CURRICULUM VITAE – January 2024

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IICiMed – Targets and Drugs for Infectious Diseases and Immunity

Pôle Santé – UFR des Sciences pharmaceutiques et biologiques

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I- CAREER AND EDUCATION

Medicinal Chemistry department – Team UR 1155 IICiMed (Targets and Drugs for Infectious Diseases and Immunity) – School of Pharmacy – University of Nantes

January 2017: Deputy director of IICiMed research group and Head of Medicinal Chemistry department
September 2013: Professor of Organic Chemistry (1st class **September 2016** & exceptional class 1 **September 2022**)
June 2007: Habilitation in Medicinal Chemistry – Design, synthesis and biological evaluation of azaheterocyclic compounds
September 2001: Assistant Professor in Organic Chemistry
January 2000-August 2001: Lecturer in Organic Chemistry
November 1999: PhD Thesis in Medicinal Chemistry – Synthesis and biological evaluation of indole derivatives as immunosuppressive and anti-cancer agents
June 1996: Master's degree in Pharmacochemistry

II- TEACHING – School of Pharmacy – Nantes

Organic Chemistry, Medicinal Chemistry, Spectroscopy (NMR, MS, IR) to Pharmacy students (Pharm. D.) from the first to the fifth year of the cursus and to Master students (MSc).

III- ADMINISTRATIVE RESPONSIBILITIES

- ✓ Vice-Dean for Research.
- ✓ Member of the Management Board.
- ✓ Member of the Scientific Council of the Nantes University Healthcare Division.
- ✓ Reviewer in the promotion commission for BIATSS staff.
- ✓ Deputy President of the validation committee for the Master.
- ✓ Jury member of Master 2 (MSc) "Molecular and Medicinal Chemistry" and Master 2 (MSc) "Polymers and Active Ingredients of Natural Origin".
- ✓ Deputy general secretary of the Association of Teachers in Organic Chemistry belonging to Faculties of Pharmacy (AECOP).
- ✓ Deputy general secretary of the French Medicinal Chemistry Society (SCT).

IV- RESEARCH SUPERVISION (see attached list)

Research interests: Design, synthesis and biological evaluation of heterocyclic compounds for therapeutic purposes (mycology, parasitology, bacteriology and cancer). Inhibitors of kinase signaling pathways. ADMET properties of molecules of biological interest.

- ✓ PhD thesis supervisions (17): industry collaborations (Æterna Zentaris-Germany and Servier-France) and academic collaborations (Parasitology and Medical Mycology department of IICiMed team and international joint supervisions of a PhD thesis: Federal University of Pernambuco, Recife - Brazil, National Polytechnic Institute of Mexico City – Mexico, Autonomous University of Nuevo León, Monterrey – Mexico and Assane Seck University of Ziguinchor, Senegal).
- ✓ Masters 2 (MSc) (15)
- ✓ Postdoctoral researchers (10)
- ✓ Bachelor's degrees (BSc) and Masters 1 (MSc) (19).
- ✓ Professional training courses (14).
- ✓ Training for research introduction, Faculty of Pharmacy (35).
- ✓ Foreign students (4): 1 MSc, University of Hamburg, Germany. 1 PhD student, University College Cork, Ireland. 1 PhD student, Sfax University, Tunisia. 1 MSc, University of Bologna, Italy.

V- PUBLICATIONS, PATENTS and SCIENTIFIC PRODUCTION (see attached list)

- ✓ 68 international publications (*h*-index: 19).
- ✓ 4 international patents.
- ✓ 70 posters.
- ✓ 27conferences as invited speaker & 23 oral communications.

