

## CURRICULUM VITAE

### Yony Román Ochoa, PhD

#### EDUCATION

University of Antioquia (UdeA), Medellín, CO	Chemistry	B.A.	2009
University of Antioquia (UdeA), Medellín, CO	Chemical Sciences	MSc.	2012
Federal University of Paraná (UFPR), Curitiba, BR	Sciences – Biochemistry	PhD.	2017

#### APPOINTMENTS

04/19-Present	Pos Doc Research Associate, Whistler Center for Carbohydrates Research, Purdue University, West Lafayette, IN, US.
05/18-03/19	Pos Doc Research Associate, Carbohydrates Research Group, UFPR, Curitiba, BR.
08/17-12/17	Substitute Professor of Organic Chemistry, Federal University for American Integration (UNILA), Foz do Iguaçu, BR.
03/14-02/17	Associate Researcher, Carbohydrate Research Group, UFPR, Curitiba, PR, BR.
06/13-06/14	Assistant Professor, Department of Biochemistry and Molecular Biology, UFPR, Curitiba, BR.
01/12-12/12	Assistant Professor, Faculty of Natural Sciences, ICESI University, Cali, CO.
01/11-01/12	Associate Researcher, Corporation for Biological Research (CIB), Medellín, CO.
03/09-03/11	Associate Researcher, Kinases Project, Department of Animal Production, National University of Colombia (UNAL), Medellín, CO.
04/09-03/09	Associate Researcher, LPS in weaned piglets Project, Department of Animal Production, UNAL, Medellín, CO.
08/08-12/11	Assistant Researcher, GIEM Group, Faculty of Exact and Natural Sciences, UdeA, Medellín, CO.
06/10-12/10	Assistant Professor, Faculty of Exact and Natural Sciences, UdeA, Medellín, CO.
08/08-02/11	Laboratory Assistant, GIEM Group, UdeA, Medellín, CO.

#### PUBLICATIONS

- Constain H. Salamanca, Cristhian J. Yarce Castellanos, Yony Román, Andrés Davalos & Gustavo Rivera. (2018). Application of Nanoparticle Technology to Enhance the Anti-microbial Resistance through  $\beta$ -lactam Antibiotic-Polymer Inclusion Nano-Complex. **Pharmaceuticals**, 11, 19. DOI: 10.3390/ph11010019.
- Diana C. Restrepo-Espinosa, Juliana Maria Motta, Felipe Teixeira, Yony Román, Jhonny Colorado-Ríos, Mauro S. G. Pavão, Alejandro Martínez. (2017). Anticoagulant properties of a high molecular weight polysaccharide fraction (1000RS) of the ascidian *Microcosmus exasperatus*. **ARS PHARMACEUTICA**. 58 (3), 95-101. DOI:10.4321/S2340-98942017000300002.
- Restrepo-Espinosa, D. C., Román, Y., Colorado-Ríos, J., de Santana-Filho, A. P., Sasaki, G. L., Cipriani, T. R., Martínez, A., Iacomini, M., & Pavão, M. S. G. (2017). Structural analysis of a sulfated galactan from the tunic of the ascidian *Microcosmus exasperatus* and its inhibitory effect of the intrinsic coagulation pathway. **International Journal of Biological Macromolecules**. 105 (2), 1391-1400. DOI: 10.1016/j.ijbiomac.2017.08.166.
- Roman Y.; Barddal H. P.; Iacomini M.; Sasaki G. L. & Cipriani, T. R. (2017). Anticoagulant and antithrombotic effects of chemically sulfated fucogalactan and citrus pectin. **Carbohydrate polymers**. 174, 731-739. DOI: 10.1016/j.carbpol.2017.06.110.
- Roman, Y.; Iacomini, M.; Sasaki, G. L. & Cipriani, T. R. (2017). Sulfation of fucogalactan from *Agaricus bisporus*: different patterns in the chemical structure and their effects on anticoagulant activity. **International Journal of Biological Macromolecules**. 97, 357-364. DOI: 10.1016/j.ijbiomac.2017.01.035.
- Roman, Y.; Iacomini, M.; Sasaki, G. L. & Cipriani, T. R. (2016). Optimization of chemical sulfation, structural characterization and anticoagulant activity of *Agaricus bisporus* fucogalactan. **Carbohydrate polymers**, 146, 345-352. DOI: 10.1016/j.carbpol.2016.03.061.
- Rueda, A.; Roman, Y.; Lobo, M. & Peláez, C. (2011). Analysis of tomato seedling cell death in response to copper and paraquat induction. **Tropical Plant Pathology**, 36, 169-177. DOI: 10.1590/S1982-56762011000300005.
- Gutierrez, C.; Roman, Y.; Peláez, C.; Ciro, J.; López, A. & Parra, J. (2012). Effect of the ex vivo addition of the lipopolysaccharide of *Escherichia Coli* on the absorption of lysine in weaning pigs. **Revista Facultad Nacional de Agronomía, Medellín**, 65, 6447-6457. ISSN: 2248-7026.
- Ospina, D.; Ciro, J.; Roman, Y.; Peláez, C.; López, A. & Parra, J. (2011). Changes in enzymatic activity in duodenum and jejunum of pigs during several post-weaning periods. **Revista de la Facultad de Medicina Veterinaria y de Zootecnia**, 58, 156-165. ISSN: 2357-3813.

