# Vanessa Aguiar-Pulido, Ph.D.

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#### **SUMMARY**

Highly motivated individual with a penchant for problem solving in biomedical research, with a focus on developing tools and algorithms that will impact diagnosis and therapeutics of rare and complex genetic disorders. Background and interests include big data analytics, bioinformatics, machine learning, neuroscience, data mining, artificial intelligence, ontologies, biomedical data integration, health informatics, epigenetics and omics in general.

#### **EDUCATION**

April 2014 Ph.D. in Computer Science
University of A Coruña, Spain
Thesis: "Solving combinatorial optimization problems using evolutionary computation techniques. An application to biomedicine"

June 2013 Postgraduate Diploma in Business Intelligence Technologies: Design and Implementation
Universitat Oberta de Catalunya, Spain

June 2010 M.S. in Computer Science and Artificial Intelligence
University of A Coruña, Spain

October 2008 B.S. in Computer Engineering
University of A Coruña, Spain

#### POSITIONS AND EMPLOYMENT

#### 2018 – Present Instructor in Neuroscience (Junior Faculty)

Center for Neurogenetics, Brain and Mind Research Institute. Weill Cornell Medicine, USA

- Spearheaded the computational team at the Center for Neurogenetics (CNG), leading the
  development of approaches to prioritize potentially causative variants using Next Generation
  Sequencing (NGS). Worked in the development of new methods for improved (small and large)
  variant calling using long-read sequencing technologies.
- Leader of the "Neural Tube Defects International Data Consortium" (NTD-IDC) Computational Working Group, whose goal is to establish best practices to analyze distributed, heterogeneous genomic data.
- Coordinated joint projects with the Institute for Precision Medicine involving the analysis of genomic and transcriptomic data.
- Mentored rotation and Ph.D. students at the CNG.

#### 2016 – 2018 Senior Postdoctoral Research Associate

Center for Neurogenetics, Brain and Mind Research Institute. Weill Cornell Medicine, USA

- Research in bioinformatics. Devised strategies for processing and analyzing NGS data from human samples for use in clinical settings and from mouse experimental models to further neuroscience research.
- Research in neurogenetics and neuroscience. Established methodologies for the analysis of data from patients with neurological disorders and neurodegenerative diseases to unravel their underlying genetic basis.
- Was responsible for mentoring rotation students and volunteers at the CNG.

#### 2014 – 2016 Postdoctoral Research Associate

School of Computing and Information Sciences. Florida International University, USA

 Research in bioinformatics. Participated in the creation of pipelines and tools for processing and analyzing NGS data. Worked on comparative genomics.

- Contributed to devising new metrics and algorithms for metagenomic data and network analysis.
- Worked on knowledge extraction from microbiome data.
- Collaborated with researchers in the fields of pharmacology, forensics, public health, molecular biology, marine sciences, microbiology and neuroscience to produce meaningful results.
- Was responsible for coordinating and organizing computational and molecular biology seminars.
   Was responsible for coordinating projects and mentoring students at the lab.

#### 2014 Research Associate

Research Center on ICT. University of A Coruña, Spain

Participated in the development of a platform for intelligent patient care based on cloud computing.
 The platform shows different content depending on the patient group (active aging or mental health). Integrated Fitbit data with the platform and developed an app for Android to monitor patient behavior.

#### 2013 *Visiting Scholar* (From Sep-21-2013 to Dec-21-2013)

Stanford Center for Biomedical Informatics Research. Stanford University, USA

 Participated in the development of a scoring algorithm for biomedical ontology recommendation (Martínez-Romero M et al (2017). NCBO Ontology Recommender 2.0: An Enhanced Approach For Biomedical Ontology Recommendation. Journal of Biomedical Semantics, 8(21), 1-22).