VI- MISCELLANEOUS ACTIVITIES AND RESPONSIBILITIES

1- International research collaborations

- ✓ ***CAPES-COFECUB 2015/2018 & 2023/2026 Programme – Brazil***

The French Committee for the Evaluation of Academic and Scientific Cooperation with Brazil (COFECUB) in partnership with the CAPES (Coordenação de Aperfeiçoamento do Pessoal de Nível Superior, the Federal Agency of Support and Evaluation of Postgraduate Education) has selected the project submitted jointly by the team IICiMed (Prof. Pascal Marchand, University of Nantes - NU) and the Department of Antibiotics, Biological Sciences Center (Prof. Teresinha Silva, Federal University of Pernambuco - UFPE, Recife, Brazil). The research program, with duration of 4 years, entitled "Discovery of novel thiazolinones, thiazolidinones and quinones for the treatment of infectious diseases and cancer" is achieved through the mobility of 8 researchers, 5 joint supervision PhD students and 1 postdoctoral researcher, chemists and biologists. *Funding of 5 doctoral fellowships and 1-year postdoctoral fellowship + €11,180 for mobility.* The researchers involved were able to give conferences, lectures at doctoral schools and research seminars at NU and UFPE.

A new **CAPES-COFECUB 2023-2026 project** has been selected for funding with the same terms and conditions and the involvement of 3 other Brazilian universities:

- Universidade Estadual da Paraíba – UEPB João Pessoa (Prof. Francisco Jaime B. Mendonça Junior)
- Universidade Federal de Alagoas – UFAL Maceió (Prof. Thiago Aquino)
- Universidade Federal do Delta do Parnaíba – UFDPar Parnaíba (Prof. Dr. Klinger Antonio da Franca Rodrigues)

This project concerns the "Design, synthesis and biological evaluation of new heterocyclic antileishmanial compounds" and will see the funding of 2 co-supervised theses or 1 Brazilian post-doctorate per year. In this context, Dr. Larissa G. Maciel, UFPE - Recife Brazil, is doing a post-doctoral fellowship in the Laboratory from November 1, **2023** to August 31, **2024**.

✓ ***Collaboration University of Toronto since 2021 – Canada***

The imidazo[1,2-*a*]pyrazine series developed as part of antiparasitic chemotherapy projects are finding an application in medical mycology through the development of *Candida albicans* Yck2 inhibitors (fungal casein kinase 1, CK1), which is involved in resistance, virulence, cell morphogenesis, polarity and cytokinesis. Yck2 therefore regulates the pathogenesis of *C. albicans* and is a target protein of interest for a drug discovery project in the field of antifungals.
(Prof. L. E. Cowen, http://individual.utoronto.ca/cowen/).

✓ ***Collaboration Ege University[1], Izmir & Izmir Katip Celebi University[2] since 2023 – Turkey***

As part of the COST ACTION CA21111 - *One Health drugs against parasitic vector borne diseases in Europe and beyond (OneHealthdrugs)*, Dr. Gulsah Bayraktar[1] has been awarded a mobility grant (Short-Term Scientific Mission) as a visiting researcher in the laboratory from June 9 to July 17, **2023**. A collaboration aimed at developing new heterocyclic compounds with antileishmanial properties has been initiated, also involving Prof. Huseyin Istanbullu[2] and Dr. Merve Saylam[2].

✓ ***Collaboration Assane Seck University of Ziguinchor 2021-2025 – Senegal***

The research work of the IICiMed team in the fight against leishmaniasis allowed the development of a collaborative project with the Laboratory of Chemistry and Physics of Materials (LCPM) of Prof. A. Gassama from the Assane Seck University of Ziguinchor. A thesis in medicinal chemistry under joint supervision (from May **2021**) focuses on the design of new bicyclic piperidine based antileishmanial compounds. *Funding of a doctoral scholarship from the French Cooperation*.

