

# Juan C. Sanchez-Arias, MD, PhD

Trained as medical doctor and neuroscientist, I use my expertise in neurobiology, computational biology, experimental design, and data analytics to magnify the impact of BenchSci's platform and mission to empower scientists to improve the speed and quality of preclinical research with the most advanced biomedical AI.



## INDUSTRY EXPERIENCE

Current  
|  
2023

- **Therapeutic Area Tech Lead (Neuroscience)**  
BenchSci 📍 Remote
  - Lead and coordinate data and product investigations to improve BenchSci's platform coverage and impact on Neuroscience-related Therapeutic Areas.
  - Act as the steward of Neuroscience-related Therapeutic Areas within BenchSci.
  - Work in collaboration with Science, Engineering, Product, and Go-to-Market to translate user requirements into features within BenchSci's platform.
  - Work in collaboration with Product and Engineering teams to magnify the impact and applications of BenchSci's platform.
  - Support Go-to-Market commercial and client engagements by providing subject matter expertise.

2023  
|  
2022

- **Scientist II, Data Extraction**  
BenchSci 📍 Remote
  - Scope and extract scientific insights from internal and external data using BenchSci's platform to provide disproportionate value to scientists working in drug development programs at the top global pharmaceutical companies.
  - Work in collaboration with Data Extraction Scientists to improve the data processing cycle within BenchSci's platform.
  - Work in collaboration with Product and Engineering teams to magnify the impact and applications of BenchSci's platform.
  - Work in collaboration with Commercial and Marketing teams to capture scientists' requirements, support commercial engagements, and deliver transformative insights to scientists working at BenchSci's key accounts partners.

## EDUCATION

2020  
|  
2015

- **Doctor of Philosophy in Neuroscience**  
University of Victoria - Division of Medical Sciences 📍 Victoria, BC, Canada
  - **Dissertation:** Pannexin 1 regulates dendritic spine formation.

2014  
|  
2007

- **Doctor of Medicine (Médico y Cirujano)**  
Universidad del Valle - School of Medicine 📍 Cali, Valle, Colombia
  - **Pre-Diploma Rotatory Internship:** Hospital Universitario del Valle ESE - Universidad del Valle. Cali, Valle. Colombia.
  - **Professional elective:** Neurosurgery and Neurocritical Care. Department of Neurosurgery. Hospital Universitario del Valle ESE - Universidad del Valle. Cali, Valle. Colombia.
  - **Observership:** Functional Neurosurgery. Department of Neurosurgery. University of Illinois Hospital & Health Sciences System. Chicago, IL. USA.

## RESEARCH EXPERIENCE

2022  
|  
2020

- **Postdoctoral Fellow - Michael Smith Health Research BC Awardee**  
Division of Medical Sciences 📍 University of Victoria
  - **Area of study:** Inherited arrhythmias, community genetics, bioinformatics, ion channel biology, calcium homeostasis in cardiomyocytes.
  - **Roles:** Project and data management, research execution, presentation of results, and grant and research writing.
  - **Techniques:** RNA seq and microarray gene expression analysis using R and bioconductor tools (DESeq2, oligo, limma).
  - Analysis of protein-protein interaction networks and pathway enrichment analysis using R and Cytoscape.
  - Immunohistochemistry and confocal microscopy of embryonic and adult mouse heart sections.

## CONTACT

✉ [jucamilo.sanchez@gmail.com](mailto:jucamilo.sanchez@gmail.com)  
🐦 [juan\\_sanar](https://twitter.com/juan_sanar)  
🗣 [juansanar](https://www.linkedin.com/in/juansanar)  
🌐 [juansanar.com](https://juansanar.com)  
in [juancsanchezarias](https://www.linkedin.com/in/juancsanchezarias)

View my full [CV online](#)

## TECHNICAL SKILLS

Project Management	
Consulting	
Scientific Writing	
Data Analytics	
SQL	
R	
Microscopy	
Cell culture	
Bio-image analysis	
Python	
Digital Editing	

Made with the R package [pagedown](#) and [datadrivencv](#).

Source code available at [juansanar/datadrivencv](https://juansanar/datadrivencv)

Last updated on 2023-07-22.

