


# Pablo J. Buccino Evans

Pharmaceutical Chemist, Doctor in Chemistry

 Cadiz 3077 / 202 Montevideo, 11600  <https://www.linkedin.com/in/pablo-buccino-462b6623>

 59899893736

 pablo.buccino@gmail.com

Experienced radiopharmacy assistant with over 8 years of experience in PET radiochemistry. Skilled in Cyclotron and Radiosynthetic automated modules operation.



## Skills

- GMP compliant Radiosynthesis of PET tracers
- QC for PET radiotracers; HPLC, GC, Radiation detection and measurement
- Research and Development of new methodologies for PET tracer labeling
- Organic Synthesis and Spectroscopic Analysis



## Work History

### ● Radiopharmacy Assistant

*Uruguayan Center Of Molecular Imaging, Montevideo, Uruguay*

- Development of methodologies for implementing Production and Quality Control (QC) of PET radiotracers containing  $^{11}\text{C}$  or  $^{18}\text{F}$ , for clinical or preclinical use.
- Organic Synthesis and Analysis of precursors for radiolabelling.
- Production (cGMP compliant) and QC of PET radiopharmaceuticals, currently in use for clinical or preclinical studies:
- $^{11}\text{C}$ -radiopharmaceuticals: [ $^{11}\text{C}$ ]Choline, [ $^{11}\text{C}$ ] Methionine, [ $^{11}\text{C}$ ]PiB, [ $^{11}\text{C}$ ]Raclopride and L-[ $^{11}\text{C}$ ]Deprenyl- $D_2$ .
- $^{18}\text{F}$ -radiopharmaceuticals: [ $^{18}\text{F}$ ]FDDNP, [ $^{18}\text{F}$ ]T807, [ $^{18}\text{F}$ ]Lanzoprazole, [ $^{18}\text{F}$ ]FDG, [ $^{18}\text{F}$ ]Fallypride, [ $^{18}\text{F}$ ]FMiso, [ $^{18}\text{F}$ ]FLT and [ $^{18}\text{F}$ ]AIF-PSMA,
- $^{68}\text{Ga}$ -radiopharmaceuticals: [ $^{68}\text{Ga}$ ]Ga-DOTA-TATE and [ $^{68}\text{Ga}$ ]Ga-PSMA.
- Microbiological Quality Control for radiopharmaceuticals (Endotoxin analysis and Esterility test) and microbial monitoring of clean rooms and operators.
- PhD studies on "Implementation and development of radiosynthetic methodologies for the incorporation of  $^{11}\text{C}$  into organic molecules"; working with radioactive precursors [ $^{11}\text{C}$ ]CN $^-$  and [ $^{11}\text{C}$ ]CO $_2$ .

2011-02 - Current

2010-03 - 2011-01

## Research Assistant - Radiochemistry

University Of The Republic - Radiochemistry Department, Montevideo, Uruguay

- Research on synthesis of precursors for labeling glucose derivatives with  $^{99m}\text{Tc}$ .
- Planned, modified and executed research techniques, procedures and tests.

2002-03 - 2006-07

## Teacher- Chemistry

Inmaculada Concepción High-School, Montevideo, Uruguay

- Basic Chemistry courses for high-school students.
- Theoretical and Practical lessons.
- Created lesson materials, visuals and digital presentations to supplement lesson plans.
- Enhanced learning plans and quantified student progress using quizzes, essays and projects.

1997-06 - 2003-06

## Research Assistant - Organic Chemistry

University Of The Republic - Organic Chemistry Department, Montevideo, Uruguay

- Research on synthetic methodologies for the preparation of 2-fluoro-3-nitrosugar derivatives.
- Spectroscopic characterization of organic compounds.
- Molecular Modeling of organic compounds - QSAR
- Teaching assistant.