✓ ***PHC ULYSSES 2014 & 2020/2021 Programme – Ireland***

Campus France, responsible for the management of Hubert Curien Partnership (PHC) has selected the project ULYSSES **2014** filed jointly by the Department of Medicinal Chemistry of IICiMed team (Prof. Pascal Marchand, University of Nantes) and "Department of Chemistry and ABCRF "(Dr Florence McCarthy, University College Cork, Ireland). This collaboration, still in progress, is a work of Medicinal Chemistry in the field of oncology that led to the mobility of the students and the project managers between the two sites. This collaboration is currently continuing in the field of medical mycology since a ULYSSES **2020** project, with the same partner, has been selected and aims at the synthesis and evaluation of new pharmaceutical leads for the inhibition of fungal Protein Kinase C to combat resistance in *Candida albicans* in the clinic. *Funding of €5,000*.

✓ ***CONACYT 2018/2021 Programme – Mexico***

The research work of IICiMed team dealing with imidazo[1,2-*a*]azine series as anti-infective agents, under the supervision of Prof. Pascal Marchand and Dr Marc-Antoine Bazin, allowed to initiate a collaboration with Mexico (Dr. H. Salgado Zamora of the National Polytechnic Institute (IPN) of Mexico City) through the PhD thesis co-supervision and mobility of Juan Emmanuel Reynoso Lara (**2015**-**2018**). An official partnership agreement was also signed between University of Nantes and Autonomous University of Nuevo León, Monterrey. In response to a call for projects, it allowed to develop a collaborative work in **2018** through 1 international joint supervision of PhD theses (1-year mobility in IICiMed Lab at the end **2019** and **2020**). This research work, directed by Prof. Maria del Rayo Camacho Corona and Prof. Pascal Marchand, deals with the biological valorization of natural products and their synthetic derivatives endowed with antibiotic properties. *Funding of 1 doctoral fellowship + mobility of the project managers between the two sites.*

✓ ***Campus France Programme Project 911 2015/2018 – Vietnam***

UR 1155 - IICiMed hosted, in the frame of a cooperation agreement between Nantes University and School of Pharmacy Phu Tho - Vietnam, a doctoral student under my supervision between **2015** and **2018**. The Medicinal Chemistry project focused on the design of new compounds with antifungal properties and active against strains of *Candida albicans* resistant to azole treatments in the clinic. *Funding of 1 doctoral grant over 4 years.*

2- National research networks

✓ ***ANR PRC TEXLEISH Nov.2021-Oct. 2025, UR 1155 – IICiMed, Pasteur – Paris et BioCIS UMR CNRS 8076 – Châtenay-Malabry***

Leishmaniasis is a severe public health issue and the current treatments are toxic, costly or lead to parasite resistance, thus there is an urgent need for new drugs. The TEXLEISH consortium proposes a new paradigm: inhibiting host-parasite interactions, through targeting *Leishmania* exoproteome, in order to limit the risk of parasite resistance. TEXLEISH synergizes important expertise in medicinal chemistry, kinase-based drug discovery, parasite biology and in vivo testing to optimize **CTN1122**, a potent antileishmanial lead compound, into an orally active, safe, effective drug candidate. This process involves iterative rounds of chemical synthesis, assessment of its efficacy, toxicity, in vitro bioavailability, in vivo efficiency on animal models and the study of its mechanism of action. The TEXLEISH project will constitute a proof of concept to validate pathogen exoproteome as the future of target-based strategies.

This project, of which I am the leader for 4 years, benefits from ANR (French National Research Agency)/Region funding (Targeting host-parasite interactions through the inhibition of EXcreted *LEISHmania* casein kinase 1). It brings together 3 laboratories with 8 EC, 1 CR, 1 IR, 2 technicians, 1 chemistry doctoral student, 3 Master 2 chemistry student, and it will allow the recruitment of 1 biology post-doctoral fellow, 1 MolMod engineer, 2 biology technicians. *Funding ANR 747 k€ and Pays de la Loire Region 50 k€ (AAP National Trajectory of Loire Research). https://anr.fr/Projet-ANR-21-CE18-0026.*

✓ ***Cancéropôle Grand Ouest***

IICiMed Laboratory collaborates with the teams of "Cancéropôle Grand Ouest" through its integration in the network "Seafood valorisation in cancer"and can access to the kinases evaluation platform KISS*f* of Roscoff, France (Dr S. Ruchaud, Dr S. Bach, CNRS USR3151).