#### 2011 – 2014 Predoctoral fellow. Research Assistant and Instructor

Dept. Information and Communication Technologies. University of A Coruña, Spain

- Aided the instruction of different courses at the University of A Coruña from different degrees
  (Basics of Informatics, Degree in Industrial Design and Product Engineering; Informatics for
  Documentation, Degree in Information and Documentation; Machine Learning, Degree in Computer
  Science) and at the Spanish Navy (Network Management, Specialty in Information and
  Communication Technologies for officers). Supervised one undergraduate thesis and one senior
  project from two Computer Science degrees.
- Developed an artificial intelligence approach based on evolutionary computation as part of my Ph.D.
  thesis. Collaborated with several research groups, which implied working in a multidisciplinary
  environment.
- Gained experience in bioinformatics and epigenetics working with the CHROMEVOL group from FIU.
  Collaborated to create CHROMEVALOA db, which was originally developed using MySQL, Perl and
  HTML. Responsible for managing the Ubuntu Linux server in which this resource is stored. Also
  collaborated with the Gerontology Research Group from University of A Coruña and aided in the
  creation and maintenance of different PHP-based websites.
- Reviewer of "Neural Processing Letters" (2012 present) and of "Database: The Journal of Biological Databases and Curation" (2013). Chair at ICAI'12, WORLDCOMP'12 (Las Vegas, USA) and at IWANN'11 (Torremolinos, Spain).

#### 2008 – 2011 Research Assistant

Dept. Information and Communication Technologies. University of A Coruña, Spain

 Application and development of machine learning techniques to analyze biomedical and hydrological data.

### 2007 – 2008 Undergraduate research assistant

Dept. Information and Communication Technologies. University of A Coruña, Spain

• Application of genetic algorithms for classification rule mining.

#### **PUBLICATIONS** (h-index = 9)

#### Peer reviewed journal articles

- 1. Cickovski T, **Aguiar-Pulido V**, Narasimhan G (2019). MATria: A unified centrality algorithm. BMC Bioinformatics. *In press*
- 2. Chen Z, Lei Y, Zheng Y, **Aguiar-Pulido V**, Ross ME, Peng R, Zou J, Wu J, Wang F, Zhang F, Jin L, Zhang T, Finnell RH, Wang H (2018). Threshold for Neural Tube Defect Risk by Accumulated Singleton Loss-of-function Variants. Cell Research (Nature Publishing Group) 28:1039-1041(JCR 15.606).
- 3. Martin-Sanchez FJ, **Aguiar-Pulido V**, Lopez-Campos GH, Peek N, Sacchi L (2017). Secondary Use and Analysis of Big Data Collected for Patient Care. Contribution from the IMIA Working Group on Data Mining and Big Data Analytics. IMIA Yearbook of Medical Informatics 26(1).
- 4. Cickovski T, Peake E, **Aguiar-Pulido V**, Narasimhan G (2017). ATria: A novel centrality algorithm applied to biological networks. BMC Bioinformatics 18(S8):239-248 (JCR 2.448).