2013-12 - 2019-06



## Education

### Doctor in Chemistry

**Thesis title:** "Implementation and development of radiosynthetic methodologies for the incorporation of  $^{11}\text{C}$  into organic molecules"

Faculty of Chemistry - University of The Republic - Montevideo, Uruguay

2007-02 - 2011-06

### Pharmaceutical Chemist

Faculty of Chemistry - University of The Republic - Montevideo, Uruguay

1993-05 - 1999-07

### Bachelor in Chemistry

Faculty of Chemistry - University of The Republic - Montevideo, Uruguay



## Languages

Spanish



Native

English



Superior

Portuguese



Advanced

● Italian

● 日本語

● 中文

●●●●●  
Advanced

●●●●●  
Novice

●●●●●  
Novice



## Training

### **Methodologies for labeling organic molecules with the precursor $^{11}\text{C}$ -Cyanide**

*June, 2015*

Supervisor: MSc. Carmen Dence.

Washington University in St.Louis, Mallinckrodt Institute of Radiology. USA.

### **Radiosynthesis of tracers for beta-amyloid and tau-aggregates.**

*July, 2014 – August, 2014*

Supervisor: Dr. Jorge Barrio.

University of California, Los Angeles, Brain Research Institute. USA

### **Development of PET Radiopharmaceuticals: Postgraduate scholarship - Technical aspects of platforms and labeling methodologies with positron emitting radionuclides.**

*May, 2014 – June, 2014.*

Supervisor: MSc. Carmen Dence.

Washington University in St.Louis, Mallinckrodt Institute of Radiology. USA.

### **Research Experience for Undergraduates Program - Organic Chemistry Department Sector**

*May, 2001- August, 2001.*

Supervisor: Dr. Thomas Hudlicky.

University of Florida, Organic Chemistry Department. USA.

### **Training at the Uruguayan Center of Molecular Imaging (CUDIM)**

- Training on radiopharmaceuticals of O-15 - Eng. Oliver Schmiedl (GE) (2014)
- Training on radiopharmaceuticals of Ga-68 - Dr. Frank Rösch (2012)
- Training on radiopharmaceuticals of C-11 y F-18 - Eng. Oliver Schmiedl (GE) (2011)
- Training on Cyclotron - GE ProCab - Dr. Stephen Downey (GE) (2011)



## Publications

**Fully-automated radiosynthesis of the amyloid tracer [<sup>11</sup>C]PiB via direct [<sup>11</sup>C]CO<sub>2</sub> fixation-reduction**

Buccino, P., Savio, E. , Porcal, W.

*EJNMMI Radiopharmacy and Chemistry*, 4:14, 2019

<http://www.doi.org/10.1186/s41181-019-0065-4>

**An efficient preparation of labelling precursor of [<sup>11</sup>C]L-deprenyl-D<sub>2</sub> and automated radiosynthesis**

Zirbesegger K., Buccino, P., Kreimerman I. , Engler, H. , Porcal, W. , Savio, E.

*EJNMMI Radiopharmacy and Chemistry*, v.: 2 2017

<http://doi.org/10.1186/s41181-017-0029-5>

**Automated radiosynthesis of [<sup>11</sup>C]L-deprenyl-D<sub>2</sub> and [<sup>11</sup>C]D-deprenyl using a commercial platform**

Buccino, P., Kreimerman, I. , Zirbesegger, K. , Porcal, W. , Savio, E. , Engler, H.

*Applied Radiation and Isotopes*, v.: 110, 2016

<http://www.doi.org/10.1016/j.apradiso.2015.12.051>

**<sup>11</sup>C-SAM: Radiosynthesis and preliminary biological studies as a potential agent for prostate cancer diagnosis**

Zoppolo, F. Reyes, A.L., Buccino, P., Vasilskis, E., Porcal, W., Oliver, P. Savio, E., Engler, H.

*J Nucl Med*, vol. 57 no. supplement 2 2700, 2016

[http://www.jnm.snmjournals.org/content/57/supplement\\_2/2700](http://www.jnm.snmjournals.org/content/57/supplement_2/2700)

**<sup>18</sup>F-Sulforhodamine 101 derivative as a potential agent for astrocytosis diagnosis: labelling and preliminary biological studies**

Kreimerman, K., Reyes, A.L., Buccino, P., Vasilskis, E., Porcal, W., Oliver, P. Savio, E., Engler, H.

*J Nucl Med*, vol. 57 no. supplement 2 2701a, 2016

[http://www.jnm.snmjournals.org/content/57/supplement\\_2/2701a](http://www.jnm.snmjournals.org/content/57/supplement_2/2701a)

**Synthesis and quality control of [<sup>11</sup>C]Deuterodeprenyl using the automated module General Electric (GE) TRACERlab® FX C Pro**

Buccino, P., Kreimerman, I., Savio, E., Engler, H.