- Parra, J.; Agudelo, J.; López, A.; Román, Y.; Pelaez, C. & Rodriguez, B. (2011). Cambios en la morfología de las vellosidades y glándulas, y la actividad enzimática intestinal de cerdos durante varios períodos postdestete (Resumen). *Revista Colombiana de Ciencias Pecuarias. Fisiología*, 24(3), 427. [ISSN: 0120-0690](#).
- Ospina, V. D., Agudelo, J., López, A., Román, Y., Peláez, C., & Parra, J. (2009). Efecto de la inflamación intestinal de lechones sobre la actividad y cinética enzimática de las vellosidades intestinales en lechones recién destetados. Ponente. (Resumen). *Revista Colombiana de Ciencias Pecuarias. Patología*, 22(3), 555. [ISSN: 0120-0690](#).

## **SYNERGISTIC ACTIVITIES**

### **Adviser of undergraduate projects**

*Thesis adviser of undergraduate student:*

- 2013 - Juan Felipe Granada Velez. B.A in Chemistry. GIEM Group. Faculty of Exact and Natural Sciences. UdeA. CO.

*Undergraduate Research Work:*

- 2015 - Bruna Lisboa. Bioprocess and Biotechnology Engineering. Carbohydrates Research Group. UFPR. BR.  
2013 - Hector Jaramillo. GIEM Group. UdeA - CIB. CO.  
2013 - Mateo Pineiros Rhon. Pharmaceutical Chemistry. Faculty of Natural Sciences, ICESI University. Colombia.  
2013 - Sthephany Molina Rojas. Pharmaceutical Chemistry. Faculty of Natural Sciences, ICESI University. CO.

### **Reviewer of research works**

*Undergraduate Research Work:*

- 2018 - Franciê Assis Melo Faria. TCC - Biomedicine. Carbohydrates Research Group. UFPR. BR.  
2015 - Jhordan Sting Arias and Polania Solano. B.A in Biology. University of Tolima. CO.  
2015 - Participation as an evaluator of students of Scientific Initiation (undergraduate). "23° Evento de Iniciação Científica e 8° Evento de Inovação Tecnológica da Universidade Federal do Paraná (23° EVINCI e 8°EINTI), durante a 7ª Semana Integrada de Ensino, Pesquisa e Extensão (7ª SIEPE)". BR.

*School Research Works:*

- 2011 - Scientific adviser in the "meeting for teachers" in the Fair of Science, Technology and Innovation (Fair of the CT+I). City of Medellin. Organization of Explora Park and EPM. Medellin. CO.

### **Organizing committee of scientific events**

- 2014 - "II Semana científica de bioquímica da UFPR". Department of Biochemistry and Molecular Biology. Biology Sciences Sector. UFPR, Curitiba, BR.

*Seminars:*

- 2018 - "Anticoagulant and antithrombotic activities and characterization of polysaccharides". I Semana Acadêmica do Curso de Farmácia. Centro Universitário Unicesumar. Curitiba. BR.  
2016 - Structural characterization, chemical sulfation and anticoagulant and antithrombotic activities of polysaccharides. Organization Delima S.A. Auditorium. ICESI University, Cali, CO.  
2012 - Development and validation of kinetic methods for the determination of disaccharidase and aminopeptidase activities. Jefferson Smurfit Auditorium. ICESI University, Cali, CO.  
2011 - Important aspects in the experimental measures of enzymatic activities. Organization Delima S.A. Auditorium. ICESI University, Cali, CO.

### **Scholarships**

- 2013 - 2017 - Scholarship - Organization of American States - Coimbra Group Brazilian Universities (OAS-GCUB-2012). UFPR. BR.  
2011 - 2012 - Scholarship - Young Researchers and Innovators Program - COLCIENCIAS. UdeA. CO.  
2007 - 2008 - Instructor - Scholarship of the Faculty of Exact and Natural Sciences. UdeA. CO.  
2006 - 2007 - Scholarship - Young Researchers Program of the University of Antioquia. UdeA. CO.

### **Awards**

- 2016 - SBBq award for the best poster. 45<sup>th</sup> Annual Meeting of the Brazilian Society for Biochemistry and Molecular Biology (SBBq). Natal, BR.

### **Courses**

- 2013 - Theoretical course on manipulation in animal experimentation. Department of Basic Pathology. Biological Sciences Sector - UFPR. Curitiba, BR.

- 2011 - Bioethics in Research. University of Antioquia. Medellín, CO.

### **Related areas**

Biochemistry, Enzymology, Carbohydrates, Nuclear Magnetic Resonance of Carbohydrates, Natural Products, Organic Chemistry, Food Chemistry.