- 5. **Aguiar-Pulido V**, Huang W, Suarez-Ulloa V, Cickovski T, Mathee K, Narasimhan G (2016). Metagenomics, metatranscriptomics, and metabolomics approaches for microbiome analysis. Evolutionary Bioinformatics, 12(Suppl 1):5-16 (JCR 1.452).
- 6. Huang W, Kazmierczak K, Zhou Z, **Aguiar-Pulido V**, Narasimhan G, Szczesna-Cordary D (2016). Gene expression patterns in transgenic mouse models of hypertrophic cardiomyopathy caused by mutations in myosin regulatory light chain Archives of Biochemistry and Biophysics, 601:121-32 (JCR 3.017).
- 7. Suarez-Ulloa V, Fernandez-Tajes J, **Aguiar-Pulido V**, Prego-Faraldo V, Florez-Barros F, Sexto-Iglesias A, Mendez J, Eirin-Lopez JM (2015). Unbiased high-throughput characterization of mussel transcriptomic responses to sublethal concentrations of the biotoxin okadaic acid. PeerJ, 3:e1429 (JCR 2.1).
- 8. Munteanu CR, **Aguiar-Pulido V**, Freire A, Martinez-Romero Marcos, Porto-Pazos AB, Pereira J, Dorado J (2015). Graph-Based Processing of Macromolecular Information. Current Bioinformatics, 10(5):606-631 (JCR 0.921; 43/57).
- 9. **Aguiar-Pulido V**, Gestal M, Cruz-Monteagudo M, Rabuñal JR, Dorado J, Munteanu CR (2013). Evolutionary computation and QSAR research. Current Computer-Aided Drug Design, 9(2):206-225 (JCR 1.54; 40/100; Q2).
- 10. Rivero D, **Aguiar-Pulido V**, Fernández Blanco E, Gestal M (2013). Using genetic algorithms for automatic recurrent ANN development: an application to EEG signal classification. International Journal of Data Mining, Modelling and Management, 5:182-191.
- 11. **Aguiar-Pulido V**, Gestal M, Fernandez-Lozano C, Rivero D, Munteanu CR (2013). Applied Computational Techniques on Schizophrenia using Genetic Mutations. Current Topics in Medicinal Chemistry, 13(5):675-84 (JCR 4.174; 5/59; Q1).
- 12. Suárez-Ulloa V, Fernández-Tajes J, **Aguiar-Pulido V**, Rivera-Casas C, González-Romero R, Ausio J, Méndez J, Dorado J, Eirín-López JM (2013). The CHROMEVALOA Database: A Resource for the Evaluation of Okadaic Acid Contamination in the Marine Environment Based on the Chromatin-Associated Transcriptome of the Mussel Mytilus galloprovincialis. Marine Drugs, 11(3):830-841 (JCR 3.854; 7/59; Q1).
- 13. Seoane JA, **Aguiar-Pulido V**, Munteanu CR, Rivero D, Rabuñal JR, Dorado J, Pazos A (2013). Biomedical Data Integration in Computational Drug Design and Bioinformatics. Current Computer-Aided Drug Design, 9:108-117 (JCR 1.762; 31/99; Q2).
- 14. **Aguiar-Pulido V**, Seoane JA, Gestal M, Dorado J (2013). Exploring patterns of epigenetic information with data mining techniques. Current Pharmaceutical Design, Special Issue: Epigenetic and metabolic drug target for anticancer therapy:779-789 (JCR 3.870; 46/261; Q1).
- 15. Seoane J, **Aguiar-Pulido V**, Cabarcos A, Quintela S, Rabuñal J, Dorado J (2013). SNP Locator: a Candidate SNP Selection Tool. International Journal of Data Mining, Modeling and Management, 5(3):193-209.
- 16. Fernández Blanco E, **Aguiar-Pulido V**, Munteanu CR, Dorado J (2013). Random Forest Classification based on Star Graph Topological Indices for Antioxidant Proteins. Journal of Theoretical Biology, 317:331-337 (JCR 2.208; 11/47; Q1).
- 17. Seoane JA, Dorado J, **Aguiar-Pulido V**, Pazos A (2012). Data Integration in Genomic Medicine: Trends and Applications. IMIA Yearbook of Medical Informatics 2012: Personal Health Informatics, 7(1):117-125.
- 18. **Aguiar-Pulido V**, Munteanu CR, Seoane JA, Fernández-Blanco E, Pérez-Montoto LG, González-Díaz H, Dorado J (2012). Naïve Bayes QSDR classification based on spiral-graph Shannon entropies for protein biomarkers in human colon cancer. Molecular Byosistems, 8(6):1716-1722 (JCR 3.534; 103/290; Q2).
- 19. Cabarcos A, Sanchez T, Seoane JA, **Aguiar-Pulido V**, Freire A, Dorado J, Pazos A (2010). Retrieval and management of medical information from heterogeneous sources, for its integration in a medical record visualisation tool. International journal of electronic healthcare, 5(4):371-385.
- 20. **Aguiar-Pulido V**, Seoane JA, Rabuñal JR, Dorado J, Pazos A, Munteanu CR (2010). Machine learning techniques for single nucleotide polymorphism-disease classification models in schizophrenia. Molecules, 5(7):4875-4889 (JCR 1.988; 27/56; Q2).
- 21. Vázquez JM, **Aguiar V**, Seoane JA, Freire A, Serantes JA, Dorado J, Pazos A, Munteanu CR (2009). Star Graphs of Protein Sequences and Proteome Mass Spectra in Cancer Prediction. Current Proteomics, 6:275-288.