✓ ***Regional project PIRAMID***

Member of the committee of the regional project PIRAMID (€ 1.26 million), which includes 11 laboratories/research teams (duration 5 years from January **2016**) on a theme consisting of a rational approach to the development of innovative molecules, for therapeutic purposes, targeting protein-protein interactions. http://piramid-research.fr/

3- European research networks

✓ Member of "Groupement des Pharmacochimistes de l'Arc Atlantique (GP2A)" from **1997** and President from September **2017**, rebranded GP_2A "Group for the Promotion of Pharmaceutical chemistry in Academia" (www.gp2a.org).

✓ Local coordinator of Paul Ehrlich MedChem Euro-PhD Network at Nantes Université from **2021** (http://www.pehrlichmedchem.eu).

✓ Member of the European programme COST ACTION CA21111 - One Health drugs against parasitic vector borne diseases in Europe and beyond (OneHealthdrugs) since **2022** (https://www.cost.eu/actions/CA21111/).

4- Industrial research collaborations

✓ Industrial collaborations for PhD and postdoctoral research projects (Æterna Zentaris-Germany from Oct. **2002** to Dec. **2009** and Servier-France from Oct. **2003** to Nov. **2011**).

5- Scientific societies

✓ Member of "Société de Chimie Thérapeutique" from **2002**.

✓ Member of "Association des Enseignants de Chimie Organique" from **2002**.

✓ Member of "Société Française de Chimie" from **2003**.

6- Expert reports

✓ Manuscript reviewer for international scientific journals: *European Journal of Medicinal Chemistry*, *Journal of Medicinal Chemistry, Bioorganic & Medicinal Chemistry, Bioorganic & Medicinal Chemistry Letters*, *ACS Medicinal Chemistry Letters*, *Bioorganic Chemistry, ACS Bio. & Med. Chem. Au, Current Medicinal Chemistry*, *MedChemComm, ChemMedChem, Journal of Enzyme Inhibition and Medicinal Chemistry*, *Pharmaceuticals*, *Molecules*, *Tetrahedron*, *Synthesis.*

✓ Expert member of the French National Research Agency (ANR) in **2022**, **2023** & **2024**, for the scientific evaluation committee 18 "Biomedical Innovation".

✓ Expert member of COFECUB - CAPES France-Brazil **2024**.

✓ Expert of call for project « Ligue contre le Cancer » in **2021**.

✓ Guest expert for the Franco-Mexican CONACYT files as part of the call for projects "Frontier Science" **2019** & **2020**.

✓ Guest editor for the *Pharmaceuticals* journal (MDPI) in 3 special issues: "Recent Contributions in Medicinal Chemistry Within European GP2A Network" in **2018**-**2019**, "Heterocyclic Compounds and Their Application in Therapy" in **2021**-**2023**, "Drug Discovery of Antiprotozoal Agents" in **2024** and for the *Molecules* journal (MDPI) in 1 special issue: "Kinase Inhibitors 2020" in **2020**-**2021**.

✓ Jury member for the recruitment of Assistant Professors at the University (**2007**: Rennes, **2008**: Nantes, **2009**: Angers, Caen, Rennes, **2010**: Nantes, **2012**: Nantes, **2014**: Tours, **2021**: Limoges, **2023**: Tours (President), Lille (President)) and Full Professor (**2023**: Nantes (President), **2024**: Nantes).

✓ Promotion committee **2023**, University Professorship - CNU 86-87 Paris-Saclay University & Bourgogne University.