*J Nucl Med*, vol. 55 no. supplement 1 1251, 2014

[http://www.jnm.snmjournals.org/content/55/supplement\\_1/1251.short](http://www.jnm.snmjournals.org/content/55/supplement_1/1251.short)

**Improving Production of <sup>11</sup>C to Achieve High Specific Labelled Radiopharmaceuticals**

Savio, E., García, O., Trindade, V., Buccino, P., Giglio, J., Balter, H, Engler, H.  
*AIP conference proceedings*, v.: 1509 p.:185 - 189, 2012  
<http://www.doi.org/10.1063/1.4773964>

**Synthesis and biological properties of new 5-nitroindazole derivatives**

Aran, Vj , Ochoa, C , Boiani, L , Buccino, P. , Cerecetto, H , Gerpe, A ,  
Gonzalez, M , Montero, D , Nogal, Jj , Gomez-Barrio, A, Azqueta, A , De  
Ceraín, Al , Piro, Oe , Castellano, Ee  
*Bioorganic & Medicinal Chemistry*, v.: 13, 2005  
<https://doi.org/10.1016/j.bmc.2005.02.043>

**Chemo-selective hydrolysis of the iminic moiety in salicylaldehyde  
semicarbazone promoted by ruthenium**

Vieites, M , Buccino, P. , Otero, L , Gonzalez, M , Piro, Oe , Delgado, Rs , Anna,  
Cmrs , Barreiro, Ej , Cerecetto, H , Gambino, D  
*Inorganica Chimica Acta*, v.: 358 p., 2005  
<http://www.doi.org/10.1016/j.ica.2005.04.021>

**Molecular Modeling as Didactic Tool for the First Course of Organic Chemistry**

Boiani, M , Buccino, P. , Cerecetto, H. , Gonzalez, M , López, V , Saenz, P ,  
Seoane, G , Loureiro, S , Míguez, M , Otegui, X  
*Educación Química*, v.: 15 p.:349 - 352, 2004  
<http://www.doi.org/10.22201/fq.18708404e.2004.4e.66154>

**Opening of a vinyl aziridine with p-toluenesulfonamide under TBAF catalysis:  
Synthesis of 3,4-diamino-3,4-dideoxy-L-chiro-inositol**

Paul, B , Hoobs, E. , Buccino, P., Hudlicky, T.  
*Tetrahedron Letters*, v.: 42 37, 2001  
[http://www.doi.org/10.1016/S0040-4039\(01\)01298-9](http://www.doi.org/10.1016/S0040-4039(01)01298-9)



**Attendance at conferences and seminars**

**4th International Conference of Molecular Imaging (2018)**

Uruguayan Center of Molecular Imaging (CUDIM), Montevideo, Uruguay

**3rd International Conference of Molecular Imaging (2015)**

Uruguayan Center of Molecular Imaging (CUDIM), Montevideo, Uruguay

**Society of Nuclear Medicine and Molecular Imaging Annual Meeting (2014)**

SNMMI, St. Louis, USA.

**Symposium on Neuroimaging and Tracer Development (2013)**

PositronPharma, Santiago de Chile, Chile

## **2nd International Conference of Molecular Imaging: A multitracer and multidisciplinary approach (2013)**

Uruguayan Center of Molecular Imaging (CUDIM) - University of the Republic - Uppsala Universitet, Montevideo, Uruguay



### **Academic References**

#### **Dr. Ana Rey**

Associate Professor of Radiochemistry - Faculty of Chemistry, University of the Republic

[anareyrios@gmail.com](mailto:anareyrios@gmail.com)

#### **Dr. Williams Porcal**

Professor of Organic Chemistry - Faculty of Chemistry, University of the Republic

[wporcal@gmail.com](mailto:wporcal@gmail.com)

#### **MSc Carmen S. Dence**

Former Associate Professor of the Mallinkrodt Institute of Radiology – Washington University in St. Louis

[carmensdence413@gmail.com](mailto:carmensdence413@gmail.com)