#### Conferences

- 1. Wolujewicz P, **Aguiar-Pulido V**, Finnell RH, Mason CE, Elemento O, Ross ME (2018). Structural variation in neural tube defects: adding another layer to a complex genetic architecture (Poster). American Society of Human Genetics (ASHG) at San Diego, CA (USA).
- 2. **Aguiar-Pulido V**, Schlusche AK, Liu WA, Singh S, Shi S, Ross ME (2018). High-throughput single-cell transcriptomics profiling interneuron specification during brain development. Intelligent Systems for Molecular Biology (ISMB) at Chicago, IL (USA).
- 3. **Aguiar-Pulido V**, Lei Y, Gross SS, Shaw G, Finell RH, Ross ME (2017). Genome sequence insights into human predisposition to Spina Bifida. International Conference on Neural Tube Defects at Austin, TX (USA).
- 4. Cickovski T, **Aguiar-Pulido V**, Narasimhan G (2017). MATria: A unified centrality algorithm. IEEE 7th International Conference on Computational Advances in Bio and Medical Sciences (ICCABS) at Miami, FL (USA).
- 5. **Aguiar-Pulido V**, Kim SE, Gross SS, Finnell RH, Ross ME (2017). Dominant Mutations in Primary Cilium Protein GPR161 are a Risk Factor for Human Spina Bifida. 11th Structural Birth Defects Meeting at Bethesda, MD (USA).
- 6. **Aguiar-Pulido V**, Martin-Sanchez F (2016). From published examples to knowledge representation: an inductive approach for exposome data mapping (Oral presentation & Poster). Emory Exposome Summer Course at Atlanta, GA (USA).
- 7. Martin-Sanchez F, Tran E, de Andrés-Galiana E, Benitez S, **Aguiar-Pulido V**, Lopez-Campos GH (2016). The Precision Medicine Game: an educational tool for understanding the Genome-Exposome interplay (Poster). Emory Exposome Summer Course at Atlanta, GA (USA).
- 8. Suarez-Ulloa V, **Aguiar-Pulido V**, Narasimhan G, Eirin-Lopez JM (2016). Network-inspired analysis of transcriptomic responses to environmental stressors in bivalve molluscs (Poster). Emory Exposome Summer Course at Atlanta, GA (USA).
- 9. **Aguiar-Pulido V**, Martin-Sanchez F (2016). Towards disease characterization: The Exposome as a new challenge for Bioinformatics (Poster). Intelligent Systems for Molecular Biology (ISMB) at Orlando, FL (USA).
- 10. Suarez-Ulloa V, **Aguiar-Pulido V**, Ruiz-Perez D, Narasimhan G, Eirin-Lopez JM (2016). Network-based analysis of chromatin-associated gene expression dynamics in response to environmental stress (Poster). Intelligent Systems for Molecular Biology (ISMB) at Orlando, FL (USA).
- 11. Valdes C, **Aguiar-Pulido V**, Narasimhan G, Clarke J (2016). Flint: A Distributed Surveying Tool for Metagenomic Samples (Poster). Intelligent Systems for Molecular Biology (ISMB) at Orlando, FL (USA).
- 12. Narasimhan M, Vietri G, **Aguiar-Pulido V**, Mehta A, Rajabli F, Mathee K, Narasimhan G (2016). Predicting Symptom Severity and Contagiousness of Respiratory Viral Infections. F1000Research 2016, 5(ISCB Comm J):1663 (poster). Best Poster Award ISMB-SCS.
- 13. **Aguiar-Pulido V**, Suarez-Ulloa V, Eirin-Lopez JM, Narasimhan G (2016). Network-inspired Approaches for Transcriptomic Analyses. International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO) at Granada (Spain).
- 14. Cickovski T, **Aguiar-Pulido V**, Huang W, Mahmud S, Narasimhan G (2016). Lightweight Microbiome Analysis Pipelines. International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO) at Granada (Spain).
- 15. Suarez-Ulloa V, **Aguiar-Pulido V**, Narasimhan G, Eirin-Lopez JM (2015). Framing epigenetic signatures of the Pacific oyster under environmental stress using network analysis. Asilomar Chromatin, Chromosomes and Epigenetics Conference (ACCEC) at Pacific Grove, CA (USA).
- 16. Cickovski T, Peake E, **Aguiar-Pulido V**, Narasimhan G (2015). ATria: A Novel Centrality Algorithm Applied To Biological Networks. International Conference on Computational Advances in Bio and Medical Sciences (ICCABS) at Miami, FL (USA).
- 17. Pedreira N, **Aguiar-Pulido V**, Dorado J, Pazos A, Pereira J (2014). Knowledge management for chronic patient control and monitoring. International Conference of Computational Methods in Sciences and Engineering (ICCMSE) at Athens (Greece). AIP Conference Proceedings, 1618:747-750.