✓ ***Examinator of PhD thesis and President of the jury***

- M. Demonceaux – Regioselective enzymatic glucosylation of polyphenols using sucrose phosphorylases – 13th October **2023**. Molecular and Structural Biology, Biochemistry, Nantes University.
- S. Soltani – Phytochemical study of the species *Thymelaea tartonraira* and evaluation of its leishmanicidal, antidiabetic and antimicrobial potential: *in vitro* and *in silico* studies – 30th September **2023**. Phytochemistry, School of Sciences, University of Sfax, Tunisia (examinator).
- C. Breton-Patient – Development of photoactivatable inhibitors of the TAM family - Methodology for the sulfonylation of imidazopyridines by photoredox catalysis – 9th December **2022**. Organic Chemistry – University of Paris-Saclay (examinator).
- K. Gaillard – Synthesis of cyclic dinucleotide amide analogs as potential antibacterial, antiviral and anticancer agents – 14th December **2021**. Organic Chemistry – University of Nantes.
- A. Leray – Chemical modification of AAV for gene therapy – 16th February **2021**. Molecular and Macromolecular Chemistry – University of Nantes.
- C.A. Ceballos-Garzón – Proteomic study and impact of the modulation of the Calmodulin/Calcineurin pathway in *Candida glabrata* resistant to caspofungin – 8th February **2021**. Medical Mycology – University of Nantes.
- M. Polomski – Synthesis of inhibitors targeting STAT5 proteins in the treatment of myeloid leukemia: effects on drug resistance – 10th December **2020**. Life and Health Sciences – University of Tours.
- L.A. Voli – Synthetic development of "hybrid" analogues derived from SKF-96365 and carriers of fluorophores: biological evaluations and RSA study for the modulation of calcium channels (SOCE influx) for the treatment of cancer – 29th January **2020**. Molecular and Macromolecular Chemist – University of Rennes 1.

- C. Denis – Design, synthesis and biological evaluation of inhibitors of Bcl-2 family proteins for anticancer purpose: Application to chemoresistant ovarian cancers – 21st November **2018**. Medicinal Chemistry – University of Caen Normandy.
- F. Couly – C2 functional modifications of 8-alkylthiazolo[5,4-*f*]quinazolin-9(8*H*)-ones and fragment extension strategy for the synthesis of kinase inhibitors of the DYRK family – 12th October **2018**. Medicinal Chemistry – University of Rouen Normandy.
- A. Couhert – Design of dual melatonergic and serotonergic ligands with azaindole and furopyridine structures. 19th February **2015** – Medicinal Chemistry – University of Orléans.
- Y. Loidreau – Synthesis of heterocyclic compounds [6,5,6] polyheteroatomic, as potential kinases inhibitors. 5th September **2013 –** Medicinal Chemistry – University of Rouen.

