|  |
| --- |
| BIOGRAPHICAL SKETCHProvide the following information for the proposed network coordinators and members Follow this format for each person.  |
|  |
| NAMEVivien, Denis | POSITION TITLEFull professor – Hospital Practitioner |

| INSTITUTION AND LOCATION | DEGREE(if applicable) | Completion DateMM/YYYY | FIELD OF STUDY |
| --- | --- | --- | --- |
| Paris XI, Orsay University (Paris, France) | PhD | 1992 | Molecular and cell biology |
| Sloan Kettering Howard Hughes Institute (New York, U.S.) | Postdoctoral | 1994 | Cancer research/ molecular biology |
| Caen Normandy University (France) | HDR | 1997 | Neurosciences |

1. **Positions and Honors**

**2019-x** Scientific Director Blood and Brain @ Caen-Normandie Institute, bb-c.fr **- 2017-x** Director INSERM UMR-S PhIND “Physiopathology and Imaging of Neurological Disorders” (phind.fr), Phind.fr **–** Director of the Center for Biological Resources (CRB-InnovaBIO),Caen University Hospital and Scientific advisor Guichet Innovations and Partnerships, Caen University Hospital. Coordinator HCERES Axis “Heart and Brain”.**-** Scientific Director of the Platform for Experimental Stroke Research (ESRP) **- 2023-x** Adjunt Senior Investigator, Versiti Blood Research Institute, Milwaukee, US. **- *2014-2017*** Coordinator of the team “Immunotherapy for Neurological Diseases” funded “Fondation pour la Recherche Medicale”**; 2005-08** Director, INSERM UMR\_S U919 “serine proteases and pathophysiology of the neurovascular unit” **; 2004-05** Director INSERM-Avenir "tPA in the working brain" award**; 20001-04** Vice-Director of UMR CNRS 6185**; 1995-2001** Full Professor in Neurosciences, Université de Caen Normandy**,** Assistant professor in molecular biology, Université de Caen Normandy**, 1993-1995** Research Associate, Sloan Kettering Cancer Center, Howard Hughes Institute, New York.

**Honors: 2023** Prix Danielle Hermann, 2023, Institut de France, Fondation Recherche Cardio-vasculaire **; 2021**

Grand Prix I-LAB 2021, for the development of the therapeutic antibody "Gluno(zu)mab", licensed to the startup Lys Therapeutics, for the treatment of stroke. - **2016** Rose LAMARCA Award for advance in translational research**; 2014-2017** FRM group” by the French Medical Research Foundation**; 2012** Schlumberger Foundation prize for an innovative teaching aid called «Cérébro»**; 2011** Award: “medical innovation” (Fondation de France-Matmut)**; 2009** Senior member of the Institut Universitaire de France.

**Invited talks** (past 5 years)**:** 41 seminars and invited speaker (35 international) including several Gordon conf.

1. **Most Important Recent Publications - Publications: Scopus H-index: 59**
2. Douceau S, Lemarchand E, Hommet Y, Lebouvier L, Joséphine C, Bemelmans AP, Maubert E, Agin V, **Vivien D.** PKCδ-positive GABAergic neurons in the central amygdala exhibit tissue-type plasminogen activator: role in the control of anxiety. ***Mol Psychiatry. 2022*** *Apr;27(4):2197-2205*. PMID: 35145231.
3. Jacqmarcq C., Picot A., Flon J., Lebrun F., Martinez de Lizarrondo S., Naveau M., Bernay B., Goux D., Rubio M., Malzert-Fréon A., Michel A., Proamer M., Mangin P., Gauberti M., **Vivien D.\*,** Bonnard T\*, \* corresponding authors. MRI-Based Microthrombi Detection in Stroke with Polydopamine Iron Oxide. **Nature Communications, 2024** Jun 13;15(1):5070. PMID: 38871729
4. Levard D., Seillier C., Bellemain Sagnard M., Riou G., McDade G., Smith C., McQuaid C., Montagne A., Amann L., Prinz M., **Vivien D.\*,** Rubio M.\*, \* Corresponding authors. CNS-associated macrophages tune immune response after stroke, a phenotype acquired with age. **Nature Neuroscience, 2024** Jul 3. doi: 10.1038/s41593-024-01695-3. PMID: 38961228
5. Varangot A, Lebatard S, Bellemain-Sagnard M, Lebouvier L, Hommet Y, **Vivien D.** Modulations of the neuronal trafficking of tissue-type plasminogen activator (tPA) influences glutamate release. **Cell Death Dis. 2023** Jan 18;14(1):34. PMID: 36650132
6. Hingot V, Brodin C, Lebrun F, Heiles B, Chagnot A, Yetim M, Gauberti M, Orset C, Tanter M, Couture O, Deffieux T, Vivien D. Hingot and Brodin, equal contribution Early ultrafast ultrasound imaging of cerebral perfusion correlates with ischemic stroke outcomes and responses to treatment in mice. **Theranostics, 2020** Jun 12;10(17):7480-7491. PMID: 32685000