- 18. **Aguiar-Pulido V**, Suárez-Ulloa V, Rivero D, Eirín-López JM, Dorado J (2013). Clustering of gene expression profiles applied to marine research. International Work-Conference on Artificial Neural Networks (IWANN) at Tenerife (Spain). Lecture Notes in Computer Science, 7902:453-462.
- 19. **Aguiar-Pulido V**, Rivero D, Gestal M, Dorado J (2012). Weighting the Importance of Variables With Genetic Programming. International Conference on Artificial Intelligence (ICAI), WORLDCOMP'12 at Las Vegas, NV (USA), Vol II: 583-587.
- 20. Fernández Blanco E, **Aguiar-Pulido V**, Cabarcos A, Pazos A (2012). Un ADN artificial simplificado como método de clasificación. VIII Congreso Español sobre metaheurísticas, algoritmos evolutivos y bioinspirados (MAEB) at Albacete (Spain).
- 21. **Aguiar-Pulido V**, Seoane JA, Munteanu CR, Pazos A (2011). SNP-Schizo: A Web Tool for Schizophrenia SNP Sequence Classification. International Work-Conference on Artificial Neural Networks (IWANN) at Torremolinos (Spain). Lecture Notes in Computer Science, 6692:252-259.
- 22. Freire A, **Aguiar-Pulido V**, Rabuñal JR, Garrido M (2010). Genetic Algorithm based on Differential Evolution with variable length. Runoff prediction on an artificial basin. International Conference on Evolutionary Computation (ICEC) at Valencia (Spain), 207-212.
- 23. **Aguiar-Pulido V**, Seoane JA, Freire A, González-Díaz H, Duardo-Sánchez A, Dorado J, Pazos A, Munteanu CR (2010). New Markov-Randic Centralities for Computational Methods of Biology, Parasitology, Technology, Social and Law Networks. International Conference of Computational Methods in Sciences and Engineering (ICCMSE) at Island of Kos (Greece).
- 24. Freire A, **Aguiar-Pulido V**, Rabuñal JR, Garrido M (2010). Algoritmo genético de evolución diferencial con longitud variable para la predicción del caudal generado por lluvia en una cuenca artificial. VII Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB) at Valencia (Spain).
- 25. **Aguiar V**, Seoane JA, Freire A, Munteanu CR (2009). Data mining in complex diseases using Evolutionary Computation. International Work-Conference on Artificial Neural Networks (IWANN) at Salamanca (Spain). Lecture Notes in Computer Science, 5517:917-924.
- 26. Seoane JA, **Aguiar V**, Gestal M, Dorado J, Pazos A (2008). Association analysis in complex diseases using evolutionary computation (Poster). Intelligent Systems for Molecular Biology (ISMB) at Toronto (Canada).

#### **Book chapters**

- 1. Martin-Sanchez F, **Aguiar-Pulido V** (2017). Analytics and Decision Support Systems in Global Health Informatics. Global Health Informatics: How Information Technology Can Change Our Lives in a Globalized World (pp. 195-217). Elsevier.
- 2. Fernandez M, **Aguiar-Pulido V**, Riveros JD, Huang W, Segal J, Zeng E, Campos M, Mathee K, Narasimhan G (2016). Microbiome Analysis: State-of-the-Art and Future Trends. Computational Methods for Next Generation Sequencing Data Analysis (pp. 401-424). John Wiley and Sons.
- 3. **Aguiar-Pulido V**, Suarez-Ulloa V, Eirin-Lopez JM, Pereira J, Narasimhan G (2015). Computational Methods in Epigenetics. Personalized Epigenetics (pp. 153-180). Elsevier Academic Press.
- 4. Freire A, **Aguiar-Pulido V**, Rabuñal JR, Porto A, Pereira J (2011). Extracción de información mediante computación evolutiva. Nano, Bio, Info y Cogno (Convergencia de Tecnologías NBIC). Conceptos y aplicaciones. Redes CYTED NanoRoadmap e Ibero-NBIC. Ciencia y Tecnología para el Desarrollo (CYTED).
- 5. **Aguiar-Pulido V**, Pazos A (2013). Informática biomédica: conceptos y aplicaciones. Investigación aplicada a Medicina Respiratoria. Un ABC para entender las innovaciones biomédicas. Andavira Editora.
- 6. **Aguiar-Pulido V**, Seoane JA, Freire A, Guo L (2010). GA-based Data Mining applied to genetic data for the diagnosis of complex diseases. Soft Computing Methods for Practical Environmental Solutions: Techniques and Studies (pp. 220-240). IGI Global.
- 7. Munteanu CR, Fernández B, **Aguiar V**, Serantes J, Dorado J, Pazos A, González-Díaz H (2010). Directed Network Topological Indices for van der Waals complexes based on Coupled Cluster Interaction Energies. Topological Indices for Medicinal Chemistry, Biology, Parasitology, and Social Networks. Research Signpost.