✓ ***Reviewer of PhD thesis***

- C. Blouet – Development of new macrocyclic inhibitors of Pim-1/2 kinases with anti-leukaemic potential – 15th December **2023**. Life and Health Sciences, Medicinal Chemistry, University of Tours.
- R. Le Biannic – Synthesis of new anti-PD-L1, immune checkpoint inhibitors – 7th November **2023**. Pharmaceutical Sciences, University of Lille.
- N. Compagne – Development of inhibitors of efflux pumps in Gram-negative bacteria to combat antibiotic resistance – 22th November **2023**. Organic Chemistry, Biomolecules, Pharmacology, Therapeutics, University of Lille.
- R. Hussain – Computer aided drug design and synthesis of HCV NS3 protease inhibitors – 13th January **2023**. Degree of Doctor of Philosophy in Chemistry, Forman Christian College (A Chartered University) Lahore, Pakistan.
- R. Ondoño Molina – *De novo* development of novel DM1 toxic ncRNA targeting small molecules and its biological evaluation – 13th December **2022**. Department of Organic and Pharmaceutical chemistry. IQS School of Engineering, University Ramon Llull, Barcelona, Spain.
- M. Brouillard – Design, synthesis, and formulation into nanoemulsions of nucleolipids for neurodegenerative diseases – 25th October **2022**. Chemistry and Life Sciences Technologies, University of Bordeaux.
- C. Horgan – Synthesis of novel quorum sensing inhibitors of diffusible signal factor (DSF) – 13th June **2022**. School of Chemistry, University College Cork, Ireland.
- F. Grosjean – Design, synthesis and study of 5'-ectonucleotidase inhibitors in cancer chemotherapy – 8th December **2021**. Organic, Mineral, Industrial Chemistry – University of Montpellier.
- L. Faïon – Development of MabA enzyme inhibitors and antibiotic boosters as innovative strategies to treat tuberculosis – 14th October **2020**. Drug Sciences – University of Lille.
- W.P. Ouedraogo – Detection of resistance to vancomycin by highlighting D-Ala-D-Ala dipeptidase activity – 2nd June **2020**. Life and Health Sciences – University of Caen - Normandie.
- J. Pédron – Synthesis and study of the anti-kinetoplastid activity of new 8-nitroquinolin-2(1*H*)-ones bioactivated by type 1 nitroreductases – 5th October **2018**. Chimistry, Biology, Health, University of Toulouse III Paul Sabatier.
- M. Doumas – Design, synthesis of halogenated derivatives of bisphenol A, of parabens and their conjugated analogues – 27th September **2018 –** Biology, Medecine, Health, University of Poitiers.
- Y. Jr Esvan – Design and synthesis of new heteroaromatic compounds as potential kinases inhibitors – 27th October **2016 –** Organic Chemistry & Biology **–** University Blaise Pascal of Clermont-Ferrand.
- K. Al Sabil – Semisynthesis in tocotrienol series - Development and valorisation of *ortho*-formylation – Biological evaluation – 14th September **2016 –** Organic Chemistry **–** University of Angers.
- E. Moine – Design, synthesis and evaluation of new anti-apicomplexan imidazoazines for therapeutic purpose – 9th October **2015 –** Antiparasitic Medicinal Chemistry **–** University of Tours.
- K. Greaney – Synthesis and evaluation of novel quinolines and quinazolinediones as potential anti-cancer agents – 24th November **2014**. Medicinal Chemistry, University College Cork, Ireland (CV selection by the "College of Science, Engineering and Food Science").
- S. Le Corre – New cationic phospholipids for nucleic acids delivery – 22th September **2014** – Medicinal Chemistry – University of Brest.

✓ ***Reviewer of French Research Habilitation (HDR)***

- Dr M.-A. Bazin – Design of heterocyclic biomolecules with anti-infective and antiproliferative properties – 15th February **2021**. Laboratory EA1155 - IICiMed – University of Nantes, as HDR guarantor.
- Dr C. Pouget – Chemistry of natural products and biological applications – 28th February **2019**. Research Laboratory PEIRENE EA 7500 – University of Limoges.
- Dr B. Pérès – Design, synthesis and biological evaluation of modulators of ABC transporters to circumvent multidrug resistances – 19th May **2017**. Department of "Pharmacochimie Moléculaire" UMR CNRS 5063 – University of Grenoble Alpes.

7- Organisation of congress

✓ President of the organising committee – 22th European Conference of the Group of Medicinal Chemists of the Atlantic Arc (GP2A), Nantes, August 28-29, **2014**.

✓ President of the local organising committee – 55th International Conference on Medicinal Chemistry, Nantes, July 3-5, **2019** (www.rict2019.org).

✓ Vice-Chair of the organising committee – 1st Brazil-France Symposium on Medicinal Chemistry, Federal University of Pernambuco, Recife – Brazil, December 2-4, **2019** & 2nd Brazil-France Symposium on Medicinal Chemistry, Federal University of Paraíba, João Pessoa – Brazil, October 26-28, **2023**.

✓ Participation in the organization of the 11th symposium of the National Antiparasitic and Antifungal Consortium (CaPF), in Nantes June 2-3, **2022**, as part of the 2022 scientific days of Nantes University.

✓ Responsible for the local organizing committee of the 29th SCT Young Research Fellows Meeting, in Nantes July 4-6, **2022**.

8- Additional information

✓ Webmaster of IICiMed team (https://iicimed.univ-nantes.fr/).