**Publications related to the proposed network program**

1. Jacqmarcq C., Picot A., Flon J., Lebrun F., Martinez de Lizarrondo S., Naveau M., Bernay B., Goux D., Rubio M., Malzert-Fréon A., Michel A., Proamer M., Mangin P., Gauberti M., **Vivien D.\*,** Bonnard T\*, \* corresponding authors. MRI-Based Microthrombi Detection in Stroke with Polydopamine Iron Oxide. **Nature Communications, 2024** Jun 13;15(1):5070. PMID: 38871729
2. Levard D., Seillier C., Bellemain Sagnard M., Riou G., McDade G., Smith C., McQuaid C., Montagne A., Amann L., Prinz M., **Vivien D.\*,** Rubio M.\*, \* Corresponding authors. CNS-associated macrophages tune immune response after stroke, a phenotype acquired with age. **Nature Neuroscience, 2024** Jul 3. doi: 10.1038/s41593-024-01695-3. PMID: 38961228
3. Borha A, Lebrun F, Touzé E, Emery E, **Vivien D,** Gaberel T. Impact of Decompressive Craniectomy on Hemorrhagic Transformation in Malignant Ischemic Stroke in Mice. **Stroke. 2023** Jan;54(1):e1-e6. Doi 10.1161/STROKEAHA.122.041365.
4. Debatisse J, Wateau O, Cho TH, Costes N, Mérida I, Léon C, Langlois JB, Taborik F, Verset M, Portier K, Aggour M, Troalen T, Villien M, Makris N, Tourvieille C, Bars DL, Lancelot S, Confais J, Oudotte A, Nighoghossian N, Ovize M, **Vivien D**, Contamin H, Agin V, Canet-Soulas E, Eker OF. A non-human primate model of stroke reproducing endovascular thrombectomy and allowing long-term imaging and neurological read-outs. ***J Cereb Blood Flow Metab*. 2021** Apr;41(4):745-760. PMID: 32428423.
5. Marcos-Contreras OA, Martinez de Lizarrondo S, Bardou I, Orset C, Pruvost M, Anfray A, Frigout Y, Hommet Y, Lebouvier L, Montaner J, **Vivien D**, Gauberti M. Hyperfibrinolysis increases blood-brain barrier permeability by a plasmin- and bradykinin-dependent mechanism. ***Blood.* 2016** Nov 17;128(20):2423-2434. PMID: 27531677.
6. Martinez de Lizarrondo S, Gakuba C, Herbig BA, Repessé Y, Ali C, Denis CV, Lenting PJ, Touzé E, Diamond SL, **Vivien D**, Gauberti M. Potent Thrombolytic Effect of N-Acetylcysteine on Arterial Thrombi. ***Circulation*. 2017** Aug 15;136(7):646-660. PMID: 28487393.
7. Martinez de Lizarrondo S, Jacqmarcq C, Naveau M, Navarro-Oviedo M, Pedron S, Adam A, Freis B, Allouche S, Goux D, Razafindrakoto S, Gazeau F, Mertz D, **Vivien D**, Bonnard T, Gauberti M.Tracking the immune response by MRI using biodegradable and ultrasensitive microprobes. ***Sci Adv. 2022*** Jul 15;8(28):eabm3596. PMID : 35857494
8. Fournier AP, Martinez de Lizarrondo S, Rateau A, Gerard-Brisou A, Waldner MJ, Neurath MF, **Vivien D**, Docagne F, Gauberti M. Ultrasensitive molecular imaging of intestinal mucosal inflammation using leukocyte-mimicking particles targeted to MAdCAM-1 in mice. ***Sci Transl Med.* 2020** Sep 9;12(560):eaaz4047. doi: 10.1126/scitranslmed.aaz4047. PMID: 32908005.
9. Fournier AP, Quenault A, Martinez de Lizarrondo S, Gauberti M, Defer G, **Vivien D**, Docagne F, Macrez R. Prediction of disease activity in models of multiple sclerosis by molecular magnetic resonance imaging of P-selectin. ***Proc Natl Acad Sci U S A.* 2017** Jun 6;114(23):6116-6121. doi: 10.1073/pnas.1619424114. Epub 2017 May 22. PMID: 28533365. PMCID: PMC5468646
10. **Current grant support among others** (direct funds to Vivien Lab) - **2024-2029** France 2030 Excellence research program, Caesar, Molecular Imaging of Inflammation (PI) Euro 3.300.000 - **2023-2026** Eranet-Neuron, Menispys,  grant agreement No 964215 - The meninges as a new player in post-stroke recovery (PI) Euro; 315.000- **2022-2025** ANR Throne, Awake stroke and functional in vivo brain imaging, PI, Euro. 420.000
11. **Previous experience in collaborative research - 2010-24:** - 19 ANR contracts, 12 with PI from Vivien’s lab; **2020-24**. - Partner H2020 program, NeuroAtlantic, An Atlantic innovation platform on diagnosis and treatment of neurological diseases and aging - Partner, H2020, International Marie Curie Training Network, ENTRAIN, Neuroinflammation; **2020-25** - Partner RHU, “Booster” Acute phase of stroke, including a clinical trial on N-Acetyl-Cysteine (NAC), a program initiated from our own fundamental research (Circulation, 2017); **2020-25** - Partner H2020: Euronanomed III, PLATMED Improving fibrinolysis for stroke. JPND 2023 Rebalance fUS and piezo receptors, Eranet-Neuron 2022 MeniSPY as PI.