2020   2015	<div><div>●</div><div><div>Graduate Research Assistant</div><div>Division of Medical Sciences</div><div>University of Victoria</div></div></div> <div><ul style="list-style-type: none"><li>• <b>Area of study:</b> Ion and metabolite channels, developmental neurobiology, channel trafficking, cytoskeletal dynamics, neural stem cells, advanced microscopy.</li><li>• <b>Roles:</b> Project and data management, research execution, presentation of results, and grant and research writing.</li><li>• <b>Techniques:</b> Fixed and live-cell fluorescence microscopy of cultured neurons. Immunocytochemistry. Super-resolution microscopy.</li><li>• Analysis of calcium imaging data from cultured neurons using MATLAB.</li></ul></div>
2014   2013	<div><div>●</div><div><div>Research Medical Intern</div><div>Centro de Estudios Cerebrales</div><div>Universidad del Valle</div></div></div> <div><ul style="list-style-type: none"><li>• <b>Area of study:</b> functional neuroanatomy, cerebral cortex organization, traumatic brain injury, stroke, neuroprotection.</li><li>• <b>Roles:</b> Support and execution of experimental research on traumatic brain injury and ischemic stroke in rats.</li><li>• <b>Techniques:</b> Immunohistochemistry and confocal microscopy of rat brain sections.</li></ul></div>
2011   2010	<div><div>●</div><div><div>Undergraduate Medical Researcher</div><div>School of Public Health</div><div>Universidad del Valle</div></div></div> <div><ul style="list-style-type: none"><li>• <b>Area of study:</b> Cardiovascular risk health, spinal cord injury, rehabilitation medicine, public health.</li><li>• <b>Roles:</b> Project management, data management with Epi Info, research execution, grant and research writing, and presentation of results to stakeholders.</li><li>• Supported clinical assessment of patients in the spinal cord injury clinic.</li></ul></div>



SERVICE & LEADERSHIP

Current   2023	<div><div>●</div><div><div>Innovation Lab</div><div>Hacker - Builder</div><div>Island Health</div></div></div> <div><ul style="list-style-type: none"><li>• Working in collaboration with the Innovation Lab to materialize a proposal to mitigate PJ Paralysis in Island Health affiliated institutions by exploiting small activity sensors and data analytics, along with educational programs to healthcare providers, patients, and patients' families.</li><li>• Third Place in Code Hack 2023</li></ul></div>
2023   2021	<div><div>●</div><div><div>Who Can Become a Scientist?</div><div>Co-founder and Co-organizer</div><div>University of Victoria</div></div></div> <div><ul style="list-style-type: none"><li>• <b>"Who can become a scientist?"</b> is a workshop for high school students that discusses equity, diversity, and inclusion issues in STEMM.</li><li>• It reflects on the stereotypical image of scientists and the importance of leveraging support from role models and mentors to increase diversity in STEMM.</li></ul></div>
2022   2018	<div><div>●</div><div><div>Let's Talk Science</div><div>University of Victoria</div><div>Victoria, BC, Canada</div></div></div> <div><ul style="list-style-type: none"><li>• Volunteer for public audience presentations and high school science tours.</li></ul></div>
2022   2017	<div><div>●</div><div><div>CIHR Brain Bee</div><div>Victoria Chapter</div><div>Victoria, BC, Canada</div></div></div> <div><ul style="list-style-type: none"><li>• Organize and coordinate social media outlets for the Victoria Brain Bee. Mentored high school students from the Greater Victoria Area who participated in the Brain Bee competition.</li><li>• Secured funding to sponsor Victoria Brain Bee winners traveling to the CIHR National Brain Bee.</li></ul></div>
2020   2017	<div><div>●</div><div><div>Neuroscience Graduate Student Association (NGSA)</div><div>University of Victoria</div><div>Victoria, BC, Canada</div></div></div> <div><ul style="list-style-type: none"><li>• Student Representative - Division of Medical Sciences 2017-2018.</li><li>• Contributed to organizing the Neuroscience Graduate Program Kick-Off. Liaised and recruited keynote speakers for seminar lectures.</li></ul></div>
2019   2017	<div><div>●</div><div><div>BCREGMED Newsletter</div><div>Co-editor</div><div>BCREGMED</div></div></div> <div><ul style="list-style-type: none"><li>• Co-organized the BC Regenerative Medicine Symposium and Trainee workshop. Liaise with speakers and sponsors. Served as scientific committee member for abstract review and evaluation.</li></ul></div>

**Leadership Philosophy:**  
By borrowing traits from multiple leadership styles, I center my leadership philosophy around 4 core areas: integrity & communication, interdisciplinarity & collaboration, advancement & growth mindset, and authenticity & transparency. I am a firm believer that integrating diverse perspectives and strengths towards common goals enable teams to challenge themselves and hit achievements above their weight. Hence, I strive to foster a safe and collaborative environment for me and those around me.