#### **PROFESSIONAL**

#### Funded research

2019 Hybrid sequencing for improved genetic diagnosis in clinical settings. Sackler Research Grant

(Principal Investigator)

2018 – 2023 Progenitor regulation underlying cortical interneuron specification. NIH (Key Personnel)

### Teaching experience

#### Medical education level courses

2017 - Present Medical Doctor Degree

Weill Cornell College of Medicine, Cornell University

Journal club facilitator: Brain and Behavior

#### Master level courses

2016 Master of Science in Health Informatics

Weill Cornell College of Medicine, Cornell University

Invited lecture "'Omics' Informatics": Introduction to Health Informatics (HINF 5001)

2016 Master in eHealth and Big Data

International University of La Rioja (UNIR), Spain

Syllabus development: "Health informatics: computational trends"

2012 – 2014 Specialty in Information and Communication Technologies for officers

Antonio de Escaño Specialist School. Spanish Navy

Instructor: Network Management

### **Bachelor level courses**

2013 – 2014 Degree in Computer Science

University of A Coruña, Spain

Instructor: Security in Information Systems

2012 – 2014 Degree in Computer Science

University of A Coruña, Spain Instructor: Machine Learning

Degree in Industrial Design and Product Engineering

University of A Coruña, Spain Instructor: Basics of Informatics

Degree in Information and Documentation

University of A Coruña, Spain

Instructor: Informatics for Documentation

### Thesis mentoring and evaluation experience

2015 Ph.D. thesis international expert evaluator

"Impact of Information and Communication Technologies on daily life of children with Autism

Spectrum Disorder"

2015 Member of Ph.D. Thesis Committee

"Information processing by means of Artificial NeuroGlial Networks applied to classification

and prediction"

2014 – 2015	Advisor of 1 undergraduate thesis from the Computer Engineer degree "Development of a bioinformatics platform for the storage and retrieval of NGS data in marine sciences, and its application to massive data processing and analysis"
2013 – 2014	Advisor of 1 undergraduate thesis from the Computer Science degree "Rule mining using genetic programming and data mining for medical purposes"
2011 – 2012	Advisor of 1 senior project from the Computer Engineer degree "Differential evolution: new approaches and an application to hydrology"

## Editorial and other professional responsibilities

2018 – Present	Reviewer of "Communications Biology" (Nature Publishing Group)
2018 – Present	Reviewer of "ACS Chemical Neuroscience"
2018	Reviewer of "International Journal of Data Science and Analytics (JDSA)"
2018	Guest Editor of "Computational Intelligence and Neuroscience"
2017 – Present	Program Committee of the "IEEE Computer-Based Medical Systems" Conference
2017	Reviewer for the "American Medical Informatics Association (AMIA)" Conference
2016 – Present	Member of the Editorial Review Board of "International Journal of Big Data and Analytics in Healthcare (IJBDAH)"
2013	Reviewer of "Database: The Journal of Biological Databases and Curation"
2012 – Present	Reviewer of "Neural Processing Letters"
2012	Chair at ICAl'12, WORLDCOMP'12 – Las Vegas, USA Session: Medical & Health Informatics + Related issues
2011 – Present	Program Committee of "International Work-Conference on Artificial Neural Networks (IWAAN)"
2011	Chair at IWANN'11 – Torremolinos, Spain Session: Data mining in biomedicine

## **Professional organizations**

2016 – Present	Member of the International Society for Computational Biology (ISCB)
2016 – Present	Member of the New York Academy of Sciences (NYAS)

### Honors and awards

2013	Competitive grant supporting research stays. Inditex-UDC, Spain
2011	"Plan I2C" competitive Fellowship. Xunta de Galicia, Spain
2011	"Pre-doctoral" competitive Fellowship. University of A Coruña, Spain
2011	Competitive grant supporting travel. University of A Coruña, Spain
2009	Competitive research scholarship. Xunta de Galicia, Spain
2007	Competitive collaboration scholarship. Ministry of Science and Education, Spain