✓ Responsible for the UPLC-MS analytical platform of IICiMed team.

✓ Responsible for the control and management of "Central storage of chemicals" – Faculty of Medicine and Pharmacy, University of Nantes.

I- LIST OF SUPERVISION OF PhD THESES

1- PhD Theses (T)

T17. Siga SAGNE (International joint supervision 50%) – Synthesis and evaluation of the antiparasitic properties of a new class of molecules for the treatment of leishmaniasis – defense planned on May **2025**.
Co-supervision: Prof. Abdoulaye Gassama, Assane Seck University of Ziguinchor, Senegal.

T16. Lhana TISSEUR (Co-supervision at 50%) – Design, synthesis and evaluation of antiparasitic properties of imidazo[1,2-*a*]pyrazine derivatives targeting casein kinase 1 of *Leishmania* spp. – defense planned on November **2024**.
Co-supervision: Dr Marc-Antoine Bazin.

T15. Célia ROUGES (Co-supervision at 50%) – Hsp90/co-chaperones interaction: a new target for the treatment of invasive candidiasis – 14th June **2023**.
Thesis supervisor: Prof. Patrice Le Pape.

T14. Felipe NEVES COUTINHO (International joint supervision 50%) – Design, synthesis and biological evaluation of bicyclic isoxazole and isoxazoline derivatives – 27th June **2022**.
Co-supervision: Prof. Teresinha Gonçalves da Silva, Recife - Federal University of Pernambuco, Brazil.

T13. Guillermo NÚÑEZ-MOJICA (International joint supervision 50%) – Isolation, structural characterization and assessment of the antibacterial activity of constituents of *Solanum chrisotrichum* Schldl. and their derivatives – 26th April **2021**.
Co-supervision: Prof. María del Rayo Camacho Corona, Monterrey – Autonomous University of Nuevo León, Mexico.

T12. Marlene SARAIVA DE ARAÚJO NETA (International joint supervision 50%) – Design, synthesis and anti-trypanosomatidae activity of novel aza-bicyclic 2-isoxazoline and 5,6,7,8-tetrahydroimidazo[1,2-a]pyrazine hybrid heterocyclic derivatives – 26th September **2019**.
Co-supervision: Prof. Antônio Rodolfo de Faria, Recife – Federal University of Pernambuco, Brazil.

T11. Dartagnan DE SÁ PIRES FERREIRA (International joint supervision 50%) – Chemoenzymatic preparation of chiral gamma-oxo-alcohols for the stereoselective synthesis of the macrolides pyrenophorine and clonostachydinone and studies aiming the obtention of a cercosporamide bioisostere – 14th December **2018**.
Co-supervision: Prof. Jefferson Luiz Princival, Recife – Federal University of Pernambuco, Brazil.

T10. Viet Hung DAO (Director, 50%) – Design, synthesis and biological evaluation of benzofuro[3,2-*d*] pyridines and dibenzo[*b*,*d*]furans, derived from cercosporamide natural product – 18th October **2018**.
Co-supervision: Dr I. Ourliac-Garnier.

T9. Anne Cecília NASCIMENTO DA CRUZ - Assessment of the cytotoxicity, mutagenicity and antitumor potential of new arylsemicarbazone and arylthiosemicarbazone derivatives – 27th July **2018**.
Co-supervision: Prof. Gonçalves da Silva and Prof. Dalci José Brondani, Recife – Federal University of Pernambuco, Brazil.

T8. Arsênio RODRIGUES OLIVEIRA (International joint supervision 50%) – Design, synthesis and biological evaluation of new multi-target hybrid heterocyclic molecules – 10th July **2018**.
Co-supervision: Prof. Ana Cristina L. Leite, Recife – Federal University of Pernambuco, Brazil.

