen JP, Empana JP, Bruneval P, Glotz D, Legendre C, Jouven X, Lefaucheur C: *Determinants and Outcomes of Accelerated Arteriosclerosis: Major Impact of Circulating Antibodies.* Circ Res 2015 (IF=15.862)

10. **Loupy A***, Lefaucheur C*, Vernerey D, Duong-Van-Huyen JP, Suberbielle C, Anglicheau D, Vérine J, Beuscart T, Nochy D, Bruneval P, Charron D, Delahousse M, Empana JP, Hill GS, Glotz D, Legendre C, Jouven X: *Antibody-mediated vascular rejection of kidney allografts: a population-based study.* Lancet 2013 (IF=59.102)

11. **Loupy A**, Lefaucheur C, Vernerey D, Prugger C, Duong van Huyen JP, Mooney N, Suberbielle C, Frémeaux-Bacchi V, Méjean A, Desgrandchamps F, Anglicheau D, Nochy D, Charron D, Empana JP, Delahousse M, Legendre C, Glotz D, Hill GS, Zeevi A, Jouven X: *Complement-binding anti-HLA antibodies and kidney-allograft survival.* N Eng J Med 2013 (IF=70.670)

8. Research featured in mainstream media

CNN / CNN News, FOX News online, MEDSCAPE (Major medical trade that we pitched), MEDPAGE TODAY, USA Today, HealthDay, New York Post, Daily Mail, MD MAGAZINE (a top medical trade), BioSpace, WebMD – Healthday, FOX News, KSBY-TV in California, CNN pickups, PR NEWSWIRE (Press release), UPENN news release, Healio, Philadelphia Inquirer, AFP, Renal and Urology News, CNN online, CNN pick up, Medical Research, Cordis (European Commission), PR Newswire, KidneyNews, Healio, Egora, FR24 News, Practice Update