T7. Juan Emmanuel REYNOSO LARA (International co-supervision 50%) – Design and synthesis of imidazo[1,2-*a*]pyridines and imidazo[1,2-*a*]pyrimidines substituted by an amide functional group as antimicrobial agents – 29th June **2018**.
Co-supervision: Dr Maria Elena Campos Aldrete, Mexico City – Institut Polytechnique National, Mexico.
T6. Sophie MARHADOUR (Director, 60%) – Synthesis and biological evaluation of substituted imidazo[1,2-*a*]pyridines and imidazo[1,2-*a*]pyrazines – 25th October **2012**.
Co-supervision: Dr F. Pagniez.

T5. Julien DEFAUX (Director, 100%) – Synthesis and pharmacological evaluation of azaheterocyclic compounds with antitumor activity – 4th December **2009**.

T4. Célina REVERDY (Co-Director, 50%) – Synthesis of polysubstituted heterocycles as dopamine receptor antagonists D3>D2 and serotonin receptor antagonists 5-HT_6 with antipsychotic properties – 30th October **2009** – Director: Prof. M. Duflos.

T3. Vincent BABONNEAU (Co-supervision, 50%) – Synthesis and pharmacological evaluation of indole and quinoline derivatives with melatoninergic and serotonergic properties – 20th October **2006** – Director: Prof. S. Piessard.

T2. Maud ANTOINE (Co-supervision, 70%) – Synthesis and pharmacological evaluation of indole and pyridopyrazine derivatives with antitumor activity – 18th October **2005** – Director: Prof. G. Le Baut.

T1. Alain PUGET (Co-supervision, 50%) – Synthesis and pharmacological evaluation of indole-based peptidomimetics potentially LHRH antagonists – 12th June **2003** – Director: Prof. G. Le Baut.

II- LIST OF PUBLICATIONS AND SCIENTIFIC PRODUCTIONS

1- Publications (P)

P68. Rouges, C.; Asad, M.; Laurent, A.D.; **Marchand, P.**; Le Pape, P. Is the *C*-terminal domain an effective and selective target for the design of Hsp90 inhibitors against *Candida* yeast? *Microorganisms* **2023**, *11*, 2837; doi.org/10.3390/microorganisms11122837.

P67. Gonçalves de Lima Neto, R.; Saraiva de Araújo Neta, M.; Tiburcio Valeriano, C. A.; Pereira Neves, R.; Lacerda, A. M.; Ferraz, C. E.; Inácio, C. P.; Le Pape, P.; Ourliac-Garnier, I.; de Faria, A. R.; da Silva, T. G.; Alves Pereira, V. R. ; **Marchand, P.** Antifungal efficacy of imidazo[1,2-*a*]pyrazine based thiosemicarbazones and thiazolidinediones against *Sporothrix* species. *Future Microbiol.* **2023**, *18*, 1225-1233; doi: 10.2217/fmb-2023-0044.

P66. Soltani,S; Koubaa, I.; Cojean, S.; Picot, C.; **Marchand, P.**; Allouche, N. Phytochemical, antileishmanial, antifungal and cytotoxic profiles of *Thymelaea tartonraira* (L.) All. extracts. *Nat. Prod. Res.* **2023**; doi: 10.1080/14786419.2023.2252153.

P65. O'Boyle, N. M.; Helesbeux, J.-J.; Meegan, M. J.; Sasse, A.; O'Shaughnessy, E.; Qaisar, A.; Clancy, A.; McCarthy, F.; **Marchand, P.** 30th Annual GP_2A Medicinal Chemistry Conference. *Pharmaceuticals* **2023**, *16*, 432; doi: 10.3390/ph16030432.

P64. Soltani, S.; Koubaa, I.; Dhouib, I.; Khemakham, B.; **Marchand, P.**, Allouche, N. New specific α-glucosidase inhibitor flavonoid from *Thymelaea tartonraira* leaves: structure elucidation, biological and molecular docking studies. *Chem. Biodivers.* **2023**, *20*, e202200944; doi: 10.1016/j.phytol.2022.05.004.

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2- Patents (B)

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